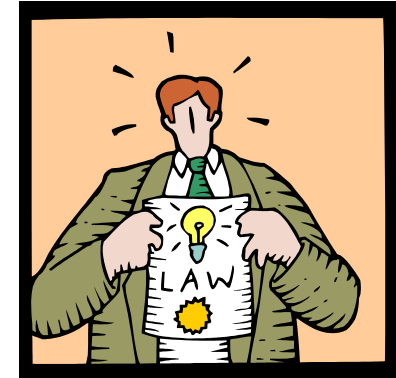


Module 4:

Administration of a Local Floodplain Program



Introduction



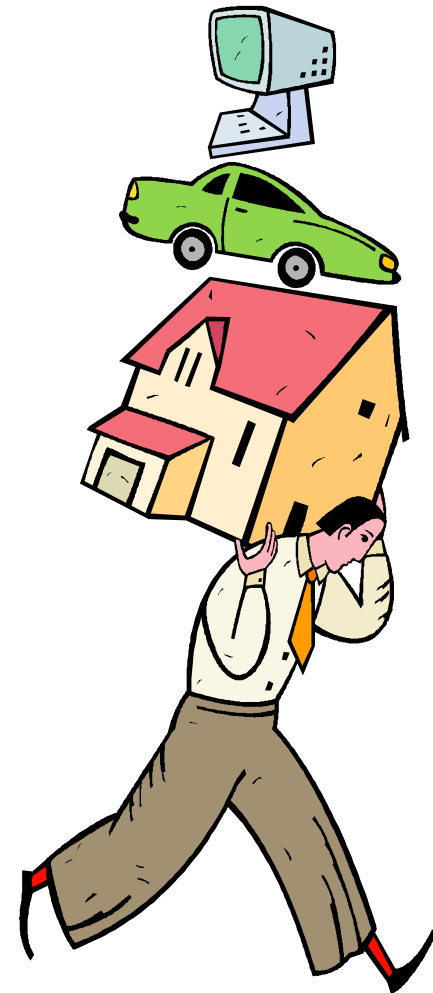
Your municipality's governing floodplain rules can be found in the **Flood Damage Prevention Ordinance**. Sound and proper administration of this ordinance is vitally important to realizing the community's goals to protect human life, health, safety, and property.

Enforcement of the ordinance is part of the community's agreement to participate in the National Flood Insurance Program.

You should make sure you have a copy of your flood damage prevention ordinance!

Local Floodplain Management

New Jersey grants local units of government the duty to adopt, administer and enforce floodplain management regulations. In most instances, local elected officials delegate authority for ordinance administration and enforcement to a floodplain administrator. This person is responsible for ensuring that development activities within the community comply with all local floodplain management regulations and other applicable codes and regulations.



Duties and Responsibilities

Understanding and administering the floodplain management ordinance presents some uncommon challenges...it deals with a specialized case of land use regulations that contain provisions or requirements to address the flood hazard.



Technical data has to be understood and utilized. The duties of the local administrator vary depending on the kind, size, and characteristics of the individual community. However, there are certain responsibilities that are common to all local floodplain administrators.

Outline of Responsibilities

Part 1:

- Understand the Regulation
- Review Permit Applications
- Coordinate Permit Review with Other Community Officials
- Interact with Appeals and Variance Procedures
- Collect Fees
- Maintain and Update Administrative Forms
- Provide Basic Flood Data
- Review Plans and Specifications
- Ensure that all Other permits are Obtained
- Notifications of Watercourse Alterations
- Issue or Deny Permits
- Record Keeping
- Investigate Complaints
- Remedy Violations



Part 2: The Permit Review Process In Depth

(1) Understand the Regulation

A sound working knowledge of the general and technical provisions of the local floodplain management regulations is essential to enable the local administrator to explain them to others to review permit applications for compliance, and to provide adequate interpretations.



(2) Review Permit Applications



Review all floodplain development permit applications is one of the most important responsibilities of the local administrator. The administrator determines if the provisions of the flood damage prevention ordinance apply by determining whether the proposed development is in a Special Flood Hazard Area.

Permit Application Form

- Review the form design for clarity and content for most current information requirements.
- Use a checklist of key elements to assure your application form includes:
 - Technical provisions of your ordinance.
 - Use/maintenance of NFIP Elevation Certificates.
 - Use/maintenance of NFIP Floodproofing Certificate.

(3) Coordinate Permit Review with Other Community Officials

All or portions of the responsibility for permit review may reside in other administrative offices, such as public works, planning and zoning, code enforcement, or housing departments. However, the local administrator should be involved in the coordination of permit reviews for all development in Special Flood Hazard Areas.



