

How to Conduct a Floodproofing Open House

Prepared by the

Illinois Association for Floodplain and Stormwater Management

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How to Conduct a Floodproofing Open House

1. Background

Floodproofing open houses have been conducted in Illinois since 1981. Open houses are effective ways to encourage property owners to undertake flood protection measures. They have the advantages of being quick to implement, inexpensive to administer, and flexible to meet the needs of floodprone property owners.

Open Houses have four major parts:

1. A registration table that gives all attendees one or more handouts on flood protection and orients them to the open house,
2. A slide show and/or video to provide an overview of floodproofing, insurance, and other flood protection topics,
3. Contractors and government staff available at tables to talk one-on-one with the attendees about their products, services or programs, and
4. A "mitigation table" where people can review their flood situation with an objective expert and receive advice on what to do and who at the open house can help.

Up until 1987, open houses were organized and administered by the Illinois Department of Transportation, Division of Water Resources (DWR). Since then, two have been conducted by local governments with support from DWR and the Illinois Association for Floodplain and Stormwater Management (IAFSM).

The open houses conducted since 1986 have been studied to confirm their effectiveness. These studies are reported in Floodproof Retrofitting, by Dr. Shirley Laska, published by the Natural Hazards Center, University of Colorado, 1991 and Analysis of the 1991 and 1992 Floodproofing Open Houses, published separately by IAFSM, 1993.

2. Purpose

In the future, more open houses will be implemented throughout the state and in other parts of the country. The purpose of this paper is to help future sponsors by providing instructions on how to prepare and conduct an open house. It is based on DWR's experiences since 1981 and the findings of the recent research projects.

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This paper was prepared by French & Associates under contract to IAFSM. It was drafted by French Wetmore, project manager for the open houses when they were conducted by DWR. The draft of the paper was reviewed and critiqued by an advisory committee that included:

- Bill Powers, Hazard Mitigation Officer, FEMA, Region V
- Jan Horton, State Hazard Mitigation Officer, Illinois Emergency Management Agency
- Molly O'Toole, Chief, Flood Mitigation and Stormwater Programs, DWR
- Brad Brink, Chair, IAFSM
- Peggy Glassford, Village Manager, Village of Flossmoor, IL
- Chris Wuellner, Director of Public Works, Village of Homewood, IL
- Rich Zimmerman, Deputy Clerk, Village of South Holland, IL
- Rose Marie DeWitt, Flood Control Liaison Committee, South Holland, IL
- Dr. Shirley Laska, University of New Orleans

3. Organization and planning

3.1 Sponsors: To be most efficient, one prime sponsor of the open house should be identified. The prime sponsor may be a community, a citizen's organization, a state or regional agency, or an association. The prime sponsor should be the organization most interested in conveying flood protection information to the area's residents. The prime sponsor assumes responsibility for organization, planning, publicity and conduct.

Co-sponsors should also be sought. They can include communities, citizen's organizations, state or regional agencies, or associations. Co-sponsors have two benefits. First, they can provide staff or other support to help with preparation, publicity, conduct, etc. Second, by adding their names to the publicity materials, the event takes on a higher profile and more participants will be attracted.

3.2 Organizational meeting: The prime sponsor should call the organizational meeting. The prime sponsor's lead staff person should conduct the meeting. Also present should be the co-sponsors' liaisons, a public information officer, and any staff who have open house experience. Local building and public works staff would be helpful participants to identify common flood problems, provide names of reliable contractors, and determine if there are any flood protection measures that are contrary to local codes.

The key items to cover at the organizational meeting are shown in Figure 1.

The prime sponsor should have a target audience in mind. Depending on the size of the facilities, an evening open house can handle up to 200 people. If the target audience is small, contractors and government agencies may not be interested in exhibiting.

A well-publicized open house in an area with repeated flooding or drainage problems can be ex-

1. Target audience
 2. Formal agreement on sponsorship
 3. Dates and times
 4. Site: see section 4
 5. Staff support: see section 5
 - registration table
 - slide show
 - mitigation table
 6. Exhibits: see section 6
 7. Materials: see section 7
 - handouts
 - videos, player and monitor
 - signs
 - refreshments
 8. Publicity: see section 8
 9. Assignment of responsibilities
- Figure 1. Organizational Meeting Agenda**

pected to draw 10% of a community's floodplain residents. Therefore, the area targeted should have at least 1,000 homes with flood problems.

If the target area is smaller, other approaches which do not involve so many contractors and government staff may be more appropriate. These can include public meetings, slide shows like the one described on pages 7 and 11, and "flood audits" to visit interested property owners and provide site-specific advice.

The sponsorship agreement does not have to be a written contract. However, the sponsors should agree in writing that their names can be used in the publicity.

After the first three agenda items are agreed to, the meeting participants should offer suggestions on the rest. The prime sponsor should ensure that at least one person is designated as responsible for following up on items 4-8. They should report back to the prime sponsor within a designated time, such as one or two weeks.

Some of the staff support or materials (e.g., a locally pertinent video) may not be available. The organizational meeting should provide the sponsors with enough information to decide whether to proceed with the open house, have a public meeting, or conduct another type of outreach project.

3.3 Dates and times: If the open house is being scheduled after a major overland flood that caused structural damage, it should be held before people begin rebuilding their homes so they can incorporate the open house's recommendations during reconstruction. In other situations, the open house should be scheduled at least two months after the organizational meeting to allow adequate preparation time and to allow people to complete their post-flood cleanup and have some free time to attend.

Saturday sessions have not had very good turnouts. Evening sessions on weekdays have been most successful. A run time of 6:00 or 7:00 until 10:00 has worked well. The publicity needs to clearly state that people can drop in at any time. Otherwise, there is a crowd at the door when it opens. Attendance tapers off during the last hour and often some of the exhibitors are gone by 10:00.

The sponsors need to check on conflicting activities during the proposed time. Monday nights have sports conflicts. One northeastern Illinois open house was scheduled over a month in advance but ended up at the same time as one of the Chicago Bulls' playoff games. The sponsors brought a television set so the exhibitors and some of the attendees could stay posted on the score. This service could be publicized so all members of a family will attend.

3.4 Follow up meetings: The prime sponsor may be able to monitor progress and make decisions without more meetings. This is recommended only if the prime sponsor has access to someone experienced in conducting open houses. Otherwise, follow up meetings are appropriate if the assignments cannot be completed. If there are many communities as co-sponsors, there may need to be a meeting to agree on the news releases and other publicity.

If a follow up meeting is needed, it should be at (or include a tour of) the open house site. The room assignments can be confirmed and the sponsors will have a better visual idea of how the open house will work.

4. Site

The site should be near the target audience. Two attempts at open houses for large areas had relatively low turnout. A local site reinforces the message that the open house is something being done by the community for its residents.

