The Park Forest Home Maintenance Handbook

Dudley Onderdonk
Village of Park Forest
THE PARK FOREST HOME
MAINTENANCE HANDBOOK

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THE PARK FOREST HOME MAINTENANCE HANDBOOK

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CHAPTER I  INTRODUCTION

This Home Maintenance Handbook is designed for Park Forest homeowners who are concerned about home maintenance and improvement. Renters and members of the Village's cooperatives also will find the chapters on housing code, energy conservation, and home safety and security, useful.

It is hoped the handbook will help residents address some basic questions surrounding homeownership. This is not a "how to" or a repair manual, but rather a guide to help homeowners evaluate their homes. Before homeowners can make constructive changes they must have some understanding of how a house "works." This handbook is concerned with home maintenance, especially in the area of identifying and/or preventing costly repairs. The handbook reviews common housing problems in the Village and suggests how they might be corrected. It is especially important that all homes constructed before 1970 receive preventative maintenance. The handbook includes common replacement schedules for the major elements of a typical Park Forest home.

A portion of the handbook is devoted to home improvements. Many people request help from the Village for ideas about how they can make their homes larger and more comfortable. More recently, people have requested information concerning energy conservation, home safety and security.

Many improvements require the services of a contractor, and the book outlines how to select and use contractors. The handbook also includes suggestions for where to go for more information.

Elected and appointed Village officials are concerned about housing quality. It is the official adopted policy of the Village of Park Forest to encourage the maintenance and improvement of all existing housing, including structural maintenance, beautification, and general home improvements. It also is the Village's policy to promote energy conservation, as well as to promote a sense that the care and maintenance of each house affects neighborhood pride and the value of surrounding homes. (Resolution 79-15)

Both the Village and individual homeowners benefit from a continuing home maintenance program.
CHAPTER II  PARK FOREST HOMES

History of Construction

The Village of Park Forest is a planned residential community, meaning the original developer, American Community Builders, built the community according to an overall design.

Construction in the Village began in 1948 with townhouse apartments, marking the beginning of a major new housing development. In 1950, small single-family homes were built using variations of a single floor plan. Single-family construction proceeded throughout the 1950s and lasted well into the 1960s. Development proceeded clockwise around the Plaza starting in the east and proceeding west. In 1953, development skipped to Eastgate area, only to return in 1954 to finish the sweep around the Plaza. The year 1958 also marked the beginning of the Lincolnwood subdivision, which began just west of Western Avenue and slowly grew west to its present size. Later, other apartment and single-family developments were built southeast and southwest of the original Village.

As the Village grew, so did the size and diversity of the homes. The basic Park Forest home began at under 600 sq. ft. Now, a common Park Forest home has almost 2,000 sq. ft. Many of the homes were built at the same time with similar floor plans. In fact, most Village neighborhoods can be identified by their housing style. Due to soil conditions, almost all the single-family homes were constructed on a concrete slab without a basement. Over the years, greater diversity has been added by individual homeowner improvements.

Many people want to know basic housing facts, including the age and original cost of their house. While the Building Commissioner can look up the original building permit, the attached text and map give some basic facts.

Park Forest Housing Development
(See Map for Number Identification)

Housing Overview

1. 1948-1950  Rental Area constructed and occupied. Contains 3,010 dwelling units in 2, 4, 6, and 8 unit "Town House" structures, grouped around parking courts with generous amounts of green mall areas. Gross density about 11 dwelling units per acre. 204 one-bedroom units; 2,104 two-bedroom units; 702 three-bedroom units. These were completed and occupied before the homes area got under way in 1950.

Since 1961 six "Areas," comprising 2,588 dwelling units, have been sold and are operating as cooperatives. During the early 1970s, 380 units were converted from Rental to Condominium.

2. 1950-1952  Initial "Homes for Sale" construction,

a. 985 two-bedroom masonry (early ones all-masonry, later ones brick veneer), radiant heat, identical floor plans but with 14 different stylings. Sold for $13,300.

b. 284 three-bedroom frame, shingle siding, attached garage, fireplace. Sold for $14,200.


5. **1953** 12 dwelling unit apartment complex of two 6-unit buildings containing ten 3-bedroom units and two 4-bedroom units.

6. **1953-1954** 283 "tract" homes. Two-bedroom, Cape Cod, unfinished second floor (can accommodate 1 or 2 additional bedrooms). This is very similar to an early Levittown model. Originally these homes were identical. Sale price $11,000 - $11,500.

7. **1953-1960** "Custom Homes" area. Approximately 70 lots sold to individuals desiring to construct own home. Developer approved individual building plans.

8. **1953-1954** 319 three-bedroom brick and frame with attached carport with outside "storage wall." (Futura model having flat roofs.) Sold for $14,800 - $15,300.

9. **1954-1956** 300 three-bedroom brick veneer and frame, with attached garage. Sold for $17,000 - $20,000.

10. **1955-1956** 200 Cape Cod, four-bedroom attached garage. (Similar to a Levittown model). Sold for $17,000.

11. **1957** Initial "split-level" homes. Brick veneer and frame, three-bedroom, family room, sold for $20,000.

12. **1957** Largest split-level models at a "choice" location (overlooking forest preserve and school-recreation area). Sold for $23,000.


13A. **1957-1958** Development of these lots was bypassed for a period of years, partly because of their less desirable location (adjacent to railroad and low-lying ground). Homes are similar to numbers 9 and 11 above, but sold for a somewhat lesser figure because of location.


15. **1960-1962** Houses similar to 14; sale prices ranged from $17,000 - $22,000.

16. **1963-1964** Four and five-bedroom split-levels, mid-levels and two-story colonial. Sold for $23,000 - $35,000.

17. **1955** Thorn Creek Estates, a 75-lot custom home subdivision owned by developers of Park Forest. This subdivision was originally developed in unincorporated Will County and was later annexed to the Village.

18. **1965-1967** Three, four and five-bedroom split-levels, mid-levels. Homes are similar to number 16 and sold for similar figure - $23,000 - $35,000.

19. **1966-1967** Houses similar to 18; sold for $23,000 - $35,000.

20. **1969-1970** Juniper Towers. This 106-unit subsidized senior apartment building is operated by the Cook County Housing Authority. This was the first building over 2 stories constructed in the Village.

2. **1971-1973** Arbor Trails Apartments. This 372-unit apartment complex consists of 4 six-story buildings and 50 townhouse units. This complex was financed with Sec. 236 funds provided by the Illinois Housing Development Authority. The complex contains both assisted and non-assisted housing.

3. **1975-1978** Governors Park Subdivision. A 27-lot single-family subdivision consisting of three bedroom bi-levels. This development is constructed on land originally set aside for a cemetery.

4. **1979-1980** Garden House. A 12-story 146-unit senior apartment building constructed with Federal Section 8 funds and revenue bonds issued by the Village. This subsidized project is reserved for senior citizens and the handicapped.
How the Homes Were Constructed

Construction in Park Forest was conducted on a massive scale by subdivision areas. During the rapid growth years, it was not uncommon to have construction along whole streets at the same time. Park Forest, in the 1950s, became a massive building project with homes, streets and public facilities all under construction at the same time. Many of the homes are of similar design, especially in the smaller subdivision areas. This similarity allowed "economies of scale" and allowed the original builder to build more homes, faster and at a lower cost. Because so many homes were constructed at approximately the same time, many engineering problems associated with piece-meal construction are not present in the Village. After initial installation, engineering improvements (water, sewer, etc.,) have been adequate to serve neighborhood needs.

Some corners were cut during the construction of both the townhouse and single-family areas. Many of the construction materials used were of unusual dimensions -- army surplus or the bottom of a manufacturer's product line. The metal casement windows used throughout the Village are an unusual size. Anyone who has purchased window shades can attest to this. The water lines are galvanized pipe rather than copper. The foundations were not completely excavated as is now required. Little insulation was used in either the walls or ceilings. These items do not mean that Park Forest housing is in any way substandard. With the proper care, housing in Park Forest can last almost indefinitely. However, all homes, and in Park Forest's case, especially homes constructed before 1958, need continuing care and upgrading to modern standards.
cape cod

ranch
Older Park Forest housing also has some design quirks dictated by the construction technology of the day. Most Park Forest homes have inadequate electrical wiring. Park Forest was originally planned as a "blue star" natural gas community. Most major appliances were to be powered by gas rather than electricity. Therefore, only minimal electrical service was provided to each home. With the growth in use of electric appliances, much of the Village's wiring needs to be upgraded. Another unusual feature of Park Forest housing is the general lack of basements. Almost all single-family homes were built on concrete slabs. The soil conditions and high water table generally prevent the construction of basements in the Village. Finally, one feature of Park Forest housing often overlooked is the underground wiring. While the individual service drops are normally above ground, the utilities are completely underground in the multi-family areas and in street right-of-way and other public land. Many of the underground wires deteriorated, and some were replaced in the early 1970s. These unusual features do not detract from the housing quality; however, they do make living in Park Forest somewhat unique.

Most of the housing in the Village of Park Forest was constructed during the post-war construction boom. Almost 90 percent of the homes were built before 1958. In 1958 the Village hired its first full-time, professional building inspector. Prior to 1958, building inspections were conducted by part-time or volunteer staff, and inspections were not as complete as those conducted by a full-time professional. While code inspection by a full-time
professional inspector cannot guarantee that a home is sound, contractors are much less likely to cut corners when an inspector is present. Also, construction records for homes built before 1958 are somewhat incomplete.

A Review of Basic Housing Styles and Systems

Park Forest displays a surprising variety in housing styles. Although individual neighborhoods tend to have similar homes, individual additions and remodeling have added to the diversity of the housing stock. The Village has over 45 basic housing models representing four single-family styles - ranch, cape cod, split-level, and colonial, and three multi-family styles -- mid-rise, townhouse and garden apartments. In addition, the Village has approximately 150 custom designed single-family homes.

The following pages provide an outline of the basic facts concerning Park Forest homes. Each homeowner should have a copy of the basic house plans including the Model Number.
<table>
<thead>
<tr>
<th>BASIC PARK FOREST SINGLE-FAMILY HOUSING STYLES</th>
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<tbody>
<tr>
<td>Ranch (small)</td>
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<tr>
<td>Facts:</td>
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<tr>
<td>Construction: masonry/brick veneer</td>
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<tr>
<td>Foundation: slab</td>
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<td>Size: 650 - 1,000 sq. ft.</td>
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<td>Bedrooms: 2 - 3</td>
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<td>Some have an attached garage</td>
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<td>Ranch (large)</td>
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<td>Construction: frame, some w/brick veneer</td>
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<td>Foundation: slab</td>
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<td>Size: 800 - 1,200 sq. ft.</td>
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<td>Bedrooms: 3</td>
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<td>Many have an attached garage</td>
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<td>Futura</td>
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<td>Construction: frame/brick veneer</td>
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<td>Foundation: slab</td>
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<td>Size: 800 - 1,000 sq. ft.</td>
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<td>Bedrooms: 3</td>
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<td>They often have a carport</td>
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<td>Cape Cod (small) (common in Eastgate)</td>
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<td>Construction: frame</td>
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<td>Foundation: slab</td>
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<tr>
<td>Size: 1,300 sq. ft.</td>
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<td>Bedrooms: 4 - if finished 2nd floor</td>
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<td>Seldom have an attached garage</td>
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<tr>
<td>Cape Cod (large) (common in &quot;W&quot; area)</td>
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<tr>
<td>Construction: frame</td>
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<tr>
<td>Foundation: slab</td>
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<tr>
<td>Size: 1,000 sq. ft.</td>
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<tr>
<td>Bedrooms: 3 - 5 if finished 2nd floor</td>
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<td>Usually have an attached garage</td>
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<td>Split Level</td>
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<td>Construction: frame/brick veneer</td>
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<td>Foundation: special slab</td>
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<td>Size: 1,000 - 1,500 sq. ft.</td>
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<td>Bedrooms: 3 - 5</td>
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<td>Some have an attached garage</td>
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<td>Colonial</td>
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<td>Construction: frame/brick veneer</td>
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<td>Foundation: slab, a few basements</td>
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<td>Size: up to 2,200 sq. ft.</td>
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<td>Bedrooms: 4 - 5</td>
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<td>Some have an attached garage</td>
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Review of the Basic Systems

Heating and Cooling

Most Park Forest homes are heated by one of three methods.

1) Radiant heat: This heating method uses hot water which is heated in a central reservoir and then pumped through pipes embedded in the concrete slab. The hot water heats the slab which, in turn, radiates heat into the room. This method works well unless a leak develops. Then it is often necessary to tear up the floor for repairs. (See figure 2-1)

2) Forced air: This is the most popular heating system in the Village. Every Park Forest residence is served by natural gas. The gas is burned to heat air which is then forced via fans to provide warmth throughout the house. Forced air works well in Park Forest, although it can be a little drafty. The useful life of a forced air furnace is about 30 years. People who use this system should remember to clean the filters often and not block the cold air return. (See figure 2-2)

3) Baseboard convection: This system is popular for new additions. Baseboard convection uses a mini-radiator next to the floor to provide heat for a room. Air circulation is provided by the convection or movement of warm air throughout the room. For this system to work properly, the heating element should not be blocked by furniture. (See figure 2-3)
Air Conditioning

Park Forest homes were not designed for central air conditioning. Most air conditioning units in the Village are "tacked" on to the existing forced air system, or are small window units added to cool individual rooms. These systems do work; however, they use lots of energy. The electrical system must be checked to make sure it is designed to handle the added load. Often an open window can be as effective in cooling a house as an air conditioner, but the cost is far less.

Plumbing

Every home in Park Forest is serviced by water and sewer. While the Village is responsible for the water mains and trunk sewer lines, each property owner is responsible for individual hook-up.

