

Chapter 29

A TUDOR COTTAGE

SINCE its origin in England during the reign of the House of Tudor, this particular style of architecture has been popular for both country and suburban homes. Tudor architecture was brought to this country by the early settlers, and many fine examples of it can be found here in both old and modern homes.

One of the most outstanding features of Tudor architecture is the feeling of permanence that it produces. The massive walls of masonry or stucco with exposed heavy timbers give one the feeling that here is a house that will stand for many a year.

The Tudor Cottage covered in this section will make an ideal country or suburban home for the average family. While it is only one story, the first floor provides ample space for two good-size bedrooms along with a spacious living room and dining room as well as a kitchen, a bathroom and several large closets.

The large bay windows help increase the size of the two bedrooms and the living room considerably. In fact, the bay window in the living room is large enough to serve as a dining alcove, so that the dining-room table and chairs

can be left in place without detracting from the over-all size of the living room proper.

The utility room off the kitchen provides sufficient space for the furnace and hot-water heater, so there is no need for a basement of any sort, unless one is desired for a game room or for additional storage space.

Choice of Materials

As far as the construction of this type of house goes, the builder is somewhat limited in his choice of materials. Wood siding or wood or asphalt shingles are not satisfactory. Native field stone is excellent, but the work goes rather slowly. Cut stone can be used with very good results, but this will run up construction costs considerably.

Special masonry blocks can also be used for the job, and they can be laid up in coursed ashlar or random ashlar or a combination of the two. They are much less expensive than the cut stone and can be laid up a good deal more easily. After they are in place, they can be painted.

Ordinary masonry blocks can also be used and, after the wall is finished,

they can be coated with stucco, which is marked off before it is hard to give the appearance of a wall of stone. Still another method of construction is to build with masonry blocks and then cover them with a veneer of stone.

Brick veneer is also suitable for the outside walls of the Tudor Cottage. In this type of construction, the house frame is built out of wood and then covered with wood sheathing and waterproof paper. After this has been done, a veneer one brick thick is laid up and tied to the house framework by means of metal straps.

Another method of building is to use stucco for the walls. Before the stucco is applied, the wall can be divided up into sections by attaching heavy timbers to the house framework. While these timbers will give the impression that they provide structural strength to the house, actually they do not, and therefore it is possible to use rather light-weight stock, just thick enough, in fact, so that it will stick out beyond the finish surface of the stucco. The outside face of these timbers can be worked over with a hatchet to give the appearance that the wood was hand-hewn.

Windows should be of the casement type, of either metal or wood, with small-size panes of glass. Lead windows are very much in keeping with the Tudor style but, of course, they are more expensive than some of the other windows available.

The perfect material for the roof is slate, but this is not only very expensive

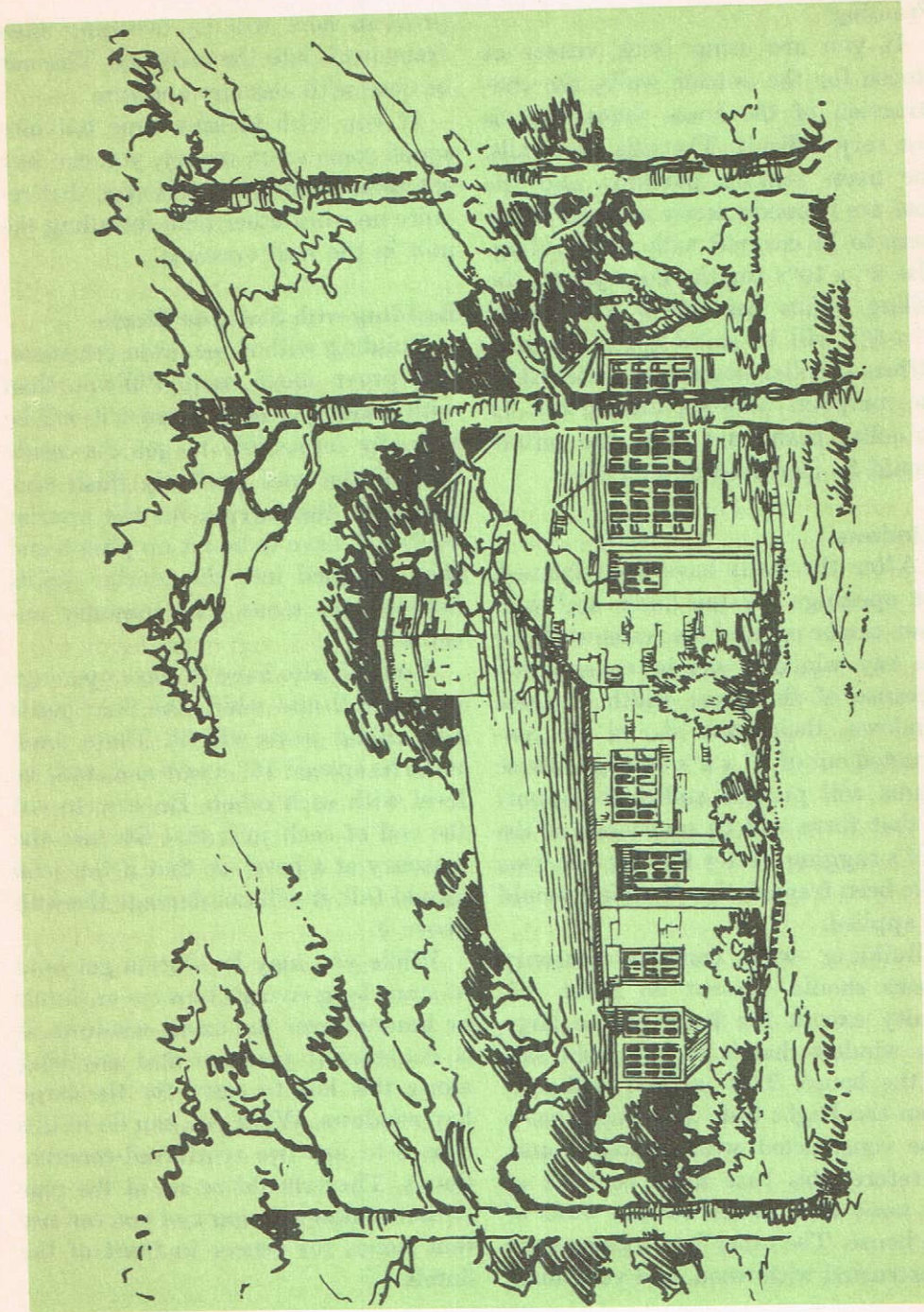
as compared with other roofing materials but is also difficult for anyone other than a skilled roofer to install satisfactorily. Asbestos or asphalt shingles made to resemble a slate roof will be adequate in most cases.

If stone or concrete blocks are to be used for the outside walls, the gable ends of the house can be covered with some other type of siding since to cut stone or blocks to go under the end rafters and produce a tight fit would be difficult and time consuming. The house shown here has its gable ends covered with plywood or wide boards with the horizontal joints exposed.

Foundations

Before the footing and foundations can be installed, you must decide what sort of siding you are going to use. If you select either stone, blocks or blocks with stone veneer, the footings and foundations must be wide enough to carry the load. The minimum thickness for a stone wall is 16", and for one made out of blocks, 8". If you plan to use brick veneer, the foundation walls must extend far enough beyond the house framework and sheathing to provide a base on which to lay up the bricks. This is important because unless the bricks are set on a solid base, the wall will not last long since the house framework cannot support it.

At the same time that the foundations are installed, a footing for the main bearing partition and one for the fireplace and chimney should be installed.



The Tudor Cottage

Framing

If you are using brick veneer or stucco for the outside walls, the construction of the house framework is not very difficult. The sills, the walls, the main bearing partition and the roof are framed exactly as if the house were to be covered with wood siding. Use 2" x 10"s for the floor joists; the ceiling joists can be 2" x 8"s, and 2" x 6"s will be suitable for the roof rafters if collar beams are installed at the midpoint between the rafters. If no collar beams are used, the rafters should be increased to 2" x 8"s.

Windows

After the walls have been framed, the openings for the doors and windows can be cut and the framework for the bay windows can be constructed. Because of the great width of these windows, their tops should be constructed out of 2" x 6"s on edge. These beams will provide sufficient support so that there will be no chance of the roof's sagging. After the bay windows have been framed, the sheathing should be applied.