The most common and readily available site for an open house is a school building. It is easy to find, especially if it is a high school. Schools have the facilities needed, such as parking, rooms, restrooms, and handicapped access. They also have cooperative governing boards that are interested in helping the community. An alternative to a school is a community center or recreation building.

4.1 Facilities needed: The following facilities are needed:

- parking
- a clearly identified main entrance
- a large room for the exhibits, such as a gymnasium
- tables (approximately 2' x 6') for the exhibits and mitigation tables
- two chairs for each table
- a room, such as a classroom, that will seat 20-40 people for the slide show
- a slide screen and slide projector
- a second similar room if videos will be shown concurrently
- restrooms
- custodial support on call

Other optional facilities include:

- a kitchen for preparation of refreshments
- public address system

4.2 Floor plan: The person responsible for facility arrangements should sketch a floor plan of the building. Together with the staff that have open house experience, they should locate the following on the floor plan to ensure the most efficient traffic flow:

- Parking, the main entrance and restrooms should be shown.
- The registration table should be inside the main entrance, allowing adequate space for people to line up indoors to register. The table should be located so that everyone coming in must go past the registrars. They need to be able to direct everyone and make sure people do not wander off into other parts of the building.
- The first stop after the registration table is the slide show. This should be a classroom that will seat 20-40 people. Desks are not needed, but it may be easiest to leave them in place.
- The gym or other large room should be beyond the slide show room. The sponsor should make sure the facility manager will allow street shoes and tables on the gym floor. There will also be a need for electricity. The details of the gym arrangements are covered in section 6.3.
- Refreshments and the video room should be located near the slide show room, so people can keep busy while waiting for the next presentation.

5. Staff Support

The design of the open house will depend on whether competent people are available for the slide show and mitigation tables. If they are not available, it is recommended that those parts be omitted rather than risk having an unprepared person provide bad information. In any case, there must be a registration table.

5.1 Registration table: The objective of the registration table is to make sure that people know where to go to take advantage of all of the open house's activities. Two to four registrars are needed. Their jobs are to:

- greet everyone as they come in the front door,
- have each family complete a registration form,
- give each family a copy of the handouts (see section 7.1), and
- provide an orientation handout on the activities and where they are taking place.

The registration form is optional. A registration form is needed only if the sponsors want data on the attendees, such as which towns are represented or what types of flooding people experienced. Sometimes, they are useful to collect data on flood damage for disaster assistance or local planning purposes. An example of such a form is in Figure 2 on the next page.

At a minimum, names and addresses should be recorded. Some people are hesitant to give their names to this new and unknown activity, so names could be optional. Attendees should be assured that their names or addresses will not be given to contractors.



South Suburban Floodproofing Open House

REGISTRATION

This information is for the Illinois Department of Transportation, Division of Water Resources research only. It will not be used for private use or any other government programs.

Address of Property:

1. Was your home or property flooded in November 1990?
 Yes No

2. Did you home ever experienced flooding at you home prior to 1990?
 Yes No

3. Do you have flood insurance?
 Yes No

4. If you were flooded in November 1990, how high did the water get?
 In yard only
 Water kept out of house by sandbagging, sewer valve or other protective measure
 In basement/crawl space: less than 2 feet
 In basement/crawl space: over 2 feet
 Over first floor: less than 2 feet
 Over first floor: over 2 feet

5. What do you feel was the cause of your flooding?
 Storm sewer backup
 Sanitary sewer backup
 Saturated ground/leaks in basement walls
 Flooded creek or river/overland flooding
 Other _____

Figure 2. Example Registration Form

Addresses and a question on how people learned of the open house will determine where publicity was effective and if subsequent open houses would be productive. Names and address can also assist later research efforts to evaluate and improve open houses, as was done for the two research projects mentioned at the beginning.

The major time consumer at the registration table is signing in or completing the registration form. If this is not needed, then fewer registrars are needed. If long lines develop, an alternative is to include the form with the handouts. The registrars would ask the participants to complete the form during the evening and drop it off at the registration table on their way out. The form can then double as an evaluation form. However, the registrars will have to stop people as they are exiting and remind them to complete the form. The sponsors may want to consider giving door prizes based on a drawing of the registration forms to encourage people to turn them in.

An example orientation handout is in Figure 3 on page 8. Such a handout could include a map of the building with arrows showing traffic flow so the slide show will be visited first. It may also include a list of the contractors and a brief summary of their specialties. An example of a more detailed list of contractors is in Figure 4 on pages 9 and 10. Listing the contractors' telephone numbers and addresses can also serve as a motivator to encourage more contractors to exhibit.

5.2 Slide show: The objective of the slide show is to give the attendees an overview of self-help flood protection. The presentation should be prepared by the presenter so he or she is comfortable with the script. It should cover the following points:

- purpose of the open house and slide show
- examples of flood damage to homes (this is a reminder of what can happen and a motivator to take self-help protection measures, so it can be skipped if the area recently flooded)
- what government agencies are doing (i.e., self-help flood protection are interim measures until structural flood control projects are completed)
- acquisition and relocation (can be skipped if the area is subject to basement or shallow flooding that does not warrant acquisition)
- floodproofing techniques (where appropriate, pros and cons, typical costs, etc.)
 - elevation
 - floodwalls and berms
 - dry floodproofing
 - wet floodproofing
- permit requirements and regulations that protect everyone from flood damage
- stream and ditch maintenance

AFTER THE FLOOD

August 25
Park Ridge

SLIDE SHOW

We recommend that first you attend the thirty minute slide show presentation "Protect Your Home from Flood Damage." It will be presented periodically throughout the evening in Room 158. Check the signs for times.

OPEN HOUSE

Tables have been set up in the Faculty Dining Room with representatives from these agencies and contractors. Please feel free to meet with them and to ask questions or discuss your concerns.

Agencies:

Illinois Division of Water Resources
Illinois Attorney General, Consumer Protection Division
U.S. Army Corps of Engineers
National Flood Insurance Program
Cook County Building and Zoning
Cook County Assessor's Office
Park Ridge Building Department
DesPlaines Building Department
Mount Prospect Building Department
Maine Center for Mental Health

Organizations/Utilities:

American Red Cross
Independent Contractors Association of Illinois
Commonwealth Edison
Northern Illinois Gas

Contractors:

Advance Moving Contractors, Inc.
Basement Flood Protector, Inc.
Eveready Flood Control, Inc.
Flood Shield Systems, Inc.

ON YOUR WAY OUT

Please stop by the Illinois Division of Water Resources Table with any questions you might still have and to DROP OFF THE INFORMATION SHEET YOU WERE ASKED TO COMPLETE.

This Open House is sponsored by the Illinois Department of Transportation, Division of Water Resources; the Northeastern Illinois Planning Commission; and the Village of Park Ridge.