Centrally softened water enters the house via a water line which links each house with the water main in the street right-of-way. Each house has a master water shut-off valve called a buffalo box, usually located in the front yard. The water enters the house and is distributed via galvanized iron water pipes. (Copper tubing was used only in the more expensive or recent homes.) In some homes these pipes have deteriorated. Sometimes these pipes leak, and at other times they become clogged with minerals from the water supply, reducing the water pressure in some homes.
typical water supply
Waste water leaves the house via the sanitary sewer line. This line also is the responsibility of the homeowner. In some neighborhoods, generally south of Sauk Trail, homeowners share a common sewer line. Sewer backups are generally the result of the individual homeowner's actions. Certain items, such as tampons or disposable diapers, tend to clog the sewer. Occasionally, the trunk sewer owned by the Village becomes clogged, and the Village uses special equipment to free the blockage. After the waste leaves each individual home, it is conveyed to the Thorn Creek Basin waste treatment plant in Chicago Heights where it is treated and released into Thorn Creek.
Energy Systems (Electricity & Natural Gas)

All Park Forest homes are serviced by natural gas and electricity. The natural gas is distributed throughout the Village via an underground pipe system in the street right-of-way. The gas pipe usually enters the house under the front yard. Then it is metered and distributed inside the house to various appliances -- the hot water heater, stove and often the furnace. Since natural gas is explosive, and its fumes often poisonous, it is a good idea to know the location of the shut-off valve and to make sure the burnt gasses are properly vented. (See figure 2-4)

Park Forest was one of the first communities in the nation to have extensive underground wiring. Even today all the multi-family areas and over two-thirds of the single-family homes have underground wiring. Most above ground wiring consists of individual service drops along the rear yard easement of the single-family homes. Most Park Forest homes could use additional electrical service, especially homes containing several major electrical appliances. Commonwealth Edison provides 220 volt service. The most common danger surrounding the electrical system is improper use of the fuse box. The fuse box, usually located in the basement or utility room, links the home electrical system to the outside. The fuse box is a safety device that protects the home from electrical overload. When a fuse blows, it should never be replaced with a fuse with a larger voltage. This dangerous practice defeats the purpose of a fuse and can lead to a serious fire. (See figure 2-5)

Before digging or trenching in a yard, all residents should check with the Village to avoid damaging underground wires and pipes.
2-4 natural gas supply

2-5 electrical service
CHAPTER III HOUSING & ZONING CODES

To protect the health, safety, and welfare of the residents, the Village Board has adopted Housing, Building and Zoning Codes. A housing code is concerned with day to day housekeeping. It establishes standards for cleanliness, safety and minor maintenance. Housing codes are most concerned with health related items.

Zoning codes regulate the use of land. They set standards for the use of land and placement of buildings. These codes are not to be confused with building codes, which regulate new construction, including workmanship and materials. Building codes are discussed in Chapter VI.

This chapter discusses various housing and zoning codes and should be helpful to residents who wish to inspect their homes for possible code violations. There is no mystery to housing and zoning codes. With a little practice it is easy to spot problems.

Housing Codes & How to Inspect Your Own Home.

The Village’s housing stock should be maintained to a high standard. The maintenance of private property is a matter for community concern for several reasons:

1. The Protection of Property Values.
The standards of the housing code protect the average property owner from unreasonable demands on the part of his neighbors. By setting uniform standards for maintaining property, housing codes protect the value of all citizen’s investment from loss and promote the well-being of the community as a whole.

2. Consumer Protection
Another important reason for adopting and enforcing housing codes is related to consumer protection. The tenant has a right to receive value for the dollar that he pays in rent. There should be a balance between the need for the property owner to make a reasonable profit and the right of the tenant to some minimum standard of structural soundness and sanitary condition in the housing that is purchased or rented.

3. To Promote Public Health and Safety
A housing code can serve an important purpose in contributing to public health and safety. Codes requiring indoor toilet and plumbing facilities to be present and to be kept in good repair are extremely important to the health of the entire community. The absence of sanitary facilities makes housekeeping impossible and can contribute to disease. Diseases do not confine themselves to the house where they originated; they can spread to the rest of the community.

Sometimes property owners allow their properties to run down to the point where no one can or wants to live in them. Experience in Park Forest demonstrates that once a house is vacant and abandoned, it becomes a target for vandalism and can be a site of illegal activities. Housing code enforcement is used to keep houses safe, lived in, and attractive to prevent threats to public health and safety.

4. To Maintain the Local Tax Base
Housing codes help to maintain the local tax base. Housing codes require that all housing in the community be maintained at an acceptable level. This standard protects the local tax base by mandating certain improvements to blighted property, thereby preserving the market value of neighboring homes.

5. To Conserve Our Housing Stock
The conservation or "wise use" of housing stock is promoted with the use of housing codes. This conserves resources. In general, it costs less to rehabilitate a structure than it does to tear it down and start over again. Unnecessary new construction wastes our energy resources and
unnecessarily drives up the already high cost of housing.

What do Housing Inspectors Look For?

Many people want to know what a housing inspector looks for when examining a house. There is no mystery to this inspection process. The requirements are mostly common sense. To help homeowners and renters in the Village, the Building Department has developed a Homeowner's Checklist which serves as a quick guide for home maintenance. (See attachment 1)

For those people who want to know exactly what to look for, this chapter also includes the Housing Inspection Program Guidelines. The Guidelines are used by the code enforcement officers in conjunction with the Home Inspection Checklist. The inspector reviews the exterior and interior items on the checklist and evaluates them according to the program guidelines. Each guideline has as its source the Park Forest Code. (See Housing Inspection Program Guidelines attachment 2)

Common Code Violations

The most common housing code violations in the Village involve minor home maintenance problems. These code problems do not cost a lot of money to correct; however, they are far too common. The common code problems are:

- Gutters and Downspouts - The improper installation and maintenance of gutters and downspouts can lead to serious structural damage in walls, ceilings and floors.

- Vehicle Parking - Parking cars and small recreational vehicles on the lawn areas can lead to drainage and utility service problems.

- Painting - All exposed wood and metal surfaces should be sealed and painted. Well painted homes contribute to an attractive neighborhood and painting prevents structural deterioration.

- Windows - It is common sense that broken windows should be replaced.

- Yard Maintenance - Unfortunately, this is one of the most common problem areas in the Village. Poor yard maintenance can affect the appearance of a whole neighborhood. Yard problems include grass over 12" high, dead trees, and broken or sagging fences.

- Garbage Rubbish and Trash - In Park Forest, private firms collect garbage. Each homeowner is responsible for the disposal of waste in a sanitary manner.

Zoning Codes

What are zoning codes and how do they apply to Park Forest homes?

Zoning is a power exercised by the Village of Park Forest. The Village divides itself into districts and within each district, governs lot size, building bulk and placement.

Zoning is important in home maintenance and improvement because it guarantees the character of residential areas. Any home additions must conform to the zoning requirements for that district. For instance, in Park Forest most single-family residences are zoned R-1. The following regulations apply:

Zone: R-1
Use: single-family dwellings
Height Limit: 2 stories or 30 ft., whichever is least
Lot coverage: No buildings on any lot shall exceed 30% of the lot area
Front yards: Shall be at least 15 ft.
Side yards: Shall be at least 5 ft.
Rear yards: Shall be at least 30 ft.
Fence height: Shall not be higher than 6 ft.
Accessory buildings (garages and storage sheds)
Size: shall not exceed 500 sq. ft.
Setback: from other buildings - 6 ft.
from side lot lines - 3 ft.
from rear lot line - 5 ft.
Maximum height - 14 ft.

Most single-family areas in the Village also have special restrictions which do not permit fences in the front yard.

Multi-family districts have planned development zoning which is specific to the particular project. Questions concerning zoning of property should be directed to the Building Commissioner or Village Planner, c/o Village Hall, 748-1112.

A diagram showing many of these terms is included for reference at the beginning of the chapter.
HOMEOWNER'S CHECKLIST

This checklist is intended as a guide to determine the work needed in a home. For more information telephone 748-1112, Monday thru Friday.

1. Workable electrical outlets with coverplate and light fixtures in each room.

2. No exposed bare electric wires or short circuits, adequate circuits to handle average household loads.

3. No temporary wiring running through walls, ceilings, transoms or lying under floor covering materials.

4. Safe passage to ground level from all livable rooms.

5. Adequate rubbish-garbage storage space in adequate containers.

6. Openable window in each livable room - or ventilating system.

7. Openable window or ventilating system in each bathroom.

8. Screens on outside windows and doors which are used for ventilation.

9. Rat screen over crawl space of basement openings.

10. Stairs, porches, foundation, walls, ceilings, floors, doors, windows, roof - all structurally sound and in good condition.

11. Easily cleaned, water proof, hard, smooth floor surface in bath.

12. Adequate and safe heating facilities throughout.

13. Gas hot water heater vented to outside.

14. Walls and floors insulated from heating unit, with proper spacing from walls, floor, and roof. Air space or non-flammable material.

15. Kitchen sink sanitary and properly connected to hot and cold water.

16. Kitchen sink drain properly connected to sewer and in working condition.

17. Bathroom with flush toilet and wash basin in working condition.

18. Bathtub or shower in bathroom or other room which affords privacy.

19. All plumbing and fixtures in sanitary and working condition.
HOUSING INSPECTION PROGRAM
GUIDELINES
(Numbers Correspond to Numbers on Inspection Checklist)

EXTERIOR ITEMS:

1. Foundations should be reasonably weathertight, rodent-proof, insect-proof and should be in good state of repair. Check for visible cracks, settling, spalled areas and honeycombs.

2. Exterior walls should be reasonably weathertight, watertight, rodent-proof, insect-proof, and be kept in good state of maintenance and repair. Brick should be free of cracks, spalling, eroded or missing mortar joints and missing bricks. Wood or cement-asbestos shingles or siding should be free of missing or loose pieces. Check caulking around windows, doors and sills.

3. See Above.

4. Screens and Windows - Check for large cracks and missing pieces. Panes should be caulked into position. Check for screens (basement windows should be screened).

5. Exterior Doors and Closers - Every exit or entrance should be equipped with two (2) doors (one interior door and one storm door). Interior door should be weatherproof. Security locks must be in working order. Storm door should be weathertight. Check for doors that have been added or doors that have been enlarged. (e.g., patio door)

6. Mail box, Slot or Chute - If chute or slot - it should be equipped with a hinged flap or cover plate to protect interior. Check for broken hinges. If mailbox is mounted on exterior wall, is it securely in place? Does it have lid to protect contents?

7. Roof/Dormer: Should be weathertight and watertight. Check for missing, blown up, torn shingles.

8. Chimney should be adequately supported, free of rust and corrosion. Check that chimney cap is not rusted out or missing.

9. Gutters and Downspouts - Check for proper drainage. Walls, ceilings and floors may show water markings. Check for rust and paint problems.

10. Antennae should be securely mounted away from electric power lines and not too close to lot line. Should have building permit for ones over 12 feet tall.

11. Outside stairway should be in sound condition.

12. Garage and Carports - If not originally constructed with home, resident should have a building permit. Check for foundation problems, dry rot, paint peeling, etc.

13. Room Addition - Check for building permit. All interior and exterior requirement for private dwellings apply to this item.

14. Awnings - Should be adequately supported and in good condition. Permit is not needed in single-family dwellings. A permit is required, however, for patio covers that are supported on posts anchored to ground.

15. Porch - Check cement for major cracks, and that supports for overhang are secure.

16. Storage Shed - Must be a minimum of six (6) feet from house, minimum of three (3) feet from side lot line, and a minimum of five (5) feet from back lot line but cannot be placed on an easement. Over 40 square feet should have a building permit.
17. Fence - On a corner lot, a fence cannot be higher than 30' for 25 feet on each side of lot.

18. Driveway - No fencing, planting or erection should be more than 30" high for 25 ft. from property line along driveway. Check for major cracks, bulges, etc.

19. Sidewalks must be of cement.

20. Stoops - Are they pulling away from foundation on porch slab?

21. Means of Egress - There should be doors that exit to outside. Windows should be easily opened so that access to ground level is obtainable.

22. Address numerals should be clearly visible from street.

23. Light Fixtures and Wiring - Should be installed in conduit and working properly. Check porch light, electric and gas meters. Wires leading into house should not be touching trees or roof top.

24. Electric/Gas Service - See Above.

25. Swimming pools above ground should not be over two (2) feet high or 250 sq. ft. in area. Owner of below ground pools should request an annual inspection within ten (10) days of placing pool in operation.

26. Recreational vehicles should not be parked in front area for more than 24 hours in a week. If unit is over 22' x 8' it cannot be stored on a lot for more than six (6) days a year. Only one (1) vehicle per unit.

27. Commercial vehicles over 5,100 pounds cannot be parked on a regular basis.


29. Vehicle Parking - Must be parked on improved surface.

30. Home Occupation - Major businesses are not allowed in areas that are not commercially zoned unless it is clearly incidental and subordinate to its use as a residence. No advertising or sales of commodities on premises.

31. Signs - Real estate signs cannot exceed five (5) square feet. Sold signs must be dated and taken down in two (2) weeks. Garage/rummage signs can only be displayed in a window.

32. Construction on Premises - Must have building permit.

33. Pets - No more than three (3) animals per unit unless licensed before June, 1975.

34. Grass, Weeds, Bushes - Grass cannot be over 12" high.

35. Dead trees or dying trees are a public nuisance.

36. Animal Defecation - Organic waste must be disposed of in a clean, sanitary manner.

37. Garbage must be disposed of in a clean, sanitary manner.

38. General condition of premises should be clean.

39. Other
INTERIOR ITEMS:

40. Attic - Check for excessive weight stored and frayed wiring. Wiring should be encased in conduit.

41. Floor Slab - Foundation should be weathertight, rodent-proof, insect-proof, and in good state of repair.

42. Windows, Cranks, and Locks - Windows should be reasonably weathertight and in working condition.

43. Doors and Locks - Doors should be reasonably weathertight and in working condition.

44. Means of Egress - Every unit should have two (2) safe, unobstructed means of egress.

45. Accessibility to Rooms - Access to bathroom from one bedroom should not be through another bedroom.

46. Excessive Number of Occupants - 2 bedrooms, living room, dining room is about 800 sq. ft. - 150 sq. ft. for first occupant - 100 sq. ft. for each occupant thereafter. This would allow seven (7) people to occupy a unit. No more than four (4) people can occupy a bedroom. Children under eleven (11) are considered 1/2 an occupant.

