Agenda
Village of Glen Ellyn
Building Board of Appeals Meeting
Wednesday, April 20, 2022
7:00 PM
Glen Ellyn Civic Center, Galligan Board Room

A. Call to Order: 7:00 p.m.

B. Roll Call

C. Public Comments (Non-agenda Items)

D. Approval of Draft Minutes

1) Minutes, Regular Meeting – 3/16/22

E. Old Business

- Update on the Building Community Listening Sessions

F. New Business

- Review of codes regulating construction for potential adoption

G. Trustee Report

H. Chairman's Report

I. Staff Liaison's Report

J. Next Meeting Date: May 18, 2022

K. Adjournment

cc: Building Board of Appeals Members
Kelley Kalinich, Trustee Liaison
Emily Rodman, Assistant Village Manager
Penni Cannova, Executive Secretary
Grant Paplauskas, Communications Coordinator
Kelly Purvis, Planning Manager
Atrin Fard, Planner
BBA Recording Secretary
Lori Gloude, Administrative Assistant II
Brian Baltudis, Facilities Manager

Dear Interested Citizens:

This note provides you with information regarding the process of amending the Village Code. Once public comments, discussions and considerations have been completed, the Building Board of Appeals makes a recommendation to the Village Board. The recommendation, along with the meeting minutes, summary report and all related material, is then scheduled for consideration by the Village Board at one or two meetings. The recommendation may first be considered by the Village Board at a workshop meeting, which will be held on a Monday at 7:00 p.m. The recommendation may then be considered at a formal meeting of the Village Board at 7:00 p.m., for a formal decision. To confirm exact dates for these Village Board meetings, please call 630-547-5244. The Village Board meets in the Galligan Board Room on the third floor of the Civic Center, 535 Duane Street.

Individuals with disabilities who plan to attend the hearing and who require certain accommodations in order to allow them to observe and participate, or who have questions regarding the accessibility of the meeting or facilities, are requested to contact the Village at least 24 hours before the meeting.

Glen Ellyn Building Board of Appeals
535 Duane Street
Glen Ellyn, IL 60137

Meeting 4/20/2022 7:00 PM
Department: Community Development
Department Head:
Category: Minutes
Prepared By:

AGENDA ITEM (ID # 2022-2148)

DOC ID: 2022-2148

1) Minutes, Regular Meeting - 3/16/22

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments:
1. Minutes-DRAFT-BBA Meeting 031622

DRAFT MINUTES
BUILDING BOARD OF APPEALS MEETING
March 16, 2022

Call to Order and Roll Call

The meeting was called to order at 7:02 p.m. by Building Board of Appeals (BBA) Chairperson Thomas Bredfeldt.

Roll was called. Present: Chairperson Tom Bredfeldt, BBA Members Brian Beck, Christopher Clark, Matthew Rooney, Robert Stahr and Barrington Pope. Absent: Thomas Tuscher. Also present were Village Community Development Director Staci Springer, Building & Zoning Official Steve Witt, and Recording Secretary Barbara Dutton-Thomas

Public Comment Non-Agenda Items

There was no public comment pertaining to non-agenda items.

Approval of Minutes

Following a motion by BBA Member Clark, seconded by Member Beck, draft minutes of the February 16, 2022 meeting were approved unanimously as amended.

Old Business

Director Staci Springer delivered a status report on issues raised at the Building Community Listening Session and that had been updated since the last meeting. Referring to item #3 claiming that engineering reviews and inspections are overly restrictive, she explained that Du Page County requires strict code enforcement, and if stormwater reviews aren't conducted properly and the Village isn't following the codes/County stormwater ordinance, the County can pull the Village's "full waiver status," causing the building community to have to go to the County to get stormwater reviews, which, she said, would be double the time of the Village. She added that the checklist the Village uses has been the same for some 15 years. Regarding item #6, she said the Village will ask a consultant to update the local area depressional map, which is envisioned to be added to the interactive GIS map on the Village website.

Regarding item #7, a complaint that new home permits take too long to get, Ms. Springer said other communities were found to be consistent with Glen Ellyn's performance. She went on to recount results of random permits pulled prior to the listening session, saying that these show that the Village's turnarounds are very quick (and that builders had permits a much greater portion of the durations). Referencing item #20 suggesting the Village should hire a consultant to perform stormwater reviews in 10 days, Ms. Springer pointed out that when the Village had a staff engineer, it wasn't consistently meeting that turnaround time goal during the busy construction months of the year, and now, with the consultant, a five-day review time is typical, and using the consultant affords the ability to complete final reviews faster (though builders often contribute to delays).

Item #22, she related, claims the engineer and the building official overreach their authority. She said both are certified and careful not to design things, but rather try to offer suggestions for meeting Code, which, she said maybe people consider as "designing it." Relative to item #28, Ms. Springer said the Village changed positions on tying downspouts in to the storm sewer, though considers situations on a case-by-case basis and is judicious in permission so as not to overtax the system.

To item #29, which asks why a stamped engineering drawing is necessary for retaining walls, she said other communities have similar requirements, and that Village Staff is proposing an increased minimum for having a sealed drawing to 4 ft. or greater or if there's a surcharge load on the wall, and any licensed design professional can stamp the drawings.

New Business

International Fire Code

Building & Zoning Official Steve Witt presented text changes drawn from the February 16th meeting to the International Fire Code (IFC): Concerning item #21, Mr. Witt (who had earlier reported that Staff hadn't received responses from four vendors, but that Groot indicated they don't provide dumpsters with metal lids) asked if the Board would like to specify that dumpster bodies be metal regardless of lid material. Chief Clark (who'd also reported not having heard back from a source to which he'd reached out) recommended that. Mr. Witt said language requiring a metal lid would be removed, but a requirement to have metal bodies would be reflected. He went on to discuss item #32, concerning combustible goods at retail stores, specifically a request by Chief Clark to look at propane tanks (i.e., quantity). Mr. Witt said he changed text to read "combustible or flammable" materials, and does include propane tanks, but added that he does not want a new provision to be retro-active (though doesn't want to see large displays), unless Chief Clark sees a definitive need for it, and cited success with outdoor displays. Chief Clark asked if monitoring could be handled administratively. Mr. Witt replied it could if the Chief ceded authority to do so, and added that the Building Official (which technically covers this in the Chief's absence) could manage the process, seeking the Chief's opinion as necessary. Chief Clark said that allowing the Code Official to make the call in individual circumstances offers flexibility. Mr. Witt asked to whom Chief Clark wishes to rest authority, to which Mr. Clark replied that the Building and Code Official is fine. Mr. Witt acknowledged this. Mr. Pope asked if the language could merely express "Village official," to which Mr. Witt replied that the doing so could yield various opinions, so he would prefer to channel the task to one or two individuals. Chief Clark agreed with this approach.

Discussion moved on to reviewing items #36-#37, with Mr. Clark saying he didn't know if he's comfortable requiring key boxes to have individual dwelling unit keys, and would make it optional. Mr. Witt said he's fine striking language specifying it as a requirement. Mr. Stahr articulated that having keys to units is a liability, and also that since locks change frequently, managing keys would be "a nightmare." Mr. Witt suggested removing the exception from item #36, and confirmed maintaining a requirement for key boxes to access common areas in multi-family buildings. In response to discussion of keys for roof access, Mr. Witt pointed out that item #37 references rooftop level in multi-family buildings, and said there's a provision for commercial buildings, as well. Chief Clark said he didn't know if he'd require a set of keys for the rooftop level, but noted that the bigger the building the more sets of keys are recommended to enhance the efficiency of a response crew. Mr. Witt said he'd strike language in item #37 so access to individual dwelling units is prevented.

Pursuant to item #40, Mr. Witt said language solely about change of occupancy in the same use group was removed in requiring fire sprinklers, which, he said, would typically result in a change of ownership, but not a higher hazard situation (as the risk factor shouldn't be any different). Mr. Pope asked if there would be an exception for moderate- or high-hazard storage. Mr. Witt referenced hazard categories and classifications in item #16 that were proposed for addition into the Code, which specifies that industrial or

storage occupancies with low-hazard content remain at the lowest hazard level and are based on what is being stored.

Item #45 language concerning exterior alarm bells, said Mr. Witt, was changed to show split up strobe lights, to display a blue lens on the strobe when there is an activation of water flow on the fire sprinkler system. Item #55 specifies a white lens when there is fire alarm system activation but no water flow. Chief Clark said this is fine, and that he'd be okay with not making it retroactive. Mr. Witt said the Village is trying to get rid of alarm bells in which critters nest, so he prefers to keep the language in the provision. Item #57, Mr. Witt said, provides clarification regarding a DU-COMM remote station. Item #64, he explained, has been updated to list the presence of boilers to require sprinkler heads be installed in a basement remodel exceeding $15,000. Item #69, he noted, is a renumbering issue. On the subject of tents, he said, it was decided to strike the provision for tents less than 700SF in area, with these to be handled administratively as special event applications come in. He said the Village has published a comprehensive guideline for requirements, and has a good package for distribution.

A motion to accept the IFC as amended made by Member Clark; seconded by Member Beck, passed unanimously by voice vote.

International Building Code

Introducing the International Building Code (IBC), Mr. Witt stated that proposed changes are not contemplated to be retroactive. He pointed to notation offering a "jump" from the 2009 to the 2018 IBC. Items (B)1-7, he added, reflect formatting changes, and deletion of International Plumbing Code references (with one exception), as the State has its own plumbing code. Item #8, he said, is to let people know that permits expire and a fee is necessary to extend them, and refers to the fee schedule, which also is noted in item #9. Item #10 reflects a change to the number of drawings required to at least four sets. Explaining that item #12 clarifies a requirement in the Professional Engineering Act of Illinois pertaining to any building requiring a fire alarm sprinkler system, Mr. Witt said that before a municipality is allowed to grant a permit, the design team must submit a technical submission. Since, however, pipe size isn't engineered until after a permit is issued, the Village is looking to get this information before shop drawings are provided, so to ensure correlation with the architect's program requirements and allow the engineer to design the system accordingly.

Mr. Witt said that Staff wants to remove from item #13 the section on relocatable buildings, such as mobile homes, that the Village doesn't want to see in town. Discussion ensued as to what defines such, with Mr. Witt noting that construction trailers fall under "means and methods" and saying trailers used for classrooms can be considered on a case-by-case basis. He also noted the difficulty in verifying whether structures built out of state meet local code. Member Stahr observed that healthcare and hotel concerns are pushing for pre-fab units, but Mr. Witt indicated that the proposed revisions don't concern these. Declaring intent to synch code with the Zoning Code, Official Witt thought the BBA might give this section further thought and revisit it later. He referenced Section 3113, which he noted requires manufacturer data plates that produce conformance with the book. Mr. Clark suggested it's probably beneficial to keep the language to prevent ducking standards by claiming a structure is mobile so doesn't have to meet codes. Mr. Witt said he'd strike the two sections in question, taking it back to Zoning for review to see how to regulate it. Suggesting that items #14 and #15 go together somewhat, Mr. Witt explained that the Building Department has internal requirements for preparation of site management plans which are requested for large commercial developments to understand a contractor's use of the site,

and the use's effects on traffic. He said the approach has worked well, and Staff merely wants to codify it. Similarly, he said, Item #15, concerns a fire safety plan for certain commercial buildings (e.g., hospital renovations). In response to a question from Mr. Rooney, Mr. Witt said he'd add language pertaining to horizontal assemblies.

Item #16 is a formatting issue, he said, and Item #17 is to codify the permit fee that appears in the fee schedule. Item #18, he said, is an attempt to educate contractors that there is sequence of inspections that have to occur. Member Clark asked how a large project with multiple areas that have separate inspections would be handled. Mr. Witt replied that the Village would perform two inspections per area covered. Items #19, #21 and #22 reflect formatting changes, he noted, and Item #20 (pertaining to temporary occupancy), a reference to the fee schedule.

Item #23 reflects the addition of a definition of co-working facilities, said Official Witt, who explained that over the past year the Village has seen such proposed with business plans that include serving alcohol, and so when occupancy reaches a certain point the Village wants to treat the use as "assembly" (like a restaurant). He said there's a notation to get this into the business use group. Mr. Witt said Item #27 picks up an IRC requirement to give at least a 20-minute rating on any garage doors that are between a garage and a dwelling unit. The section, "Special Detail Requirements Based on Occupancy and Use" was added to Item #28, he said, explaining that the text relates requirements for adding fire sprinklers when the size of an addition or alterations on a project either exceed $15,000 in hard costs or meet other criteria.

Modification of Item #36, said Mr. Witt, is an attempt to require fire separation conditions for multiple tenancies in the Downtown District and other areas (e.g., shopping centers). Items #38 through #50 display formatting changes, he said, and noted that multiple deleted items were picked up in the Fire Code. To a query from Mr. Pope, Mr. Witt said a fire command room is only in a high-rise situation, something he doesn't anticipate in Glen Ellyn. Mr. Clark said pertinent language could be left in. Item #51, continued Mr. Witt, addresses concerns about guard rails and handrails that use cable rails as pickets to provide fall protection, so in lieu of making a design load requirement, he said Staff doesn't want to see cables further apart than 3 inches so that the openings cannot be spread out to greater than the maximum allowed 4 inches. Item #53, he said, is intended to ensure design meets accessibility acts and codes requirements.

To ensure wheelchair access to charge electric vehicles, Mr. Witt said Item #54 specifies at least one parking stall out of every 25 charging stations is to be accessible. Discussion of configuration, including reach range, followed. Item #55, said Mr. Witt, establishes a minimum clear height for crawl spaces (a requirement carried over from the Residential Code), Item #56 presents language concerning the temperature reading zone in-synch with the Property Maintenance Code, and Item #57 involves a formatting issue. Official Witt directed attention to proposed language to amend Item #59 to reference the International Plumbing Code on the design of vertical or horizontal runs of piping relative to roof/storm drainage, as well as to present the following exception:

> "The size of the vertical conductors and leaders, building storm drains, building storm sewers and any horizontal branches of such drains or sewers shall be based on the 100-year hourly rainfall rate indicated in the Illinois State Water Survey Bulletin 75 Precipitation Frequency Study for Illinois, and the DuPage County Countywide Stormwater & Floodplain Ordinance. Any reference in this Code to the International Plumbing Code Figure 1106.1 shall be deleted."