Figure 3. Example Open House Orientation Handout

Expo Room

Association of State Floodplain Managers

The Association manages the Floodplain Management Resource Center, a free referral service to help you find technical information on flood proofing and other topics. The Association also publishes a newsletter and technical papers and conducts conferences and training sessions.

Basement Flood Protector

This firm provides a variety of products to protect against basement flooding. They include a battery backup sump pump system, a water alarm, and window well covers.

Everdry Waterproofing

Everdry waterproofs basements and offers free inspections and information on dealing with basement problems.

Eveready Flood Control

Eveready builds and installs systems to prevent flooding from sewer backup. They also have a battery operated back up power supply for sump pumps.

Federal Emergency Management Agency (FEMA)

FEMA staff have materials and information on flood insurance and government disaster assistance programs. They also have an excellent manual, "Retrofitting Flood-Prone Residential Structures" which is available for free.

House Raising and Moving

Several Midwestern house moving companies have teamed up to staff a table on elevating a house above flood levels. They also have many years of experience in relocating buildings and have done several jobs for government agencies.

Illinois Association for Floodplain and Stormwater Management

The IAFSM publishes a newsletter, sponsors conferences, and works to improve state laws and programs to reduce flood damage. The Illinois Division of Water Resources has some free handbooks available at the IAFSM table.

Independent Contractors Association

This non-profit association assists property owners in finding and contracting with home improvement contractors. ICA provides referrals, documents, advice and other materials to help people through the contracting process.

National Flood Insurance

Most homeowner's insurance policies do not cover a building for flood damage. Flood insurance is sponsored by the Federal government as explained at this table.

North Shore Sewerage and Drainage/Metropolitan Pump

North Shore sells and installs systems to protect a house from sewer backup flooding. They also sell pumps and build and repair sewer lines.

Figure 4. Example Activity Description

Expo Room

Portadam

Portadam has developed a portable system that can be quickly erected to form a flood barrier. It is faster and easier than building a sandbag wall.

Presray

The Presray Corporation designs and markets flood barriers. Their watertight doorway shields can be found in flood-prone buildings across the country.

The Basement Watchdog

Glentronics, Inc. has developed a battery operated sump pump system that works when power is lost during a storm.

U.S. Army Corps of Engineers, National Flood Proofing Committee

Corps staff can talk to you about a variety of flood protection measures. They also have brochures and reports on flood proofing techniques.

World Wide Drying

This firm is one of the nation's experts in post-flood drying and clean up. Their specialized equipment can be quickly brought to a disaster site so flooded buildings can be repaired and reoccupied as fast as possible.

Video Room

House Raising with Slab Attached

The U.S. Army Corps of Engineers' National Flood Proofing Committee has produced a seven minute video on a new technique to raise or move a flood-prone house with its concrete slab attached.

This video will be shown every hour on the hour.

Protecting a Flood-prone Home

This is the Federal Emergency Management Agency's new thirty minute video that provides an overview of ways to flood proof a house. This is the third in the "Best Build" series FEMA produced with the National Association of Home Builders. The video recommends developing a chart to help select the most appropriate flood proofing method for the building and flood conditions. This is the same as the "Decision Matrix" approach discussed on the next few pages and discussed in more detail in the "Retrofitting" manual at the FEMA table.

This video will be shown at twenty minutes after the hour.

More information on the terms and techniques used in the videos can be obtained at the FEMA and Corps of Engineers tables in the Expo Room.

Figure 4. Example Activity Description (Continued)

- insurance
 - National Flood Insurance
 - private sewer backup and sump pump failure insurance (if appropriate)
- financial assistance (omit if there is no disaster declaration or other source of assistance)
- where the attendees go next

The thrust of the presentation is that people should take this opportunity to protect themselves, rather than rely solely on government agencies whose projects will take many years to complete (if there are any feasible projects under study). As much as possible, the presentation should reference the types of exhibitors and government agencies who are participating in the open house. The presentation should be tailored to local conditions, preferably with slides of examples from the area.

The presenter should expect to be interrupted with questions and perhaps even heckled. It is recommended that the questions be answered to ensure that the audience follows the presentation and that the terminology is understood. People will also ask questions after the slide show is over. If time does not allow them to be answered, they should be referred to the mitigation tables.

Because the slide show is the attendees' first exposure to the open house and the concept of self-help and floodproofing, it is important that the speaker is skilled in both the subject matter and public presentations. Some of the audience will be skeptical, so the speaker must be confident in the measures. If the sponsors cannot find a speaker with these traits, then they should seriously consider omitting the slide show.

5.3 Mitigation tables: Mitigation table staff are usually government employees or consultants who are familiar with floodproofing and other self-help measures. They staff one or more tables in the exhibit area, preferably near the entrance so people can visit them first. Their job is to review the person's flood problem and building condition, to advise the owner on appropriate flood protection measures, and to identify which contractors and government agencies can help.

The people staffing the mitigation tables should have the same knowledge and traits as the slide show speaker, except that public speaking is not as important. They should be familiar with local filling, grading, plumbing, and building requirements. They should also be aware of local or regional flood control and stormwater management programs.

People with these skills and knowledge can often be found in the state water resources office, the Corps of Engineers, FEMA mitigation offices, and consulting engineering firms. Suggestions and recommendations of appropriate personnel for this job should be obtained from others who have held open houses.

The mitigation staff must be able to spend the needed time with each person but not take so long that a long line develops. Where feasible, staff can meet with people with similar problems in a group, although this detracts from the personal attention people want and may need.

The number of mitigation staff is hard to predict. It is better to have a few qualified and experienced people than to have five to ten people who are not familiar with or have no confidence in floodproofing. Therefore, the number of mitigation tables is dependent on the availability of staff. Mitigation staff can be trained if the sponsors can find an instructor and the staff members are willing to spend at least one-half day at a training session.

More detailed instructions on the conduct of mitigation tables are included in Appendix A.

6. Exhibits

The unique feature of open houses is the presence of contractors and government agencies. These people provide detailed information on a variety of subjects of interest to the property owner. Their displays add color to what otherwise could be a drab bureaucratic affair.

It should be noted that often contractors and government staff have to cancel at the last minute, especially if there is still flooding going on. It is recommended they be called frequently to remind them not to forget.

6.1 Contractors: Contractors have a great amount of personal experience with constructing or installing flood protection measures. They know what works in the area and their livelihood depends on doing a good job. Their displays often include moving water or interesting hardware that attract people to their tables where they can learn more about different measures.

The type of flooding determines which contractors to select. The sponsor should use lists of locally licensed contractors or the "Yellow Pages" and send invitations to all local businesses. The following "Yellow Pages" headings could be checked:

General

- Architects
- Building inspection service
- Contractors, general
- Engineers
- Flood control
- Hardware stores
- Home improvements
- House and building movers
- Insurance agents
- Lumber/building supplies

Basement flooding

- Contractors, waterproofing
- Plumbing contractors
- Sewer flood control
- Sump pumps
- Waterproofing contractors

Drainage problems

- Drainage contractors
- Engineers
- Landscape contractors

There are some contractors who may not be in local telephone directories but are willing to travel distances to exhibit. It is recommended that the sponsors contact someone who conducted a previous open house for the names of the "regulars."