Building with concrete masonry blocks should present no great difficulty except for framing the large bay window that is on the right side of the house. This, as you will note from the Right Side Elevation, has a base constructed with masonry, and, therefore, this base must be built at the same time as the outside walls of the house. The other bay windows are constructed with wood, and your main

problem here will be fastening their framework into the masonry. This can be done with masonry anchors.

If you wish to save time but also spend some extra money, you can buy complete windows of this type that require no work other than installing the unit in the wall opening.

Building with Stone or Blocks

Building with stone, even cut stone, will prove much more difficult than with masonry blocks because it will be virtually impossible to get the inside face of the wall perfectly flush and, therefore, the furring for the interior walls will have to be set up plumb and then fastened into the mortar joints between the stone with masonry anchors.

You will also have to leave openings in the wall into which the floor joists and ceiling joists will fit. These joists must be spaced 16" apart and must be level with each other. Be sure to cut the end of each joist that fits into the masonry at a bevel, so that if the joist should fall, it will not damage the wall above it.

While you may be able to get hold of stone long enough to serve as lintels or headers over the small windows, it is doubtful if you can find anything along this line to serve for the large bay windows. What you can do in this case is to use two reinforced-concrete lintels. They should be set at the rear of the window opening and you can use thin stones for veneer in front of the lintels.

Once the house frame has been built and the roof is on, the interior wall partitions can go up.

The location of these is shown on the first-floor plan.

Insulation and Flashing

Insulation should be installed on the four outside walls; this is especially important if stone has been used. Be sure that the insulation does not come into direct contact with the masonry because if it does, there is a chance that it will be damaged by moisture's coming through a leak in the wall.

After the bay windows have been constructed, but before the siding is installed, the bottom of the windows and the joints between the sides of the bay windows and the house wall must be flashed with metal flashing to eliminate the possibility that moisture will enter at the seams. Joints between the window frame and masonry walls can be made tight by first packing the seam with oakum and then using caulking compound. Flashing at the base of the window should be bent over and turned into one of the horizontal mortar joints in the masonry.

Keeping the Tudor Style

When finishing off this type of house, care must be taken not to ruin its style. As far as the hardware is concerned, the most suitable type is rough wrought iron. This is coated with asphaltum paint, which is black and in keeping with the design of the house. Solid brass hardware is also suitable.

The front door should be of oak and rather heavy. It can be given a stain to darken the wood and then a coating of spar varnish to protect it from the weather. Woodwork around the outside window frames and door frames should be treated in a similar fashion. Where possible, woodwork should be left natural, with, of course, a protective coating of varnish.

Exterior fixtures, such as the front-door electric light, should be selected to fit in with the architectural style. Fixtures of suitable types are on the market and are no more expensive than other kinds.

In considering the interior of the house, do not think that it has to be dark. Light colors or natural wood are quite proper. In the strictest tradition of Tudor architecture, of course, the living room is best finished off with a hardwood floor of oak or planks and walls covered with wood paneling.

An excellent material to use for the living-room walls is grained plywood, which, when stained, resembles very closely the type of walls found in the original Tudor homes. A rough-textured plaster wall, however, is likewise very effective, and plaster can also be used with good results on the ceiling.

The fireplace opening in the living room may be of Tudor design, of course, but a conventional type of fireplace is perfectly suitable under most conditions.

The bedrooms should be finished off for comfort and cheerfulness and need not by any means follow the Tudor

style. The same holds true for the bathroom and kitchen, which should, in fact, be finished in a modern fashion.

Do not use ultra-modern furniture or furnishings if you can possibly avoid them, because they will clash with the house itself and the effect of both will be ruined. This does not mean, of course, that only heavy, massive, Tudor furniture can be used, but you should

steer clear of too much present day, modern furniture.

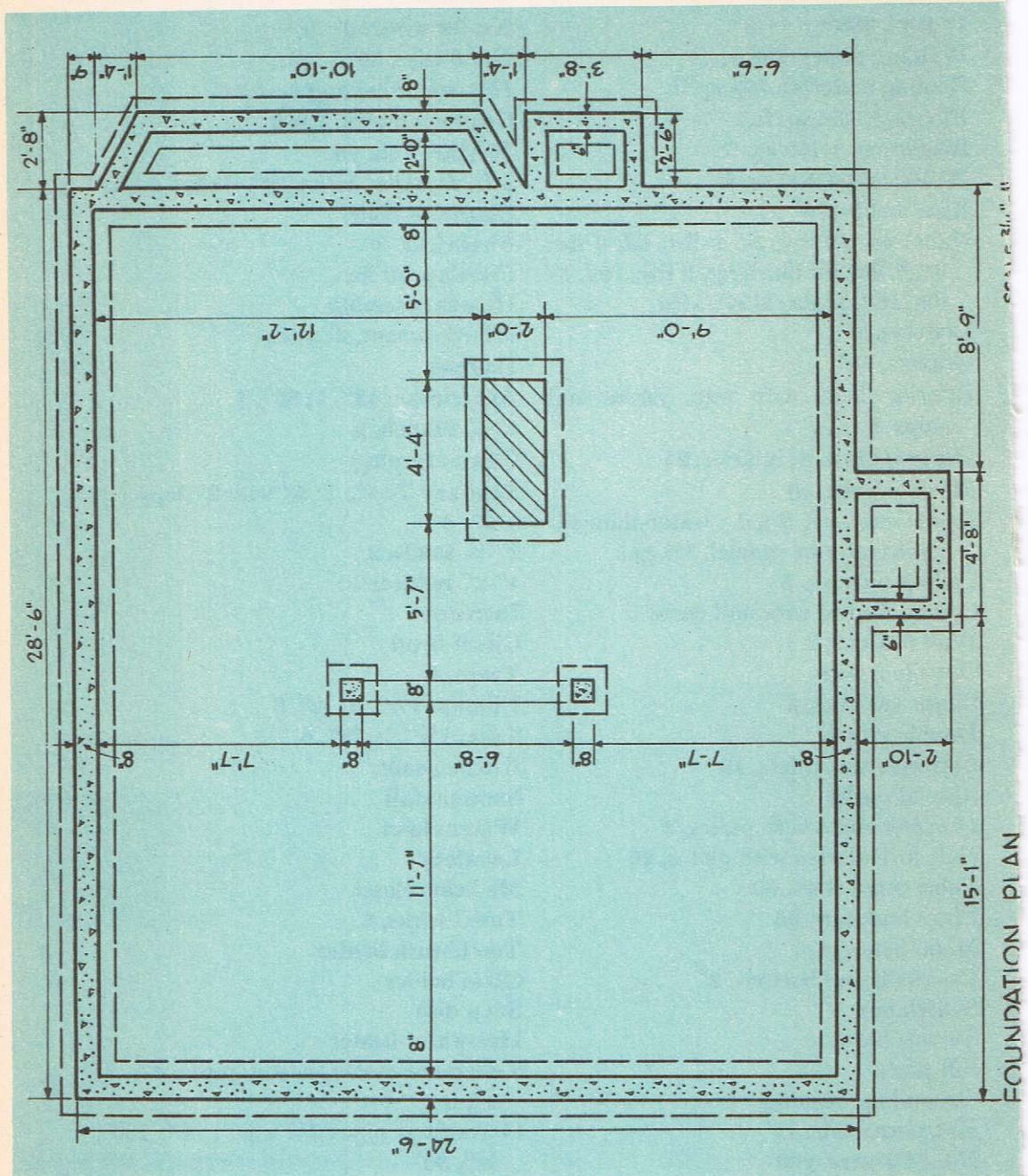
Interior woodwork in the living room and halls can be stained. Doors can be either of the panel or flush type, but the flush is more in keeping with the general style.

Interior hardware, with the exception of the bathroom and kitchen, should be wrought iron or solid brass.

