# INSTRUCTIONS AND NOTES *for the* Model Code-Companion Floodplain Management Ordinance with Appendix G for All Communities

***August 2020***

***Note:*** *This model should be used ONLY if the community will ALSO adopt the optional California Building Standards Code CCR 24 Part 2, Appendix G Flood-Resistant Construction. REMINDER: communities that use Appendix G and this ordinance must re-adopt Appendix G with each new edition of the building code.*

***Note:*** *This FINAL version includes requirements for all SFHAs shown on FIRMs. Communities that do not have coastal high hazard areas (zones that start with letter” V”) should delete the following:*

*Sec. 105-1(1)(d) – agricultural structure in Zone V/VE*

*Sec. 302-3 – nonstructural fill in Zone V/VE*

*Sec. 302-4 – other site development in Zone V/VE*

*Sec. 304-1(2) – accessory structure in Zone V/VE*

***Please download the Model Code-Companion Ordinance with Appendix G that goes with these Instructions and Notes, also dated August 2020.***

The California Building Standards Codes (CCR Title 24) include flood provisions that are in the model International Codes® that form the basis of the codes. The Federal Emergency Management Agency considers the flood provisions of the International Codes (2015 and later editions) to be the minimum standards for hazard resistance and the flood provisions of those editions meet or exceed the NFIP requirements. Therefore, communities may rely on the flood provisions of the CCR Title 24 to fulfill NFIP requirements for buildings in flood hazard areas. Excerpts of the flood provisions of the CCR Title 24 are available at <https://www.water.ca.gov/nfip/>.

Changes to local floodplain management regulations are appropriate to properly coordinate with the CCR Title 24. Retaining requirements for buildings in local floodplain management regulations can lead to conflicts with the CCR Title 24 and creates a burden to resolve differences. The Model Ordinance that is coordinated with the CCR Title 24 and satisfies the requirements of the National Flood Insurance Program (NFIP) was developed by DWR and approved by FEMA Region IX. The Model Ordinance is designed to adopt Appendix G and, at the same time, repeal and replace existing floodplain management regulations. A crosswalk that demonstrates the Model Ordinance (version without Appendix G) is consistent with the NFIP is posted at <https://www.water.ca.gov/nfip/>.

***Please make any and all changes using <track changes> to facilitate review by DWR or FEMA NFIP Staff. We recommend resolving all text changes and obtaining that review before renumbering to be consistent with your community’s Code of Ordinances.***

***Contact DWR or FEMA NFIP staff for Technical Support: Email for help and submit drafts to*** [***DWR\_NFIP@water.ca.gov***](mailto:DWR_NFIP@water.ca.gov) ***or*** [***FEMA-NFIP-R9@fema.dhs.gov***](mailto:FEMA-NFIP-R9@fema.dhs.gov) ***(put community name in subject line). Please allow plenty of time for at least two reviews – at a minimum provide the first draft at least 8 weeks before you submit it for first reading by council/commission. At any given time, we have many draft ordinances under review and cannot guarantee fast turn-around.***

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| *NOTE: This model ordinance is specifically written as a companion to CCR Title 24, the California Building Standards Codes, which have requirements for buildings in flood hazard areas.* ***DO NOT*** *copy from your existing regulations and paste into this ordinance any requirements for buildings.*  *For “higher standards” that affect the design of buildings (such as freeboard) and other higher standards, see the instructions and model language on* [*https://www.water.ca.gov/nfip/*](https://www.water.ca.gov/nfip/) *and contact DWR NFIP staff for assistance.* |

**Floodplain Administrator Responsibilities.** The Floodplain Administrator is the position designated by the community’s legislative body to be responsible for administering the floodplain management regulations. The Floodplain Administrator may or may not be the Building Official. In many communities the floodplain management responsibilities traditionally have been assigned to a department other than the building department (e.g., planning, engineering, public works, stormwater). In other communities, the responsibilities are assigned to the building department. Coordinating with the appropriate units is the Floodplain Administrator’s responsibility.