He said the idea is to have the design of buildings correspond with the County's stormwater ordinance. Item #60 is a formatting issue, said Mr. Witt, who went on to describe Item #61 as codifying a process the Village already does in re-roofing instances and which involves examining a roof core sample to check for moisture and verify the number of roof systems in place. Mr. Witt gave a synopsis of Items #62-#64, which he indicated, convey requirements for the design of attached decks. Explaining that the International Residential Code requires these have a minimum two tie-downs, which he contended is problematic when there's a difference between inside and outside floor levels, he proposed requiring a minimum design horizontal load of 10 psf on the deck's walking surface – a specification that, he said, seems even more critical on a commercial building.

In item #65, an exception under handrails and guards on single- and two-family dwellings was deleted, said Mr. Witt, as these dwellings are not covered by the IBC. Item #66 amends snow load from 25 psf to 30. Item #67 is to establish a minimum surcharge load for retaining walls, he said, and Item #68 is to clarify design of inlets for secondary drains to ensure adequate capacity. Item #69, said Mr. Witt, is a formatting issue.

Moving on to Item #70, he outlined proposed criteria for requiring retaining walls to be designed by a licensed design professional (e.g., walls over 24 inches in height that resist a surcharge load). Mr. Witt listed provisions proposed for segmental retaining walls, and (in response to a query from Mr. Stahr) said wood retaining walls are allowed but not recommended due to rot. Items #72-7#5 are formatting issues, he said.

Items #76 and #77 concern wood trusses, said Mr. Witt, who explained that language is proposed to ensure condition details absent from the architectural drawings are presented by requiring that the truss placement diagram be part of the design package that is signed and sealed by a structural engineer. Items #84 and #86 show formatting issues, said Mr. Witt, who noted that Item #85 concerns relocatable buildings and will be stricken. In Item #87, he said, Staff wants to modify the section on safety and security fence at job sites to require opaque fabric, as well as to require fence posts be driven into the ground and not held in place by sandbags (unless approval is granted otherwise). There was subsequent discussion of the duration a construction site fence is permitted to stand.

Item #88, said Mr. Witt, specifies that when a contractor cannot do an excavation to in accordance with published OSHA Standards pertaining to shelving and slopes, use of an earth retention system designed by a licensed structural engineer is required. Having this be part of the site management plan was debated, with Mr. Witt saying that plans are reviewed on a case-by-case basis.

Mr. Pope indicated that the Chicago Porch and Deck Code had similar language to Items #62-#64 relative to lateral loads, to which Mr. Witt replied he's not aware of such a provision. He opined that current Code still doesn't adequately address the dynamic effect of people on a deck. Chairperson Bredfeldt asked if deleted sections in items numbered 38-50 are covered elsewhere. Mr. Witt replied they are covered in the Fire Code, explaining that the intention is to eliminate duplicative language. Mr. Bredfeldt said he thinks codes should apply to portable/temporary buildings. Discussion ensued regarding the change of categorization of co-working space from business occupancy to A2, with Mr. Clark saying he thought the way it is presented makes sense.

A motion to accept the IBC as amended was made by Mr. Beck, seconded by Mr. Stahr, and passed unanimously by voice vote.

Staff Report

Mr. Witt said the Residential Code will be reviewed at the next meeting, which is scheduled for April 20th. He said that two titles in the Municipal Code will be taken up, along with a review of regulations for telecom sites, and estimated that two or three more meetings would be all that is needed to conclude the BBA's current charge. A comprehensive package, he said, will be presented to the Village Board.

Adjournment

Chairperson Bredfeldt adjourned tonight's meeting at 9:41 p.m., following a unanimous voice vote on a motion to do so made by Board Member Clark and seconded by Member Rooney.

Respectfully submitted,

Barbara Dutton-Thomas
Recording Secretary

Glen Ellyn Building Board of Appeals
535 Duane Street
Glen Ellyn, IL 60137

Meeting 4/20/2022 7:00 PM
Department: Community Development
Department Head:
Category: Other
Prepared By:

AGENDA ITEM (ID # 2022-2149)

DOC ID: 2022-2149

Update on the Building Community Listening Sessions

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments:

Glen Ellyn Building Board of Appeals
535 Duane Street
Glen Ellyn, IL 60137

Meeting 4/20/2022 7:00 PM
Department: Community Development
Department Head:
Category: Other
Prepared By:

AGENDA ITEM (ID # 2022-2150)

DOC ID: 2022-2150

Review of codes regulating construction for potential adoption

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments:
1. Staff Report - Building Codes Upgrade Meeting 6 - 042022
2. Attachment IRC-1 - Existing Amendments
3. Attachment IRC-2 - Proposed Amendments (Redlined)
4. Attachment IRC-3 - Proposed Amendments (Clean)
5. Attachment IRC-4 - Major Changes

Glen Ellyn Building Board of Appeals
535 Duane Street
Glen Ellyn, IL 60137

Meeting 4/20/2022 7:00 PM
Department: Community Development
Department Head:
Category: Other
Prepared By:

AGENDA ITEM (ID # 2022-2150)

DOC ID: 2022-2150

Review of codes regulating construction for potential adoption

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments:
1. Staff Report - Building Codes Upgrade Meeting 6 - 042022
2. Attachment IRC-1 - Existing Amendments
3. Attachment IRC-2 - Proposed Amendments (Redlined)
4. Attachment IRC-3 - Proposed Amendments (Clean)
5. Attachment IRC-4 - Major Changes

MEMORANDUM

TO: Chairman Bredfeldt and Members of the Building Board of Appeals
Kelley Kalinich, Trustee Liaison

FROM: Steve Witt, Building & Zoning Official

CC:

DATE: April 15, 2022

RE: Building Codes Upgrade
BBA Meeting 04/20/22

The next item for the Building Board of Appeals to consider at the meeting to be held on April 20, 2022, is the review of the following code.

- International Residential Code, 2018 (IRC)
  The 2009 edition of the IRC is currently enforced within the Village.

A summary of the scope of the code to be reviewed is below. We have prepared attachments related to each of this code which will assist us in walking through all the proposed amendments.

Specifically, the attachments to this memorandum include the following:

1. A copy of the currently adopted amendments to the code being reviewed that are already in effect.
2. A summary indicating the major revisions to code editions from our currently adopted edition to the proposed edition. The summary includes the major changes for each of the updates so we can understand the full scope of the changes since the 2009 editions. The highlights on the summaries indicate what changes are deemed to have the most impact on construction within the Village. We recommend concentrating on those changes during any discussions.
3. A "Redlined" version of the current amendments indicating the addition, deletions or modification to the existing amendments that are proposed by staff for discussion and consideration by the BBA.
4. A "Clean" version of the combined existing and proposed amendments which eliminates the struck-thorough verbiage contained in the Redlined version to make for easier reading and reference.
5. Other attachments as deemed necessary to provide information for consideration by the BBA in their deliberation on the proposed codes.

The International Code Council provides free online access for viewing of their codes. The International Codes can be viewed on the International Code Council's website through the following URL:

International Building Code:
https://codes.iccsafe.org/content/IRC2018P4

Residential Code Summary:

At the April 20, 2022, meeting, we will begin discussion of the IRC. At the meeting, we will provide further background for the reasoning behind each of the proposed amendments as well as the proposed deletion or modification of existing amendments. If we are unable to finish reviewing the code, we can continue the review to a future meeting.

Scope of the Code:

International Residential Code, 2018

Note: The following information was gleaned from the IRC but is not necessarily repeated here verbatim.

The *International Residential Code* (IRC) is a model code that provides minimum requirements to safeguard the public health, safety and general welfare of the occupants of new and existing buildings and structures. The IRC is fully compatible with the ICC family of codes.

The International Residential Code® (IRC®) was created to serve as a complete, comprehensive code regulating the construction of single-family houses, two-family houses (duplexes) and buildings consisting of three or more townhouse units. All buildings within the scope of the IRC are limited to three stories above grade plane. For example, a four-story single-family house would fall within the scope of the International Building Code® (IBC®), not the IRC. The benefits of devoting a separate code to residential construction include the fact that the user need not navigate through a multitude of code provisions that do not apply to residential construction in order to locate that which is applicable. A separate code also allows for residential and nonresidential code provisions to be distinct and tailored to the structures that fall within the appropriate code's scopes.

The IRC contains coverage for all components of a house or townhouse, including structural components, fireplaces and chimneys, thermal insulation, mechanical systems, fuel gas systems, plumbing systems and electrical systems.

The IRC is a prescriptive-oriented (specification) code with some examples of performance code language. It has been said that the IRC is the complete cookbook for residential construction. Section R301.1, for example, is written in performance language, but states that the prescriptive requirements of the code will achieve such performance.

It is important to understand that the IRC contains coverage for what is conventional and common in residential construction practice. While the IRC will provide all of the needed coverage for most residential construction, it might not address construction practices and systems that are atypical or rarely encountered in the industry. Sections such as R301.1.3, R301.2.2.1.1, R320.1, M1301.1, G2401.1 and P2601.1 refer to other codes either as an alternative to the provisions of the IRC or where the IRC lacks coverage for a particular type of structure, design, system, appliance or method of construction. In other words, the IRC is meant to be all inclusive for typical residential construction and it relies on other codes only where alternatives are desired or where the code lacks coverage for the uncommon aspect of residential construction. The IRC constantly evolves to address new technologies and construction practices that were once uncommon, but are now common.

The IRC is unique in that much of it, including Chapters 3 through 9 and Chapters 34 through 43, is presented in an ordered format that is consistent with the normal progression of construction, starting with the design phase and continuing through the final trim-out phase. This is consistent with the "cookbook" philosophy of the IRC.

The IRC is divided into eight main parts, specifically: Part I—Administration; Part II—Definitions; Part III—Building Planning and Construction; Part IV—Energy Conservation; Part V—Mechanical; Part VI—Fuel Gas; Part VII—Plumbing; and Part VIII—Electrical.

The following is a chapter-by-chapter synopsis of the scope and intent of the provisions of the *International Residential Code* as repeated, though not verbatim, from the preface of the 2018 IRC.

Chapter 1 Scope and Administration. This chapter contains provisions for the application, enforcement and administration of subsequent requirements of the code. In addition to establishing the scope of the code, Chapter 1 identifies which buildings and structures come under its purview. Chapter 1 is largely concerned with maintaining "due process of law" in enforcing the building criteria contained in the body of the code. Only through careful observation of the administrative provisions can the building official reasonably expect to demonstrate that "equal protection under the law" has been provided.

Chapter 2 Definitions. Terms defined in the code are listed alphabetically in Chapter 2. It is important to note that two chapters have their own definitions sections: Chapter 11 for the defined terms unique to energy conservation, Chapter 24 for the defined terms that are unique to fuel gas and Chapter 35 containing terms that are applicable to electrical Chapters 34 through 43. Where Chapter 24 or 35 defines a term differently than it is defined in Chapter 2, the definition applies in that chapter only. Chapter 2 definitions apply in all other locations in the code.

Where understanding a term's definition is key to or necessary for understanding a particular code provision, the term is shown in italics where it appears in the code. This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known. Guidance regarding not only tense, gender and plurality of defined terms, but also terms not defined in this code, is provided.

Chapter 3 Building Planning. Chapter 3 provides guidelines for a minimum level of structural integrity, life safety, fire safety and livability for inhabitants of dwelling units regulated by this code. Chapter 3 is a compilation of the code requirements specific to the building planning sector of the design and construction process. This chapter sets forth code requirements dealing with light, ventilation, sanitation, minimum room size, ceiling height and environmental comfort.

Chapter 3 establishes life-safety provisions including limitations on glazing used in hazardous areas, specifications on stairways, use of guards at elevated surfaces, window and fall protection, and rules for means of egress. Snow, wind and seismic design live and dead loads and flood-resistant construction, as well as solar energy systems, and swimming pools, spas and hot tubs, are addressed in this chapter.

Chapter 4 Foundations. Chapter 4 provides the requirements for the design and construction of foundation systems for buildings regulated by this code. Provisions for seismic load, flood load and frost protection are contained in this chapter. A foundation system consists of two interdependent components: the foundation structure itself and the supporting soil.

The prescriptive provisions of this chapter provide requirements for constructing footings and walls for foundations of wood, masonry, concrete and precast concrete. In addition to a foundation's ability to support the required design loads, this chapter addresses several other factors that can affect foundation performance. These include controlling surface water and subsurface drainage, requiring soil tests where conditions warrant and evaluating proximity to slopes and minimum depth requirements. The chapter also provides requirements to minimize adverse effects of moisture, decay and pests in basements and crawl spaces.

Chapter 5 Floors. Chapter 5 provides the requirements for the design and construction of floor systems that will be capable of supporting minimum required design loads. This chapter covers four different types: wood floor framing, wood floors on the ground, cold-formed steel floor framing and concrete slabs on the ground. Allowable span tables are provided that greatly simplify the determination of joist, girder and sheathing sizes for raised floor systems of wood framing and cold-formed steel framing. This chapter also contains prescriptive requirements for wood-framed exterior decks and their attachment to the main building.

Chapter 6 Wall Construction. Chapter 6 contains provisions that regulate the design and construction of walls. The wall construction covered in Chapter 6 consists of five different types: wood framed, cold-formed steel framed, masonry, concrete and structural insulated panel (SIP). The primary concern of this chapter is the structural integrity of wall construction and transfer of all imposed loads to the supporting structure. This chapter provides the requirements for the design and construction of wall systems that are capable of supporting the minimum design vertical loads (dead, live and snow loads) and lateral loads (wind or seismic loads). This chapter contains the prescriptive requirements for wall bracing and/or shear walls to resist the imposed lateral loads due to wind and seismic.