47. Walls Removed, Altered - Check if a bearing wall has been removed. If so, the ceiling should be reinforced.

48. Habitable Kitchen - Must have adequate ventilation either by window or electrical system. Must have sink connected to hot water tank and sewer system. Must have safe, adequate means of heating. Must have two (2) electrical outlets, and ceiling light fixture.

49. Kitchen floors should be in reasonably good shape.

50. Bathrooms - One bathroom should have toilet, sink, shower or tub. Bathroom must be connected to water and sewer system. It should have a window or electric ventilation and ceiling light fixture. It should also have a safe heating system.

51. Bathroom floors should have surface that is reasonably impervious to water and be in clean, sanitary condition.

52. Ceiling Height - Half the floor area of a room should have ceiling height of 7-1/2 feet.

53. Interior walls, partitions, floors and ceilings should be in good repair and sanitary.

54. Basement, Subgrade Walls - Cannot be classed as habitable room unless waterproof and have windows.

55. Electrical Outlets - Each room should have two (2) outlets and one (1) light fixture.

56. Extension Cords - Extension cords should be no more than six (6) feet and free from frayed insulation.

57. Closet and Storage - Each bedroom should have a place to store clothing.

58. Light and Ventilation - All rooms should have one (1) unobstructed window that is easily opened.

59. Trash and Garbage - Should have adequate means of storing trash and disposing of it.

60. Stairways - Should have a minimum of one (1) handrail and at least 6'-9" of clear headroom. Stair treads shall be firmly attached and free from defects.
61. Protection From Infestation - Screens on basement windows to protect rodents from entering. Owner is responsible for extermination of insects, rodents, and pests.

62. Heating Facility - Dwelling should have a properly installed furnace maintained in safe condition and capable of heating all habitable rooms to 72 degrees when temperature is 10 below zero.

63. Water Heater - Every kitchen sink, bathtub, and shower should be connected to both cold and hot water systems. Hot water heater should be capable of reaching a temperature of not less than 120 degrees.

64. Plumbing should be in sanitary condition and free of leaks and connected to hot and cold water lines and sewer system.

65. Electrical - All rooms should have two (2) separate electrical outlets and each outlet should be in working order. All electric fixtures should be properly installed and be connected to power source in a safe manner. Roof additions over 300 sq. feet shall constitute changing the electric service to 100 amps.

66. Sump Pump Discharge - Sump pump shall not be connected to the sanitary sewer, but only to the storm sewer.

67. Fireplace - Check for permit if installed after home was originally built. Chimney shall extend a minimum of three (3) feet above the adjacent roof and at least two (2) feet above any roof ridge within ten (10) feet.

68. Evidence of home occupation should be incidental and subordinate to the use of the dwelling.

69. Doorbell should be properly installed and be connected to power source in a safe manner.

70. General Conditions - No owner shall occupy or let any other person occupy any dwelling unless it is reasonably clean and safe.
**VILLAGE OF PARK FOREST**
**INTERIOR AND EXTERIOR DWELLING INSPECTION REPORT**

**LOCATION:** 

**DATE:** 

**OWNER/AGENT:** 

**TIME STARTED:** 

**Inspectors:** **NAME:** 

**TIME FINISHED:** 

**PREMISES ON __________________________ WERE FOUND IN THE FOLLOWING CONDITIONS.**

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<th>INTERIOR ITEMS</th>
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**SYMBOLS:**

- **G** = Good
- **F** = Fair
- **P** = Poor (See Below)
- **N/A** = Not Applicable

**DEFICIENCIES** - The following items were found to be in poor condition and will soon require attention:

**ITEM NO.**

**COMMENTS**

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Chapter 4
Common Housing Problems
CHAPTER IV COMMON HOUSING PROBLEMS

The Village has helped many families upgrade their homes and correct building deficiencies and common housing problems. This chapter identifies the most common housing problems and suggests how to correct them. Most of the problems identified are major, and usually require professional help to correct.

Interior & Exterior Problems

Roof Replacement

The time to replace a roof is before it leaks. Roofs on Park Forest homes should be replaced approximately every 20 years or if the shingles are brittle, if the edges curl, or if there is evidence of leaks.

For steeply pitched roofs, 235# or heavier shingles should be used. The homeowner may wish to investigate replacing shingles with light colored shingles because they will reflect the hot summer sun. The first new roof can be applied directly over the old roof. However, a second new roof cannot be applied directly over the original and first replacement roof because it would be too heavy for the roof trusses to support. In this case, it is best to completely strip the two layers of the old roof and install a new roof. For Park Forest homes, the cost of a new shingle roof, typically, ranges between $800 - $1,000. It is recommended that the new roof carry a guarantee.

Some homes in Park Forest have a flat or nearly flat roof. In this case, shingles are inappropriate because the wind can drive water under the overlapping shingles. A special "hot melt" roofing has been developed for these homes. It is time to replace a "hot melt" roof when there is evidence of blistering, bubbles, cracking or alligatoring (many small cracks). Unfortunately, "hot melt" roofs are expensive (as much as $3,000) and they should be applied by a professional roofing contractor.

Gutters & Downspouts

Gutters and downspouts help control water that falls on a roof by directing water away from the foundation as it reaches the ground. Sometimes a roofing job will include the installation of gutters and downspouts. When replacing these items, the Building Department recommends use of seamless aluminum gutters of at least 0.032 in gauge for ease of maintenance and to withstand the weight of snow. The gutters should be hung on special hangers spaced every 3-4 ft. along the edge of the roof. The downspouts should have extra long extensions to direct the water away from the foundation. Gutters and downspouts often cost more than a shingle roof. It is not uncommon for a Park Forest family to spend over $1,000 for new gutters and downspouts.
Foundations

The foundation provides a solid base for the rest of the house. Ideally, the soil beneath the foundation also should be solid. Unfortunately, this is not the case in the Chicago region, and most all Park Forest homes have small cracks in their foundations.

These cracks have several sources. The original developer of Park Forest chose some soggy house-sites. As the land dried out, the foundations settled and cracks appeared. The construction techniques used by the early builders also created some problems. The foundation slab was poured on bare unexcavated earth. As the land beneath the concrete slab gradually settled and stabilized, the foundation often developed cracks. In fact, in many homes the foundation slab actually floats up and down on the underlying soil.

While most Park Foresters need not worry about minor cracks in their foundations, major cracks should not be ignored, especially those that go all the way through the foundation. Major cracks require that the earth next to the foundation be excavated and the crack patched. This job is usually done best by a professional. A professional patching job normally costs between $500-$600. (cost includes excavation)

Other actions can be taken to generally strengthen the foundation and prevent existing cracks from getting larger. Since many cracks in the foundation and slab are caused by the shrinking and expansion of clay rich soil, it is wise to keep the soil around the foundation wet during the summer dry spells. Sometimes the soil shrinks away from the foundation leaving a gap between the concrete and the soil. This gap represents a loss of foundation support, and the space should be filled with sand. The best, although most expensive, solution to foundation problems is to install drain tile completely around the foundation. A great deal of money can be saved on labor costs if homeowners are able to dig the trench themselves. Instead of thousands (2,000 to 3,000) the cost might be as low as $300 to $400.

Heating & Air Conditioning

Most Park Forest homes are heated by a forced air heating system. The heart of this system is a natural gas fired furnace. A good furnace can last 30 years or more if it is properly maintained. The Building Department recommends that the furnace/air conditioner be inspected each year by a reputable service company. The single most important maintenance task is the regular replacement of the air filters every two months. When a furnace needs replacement, carefully select a new energy efficient model with a 20 year warranty. Smaller Park Forest homes need a 100,000 BTU (input) furnace, while the largest homes need a 150,000 BTU (input) furnace. The cost of a furnace (installed) begins at around $750. The chapter concerning energy conservation gives additional tips on efficient furnace operation.

Air conditioning is a pleasant, though expensive, method of environmental control. Park Forest homes were not designed for air conditioning. Natural ventilation through screened windows was expected to be sufficient. Most air conditioning system units were added to the basic furnace after the furnace was installed. Air conditioners should be inspected yearly. Air conditioners, generally, need to be replaced every 10-15 years. As mentioned earlier, air conditioners are not very efficient, and they use a lot of electricity. (The electrical system must be designed for the added electrical load.)
Electricity

The original Park Forest homes were provided only with minimal electrical service - 60 amp/120 volts. Most, but not all, of the homes have upgraded electrical service to 100 amps. The upgraded system is needed to supply energy for large modern appliances. Electrical problems are serious, and professionals should be consulted even for minor changes.

Homeowners can prevent many electrical problems. The wire that connects the house to the utility pole is called the service drop. It should be kept free of branches and the line should not drop over buildings. Many electrical fires are caused by using improper use of fuses. When a fuse burns out, do not replace it with a larger numbered fuse. Do replace it with a fuse of the same size. Using a larger fuse does not "fix" a blown fuse, it just increases the chance of an electrical overload. The improper use of fuses has led some contractors to install a circuit breaker which cannot easily be reset for higher electrical loads. Two other safety hints are: (1) label the electrical service panel box to make it easier to replace fuses and track down electrical problems and (2) don't overload electrical outlets with adapters and extension cords. This practice not only blows fuses, it can cause fires.

Plumbing

Water problems

Park Forest homes are connected to the Village-owned and operated water utility which supplies safe, softened and fluoridated water to all residents. Occasionally the Village has problems with the production and distribution of water; however, most water problems can be traced to the individual homeowner. The Village is responsible for providing a safe and adequate water supply to the underground water main which is usually located in the street right-of-way in front of the house. The homeowner is responsible for the rest of the water system, except the meter, from the service lateral connected to the water main to the faucet.

People sometimes call Village Hall because their water is "rusty" or has an orange tinge. This water is still safe to drink and use in everyday chores, even though it is discolored. The rusty color is caused by minerals in the water that were deposited originally on the inside of the water pipe. A sudden change in water pressure or water main break causes the minerals to go into suspension. At times, letting the water run a bit will help clear it. The rusty water problem is only temporary; clear water should be available in a few hours when the minerals settle.
Some Park Foresters experience problems with water pressure. Water is delivered to each home at 55 lbs/sq. in. or more. Some homes have less water pressure because their pipes are clogged with minerals. The only cure is to replace the clogged pipes. Copper replacement piping is less likely to become clogged than galvanized iron.

Never turn off the heat in winter. Frozen pipes can break. When frozen pipes thaw, minerals in the pipe are loosened and will resettle elsewhere in the system, usually in undesirable places.

Water heaters are an important part of the water system. The life of a water heater is variable, but usually they can be expected to last many years. For Park Forest families, the Building Commissioner recommends a 40 gallon energy efficient model with a temperature and pressure relief valve. New water heaters cost around $225.

The Building Commissioner also recommends that residents use water saver fixtures and regularly check for costly leaks. Residents should take precaution not to cover or destroy the main shut-off valve (buffalo box) in their front yard.

Sewer problems

Almost every house will have a sewer problem at least once during its lifetime. Generally, the problem results from a clog or blockage in the pipe that prevents waste water from leaving the house. These blockages are usually caused by flushing bulky paper items down the toilet. Sometimes tree roots or pipe collapse also causes sewer backups. While every house in the Village is connected to the sanitary sewer, many homes, especially those south of Sauk Trail, share service lateral with a neighbor. In some cases, a homeowner's sewer will back up as a result of a neighbor's carelessness.

Many complaints concerning sewer problems are received at Village Hall. The homeowner is responsible for the sewer inside the house, as well as from the house to the sewer main located in the street right-of-way. Ninety-five percent of the sewer-related calls to the Village can be traced to sewer problems on private lots. Blockages or equipment failure may cause a sewer backup. In this case, special equipment -- a sewer jetter -- must be used to flush the sewer.
Clogged sewers on a homeowner's lot sometimes can be cured with a snake. The plumber's snake is a long metal wire which can be forced down a drain and into the home sewer system. The snakes, which can be rented at a tool supply store, are sized for different pipes. Failing to use the correct size snake, or using the snake improperly can damage the sewer pipe.

Clogged sewers can be prevented, if residents are careful about what they put in the sewer. In addition to paper products, the building department has found that paint often is responsible for sewer clogs. Pouring hot water down the drains each week can help prevent sewer blockage. This also can prevent sewer gas from entering the home through a dried out sewer trap.

Other sewer problems should be inspected by a qualified plumber. Plumbers generally are needed to fix a broken sewer lateral (the pipe that goes from the house to the sewer main), or for additional plumbing fixtures. Each homeowner should consider seriously installing a sewer clean-out pipe in the service lateral just before it enters the house.

**Painting & Siding**

Painting and/or siding problems are a continuing concern for Park Forest homeowners. Paint is used to protect wood and metal surfaces from the weather; and all exposed surfaces should be painted. Painting problems can be easily identified by chipping and peeling.

Residents of the older (pre 1952) Park Forest homes should be aware that the walls may originally have been painted with lead based paint. Lead based paint is poisonous, and chips have been known to harm small children. This paint was taken off the market in the early 1950s.

Most Park Forest homes should be painted every 2 - 5 years depending on the exposure of the structure. Wood surfaces should be scraped and sanded before painting. Where necessary, a prime of the same tint as the final coat should be applied. Painting can be done easily by the homeowner; however, the exterior of a home should not be painted when it is raining or colder than 50°F. A painting contractor can usually paint a Park Forest home for between $600 - $1,000.

The building department recommends aluminum siding in lieu of painting for those residents who can afford it. Aluminum siding is virtually maintenance free, and it protects the wood siding underneath. Aluminum siding also makes a frame home more energy efficient. A good aluminum siding job should last up to 20 years. Some architects maintain that a light colored siding maintains its color better than darker colors. Aluminum siding costs ($4,000 to $8,000) depending on the size of the house.

**Yard Problems**

Many of the problems encountered by the building department and by Village residents center on the yards of single-family homes. Yard problems are common, yet they are are easily corrected.

**Trees**

Trees generally enhance the value of a home; however, they sometimes create problems for the homeowner. Certain tree varieties, such as silver maple or lombardy poplar, have a short (15 - 20 year) life span. Dead trees, such as the victims of Dutch elm disease, must be removed because they threaten surrounding property.