The Building Official is responsible for enforcing the California Building Standards Code (CCR Title 24), including the flood provisions contained in each part of the code. The floodplain management responsibilities related to requirements in the Model Ordinance can continue to be assigned to the department that traditionally has enforced floodplain management responsibilities.

**Administrative Provisions.** The administrative sections of the Model Ordinance are organized to be consistent with the administrative provisions in Chapter 1 of each code and with Appendix G. CCR Title 24 Chapter 1 is available for local adoption and enforcement. Chapter 1 contains some flood provisions – communities that do not use the Chapter 1 of each code should take care to include those flood provisions in their code administration regulations. However, it is important to note that some administrative provisions, even if included in the building codes, must be retained in the floodplain management regulations in order to appropriately regulate development that is not within the scope of the building codes (development other than buildings and structures).

**Frequently Asked Questions.** Frequently asked questions about transitioning to floodplain regulations that are coordinated with the flood provisions in the CCR Title 24 are answer in the FAQs on the DWR Floodplain Management web page, <https://www.water.ca.gov/nfip/>. For questions not covered by the FAQs, contact DWR or FEMA at [DWR\_NFIP@water.ca.gov](mailto:DWR_NFIP@water.ca.gov) or [FEMA-NFIP-R9@fema.dhs.gov](mailto:FEMA-NFIP-R9@fema.dhs.gov).

**Higher Standards.**  DWR makes available separate instructions explaining certain higher standards that can be accomplished as part of floodplain management ordinances (download from <https://www.water.ca.gov/nfip/>). Higher standards that affect the design of buildings must be adopted in accordance with statutory requirements for local amendments to the CCR Title 24. Local amendments are not effective until copies of the amendment documents are filed with the California Building Standards Commission. Local amendments to the building code (and Appendix G) must be re-adopted every three years when the building code is updated.

## INSTRUCTIONS FOR TAILORING THE MODEL ORDINANCE:

**IMPORTANT:** Ordinances to change or replace local floodplain management regulations must be reviewed by DWR or FEMA before you start the formal adoption process (e.g., before planning commission consideration or before first council reading). **Do not adopt an ordinance based on this Model Ordinance without obtaining DWR’s or FEMA’s review and concurrence**. Working with DWR through the process and obtaining DWR’s concurrence ensures FEMA will approve the ordinance.

**IMPORTANT:** The Model Ordinance uses generic section numbering. Careful attention must be paid to renumbering to fit within a community’s existing code of ordinances. Content changes may affect cross references.

The Instructions and Notes below are keyed to the sections of the Model Ordinance. The notes are not intended to explain every provision, but to highlight those that clarify and those that are new to many local floodplain management (FPM) regulations.

The following are important aspects of the Model Ordinance:

1. The Model Ordinance is written in regulatory language, avoiding permissive and unenforceable language that may appear in some local regulations.
2. The Model Ordinance is coordinated with the CCR Title 24 and Part 2 Appendix G. The CCR Title 24 contains requirements for buildings and structures; Appendix G and this Model Ordinance contain other administrative provisions necessary for consistency with the NFIP and to regulate development other than buildings.
3. The Model Ordinance adopts Appendix G, which must be re-adopted with each revised edition of the building code.
4. The official designated by position who serves as Floodplain Administrator must be identified. As written, the Floodplain Administrator and Building Official are responsible for different aspects required to fulfill a community’s commitment and responsibilities to the NFIP. In many communities both functions are fulfilled by the same office or person. In those communities, when enforcing the CCR Title 24 that person is acting as the Building Official, and when enforcing the floodplain management ordinance that person is acting as the Floodplain Administrator. Appendix G can be modified to designate an official other than the Building Official to be responsible for administering Appendix G. The fact that two titles are used should not be cause for confusion (i.e., one person can wear two hats).
5. Appendix G and the Model Ordinance identify the duties of the Floodplain Administrator. The duties of the Building Official are specified in the CCR Title 24. The Model Ordinance is designed so that the Floodplain Administrator handles NFIP-required duties that are not the responsibility of the Building Official.
6. Appendix G and the Model Ordinance include specific requirements for development other than buildings. These requirements may seem new to some communities, but they are based on the overall performance expectation of the NFIP for any development, including development activities other than buildings. The specific requirements are based on FEMA guidance. The specificity is intended to help both the local official and the applicant understand what constitutes flood damage resistance for such activities.
7. Appendix G and the basic Model Ordinance do not include the common “higher standards” that many California communities have adopted. However, instructions and sample language to adopt many higher standards are available on the DWR Floodplain Management web page, <https://www.water.ca.gov/nfip/>. Specific statutory requirements related to local amendments to the CCR Title 24 requirements for buildings must be satisfied and local amendments must be re-adopted each time the State adopts a new edition of the CCR Title 24. Communities that adopt Appendix G must also re-adopt it on the same cycle. Assistance will be provided to any community that elects to adopt other higher standards or otherwise modify the codes, Appendix G, and the Model Ordinance.