If the open house is being scheduled immediately after a flood, clean up and repair contractors may be appropriate. However, generally both they and the property owners are too busy to spare an evening. The following "Yellow Pages" listings could be checked:

- Dehumidifiers
- Furniture cleaning
- Fire and water damage restoration
- House cleaning

There has often been concern voiced that in a post-flood situation contractors will prey on flood victims and take unfair advantage of them. The research has shown that this is rarely the case. In fact, few contractors have actually made sales because of their open house participation. Of 160 open house attendees surveyed in 1993, only 13 (8%) reported that they actually used the services or got materials from an open house exhibitor. On the other hand, 37 (23%) stated that they got flood protection ideas from contractors and 13 volunteered that future open houses should have more contractors.

Even though contractors have a good track record, it is not a bad idea to include a disclaimer that the sponsors do not vouch for their work or recommend them over other area contractors. A handout on dealing with contractors could be part of the registration materials (the handbooks mentioned in section 7.1 have articles on this topic).

The sponsors could invite the Better Business Bureau or the Attorney General's Consumer Protection Office to staff a table to advise people, too. Another group available in northeastern Illinois is the Independent Contractor's Association (708/971-0102) which provides information on selecting and dealing with contractors.

6.2 Government agencies: Many government and not-for-profit organizations can help floodprone property owners. Normally the sponsors will have their own table to discuss their flood protection activities. Other agencies that may be appropriate include:

- American Red Cross
- Consumer protection office
- County mental health office
- County or regional planning or water management commission
- County public health office
- Federal Emergency Management Agency
- Local building permit offices
- National Flood Insurance Program (request through FEMA)
- Regional sanitary or flood control districts
- State department of insurance, consumer division
- State floodplain managers association
- State water resources agency
- U.S. Army Corps of Engineers
- USDA, Soil Conservation Service
- Utility companies

6.3 Gym arrangements: The contractor and government agency tables are set up in a large room, usually a gymnasium. The facility owner should be able to supply fold up tables (usually 2' x 6'). Normally one table per exhibitor is sufficient. One or two chairs may be provided for the exhibitor, but visitors usually stand. Chairs are needed for the mitigation tables, usually one for the staff and two for the family being counseled.

Each potential exhibitor should be asked the following:

- Do they need electricity?
- Is the size of the table adequate?
- Do they have a backdrop?
- Does their exhibit make noise?
- How much time do they need to set up?

The floor plan should place exhibitors needing electricity near outlets. Those with backdrops should be against the walls. Generally, noises are limited to buzzers or alarms that do not disrupt the proceedings. Set up should begin one hour before the open house starts.

The sponsors' tables should be near the entrance to help direct people. The mitigation tables are also near the entrance so people visit them first. Competing companies should not be put next to each other. It is recommended that government agency tables be interspersed among the contractor tables.

A public address system that reaches the gym would be helpful to announce slide show and video presentations. However, someone walking around and announcing that the next show is in five minutes will also work.

7. Materials

Most materials needed for an open house are usually supplied by the building manager or the exhibitors. Materials supplied by the building are discussed in section 4.1. The sponsors need to supply materials that are handed out to all the attendees.

7.1 Handouts: The registrars give every family a packet that can include the following:

- Registration form (see section 5.1)
- Orientation to the open house (see section 5.1)
- Evaluation form (see example in Figure 5, page 15)
- Information on local flood programs
- Flood protection handbook

Midwest Flood Proofing Exposition

Comment Sheet

Your comments can help us better prepare for future expositions. Please answer the following questions and leave this form at the Welcome Table.

1. Which of the following best describes your house's foundation?

Concrete slab Basement Crawlspace

2. Has your house or business been flooded? Yes No

3. If yes, in what year? (check all that apply)

1981 1982 1983 1984 1985

1986 1987 1988 1989 1990

4. What was the source of floodwater?

Through the sump Leaks through the basement walls

From sewer backup Bad local drainage

Overflow of a river or creek Other:

5. Did you have any questions in mind before you came to the Exposition?

If yes, what kinds of questions?

Were your questions answered?

6. Were there any exhibits that you found particularly helpful?

If yes, which ones?

7. Were there any exhibits that you thought were not appropriate?

If yes, which ones?

8. Do you think there should be more Flood Proofing Expositions?

If yes, when and where should they be held?

9. Please note any other comments you have on the other side of this form.

Please leave this form at the Welcome Table.

Figure 5. Example Evaluation Form

The flood protection handbook should be available in quantity from the state or FEMA. The registrars can ask the person what type of flooding they have and can provide either or both of two DWR handbooks: Protect Your Home from Flood Damage or Flooded Basements: A Homeowner's Guide. FEMA and the Red Cross have jointly published Repairing Your Flooded Home. Either office should have an adequate number for an open house, if they are requested early enough.

In the case of all three handbooks, the sponsors may want to reprint them locally. They are authorized to reproduce them with a local cover instead of the state or FEMA cover. Research has shown that such locally tailored publications are more likely to be read.

Participants are likely to pick up many more handouts from the exhibitors' tables. Some exhibitors or local businesses may provide bags or folders to carry all the materials.

7.2 Video: "Best Build 3: Protecting a Flood-prone Home" is a 30 minute video tape available on loan free from FEMA or IAFSM. It is a professional production, made in cooperation with the National Association of Home Builders. The video covers all floodproofing approaches, including elevation of buildings eight feet above grade. Accordingly, several parts are not appropriate in areas with shallow flooding. It does not have much on basement flooding or sewer backup.

Some communities and other agencies have developed videos or have taped local cable television shows on flood issues. These should be screened to be sure that they are appropriate and interesting.

Generally, the video room of the open houses has not had many people stay for a long time. However, the most recent survey of open house attendees found that videos were rated as being as helpful as the slide show. Several people recommended more videos.

A video player and monitor is needed to show the videos. If the facility does not have one available, they can be obtained from the home of one of the sponsors. One of the registrars should be designated to monitor the room and rewind and change the tapes.

7.3 Signs: Directional and identification signs are needed to ensure a smooth traffic flow. If one of the sponsors does not have the ability to make signs, one of the exhibitors may (in return for making all the signs needed for one open house, a local engineering firm was allowed to put its logo on each one). The following signs will be needed:

- "Floodproofing Open House" for the parking areas, front door, and registration table
- "Registration"
- "Floodproofing Slide Show" for the room and along the hallways to provide directions.
- "Floodproofing Video" for the room and along the hallways to provide directions.
- "Exhibits" for the door of the room and along the hallways to provide directions.