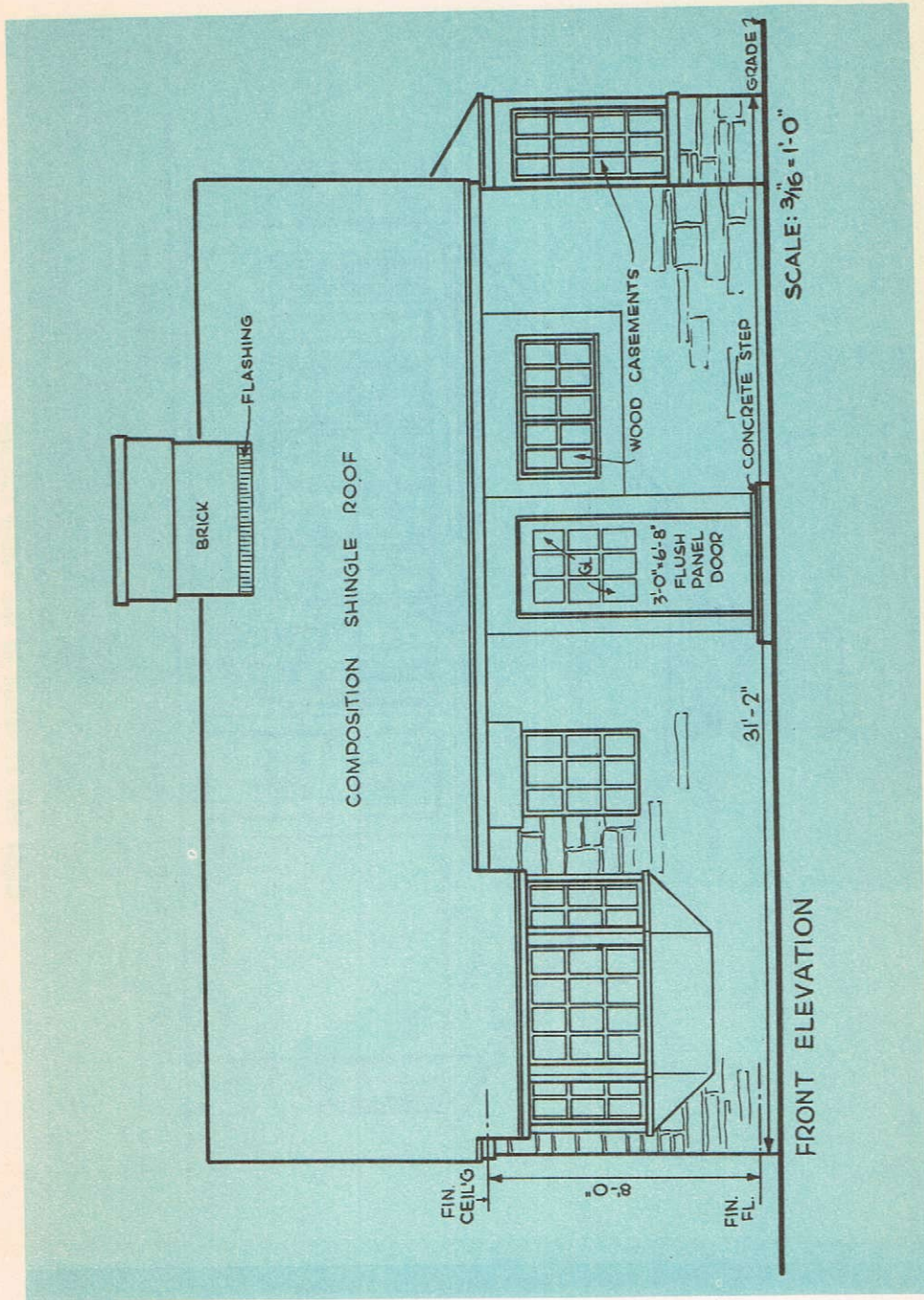
TUDOR COTTAGE MATERIALS LIST

<i>Material</i>	<i>Quantity</i>	<i>Dimensions</i>
Mixed cement	4.5 cu. yds.	
Concrete blocks	1,406	
2" x 10"	18	14'
	22	16'
2" x 8"	6	12'
	18	14'
	21	16'
	46	18'
2" x 6"	19	14'
2" x 4"	43	16'
2" x 2"	32	16'
1" x 6"	2	16'
Sheathing	2,359 board ft.	1" x 6"
Beveled siding	300 board ft.	1" x 6"
Shelving	100'	1" x 6"
Copper flashing	50'	24"
Entrance doors with frame and trim	2	7'0" x 3'3"
Windows with frame and trim	2	2'4" x 4'6"
	3	3'3" x 4'6"
	2	3'3" x 3'3"
	3	1'8" x 2'6"
	4	2'0" x 3'3"
	1	3'4" x 2'6"
	1	2'9" x 4'6"
	1	4'6" x 7'2"

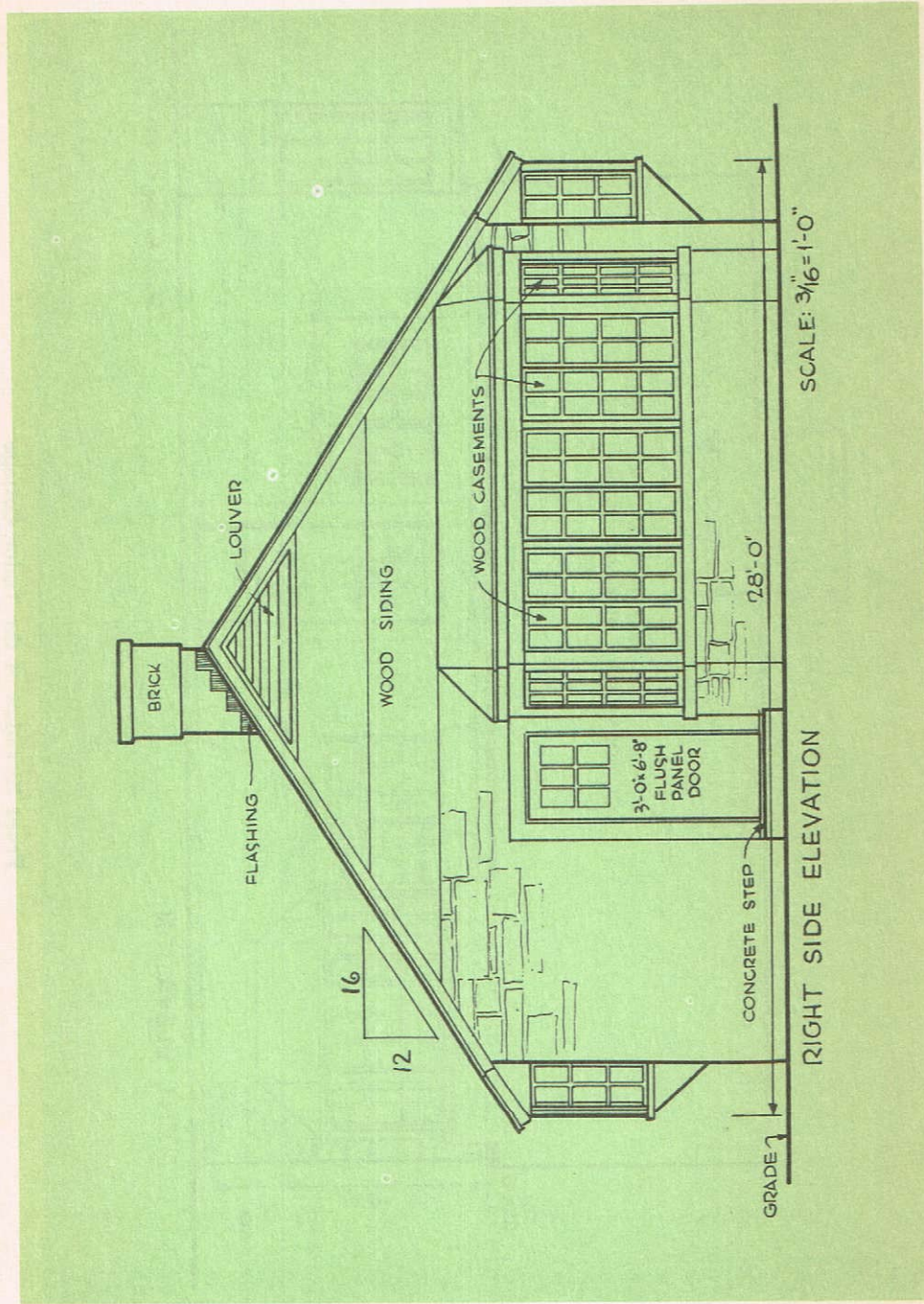
1" x 3", 288'	No. 12 wire, 50'
Building paper, 250 sq. ft.	No. 6 wire, 30'
Roofing material, 700 sq. ft.	Hot-water heating system
Flooring, 600 sq. ft.	Common bricks, 1,800
Insulation, 1,400 sq. ft.	Mortar, 1 cu. yd.
Wallboard, 1,520 sq. ft.	2-ft. flue-tile: 12" x 12", 6; 12" x 8", 6
Base mold, 173'	Clean-out door
Nails: 4d, 42 lbs; 5d, 9 lbs; 6d, 8 lbs;	Firebricks, 90
8d, 7 lbs; 8d finishing, 3 lbs; 10d, 57	Fireclay, 30 lbs