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| *Effective with the 2016 edition, the CCR Title 24 Part 2.5 (residential) requires elevation to or above the BFE + 1 foot for all dwellings in all flood zones. The CCR Title 24 Part 2 (building), by reference to ASCE 24, requires all other buildings to be elevated or protected to at least BFE + 1 foot.* |

Please read the complete Model Ordinance and Appendix G and follow along with the notes below that are keyed to the same sections. You will find it useful to download the excerpts of the flood provisions in the CCR Title 24 (which include Appendix G). The Floodplain Manager and the Building Official should get together to do this review.

The Model Ordinance is organized as follows:

* **TITLE/HEADING and WHEREAS CLAUSES**
* **SECTION 1** is “recitals” to incorporate the Whereas clauses by reference.
* **SECTION 2** contains the complete FPM regulations that are coordinated with the CCR Title 24. The regulations are organized to match the organization of the code, with scope and administrative provisions in Part I, definitions in Part II, and technical provisions in Part III. Remember, Appendix G also includes requirements.
* **SECTION 3 through SECTION 6** are part of the adopting shell to address applicability, inclusion in code of ordinances, severability and effective date.

**Step One.** The first step is to determine which flood zones are identified on your community’s Flood Insurance Rate Maps. A note at the top of the model ordinance identifies four sections that can be removed if your community does not have any flood zones that start with the letter “V”.

**Step Two.** Begin to complete the community-specific information to be inserted where noted in **{bracketed bold}**:

1. **{name of community}** is the legal name of the county, city, or town.
2. **{community’s governing body}** is the city commission, board of county commissioners, town council, etc.
3. **{date of regular program entry}** is the date the community joined the NFIP. Find the date here: [https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book](https://www.fema.gov/national-flood-insurance-program-community-status-book) (select California and use the “Reg-Emer Date” in the second column from right).
4. **{title of FIS}** the full title of the initial Flood Insurance Study that includes the community (check the actual title; **do not** simply insert the community or county name).
5. **{date of FIS}** date of initial FIS. Find the date of the initial FIS: [https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book](https://www.fema.gov/national-flood-insurance-program-community-status-book) (select California and use the “Init FIRM” column).

**Step Three.** Carefully consider any modifications you may wish to make to the Model Ordinance or Appendix G. Remember the model is written to satisfy NFIP requirements, which means you and DWR/FEMA must be very careful to ensure changes are acceptable. Please contact DWR or FEMA NFIP staff if you have questions or would like a preliminary review of changes you’re considering. We recommend NOT re-numbering the sections of your draft to match your local code until after all the text changes are reviewed and approved. As part of renumbering, care must be taken to renumber cross references. An ordinance with incorrect cross references may be deemed unenforceable. Also, we recommend you not adopt with generic numbers and then rely on a commercial codification service to renumber (experience indicates cross references may not get renumbered correctly).

**Step Four.** Have DWR or FEMA NFIP staff review your tailored ordinance in <track changes> mode before you get too far along in your adoption process. This is especially important if you propose to modify, delete, or add any provisions. If additional changes – *no matter how minor –* are made after DWR’s or FEMA’s review, please send it for another review (this is especially important if changes are made or sections renumbered after legal review). Final review and approval by DWR and FEMA will be much easier if DWR or FEMA has reviewed and approved ALL changes. DWR or FEMA will also double check the re-numbering and ensure all cross references are changed correctly.