- "Mitigation Table"
- One sign to hang on the front of the table for each exhibit
- "Refreshments"
- "Restrooms"
- Arrows to add to the above signs to give directions

7.4 Refreshments: Refreshments are not mandatory but they add a welcome touch. Coffee and cookies are usually sufficient (not many children attend). One advantage of having an area for refreshments is that property owners meet other people with similar problems. One of the advantages of open houses is that the socializing by property owners results in a good deal of information transfer and mutual aid.

8. Publicity

The success of the open house will depend on the publicity. If no one comes, no one is helped and the exhibitors may not want to return. Therefore, a local public information officer would be very helpful at the organizational meeting.

Lead time is needed more for publicity than for any other facet of open house preparation. Contrary to popular opinion, the open houses that had been prepared and publicized one or two months in advance had better turnouts than those held within a week or two of a flood.

The study reported in Analysis of the 1991 and 1992 Floodproofing Open Houses, asked the question "How did you hear about the Open House?" The results are shown in Figure 6.

Newspapers and local notices were by far the most effective publicity. Thirty-seven percent listed the newspaper as the only source of information about the open house. Local weekly and bi-weekly papers and flyers distributed door to door in floodprone areas were felt to be most effective. A copy of one flyer is included in Figure 7 on page 18.

Read about it in the newspaper	51%
Received a notice from the city/village government	27%
Heard about it on the radio or television	2%
Heard about it from a friend or neighbor	20%

Figure 6. How Attendees heard about the Open Houses

The sponsors should coordinate news releases for area newspapers and electronic media. They should be released several weeks in advance. Each sponsor and participating community should assist in the effort with articles in local newsletters and notices on cable television channels.

One common problem with an open house is that everyone wants to come at the beginning. There is often a large crowd when it opens and the attendance tapers off during the evening. Publicity messages should stress that people can drop in at anytime.

**SOUTH SUBURBAN FLOODPROOFING OPEN HOUSE
WEDNESDAY, MAY 8, 1991**

**A Self-Help Program
to Prevent Flood Damage from Overland Flow,
Sewer Backup, and Leaky Basements**

Sponsored by:
Illinois Assn. of Stormwater and Floodplain Management
Butterfield Creek Steering Committee
Illinois Dept. of Transportation/Div. of Water Resources
South Suburban Mayors and Managers Assn.

Who should attend?

South suburban residents who have flooding problems at their homes.

Why should you attend?

To put an end to flood damages at your home or property through some simple self-help methods.

What information is available at the open house?

- Self-Help Ideas in Video:

A slide program which is an introduction to floodproofing techniques will be presented along with the "Best Build" video on how to retrofit your home or property to protect against flood damage.

- Information from Sponsoring Groups and Agencies:

Representatives from sponsoring groups will help homeowners understand the causes of flooding and will provide one-on-one advice on how to prevent future flood damages.

- Educational Pamphlets and Materials:

Several free guides will be available to help you better understand how you can protect your home from flood damages.

- Exhibits by Contractors:

Contractors offering an array of services will be on hand to explain their products, including models of how these products would work in your home to help prevent flood damages.

- Local Building Officials:

Building officials from several participating communities will be present to explain how to get the necessary permits and assistance from your City or Village Hall.

- Flood Insurance Expert:

A representative from the agency that administers the National Flood Insurance Program will attend to answer your flood insurance questions.

When is the open house being held?

Wednesday, May 8, 1991, from 7 p.m. to 10 p.m.

Where is the open house being held?

Homewood-Flossmoor High School (South Building Cafeteria)
999 Kedzie Avenue, Flossmoor, Illinois
(A map locating the High School is shown on the reverse side of this announcement.)

For Further Information:

Call Molly O'Toole, IDOT/DWR, at 312-793-3123 or
Peggy Glassford, Village Manager, Flossmoor, at 708-798-2300.

Appendix A. Mitigation Table Procedures

1. Staff preparation

- Meet with the local building officials both as a courtesy and to collect needed information.
- Review any code provisions that restrict the use of certain mitigation measures.
- Check on requirements for permits or clearances needed from the state, other agencies, or utility companies.
- Identify any peculiar local terminology (e.g., do they call them levees, dikes or berms? What is the proper name of the building department?)
- Find out if there are any plans to acquire or clear areas for parks or other redevelopment projects.
- Ask about local flood conditions. Buildings in areas with the following high hazards should be relocated or demolished:
 - Large debris, ice jams, or mudflows.
 - Velocity of more than 5 feet per second.
 - Bad soils (i.e. buildings are sinking or cracking).
- If possible, obtain the recurrence interval of the past flood. Calculate the difference between the flood's level and the base flood elevation or the local code's flood protection elevation. This number may be different in different areas.
- Invite the local officials to help with the mitigation table staff orientation, to sit in on the mitigation table, or to set up a table to advise residents on permit requirements (clear the last with the prime sponsor first).
- Check the status of any planned or expected flood control projects. People will want to know what is being done by the government to prevent a recurrence of the flood. If there are high hopes for a structural solution, there may be apathy toward self-help.
- Check with FEMA and others to identify any federal, state, or local funding sources that may help people pay for a floodproofing project.
- If possible, visit the target area to:
 - Identify typical flood damage and building types.
 - Locate and take pictures of any previous mitigation efforts (e.g., elevated house, dike). If possible, ask the owner or a neighbor if the measure prevented damage during the flood.
 - Check with the local building department on the prevailing costs for overhead sewers and other common flood protection projects.

- Check out the cost and local availability of various measures such as a sump pump or stand pipe in area hardware and lumber stores. If the open house will not include businesses that sell or install these things, samples should be purchased for each mitigation table to give the property owner a tangible example of possible floodproofing measures.

2. **Supplies:** There should be enough of the following for each table:

- References (FEMA, Corps of Engineers, and state floodproofing publications)
- Building drawings (see page 1-6)
- Blue felt-tip pens to graphically illustrate water levels on the building drawings
- Shelves and/or expandable file folders for organizing papers
- Relatively cheap protection measures such as a standpipe or water alarm
- Posters or photographs of actual (preferably local) mitigation projects
- "Mitigation Table" signs
- Local handouts, such as building department procedures and phone numbers
- Business cards (if the staff is willing to answer questions later)

3. **Procedures**

- Introduce yourself and explain the purpose of the mitigation table.
- Ask what type of building he or she has and select the appropriate building drawing (see page 1-6). Have the person review how the water entered the building, how high it got, and the nature of the damage. Mark the depth and the flood protection level on the building drawing (if different from the flood level) with the blue marker.
- Follow the floodproofing decision steps shown on the next two pages.
- Suggest the appropriate mitigation techniques. Explain the techniques and the flood protection level.
- Advise that he or she should review the suggested technique(s) with local officials to confirm the feasibility and determine any permit requirements.
- Discuss possible sources of financial assistance.
- Advise everyone about NFIP, sewer backup, or sump pump failure insurance, as appropriate.