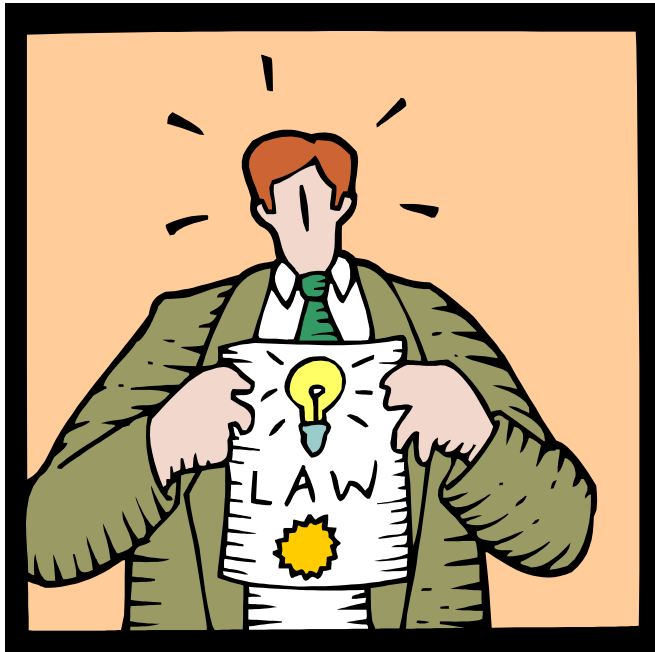
Make sure that you familiarize yourself with your own community's permitting process and the steps and players involved.

(3) Continued...Interoffice Review Process

- Identify departments that should review floodplain management decisions.
- Assure that involved departments understand floodplain management requirements.
- Develop an interoffice routing and signoff procedure.



(4) Interact with Appeals and Variance Procedures



The local administrator should be in a position to advise permit applicants of established appeals and variance procedures and requirements

(5) Collect Fees

The local administrator may be involved in collecting fees for permit reviews or variance requests, as well as for other administrative actions, if required by the community.



(6) Maintain and Update Administrative Forms

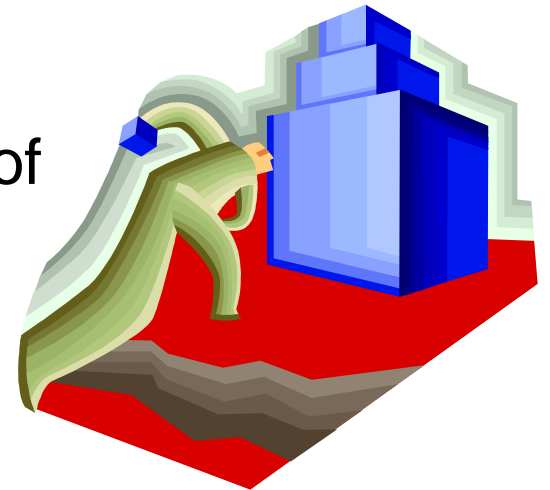


Permit applications, variance requests, and other administrative forms should be kept current and in sufficient supply.

(7) Provide Basic Flood Data

Within Special Flood Hazard Areas, all new construction, substantial improvement, or restoration of substantially damaged residential structures must have the lowest floor (including basement) elevated to or above the identified Base Flood Elevation.

Non-residential structures have the option of being elevated or made water-tight (dry-floodproofed) to meet this standard. The administrator determines the Base Flood Elevation for the site of the proposed development and either provides this data to the application or reviews the permit application to determine if the applicants or their representative are using the correct data.



(8) Review Plans and Specifications

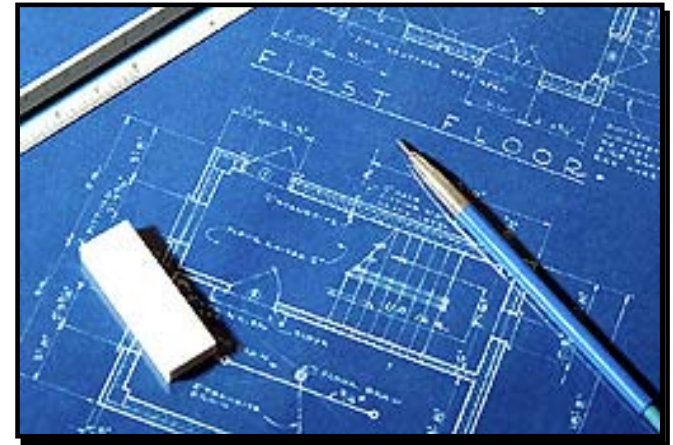


The administrator reviews the plans and specifications to ensure that the requirements of the ordinance are met, including the location of the structure, accessory structures, well, septic system, tanks, etc.,

Also, the administrator checks to see that the foundation is designed with adequate openings that allow free inflow and outflow of water to equalize hydrostatic pressures; the mechanical and electrical equipment are elevated or floodproofed; and other detailed requirements are met.



Plan Completeness

- ✓ Topography (existing/proposed)
- ✓ Floodplain and floodway boundaries
- ✓ BFEs
- ✓ Plans/elevations of existing/
proposed structures
- ✓ Existing/proposed
infrastructure
- ✓ Utilities



Technical Document Completeness

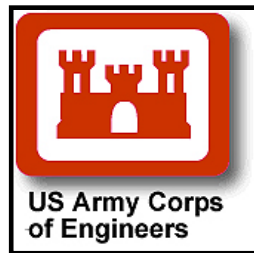
- ✓ Floodway encroachment
“no impact”
- ✓ Floodproofing
- ✓ Enclosures below lowest floor
- ✓ V-Zone construction/
breakaway walls
- ✓ Engineered flood openings
- ✓ Certifications