Chapter 6 also regulates exterior windows and doors installed in walls. This chapter contains criteria for the performance of exterior windows and doors and includes provisions for testing and labeling, garage doors, wind-borne debris protection and anchorage details.

Chapter 7 Wall Covering. Chapter 7 contains provisions for the design and construction of interior and exterior wall coverings. This chapter establishes the various types of materials, materials standards and methods of application permitted for use as interior coverings, including interior plaster, gypsum board, ceramic tile, wood veneer paneling, hardboard paneling, wood shakes and wood shingles. Chapter 7 also contains requirements for the use of vapor retarders for moisture control in walls.

Exterior wall coverings provide the weather-resistant exterior envelope that protects the building's interior from the elements. Chapter 7 provides the requirements for wind resistance and water-resistive barrier for exterior wall coverings. This chapter prescribes the exterior wall coverings as well as the water-resistive barrier required beneath the exterior materials. Exterior wall coverings regulated by this section include aluminum, stone and masonry veneer, wood, hardboard, particleboard, wood structural panel siding, wood shakes and shingles, exterior plaster, steel, vinyl, fiber cement and exterior insulation finish systems.

Chapter 8 Roof-ceiling Construction. Chapter 8 regulates the design and construction of roofceiling systems. This chapter contains two roof-ceiling framing systems: wood framing and cold-formed steel framing. Allowable span tables are provided to simplify the selection of rafter and ceiling joist size for wood roof framing and cold-formed steel framing. Chapter 8 also provides requirements for the application of ceiling finishes, the proper ventilation of concealed spaces in roofs (e.g., enclosed attics and rafter spaces), unvented attic assemblies and attic access.

Chapter 9 Roof Assemblies. Chapter 9 regulates the design and construction of roof assemblies. A roof assembly includes the roof deck, vapor retarder, substrate or thermal barrier, insulation, vapor retarder and roof covering. This chapter provides the requirement for wind resistance of roof coverings.

The types of roof covering materials and installation regulated by Chapter 9 are: asphalt shingles, clay and concrete tile, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shakes and shingles, built-up roofs, metal roof panels, modified bitumen roofing, thermoset and thermoplastic single-ply roofing, sprayed polyurethane foam roofing, liquid applied coatings and photovoltaic shingles. Chapter 9 also provides requirements for roof drainage, flashing, above deck thermal insulation, rooftop-mounted photovoltaic systems and recovering or replacing an existing roof covering.

Chapter 10 Chimneys and Fireplaces. Chapter 10 contains requirements for the safe construction of masonry chimneys and fireplaces and establishes the standards for the use and installation of factory-built chimneys, fireplaces and masonry heaters. Chimneys and fireplaces constructed of masonry rely on prescriptive requirements for the details of their construction; the factory-built type relies on the listing and labeling method of approval. Chapter 10 provides the requirements for seismic reinforcing and anchorage of masonry fireplaces and chimneys.

Chapter 11 Energy Efficiency. The purpose of Chapter 11 is to provide minimum design requirements that will promote efficient utilization of energy in buildings. The requirements are directed toward the design of building envelopes with adequate thermal resistance and low air leakage, and toward the design and selection of mechanical, water heating, electrical and illumination systems that promote effective use of depletable energy resources. The provisions of Chapter 11 are duplicated from the International Energy Conservation Code—Residential Provisions, as applicable for buildings which fall under the scope of the IRC.

Chapter 12 Mechanical Administration. Chapter 12 establishes the limits of applicability of the code and describes how the code is to be applied and enforced. A mechanical code, like any other code, is intended to be adopted as a legally enforceable document and it cannot be effective without adequate provisions for its administration and enforcement. The provisions of Chapter 12 establish the authority and duties of the code official appointed by the jurisdiction having authority and also establish the rights and privileges of the design professional, contractor and property owner. It also relates this chapter to the administrative provisions in Chapter 1.

Chapter 13 General Mechanical System Requirements. Chapter 13 contains broadly applicable requirements related to appliance listing and labeling, appliance location and

installation, appliance and systems access, protection of structural elements and clearances to combustibles, among others.

Chapter 14 Heating and Cooling Equipment and Appliances. Chapter 14 is a collection of requirements for various heating and cooling appliances, dedicated to single topics by section. The common theme is that all of these types of appliances use energy in one form or another, and the improper installation of such appliances would present a hazard to the occupants of the dwellings, due to either the potential for fire or the accidental release of refrigerants. Both situations are undesirable in dwellings that are covered by this code.

Chapter 15 Exhaust Systems. Chapter 15 is a compilation of code requirements related to residential exhaust systems, including kitchens and bathrooms, clothes dryers and range hoods. The code regulates the materials used for constructing and installing such duct systems. Air brought into the building for ventilation, combustion or makeup purposes is protected from contamination by the provisions found in this chapter.

Chapter 16 Duct Systems. Chapter 16 provides requirements for the installation of ducts for supply, return and exhaust air systems. This chapter contains no information on the design of these systems from the standpoint of air movement, but is concerned with the structural integrity of the systems and the overall impact of the systems on the fire-safety performance of the building. This chapter regulates the materials and methods of construction which affect the performance of the entire air distribution system.

Chapter 17 Combustion Air. Complete combustion of solid and liquid fuel is essential for the proper operation of appliances, control of harmful emissions and achieving maximum fuel efficiency. If insufficient quantities of oxygen are supplied, the combustion process will be incomplete, creating dangerous byproducts and wasting energy in the form of unburned fuel (hydrocarbons). The byproducts of incomplete combustion are poisonous, corrosive and combustible, and can cause serious appliance or equipment malfunctions that pose fire or explosion hazards.

The combustion air provisions in this code from previous editions have been deleted from Chapter 17 in favor of a single section that directs the user to NFPA 31 for oil-fired appliance combustion air requirements and the manufacturer's installation instructions for solid fuel-burning appliances. If fuel gas appliances are used, the provisions of Chapter 24 must be followed.

Chapter 18 Chimneys and Vents. Chapter 18 regulates the design, construction, installation, maintenance, repair and approval of chimneys, vents and their connections to fuel-burning appliances. A properly designed chimney or vent system is needed to conduct the flue gases produced by a fuel-burning appliance to the outdoors. The provisions of this chapter are intended to minimize the hazards associated with high temperatures and potentially toxic and corrosive combustion gases. This chapter addresses factory-built and masonry chimneys, vents and venting systems used to vent oil-fired and solid fuel-burning appliances.

Chapter 19 Special Appliances, Equipment and Systems. Chapter 19 regulates the installation of fuel-burning appliances that are not covered in other chapters, such as ranges and ovens, sauna heaters, fuel cell power plants and hydrogen systems. Because the subjects in this chapter do not contain the volume of text necessary to warrant individual chapters, they have been combined into a single chapter. The only commonality is that the subjects use energy to perform some task or function. The intent is to provide a reasonable level of protection for the occupants of the dwelling.

Chapter 20 Boilers and Water Heaters. Chapter 20 regulates the installation of boilers and water heaters. Its purpose is to protect the occupants of the dwelling from the potential hazards associated with such appliances. A water heater is any appliance that heats potable water and supplies it to the plumbing hot water distribution system. A boiler either heats water or generates steam for space heating and is generally a closed system.

Chapter 21 Hydronic Piping. Hydronic piping includes piping, fittings and valves used in building space conditioning systems. Applications include hot water, chilled water, steam, steam condensate, brines and water/antifreeze mixtures. Chapter 21 regulates installation, alteration and repair of all hydronic piping systems to ensure the reliability, serviceability, energy efficiency and safety of such systems.

Chapter 22 Special Piping and Storage Systems. Chapter 22 regulates the design and installation of fuel oil storage and piping systems. The regulations include reference to construction standards for above-ground and underground storage tanks, material standards for piping systems (both above-ground and underground) and extensive requirements for the proper assembly of system piping and components. The purpose of this chapter is to prevent fires, leaks and spills involving fuel oil storage and piping systems, whether inside or outside structures and above or underground.

Chapter 23 Solar Thermal Energy Systems. Chapter 23 contains requirements for the construction, alteration and repair of all systems and components of solar thermal energy systems used for space heating or cooling, and domestic hot water heating or processing. The provisions of this chapter are limited to those necessary to achieve installations that are relatively hazard free.

A solar thermal energy system can be designed to handle 100 percent of the energy load of a building, although this is rarely accomplished. Because solar energy is a low-intensity energy source and dependent on the weather, it is usually necessary to supplement a solar thermal energy system with traditional energy sources.

Chapter 24 Fuel Gas. Chapter 24 regulates the design and installation of fuel gas distribution piping and systems, appliances, appliance venting systems and combustion air provisions. The definition of "Fuel gas" includes natural, liquefied petroleum and manufactured gases and mixtures of these gases.

The purposes of this chapter are to establish the minimum acceptable level of safety and to protect life and property from the potential dangers associated with the storage, distribution and

use of fuel gases and the byproducts of combustion of such fuels. This code also protects the personnel who install, maintain, service and replace the systems and appliances addressed herein. Chapter 24 is composed entirely of text extracted from the IFGC; therefore, whether using the IFGC or the IRC, the fuel gas provisions will be identical. Note that to avoid the potential for confusion and conflicting definitions, Chapter 24 has its own definition section.

Chapter 25 Plumbing Administration. The requirements of Chapter 25 do not supersede the administrative provisions of Chapter 1. Rather, the administrative guidelines of Chapter 25 pertain to plumbing installations that are best referenced and located within the plumbing chapters. This chapter addresses how to apply the plumbing provisions of this code to specific types or phases of construction. This chapter also outlines the responsibilities of the applicant, installer and inspector with regard to testing plumbing installations.

Chapter 26 General Plumbing Requirements. The content of Chapter 26 is often referred to as "miscellaneous," rather than general plumbing requirements. This is the only chapter of the plumbing chapters of the code whose requirements do not interrelate. If a requirement cannot be located in another plumbing chapter, it should be located in this chapter. Chapter 26 contains safety requirements for the installation of plumbing systems and includes requirements for the identification of pipe, pipe fittings, traps, fixtures, materials and devices used in plumbing systems. If specific provisions do not demand that a requirement be located in another chapter, the requirement is located in this chapter.

Chapter 27 Plumbing Fixtures. Chapter 27 requires fixtures to be of the proper type, approved for the purpose intended and installed properly to promote usability and safe, sanitary conditions. This chapter regulates the quality of fixtures and faucets by requiring those items to comply with nationally recognized standards. Because fixtures must be properly installed so that they are usable by the occupants of the building, this chapter contains the requirements for the installation of fixtures.

Chapter 28 Water Heaters. Chapter 28 regulates the design, approval and installation of water heaters and related safety devices. The intent is to minimize the hazards associated with the installation and operation of water heaters. Although this chapter does not regulate the size of a water heater, it does regulate all other aspects of the water heater installation such as temperature and pressure relief valves, safety drip pans and connections. Where a water heater also supplies water for space heating, this chapter regulates the maximum water temperature supplied to the water distribution system.

Chapter 29 Water Supply and Distribution. This chapter regulates the supply of potable water from both public and individual sources to every fixture and outlet so that it remains potable and uncontaminated by cross connections. Chapter 29 also regulates the design of the water distribution system, which will allow fixtures to function properly. Because it is critical that the potable water supply system remain free of actual or potential sanitary hazards, this chapter has the requirements for providing backflow protection devices.

Chapter 30 Sanitary Drainage. The purpose of Chapter 30 is to regulate the materials, design and installation of sanitary drainage piping systems as well as the connections made to the system.

The intent is to design and install sanitary drainage systems that will function reliably, are neither undersized nor oversized and are constructed from materials, fittings and connections whose quality is regulated by this section. This chapter addresses the proper use of fittings for directing the flow into and within the sanitary drain piping system. Materials and provisions necessary for servicing the drainage system are also included in this chapter.

Chapter 31 Vents. Venting protects the trap seal of each trap. The vents are designed to limit differential pressures at each trap to 1 inch of water column (249 Pa). Because waste flow in the drainage system creates pressure fluctuations that can negatively affect traps, the sanitary drainage system must have a properly designed venting system. Chapter 31 covers the requirements for vents and venting. All of the provisions set forth in this chapter are intended to limit the pressure differentials in the drainage system to a maximum of 1 inch of water column (249 Pa) above or below atmospheric pressure (i.e., positive or negative pressures).

Chapter 32 Traps. Traps prevent sewer gas from escaping from the drainage piping into the building. Water seal traps are the simplest and most reliable means of preventing sewer gas from entering the interior environment. This chapter lists prohibited trap types and specifies the minimum trap size for each type of fixture.

Chapter 33 Storm Drainage. Rainwater infiltration into the ground adjacent to a building can cause the interior of foundation walls to become wet. The installation of a subsoil drainage system prevents the buildup of rainwater on the exterior of the foundation walls. This chapter provides the specifications for subsoil drain piping. Where the discharge of the subsoil drain system is to a sump, this chapter also provides coverage for sump construction, pumps and discharge piping.

Chapter 34 General Requirements. This chapter contains broadly applicable, general and miscellaneous requirements including scope, listing and labeling, equipment locations and clearances for conductor materials and connections and conductor identification.

Chapter 35 Electrical Definitions. Chapter 35 is the repository of the definitions of terms used in the body of Part VIII of the code. To avoid the potential for confusion and conflicting definitions, Part VIII, Electrical, has its own definition chapter.

Codes are technical documents and every word, term and punctuation mark can impact the meaning of the code text and the intended results. The code often uses terms that have a unique meaning in the code, which can differ substantially from the ordinarily understood meaning of the term as used outside of the code.

The terms defined in Chapter 35 are deemed to be of prime importance in establishing the meaning and intent of the electrical code text that uses the terms. The user of the code should be familiar with and consult this chapter because the definitions are essential to the correct interpretation of the code and because the user may not be aware that a term is defined.