The homeowner should be careful not to plant trees too close to the foundation. The root system of a tree is as large as the leafy crown, and future branches can encroach on the house. Care should be taken to trim low tree branches or branches that interfere with wires that lead into the house. Some trees, especially willows, have water seeking roots that often seek water in sewers causing sewer problems. The Village Recreation & Parks Department can recommend landscaping. It also will remove oversize shrubs and replant them in the parks.
Drainage

All the residential areas in the Village of Park Forest originally were engineered to provide for efficient drainage of rain water away from homes. Most homes have a ten foot drainage easement along the rear lot line to facilitate water runoff away from the house. As originally constructed, no water should drain into a house or pond in the back yard.

Most drainage problems result from changes in the originally planned drainage patterns. The engineered drainage pattern can be disturbed by sodding, regrading the lot, the erection of fences, landscaping, and even gardens. These changes to the yard may seem minor; however, they can seriously change the subdivision's drainage pattern.

Correcting drainage problems requires the cooperation of many neighbors. The Village has little authority over the drainage easements in the rear and side yards. Continued drainage requires the continuing cooperation of neighbors. Of course, litigation is the last resort.

Some individual drainage problems may be corrected by clearing the drainage easement or by providing positive drainage away from the house. Positive drainage can be most often provided by regrading the lot so the ground falls away from the house. Sometimes drainage tile can be used to control water runoff. These improvements must be installed carefully to avoid harming adjacent property.
Other Common Yard Problems

Grass

Grass growing taller than 12 inches is one of the most common yard problems in Park Forest. Few items detract from a home as much as a lawn that needs mowing. Furthermore, high grass is a fire hazard and can prevent the efficient drainage of stormwater away from the home site. Tall grass must be cut. If the homeowner is unwilling to mow grass, the Village has the legal power to cut it and place a lien on the property to recover the cost of cutting.

Refuse

One of the basic principles of public health is to deny germ-carrying animals a chance to spread disease. All refuse should be stored in a sanitary, sealed container. Plastic garbage bags are appropriate only for temporary storage inside the home. Outside the house, plastic bags are not satisfactory for storage because they can be easily torn apart by animals. Village residents may use plastic garbage bags for refuse pick-up the day of collection. The Village does not pick up refuse. All residents must contract with a private contractor for refuse pick-up service.

Problems With Outdoor Improvements

Fences

One of the most common outdoor problems reported to the Village concerns fences. Every homeowner should have a copy of the plat of survey which shows the exact location of all the property lines and easements, and fences must be built on or within these lines. Please note that fences constructed over easements are built at the owner's risk, and most subdivisions in the Village have a covenant forbidding fences in the front yard. Continuing fence maintenance is another part of fence ownership.

Pavement/Sidewalk Problems

Each homeowner is responsible for the maintenance of the pavement and walkways on the property. While the homeowner is not responsible for the sidewalk in front of the house, the driveway apron between the street and the property line is the responsibility of the homeowner. Even if a contractor totally replaces a cracked driveway with either asphalt or concrete, the surface cannot be guaranteed because the curing of the surface is dependent on weather conditions, which are out of the control of the contractor. Some homeowners have added little ramps over the street curbs at the driveway entrance. These ramps should be avoided as they present both traffic and drainage problems to other residents.

Outdoor Storage Sheds

On single-family lots some people erect small (less than 40 sq. ft.) storage sheds. These sheds usually are treated as "accessory buildings" under the zoning ordinance (see "Zoning"). A building permit is not required for the small sheds; however, the Building Commissioner suggests they be placed on a concrete slab. The standard metal garden shed is actually fragile. After a few years' use, metal sheds tend to rust, lose form, sag and rumple. All structures, (including storage sheds), over 40 sq. ft. require a building permit.
CHAPTER 5
Energy Conservation
CHAPTER V  ENERGY CONSERVATION

Homeowners can make a wise investment by improving the energy efficiency of their home. By adding insulation, caulking joints, weatherstripping doors and windows, etc., the typical Park Forester can reap energy savings.

Reduced energy consumption results in lower utility bills. The homeowner who makes his home energy efficient will not suffer from the effects of raised utility rates as much as the homeowner who hasn't made these modifications. Another benefit of energy improvements is the tax credit the homeowner can claim for energy-saving activities. Up to 15% or $300 of the cost of insulation and other specified modifications can be deducted from Federal incomes taxes.

Finally, the homeowner should get a return on his investment when he sells his house. Although this has not always been true, buyers are beginning to demand energy efficient homes. Already real estate prices have started to reflect this trend and as energy grows more scarce, the demand for efficient houses is likely to increase.

Insulation

Buildings gain heat in the summer and lose heat in the winter. This gain/loss cycle can be controlled with insulation and reduce energy consumption by as much as 30%. Insulation provides warmer walls and ceilings as well as greater comfort at lower temperatures during the winter months. It also reduces the load on air conditioning systems during the summer.

Good insulators are light weight, dry, resistant to moisture and fire retardant. Insulation must also contain numerous air pockets to trap and reduce the passage of heat.

There is no best insulation. That depends on what has to be insulated and how much money is available. Many materials are easily handled by the do-it-yourselfers while others must be installed by professionals using special equipment. There are four basic types of insulation available:

1) Loose Fills - glass fiber, mineral wool, cellulose and vermiculite--are commonly used in attics and in the walls of existing buildings. A machine that fluffs and blows the insulation is used to fill walls and the space between the joists of an attic floor. In others, the material can be poured by hand between the joists or roof trusses. Glass fiber, mineral wool and vermiculite are naturally fire resistant. The cellulose fiber materials are treated to be fire and moisture resistant. There is some concern about the permanency of this treatment and about the corrosive effects the treatment may have on metal materials, such as electrical boxes and the metal plates on roof trusses. The treatment process used and certification should be clearly marked on the insulation package.

Under laboratory conditions, cellulose fiber is a more effective insulator. (It has a higher R-value than glass fiber or mineral wool.) Vermiculite is less effective, but is useful for filling concrete blocks, masonry cavity walls and small, tight spaces that are not easily accessible.

2) Batts and Blankets - mineral wool and glass fiber -- are made to fit exactly between studs and joists spaced either 16 or 24 inches apart. They are available either unfaced or with an attached vapor-retardant facing and in a variety of thicknesses from 2 to 12 inches. In new construction the batts or blankets are installed before the wall or ceiling finish is applied. When installed over existing insulation in
3) **Rigid Boards** - polystyrene (beadboard and extruded), urethane and polyisocyanurate are used to insulate masonry walls (such as those found in basements and crawl spaces) and the edges of concrete floor slabs. Rigid glass fiber boards are frequently used under built-up roofs, on wood plank roofs and in other locations when attic insulation cannot be used. Beadboard, urethane, polyisocyanurate and glass fiber need a separate vapor retardant. Extruded polystyrene itself resists the passage of vapor and therefore a separate vapor retardant is not needed. When used in occupied spaces, the polystyrenes and urethanes must be covered with gypsum board at least 1/2 inch thick to provide fire protection.

4) **Foams or Sprayed-in-place Insulation** - urethane is normally installed in walls by contractors using special equipment. Sprayed urethane is combustible and should always be covered by gypsum board at least 1/2 inch thick for fire protection. It may also shrink as it cures in the walls, resulting in void spaces.

Insulating materials are rated by "R-Values," which represents a material's resistance to heat flow. The higher the R-Value the greater the resistance. For instance, 6 inches of fiberglass (a good insulator) has an R-Value of 19, while a single pane glass window or a 6-inch concrete block have an R-Value of between 1 and 3.

When purchasing insulation, be sure to go by the R-Value rather than thickness. The R-Value gives a clearer picture of how well the materials insulate.
Where to add insulation

--- Attic

The first thing that the homeowner should do to upgrade the energy efficiency of his house is adding insulation to the attic. The attic represents the largest single surface area of the home. Since hot air rises and is lost through the roof, adding insulation reduces heat loss and keeps more warm air inside the house. The amount of insulation that should be added depends upon the type and amount of existing insulation and the "R-Value" of the insulation that will be added.

<table>
<thead>
<tr>
<th>Attic Condition</th>
<th>Recommended Insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>Batts, blankets or loose fill can be placed between ceiling</td>
</tr>
<tr>
<td>unfinished</td>
<td>joists. Loose fill can be added on top of batts or blankets.</td>
</tr>
<tr>
<td>unfloored</td>
<td></td>
</tr>
<tr>
<td>unheated</td>
<td></td>
</tr>
<tr>
<td>Truss roof structure</td>
<td>Blown-in loose fill is best. Batts or blankets can be used</td>
</tr>
<tr>
<td>unfinished</td>
<td>but are difficult to install.</td>
</tr>
<tr>
<td>unfloored</td>
<td></td>
</tr>
<tr>
<td>unheated</td>
<td></td>
</tr>
</tbody>
</table>
Flat roof

Same as cathedral ceiling.

A Reminder: Regardless of the type of attic or the type of insulation used, be sure to keep eave vents free of insulation and never cover electrical boxes or recessed ceiling fixtures with insulation.
Insulating Walls

All housing units built in Park Forest before 1953, both single-family and the townhouses, are constructed without insulation. According to the building plans, one inch of "insulated" sheathing was used to enclose these homes. The sheathing used during the early construction is, for all practical purposes, pressed cardboard. The sheathing is attached to the exterior wall and it is covered by siding. This exterior combination plus the air space between it and the interior wall surface is the only wall insulation in these early homes.

Those homes built after 1953 are insulated. Wall insulation is a required part of new construction in Park Forest. However, due to a general lack of knowledge of insulating practices and the sometimes relaxed enforcement of the building code, many of the houses built during the mid to late '50s do not meet today's standards.

The homeowner can check for insulated walls. First, remove the plate cover from an electrical outlet on an exterior wall and then probe with a flashlight or a non-metallic probe. (Be sure to turn off the electricity.)

Installing insulation in existing walls is a rather difficult process. The insulation must be blown in through holes cut in the wall between the studs. These may be inside or outside depending on the type of construction. Care must be taken to assure the insulation falls below electrical conduits, switch boxes and cross bracing. It is recommended that a contractor be hired to do this job.
Caulking & Weatherstripping

Once the homeowner has adequately insulated his house, he should then control air movements.

The first step in controlling air movements is to seal any gaps between doors or windows and their frames. These gaps allow heated or cooled air to escape into the surrounding environment. In fact, they are one of the largest sources of wasted energy in Park Forest. These gaps cost the homeowner money. Fortunately, weatherstripping can keep heated (or cooled) air inside and save money. Weatherstripping doors and windows can reduce heating and cooling bills by as much as 30%.

There are several ways to check weatherstripping. The easiest is to feel for cold drafts around doors and windows on a windy day. If a draft is present, weatherstrip. Another test for leaks is to go outside with a hand-held hair dryer and have a helper follow the dryer around with his hands from the inside.

The following charts are a guide to the types of weatherstripping that are available and their applications.

<table>
<thead>
<tr>
<th>WEATHERSTRIPPING DOORS</th>
<th>Installation</th>
<th>Cost</th>
<th>Durability</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tack or staple to the top and sides of the door stop. Vinyl should fit snugly.</td>
<td>About $5.50 per door</td>
<td>Effective and durable</td>
<td>Vinyl Tubing (with or without backing) and Tubular Gasket</td>
</tr>
<tr>
<td></td>
<td>Nail or secure flange of the door stop and the point of the V to the side of the window or door. Cut away sections that would cover hinges or the lock.</td>
<td>$5 - $8 per door</td>
<td>Extremely durable and effective</td>
<td>V-Strip (thin metal)</td>
</tr>
<tr>
<td></td>
<td>Stick foam to inside face of door stop.</td>
<td>$1.50 - $2 per door</td>
<td>Not very durable. May fall off after 6 year or two</td>
<td>Adhesive Backed Foam</td>
</tr>
<tr>
<td></td>
<td>Close door against stop. Press foam edge against door and nail wood to top and sides of door stop.</td>
<td>About $2.50 per door</td>
<td>More durable than foam ship alone</td>
<td>Foam Edged Wood</td>
</tr>
<tr>
<td></td>
<td>Tack to top and side of door stop as with foam rubber.</td>
<td>$1.19 per door</td>
<td>Fairly durable</td>
<td>Felt</td>
</tr>
</tbody>
</table>
# Weatherstripping Windows

<table>
<thead>
<tr>
<th>Type</th>
<th>Durability</th>
<th>Cost</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Metal</td>
<td>Very durable</td>
<td>About $4 - $4.50 per window</td>
<td>Somewhat difficult to install. For double-hung windows, nail in the side channels, to the top of the upper sash, to the bottom of the lower sash, and where the sash meet. Awning and casement windows are treated like doors. Sliding windows can be considered like double-hung windows on their sides.</td>
</tr>
<tr>
<td>Adhesive Backed Foam</td>
<td>Not as durable as others. May fall off after a year or two.</td>
<td>About $2 per window</td>
<td>Easiest to install. Just peel away backing and stick to clean, dry surfaces. Use only in places where there is no friction. On a double-hung window, use on the underside of the bottom sash.</td>
</tr>
<tr>
<td>Felt</td>
<td>May deteriorate. Don't use outside.</td>
<td>About $1.19 per window</td>
<td>Easy to install. Tack to inside of window stop, frame or sash. On double-hung window lack a strip where upper and lower sash meet. Use for sealing gaps that are narrow and of uniform width.</td>
</tr>
<tr>
<td>Tubular Gasket and Vinyl Tubing (with or without metal back.)</td>
<td>Durable</td>
<td>$2 - $3.50</td>
<td>Easy to install. On double hung windows, nail the lip of gasket or tubing to the sides of the window frame, to the top and bottom of the sash and at the point where the two sash meet.</td>
</tr>
<tr>
<td></td>
<td>Durable</td>
<td>About $4 per window</td>
<td></td>
</tr>
</tbody>
</table>
Caulking also controls air movements. Remember to caulk small cracks where two sides or surfaces meet and wherever different types of building materials meet.