	
V Zone Building Design and Performance Certificate For New Construction, Substantial Improvements, and the repair of Substantially Damaged structures in Coastal Special Flood Hazard Area (Zone V)	
Section 1: Structure Location and Ownership Information To be completed by a Registered Professional Engineer or Architect	
Structure Owner _____	
Mailing Address _____	
City _____ State _____ Zip Code _____	
Structure Location _____	
Latitude _____ Longitude _____ County _____	
Other Legal Description _____	
Within City Limits? Y_/ N_/ Coastal Barriers Resource Act (CBRA) Zone Y_/ N_/	
Section 2: Flood Insurance Rate Map (FIRM) Data NOTE: This Certificate is NOT a substitute for an Elevation Certificate.	
Community Name _____ Community ID Number _____ FIRM Panel Number _____	
Panel Suffix _____ FIRM Zone _____ Date of FIRM Panel _____ Date of Index _____	
Section 3: Elevation Information Record elevations to one tenth of a foot.	
1. Elevation of the bottom of the Lowest Horizontal Structural Member.....feet	
2. Base Flood Elevation (BFE).....feet	
3. Elevation of Lowest Adjacent Grade (LAG).....feet	
4. Elevation of Highest Adjacent Grade (HAG).....feet	
5. Foundation type: Piling ___/ Post ___/ Pier ___/ Column ___/ Fill ___/ Shear Wall ___/ Enclosed Wall ___/	
Foundation Description: _____	
Elevation at Bottom of Foundationfeet	
6. Approximate depth of scour/erosion used for foundation design.....feet	
7. Embedment depth of pilings or foundation below LAG.....feet	
8. Datum used: NGVD 29 ___/ NAVD 88 ___/ Other _____	
9. Date of Construction ___/___/___ Improvement/Repair (to existing Bldg) ___/ New Building ___/	

(9) Ensure That all Other Permits are Obtained

The administrator advises the applicant of the need of any additional local, state, or federal permits for the proposed development. The administrator may have copies of the permit application forms or advises whom to contact.

In particular, permits may be required from the U.S. Army Corps of Engineers. Under Section 404 of PL 92-500, the federal Water Pollution Control Act of 1972, permits are required if the proposed development involves the placement of any fill material into bodies of water or wetlands, or if it affects a navigable body of water.



(10) Notification of Watercourse Alterations

The administrator notifies adjacent communities and the NJDEP prior to any alteration or relocation of watercourse. Evidence of such notification is also submitted to the Federal Emergency Management Agency Region II Mitigation Division office.



(11) Issue or Deny Permits

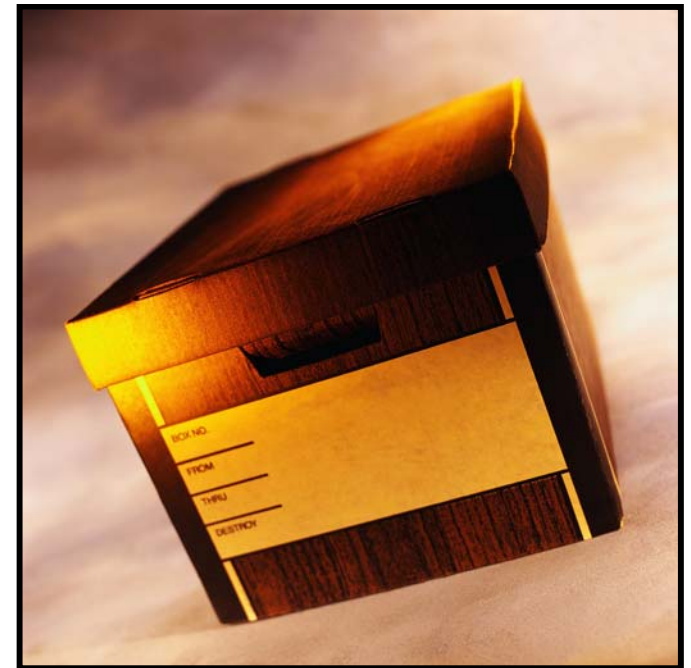


The administrator issues a development permit, if all provisions of the floodplain management ordinance and other local ordinances are met.

The permit is denied if the proposed development or use is not permitted by the ordinance or cannot be modified to comply.

(12) Record Keeping cont'd...

The administrator should maintain the community's Special Flood Hazard Areas for administrative purposes and for use by the public. All map corrections and notices of map revisions should be recorded and denoted on administrative maps, with the details kept close-by in an indexed file. Be sure to keep old Flood Insurance Rate Maps after revisions or restudies. Insurance rates are based on the flood zone and depth at the time of construction.