lbs; 16d, 15 lbs; 20d, 25 lbs	Hearth assembly
Louvers, 2	Mixed cement, 2 cu. ft.
Gutters, 60'	Damper
Interior doors with trim, jambs and	Angleirons: 42", 1; 36", 1
stops, 8	4" Y branch, 2
Hinges: brass, 6; interior, 24	Clean-out plug
Mortice locks, 10	Sanitary T: 4", 1; 4" with 2" tapp., 2;
Paint: exterior, 3 gal.; water-thinned,	2", 2
5 gal.; interior enamel, 1½ gal.	2" ¼-bends, 2
Ceiling fixtures, 5	4"-2" reducer
Ceiling fixture with pull chain	Increaser
Wall fixtures, 2	Closet bend
Outside fixture	Traps, 3
Single switches, 5	Elbows: 1½", 3; ½", 6
Double switch	Tees: 1½", 3; ½", 6
Convenience outlets, 13	Kitchen sink
Special outlet	Shower stall
4" outlet boxes with plates, 6	Water closet
2½" outlet boxes with plates, 20	Lavatory
Cable connectors, 60	Medicine closet
Fibre bushings, 60	Towel racks, 2
Metal hangers, 6	Toothbrush holder
Doorbells and buttons, 2	Glass holder
Switch box	Soap dish
Service head	Hot-water heater
Sill plate	5'-sections cast-iron soil pipe: 4", 7;
Grounding bushing	2", 6
Entrance cable, 16'	Galvanized pipe: 1½", 60'; ¾", 100';
No. 14 2-wire, 250'	½", 30'