There are many small cracks in the average home. If added, the space would be equivalent to a 1 square foot hole in the wall. These cracks and gaps not only waste energy, but they also lead to other more serious maintenance problems. These cracks allow moisture to enter the home which can cause rot and promote mold and mildew. Also, these cracks serve as entryways for insects and other pests.

Caulk comes in several forms. The most popular, due to its ease of application, is the cartridge. The cartridge is designed to be applied with a caulking gun. Caulk also comes in squeezable tubes as well as in cans for application with a putty knife. Rope caulk is available which is pre-formed strands of caulk packaged in a roll. The most economical way to buy caulk is in bulk. Unfortunately, since the shelf life of most caulk is usually no more than one year, buying in bulk is only economical for industrial users. The homeowner should only buy caulk he expects to use in the immediate future.
Storm Windows & Doors

1. Storm windows. Storm windows save energy. Windows represent 12 to 15 percent of the wall space of the average house; however, they are responsible for 30 to 50 percent of the home's total energy loss. Some energy loss occurs around the frame but most loss occurs by conduction and radiation through the glass.

Adding a second (or in some cases, third) layer of glass, can cut heat losses by about 50%. Furthermore, storm windows save energy by creating a dead air space that acts as an insulator.

In addition to energy savings, storm windows make a house more comfortable by helping to maintain a more uniform temperature. When properly installed, storm windows also reduce sweating on the inside of the windows. This reduces the frequency that window sashes, trim, and surrounding walls must be repainted. Storm windows also are helpful in reducing outside noise, dust, pollen, and pollutants.

Storm windows come in a variety of styles and price ranges. They can be as simple as a sheet of plastic attached to the window frame, or they can be single sheets of glass in wood frames. More expensive combination storm windows and insect screens are available. Unfortunately, for Park Forest homeowners, many casement windows are an unusual size and require custom made storm windows. A number of improvements are available to make windows energy efficient. Conduction losses can be reduced with the addition of a third storm window mounted on the inside of the window frame.

The interior storm window is effective when used on the casement windows that are common in Park Forest. They can be made quickly and cheaply by mounting sheet acrylic plastic on furring strips. This is a great energy saving do-it-yourself project. Heavy draperies and insulated shutters also will help conserve energy.

Excessive heat gain is often a problem in summer. Storm windows help moderate temperatures. Reflective films are available that can be applied to windows that reflect up to 80% of the sunlight heating the house. Heavy draperies and insulated shutters also block out a large portion of summer heat.

2. Storm doors. Doors typically make up 3 to 5 percent of the exterior wall space. They can be made more energy efficient with the installation of storm doors. Storm doors should be installed for the same reason as storm windows.

Storm doors may have wood or metal frames with screens to replace the glass during the summer. Combination storm and screen doors allow the homeowner to switch from summer to winter without removing the screen or glass. State law requires safety glass or plastic in storm doors to prevent injuries.
There are a number of simple improvements that the homeowner can make to the heating system to cut energy costs and consumption.

The easiest approach to save energy is to use less. Turn down the thermostat. If winter thermostat settings are kept at 65°F during the day and 55°F at night, a reduction of about 15% in fuel consumption can be expected. This temperature control can be done manually or automatically by a clock thermostat.

The homeowner should also keep the furnace in top working order. The furnace should be serviced every year in the late summer or early fall. Clean or replace the filters of forced air units at least once a month during the heating season. These activities may seem obvious but many people overlook them. Insulate air ducts that run through unheated areas of the house (crawl spaces, etc.) and check all exposed ducts for leaks. Also, remember to keep obstructions away from any heat registers that might cut off warm air circulation.

There are two energy saving devices that homeowners should seriously consider installing on their furnace. The first is an electronic ignition system which replaces the gas burning pilot light. The second is a flue damper. This gadget closes the flue when the furnace is off, preventing the hot air still inside from escaping up the chimney. Both devices can be dangerous and should only be installed by a qualified professional.

Finally, establish heating zones for the house that can be closed off and left unheated when unoccupied. Heat to the bedrooms can be shut off during the day and heat to the living and dining areas can be shut off at night.

These same general principles apply to air conditioning as well. The homeowner can save on his summer electric bills by keeping the A/C unit in good working order, changing or cleaning air filters as necessary, and insulating ductwork. The greatest savings can be made by wise use of the air conditioner. For the most energy-efficient use, air conditioning should be used only when it is absolutely necessary. The thermostat should be set no lower than 78°F. There are additional ways to keep the house cool without using additional energy.

Keep the air circulating. The best way is to open the windows. Cross-ventilation was a frequently advertised selling point when Park Forest was new, so it is rare to find a house in town that doesn't pick up some breezes.

If the wind isn't enough, use fans. They cost much less to run than air conditioning and can be very effective. Window fans should be placed on the hot south and west sides of the house, facing out, to draw in cool air from the north and east.
Attic fans dissipate heat that rises to the attic and they also are very effective in helping to cool off the house. Exhaust fans in the kitchen and bathrooms also help. In addition, most thermostats have a manual control switch for the blower in the furnace that will allow air to circulate without turning on the compressor.

If the problem is too much humidity, a dehumidifier can make a house comfortable without lowering the temperature. The dehumidifier uses less electricity than an air conditioning system.

Big reductions in energy consumption can be made by efficiently heating water. Over 14% of the energy used in the home is spent heating water and there are several actions that the homeowner can do to cut costs and consumption:

- Turn down the thermostat on the hot water heater. By reducing the temperature to 120°F (140°F if you have an automatic dishwasher), up to 18% of the energy used at its previous setting can be saved.
- Keep the hot water heater in good repair and drain a pail of water from it once a month. This will remove sediments and mineral deposits that reduce heating efficiency and also increases the unit's life.
- Repair leaky faucets. All that water dripping down the drain is money dripping out of the bank.
- Add insulation to the hot water heater. This should save $8 to $20 a year in energy costs. Kits are available at most large hardware and department stores.
- Insulate hot water pipes.
- When purchasing a new hot water heater, choose one with thick tank insulation and a high heating efficiency. The initial cost may be more, but in the long run the homeowner will save money.

Energy Efficient Landscaping

The use of trees, shrubs, and vines can add significantly to the energy efficiency of dwellings. The average temperature differential between a wooded area and a non-wooded area is 10°F. In summer the shade of trees will make the area cooler and in winter, evergreens will make the area warmer. Trees are the best natural cooling systems available. The evaporated moisture from leaves creates cool areas under the tree's branches. It is important to have trees shade structures with solar collector systems in the summertime to prevent overheating. These trees must be deciduous and lose their leaves in the fall to permit adequate sunlight to reach the collectors in the heating season. Various types of ash are well-suited for this purpose. Vines can be grown on structures to reduce heat gains and help in cooling. Shrubs, when placed with an understanding of prevailing summer breezes can direct these breezes into structures.
In winter, evergreen trees and shrubs that give dense growth, can be planted so that the wind's velocity and direction are lowered. Shrubs also deflect the wind away from structures. The net effect of these plantings is to cut down on infiltration of cold air into the structure and thereby lower heating demand. For windbreaks, the maximum distance of the trees from the house should not be more than five times the building height. For a one story house an 8' high windbreak should be 30' from the building.

Solar Heating

Solar heating should be explored by homeowners who are serious about energy conservation. Solar units can help to heat a room, or an entire house. In the southwest solar units also heat water for domestic use.

There are two types of solar heating systems -- passive and active. Passive systems are generally very simple. They use the entire building as a collector and heat storage unit. Sunlight enters the building through specially designed windows and heats the interior of the structure. When the house cools, the interior releases its stored heat to maintain a comfortable temperature.

Active systems are more complex because they employ mechanical means to transfer heat from the collectors to the storage area. Once in the storage area, the heat is transferred to the rest of the house by a heat exchanger. (see figure)
When properly designed, solar heating systems can provide over 75% of the typical home's winter heat requirements. However, there are some limitations which the homeowner should keep in mind before building a solar heating system. First, a good southern exposure is an absolute must. For optimum performance, the collectors must be aligned within a narrow arc of 20° on either side of due south. When placed at a greater angle away from due south the system is not reliable.

The collector areas should receive adequate shading during the summer months to prevent overheating. Remember to provide a back-up source of heat for those cloudy days when the solar system is not operating at peak efficiency. Finally, if a solar system is added to an existing house, the structure must be made as energy efficient as possible. The secret to truly effective solar heating is not how much heat is collected, but rather how well the heat is managed once it has been collected. Most add-on systems will not work as well as a system which was designed as an integral part of the house.

For information concerning energy conservation there are a number of places one can go for help.

There are a number of books on energy conservation in the Park Forest Public Library (see the bibliography in Chapter 8).

Governors State University is another good place for help. The university publishes "Outlook" magazine, which deals with energy conservation, solar power, and other environmental concerns. The National Center for Appropriate Technology maintains a regional office at GSU and is a good place to go for information on wind generators, biomass production and other energy conserving devices.

The Illinois Institute of Natural Resources (325 W. Adams, Springfield, IL 62706, 217-785-2800) also has people who deal exclusively with energy conservation.
CHAPTER VI HOME IMPROVEMENTS

Common Home Improvements

Many Park Forest residents are pleased with their neighborhood and community, but their home is too small or they would like special features that are common on newer homes.

Home improvements can make a difference and positively affect the value and condition of a home. They add to a household's comfort and convenience. Moreover, improvements enhance the appearance of the neighborhood and community.

A carefully thought-out rehabilitation improvement plan will make a home safe, sound and comfortable. Always analyze the end results of an improvement program before spending money on the project.

Before beginning a home improvement be sure to check the plat of survey. A plat of survey is a map showing the location, boundaries, and ownership of each lot in the Village. Each homeowner should have a copy of the plat of survey. It is important that all the improvements a homeowner makes are actually on his property.

The Building Commissioner recommends that before making an addition or building an accessory structure the owner should draw it out on the plat of survey. If the plat is lost, the Village staff can provide the approximate dimensions of the lot. Of course, for more accuracy, a registered land surveyor will re-survey the lot and stake it. By state law all surveys must contain certain information and conform to established levels of accuracy. Figure 6-1 is a copy of a plat of survey for a typical Park Forest lot.

Room Additions

Room additions are quite common in Park Forest. Many of the original homes were small and a room addition provides that extra bedroom, family room or den that is needed. Additions to single-family homes may not exceed thirty (30) percent of the area of any lot. Some residents have decided to build up and add a second story rather than cover more of their lot. Room additions require a building permit. A standard one-story room addition costs at least $5,000. The full second story addition can cost as much as $20,000.

Homeowners often convert an attached garage or carport into an extra bedroom. Although this relatively low cost addition makes use of a structure that already exists, there are some problems. When a garage is enclosed, special modifications to the heating system and insulation are required. The homeowner also loses an enclosed parking space and he is forced to park the second car on the street.

The enclosure of a carport presents additional problems. Carport foundations are not designed to hold an enclosed heated structure. When a homeowner is enclosing a carport it is not enough to just fill in the space. Often the foundation and heating systems must be "beefed" up to adequately serve the added space. Homeowners should be aware that filling in a carport will block vehicle access to the rear yard, so once the carport is filled in a garage cannot be added at a later date. Garage and carport conversions also require a building permit.
FIGURE 6-1
PLAT OF SURVEY FOR 44 APACHE STREET
PARK FOREST, ILLINOIS

Lot 26, Block 9 in the Village of Park Forest, Illinois, in Area No. 23 being a portion of...
Popular Improvements

Other popular improvements that require building permits are fireplaces and central air conditioners. Many single-family homeowners add these improvements, however, they should be aware of two drawbacks. First, these improvements are very energy intensive. Special provisions should be taken to assure that the fireplace is energy efficient. Families desiring air conditioning should investigate heat pumps because of their high efficiency and relatively low operating costs. (See Chapter 2)

Recommended Improvements

Many recommended home improvements do not require a building permit. Most of these improvements could be called "remodeling." You may wish to upgrade your electrical wiring to modern standards (See Chapter 2). Changing window frames will help you stay more comfortable in winter and save energy year round. Many Park Foresters have had their bathrooms and kitchens redone. Almost anyone can paint and decorate at a relatively low cost.
possible second story additions
Typical Park Forest lot.

House Model #52A

Lot coverage approx. 14%

Additional buildable area: 16%

Note: Minimum yard areas (shaded areas) must not be infringed upon.
Most Park Forest homes were landscaped by the original owner a number of years ago. One of the advantages of buying a home as its second or third owner is that the lawn, trees and shrubs are established. This, however, does not mean that the new owner need not be concerned with landscaping and lawn care. In all probability, the new owner has purchased some landscaping problems or mistakes along with the house.

Most Park Forest homes have a green strip or parkway between the street curb and the public sidewalk. This strip of lawn belongs to the Village rather than the homeowner. The homeowner normally plans and maintains this strip as part of the yard. Necessary maintenance includes its mowing, edging, fertilizing, and re-seeding when necessary. It is also advisable to plant some good varieties of trees in the parkway. Village ordinance controls the type of plantings which are permitted in the parkways. The following species of trees are not permitted for planting on any public parkway: box elder, poplar, silver maple, and willow. Other trees which are not suitable for planting on typical residential parkways include upright junipers, spruce, pine, flowering crabs, or other similar types of low growing, horizontal-shaped plant materials. Periodically, the Village of Park Forest will share with property owners the cost of planting trees on public parkways throughout the Village. All trees are purchased and planted in place by the Village. Before planting anything in the parkway, the homeowner should contact the Director of Recreation and Parks at the Village Hall (748-1112) and discuss plans with him.

A good lawn is composed entirely of a variety of good grasses. If not properly cared for, any lawn will give growth to wild grasses and weeds. The most familiar weed is the dandelion, but don't overlook other weeds -- sorrel, crab grass, knotweed and other broadleaf weeds.
Most shrubbery in Park Forest was planted when the homes were new. Some early residents took the advice of landscapers while others planted haphazardly. These plants survived, yet may need added care and rejuvenation. Some trees and shrubs are overgrown while others are withering due to old age or improper care. Many homeowners have replaced the old plantings with new shrubbery which is more in keeping with the scale of their house. Trees and shrubs that must be removed for a home improvement can be relocated on the same lot or donated to a Village park.