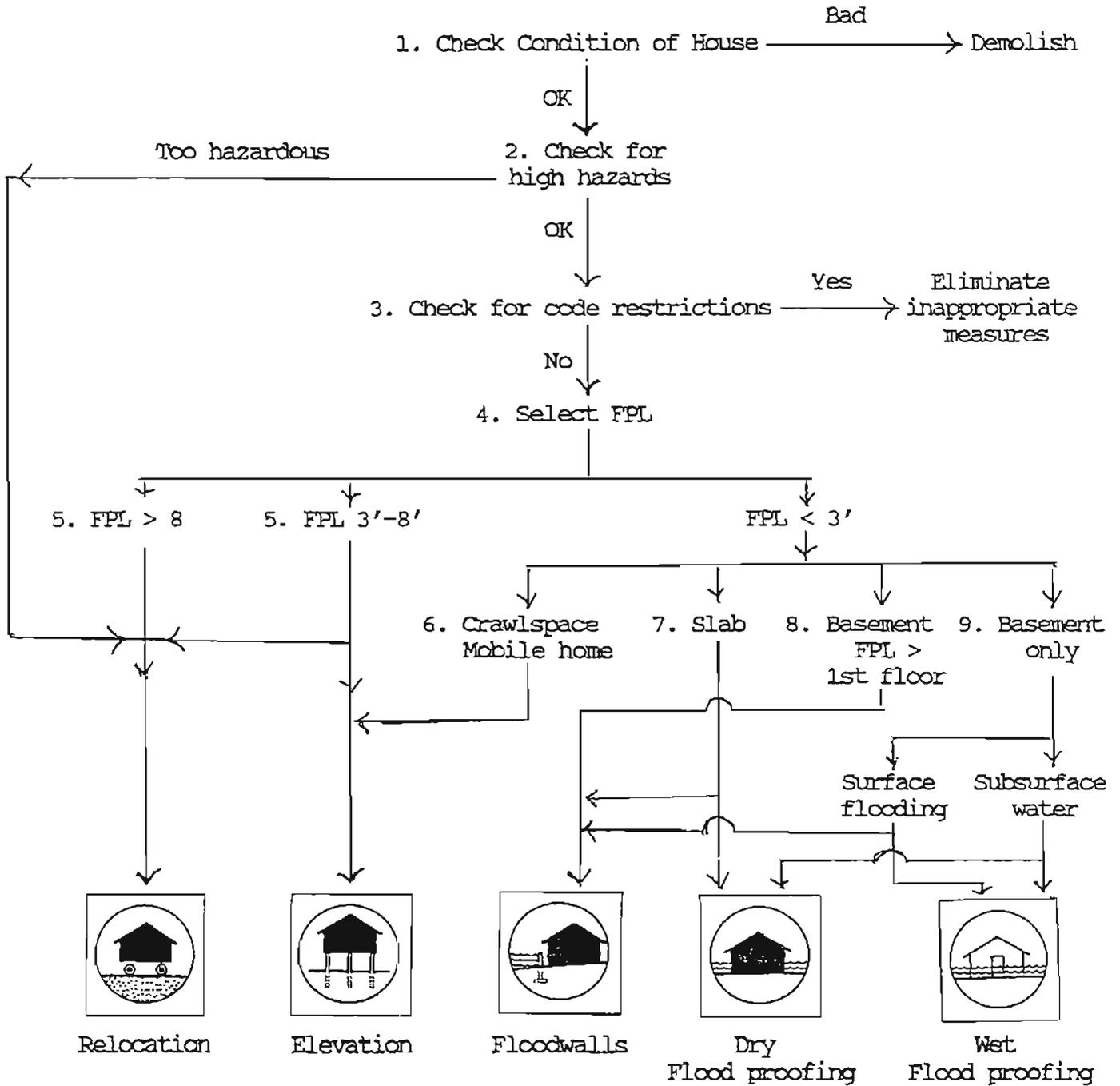
4. **Floodproofing Decision Steps:** These steps are shown graphically in the next section.

1. Check the condition of the house. If it is unsound, substantially damaged or dilapidated, the building should be demolished.
2. Check to see if there are any hazards sufficient to warrant relocation (e.g., high velocity, ice jams, etc.).
3. Check for code restrictions that may prevent one or more measures. For example, floodwalls are generally prohibited in floodways.
4. Select the flood protection level (FPL). An FPL of 3 means that the building should be protected from a flood that is three feet higher than the first floor. If the building was damaged more than 50%, the person must use the local building code's flood protection level or a higher one.
5. If the FPL is greater than eight feet deep, the building should be relocated to higher ground. If the FPL is between three and eight feet deep, elevation or relocation are the only secure protection measures.
6. If it is a small house on a crawlspace or a mobile home, the best measures are relocation or elevation, even if the FPL is less than three feet deep.
7. If the house is on a slab and the flood protection level is no more than three feet above the first floor, floodwalls or dry flood proofing are probably the least expensive measures. Slab homes can be elevated but the cost can run as high as \$30,000 - \$50,000.
8. If the house has a basement and the flood protection level is over the first floor, a floodwall or berm is needed to keep surface waters from reaching the basement walls. If this cannot be done, the house should be elevated and the basement should be abandoned.
9. If surface water only gets into the basement, and a berm cannot be built, wet floodproof the basement. If the basement is flooded from subsurface water, such as leaking walls or sewer backup, dry flood proofing measures will correct the problem.

These steps are designed for houses. Generally accessory buildings, such as garages, can be wet floodproofed. The steps are different for large buildings, such as factories, where construction materials and availability of trained crews provide more options.

These steps identify measures that are usually feasible and economical. A structural review of the building should be conducted by an engineer before dry flood proofing is attempted. If the selected measure is not feasible, relocation and wet flood proofing will reduce flood damage to any building.

5. Floodproofing Decision Tree



6. Hints for Mitigation Table Personnel

Personal contact is very important in advising people about self-help flood protection. The staff should have name tags (first names are sufficient) and otherwise be very personable. Giving the person their name and office number is very helpful to ensure people will call back if they have questions.

One of the objectives of the mitigation table is to "build an attitude" so the person becomes interested in self-help mitigation. The table can be considered successful if the person reads the manual when he or she gets home. However, if the person already has an idea, the mitigation staff's job is to confirm that it is a good one and encourage it and/or provide additional technical information.

There is no need for a centrally controlled procedure or mandatory format for each person to follow. However, each counselor must convey an understanding of and belief in the protection measures being recommended. Some prefer marking up the manuals instead of the building drawings.