**Step Five.** Upon adoption and execution, send DWR or FEMA NFIP staff a scan of the adopted ordinance, with all signatures. At that time, DWR or FEMA will do a final review to complete the process and send a concurrence letter.

**Step Six.** Your community must submit adoption of Appendix G to the California Building Standards Commission. In addition, all other amendments to the building code, and the ordinance adopting those amendments must be submitted to the California Building Standards Commission. See the instructions for higher standard for the specific requirements.

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| *Remember – the Model Ordinance was approved by FEMA. This means any changes must be reviewed by DWR or FEMA to ensure consistency with the NFIP is maintained.* |

## Guidance and Explanatory Notes for Model Floodplain Management Ordinance

| **ORDINANCE SECTION** | **GUIDANCE NOTES** |
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| Title and Whereas clauses | * Communities will modify and finalize the title according to their standard practice. * Do not remove the whereas clauses. * Check <date of regular program entry> [https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book](https://www.fema.gov/national-flood-insurance-program-community-status-book) (use the “Reg-Emer Date” in the second column from right) |
| CHAPTER XX – FLOODPLAIN MANAGEMENT  PART I. – SCOPE AND ADMINISTRATION  ARTICLE 101 GENERAL PROVISIONS |  |
| Sec. 101-1. - Title. |  |
| Sec. 101-2. - Statutory authority. |  |
| Sec. 101-3. - Scope. | The NFIP definition of “development” is very broad. Communities that participate in the NFIP agree to regulate all development. Enforcing regulations based on this ordinance and enforcing CCR Title 24 fulfill the requirements for participation in the NFIP. |
| Sec. 101-4. – Purposes and objectives. |  |
| Sec. 101-5. - Coordination with Building Codes. | This is an explicit acknowledgement that the ordinance and the CCR Title 24 are enforced together. |
| Sec. 101-6. – Adoption of CCR Title 24 Part 2 Appendix G. | To be effective in the community, Appendix G must be adopted (and re-adopted with every updated of the building code). |
| Sec. 101-7. - Warning. | A statement to this effect has always been part of local floodplain management regulations. The second part of the paragraph contains a warning that if flood maps and flood data change, the community will be required to adopt that revised flood data, which would then have to be enforced in the future. |
| Sec. 101-8. - Disclaimer of liability. | A statement to this effect has always been part of local floodplain management regulations. |
| Sec. 101-9. - Other laws. |  |
| Sec. 101-10. - Abrogation and greater restrictions. |  |
| ARTICLE 102 APPLICABILITY |  |
| Sec. 102-1. – General applicability. |  |
| Sec. 102-2. - Establishment of flood hazard areas. | Insert the actual title and date of the initial FIS. Find the date of the initial FIS: [https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book](https://www.fema.gov/national-flood-insurance-program-community-status-book) (select California and use the “Init FIRM” column).  When a “countywide” map is available, the FIS and FIRMs include the unincorporated areas of the county and incorporated areas (e.g., “\_\_\_\_County, California and Incorporated Areas”). For municipalities, a reference to the countywide FIS and FIRMs means a reference to the FIRM panels (or portions of FIRM panels) that show the area within the boundaries of those municipalities. DWR or FEMA does not recommend listing specific panels.  The FIS and accompanying FIRMs are adopted along with “all subsequent amendments and revisions.” California communities may rely on this “auto-adopt” language and not have to adopt every subsequent FIS and FIRM revision. Some communities elect to amend regulations to update the FIS date when new effective studies are issued by FEMA.  CCR Title 24 Part 2 (building) Section 1612 and Part 2.5 (residential) Table R301.2(1) anticipate identification of community-specific FIS/FIRM information. Rather than do that as local amendments to the building code, this section notifies users the applicable studies/maps for the building code are those adopted in this ordinance  Communities may adopt a flood hazard map other than the FIRM provided that map shows flood hazard areas that are larger than the SFHA. Any community that uses an additional map should modify this section to identify and adopt that map or study, even if the other flood hazard map is for only a portion of the community (e.g., for only one watershed or a part of a waterway). |
| Sec. 102-3. - Interpretation. |  |