Plant diseases alter or prevent the normal growth of a plant. Plant diseases are caused by fungus, bacteria, viruses, etc., which live at the expense of the plant-host, or they are the result of insects, environmental conditions or man. Plant disease can be prevented. Proper selection, common sense and keeping trees and shrubs healthy and protected from needless mechanical injury, will minimize the need for more involved disease treatment. A regular program of watering, feeding and removal of dead wood will allow most trees and shrubs to resist such diseases.

Detecting signs of insects and their damage to landscape plants before it becomes serious requires a close examination of plants at least weekly during the growing season. An elementary knowledge of insects and how they reproduce and grow will also be helpful in watching for certain related problems.

The Recreation and Parks Department has suggestions for landscaping that requires minimum maintenance. Minimum maintenance landscaping requires planning with a special concern for maintenance. It uses knowledge of low maintenance techniques such as mulching and use of edgers. Minimum maintenance requires that the homeowner choose plants wisely. Local native, hardy plants usually require little care. The gardener strives for a balance between high maintenance floral displays and low maintenance ground covers or pavement. Labor saving devices are used to perform maintenance tasks quickly and efficiently. Finally, in learning how to be flexible, the homeowner can use different plantings, a small site, pavement and other techniques to save time and energy.

The minimum maintenance landscaping rules are:

1. AVOID SHARP CORNERS - Informal lines and gentle curves make for easier mowing. Sharp corners result in "push and pull" mowing and hand trimming in hard to get at places. Sweeping curves also add to the overall design.

2. KEEP PAVED AREAS FLUSH WITH LAWN - When walks, drives and patios are not flush with adjacent lawn areas, hand clipping is usually necessary. Building on the same grade also permits easier movement of equipment from one area to another.

3. USE BRICK OR CONCRETE MOWING EDGE GENEROUSLY - A brick edger between lawn and house, plant beds and around other obstructions will save countless hours of hand trimming. Bricks provide free wheeling surface for mower wheels while blades cleanly cut grass to the edge. Use hardened brick, not common brick. The latter cannot withstand freezing and will disintegrate.

4. PLAN OR INSTALL CONVENIENT ELECTRICAL OUTLETS - Make it easier to use power tools by providing outlets where you need them. You should never require more than 50 feet of cord for use of power tools in the yard.

5. AVOID MOWING CLOSE TO TREES - Use ground cover, mulch or brick mowing edge to eliminate mowing and trimming right up to trunk of trees. This will save time-consuming trimming, prevent mower damage to tree and add a pleasant feature to the landscape.
6. LOCATE WATER SOURCES CONVENIENTLY - Once again, no more than a 50 ft. length of hose should be required to cover your grounds. Install or add conveniently located foundation faucets, consider underground lines using inexpensive equipment available, particularly the soaker hose which conserves water.

7. AVOID IMPOSSIBLE-TO-MOW SITUATIONS - Use ground covers, gravel or paved surfaces on steep slopes, bumpy areas and other hard-to-mow sites.

8. PROVIDE FREE MOVEMENT OF EQUIPMENT - Plan ramps of concrete, grass or wood to permit moving machines from one level to another in the yard. All walks, gates and entrances should be planned wide enough to easily accommodate equipment.

9. USE HARD SURFACES WHERE TRAFFIC IS HEAVY - This can be done with wood chips, gravel, pavers or concrete laid flush with grass or adjacent ground cover.

10. USE MINIMUM MAINTENANCE PRIVACY BORDERS - Attractive cedar or redwood privacy fence can be used in place of hedge plantings along side or rear property lines but not in front yards. These are not permitted in Park Forest by covenant.

11. PROVIDE RAISED BEDS FOR FLOWERS - Use railroad ties, brick walls or cut stones to raise planting beds requiring the most care. Raised beds give added interest in the landscape as well as eliminating backaches.

12. USE GRAVEL UNDER THE DRIPLINE - This problem planting area can be easily and handsomely solved with a strip of attractive crushed stone. Low ground cover next to the house helps to further enhance this area.

13. DO NOT TRY TO GROW GRASS WHERE IT WON'T - Use ground covers or mulches in dense shade or other hard-to-grow areas.

14. USE METAL EDGING - To keep a smart outline without hand trimming, use a metal edger between planting areas or next to walks and mulched areas.

15. KEEP LAWNS CLEAR OF UNNECESSARY OBSTRUCTIONS - Keep trees, shrubs, and other plantings out of lawn areas to avoid breaking up continuous mowing patterns.

16. PROVIDE CONVENIENT TOOL STORAGE - Keep tool storage easily accessible to work areas.

17. AVOID MESSY CLEAN-UP UNDER TREES THAT "SHED" - Provide bed of ground cover to absorb falling blossoms, buds, fruits, etc.

18. AVOID SUSCEPTIBILITY TO INSECT AND DISEASE DAMAGE - Use plant varieties that are disease resistant and insect free. Before buying, check with your extension office or with a reputable nurseryman.

19. ESTABLISH AN ADEQUATE FEEDING PROGRAM - Turf and plant materials in a weakened condition are more susceptible to insect and disease infestation and invasion by weeds. On the other hand, over fertilization promotes vigorous top growth requiring additional mowing and pruning.

20. USE MULCH GENEROUSLY - Mulching is the business of putting enough organic material on the surface around a planting to discourage weeds and retain moisture. It's a substitute for hoe and hose if chosen wisely and spread over an area after cultivation and watering. For best results, a mulch should be 4" to 6" deep.

For a more complete discussion of techniques and methods of conserving water and reducing your water bill while at the same time maintaining a greener, healthier landscape, pick up THE GREEN SCENE brochure entitled "Conserving Water In the Landscape" available free of charge from the Recreation and Parks Office.
PRUNING

What is pruning. Pruning is the art of cutting out unwanted growth to make the plant respond as desired. It is not shearing, barbering or dehorning. This inelegant term graphically describes a particular sort of tree butchery. Sometimes all of the limbs of a large tree are sawed back -- particularly at railroad stations - leaving great stubs sticking up. The trees are ruined since they will not regain a graceful branching system.

Why prune. Pruning is one of the most misunderstood garden jobs. Let some of the following reasons and your eye be your guide on pruning yard and garden plants.

1. To rejuvenate by taking out older stems, dead wood, withered leaves, etc.

2. To repair damage from breaks in limbs, diseased wood, etc.

3. To encourage more and better bloom and fruit.

4. To develop or maintain a desired shape.

5. To compensate for root loss during transplanting.

How to prune. Pruning involves "selection" and "judgment." Keep the following basic tips in mind:

1. Use sharp and the proper size tools for the job.

2. Always make major cuts first then even up the remaining.

3. Make smooth cuts at an angle so that water does not stand in them.

4. Paint all wounds larger than 1" in diameter with tree wound paint.

5. Never leave a stump you can hang your hat on.

Shade trees are often pruned during the dormant season although other seasons are satisfactory. Dormant season pruning allows one to better see the plant and determine the material to be removed. Also, new growth will take place shortly to hide the bare appearance following pruning.

For a more complete discussion of pruning techniques, including illustrations of the proper cuts on trees and shrubs, pick up THE GREEN SCENE brochure on "PRUNING" available free of charge from the Recreation and Parks Office.
Diagrams A and B show how to landscape a typical Park Forest home. The Recreation and Parks Department publishes "A Planting Guide for Park Foresters," which suggests plant materials that grow well in the Village. Recreation and Parks also publish special planting guides and they periodically hold landscaping workshops. In addition to beauty, landscaping can help to conserve energy and increase housing values.

Building Permits

Building permits are required for all structural changes, including room additions and garages. For example, changing room sizes requires a building permit. A patio does not require a permit unless it is covered with a permanent structure. Changing, but not replacing, the heating or plumbing system does require a permit. This includes Park Forest homes converting from radiant heat to another form, e.g., hot air, convection. If you are in doubt, call the Building Commissioner.

Some residents may be tempted to add an addition without a building permit. This could cause great problems for the owner in the long run. Building Code inspections protect the resident. It is a matter of safety. Insurance companies recognize this and it is more difficult to collect a favorable settlement from the insurance carrier if a problem occurs in an uninspected addition. Furthermore, some financial institutions, as well as the VA and FHA, will not make loans on homes that have illegal, uninspected additions. Should the Village find out about an illegal addition, it has no choice but to enforce the provisions of the code.

Financing

Home improvements can be financed from many sources. Banks, Savings & Loans, Credit Unions, and Finance Companies are among the sources of loans. Many financial institutions earmark funds for residential upgrading including interior, exterior and energy efficient improvements.

Any credit-worthy homeowner who meets certain criteria can qualify for a home improvement loan. Illinois State law limits the maximum home improvement loan. Many homeowners use their own house as equity for the loan. Equity is the value of a home less the amount owed on it. Equity determines how much the financial institution will allow the homeowner to borrow - usually 70-80 percent of the equity. If the homeowner has a mortgage on the property, a second mortgage or junior mortgage serves as collateral for the home improvement loan. Illinois state law limits the maximum home improvement loan to $25,000 for 10 years.

Interest rates vary. It is always best to shop around and make comparisons on interest rates. Some contractors have special arrangements with financial institutions for relatively low interest loans. However, the interest rates charged vary considerably and it's wise to check with several financial institutions. The lower the annual percentage rate (A.P.R.) the more money will be saved in interest costs. The longer the term of the loan, the lower the payments. On the other hand, the longer the term of the loan the higher the amount of total interest paid.

Some financial institutions have additional charges for credit investigations, appraisal cost, insurance charges, title charges, service charges and closing costs. A borrower should ask about these special charges and compare the total cost of a loan from various financial sources before choosing a loan program.
There are a few special home financing programs. Among them is a home improvement loan program called the FHA/Title I loan. On Title I loans, lenders are not allowed to charge special fees to moderate and middle income households. This program is popular with both financial institutions and borrowers because the federal government picks up some of the costs. Low-income and fixed-income households in Park Forest may be eligible for a rehabilitation rebate or grant for certain code related home improvements. Under this program the Village rebates 20-50% of the cost of correcting certain housing problems. Low-income people may also be eligible for assistance under the Weatherization Act. There is also a federal tax credit available for certain energy conservation activities.

The Energy Tax Act of 1978 provides substantial tax credits for homeowners who apply energy conservation measures and/or install solar energy systems in their homes. This residential energy credit is broken down into the following two areas:

A. Energy Conservation Expenditures

Taxpayers are eligible for a federal tax credit for the installation of these "Energy Conserving Components" in their homes:

1. Insulation
2. Storm Windows and/or Doors
3. Caulking and Weatherstripping
4. Automatic Energy-Saving Setback Thermostats
5. Intermittent or Electronic Furnace Pilot Lights
6. Furnace Burners which Increase Combustion Efficiency
7. Flue Dampers which Increase Furnace Efficiency

The tax credit for installation of these components is 15% of the total cost, up to a maximum of $2,000. For example, a homeowner who spent $2,000 for insulation, storm windows, etc., would receive a credit of $300. Only those residences constructed before April 20, 1977 are eligible for this credit.

B. Renewable Energy Source Expenditures

This section provides a federal tax credit for the installation of any residential solar or wind energy system. The homeowner can receive 30% of the first $2,000 spent and 20% of any amount spent between $2,000 and $10,000 as a tax credit. For example, a homeowner who has a solar energy system installed at a cost of $2,000 would receive 30% of that amount, $600, as a tax credit. If the homeowner had a solar system installed at a cost of $10,000, he would receive a tax credit of $2,200 - 30% of the first $2,000 ($600) and 20% of the next $8,000 ($1,600).

The appropriate forms for these tax credits are available from any Internal Revenue Service office or wherever federal tax forms are available (post offices, etc.).

Avoiding Higher Assessments

Most home improvements contribute to the value of a home. Many home improvements are considered by the County Assessor to be routine upkeep, and they do not result in increased assessed valuation. A general guide is that improvements that do not require a building permit do not increase the assessment. More extensive improvements, such as room additions, central air conditioning, finished attics, etc., which require permits, will increase both the value of the home and its assessment.

In Cook County, the Home Improvement Exemption allows homeowners to make major improvements of as much as $25,000 without increasing the assessment or property tax for a four year period. If the improvement is more than $25,000, only the excess will be immediately assessed at the rate of 16 percent. Homeowners do not have to make application for the
exemption. Upon issuance of the building permit the Assessor will apply the new tax rate.

Senior citizens are also eligible for a Homestead Exemption. This tax relief for senior citizens allows the Assessor to reduce the equalized assessed valuation by $1,500 for a yearly tax savings of approximately $120.00.

When making application for a Homestead Exemption the applicant must supply the following:

a. Proof of age (65 years or older), such as birth certificate or baptismal certificate.
b. Proof of residence, such as voter's registration or driver's license.
c. Proof of ownership, a copy of the deed. Also, your last tax bill.

The Homestead Exemption is available to seniors who are owner-occupants of homes, apartments, condominiums, or cooperatives.

Application forms are available from the Cook County Assessor's Office, County Building, 118 N. Clark Street, Chicago, IL 60602 -- 443-6150.