Chapter 36 Services. This chapter covers the design, sizing and installation of the building's electrical service equipment and grounding electrode system. It includes an easy-to-use load

calculation method and service conductor sizing table. The electrical service is generally the first part of the electrical system to be designed and installed.

Chapter 37 Branch Circuit and Feeder Requirements. Chapter 37 addresses the requirements for designing the power distribution system, which consists of feeders and branch circuits emanating from the service equipment. This chapter dictates the ratings of circuits and the allowable loads, the number and types of branch circuits required, the wire sizing for such branch circuits and feeders and the requirements for protection from overcurrent for conductors. A load calculation method specific to feeders is also included. This chapter is used to design the electrical system on the load side of the service.

Chapter 38 Wiring Methods. Chapter 38 specifies the allowable wiring methods, such as cable, conduit and raceway systems, and provides the installation requirements for the wiring methods. This chapter is primarily applicable to the "rough-in" phase of construction.

Chapter 39 Power and Lighting Distribution. This chapter mostly contains installation requirements for the wiring that serves the lighting outlets, receptacle outlets, appliances and switches located throughout the building. The required distribution and spacing of receptacle outlets and lighting outlets is prescribed in this chapter, as well as the requirements for ground-fault and arc-fault circuit-interrupter protection.

Chapter 40 Devices and Luminaires. This chapter focuses on the devices, including switches and receptacles, and lighting fixtures that are typically installed during the final phase of construction.

Chapter 41 Appliance Installation. Chapter 41 addresses the installation of appliances including HVAC appliances, water heaters, fixed space-heating equipment, dishwashers, garbage disposals, range hoods and suspended paddle fans.

Chapter 42 Swimming Pools. This chapter covers the electrical installation requirements for swimming pools, storable swimming pools, wading pools, decorative pools, fountains, hot tubs, spas and hydromassage bathtubs. The allowable wiring methods are specified along with the required clearances between electrical system components and pools, spas and tubs. This chapter includes the special grounding requirements related to pools, spas and tubs, and also prescribes the equipotential bonding requirements that are unique to pools, spas and tubs.

Chapter 43 Class 2 Remote-control, Signaling and Power-limited Circuits. This chapter covers the power supplies, wiring methods and installation requirements for the Class 2 circuits found in dwellings. Such circuits include thermostat wiring, alarm systems, security systems, automated control systems and doorbell systems.

Chapter 44 Referenced Standards. The code contains numerous references to standards that are used to regulate materials and methods of construction. Chapter 44 contains a comprehensive list of all standards that are referenced in the code. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and

installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the code official, contractor, designer and owner.

Chapter 44 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based upon the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda included as part of the ICC adoption; and the section or sections of this code that reference the standard.

Recommendation:

1. We recommend that the Building Board of Appeals approve a motion to adopt the International Residential Code, 2018 as may be amended through discussion at the April 20, 2022, meeting.

Att: Attachment IRC-1: Residential Code – Existing Amendments
Attachment IRC-2: Residential Code – Proposed Amendments (Redlined)
Attachment IRC-3: Residential Code – Proposed Amendments (Clean)
Attachment IRC-4: Major changes to the International Residential Code

Attachment IRC-1
Residential Code - Existing Amendments

4-1-8. Adoption of Residential Code.

(A) The 2009 ICC International Residential Code is adopted by reference as the standards and regulations for governing the demolition, construction, enlargement, alteration, restoration or repair of buildings and structures and their appurtenances, as this Code is intended, recommended, maintained and published by the International Code Council except such portions thereof as are deleted, modified, or amended in this chapter. At least one copy of the 2009 ICC International Residential Code shall be maintained on file in the office of the Village Clerk for inspection and copying as a public record.

(B) The provisions of the 2009 ICC International Residential Code, are hereby deleted, modified, and amended as follows:

1. Amend section R101.1 to read as follows:

   R101.1 Title. These regulations shall be known as the residential code of the Village of Glen Ellyn, hereinafter referred to as "this Code."

2. Add new section R102.4.1 to read as follows:

   R102.4.1 Plumbing. Wherever reference to the international Plumbing Code is made, substitute the Plumbing Code, department of public health, State of Illinois.

3. Add new section R102.4.2 to read as follows:

   R102.4.2 Building. Where "this Code" does not address any specific application, material, or method of construction, the 2009 ICC International Building Code shall be applicable.

4. Add new section R102.7.2 to read as follows:

   R102.7.2 Partial Improvements Required. The following improvements within an existing building and on public or private property shall be required when a building addition increases the floor area of an existing building by more than 75%, or when more than 50% of the existing exterior wall and roof structure area is altered, or when interior remodeling work exceeds $100,000 in hard cost:

   1. Abandon the existing water service line between the water main and the existing building or proposed addition and install a new water service line, water meter and copper horn in accordance with current standards, codes and ordinances.
   2. Abandon the existing sanitary service line between the sanitary sewer main and the existing building or proposed addition and install a new sanitary service line if the structural integrity or water-tightness of the service line does not meet current standards, codes and ordinances.
   3. Provide an overhead sanitary service line and sewage ejector pump in accordance with current standards, codes and ordinances.
   4. Remove any existing gravel driveway and provide a hard surface driveway, approach and depressed curb and gutter and in accordance with current standards, codes and ordinances.
   5. Provide a public sidewalk across the frontage of the property if no sidewalk presently exists, or repair any existing damaged sidewalk squares, in accordance with current standards, codes and ordinances.
   6. Repair damaged or disturbed parkway grades and restore parkway groundcover or provide new groundcover where no groundcover exists.

      Exception: The existing water and sanitary service lines may remain, upon approval of the Public Works Director, if existing conditions comply with, or are repaired and maintained to

comply with current standards, codes and ordinances. Existing sanitary line conditions must be verified by a video and an audio or written report in the format required by the public works department.

5. Add new section R102.7.3 to read as follows:

R102.7.3 All Improvements Required. The following improvements within an existing building and on public or private property shall be required when a building addition increases the floor area of an existing building by more than 150%, or when more than 75% of the existing exterior wall and roof structure area is altered, or when interior remodeling work exceeds $200,000 in hard cost:

1. All improvements included in section R102.7.2.
2. The existing buildings and site shall comply, or be upgraded to comply, with all provisions of the Village Codes, regulations and ordinances for a new building or structure.

Exception: A fire sprinkler system shall be required for remodeling work only within the remodeled area when the remodeling work exceeds $300,000 in hard cost.

6. Add new section R102.8 to read as follows:

R102.8 Historic Buildings. The provisions of this Code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the Building Official to not constitute a distinct life safety hazard.

7. Delete section R105.2 in its entirety and substitute the following:

R105.2 Work Exempt from Permit. Exemptions from permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

(a) Property:

(1) Landscaping work to remove existing or plant new trees, shrubs, plants or grass provided tree removal is completed in accordance with the requirements in the tree preservation ordinance and the disturbed area does not exceed 300 square feet.

(2) Paving work to add new or replace existing impervious surface materials upon the ground provided the new paved area does not exceed 100 square feet and complies with all Zoning Code regulations.

(3) Grade changes, excavation, or fill, provided the disturbed site area does not exceed 300 square feet and natural existing stormwater runoff from the property is not altered or cause a nuisance, hazard or damage to adjacent property and complies with the requirements of the countywide stormwater and flood plain ordinance of DuPage County, IL.

(4) Retaining walls that do not exceed 8 inches in height, provided the natural existing stormwater runoff from the property is not altered or cause a nuisance, hazard or damage to adjacent property and complies with the requirements of the countywide stormwater and flood plain ordinance of DuPage County, IL.

(5) Installation of recreational and play equipment, prefabricated swimming pools that are less than 24 inches deep, and outdoor furnishings that are portable or removed after occasional or seasonal use provided the location and use complies with all Zoning Code regulations.

(b) Buildings or structures:

(1) Installation or removal of interior wall, floor or ceiling finishes such as paint, tile, carpet, and wall coverings completed in accordance with the requirements in this Code for sanitation and fire resistance and with federal and state regulations governing the removal of lead, asbestos or other hazardous materials.

(2) Window awnings that are self-supported by the exterior wall which do not project more than 54 inches from the exterior wall.

(3) Minor electrical repairs including lamp, receptacle or breaker replacement or the removal of existing and installation of equivalent new electrical fixtures at existing electrical outlets.

(4) Electrical wiring, fixtures and equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

(5) Minor mechanical repairs including the removal of existing and installation of equivalent new pumps, motors or other equipment that does not alter approval of the equipment or make it unsafe.

(6) Installation of portable electrical or mechanical equipment and appliances with cord and plug electrical connections.

(7) Work to stop leaks or clear obstructions in the plumbing system or the removal of existing and installation of equivalent new plumbing fixtures, limited to toilets, sinks, tubs and showers without any alteration to existing water supply, drain, waste or vent outlets.

(8) Replacement or repair of exterior finish materials on wall and roof surfaces up to a maximum of 300 square feet or 20% of the total roof or wall area.

8. Amend section R105.3 item 6 to read as follows:

6. Be signed by the applicant and by the property owner(s) including the name and registered address of the owner, corporate officer, registered agent, partner, trustee or managing member, upon whom any legal notice, complaint or citation may be served.

9. Amend section R105.3 item 7 to read as follows:

7. Give such other data and information as required by the Building Official including the name(s) and address(es) of all persons with a beneficial interest in the property under a land trust and all shareholders owning in excess of 5% of the stock in a corporation.

10. Delete section R105.3.1.1 in its entirety.

11. Amend section R105.5 to read as follows:

R105.5 Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after issuance or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and demonstrate justifiable cause.

1. A permit for new one and two family dwelling units and townhomes is valid for eighteen (18) months after its issuance.

2. A permit for additions, alterations and remodeling of existing one and two family dwelling units and townhomes is valid for twelve (12) months after its issuance.

3. A permit for new residential accessory buildings and structures and for additions, alterations and remodeling of existing residential accessory buildings and structures is valid for twelve (12) months after its issuance.

12. Amend section R105.7 to reads as follows:

    R105.7 Placement Of Permit. The building permit or copy shall be kept on the site of the work until completion of the project and shall be displayed in a prominent location visible from the public way.

13. Amend section R108.6 to read as follows:

    R108.6 Work Commencing Before Permit Issuance. Any person who commences any work on a site, building or structure, or any electrical, gas, mechanical, sprinkler or plumbing system before obtaining the necessary permits shall be subject to an additional fee of 200% of the basic permit fee.

14. Delete section R109.3 in its entirety and substitute the following:

    R109.3 Inspection Requests. It shall be the duty of the permit holder or their agent to notify the Building Official that such work is ready for inspection and to have the work complete and prepared for AM inspections by 8:00 AM and complete and prepared for PM inspections by noon.

15. Add new section R109.5 to read as follows:

    R109.5 Inspection Conditions. The work to be inspected must be prepared and complete and an approved means to access the work must be provided to the inspector. The inspector is not authorized to conduct an inspection if these conditions do not exist and the inspection may be cancelled by the inspector. No further work may be completed until a reinspection fee is paid and a reinspection is requested, scheduled, completed and approved.

16. Amend section R110.1 to add exception 3 to read as follows:

    3. Additions, alterations and remodeling of existing buildings and structures as determined by the Building Official.

17. Delete section R110.3 in its entirety and substitute the following:

    R110.3 Certificate Issued. After the Building Official inspects the building or structure and finds no violations of the provisions of this Code or other regulations, the Building Official shall issue a certificate of occupancy that contains the following:

    1. The address of the structure.
    2. The name and address of the owner.
    3. A description of the portion of the building for which the certificate is issued.
    4. The use and occupancy of the portion of the building for which the certificate is issued.
    5. Any special stipulation and conditions of the building permit.
    6. The name of the Building Official.

18. Amend section R112.1 to read as follows:

    R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this Code, there shall be a Building Board of Appeals. The structure, responsibilities and procedures of the Building Board of Appeals is established in chapter 7 Building Board of Appeals, title 2 Boards And Commissions, in the Glen Ellyn Village Code.

19. Delete section R112.2.1 in its entirety.

20. Delete section R112.2.2 in its entirety.

21. Delete section R112.3 in its entirety.

22. Amend section R113.4 to read as follows:

    Any person who violates a provision of this Code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this Code, shall be subject to penalties as prescribed in section 4-1-5(J) in the Village Code.

23. Amend section R301.2 table R301.2(1) to add design criteria as follows:

1. Ground snow load:	25 psf
2. Wind speed:	90 mph
3. Wind topographic effects:	No
4. Seismic design category:	B
5. Weathering:	Severe
6. Frost line depth:	42 inches
7. Termite:	Moderate
8. Winter design temp:	0 degrees F
9. Ice barrier underlayment required:	Yes
10. Flood hazards:	Yes
11. Air freezing index:	2,000
12. Mean annual temp:	50 degrees F

24. Amend section R302.2 to read as follows:

    R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated from each other by fire-resistant-rated wall and/or floor-ceiling assemblies having not less than a 2 hour fire resistance rating when tested in accordance with ASTM E 119 or UL 263. Fire resistant rated wall assemblies shall be rated for fire exposure from both sides and shall extend to and be tight against the exterior wall and roof deck.

25. Amend section R302.6 to delete the exception in its entirety.

26. Amend table R302.6 to read as follows:

Separation	Material
From the residence and attics	Not less than 5/8 inch type X gypsum board or equivalent applied to the garage side with all joints flat taped
Garages located less than 20 feet from a dwelling unit on the same lot	Not less than 1/2 inch gypsum board or equivalent applied to the interior side of all exterior walls and ceilings with all joints flat taped

27. Add new section R305.1.2 to read as follows:

    R305.1.2 Crawl Spaces. Crawl spaces below the floor of any part of a building or structure shall have a clear height of not less than 3 feet, except beams, girders, ducts or other obstructions may project to within 2 feet of the crawlspace floor.