| ARTICLE 103 DUTIES AND POWERS OF THE FLOODPLAIN ADMINISTRATOR |  |
| Sec. 103-1. - Designation. | Communities are required to designate one official by position title to enforce the adopted FPM regulations as part of meeting the requirements to participate in the NFIP (designation of multiple staff positions or designation of a department are not permitted).  Delegation of authority is standard, especially in departments where staff perform functions under the authority of the designated department manager or city manager. This authority also allows reviews by other departments where those departments already review or approve certain activities. For example, grading plans may be approved by a public works department; subdivision requests typically are approved by the planning department. Regardless of which department or person performs the work, the Floodplain Administrator has overall responsibility.  See notes at the top of these instructions. The Floodplain Administrator may be the building official or another position. If the Floodplain Administrator is the building official, do not change the title throughout the ordinance. When enforcing the CCR Title 24, the building official “wears the BO hat” and enforces pursuant to statutory authority, and when enforcing this ordinance, the “FPA hat is worn,” and enforcement is pursuant to the authority established in this ordinance. |
| Sec. 103-2. - General authority. |  |
| Sec. 103-3. - Coordination. | This section recognizes that communities may have more than one office or department involved in the review of applications for development in flood hazard areas. |
| Sec. 103-4. - Duties. | #7 requires the Floodplain Administrator, with the Building Official, to determine if design certifications and documentation of elevations are complete (e.g., that appropriate fields of the NFIP Elevation Certificate are completed by the surveyor).  #9 relates to requests under the building code to “modify the strict application” of requirements, which are, in effect, a request for variances. See CCR Title 24 Part 2 Sec. 104.10.1 and CCR Title 24 Part 2.5 Sec. 104.10.1. Any such request to modify the flood provisions of the building code must be handled as requests for variances per Article 107 of the FPM regulations.  #11 applies when an applicant elects to have engineering done to show different boundaries or BFEs, in which case the community can only use the new data if it is approved by FEMA. This is not equivalent to Sec. 105-2 which applies in SFHAs without BFEs, in which case the additional data are submitted for unnumbered zones to determine the BFE of the existing SFHA, not to redelineate the SFHA or to refute the BFE.  #12 satisfies the NFIP requirements for notifications related to watercourse alterations, but does not obviate the need to obtain any other Federal or State permits that may be required (see Sec. 104-4).  #14 applies when applicants seek variances from these regulations or Appendix G (#9 refers to variances for buildings).  #16 Communities that annex area outside the municipal boundaries shown on the current FIRM must notify FEMA. This is especially important when a community participates in the NFIP Community Rating System or has a better CRS class than the county. |
| Sec. 103-5. - Other permits required. |  |
| Sec. 103-6. - Substantial improvement and substantial damage determinations. | These responsibilities are not new, although most existing local regulations do not include this level of detail. FEMA recommends establishing procedures for SI/SD to provide uniformity, especially to identify the primary method to establish market value (see FEMA P-758, *Substantial Improvement/Substantial Damage Desk Reference*. See the packet of forms and sample letters in Appendix D of FEMA P-758. Communities that could experience widespread flood damage should review the Desk Reference and decide in advance how various aspects of dealing with the aftermath will be handled, such as estimating costs and market values.  #1, see the definition of “market value.” Note the definition allows use of adjusted tax assessment value. Applicants who dispute use of adjusted assessment value may prefer to use Actual Case Value or may submit professional appraisals.  #2, see *Substantial Improvement/Substantial Damage Desk Reference* (FEMA P-758) for methods to estimate costs.  #3, the determination is made by dividing the cost by the market value; if the result is 50% or more, then the proposed work is SI or repair of SD.  #4, an important responsibility is to notify the applicant/owner whether the work is or is not determined to be SI or SD. |