Additional information is available from the Park Forest Renovation Coordinator at Village Hall, 748-1112.
### PLANT LIST - PLAN A

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>BOTANICAL NAME</th>
<th>SIZE</th>
<th>QUANTITY</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agae Hydrangea</td>
<td>Hydrangea Agae</td>
<td>24&quot; b.b.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Andorra Juniper</td>
<td>Juniperus horizontalis plumosa</td>
<td>18&quot; b.b.</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Burning Bush</td>
<td>Euonymus alatus</td>
<td>3-4' b.b.</td>
<td>4</td>
<td>train into multistem specimen</td>
</tr>
<tr>
<td>Cornellian Cherry</td>
<td>Corrus mas</td>
<td>3-4' b.b.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dwarf Cotoneaster</td>
<td>Cotoneaster adpressa praecox</td>
<td>18&quot; b.b.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Japanese Flowering Crab</td>
<td>Malus floribunda</td>
<td>2' b.b.</td>
<td>1</td>
<td>multistem - attracts birds</td>
</tr>
<tr>
<td>Native Elderberry</td>
<td>Sambucus canadensis</td>
<td>3-4' b.b.</td>
<td>12</td>
<td>attracts birds</td>
</tr>
<tr>
<td>Native Plum</td>
<td>Prunus sargentti</td>
<td>8-10' b.b.</td>
<td>1</td>
<td>multistem - attracts birds</td>
</tr>
<tr>
<td>Pachysandra</td>
<td>Pachysandra terminalis</td>
<td>2&quot; pots</td>
<td>35</td>
<td>prepare soil w/ manure</td>
</tr>
<tr>
<td>Purple leaf Wintercreeper</td>
<td>Euonymus fortunei colorata</td>
<td>2&quot; pots</td>
<td>550</td>
<td>prepare soil w/ manure</td>
</tr>
<tr>
<td>River Birch</td>
<td>Betula nigra</td>
<td>6' b.b.</td>
<td>1</td>
<td>multistem</td>
</tr>
<tr>
<td>Tatarica Honeysuckle</td>
<td>Lonicera tatarica</td>
<td>3-4' b.b.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Washington Hawthorne</td>
<td>Crataegus phaenompyrum</td>
<td>8' b.b.</td>
<td>1</td>
<td>multistem - attracts birds</td>
</tr>
</tbody>
</table>

### PLANT LIST - PLAN B

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>BOTANICAL NAME</th>
<th>SIZE</th>
<th>QUANTITY</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Cranberry</td>
<td>Viburnum trilobum</td>
<td>3-4' b.b.</td>
<td>5</td>
<td>attracts birds</td>
</tr>
<tr>
<td>Agae Hydrangea</td>
<td>Hydrangea Agae</td>
<td>24&quot; b.b.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Andorra Juniper</td>
<td>Juniperus horizontalis plumosa</td>
<td>24&quot; b.b.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Burning Bush</td>
<td>Euonymus alatus</td>
<td>3-4' b.b.</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Dense Yew</td>
<td>Taxus media densiformis</td>
<td>24&quot; b.b.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Dwarf Cotoneaster</td>
<td>Cotoneaster adpressa praecox</td>
<td>24&quot; b.b.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Ferns</td>
<td>Ostrich Fern</td>
<td>clumps</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Japanese Flowering Crabapple</td>
<td>Malus floribunda</td>
<td>3&quot; b.b.</td>
<td>1</td>
<td>multistem/attracts birds</td>
</tr>
<tr>
<td>Native Elder</td>
<td>Sambucus canadensis</td>
<td>3-4' b.b.</td>
<td>15</td>
<td>attracts birds</td>
</tr>
<tr>
<td>Native Plum</td>
<td>Prunus sargentti</td>
<td>2½&quot; b.b.</td>
<td>1</td>
<td>multistem/attracts birds</td>
</tr>
<tr>
<td>Purple leaf Wintercreeper</td>
<td>Euonymus fortunei colorata</td>
<td>2&quot; pots</td>
<td>340</td>
<td>front yard only</td>
</tr>
<tr>
<td>River Birch</td>
<td>Betula nigra</td>
<td>3&quot; b.b.</td>
<td>1</td>
<td>multistem</td>
</tr>
<tr>
<td>Sargent Crabapple</td>
<td>Malus sargentti</td>
<td>3&quot; b.b.</td>
<td>1</td>
<td>5'x5'/attracts birds</td>
</tr>
<tr>
<td>Washington Hawthorne</td>
<td>Crataegus phaenompyrum</td>
<td>3½&quot; b.b.</td>
<td>1</td>
<td>multistem/attracts birds</td>
</tr>
</tbody>
</table>
Choosing a Contractor

Here are several important suggestions for finding the right contractor to do home improvements. Before choosing a contractor, the homeowner should have a good idea of the nature of the work to be done. It also is a good idea to have financing secured.

Finding the right contractor is more than looking through the Yellow Pages. Consult with friends and neighbors. The Village has a list of registered contractors who often work in the Village. While the Village cannot recommend one contractor, licensing means that the contractor has performed successfully in the past and that certain insurance requirements have been met. Also, check with local lenders for a list of three or four contractors.

Once a few contractors are selected, ask them for a list of references and check with several of his customers to make sure they have been satisfied with the work. Also, check friends' and neighbors' recommendations in addition to the names supplied by the contractor. Remember that a contractor is apt to give only names of satisfied customers.

Check the contractor’s liability with the local Better Business Bureau (listed in the Yellow Pages), or ask a bank or credit agency to check his credit rating. Give all the contractors the same outline of the job to be done. Be specific and don't change the job description for particular contractors. Ask each one to quote on the same job. Then select the contractor who offers what you're looking for.

Recently many contractors are joining both National and State Associations for contractors. These associations set standards for work and quality. In some cases, an association will provide warranties to the customers.

After selecting a contractor, always get a written estimate of the work to be done. Check the contract carefully for the work he is to do and make sure that it is correct. Ask the contractor about the insurance he carries. Does he have insurance to protect his workmen if they are injured? Is coverage provided if one of his workmen damages your house? Sign the contract only when it includes everything to be done. Insisting on a contract doesn't mean that contractors cannot be trusted. A contract outlines the responsibilities of both parties so that they are fully understood before the work begins.

Many consumer advisors insist that a contract include a date for completion. Few contractors like deadlines, but get it included in the contract; it may give some leverage if problems develop in the future.

A good contract often contains provisions for a waiver of lien. This contract will protect the homeowner against a claim made by a subcontractor against the general contractor. A lien is a claim against property for nonpayment of a debt. The actual work may or may not be completed. Liens are sometimes used by subcontractors to regain from the homeowner an obligation due them from the contractor. Before paying the contractor, make sure he presents copies of the waivers of lien from the subcontractors. The homeowner should be aware that the contractor can file a lien against the homeowner’s property for nonpayment if the work has been completed.

In the days following the completion of a job, check it out thoroughly. Learn as much as possible about the job and new equipment. Make sure the job was done correctly. The only "club" the homeowner has is money. The homeowner should not pay the contractor unless the job is satisfactory. A lawsuit is only worthwhile if many thousands of dollars are at stake. Checking a contractor out before he is hired can save a lot of aggravation.
CHAPTER VII   HOME SAFETY & SECURITY

Many families overlook the importance of fire safety and home security. Nevertheless, these are home improvements of great value in an emergency. Both the Police and Fire Departments recommend that every family check into these home fire and security measures.

Fire Safety

Fire provides many benefits and pleasures for people but it is dangerous. Each year in the United States, fire kills about 10,000 and injures another 100,000. These dead and injured are the tragic victims of inadequate knowledge of basic fire safety. By putting into practice the following safety hints, many families can prevent a heartbreaking fire loss.

Fire safety can be divided into two areas, fire prevention and fire prevention and escape.

Fire Prevention

Human carelessness is probably the greatest cause of home fires. The best weapon to prevent fires is common sense. It is not enough to have a safe home -- the whole family must think safety. Common fire hazards can be eliminated.

1. The number one cause of fire in the home is cigarettes burning upholstered furniture. A hot ash or cigarette will smolder in furniture for hours before making its presence known -- often while the family is asleep. This fire problem is easy to avoid.

*Always use non-combustible ashtrays.
*Don't smoke in bed.
*Never empty ashtrays into garbage bags.
*Check the furniture before retiring for the night, especially after entertaining.

2. Children playing with matches cause many home fires.

*Teach children the good and bad of fire. Explain that matches and fire are for adults and not for children.
*Keep matches out of reach and out of sight.
*Recognize a child who is attracted to fire more than most other children, and seek help before it is too late. Often a child uses fire to attract attention to himself and an underlying problem.

3. Open flames near combustible materials, such as stove burners near clothing, candles near curtains, furnaces near newspapers, and so on, can cause fires. A few precautions can prevent these fires from happening.

*Do not lean over a stove with the burners on. Clothing ignites quickly. Keep small children away while cooking.
*Do not leave stove burners and candles unattended while ignited. Beware of children leaning over a birthday cake.
*Keep candles away from curtains, paper, towels, etc., and use only in approved candleholders on a firm base.
*Never bring gasoline or flammable liquids into the house. Vapors from these liquids can travel to a furnace or hot water heater and explode.
*Keep flammable liquids in original containers at all times.
*Keep newspapers and furniture at least 36" away from heaters and furnaces.
*Keep storage spaces free of unnecessary garbage and clutter.
*Never burn paper or garbage in fireplaces; burn only seasoned wood. Clean the fireplace regularly to remove ash, and always use a screen to protect the floor from flying sparks and embers.

*If the smell of gas is detected, look for the source of the leak. Use a flashlight, not a lighted match or candle. First check all pilot lights, stove and heater burners. Remember that natural gas is lighter and will rise to the ceiling. If the odor is strong, get everyone out of the house. Don't use electric switches or the telephone. Call the fire department from a neighbor's house. If the odor is light, call the gas company.

4. Equipment failure can be minimized by an intelligent purchasing and inspection program. Many electrical fires are caused by overloaded or improperly installed electrical circuits.

*Never overload an electrical circuit. It is designed only to carry a certain electrical load. Overloading the wires will cause them to overheat, and possibly cause a fire.

*Do not use appliances with worn or frayed cords.

*Never hide extension cords under carpets or rugs. The weight of furniture, and walking on the cords, may cause the insulation to break and start a fire.

*Have all electrical work done by a qualified electrician. Many home fires have started by shortcuts taken by a home-owner with little knowledge of electricity. Don't take a chance.

*Inspect the heating plant annually.

The Building Commissioner can test home electrical systems to make sure that improvements have been properly installed. In addition, all electrical tools and appliances should be approved by Underwriters Laboratories. The label should be on the appliance, not just the cord.

Fire Detection

When fire burns carpeting, vinyl flooring, curtains and the many other flammable materials in a house, heavy smoke results. This smoke may contain toxic gasses such as hydrogen cyanide, carbon monoxide, and sulfur dioxide. In fact, smoke and toxic fumes actually kill more people than flames. Thus, early detection of smoke is essential.

Seventy-five percent (75%) of all fatal fires occur at night when people sleep and most vulnerable to smoke inhalation. It is estimated three of every five fire fatalities could be prevented by use of a smoke alarm. A smoke detector alarm sounds a sharp, loud sound almost when any amount of smoke filters through a home. This alarm wakes and warns people when fire is present, giving fire victims extra seconds to exit safely, before the fire reaches fatal proportions.

Although smoke alarms do not prevent fires, they are effective warning devices. Smoke alarms may be either battery or electrically operated, and they range in price from $10 - $20. The few moments it takes to install a smoke detector can save lives.

The National Fire Protection Association (NFPA) recommends that at least one smoke alarm be installed on the ceiling of the hall area between the bedrooms and the rest of the house. If this alarm is triggered, it should be heard by sleeping family members through closed bedroom doors. NFPA also recommends that each level in a home be protected by a smoke alarm. However, smoke alarms should not be installed in kitchens, garages, attics or bathrooms, in dead air spaces, near heating and cooling ducts, or near an object that may prevent smoke from getting into the alarm.

For families who want, and can afford, more complete protection, smoke detectors, heat detectors gas leak detectors, and burglar alarms are available in retail stores. Some of these units can be
tied directly to the Village's public safety building for a monthly fee.

In addition to purchasing and installing smoke detectors, families are urged to plan for emergencies by developing escape plans for their homes. Children should be drilled in these escape routes and taught these basics including:

* Sleeping with doors closed at night. This helps to keep smoke and gases out of bedrooms, and provides valuable escape time.
* Awakening everyone by yelling, blowing a whistle or pounding on walls.
* Feeling the door. If it is hot, do not open it. It already is too late to escape through the hallway and stairs. If the door is not hot to the touch, and smoke is not filtering in, open the door slowly. If smoke and superheated gases enter the room, close the door fast.
* Knowing two exits out of each room. If it is not possible to go out the door, go out the window. Make certain all windows open easily. Parents can use ladders from outside to help small children escape.
* Staying low in smoke. Smoke and hot gases are lighter than air and will rise to the ceiling and accumulate. The best air is near the floor. Stay low and crawl.

* Planning a meeting place for all members of the household as they evacuate the house so that lives will not be lost going back into the burning building to rescue someone who is already safe in a neighbor's house.
* If your clothing catches on fire, STOP, DROP AND ROLL. Avoid the inclination to run since running fans the flames and causes them to burn hotter.

More information about fire safety rules is available from the Park Forest Fire Prevention Bureau, phone 748-5605.

The Fire Safety Check List on the next pages will help assess fire safety in the home.

* Keeping cool. Knowing what to do makes it less likely that fire victims panic... and more likely that they will survive.
* Once outside, going to a neighbor and call the fire department. Never re-enter a burning building. A small fire can change drastically in a matter of seconds.
HOUSEHOLD FIRE SAFETY CHECKLIST

To see how well you’re doing in achieving a “Fire Safe” home, answer the questions in this checklist. Do it once a year to measure improvement (or worse, to determine if you and your family have become lax)!. Skip questions which don’t apply to you. The following is

ESCAPE

1. Does everyone in your household recognize the importance of getting out immediately if they even suspect the existence of a fire?

2. Does everyone in your household know that life safety is the first consideration and that no actions (even calling the fire department) should be taken until after everyone has been alerted?

3. Have you shown everyone in your household the ways they can get out in case of fire? Do they know more than one way out?

4. Can all windows and doors needed for emergency escape be opened easily from the inside?

5. Does everyone in your household know which fire department to call if you live in a suburb or rural area?

6. Do you make it a regular practice to let your babysitters know what to do in case of fire?

HAZARDOUS MATERIALS

7. Is gasoline always opened, poured and used only outdoors?

8. Is all gasoline stored in either a UL labeled safety can or a capped metal can in a shed or garage?

9. If you have more than 1 gallon of gasoline stored, is it in a safety can?

10. Are other flammable liquids and combustible liquids either in their original containers or in tightly capped metal cans?

11. Do you take precautions to never use a combustible liquid to “freshen” any fire nor to start a fire in a stove not designed for liquid fuel?