28. Amend section R311.4 to read as follows:

    R311.4 Vertical Egress. Egress from habitable levels including basements but excluding unfinished habitable attics, not provided with an egress door in accordance with section R311.2, shall be by ramp in accordance with section R311.8 or a stairway in accordance with section R311.7.

29. Add new section R312.5 to read as follows:

    R312.5 Safety And Security Fence. The demolition or construction of a principal building or structure, or part thereof, or an excavation over 30 inches deep, shall require the installation of a safety and security fence, with a latching gate or equivalent opening, that encloses and secures the work area. The fencing shall be a minimum of 4 feet high and constructed of chain link fabric, plastic mesh, or wooden slats secured to steel posts not to exceed 8 feet on center or equivalent materials approved by the Building and Zoning Official. The fence shall be maintained in an upright and stable condition and the gate shall be secured at all times the demolition or construction site is unattended.

30. Add new section R312.6 to read as follows:

    R312.6 Window Well Guards. Window and door wells that extend more than 30 inches below the adjacent grade shall be provided with bars, grilles, covers, screens or similar devices that are designed and listed to resist human impact unless other guards that comply with section R312 of this Code are provided. Window well guards enclosing emergency escape and rescue openings shall meet the minimum opening area requirement and be operable from the inside of the well without the use of keys, tools, or special knowledge or effort.

31. Amend section R313.1.1 to read as follows:

    R313.1.1 Design And Installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with NFPA 13D standards.

32. Add new section R403.1.3.3 to read as follows:

    R403.1.3.3 Foundations For Accessory Structures. One-story frame detached accessory structures are permitted on trench wall and slab foundations monolithically poured, consisting of a minimum 4" concrete slab, with minimum 40 pounds per 100 square foot welded wire fabric reinforcing, on a minimum 4" compacted gravel base, with a continuous thickened minimum 20" wide perimeter edge, and extending down a minimum of 10" to undisturbed subsoil.

33. Amend section R404.1 to read as follows:

    R404.1 Concrete And Masonry Foundation Walls. Concrete foundation walls shall be selected and constructed in accordance with the provisions of section R404.1.2.

    Masonry foundation walls shall not be permitted.

34. Delete sections R404.1.1 and R404.1.1.1 in their entirety.

35. Amend section R404.2 to read as follows:

    R404.2 Wood Foundation Walls. Wood foundations walls shall not be permitted.

36. Delete sections R404.2.1 through R404.2.6 in their entirety.

37. Add new section R502.1.8 to read as follows:

    R502.1.8 Light-Weight Floor Framing. Light-weight floor framing including, but not limited to, wood floor trusses, parallel chord trusses, wood I-beams, box beams, metal trusses, or bar joists shall be permitted only in dwellings or parts thereof equipped throughout with an automatic fire sprinkler system installed in accordance with NFPA standards.

38. Amend section R801.3 to read as follows:

    R801.3 Roof Drainage. All dwellings shall have a controlled method of water disposal from roofs, consisting of gutters and downspouts or equivalent means, which will collect and discharge roof drainage to the ground surface at least 5 feet (1524 mm) from the foundation walls or to an approved drainage system.

39. Amend section G2406.2 item 4 to read as follows:

    4. A single wall-mounted unvented room heater is installed in a bedroom and such unvented room heater is equipped as specified in section G2445.6 and has an input rating not greater than 10,000 Btu/h (2.93 kW). The bedroom shall meet the required volume criteria of section G2407.5 and be provided with a carbon monoxide detector that is listed, labeled and complies with the standards of an approved testing agency.

40. Delete section P2501.1 in its entirety and substitute the following:

    P2501.1 Scope. The design, construction, installation, alteration, repair and maintenance of plumbing systems and their components shall comply with the standards and regulations established in the Illinois department of public health Plumbing Code as currently adopted.

41. Delete section P2501.2 in its entirety and substitute the following:

    P2501.2 Structure Protection. In the process of installing or repairing any part of a plumbing and drainage installation, the structural framing members shall not be cut, bored or notched beyond the limitations in this Code unless restored to a safe structural condition in accordance with the building requirements in this Code.

42. Add new section P2501.3 to read as follows:

    P2501.3 Piping Protection. In concealed locations, where piping, other than cast iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 11/2 inches from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than .0575 inch (no. 16 gauge). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 2 inches above sole plates and below top plates.

43. Add new section P2501.4 to read as follows:

    P2501.4 Through Wall Protection. Any pipe that passes through a foundation wall shall pass through a pipe sleeve of a greater size that allows the installation of a sealant in accordance with the sealant manufacturer's specifications. All annular spaces between sleeves and pipes shall be filled and water sealed in accordance with the building requirements in this Code or as approved by the Building Official.

44. Add new section P2501.5 to read as follows:

    P2501.5 Tank Leak Protection. Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a material thickness of not less than .0236 inch (no. 24 gauge) or other pans approved for such use. Listed pans shall comply with CSA LC3. The pan shall be not less than 11/2 inches deep and drained by an indirect waste pipe having a minimum diameter of ¾ inch and terminate over a suitably located indirect waste receptor or shall extend to the exterior of the building and discharge not more than 24 inches or less than 6 inches from grade. A leak protection pan shall not be required if a water heater tank is located on a concrete floor on grade and a floor drain is provided on the same floor level.

45. Delete section P2502 in its entirety.
46. Delete section P2503 in its entirety.
47. Delete chapters 26, 27, 28, 29, 30, 31, and 32 in their entirety.
48. Delete chapters 34, 35, 36, 37, 38, 39, 40, 41, 42, and 43 in their entirety.

(Ord. 5995, 5-14-2012; Ord. 6603, 5-29-2018)

4-1-8. Adoption of Residential Code.

(A) The 20182009 ICC International Residential Code is adopted by reference as the standards and regulations for governing the demolition, construction, enlargement, alteration, restoration or repair of buildings and structures and their appurtenances, as this Code is intended, recommended, maintained and published by the International Code Council except such portions thereof as are deleted, modified, or amended in this chapter. At least one copy of the 20182009 ICC International Residential Code shall be maintained on file in the office of the Village Clerk for inspection and copying as a public record.

(B) The provisions of the 20182009 ICC International Residential Code, are hereby deleted, modified, and amended as follows:

1. Amend sSection R101.1 to read as follows:

   R101.1 Title. These regulations shall be known as the rResidential cCode of the Village of Glen Ellyn, hereinafter referred to as "this Code."

2. Add new sSection R102.4.1 to read as follows:

   R102.4.1 Plumbing. Wherever reference to the iInternational Plumbing Code is made, substitute the Plumbing Code, dDepartment of pPublic hHealth, State of Illinois.

3. Add new section R102.4.2 to read as follows:

   R102.4.2 Building. Where "this Code" does not address any specific application, material, or method of construction, the 20182009 ICC International Building Code shall be applicable.

4. Add new sSection R102.7.2 to read as follows:

   R102.7.2 Partial Improvements Required. The following improvements within an existing building and on public or private property shall be required when a building addition increases the floor area of an existing building by more than 75%, or when more than 50% of the existing exterior wall and roof structure area is altered, or when interior remodeling work exceeds $100,000 in hard cost:

   1. Abandon the existing water service line between the water main and the existing building or proposed addition and install a new water service line, water meter and copper horn in accordance with current standards, codes and ordinances.
   2. Abandon the existing sanitary service line between the sanitary sewer main and the existing building or proposed addition and install a new sanitary service line if the structural integrity or water-tightness of the service line does not meet current standards, codes and ordinances.
   3. Provide an overhead sanitary service line and sewage ejector pump in accordance with current standards, codes and ordinances.
   4. Remove any existing gravel driveway and provide a hard surface driveway, approach and depressed curb and gutter and in accordance with current standards, codes and ordinances.
   5. Provide a public sidewalk across the frontage of the property if no sidewalk presently exists, or repair any existing damaged sidewalk squares, in accordance with current standards, codes and ordinances.
   6. Repair damaged or disturbed parkway grades and restore parkway groundcover or provide new groundcover where no groundcover exists.

Exception: The existing water and sanitary service lines may remain, upon approval of the Public Works Director, if existing conditions comply with, or are repaired and maintained to comply with current standards, codes and ordinances. Existing sanitary line conditions must be verified by a video and an audio or written report in the format required by the ~~p~~Public ~~w~~Works ~~d~~Department.

5. Add new ~~s~~Section R102.7.3 to read as follows:

R102.7.3 All Improvements Required. The following improvements within an existing building and on public or private property shall be required when a building addition increases the floor area of an existing building by more than 150%, or when more than 75% of the existing exterior wall and roof structure area is altered, or when interior remodeling work exceeds $200,000 in hard cost:

1. All improvements included in section R102.7.2.
2. The existing buildings and site shall comply, or be upgraded to comply, with all provisions of the Village Codes, regulations and ordinances for a new building or structure.

Exception: A fire sprinkler system shall be required for remodeling work only within the remodeled area when the remodeling work exceeds $300,000 in hard cost or when the Modification Factor, as calculated in accordance with Section 1103.5.9 of the Glen Ellyn Fire Code is greater than 2.0.

6. Add new ~~s~~Section R102.7.4~~8~~ to read as follows:

R102.7.4~~8~~ Historic Buildings. The provisions of this Code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the Building Official to not constitute a distinct life safety hazard.

7. Delete ~~s~~Section R105.2 in its entirety and substitute the following:

R105.2 Work Exempt from Permit. Exemptions from permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

(a) Property:

(1) Landscaping work to remove existing or plant new trees, shrubs, plants or grass provided tree removal is completed in accordance with the requirements in the tree preservation ordinance and the disturbed area does not exceed 300 square feet.

(2) Paving work to add new or replace existing impervious surface materials upon the ground provided the new paved area does not exceed 100 square feet and complies with all Zoning Code regulations.

(3) Grade changes, excavation, or fill, provided the disturbed site area does not exceed 300 square feet and natural existing stormwater runoff from the property is not altered or cause a nuisance, hazard or damage to adjacent property and complies with the requirements of the ~~c~~Countywide ~~s~~Stormwater and ~~f~~Flood ~~p~~Plain ~~o~~Ordinance of DuPage County, IL.

(4) Retaining walls that do not exceed 12~~8~~ inches in height, provided the natural existing stormwater runoff from the property is not altered or cause a nuisance, hazard or damage

to adjacent property and complies with the requirements of the ~~c~~Countywide ~~s~~Stormwater and ~~f~~Flood ~~p~~Plain ~~o~~Ordinance of DuPage County, IL.

(5) Installation of recreational and play equipment, prefabricated swimming pools that are less than 24 inches deep, and outdoor furnishings that are portable or removed after occasional or seasonal use provided the location and use complies with all Zoning Code regulations.

(6) Sealcoating of existing driveways.

(7) Sealcoating of existing parking lots with less than 5 parking stalls and not requiring accessible stalls.

(8) Replacement in kind of wood treads and risers, or existing wood deck boards on porches or decks.

(9) Replacement of existing handrails on stairs of residential buildings not more than four dwelling units in size.

(10) Replacement in kind of up to three (3) existing fence posts and/or any existing fence pickets, facing boards or rails within any two existing panels between posts.

(11) Erection of temporary tents with an area of less than 200 square feet.

(12) Removal and replacement of existing windows of same size and style in existing opening with no structural modifications.

(b) Buildings or structures:

(1) Installation or removal of interior wall, floor or ceiling finishes such as paint, tile, carpet, and wall coverings completed in accordance with the requirements in this Code for sanitation and fire resistance and with federal and state regulations governing the removal of lead, asbestos or other hazardous materials.

(2) Window awnings that are self-supported by the exterior wall which do not project more than 54 inches from the exterior wall.

(3) Minor electrical repairs including an individual lamp, receptacle or breaker replacement or the removal of an existing and installation of an equivalent new electrical fixture~~s~~ at an existing electrical outlet~~s~~.

(4) Electrical wiring, fixtures and equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

(5) Minor mechanical repairs including the removal of existing and installation of equivalent new pumps, motors or other equipment that does not alter approval of the equipment or make it unsafe, or require the installation of a new electrical raceway, wiring, devices or breaker.

(6) Installation of portable electrical or mechanical equipment and appliances with cord and plug electrical connections.

(7) Work to stop leaks or clear obstructions in the plumbing system or the removal of existing and installation of equivalent new plumbing fixtures, limited to toilets, sinks, tubs and showers without any alteration to existing hard piped water supply, drain, waste or vent outlets, or requiring an electrical connection which are not associated with a bathroom or kitchen remodeling project.

(8) Replacement or repair of exterior finish materials on wall and roof surfaces up to a maximum of 300 square feet or 20% of the individual ~~total~~ roof or wall surface area.

8. Amend ~~s~~Section R105.3 item 6 to read as follows:

6. Be signed by the applicant and by the property owner(s) including the name and registered address of the owner, corporate officer, registered agent, partner, trustee or managing member, upon whom any legal notice, complaint or citation may be served.

9. Amend ~~s~~Section R105.3 item 7 to read as follows:

7. Give such other data and information as required by the Building Official including:

a. ~~the n~~Name(s) and address(es) of all persons with a beneficial interest in the property under a land trust and all shareholders owning in excess of 5% of the stock in a corporation.

b. Signed copy of contract for construction indicating scope of work and overall project and/or hard cost of all work to be performed.

10. Delete ~~s~~Section R105.3.1.1 in its entirety.

11. Amend ~~s~~Section R105.5 to read as follows:

R105.5 Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 90~~180~~ days after issuance or if the work authorized by such permit is suspended or abandoned for a period of 90~~180~~ days after the time the work is commenced. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 90~~180~~ days each. The extension shall be requested in writing and demonstrate justifiable cause.

1. A permit for new one- and two--family dwelling units and townhomes is valid for eighteen (18) months after its issuance.

2. A permit for additions, alterations and remodeling of existing one- and two--family dwelling units and townhomes is valid for twelve (12) months after its issuance.