Mitigation staff should not "dictate" the one best mitigation solution for two reasons. First, it may help cover them should the person want to sue if a mitigation measure fails or is overtopped (there are no reports of this happening). Second, research has shown that advisory programs are more effective if they make the property owner start thinking and make his or her own decisions. Use terms like, "this has worked for others in your situation" or "your neighbor did this and it worked."

Staff should always recommend that the person seek a professional expert if he or she is considering dry floodproofing a basement and use professionals for projects like raising a house or reworking the electrical service. Local building departments may be good sources of names of reputable or licensed contractors.

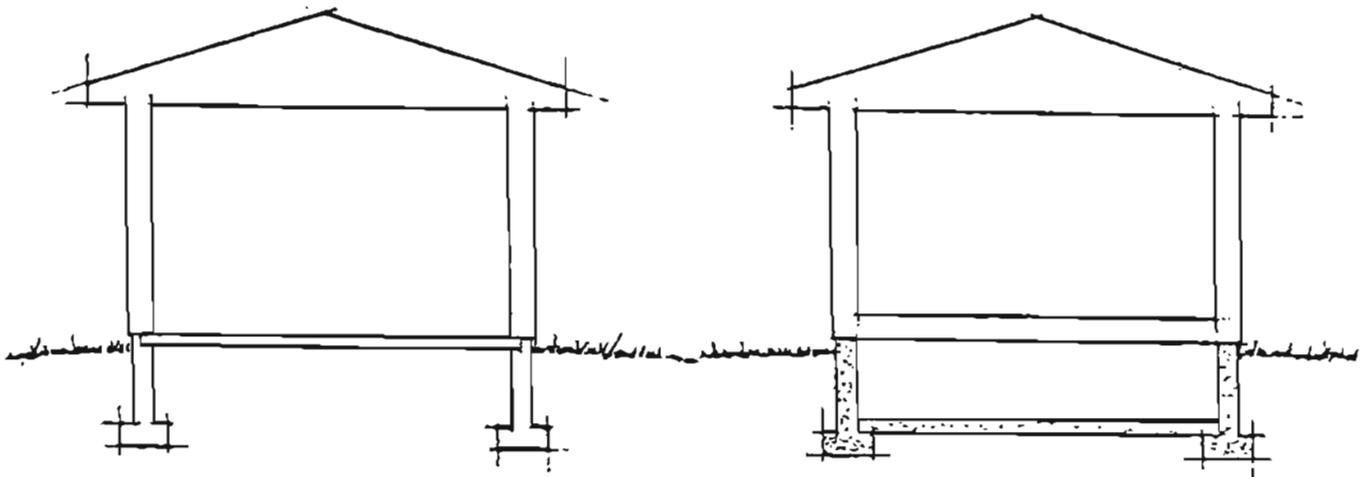
An explanation of risk analysis or detailed cost calculations are not necessary. Each homeowner makes his or her own decisions based on the personal impact of the flood and his or her subjective impression of how much it costs and the likelihood of recurrence. However, people should be told that they can be flooded again. They should also be given approximate costs of the various measures based on local prices.

Patience and tact are important. When people digress about their perceptions of current or historical causes of their flood problems, the mitigation staff must carefully redirect the discussion to floodproofing. It is most important to get people starting to think about self-help flood protection; it takes time for many people to make a major investment or to alter their house or yard.

Mitigation staff are constantly torn between two conflicting objectives: help this person and get to the next person as fast as possible. It is important to move on to the next person, especially because a person can only absorb so many new ideas at a sitting. Identify follow up activities, such as a visit to the building department or any scheduled open houses.

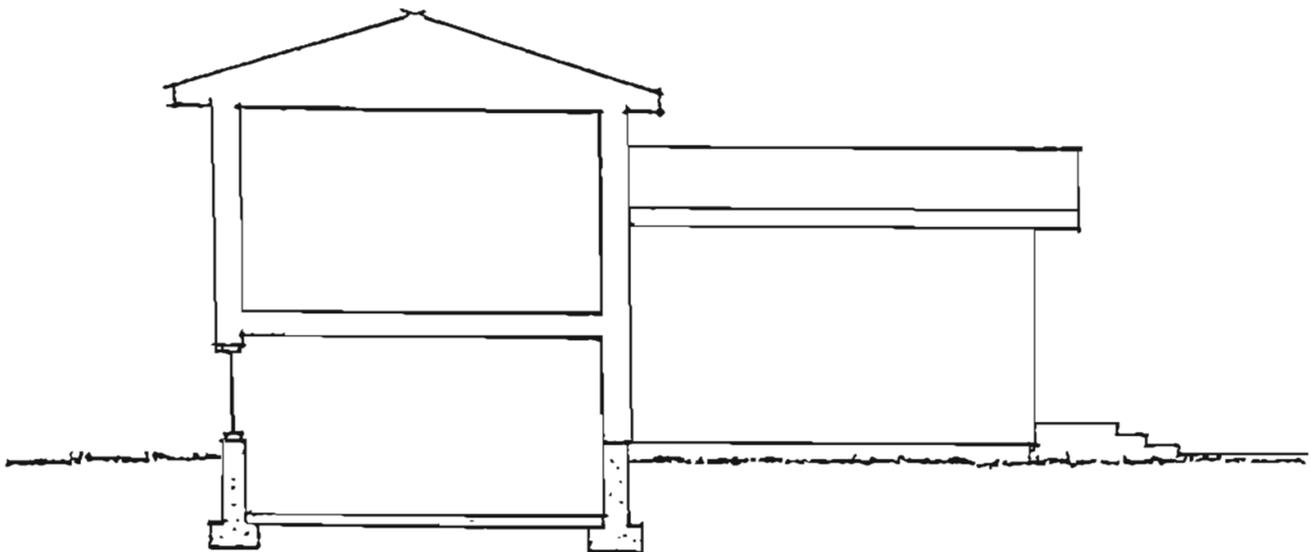
7. Typical Building Construction Drawings

The mitigation table staff use simplified drawings of typical building construction for the area. Each drawing should be on an 8½" x 11" sheet of paper. Each sheet is marked up to show entry of flood waters, flood depths, the flood protection level, and the recommended flood protection measures. It is then given to the person counseled. This section shows examples of the drawings.