FIRE EQUIPMENT

12. Are smoke detectors tested regularly as recommended by the manufacturer? (Monthly, unless otherwise indicated)

13. Have new batteries been installed in battery-operated smoke detectors within the past year?

14. Have all fire extinguishers been checked and recharged according to instructions on the nameplate?
your Fire Safety index: 5 or more “NO” answers, You’re in trouble!; 3 to 4 “NO” answers, Improvement needed; 1 to 2 “NO” answers. Good, but you can still do better; 0 “NO” answers. Congratulations for maintaining a FIRE SAFE home!

<table>
<thead>
<tr>
<th>ELECTRICAL</th>
<th>DATE</th>
<th>YES</th>
<th>NO</th>
<th>DATE</th>
<th>YES</th>
<th>NO</th>
<th>DATE</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Are all the fuses in your home the proper size? (15 or 20 amp on general circuits except special stove, dryer or air conditioner circuits.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>16. Have you operated circuit breakers in your home several times each year to be sure they don’t stick?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Does the insulation on all electric cords appear to be in good condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Are the plugs and receptacles on all electric cords attached tightly and in good condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>19. Have all electric outlet and switch plates been checked within the past 6 months to determine whether they are hot to the touch?</td>
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<th>HEATING EQUIPMENT</th>
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<th>DATE</th>
<th>YES</th>
<th>NO</th>
<th>DATE</th>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>20. Have you inspected the chimney this year to be sure there are no cracks or loose bricks? Are metal chimneys well supported with tight connections?</td>
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<tr>
<td>21. Are the smoke pipes on all furnaces and heaters well supported, tightly connected and clear of combustibles?</td>
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<td>22. Is combustible material kept at least three feet from your furnace, heaters and stoves unless instructions permit lesser clearance?</td>
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<td>23. Do you oil, clean, adjust, and perform other needed maintenance on heating equipment as required by the manufacturer's instructions?</td>
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<tr>
<td>24. Are filled wastebaskets regularly emptied?</td>
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<td>25. Do you keep matches and lighters away from small children?</td>
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<td>26. Are ashes from smoking materials emptied into the toilet, the garbage disposer or into a covered metal-can?</td>
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<td>27. Do you use ashtrays only on solid surfaces instead of on arms or seats of upholstered furniture?</td>
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<td>28. Do you make a fire safety walk-through of your home before going to bed?</td>
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Home Security

Nationally, the crime rate is increasing rapidly and crime has spread to suburban areas. Although Park Forest continues to have one of the lowest crime rates in the State, last year crime increased at approximately the national rate. Burglary and all types of theft account for 98% of reported crimes in Park Forest. No one knows how many additional burglaries and thefts went unreported.

The rate of breaking and entering typically increases during the summer, and middle class people are as likely to be burglarized as the wealthy. The articles most often stolen are television sets, money, clothing, clock radios and stereo sets, rather than art, silver or antiques. Furthermore, statistics show these stolen articles are rarely recovered. Nationally, an arrest is made in only one of eleven burglaries.

This chapter is concerned with how to prevent breaking and entering in private homes and townhouses. There is no way to make a home completely safe from breaking and entering, and there is no assurance that when a home is left it will be intact when the homeowner returns.

Physical Considerations:

Perhaps the single most important way to prevent burglary is the door lock. A wide range of locks are available, varying in both complexity and performance.

The three major types of locks are (1) knob or key-in-the-knob lock; (2) mortise lock; and (3) vertical bolt auxiliary lock. The key-in-the-knob lock is the least secure. If the trigger bolt is not set, the latch can easily be pried back with a strong, thin object, such as a credit card. Setting the trigger bolt does little to increase this lock's effectiveness because it is easily jimmed. Key-in-the-knob locks are generally priced from $9 to $40.

The mortise lock is preferable to the knob lock because of its built-in horizontal dead-bolt. The shape and ample size of this bolt prevent it from being easily pried open. To protect against the jimmying of this lock, the mortise lock should have a long bolt, extending far into the door jam. Prices for this type of lock range from $26 to $85.

For increased security many public safety officials recommend that key-in-the-knob and mortise locks be supplemented by a vertical-bolt auxiliary lock. This type of lock is extremely difficult to jimmy. There are several good locks of this type which range in price from $10 to $30.
Even the most effective lock is rendered useless if the door is inadequate or poorly fitted. In general, outside doors should be solid rather than hollow core, and of good quality so that they will be less vulnerable to crowbars. Two kinds of metal doors are acceptable for use as dwelling entry doors: hollow steel flush doors and "Kalimein" doors with steel sheets laminated to both sides.

Glass panels in or near doors can easily be broken to permit entry. Metal grates can be installed over the glass, or plain glass panes can be replaced by glass containing wire mesh of sufficient strength to act as a deterrent. Alternatively, a newly available plastic, polycarbonate, if properly installed, can be used to replace the glass. Polycarbonate is difficult to break and is inflammable. It must be set securely in the frame in some manner stronger than the usual putty or tacks to be effective. Otherwise, the whole panel can be popped out by hitting it with a heavy object. Polycarbonate cannot be easily broken by the resident in case of fire or other reason for emergency exit.

Sliding glass patio doors should be installed so that the movable section of the door slides on the inside of the fixed window. Doors must be properly installed because they are easily unlocked or removed from the track.

The locks provided on sliding glass doors often are weak. By inserting a metal bar or a piece of wood horizontally into the track of the movable door when it is closed, the door becomes immovable. This bar must lay in the entire length of the exposed track. The bar should be removed only when the door is in constant use. Tempered or wire-mesh glass or polycarbonate are better deterrents than plain glass in these sliding doors.

A sturdy door also must be properly hung. The door should fit snugly into the door frame, which must itself be sturdy. Otherwise, a crowbar can be used to force the door open. The door frame should include a molding to make it impossible to slip a thin, stiff instrument between door and frame in the attempt to push back the lock bolt. If the molding is faulty, a "pick-plate," or metal sheet for mounting on the door frame can be purchased for about $3. A lock with a trigger bolt will frustrate an intruder, but a mortise lock (with its dead bolt) or a vertical bolt lock provides greater security.

Finally, a door always should be hung with the hinges inside the home. The hinge-pin can easily be taken out if the hinges are exposed to the outside, permitting the entire door to be removed, regardless of locks. Exposed hinges should be changed. If this is not possible, security can be improved by drilling horizontally through the section of the hinge that is attached to the door frame and midway through the pin itself. The drill bit then is broken off and left in the hinge. It is virtually impossible to remove. Both hinges can be drilled for the cost of two 1/8" or 3/32" drill bits (about $2). Hinge pins also can be made more non-removable by hammering both ends.

Door Hardware... The following items help provide personal security:

Optical Door Interviewers (Peephole). An optical door interviewer is a small protected hole set into a door at eye level to help a resident visually identify a person outside the closed door. Interviewers should be installed in all solid doors.
Chain Door Interviewers (also called door chain). This device consists of a chain attached at one end to the wall and the other to the door. The chain allows the door to be opened slightly to permit visual identification, but restrains it from opening. Because chain door interviewers are generally constructed cheaply and are easily overcome, they provide a false sense of security. Chain door interviewers are not recommended unless the chain can withstand 800 pounds of pressure and extra long screws are used in installation. These screws should be imbedded firmly in the door jamb or stud and not just the drywall.

Door Closers. Safety officials recommend that each dwelling entry swinging door be fitted with a door closing device that can close and latch the door when it is left open 6 inches or more.

Burglar Alarms. Burglar alarms are effective in frightening burglars away and sometimes in leading to apprehension since the noise is loud and draws police inquiry immediately.

On the other hand, a recent article in Business Week indicated that 99 percent of the alarms are false and that no police force in the country could respond to all alarms.

Still, many people feel more secure with a burglar alarm. These alarms can be privately purchased and installed, or rented from a security company. One privately designed burglar alarm system is especially recommended for low-rise buildings and private homes. Plans for this versatile, low cost alarms are available free, from Operation Burglar-Free at Hyde Park-Kenwood Community Conference, 1400 East 53rd Street, Chicago.

There also are many professional systems available. Typically, a professional system costs $400-$500 to install and there is an operation fee of $25+ per month. The company receives any alarm directly and relays it to the police within 30 seconds.

The Crime Prevention Unit of the Park Forest Police Department will provide free advice on alarms.

Windows

One of the common ways a burglar gets into a house or apartment is through the windows. Burglars can force, break or open windows that are not secured. Burglars can be deterred by using break resistant glass or strong security devices in first floor, basement and rear windows. Even greater security can be achieved by using vandal-resistant or unbreakable glazing material (at several times the price of conventional glass).

"Latch-type" window locks are necessary for windows on any floor remotely accessible from the outside. Some experienced sources say that latch-type locks are easily opened. Others say they are not. Key-type window locks may be safest. Other possibilities, such as inserting a rod or a piece of wood or driving a large nail (the "ten-penny" size) into the track of the window pane to prevent the window from opening far enough to allow entry, have the disadvantage of rendering the window closed to the occupant as well. This disadvantage would pose a hazard in case of fire.
Transoms should be sealed if they are not used. If they are in use, they are as accessible as an open door to burglars. Bars and grates are useful on windows and transoms whenever there is easy access from the street, including, for example, the roof or a fire escape.

Window Hardware

Burglars and other criminals prefer to enter windows by breaking the locks rather than breaking the glass because it is less noisy and less noticeable. However, when glass is broken it usually is done to create a hole large enough to reach through to release the window lock or latch. Window hardware can help prevent entry.

Proper window hardware can be divided into hardware for accessible windows (a window located less than 18 ft. above ground level or within 10 ft. of another structure) and hardware for non-accessible windows.

Simple, lever-operated locking devices such as crescent sash locks, slide bolt locks, thumbscrew locks, and pin-type locks are acceptable on all windows except accessible windows. Accessible windows may have lock types similar to those used with non-accessible windows, except they should be key operated. Window keys should be kept at least three feet away from windows to prevent a criminal from breaking a small hole in the glass, reaching in, and using the window key to unlock the window. A reminder: The window key for each window should be located in a visible place so that occupants can easily escape in an emergency.

Fences and Hedges

To help prevent burglaries, it is important to create obstacles which limit the ease of entering and leaving the grounds of a building. Fences are useful for this purpose, and also for protecting property that must be left outside. Fence protection is effective when the fence is high enough and difficult enough to climb that the burglar would have a hard time lifting heavy stolen items over it. A six-foot height is useful. Open fences (such as chain link) are good because the enclosed area still is visible to passersby.

Although hedges may seem an obstacle to entering and leaving the grounds of a home, they create special problems. If hedges are tall enough to be effective obstacles, they also provide natural concealment for burglars. On balance, it is recommended that hedges be short and that tall open-type fences be used as the major obstacles to entering and leaving grounds.

Lighting

Adequate lighting is important both outside and inside the building. Entrances, breezeways, backyards all should be well lit. A hardware store can recommend lights suitable for outside installation.

Certain minimum requirements are suggested for lighting around doors and windows.

**Lighting for Doors.** Each door in a private dwelling should be lit by an exterior fixture with a vandal-proof lamp. The fixture should be installed so that at least 80% of the door and the ground within ten feet of the door is lighted.

**Lighting for Accessible Windows.** Each accessible window visible from an adjacent public street also should be lit. In many cases this low level of light can be provided by existing light sources such as street lights or entry door lighting.
It is useful to keep lights on inside the home, especially when residents are out. Residents should periodically change which lights are left on to prevent signaling a burglar that the house is empty. If absence is prolonged, inexpensive electrical timing devices are available to turn lights off and on. Two or more timing devices placed in different rooms are even more effective.

Garages

Garages may be vulnerable no matter how many precautions are taken to prevent breaking and entering of the home. Sometimes there is access to the home from the garage. Often a garage contains valuable equipment, and in some cases, burglars have gained access to homes with tools "borrowed" from an unlocked garage. Garage doors should be kept closed, even during short shopping trips.

In addition, garage windows should be painted black or covered with dark shades, so a burglar cannot look in to determine whether the family car is there or not, and whether the occupants are at home.

Additional information is available from the Crime Prevention Division of the Park Forest Police Department.
CHAPTER VIII  ADDITIONAL RESOURCES

The goal of this book is to encourage Park Forest homeowners to maintain and improve their homes. Most of the information provided will help prevent costly repairs and save money in the long run. The book stresses preventative maintenance and home safety rather than how to correct major defects. Major problems require indepth research and professional help.

For those people who would like more indepth information, several sources are available.

Schools - Several area schools have adult education programs that offer courses in home repair. Check with the local high school district and Prairie State Junior College.

The Village - Park Forest's professional code enforcement staff can answer specific questions related to building and housing codes. They also can offer suggestions as to how certain improvements can be made. The Village's Renovation Coordinator is familiar with many kinds of building problems. The Coordinator can help assess problems and help develop a remodeling work program.

The Planning Department can answer questions about zoning and energy conservation.

The Recreation and Parks Department also offer seminars on landscaping that cover the care of plant materials as well as ideas for new plantings. The Department's "Planting Guide for Park Foresters" is highly recommended.

The Library - The Park Forest Public Library has a large collection of home repairs, energy conservation and remodeling books. They have compiled the attached bibliography to help do-it-yourselfers.
HOME MAINTENANCE RESOURCES

Selected Books Available on Loan From the
Park Forest Public Library

General Home Repair


Pamphlets available in the reference department.

Roofing


Plumbing


Pamphlets available in the reference department.
Electrical Repairs & Maintenance


Carpentry


Energy Conservation


Paper back back
rack.


Pamphlets available in the reference department.
Reference Materials

R016.6 Index to How to Do It Information: an index to periodicals. ed. by Lathrop, Mary Lou and Lathrop, Norman M. Wooster, Ohio: Norman Lathrop Enterprises, (published annually)

(Index tables)

These books tell where to find do-it-yourself project information in Popular Mechanics, Family Handyman and many other magazines.

R643.7 Mechanix Illustrated How-To-Do-It Encyclopedia. 16 volumes.

R643.7 Popular Mechanics Do-it-yourself Encyclopedia. 18 volumes.