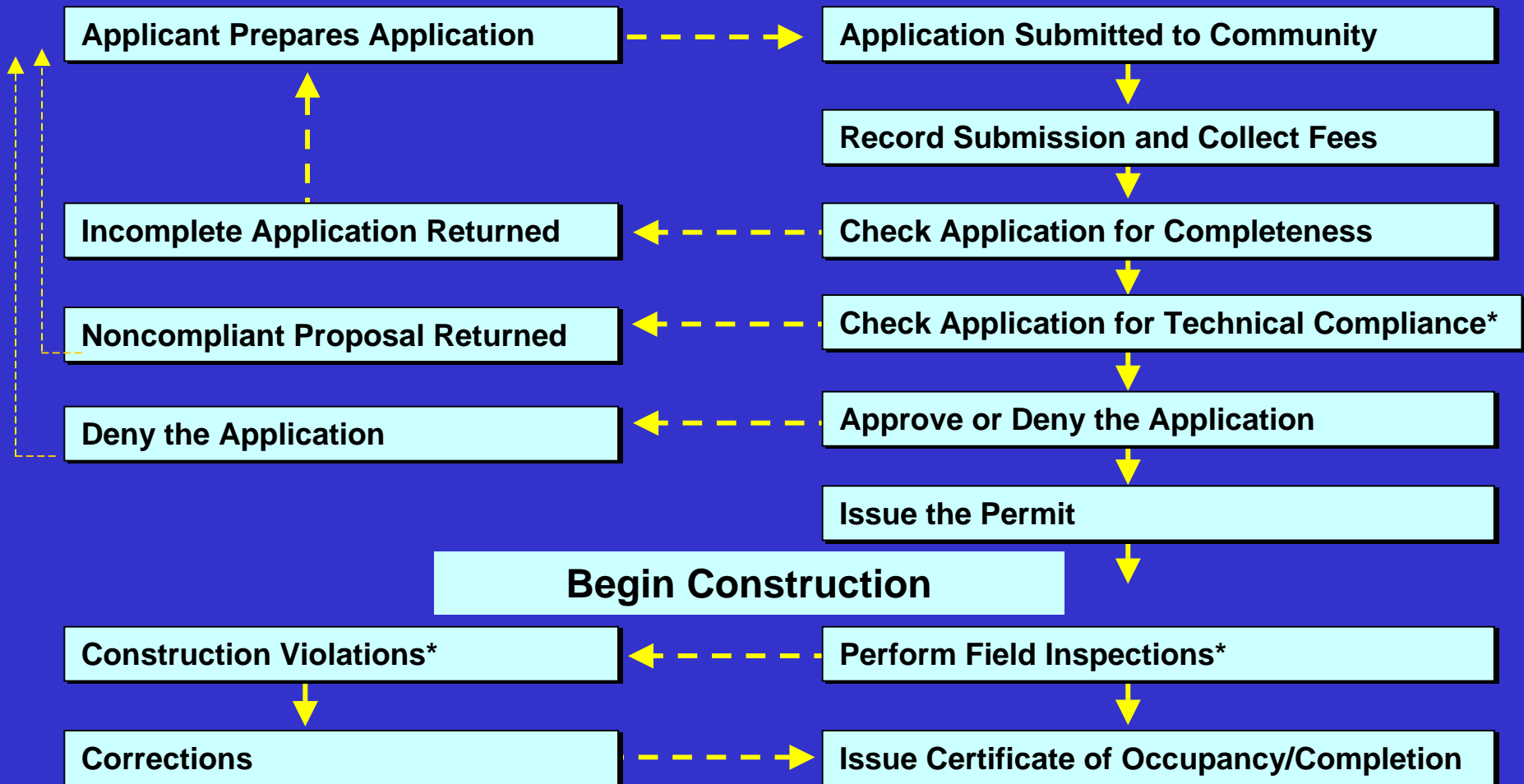
(13) Investigate Complaints

The local administrator must evaluate complaints, conduct necessary investigations and act upon them.

(14) Remedy Violations

When non-complaint activities are discovered, the administrator must take the necessary actions to resolve them. This may involve the issuance of stop-work orders or other violations notices, the coordination of enforcement procedures with the community's attorney, or, on rare occasion, a court appearance. Enforcement must not be taken lightly. Proper enforcement sends a message that the community is serious in its implementation of flood protection and other floodplain management objectives, and towards its agreement to participate in the National Flood Insurance Program.

Application Processing and Construction



Part 2

Going In-depth with the Permit Review Process

Development Permit Review Process

The key to successful local administration of the floodplain management regulations is a well-established permit system. Once the ordinance is in force, any development or change in use requires authorization. Generally, authorization means a permit from the local administrator or agency.



Permit Review Process

A permit is required for almost any development-related change to the floodplain including, but not limited to:

- ✓ Construction of new or substantial improved/or damaged structures
- ✓ Removal, modifications or improvements to existing structures, including bridges, culverts, debris blocks and dams
- ✓ Excavation, Filling, Paving
- ✓ Drilling, Driving of piles
- ✓ Mining, Dredging
- ✓ Land clearing, Grading
- ✓ Permanent storage of materials and/or equipment.



Development Permit Review Process

Regulation of all development in floodplains is essential because fill or other material can obstruct flood flows just as structures can.

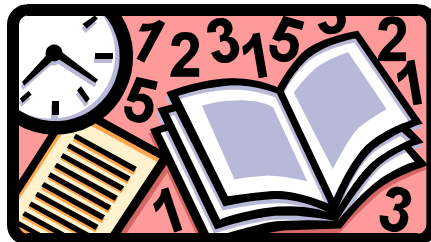
However, the local floodplain administrator has some discretion to exempt obviously insignificant activities from the permit requirement (e.g., planting a garden, farming, putting up a mailbox or flagpole).

The State Assistance Office (NJ DEP – Office of Engineering and Construction, Bureau of Dam Safety and Flood Control 609-292-2296) is available to assist community officials in interpreting the applicability of this definition to different types of development, if any questions arise.