3. A permit for new residential accessory buildings and structures and for additions, alterations and remodeling of existing residential accessory buildings and structures is valid for twelve (12) months after its issuance.

4. A permit for the any of the following items not part of the scope of work for an addition, alteration, or remodeling of an existing building, or for construction of a new dwelling unit, is valid for six (6) months after its issuance.

a. Building demolition

b. Driveway and/or approach replacement

c. Emergency generator installation

d. Exterior siding replacement

e. Fence installation or replacement

f. Furnace, boiler, water heater or air conditioning system component installation or replacement

g. Irrigation system installation

h. Radon mitigation system installation

i. Roof replacement

12. Amend ~~s~~Section R105.7 to reads as follows:

R105.7 Placement ~~O~~of Permit. The building permit or copy shall be kept on the site of the work until completion of the project and shall be displayed in a prominent location visible from the public way.

13. Add Section R106.1.5 to read as follows:

R*106.1.5 Fire protection system submittal documents.*

1. A building permit for a building that requires a fire suppression system shall not be issued without the submission and subsequent approval of a technical submission prepared and sealed by an Illinois licensed design professional. The technical submission shall consist of designs, drawings and specifications that establish the scope of the work and standards of quality for materials, workmanship and equipment and the construction systems, studies and other technical reports as determined necessary by the Building Official and prepared in the course of a design professional's practice.

Exception: Applications for permits for new single-family dwellings shall be permitted to be submitted without a technical submission if application is submitted along with fire sprinkler shop drawings signed and sealed by an Illinois licensed professional engineer or by a technician who holds a valid NICET level 3 or 4 certification.

2. After permit issuance, and prior to the rough framing inspection being performed, shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall be signed and sealed by an Illinois licensed professional engineer or by a technician who holds a valid NICET level 3 or 4 certification. Shop drawings shall contain all information as required by the referenced installation standards in Section P2904.

1~~3~~4. Amend ~~s~~Section R108.6 to read as follows:

R108.6 Work Commencing Before Permit Issuance. Any person who commences any work on a site, building or structure, or any electrical, gas, mechanical, fire protection~~sprinkler~~ or plumbing system before obtaining the necessary permits shall be subject to an additional fee of 200% of the basic permit fee.

15. Add Section R108.7 to read as follows:

R108.7 Work Exceeding Scope of Permit Issued. Any person who commences any work on a site, building or structure, or on any electrical, gas, mechanical, fire protection or plumbing system in excess of the scope of work for which a permit has been issued shall be subject to an additional fee of 300% of the building permit fee.

1~~4~~6. Delete ~~s~~Section R109.3 in its entirety and substitute the following:

R109.3 Inspection Requests. It shall be the duty of the permit holder or their agent to notify the Building Official that such work is ready for inspection and to have the work complete and prepared for AM inspections by 8:00 AM and complete and prepared for PM inspections by noon.

17. Amend Section R109.4 to read as follows:

R109.4 Approval required. All projects will be afforded an initial and one re-inspection of the work in place for each required inspection. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official or his/her designee. The Building Official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the Building Official. All work shall be re-inspected until code compliance is achieved. Re-inspections required beyond the first two, or a contractor's failure to attend a scheduled inspection, will be billed to the contractor in accordance with Glen Ellyn Village Code Section 4-1-4.

158. Add new ~~s~~Section R109.5 to read as follows:

R109.5 Inspection Conditions. The following information must be present on site and accessible to the inspector at the time of inspection:

1. Copy of the approved permit drawings.
2. Copy of any approved drawing addenda that may have been issued.
3. Copy of all previously issued inspection reports.
4. Copy of manufacturer's instructions for the installation of all hard-wired or built-in equipment and appliances, or equipment or appliances that require connection to ventilation piping or ductwork.

Failure to have the aforementioned documentation on site at the time of inspection may be cause for failure of the inspection. The work to be inspected must also be prepared and complete and an approved means to access the work must be provided to the inspector. The inspector is not authorized to conduct an inspection if these conditions do not ~~exist~~exist, and the inspection may be cancelled by the inspector. No further work may be completed until a reinspection fee is paid and a reinspection is requested, scheduled, completed and approved.

169. Amend ~~s~~Section R110.1 to add exception 3 to read as follows:

3. Additions, alterations and remodeling of existing buildings and structures as determined by the Building Official.

~~17~~20. Delete ~~s~~Section R110.3 in its entirety and substitute the following:

R110.3 Certificate Issued. After the Building Official inspects the building or structure and finds no violations of the provisions of this Code or other regulations, the Building Official shall issue a certificate of occupancy that contains the following:

1. The address of the structure.
2. The name and address of the owner.
3. A description of the portion of the building for which the certificate is issued.
4. The use and occupancy of the portion of the building for which the certificate is issued.
5. Any special stipulation and conditions of the building permit.
6. The name of the Building Official.

21. Amend Section R110.4 to read as follows:

R110.4 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely and subject to payment of administrative fees in accordance with Glen Ellyn Village Code Section 4-1-4. The Building Official shall set a time period during which the temporary certificate of occupancy is valid.

~~18~~22. Amend ~~s~~Section R112.1 to read as follows:

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this Code, there shall be a Building Board of Appeals. The structure, responsibilities and procedures of the Building Board of Appeals is established in ~~c~~Chapter 7 Building Board of Appeals, ~~t~~Title 2 Boards And Commissions, in the Glen Ellyn Village Code.

~~19. Delete section R112.2.1 in its entirety.~~

~~20. Delete section R112.2.2 in its entirety.~~

23. Delete Section R112.2 in its entirety.

2~~1~~1. Delete ~~s~~Section R112.3 in its entirety.

25. Delete Section R112.4 in its entirety.

2~~2~~6. Amend ~~s~~Section R113.4 to read as follows:

R113.4 Violation penalties. Any person who violates a provision of this Code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this Code, shall be subject to penalties as prescribed in section 4-1-5(J) in the Glen Ellyn Village Code.

27. Amend Section R202 definition of CRAWL SPACE to read as follows:

CRAWL SPACE. A space below an interior floor that is not a basement, and with a minimum clear height of 36 inches below the floor joists, and a minimum of 24 inches clear height to the underside of other framing members, ductwork, conduits, or pipes.

28. Amend Section R202 to add the definition of UNDER-FLOOR SPACE to read as follows:

UNDER-FLOOR SPACE. A space below an interior floor with a maximum clear height of 16 inches between the bottom of the floor joists and a concrete slab below.

2~~3~~9. Delete ~~Amend section R301.2 t~~Table R301.2(1) in its entirety and replace with the following Table:~~to add design criteria as follows:~~

~~1. Ground snow load:~~	~~25 psf~~
~~2. Wind speed:~~	~~90 mph~~
~~3. Wind topographic effects:~~	~~No~~
~~4. Seismic design category:~~	~~B~~
~~5. Weathering:~~	~~Severe~~
~~6. Frost line depth:~~	~~42 inches~~
~~7. Termite:~~	~~Moderate~~

~~8. Winter design temp:~~	~~0 degrees F~~
~~9. Ice barrier underlayment required:~~	~~Yes~~
~~10. Flood hazards:~~	~~Yes~~
~~11. Air freezing index:~~	~~2,000~~
~~12. Mean annual temp:~~	~~50 degrees F~~

TABLE R301.2(1)	
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA	
Ground snow load:	30 psf
Wind speed:	115 mph
Wind topographic effects:	No
Special wind region:	No
Windborne debris zone:	No
Seismic design category:	B
Weathering:	Severe
Frost line depth:	42 inches
Termite:	Moderate
Winter design temp:	0 degrees F
Ice barrier underlayment required:	Yes
Flood hazards:	Yes
Air freezing index:	2,000
Mean annual temp:	50 degrees F
MANUAL J CRITERIA	
Elevation:	741
Latitude:	42
Winter heating:	0
Summer cooling:	88°F
Altitude correction factor:	0
Indoor design temperature:	68°F
Design temperature cooling:	75°F minimum
Heating temperature difference:	73°F
Cooling temperature difference:	16°F
Wind velocity heating:	8.4
Wind velocity cooling:	5.7
Coincident wet bulb:	74
Daily range:	M
Winter humidity:	30%
Summer humidity	50%

30. Add Section R301.2.4.2 to read as follows:

R301.2.4.2 Establishment of flood hazard areas. To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as defined by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study For The Village Of Glen Ellyn", as

amended or revised with the accompanying flood insurance rate maps (FIRM) and related supporting data along with any revisions thereto. The adopted flood hazard maps and supporting data are hereby adopted by reference and declared to be part of this Section.

31. Add Section R301.5.1 to read as follows:

R301.5.1 Lateral load on decks. The lateral design live load for decks shall include the wind load determined in accordance with Section R301 plus a simultaneously applied minimum horizontal live load of 10 pounds per square foot distributed over the walking surface of the deck and stair treads. The horizontal live load shall be assumed to act in the same direction as the wind. Framing member connections and connections to the principal structure shall be designed to withstand lateral loads acting in any direction.

~~24. Amend section R302.2 to read as follows:~~

~~*R302.2 Townhouses.* Each townhouse shall be considered a separate building and shall be separated from each other by fire-resistant-rated wall and/or floor-ceiling assemblies having not less than a 2 hour fire resistance rating when tested in accordance with ASTM E 119 or UL 263. Fire resistant rated wall assemblies shall be rated for fire exposure from both sides and shall extend to and be tight against the exterior wall and roof deck.~~

~~25. Amend section R302.6 to delete the exception in its entirety.~~

~~26~~32. Amend ~~t~~Table R302.6 to read as follows:

DWELLING-GARAGE SEPARATION	
Separation	Material
From the residence and attics	Not less than 5/8-inch ~~t~~Type X gypsum board or equivalent applied to the garage side with all joints flat taped
Structure(s) supporting floor/ceiling assemblies used for separation required by this Section	Not less than 5/8-inch Type X gypsum board or equivalent with all joints flat taped
Garages located less than 20 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of all exterior walls and ceilings with all joints flat taped

33. Add new Section R302.15 to read as follows:

R302.15 Fire protection improvements in existing buildings. All exposed combustible framing members, combustible voids or similar spaces throughout an existing building or structure shall be covered with five-eighths (5/8") inch Type X gypsum board, or provided with equivalent protection, when any addition or basement renovation to the building or structure is constructed that exceeds $15,000 in hard cost and the building or structure is not equipped throughout with an approved fire sprinkler system.

~~27. Add new section R305.1.2 to read as follows:~~

~~*R305.1.2 Crawl Spaces.* Crawl spaces below the floor of any part of a building or structure shall have a clear height of not less than 3 feet, except beams, girders, ducts or other obstructions may project to within 2 feet of the crawlspace floor.~~

34. Add new Section R310.2.1.1 to read as follows:

R310.2.1.1 Window style . The use of awning or hopper windows for emergency escape and rescue openings shall not be permitted.

~~28~~35. Amend ~~s~~Section R311.4 to read as follows:

R311.4 Vertical Egress. Egress from habitable levels including basements but excluding unfinished habitable attics, not provided with an egress door in accordance with section R311.2, shall be by ramp in accordance with section R311.8 or a stairway in accordance with section R311.7.

36. Amend Section R312.1.3 to include Exception 3 to read as follows:

3. *Cable rails.* The spacing between centerlines of adjacent cables serving as infill for guard and handrail systems shall be not more than 3 inches on center.

~~29. Add new section R312.5 to read as follows:~~

~~*R312.5 Safety And Security Fence.* The demolition or construction of a principal building or structure, or part thereof, or an excavation over 30 inches deep, shall require the installation of a safety and security fence, with a latching gate or equivalent opening, that encloses and secures the work area. The fencing shall be a minimum of 4 feet high and constructed of chain link fabric, plastic mesh, or wooden slats secured to steel posts not to exceed 8 feet on center or equivalent materials approved by the Building and Zoning Official. The fence shall be maintained in an upright and stable condition and the gate shall be secured at all times the demolition or construction site is unattended.~~

30~~7~~. Add new ~~s~~Section R312.4~~6~~ to read as follows:

R312.6 Window Well Guards. Window and door wells that extend more than 30 inches below the adjacent grade shall be provided with bars, grilles, covers, screens or similar devices that are designed and listed to resist human impact unless other guards that comply with ~~s~~Section R312 of this Code are provided. Window well guards enclosing emergency escape and rescue openings shall meet the minimum opening area requirement and be operable from the inside of the well without the use of keys, tools, or special knowledge or effort.

38. Amend the Exception in Section R313.1 to read as follows:

Exception: An automatic residential fire sprinkler system shall be required in accordance with Section 1103.5 of the Glen Ellyn Fire Code where additions, alterations or remodeling of townhouses is performed.

~~31~~39. Amend ~~s~~Section R313.1.1 to read as follows:

R313.1.1 Design ~~A~~and ~~I~~installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with NFPA 13D standards.

40. Amend Section R313.2 to read as follows:

R313.2 One-and two-family dwelling automatic fire sprinkler systems. Automatic residential fire sprinkler systems for one- and two-family dwellings shall be designed and installed in accordance with NFPA 13D standards.

41. Amend the Exception in Section R313.2 to read as follows:

Exception: An automatic residential fire sprinkler system shall be required in accordance with Section 1103.5 of the Glen Ellyn Fire Code where additions, alterations or remodeling of one- and two-family dwellings are constructed.

42. Add new Section R313.3 to read as follows:

R313.3 Existing buildings. Fire sprinkler systems shall be required in accordance with Sections 1103.5.5 through 1103.5.10 of the Glen Ellyn Fire Code where additions, alterations or remodeling of one- and two-family dwellings and townhouses are constructed.

43. Add new Section R328 to read as follows:

R328 Safeguards During Construction.

44. Add new Section R328.1 to read as follows:

R328.1 General. The provisions of this Section shall govern safety during construction and the protection of adjacent public and private properties.