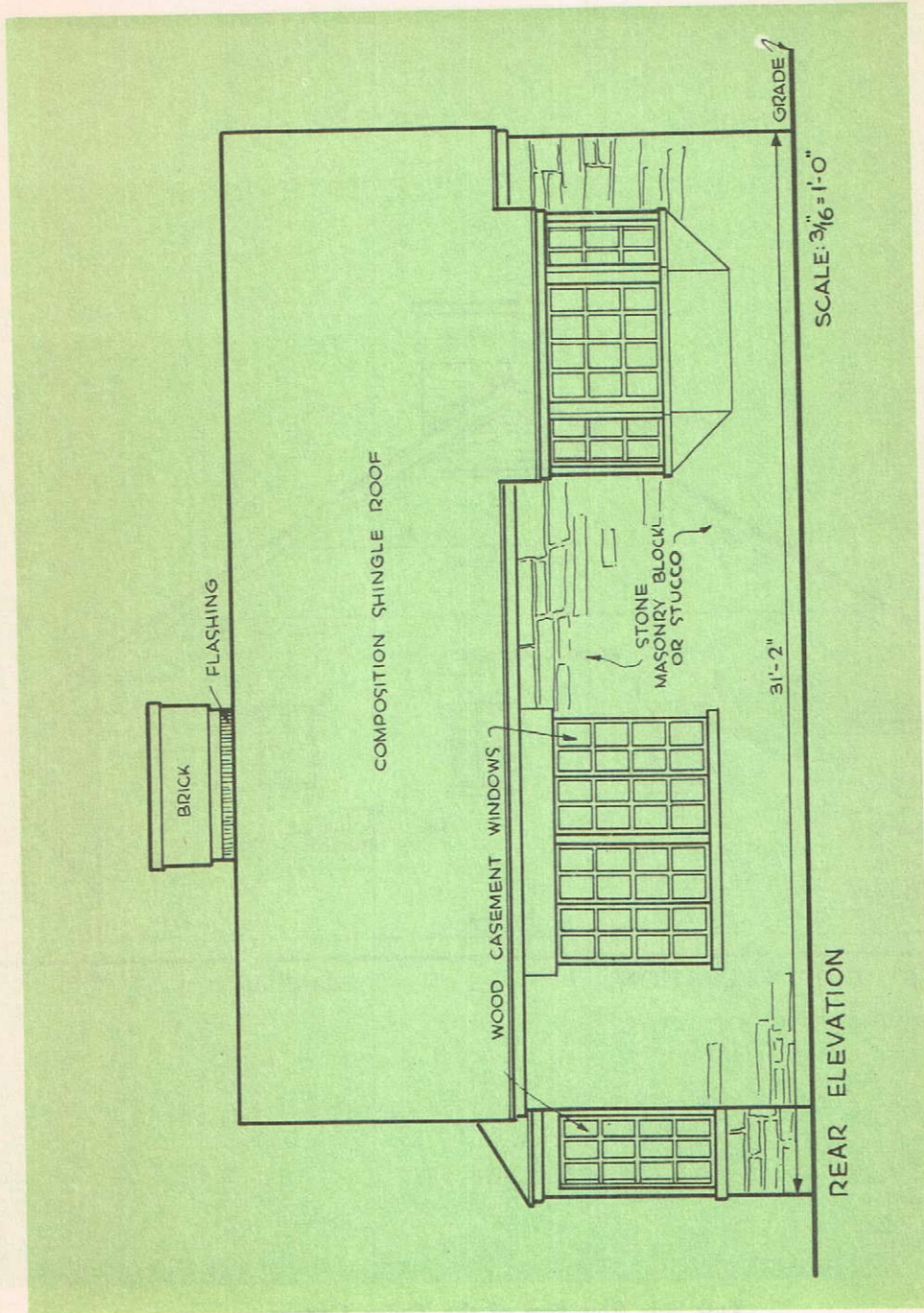
Foundation Plan of the Tudor Cottage



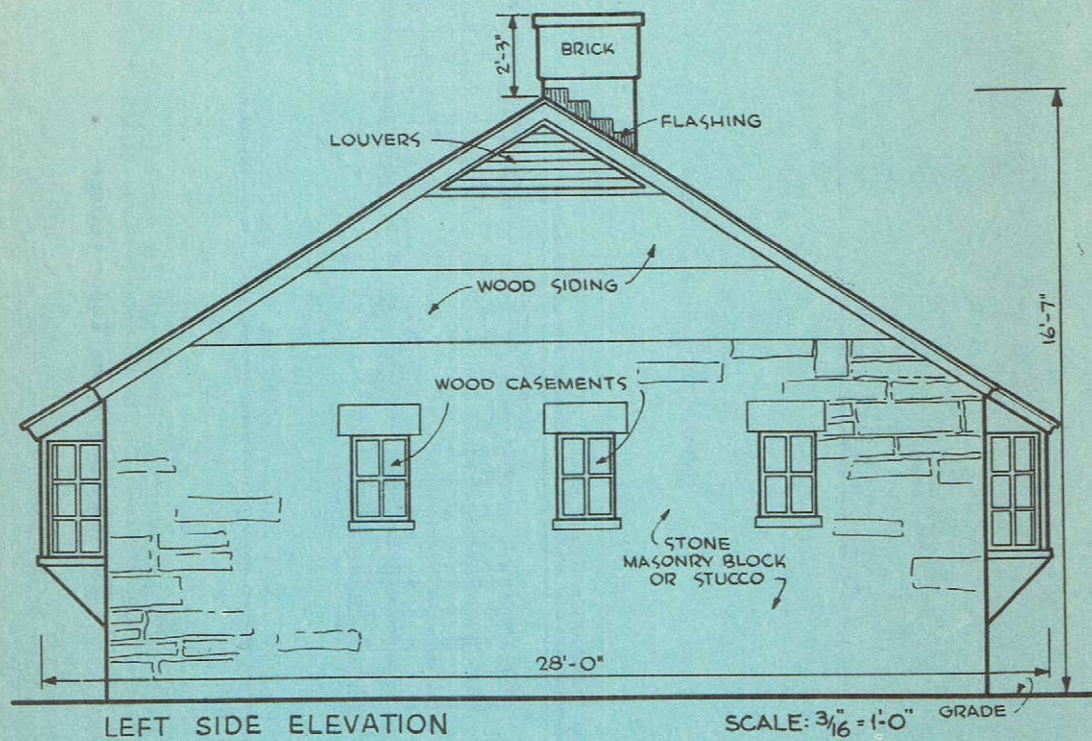
Front Elevation of the Tudor Cottage



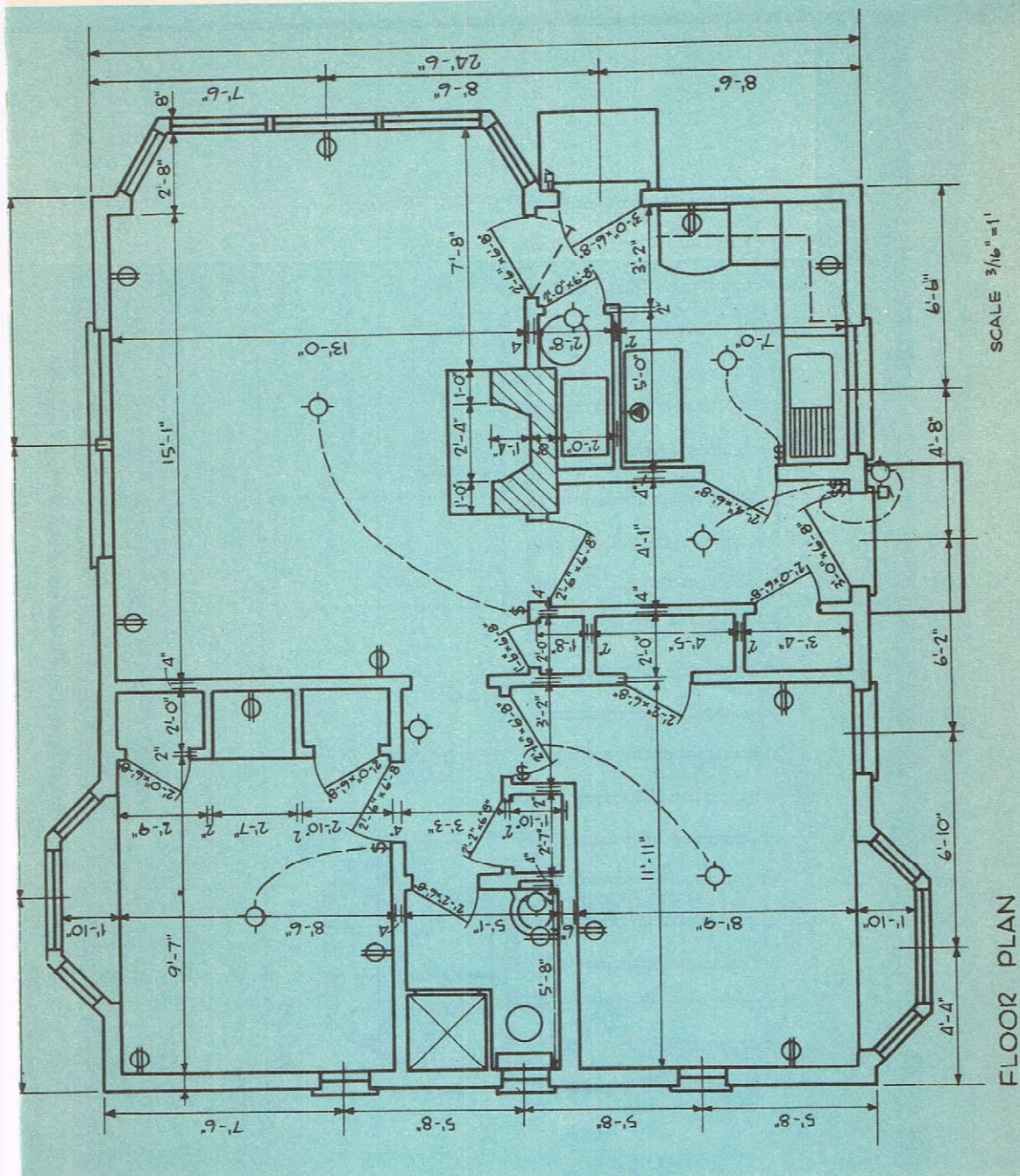
Right Side Elevation of the Tudor Cottage