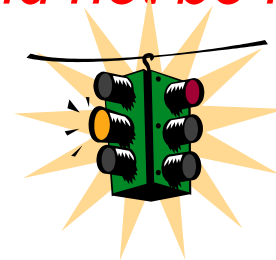
The Beginning of the Process...

The submission of a development permit application marks the formal beginning of the permit process. Prior to submitting an application, the prospective applicant often will be in contact with the floodplain administrator to obtain a copy of the regulations, locate the proposed site in relation to the National Flood Insurance Program maps, determine flood elevations, or gather procedural and technical information's needed to complete the applications package. This informal part of the permit process can be very important in guiding the applicant to locate and design the development in compliance with local regulations. It also can assist the applicant to prepare a complete application, avoiding unnecessary delays.



STEP 1: Review for Completeness

The application package should contain all the administrative forms, plans, blueprints, and technical documentation required for the administrator to review the proposed project for regulatory compliance. *The review should not be initiated if the application package is incomplete.*



The applicant should be advised of any missing documents and that the review will not start until the missing documents are submitted. The local floodplain administrator (FPA) has the responsibility to initiate review of the package and to complete review in a timely manner. The review should consist of certain procedures....*CONTINUED IN THE NEXT FEW SLIDES...*

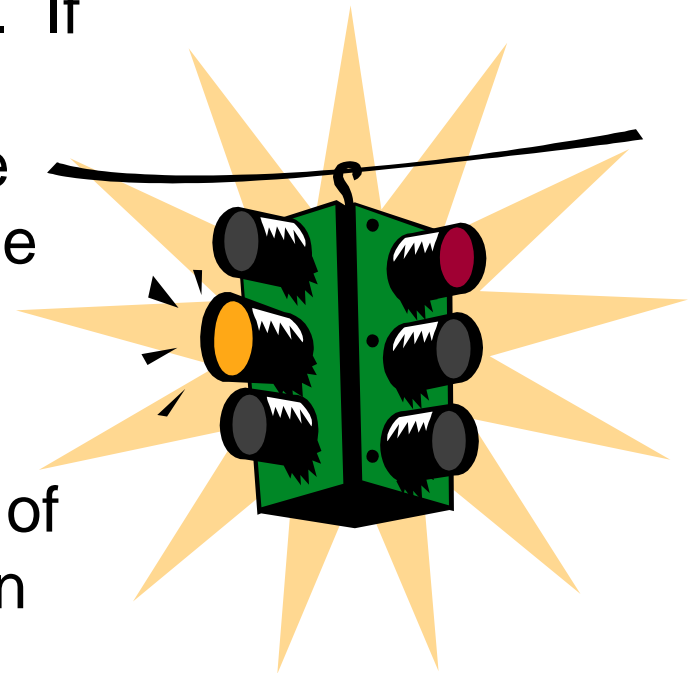
Step 1a:

Make Sure all Administrative
Forms are Completed Correctly
and Properly Signed

Forms: Completed and Signed

Scan the administrative forms to ensure that all questions have been answered. If important items are left blank or not addressed completely, these should be noted and brought to the attention of the applicant for completion.

If there is inaccurate information, this should also be brought to the attention of the applicant. Review of the application should be halted until application deficiencies are corrected.



Forms: Completed and Signed

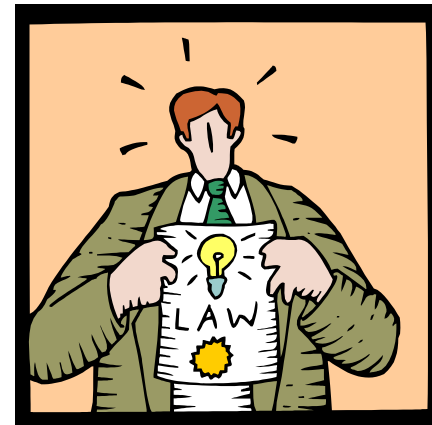
Forms are a valuable and necessary tool in reviewing development proposals for regulatory compliance. When designed properly, they can be the most efficient means of acquiring information that is essential to an effective and thorough review. The forms should be revised periodically to remain current with changes in the floodplain management ordinance and to include pertinent information needed.



Forms: Completed and Signed

The forms should include a listing of the applicant information outlined in the administrative provisions of the ordinance. In addition, forms should reflect the technical provisions of the ordinance by requiring information relative to those provisions. A good administrative form can serve as a checklist for identifying the kinds of information that should accompany the application. It is recommended that the following two forms be included as part of the application package:

- ✓ Elevation Certificate
- ✓ Floodproofing Certificate



The Certificates

- ✓ The National Flood Insurance Program Elevation Certificate provides a record of the as-built elevation of the lowest floor. Where a Base Flood Elevation is available, the certificate must be signed by someone that is authorized by law to certify the elevation.
- ✓ The National Flood Insurance Program Floodproofing Certificate provides a record of the height of floodproofing for non-residential structures in lieu of elevating to the Base Flood Elevation, only a licensed design professional can complete this Certificate.



Forms: Completed and Signed

- ✓ Briefly review site plans, grading and excavation plans, and building design plan for completeness.
- ✓ Depending on the specificity or detail of the administrative forms, the various plans that accompany the application will provide the technical data required for a thorough review.
- ✓ In the preliminary review, look for the existing and proposed topographic information, including spot elevations as a means of checking the accuracy of floodplain and floodway boundary shown on the plans submitted.