4~~6~~5.Add new ~~s~~Section R328.2~~R312.5~~ to read as follows:

R328.2~~12.5~~ Safety ~~A~~and ~~S~~security ~~F~~fence. The demolition or construction of a principal building or structure, or part thereof, or an excavation over 30 inches deep, with the exception of drilled pier excavations, shall require the installation of a safety and security fence, with a latching gate or equivalent opening, that encloses and secures the work area. The fencing shall be a minimum of 6~~4~~ feet high and constructed of chain link fabric~~, plastic mesh, or wooden slats~~ secured to steel posts not to exceed 8 feet on center or equivalent materials approved by the Building ~~and Zoning~~ Official. Fence posts shall be driven into the ground, sandbagging of posts is not permitted. The fence shall be maintained in an upright and stable condition and the gate shall be locked~~secured~~ at all times the demolition or construction site is unattended.

46. Add new Section R328.3 to read as follows:

R328.3 Tree preservation. Measures to protect public and private trees shall be taken in accordance with Glen Ellyn Village Code Sections 4-8-3 (B) and (C). Tree protection fencing shall be checked daily and maintained according to the approved Tree Preservation Plan; unsecured fabric or unstable posts shall be immediately repaired; a copy of the approved Tree Preservation Plan shall be displayed and maintained at the coordination site in a prominent location visible from the public way and within 5 feet of the property line.

45. Add new Section R328.4 to read as follows:

R328.4 Earth retention systems. All excavations that cannot be made in accordance with the United States Department of Labor Occupational Health and Safety Administration's (OSHA) requirements for sloping and benching shall utilize an earth retention system designed by an Illinois licensed design professional to protect adjoining property.

47. Add new Section R328.5 to read as follows:

R328.5 Fire safety during construction. A 20-ABC fire extinguisher shall be maintained on the site.

48. Add new Section R328.6 to read as follows:

R328.6 Site Conditions. The site shall be maintained on a daily basis to ensure:

1. Public walks and streets, and adjoining properties, are free from construction gravel, dirt and debris at the end of each workday. Adjacent streets and sidewalks shall be swept clean on a daily basis. No litter shall be placed or allowed to collect in the public rights-of-way at any time.
2. Stockpiled equipment and material shall be kept away from neighboring properties, outside of the side yard setback.

3. Stockpiled material shall not be placed in a manner that affects the natural surface water runoff patterns in a detrimental way to properties upstream or downstream of the site; any stockpile of earth to remain in place for more than three days shall be protected with silt fence, coir logs, or other perimeter erosion control barrier; stockpiles in place for more than 14 days must be stabilized or covered.

4. Silt fencing and other erosion control measures shall be inspected and maintained according to the approved Site or Site Management Plan, Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan; only clear water may be discharged into the street; muddy water must be filtered; storm sewer inlets shall be protected with filtration devices.

5. A clearly defined, minimum 36-inch wide clear, stable and walkable path between the public right-of-way and the point of construction access shall be maintained at all times to provide access for construction workers, building inspectors, emergency responders and other personnel.

49. Amend Section R401.4.1 to read as follows:

R404.4.1 Geotechnical evaluation. In lieu of a complete geotechnical evaluation, the soil bearing capacity shall be assumed to be 1,500 psf. Where the Building Official determines that in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable soil bearing capacity shall be determined by a soils investigation performed by an approved testing agency.

50. Amend Section R402.1 to read as follows:

R402.1 Wood Foundations. Wood foundations shall not be permitted.

51. Delete Sections R402.1.1 and R402.1.2 in their entirety.

52. Amend Section R402.4 to read as follows:

R402.4 Masonry. Masonry foundations shall not be permitted.

53. Add Section R403.1.1 to read as follows:

R403.1.1 Design. All footing underpinning work shall be designed by an Illinois licensed structural engineer.

~~32~~54. Add new ~~s~~Section R403.5~~R403.1.3.3~~ to read as follows:

R403.~~51.3.3~~ Foundations for detached garages.~~For Accessory Structures.~~ One-story frame detached garages~~accessory structures~~ are permitted on trench wall and slab foundations monolithically poured, consisting of a minimum 4" concrete slab, with minimum 6x6-W1.4xW1.4~~40 pounds per 100 square foot~~ welded wire fabric reinforcing, on a minimum 4" compacted gravel base, with a continuous thickened minimum 20" wide perimeter edge, and extending down a minimum of 12~~10~~" below the undisturbed ground surface to undisturbed subsoil. Where applicable, the depth of footing shall also conform to Section R403.1.4.1. Turned down footings shall have not fewer than one No. 4 continuous rebar at the top and bottom of the footing.

55. Add new Section R403.6 to read as follows:

R403.6 Foundations for gazebos and pergolas. Gazebos and pergolas shall be anchored to the ground with any of the following foundation systems:

1. Concrete slab constructed in accordance with Section R403.5.

2. Concrete piers designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.

56. Add new Section R403.7 to read as follows:

R403.7 Foundations for accessory structures. Accessory structures less than 150 square feet in area shall be anchored to the ground with any of the following foundation systems:

1. Concrete slab constructed in accordance with Section R403.5.

2. Concrete piers designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.

3. Helical pile foundations designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.

4. Soil anchor screws designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.

~~33~~57. Amend ~~s~~Section R404.1 to read as follows:

R404.1 Concrete And Masonry Foundation Walls. Concrete foundation walls shall be selected and constructed in accordance with the provisions of ~~s~~Section R404.1.3-2.

Masonry foundation walls shall not be permitted.

58. Within Section R404.1.1 delete the reference to masonry foundation walls.

~~34~~59. Delete ~~s~~Sections R404.1.2~~1~~ and R404.1.2~~1~~.1 in their entirety.

60. Add Section R404.1.2 to read as follows:

R404.1.2 Design. All foundation and retaining wall underpinning work shall be designed by an Illinois licensed structural engineer.

~~35~~61. Amend ~~s~~Section R404.2 to read as follows:

R404.2 Wood Foundation Walls. Wood foundation~~s~~ walls shall not be permitted.

~~36~~62. Delete ~~s~~Sections R404.2.1 through R404.2.6 in their entirety.

63. Amend Section 404.4 to read as follows:

404.4 Retaining walls. Retaining walls shall be designed by an Illinois licensed design professional to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning. This Section shall not apply to foundation walls supporting buildings.

Exceptions:

1. Segmental retaining walls that retain less than 48-inches of unbalanced fill with no surcharge load and are designed in accordance with the segmental wall unit manufacturer's written recommendations for design.

2. Retaining walls, other than segmental retaining walls, that are not laterally braced at the top and that retain less than 48-inches of unbalanced fill with no surcharge load.

3. Retaining walls that are less than 24-inches in height that resist surcharge or lateral loads in addition to soil.

64. Add Section 404.4.1 to read as follows:

404.4.1 Surcharge load. The design surcharge load for retaining walls shall be a minimum of 250 pounds per square foot.

65. Add Section 405.3 to read as follows:

405.3 Window wells. Window wells shall be designed for proper drainage by connecting to the building's foundation drainage system required by Section R405.1 or by an approved alternative method.

66. Amend the title of Section R408 to read as follows:

Section 408

Crawl Space

67. Amend Sections R408.1 through 408.7 to replace all references to "under-floor" with "crawl".

68. Add new Section R409 to read as follows:

Section 409

Under-Floor Space

69. Add new Sections R409.1 to read as follows:

R409.1 Ventilation. Under-floor spaces shall be ventilated as required by Sections 408.1 and 408.2 for crawl spaces.

Exception: Under-floor spaces shall not require ventilation where all of the following conditions exist.

1. A concrete slab is installed throughout the entire under-floor space in accordance with Section 506.
2. The perimeter of the concrete slab shall be sealed to prevent water and moisture infiltration into the under-floor space.
3. All floor framing, wall framing, and sill plates supporting the floor above the under-floor space shall be preservative-treated in accordance with Section 317.
4. No water or gas piping shall be permitted to be installed within the under-floor space.
5. The under-floor space shall be fully insulated in accordance with the International Energy Conservation Code.

70. Add new Sections R409.2 to read as follows:

R409.2 Access. Access to under-floor spaces shall not be required.

~~37~~71. Add new ~~s~~Section R502.1.8 to read as follows:

R502.1.8 Light-Weight Floor Framing. Light-weight floor framing including, but not limited to, wood floor trusses, parallel chord trusses, wood I-beams or joists, box beams, metal web trusses, metal

trusses, or bar joists shall be permitted only in dwellings or parts thereof equipped throughout with an automatic fire sprinkler system installed in accordance with NFPA standards.

72. Amend Section R506.2.1 to read as follows:

R506.2.1 Floor systems. Joists framing from opposite sides over a bearing support shall lap not less than 3 inches and shall be nailed together with a minimum three 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the nailed lap is permitted. Lateral restraint shall be provided by blocking between the joists along the length of the bearing support in accordance with Section R502.7.

Exception: The line of blocking may be offset from the face of the bearing support by a distance not greater than the depth of the joist to allow for passage of ductwork, piping and conduits into a wall above.

73. Amend Section R502.7 to read as follows:

R502.7 Lateral restraint at supports. Joists shall be supported at each end and at each point of support by any of the following methods based on the support condition:

1. Solid blocking between joists not less than 2 inches nominal in thickness and not less than 60 percent of the joist depth in accordance with Table 602.3(1), item 29.

2. Attachment to a full-depth header, band or rim joist with metal joist hangers with a depth of not less than 60 percent of the depth of the joists and all fasteners recommended by the hanger manufacturer installed.

3. Attachment to a rim joist in accordance with Table 602.3(1), item 26.

4. Attachment to an adjoining stud with minimum three 10d face nails.

5. Other approved method to prevent rotation of the joist.

74. Amend Section R502.11.1 to read as follows:

R502.11.1 Design. Wood trusses shall be designed in accordance with approved engineering practice, The truss design drawings shall be signed and sealed by an Illinois licensed structural engineer. Each sheet of the design drawings shall be signed and sealed by the design professional. In lieu of signing and sealing each individual sheet of the truss design drawings, the design drawings may include a cover sheet with a sheet index and a statement that the structural engineer's signature and seal applies to all sheets listed within the sheet index. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1.

75. Amend Section R502.11.4 to include the following:

13. Number of plies, if greater than one.

14. Elevation view of each truss designation.

15. Truss placement diagram.

76. Amend Section R502.11.4.2 to read as follows:

R502.11.4.2 Truss placement diagram. The truss manufacturer shall provide a truss placement diagram that identifies the proposed location for each individually designated truss. The truss placement diagram shall be provided as part of the truss submittal package and with the shipment of trusses delivered to the site.

77. Add Section R507.3.2 to read as follows:

R507.3.2 Helical piers. Helical piers shall be designed by an Illinois licensed design professional. The minimum required installation torque shall be indicated on the permit submittal documents and verified by field testing.

78. Amend Section R507.8 to read as follows:

R507.8 Vertical and lateral supports. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal nor shall such attachment be made to any masonry veneer. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. Connections of decks with cantilevered framing members to exterior walls or other framing members shall be designed for both of the following:

1. The reactions resulting from the dead load and live load specified in Table R301.5, or the snow load specified in Table R301.2(1), and the lateral design load specified in Section R301.5.1, acting on all portions of the deck.
2. The reactions resulting from the dead load and live load specified in Table R301.5, or the snow load specified in Table R301.2(1) acting on the cantilevered portion of the deck, and no live load or snow load on the remaining portion of the deck. The lateral design load specified in Section R301.5.1 shall be applied to all portions of the deck.

79. Amend Section R507.9.2 to read as follows:

R507.9.2 Lateral connection. Lateral loads shall be transferred to the ground or to a structure capable of transmitting them to the ground. Where the lateral load connection is provided in accordance with Figure R507.9.2(1), hold down tension devices shall be installed in not less than two locations per deck, within 24 inches of each end of the deck. Each device shall have an allowable stress design capacity of not less than 1,500 pounds. Where the lateral load connections are provided in accordance with Figure R507.9.2(2), the hold-down tension devices shall be installed in not less than four locations per deck, and each device shall have an allowable stress design capacity of not less than 750 pounds.

Exception: Lateral load connections shall not be required for decks that are less than 30 inches above grade level at all points along the perimeter of the deck.

80. Amend Section R507.5.2 to add the following Exceptions:

Exceptions: Double-bolted beam to post connections shall not be required when any of the following conditions exist:

1. Posts supporting beams are embedded a minimum of 24 inches into concrete piers which are extended to frost. The minimum diameter of the pier foundation shall be not less than the 2 times the nominal dimension of the post.
2. Wood braces are installed each side of beam to post connections. Braces shall be of same dimension as the post and anchored with a minimum of two ½-inch diameter lag screws a minimum of 24 inches horizontally and vertically from the point of the beam to post connection.
3. Any other approved method.

~~38~~81. Amend ~~s~~Section R801.3 to read as follows:

R801.3 Roof Drainage. All dwellings shall have a controlled method of water disposal from roofs, consisting of gutters and downspouts or equivalent means, which will collect and discharge roof drainage to the ground surface at least 5 feet ~~(1524mm)~~ from the foundation walls or to an approved drainage system.

82. Amend Section R802.10.1 to include the following:

13. Number of plies, if greater than one.

14. Elevation view of each truss designation.

15. Truss placement diagram.

83. Amend Section R802.10.1.1 to read as follows:

R802.10.1.1 Truss placement diagram. The truss manufacturer shall provide a truss placement diagram that identifies the proposed location for each individually designated truss. The truss placement diagram shall be provided as part of the truss submittal package and with the shipment of trusses delivered to the site.

84. Amend Section R802.10.2 to read as follows:

R802.10.2 Design. Wood trusses shall be designed in accordance with approved engineering practice, The truss design drawings shall be signed and sealed by an Illinois licensed structural engineer. Each sheet of the design drawings shall be signed and sealed by the design professional. In lieu of signing and sealing each individual sheet of the truss design drawings, the design drawings may include a cover sheet with a sheet index and a statement that the structural engineer's signature and seal applies to all sheets listed within the sheet index. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1.