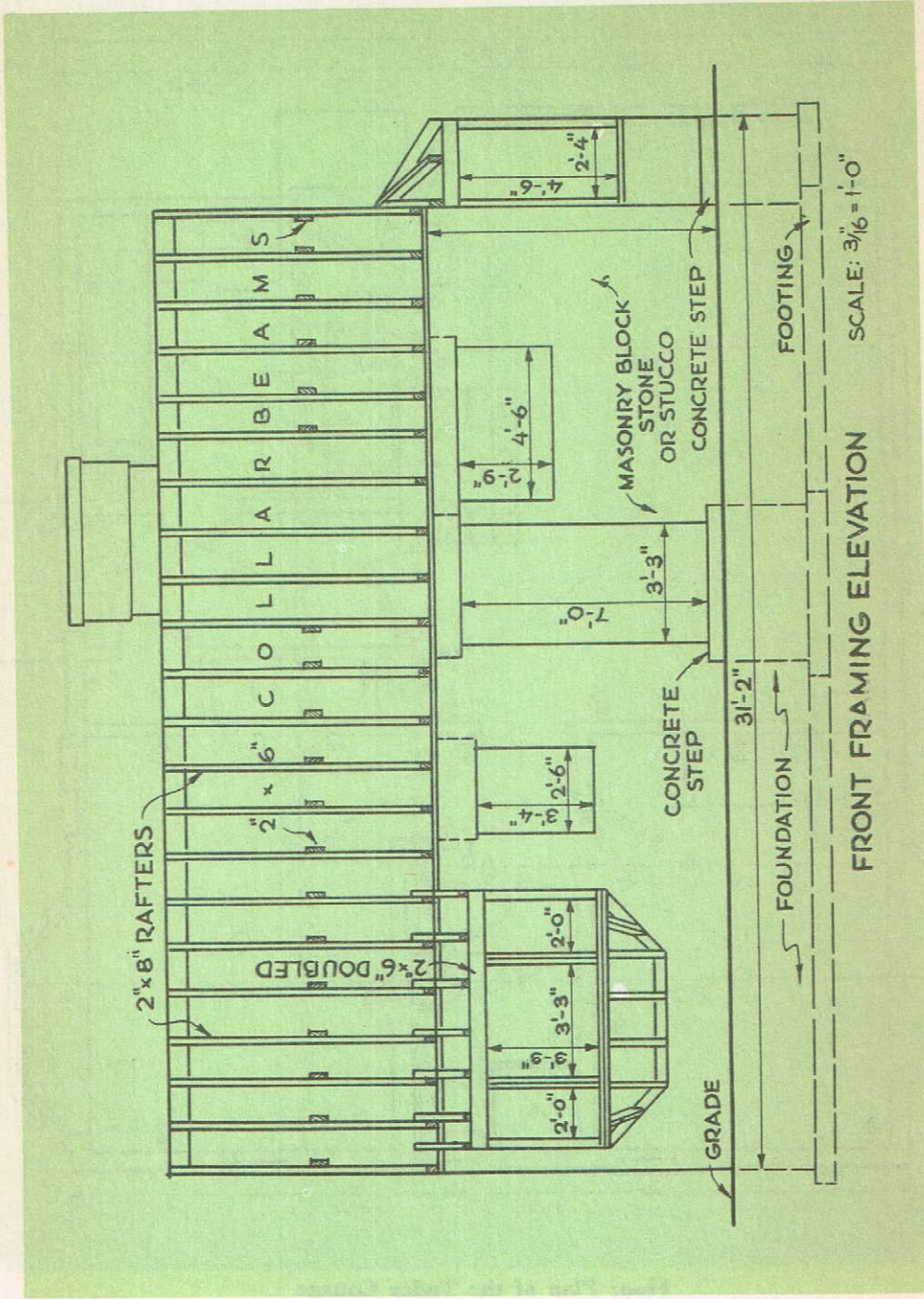
Rear Elevation of the Tudor Cottage



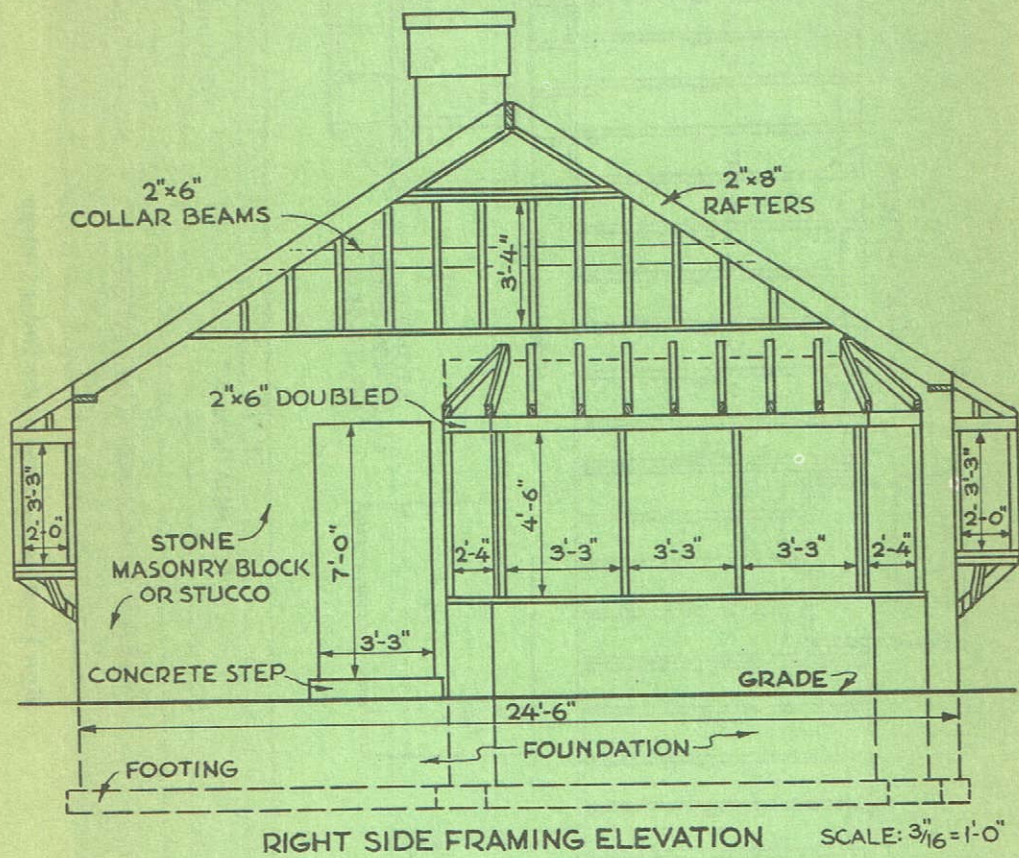
Left Side Elevation of the Tudor Cottage