Specifically Look For....

- ✓ Multiple flood zones on a single lot
- ✓ Review proposed building elevations to ensure all structures or elevated to the level of the Base Flood Elevation; this also applies substantially improved/damaged structures.
- ✓ When registered professional architects, engineers, or land surveyors prepare the plans, they should be stamped with the license seal to certify technical accuracy. If key items are missing on the plans, the applicant must obtain the information.

Step 1b:

Ensure that all Necessary
Technical Documents are
Included and Properly Certified

4 Situations which Require Certified Documents be Filed

(1) Floodway Encroachment: If any part of the proposed project is to be located in a designated floodway, the applicant needs a prior approval from NJ DEP Division of Land Use Regulation



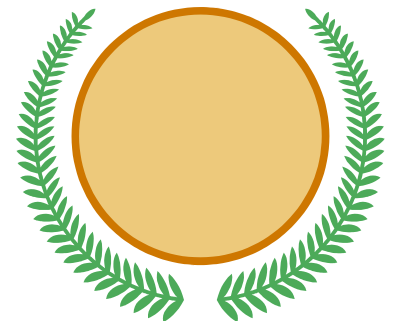
4 Situations which Require Certified Documents be Filed

(2) Non-residential floodproofing: In the event a non-residential structure is to be floodproofed according to National Flood Insurance Program standards, the applicant must submit a floodproofing certificate certifying that the design and methods of construction meet these standards. A prior approval from the NJDEP Division of Land Use Regulation is also required. A second as-built floodproofing certificate is required.



4 Situations which Require Certified Documents be Filed

(3) Enclosures Below the Lowest Floor:
When an applicant designs an enclosure below the lowest floor using an alternative to the minimum standard for openings prescribed in the National Flood Insurance Program requirements, a registered professional architect or engineer must certify the design.



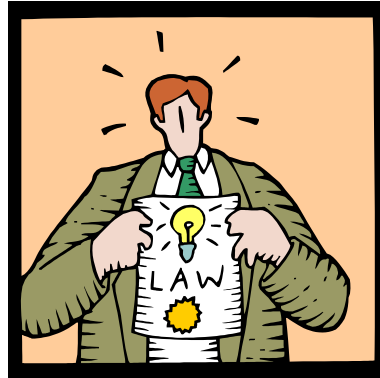
4 Situations which Require Certified Documents be Filed

(4) V-Zone Construction: An applicant proposing to construct a building in a V-Zone must supply a plan design from a registered professional architect or engineer certifying the design and method of construction of the elevated building and the design of breakaway walls (must be designed to breakaway between 10-20 lbs/square foot). An as-built certificate is required.



Step 1C:

Review to Ensure that all
Necessary Federal and State
Permits are Being Obtained



The administrator must review the application package to determine whether federal and state permits are necessary. The ultimate responsibility for securing such approvals is with the applicant, however, it is important for the administrator to be familiar with federal, state and regional regulatory programs and to direct the applicant to contact the appropriate agencies necessary.

STEP 2: Review the Application Package for Compliance with Technical Requirements of the Ordinance

It is important that the permit application be complete and accurate before a technical review of the permit is started. If it is not, advise the applicant in writing of the necessary forms and documentation that must be submitted in order for the permit review process to begin.

Step 2a:

Examine Site Information in
Detail

The site plan is a critical component of floodplain-related development proposals. Such plans should show the location of the property lines, streets, watercourses, existing and proposed structures, topographic information, Base Flood Elevation, floodway and floodplain boundaries. Inspect the plan carefully and compare it with the Flood Insurance Study and floodplain maps. Remember a floodplain development permit is only required if the project is located within the Special Flood Hazard Area.

For example, the applicant's property may be located partially in the Special Flood Hazard Area, but the location of the proposed structure is on the portion of the property that is outside the Special Flood Hazard Area. In this case, no permit is needed and floodplain regulations do not apply. However, if clearing, grading, filling, or road or bridge construction associated with the structure's construction is located in the Special Flood Hazard Area, a floodplain development permit will be required.

The site plan submitted with the application should answer the following questions:

- ✓ Is the plan clear and understandable?
- ✓ If the delineation of floodplain and floodway consistent with the Flood Insurance Study/Flood Insurance Rate Map data?
- ✓ What regulations may apply based on the location of the proposed development?
- ✓ Is there adequate stormwater management infrastructure?
- ✓ Is all proposed development shown on the plan (clearing, grading, structure location, etc.)?
- ✓ Are other permits required?

Step 2b:

Assess the Evaluation Data
Provided in the Application

Ground elevation data may be in the form of topographic contour lines; spot elevations on the site plan, the base flood and lowest floor elevations on the building design plans, or on the permit application form.



The administrator should scrutinize the elevations using the elevation data contained in the Flood Insurance Study and other available local data. Questionable data should be noted and clarification sought from the applicant.

Step 2c:

Review Building Design Plans

While site plans are vital in determining what regulations may apply based on the location of the development within the flood hazard area, building plans provide the basis for determining which regulations apply to the placement and construction of the proposed building.



