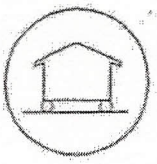
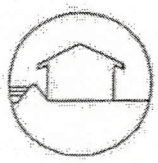
FLOOD PROTECTION METHODS

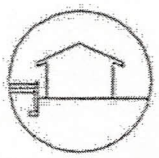
Elevation- This method consists of raising a house on an elevated support structure to place it above future flood waters. The exact method can include a number of possibilities that depend on local conditions such as expected flood and wind forces, building type and size, and soil bearing capacity.



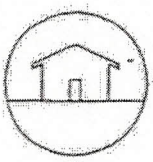
Relocation- Perhaps the only technique for completely preventing future flood damage, this method involves moving a house out of a flood area to a new location where there is not threat of flooding. The technique for moving most any house in good structural condition is well developed. It is generally more expensive and time consuming than most elevation techniques, but it can be a very feasible method in many cases.



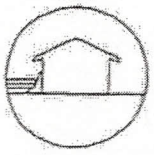
Levees- A possible technique in areas of shallow and moderate flooding depths with low velocity, this is a method of creating a barrier of compacted soil to keep the water away from a house. It can be one of the least expensive techniques, and it can be attractively landscaped. Its construction, however, requires great care, and there must be continued attention and maintenance to prevent its failure.



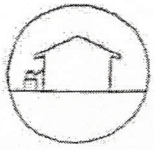
Floodwalls- This method is sometimes practical for areas with low to moderate flooding depths and velocities. As with levees, floodwalls are designed to keep the water away from a house, but are constructed of materials such as masonry block and reinforced concrete. They are more expensive than levees, but if properly designed, do not require as much concern with continued inspection and maintenance.



Closures- Often used in conjunction with other techniques such as floodwalls and levees, closures involve techniques for protecting gaps that have been left open for day-to-day conveniences, such as walks, doors, and driveways.



Sealants- Sometimes referred to as dry floodproofing, this method can be used only in areas of very shallow flooding to completely seal a home against water. Because of the tremendous pressures that water can exert against a structure protected by this method, the techniques can only be used on brick veneer or masonry construction in good structural condition, and then only when the flood levels cannot exceed two to three feet and flood velocities are negligible.



Utility Protection- Often very costly damage to utilities such as heating, air conditioning, electrical, and plumbing systems occurs during floods. Simple and relatively low-cost measures can usually prevent damage to these systems, which are essential to the habitability of a residence.