| Sec. 103-7. - Department records. | Communities make a commitment to the NFIP to retain certain documents in permanent records and to make those records available for public inspection. This commitment overrides any other provision of law or Secretary of State Records Management Guidelines that may allow disposal of public records after a certain period of time. |
| ARTICLE 104 SITE PLANS AND CONSTRUCTION DOCUMENTS |  |
| Sec. 104-1. – Additional site plan Information. | #3 is intended to minimize the placement of fill in flood hazard areas, especially fill that is not intended to support buildings. Because of adverse impacts on flooding, flood hazard areas should not be used to dispose of excess fill. In addition, applicants who intend to fill an area and then seek a map change to “remove” the area from the mapped SFHA should do so as part of the permit which requires proper compaction when the fill is initially placed, not as a subsequent action.  #4 is not intended to imply that alteration of sand dunes is permissible. Only that when such activities are allowed by the California Coastal Commission, the flood-damage impacts must be considered pursuant to this ordinance before a local permit can be issued. |
| Sec. 104-2. - Additional engineering data. |  |
| ARTICLE 105 VARIANCES |  |
| Sec. 105-1. – Variances, in addition. | Variances are official permission to undertake an activity that is otherwise prohibited or not approvable under the regulations or building code. A pattern and practice of issuing variances may prompt scrutiny by FEMA and DWR. It is inappropriate to use variances to resolve violations or to attempt to solve problems discovered after construction is completed unless a variance can legitimately be granted after all due consideration. |
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| Sec. 107-2. – Variances; general. | Appendix G designates the “board of appeals” to hear variances, however that can be changed (language not shown). Communities designate a variety of bodies to hear variances: planning and zoning board, board of appeals and adjustments, board of adjustment, city commission, city council, or board of zoning appeals. |
| Sec. 105-2. – Agricultural structures. | This section is consistent with FEMA Policy #104-008-03 (issued February 2020). This section is optional.  Communities that retain this section should obtain and review the FEMA *Floodplain Management Bulletin: Floodplain Management Requirements for Agricultural Structures and Accessory Structures*. |
| ARTICLE 106 VIOLATIONS |  |
| Sec. 106-1. – Violations, general. | This section applies to violations of this ordinance. Building Officials have authority to enforce violations of the CCR Title 24. Structures or other development without elevation certificates, other certifications, or other evidence of compliance are considered violations until such documentation is provided. |
| Sec. 106-2. – Buildings and structures. |  |
| Sec. 106-3. - Authority. |  |
| Sec. 106-4. - Unlawful continuance. | Many communities have penalties specified elsewhere in their code of ordinances, and a reference to that section could be inserted rather than the broad “as prescribed by law.” |
| PART II. – DEFINITIONS | Some communities may put all definitions in one section of local code rather than in the chapter specific for floodplain management. When this is done, and when a term may have two definitions, it is appropriate to modify the definitions that are specific to the flood chapter by adding “for the purposes of Chapter xxx….” |
| ARTICLE 201 DEFINITIONS | Some definitions include informational bracket notes indicating those terms are also defined in the CCR Title 24 Part 2. Those notes may be removed. |
| Sec. 201-1. - General. |  |
| Sec. 201-2. – Definitions |  |
| “Accessory structure” |  |
| “Agricultural structure” | Definition in accordance with FEMA Policy #104-008-02. Communities that do not adopt the variance provision for agricultural structures in Sec. 107.8 should remove this definition. |
| “Alteration of a watercourse” | Requirements for alteration of a watercourse apply to riverine (nontidal) waterways (see Sec. 105-3(3)). |
| “Development” |  |
| “Encroachment” |  |
| “Exceptional hardship’ |  |
| "Existing manufactured home park or subdivision" | See note above regarding the adoption date of the community’s first floodplain management ordinance. |
| "Expansion to an existing manufactured home park or subdivision" |  |
| “Flood control project” |  |
| "Fraud or victimization" |  |
| “Letter of Map Change (LOMC)” |  |
| “Light-duty truck” | Used in the definition for “recreational vehicle.” |