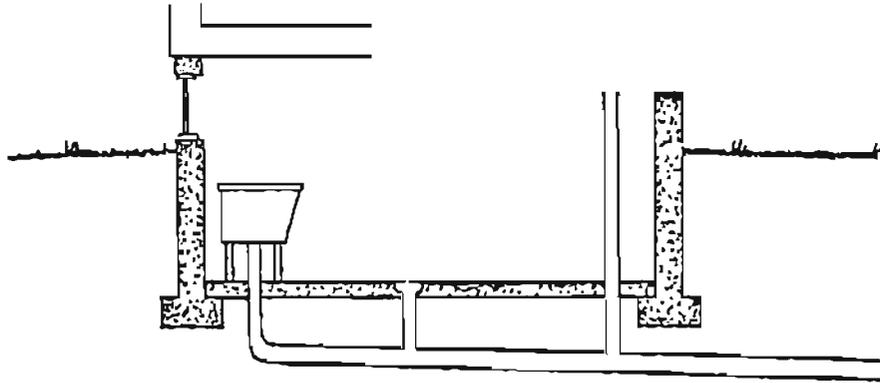


HOUSE ON SLAB

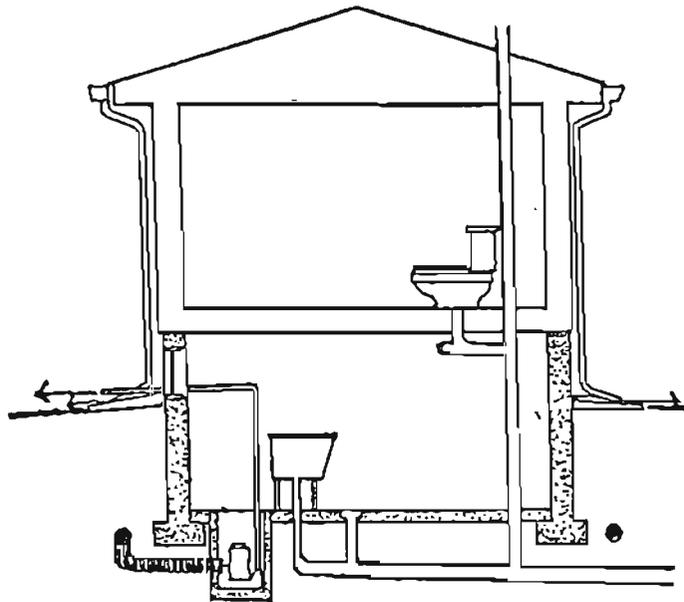
HOUSE ON CRAWLSPACE



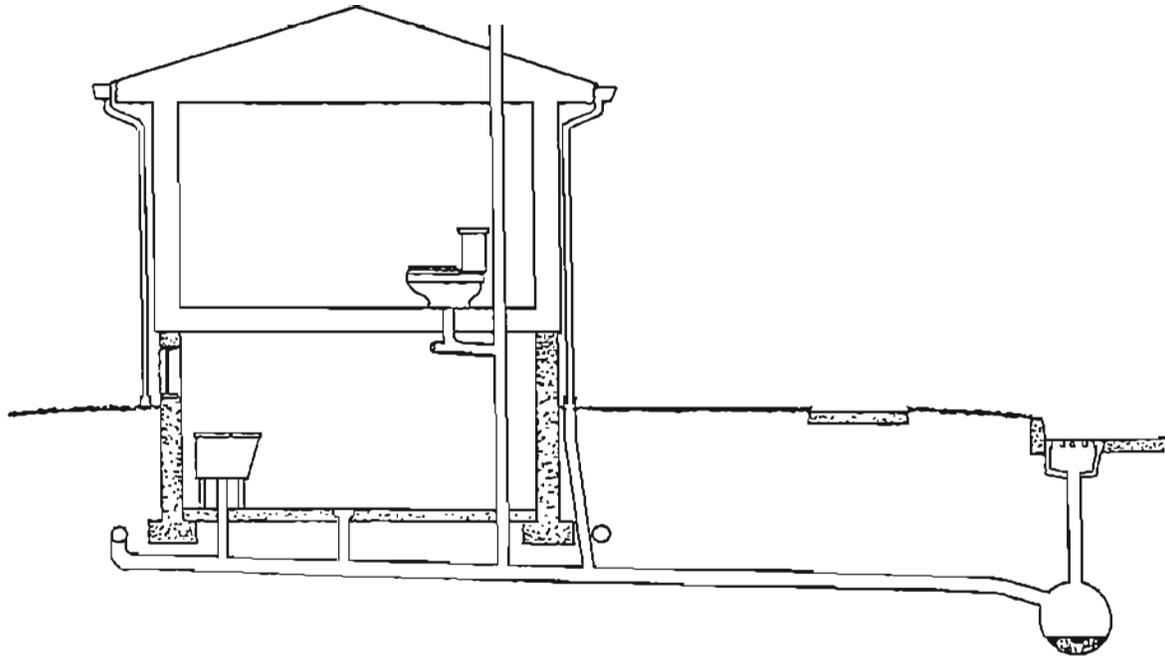
SPLIT-LEVEL HOUSE



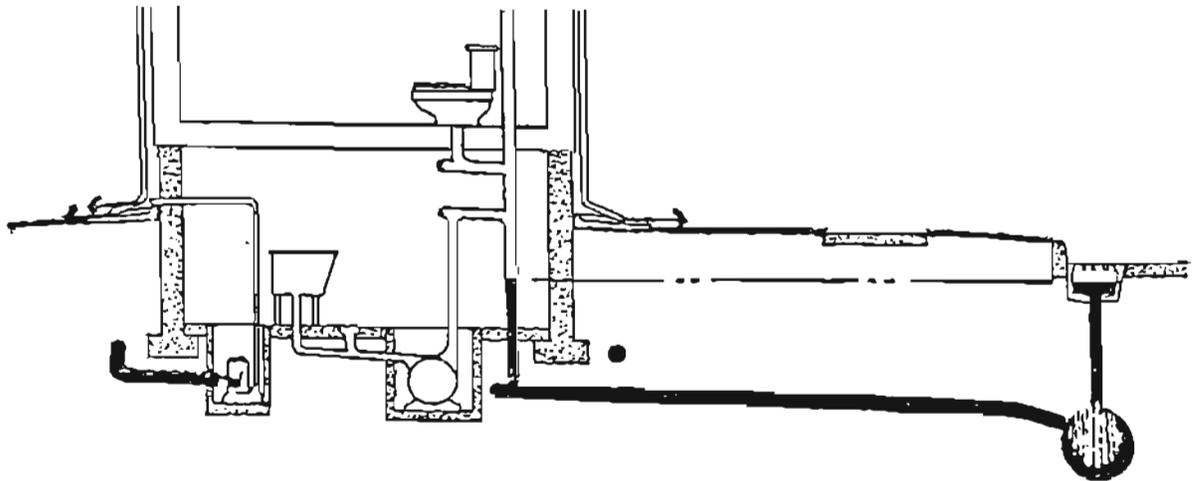
HOUSE WITH BASEMENT, SEPARATE SEWER, NO SUBSURFACE DRAINAGE



HOUSE WITH BASEMENT, SEPARATE SEWER
SUBSURFACE DRAINAGE WITH SUMP PUMP



HOUSE WITH BASEMENT, COMBINED STORM AND SANITARY SEWER



HOUSE WITH BASEMENT, COMBINED SEWER
STORM SEWER INTAKES DISCONNECTED, OVERHEAD SANITARY SEWER