Building Design Plans Should Reveal:

- ✓ The reference level of the lowest floor;
- ✓ The type of foundation system;
- ✓ The existence of an enclosure below the lowest floor; information, including electrical and plumbing plans, regarding use of the area, location of openings, materials proposed for use in below-Base Flood Elevation enclosure;
- ✓ The proposed elevation of the lowest floor in the relation to the Base Flood Elevation;
- ✓ The kind and potential use of the structure; and
- ✓ The height to which a non-residential structure is to be dry floodproofed and the complete list of floodproofing techniques to be used, described in writing with detailed drawings. Conflict or inconsistency with the applicable regulations will necessitate structural adjustments to the building plans.

Step 2d:

Review Engineering Data

Has the community's engineer reviewed documents? There are at least five separate engineering documents linked to the National Flood Insurance Program requirements, depending on the type of structure being proposed and the location:

- ✓ Hydrologic and hydraulic analysis concerning any proposed floodplain and floodway encroachments;
- ✓ Loading calculations and methods of construction relative to floodproofing;
- ✓ Alternative designs for meeting the minimum opening requirements for enclosures below the lowest floor;
- ✓ Design and methods of construction and anchoring for structures in V-Zones; and
- ✓ Design and methods of construction for breakaway walls that exceed standard load resistance of 20 pounds per square foot.

STEP 3: Approve or Deny the Permit Application

After review of the permit for completeness and technical compliance with the ordinance, a decision should be made on the application. If the proposed development is in compliance with the regulations, issue the permit. The permit becomes the official authorization from the community allowing the applicant to proceed based on the information submitted in the application package.



(12) Record Keeping

Record keeping is an extremely important part of the ordinance administration process. A project file should be kept for each development permit application. This file should contain:

- ✓ A copy of the permit application;
- ✓ Copies of all pertinent correspondence relating to the project;
- ✓ Documentation of inspections of the development;
- ✓ Certification forms for lowest floor elevations and for any floodproofing measures;
- ✓ A no-impact certification, if in the floodway;
- ✓ A V-Zone Anchoring Certification, if in a V-Zone;
- ✓ Copies of other required permits; and
- ✓ If a variance was issued, all supporting justification.



When the application is substantially not in compliance with the local regulations, the permit should be denied. The applicant can then do one of the following:

- ✓ Withdraw the permit application;
- ✓ Redesign the project to bring it into compliance with regulations; or
- ✓ Apply to the community's Board of Appeals for a variance to the regulations.



STEP 4: Inspect the Site/Work

After approval of the permit, it is important to make sure that construction is carried out as proposed and that any changes do not violate the community's floodplain management regulations and standards. The most effective method of ensuring compliance is to inspect the construction frequently while it is ongoing.



Inspecting the Site Work

Additionally, inspections give the community an opportunity to intervene when construction begins to vary from the plans. Perhaps the most significant effect of an inspection program is to put builders, developers, and property owners on notice that the community is verifying that projects are, in fact, completed in compliance with local regulations.



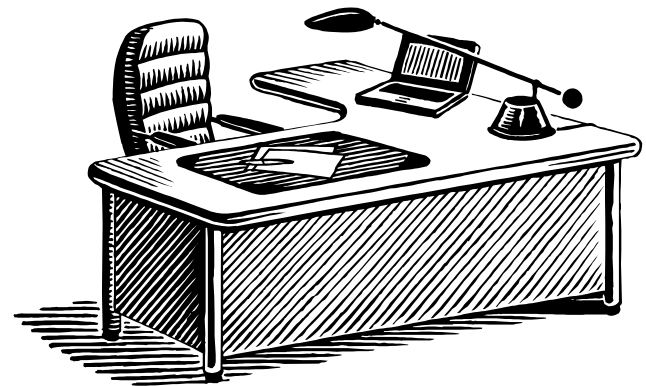
Inspections: Phase 1

With plans in hand, the administrator should conduct a site inspection to:

- ✓ Determine that the site as identified on the proposed plans is consistent with actual ground conditions
- ✓ Check setback distances and take measurements, if necessary;
- ✓ Verify the location of the floodplain and floodway boundaries, if applicable; and
- ✓ Check for floodway encroachments, if applicable.

Inspections: Phase 2

For a proposal involving an elevated structure, an inspection should be scheduled just prior to the placement of the lowest floor of the building. This will occur sometime after completion of the foundation. The purpose of this inspection is to determine whether the lowest floor will be situated to the height stipulated in the permit application, and ensure that the type of foundation constructed is the type specified in the plans. An elevation certificate is recommended after the placement of the lowest floor.



Phase 2 Continued

In many cases, a community may require the elevation certificate before the issuance of a certificate of occupancy. However, it is recommended that the certificate be obtained early enough in the construction process to assure that any discrepancies between the actual as built height of the floor and the base flood elevation level can be resolved. It is more feasible to require the certificate after the placement of the lowest floor and before the framing inspection. After the structure is completely built and ready for the certificate of occupancy, it would be difficult to correct any problems associated with the lowest floor being below the Base Flood Elevation.



Phase 2 Continued

Of particular importance is V-Zone construction and manufactured home installation in regard to ordinance requirements for foundations.