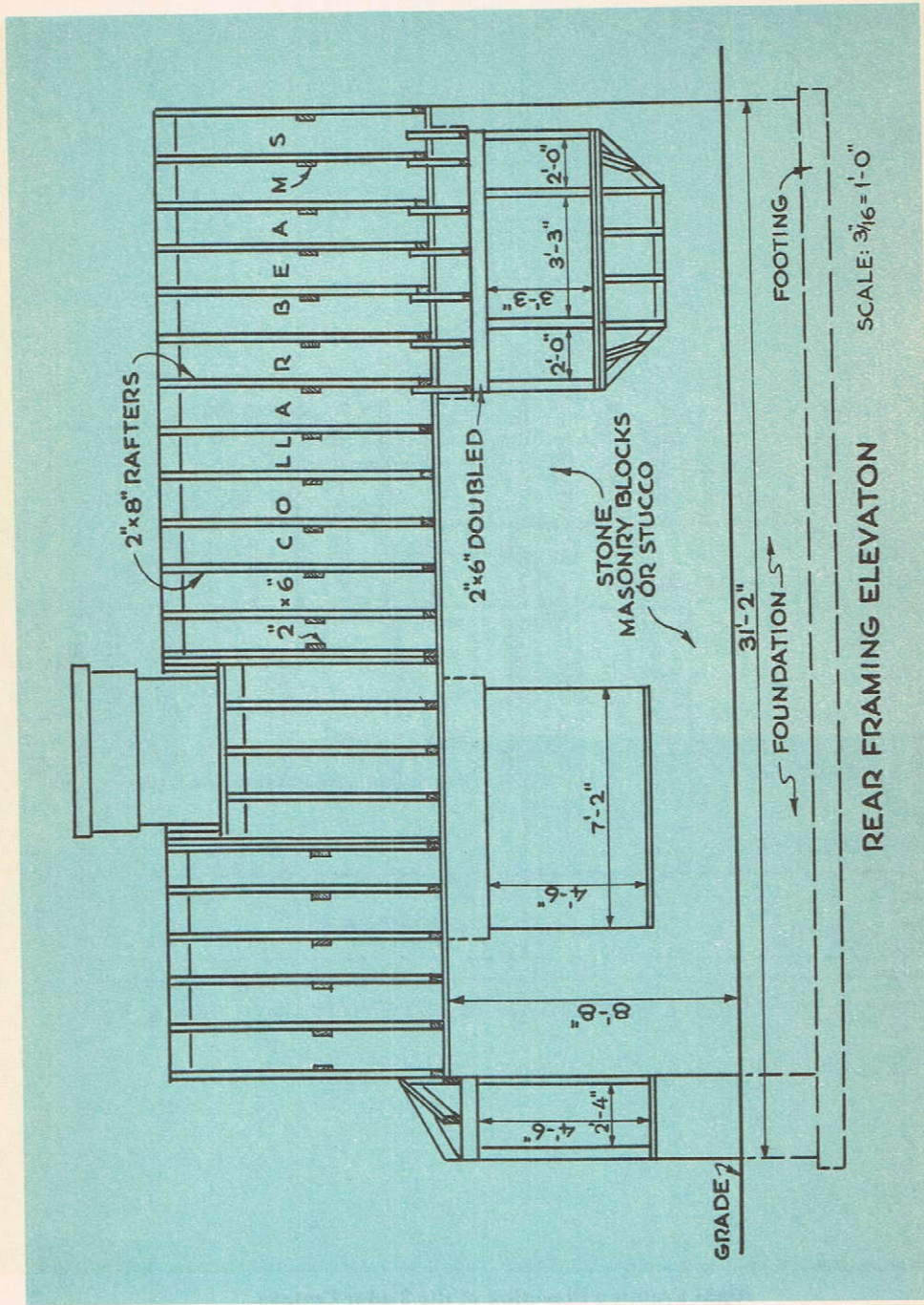
Floor Plan of the Tudor Cottage



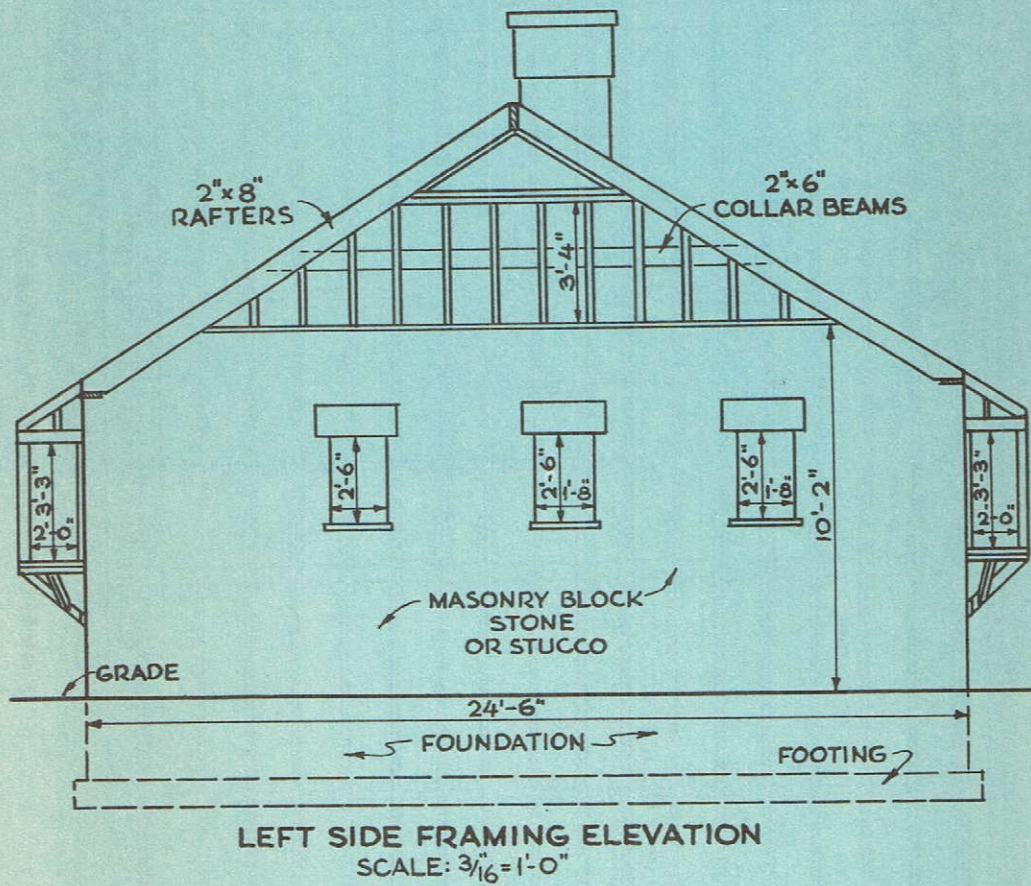
Front Framing Elevation of the Tudor Cottage



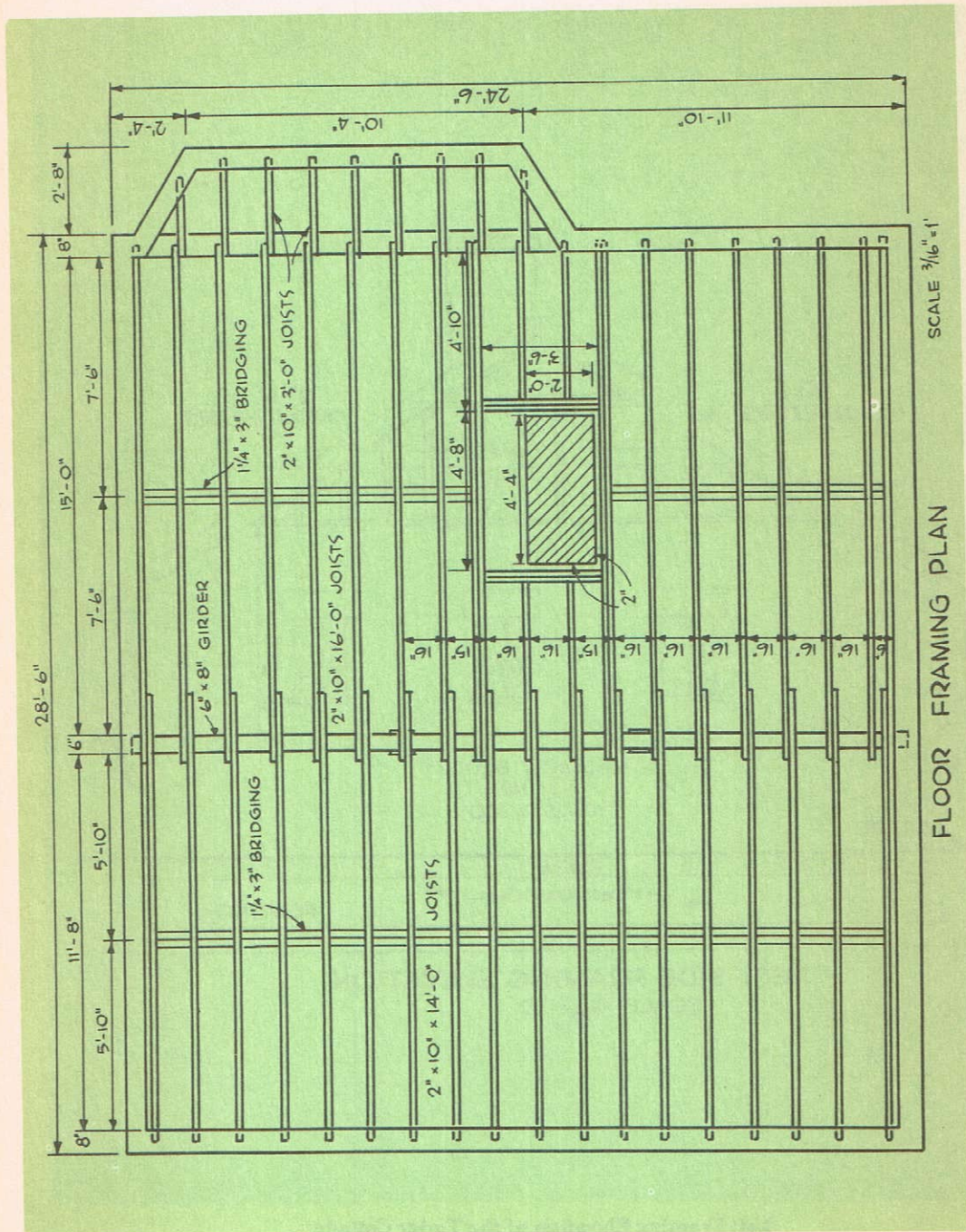
Right Framing Elevation of the Tudor Cottage