| “Market value” | The alternatives to establish market value are described in *Substantial Improvement/Substantial Damage Desk Reference* (FEMA P-758). Communities should decide which method to use and apply it consistently. When using adjusted tax assessment value, documentation of the factor (multiplier) provided by the Property Appraiser should be kept with permit records and should be verified at least annually. |
| "New manufactured home park or subdivision" | See note above regarding the adoption date of the community’s first floodplain management ordinance. |
| "Nuisance" |  |
| "Riverine" |  |
| "Sand dunes" |  |
| “Watercourse” |  |
| PART III. – FLOOD RESISTANT DEVELOPMENT |  |
| ARTICLE 301 SUBDIVISIONS |  |
| Sec. 301-1. – Subdivisions, in addition. | This section is in addition to the subdivision provisions in Appendix G. |
| ARTICLE 302 SITE IMPROVEMENT |  |
| Sec. 302-1. – Site improvement, in addition. | This section is in addition to the site improvement provisions in Appendix G. |
| Sec. 302-2. - Limitations on placement of fill. | Fill may be placed to support buildings or for other purposes. These provisions for fill placed to elevate buildings come from ASCE 24, a standard referenced in the building code. The building code also includes requirements in CCR Title 24 Part 2 Sec. 1803.5.8 and Part 2.5 Sec. R401 (fill soils) and R506 (concrete floors on ground). The ASTM Standard D-698 *Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort* may be referenced. |
| Sec. 302-3. - Nonstructural fill or alteration of sand dunes in coastal high hazard areas (Zone V/VE) and Coastal A Zones. | #1 The description of the uses and “minor” quantities of fill are the same as specified in the CCR Title 24 Part 2.5. Although a specific volume is not defined, the nature and purposes for which minor grading and quantities of fill may be used are sufficient to place bounds on proposals. FEMA Technical Bulletin 5 (2020 edition) suggests that the placement of up to 2 feet of site-compatible, non-structural fill under or around an elevated building can be assumed to be acceptable without engineering analyses, provided basic site drainage principles are not violated. The placement of fill can deflect waves and divert flood flows which may damage buildings.  #2 and #3 come from NFIP Technical Bulletin 5. Note that any proposal for dune construction or restoration of dunes must be approved by other federal, State, and local authorities, including the CCC or the applicable local reviewing agency. Where applicable, such other permits should be obtained before considering proposals under this ordinance. |
| Sec. 302-4. - Other site improvements in coastal high hazard areas (Zone V/VE) and Coastal A Zones. | Walls and other structures listed can deflect waves and divert flood flows which may damage buildings. Note that any proposal for site improvements must be approved by other federal, State, and local authorities, including the CCC or the applicable local reviewing agency. Where applicable, such permits should be obtained before considering proposals under this ordinance. |
| ARTICLE 305 MANUFACTURED HOMES |  |
| Sec. 304-1. – Installation, in addition. | Manufactured home installers are licensed by DHCD. Local floodplain development permits are required in addition to permits required by DHCD where DHCD is the enforcement agency for installation of manufactured homes. Duties of the Floodplain Administrator include completing the appropriate section of DHCD’s Floodplain Ordinance Compliance Certification form. |
| Sec. 303-2. - Elevation requirement for certain existing manufactured home parks and subdivisions. | This section allows certain homes in existing parks/subdivisions that were established before the date the community joined the NFIP to be placed, replaced, or substantially improved without full elevation, provided a home on the site was not substantially damaged by flooding. In these existing parks/subdivisions, homes may be on reinforced piers or other foundation elements of at least equivalent strength. For “dry stack block” piers, equivalent strength can be provided by cross bracing and diagonal straps and ground anchors that provide adequate resistance to flooding when soils are saturated (also see FEMA P-85).  Communities that do not want to allow certain replacement manufactured homes to be installed below the BFE on foundations that are at least 36” above grade should modify this section (see Higher Standards instructions). |
| ARTICLE 304 ACCESSORY STRUCTURES |  |
| Sec. 304-1. – Detached garages and accessory storage structures. |  |
| ARTICLE 305 FLOOD CONTROL PROJECTS |  |
| Sec. 305-1. - Flood control projects; general. |  |
| Sec. 305-2. - Flood control projects; applications. |  |