Floodway encroachments should also be checked, if applicable. Since floodproofing is a highly technical procedure involving many potential methods and designs, the administrator will need the assistance of the community's engineer. An as-built floodproofing certificate is also necessary for the design professional to certify that floodproofing was constructed to specifications.



Inspections: Phase 3

At or near completion of the development would be an appropriate time to conduct a final inspection. The purpose of this visit would be to:

- ✓ Determine whether the placement of fill, if used, meets the necessary compaction, slope, and protection standards contained in local regulations;
- ✓ Inspect enclosures below the lowest floors and “physically measure” the net openings;
- ✓ Check breakaway walls in V-Zones;
- ✓ Check for floodway encroachments, if applicable; and
- ✓ Check the anchoring system utilized in securing manufactured homes.

Applicant Disagreement With the Floodplain Process

- Applicants can seek relief:
 - Administratively by variance
 - Judicially via court
 - Legislatively by changing the law (44 CFR)



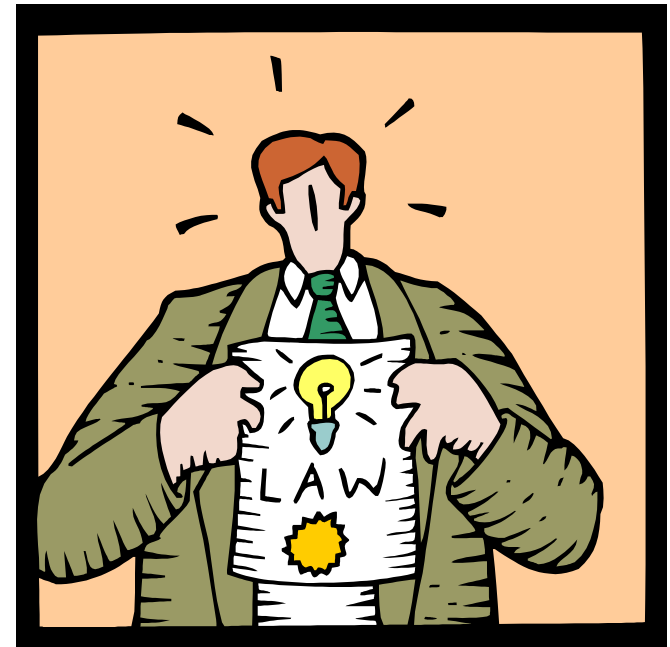
Enforcement Options

- Measures that local jurisdictions can use:
 - Administrative methods (stop work orders)
 - Fines
 - Imprisonment
 - Injunctions
 - Section 1316



Definition

- *Variance: Grant of relief by a community from the terms of a floodplain management regulation.*



Variance Criteria: 44 CFR Section 60.6

www.access.gpo.gov/nara/cfr/waisidx_02/44cfr60_02.html

- Used as a whole, not by individual paragraphs.
- For floodplain management purposes only.
- May significantly increase the cost of flood insurance.
- Pattern of inconsistent variances can result in sanctions against community.
- Designated historic structures and functionally dependent facilities receive special consideration.

Insufficient Reasons for a Variance

- Significant depreciation of property value
- Convenience of property owner
- Circumstances of owner, not land
- To obtain a better financial return
- Property similar to others in the neighborhood
- Hardship created by the owner's own actions



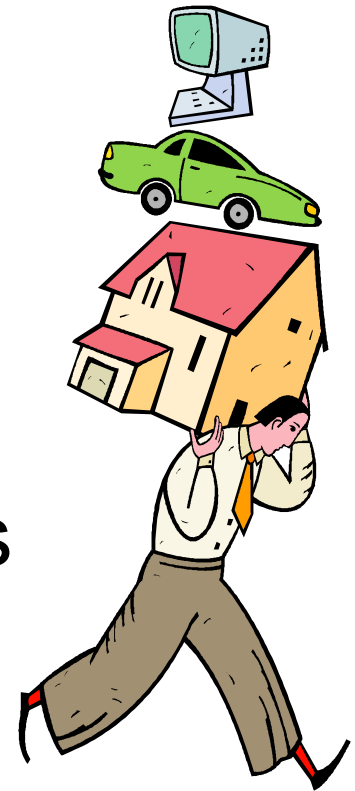
If a Variance Is Issued

- Notify applicant in writing:
 - Higher insurance premiums (\$26 for \$100 of coverage)
 - Greater risk to life and property
- Maintain records
 - Variance request
 - Notification to applicant
 - All variance actions/procedures, including denials, and justifications
- Report variance actions in biennial report to FEMA



A Word of Advice

- Do not grant variances!
 - People and property are placed at risk.
 - Flood insurance costs skyrocket.
- If you do grant a variance, be sure to document!
- Documentation is your community's only protection after a flood that causes damages.



Record Keeping

Record keeping is an important aspect of administering the community's floodplain management program. The National Flood Insurance Program requires that the local official record the number of 'development permits' issued and the number of variances granted in designated Special Flood Hazard Area, as well as any follow-up actions.



A detailed list of the documentation required to evidence compliance with the minimum National Flood Insurance Program standards including as-built elevation and flood proofing certificates must be provided.

In order to move onto the next section you must complete this module's web quiz. This Quiz can be found by clicking on the link below:

www.surveymonkey.com/s.asp?u=879223440842