Rear Framing Elevation of the Tudor Cottage

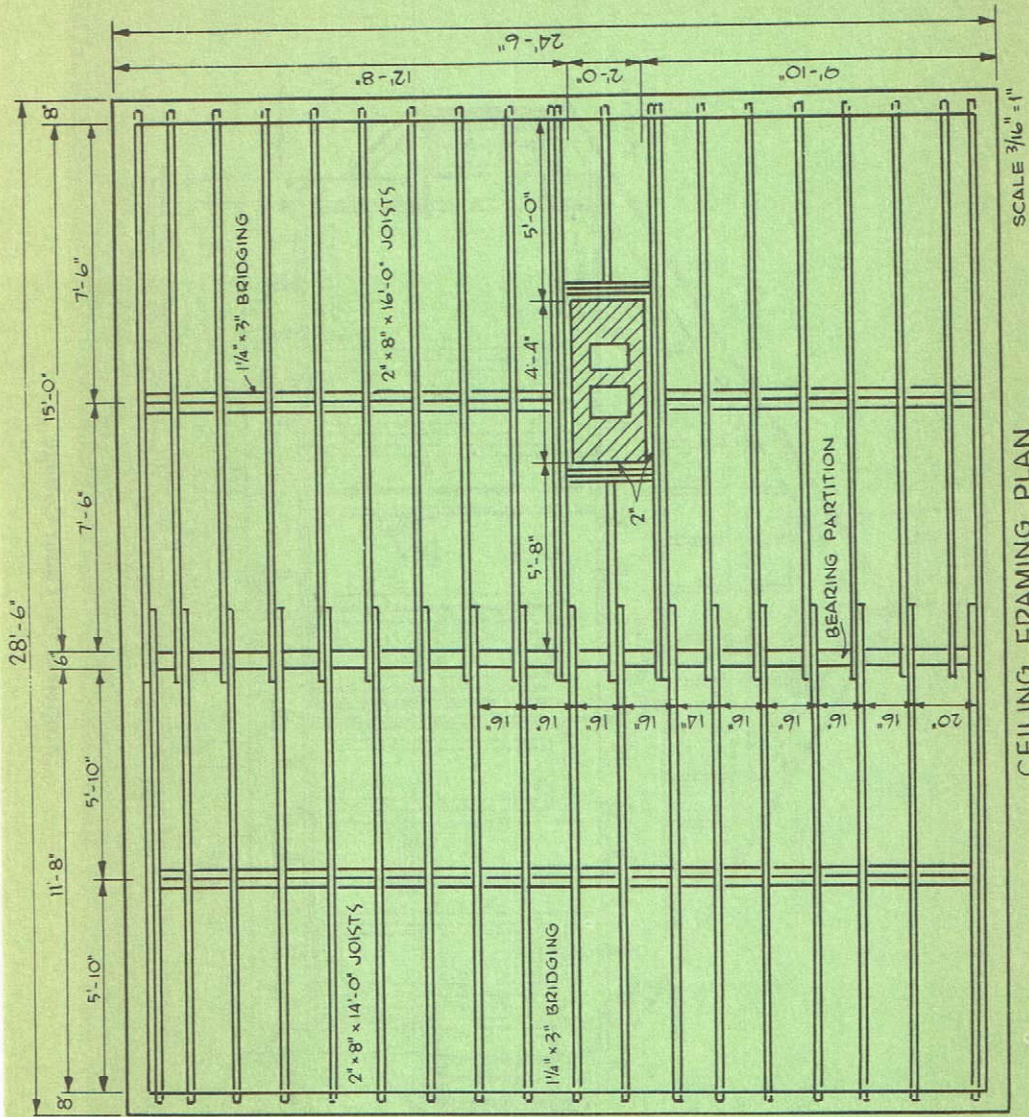


Left Framing Elevation of the Tudor Cottage



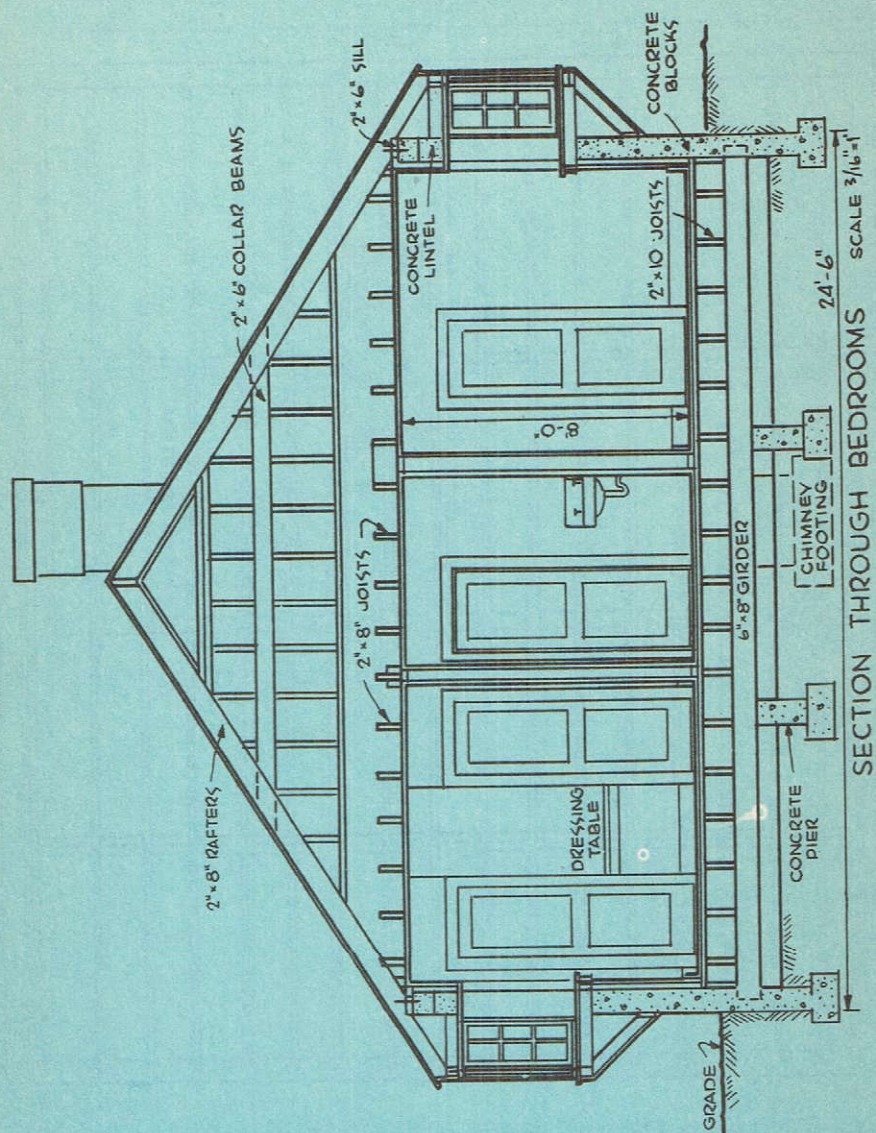
FLOOR FRAMING PLAN

Floor Framing Plan of the Tudor Cottage



CEILING FRAMING PLAN

Ceiling Framing Plan of the Tudor Cottage



Section of the Tudor Cottage

Chapter 30

A SUBURBAN HOME

THIS is an ideal house for a growing family in a growing community. Its conventional design makes it acceptable in almost every kind of residential zone but at the same time it has sufficient character of its own not to look like "just another house on the block." This is an important point, for far too many homes these days have no character of their own and might just as well have been poured from a mold. Of course, this home does just as nicely out in the country as in a well settled community.

The Suburban Home, when fully completed, can easily accommodate a large family. The attic is large enough to contain two full-size bedrooms as well as a bathroom and ample closet and storage space besides. The large dormer window in the roof insures that these rooms are both light and airy. They will be perfect for two or more older children, or they can be used as guest rooms.

The Floor Plan

The first floor, as you can see from the floor plan, includes a large master bedroom and a somewhat smaller second bedroom. Each room has ample

closet space, and there is additional closet space that can be used for linens or the like. There is a large living room with a dining alcove off to the rear as well as a large kitchen and bathroom. The kitchen has been located so that there is easy access from it to the dining alcove. There is enough extra room in the kitchen for a breakfast bar, so that the dining alcove need only be used for the main meals or when there is company. The layout of the fixtures in the kitchen is the conventional L-type arrangement, which is considered most efficient.

An interesting feature of the first floor is the location of the front door, which, as you can see from the plans, is located in an off-set on the front wall. This door opens into a coat entry or foyer. Its location—protected on two sides by walls—makes it highly desirable in cold climates where there is a tendency for houses to become chilled by strong winds each time the front door is opened. The rear door of the house is located in the rear of the dining alcove. A stoop in front of this door leads directly to the door of the garage. While there is no outside door to the kitchen, it is only a matter of a few

steps from the kitchen to the outside dining-room door.

The front of the living room is almost entirely taken up by large picture windows and there is another window that looks out on the side over the driveway.

The corners of the two bedrooms consist entirely of windows, and there are windows as well over the kitchen sink and in the bathroom.

The Basement

Some sort of a basement will be required for this house since no provision has been made on the first floor for a utility room for the furnace and other necessary equipment. You have a choice here either of making a half- or quarter-basement—enough to take care of this equipment—or of building a full basement and dividing it up into a utility room, a laundry room and a good-size game room. If the family is large, it might well be worth the added expense of having a full basement with a decent-size rumpus room.

Partitions between the rooms in the basement can be made out of masonry-blocks. This will eliminate the need for a heavy girder or lintel and will also make it possible to use a lighter size of joist than would be required if there was no support for the joists other than the main girder running through the approximate center of the floor.

Access to the basement is by means of the stairs located in the hall between the bathroom and bedroom. In planning the basement, be sure that these

steps lead down into the game room rather than into the utility room or laundry.

The one-car garage is incorporated directly in the house. If a two-car garage is desired, this can easily be constructed by extending the far wall of the garage the required distance.

The Foundation

If this house is to be built with a full basement, the foundation walls should be of either poured concrete or masonry-blocks and all precautions should be taken to insure that the basement will be adequately drained. If a laundry is to be located in the basement, there should be a floor drain at some point and the necessary provisions should be made for drainage pipes for the laundry equipment. In many instances the basement will come below the sewer line or septic tank, and in this case a sump pump will have to be installed to pump the waste water into the house sewer line.

Many basement game rooms are provided with a powder room or half-bathroom located under the basement stairs. Such fixtures will also have to be served by a sump pump if the basement is below the grade of the sewer.

Many persons, of course, will not wish to complete the entire house at one time but will put off finishing the attic and the basement until some later date. This is an excellent plan, but provisions for the attic bath and the basement laundry and bath should be made when the main house plumbing system