~~39~~85. Amend ~~s~~Section G2406.2 item 4 to read as follows:

4. A single wall-mounted unvented room heater is installed in a bedroom and such unvented room heater is equipped as specified in section G2445.6 and has an input rating not greater than 10,000 Btu/h (2.93 kW). The bedroom shall meet the required volume criteria of section G2407.5 and be provided with a carbon monoxide detector that is listed, labeled and complies with the standards of an approved testing agency.

~~40~~86. Delete ~~s~~Section P2501.1 in its entirety and substitute the following:

P2501.1 Scope. The design, construction, installation, alteration, repair and maintenance of plumbing systems and their components shall comply with the standards and regulations established in the Illinois ~~d~~Department of ~~p~~Public ~~h~~Health Plumbing Code as currently adopted.

~~41~~87. Delete ~~s~~Section P2501.2 in its entirety and substitute the following:

P2501.2 Structure Protection. In the process of installing or repairing any part of a plumbing and drainage installation, the structural framing members shall not be cut, bored or notched beyond the limitations in this Code unless restored to a safe structural condition in accordance with the building requirements in this Code.

~~42~~88. Add new ~~s~~Section P2501.3 to read as follows:

P2501.3 Piping Protection. In concealed locations, where piping, other than cast iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1-1/2

inches from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than .0575 inch (no. 16 gauge). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 2 inches above sole plates and below top plates.

~~43~~89. Add new ~~s~~Section P2501.4 to read as follows:

P2501.4 Through Wall Protection. Any pipe that passes through a foundation wall shall pass through a pipe sleeve of a greater size that allows the installation of a sealant in accordance with the sealant manufacturer's specifications. All annular spaces between sleeves and pipes shall be filled and water sealed in accordance with the building requirements in this Code or as approved by the Building Official.

~~44~~90. Add new ~~s~~Section P2501.5 to read as follows:

P2501.5 Tank Leak Protection. Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a material thickness of not less than .0236 inch (no. 24 gauge) or other pans approved for such use. Listed pans shall comply with CSA LC3. The pan shall be not less than 1-1/2 inches deep and drained by an indirect waste pipe having a minimum diameter of ¾~~-~~inch and terminate over a suitably located indirect waste receptor or shall extend to the exterior of the building and discharge not more than 24 inches or less than 6 inches from grade. A leak protection pan shall not be required if a water heater tank is located on a concrete floor on grade and a floor drain is provided on the same floor level.

~~45~~91. Delete ~~s~~Section P2502 in its entirety.

~~46~~92. Delete ~~s~~Section P2503 in its entirety.

~~47~~93. Delete ~~c~~Chapters 26, 27, 28, 29, 30, 31, and 32 in their entirety.

~~48~~94. Delete ~~c~~Chapters 34, 35, 36, 37, 38, 39, 40, 41, 42, and 43 in their entirety.

95. Appendix F, RADON CONTROL METHODS, of the 2018 ICC International Residential Code, is hereby adopted as part of this Code.

96. Amend Section AF101.1 to read as follows:

AF101.1 General. The provisions of this appendix shall control the design and construction of radon mitigation systems for new construction. All new construction, including one- and two-family dwellings and townhouses, and additions and new basement remodeling thereto shall include a radon mitigation system.

(Ord. 5995, 5-14-2012; Ord. 6603, 5-29-2018)

4-1-8. Adoption of Residential Code.

(A) The 2018 ICC International Residential Code is adopted by reference as the standards and regulations for governing the demolition, construction, enlargement, alteration, restoration or repair of buildings and structures and their appurtenances, as this Code is intended, recommended, maintained and published by the International Code Council except such portions thereof as are deleted, modified, or amended in this chapter. At least one copy of the 2018 ICC International Residential Code shall be maintained on file in the office of the Village Clerk for inspection and copying as a public record.

(B) The provisions of the 2018 ICC International Residential Code, are hereby deleted, modified, and amended as follows:

1. Amend Section R101.1 to read as follows:

   R101.1 Title. These regulations shall be known as the Residential Code of the Village of Glen Ellyn, hereinafter referred to as "this Code."

2. Add new Section R102.4.1 to read as follows:

   R102.4.1 Plumbing. Wherever reference to the International Plumbing Code is made, substitute the Plumbing Code, Department of Public Health, State of Illinois.

3. Add new section R102.4.2 to read as follows:

   R102.4.2 Building. Where "this Code" does not address any specific application, material, or method of construction, the 2018 ICC International Building Code shall be applicable.

4. Add new Section R102.7.2 to read as follows:

   R102.7.2 Partial Improvements Required. The following improvements within an existing building and on public or private property shall be required when a building addition increases the floor area of an existing building by more than 75%, or when more than 50% of the existing exterior wall and roof structure area is altered, or when interior remodeling work exceeds $100,000 in hard cost:

   1. Abandon the existing water service line between the water main and the existing building or proposed addition and install a new water service line, water meter and copper horn in accordance with current standards, codes and ordinances.
   2. Abandon the existing sanitary service line between the sanitary sewer main and the existing building or proposed addition and install a new sanitary service line if the structural integrity or water-tightness of the service line does not meet current standards, codes and ordinances.
   3. Provide an overhead sanitary service line and sewage ejector pump in accordance with current standards, codes and ordinances.
   4. Remove any existing gravel driveway and provide a hard surface driveway, approach and depressed curb and gutter and in accordance with current standards, codes and ordinances.
   5. Provide a public sidewalk across the frontage of the property if no sidewalk presently exists, or repair any existing damaged sidewalk squares, in accordance with current standards, codes and ordinances.
   6. Repair damaged or disturbed parkway grades and restore parkway groundcover or provide new groundcover where no groundcover exists.

Exception: The existing water and sanitary service lines may remain, upon approval of the Public Works Director, if existing conditions comply with, or are repaired and maintained to comply with current standards, codes and ordinances. Existing sanitary line conditions must be verified by a video and an audio or written report in the format required by the Public Works Department.

5. Add new Section R102.7.3 to read as follows:

R102.7.3 All Improvements Required. The following improvements within an existing building and on public or private property shall be required when a building addition increases the floor area of an existing building by more than 150%, or when more than 75% of the existing exterior wall and roof structure area is altered, or when interior remodeling work exceeds $200,000 in hard cost:

1. All improvements included in section R102.7.2.
2. The existing buildings and site shall comply, or be upgraded to comply, with all provisions of the Village Codes, regulations and ordinances for a new building or structure.

Exception: A fire sprinkler system shall be required for remodeling work only within the remodeled area when the remodeling work exceeds $300,000 in hard cost or when the Modification Factor, as calculated in accordance with Section 1103.5.9 of the Glen Ellyn Fire Code is greater than 2.0.

6. Add new Section R102.7.4 to read as follows:

R102.7.4 Historic Buildings. The provisions of this Code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the Building Official to not constitute a distinct life safety hazard.

7. Delete Section R105.2 in its entirety and substitute the following:

R105.2 Work Exempt from Permit. Exemptions from permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

(a) Property:

(1) Landscaping work to remove existing or plant new trees, shrubs, plants or grass provided tree removal is completed in accordance with the requirements in the tree preservation ordinance and the disturbed area does not exceed 300 square feet.

(2) Paving work to add new or replace existing impervious surface materials upon the ground provided the new paved area does not exceed 100 square feet and complies with all Zoning Code regulations.

(3) Grade changes, excavation, or fill, provided the disturbed site area does not exceed 300 square feet and natural existing stormwater runoff from the property is not altered or cause a nuisance, hazard or damage to adjacent property and complies with the requirements of the Countywide Stormwater and Flood Plain Ordinance of DuPage County, IL.

(4) Retaining walls that do not exceed 12 inches in height, provided the natural existing stormwater runoff from the property is not altered or cause a nuisance, hazard or damage

to adjacent property and complies with the requirements of the Countywide Stormwater and Flood Plain Ordinance of DuPage County, IL.

(5) Installation of recreational and play equipment, prefabricated swimming pools that are less than 24 inches deep, and outdoor furnishings that are portable or removed after occasional or seasonal use provided the location and use complies with all Zoning Code regulations.

(6) Sealcoating of existing driveways.

(7) Sealcoating of existing parking lots with less than 5 parking stalls and not requiring accessible stalls.

(8) Replacement in kind of wood treads and risers, or existing wood deck boards on porches or decks.

(9) Replacement of existing handrails on stairs of residential buildings not more than four dwelling units in size.

(10) Replacement in kind of up to three (3) existing fence posts and/or any existing fence pickets, facing boards or rails within any two existing panels between posts.

(11) Erection of temporary tents with an area of less than 200 square feet.

(12) Removal and replacement of existing windows of same size and style in existing opening with no structural modifications.

(b) Buildings or structures:

(1) Installation or removal of interior wall, floor or ceiling finishes such as paint, tile, carpet, and wall coverings completed in accordance with the requirements in this Code for sanitation and fire resistance and with federal and state regulations governing the removal of lead, asbestos or other hazardous materials.

(2) Window awnings that are self-supported by the exterior wall which do not project more than 54 inches from the exterior wall.

(3) Minor electrical repairs including an individual lamp, receptacle or breaker replacement or the removal of an existing and installation of an equivalent new electrical fixture at an existing electrical outlet.

(4) Electrical wiring, fixtures and equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

(5) Minor mechanical repairs including the removal of existing and installation of equivalent new pumps, motors or other equipment that does not alter approval of the equipment or make it unsafe, or require the installation of a new electrical raceway, wiring, devices or breaker.

(6) Installation of portable electrical or mechanical equipment and appliances with cord and plug electrical connections.

(7) Work to stop leaks or clear obstructions in the plumbing system or the removal of existing and installation of equivalent new plumbing fixtures, limited to toilets, sinks, tubs and showers without any alteration to existing hard piped water supply, drain, waste or vent outlets, or requiring an electrical connection which are not associated with a bathroom or kitchen remodeling project.

(8) Replacement or repair of exterior finish materials on wall and roof surfaces up to a maximum of 300 square feet or 20% of the individual roof or wall surface area.

8. Amend Section R105.3 item 6 to read as follows:

6. Be signed by the applicant and by the property owner(s) including the name and registered address of the owner, corporate officer, registered agent, partner, trustee or managing member, upon whom any legal notice, complaint or citation may be served.

9. Amend Section R105.3 item 7 to read as follows:

7. Give such other data and information as required by the Building Official including:

a. Name(s) and address(es) of all persons with a beneficial interest in the property under a land trust and all shareholders owning in excess of 5% of the stock in a corporation.

b. Signed copy of contract for construction indicating scope of work and overall project and/or hard cost of all work to be performed.

10. Delete Section R105.3.1.1 in its entirety.

11. Amend Section R105.5 to read as follows:

R105.5 Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 90 days after issuance or if the work authorized by such permit is suspended or abandoned for a period of 90 days after the time the work is commenced. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 90 days each. The extension shall be requested in writing and demonstrate justifiable cause.

1. A permit for new one- and two-family dwelling units and townhomes is valid for eighteen (18) months after its issuance.

2. A permit for additions, alterations and remodeling of existing one- and two-family dwelling units and townhomes is valid for twelve (12) months after its issuance.

3. A permit for new residential accessory buildings and structures and for additions, alterations and remodeling of existing residential accessory buildings and structures is valid for twelve (12) months after its issuance.

4. A permit for the any of the following items not part of the scope of work for an addition, alteration, or remodeling of an existing building, or for construction of a new dwelling unit, is valid for six (6) months after its issuance.

a. Building demolition

b. Driveway and/or approach replacement

c. Emergency generator installation

d. Exterior siding replacement

e. Fence installation or replacement

f. Furnace, boiler, water heater or air conditioning system component installation or replacement

g. Irrigation system installation

h. Radon mitigation system installation

i. Roof replacement

12. Amend Section R105.7 to reads as follows:

R105.7 Placement of Permit. The building permit or copy shall be kept on the site of the work until completion of the project and shall be displayed in a prominent location visible from the public way.

13. Add Section R106.1.5 to read as follows:

R*106.1.5 Fire protection system submittal documents.*

1. A building permit for a building that requires a fire suppression system shall not be issued without the submission and subsequent approval of a technical submission prepared and sealed by an Illinois licensed design professional. The technical submission shall consist of designs, drawings and specifications that establish the scope of the work and standards of quality for materials, workmanship and equipment and the construction systems, studies and other technical reports as determined necessary by the Building Official and prepared in the course of a design professional's practice.

   Exception: Applications for permits for new single-family dwellings shall be permitted to be submitted without a technical submission if application is submitted along with fire sprinkler shop drawings signed and sealed by an Illinois licensed professional engineer or by a technician who holds a valid NICET level 3 or 4 certification.

2. After permit issuance, and prior to the rough framing inspection being performed, shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall be signed and sealed by an Illinois licensed professional engineer or by a technician who holds a valid NICET level 3 or 4 certification. Shop drawings shall contain all information as required by the referenced installation standards in Section P2904.

14. Amend Section R108.6 to read as follows:

R108.6 Work Commencing Before Permit Issuance. Any person who commences any work on a site, building or structure, or any electrical, gas, mechanical, fire protection or plumbing system before obtaining the necessary permits shall be subject to an additional fee of 200% of the basic permit fee.

15. Add Section R108.7 to read as follows:

R108.7 Work Exceeding Scope of Permit Issued. Any person who commences any work on a site, building or structure, or on any electrical, gas, mechanical, fire protection or plumbing system in excess of the scope of work for which a permit has been issued shall be subject to an additional fee of 300% of the building permit fee.

16. Delete Section R109.3 in its entirety and substitute the following:

R109.3 Inspection Requests. It shall be the duty of the permit holder or their agent to notify the Building Official that such work is ready for inspection and to have the work complete and prepared for AM inspections by 8:00 AM and complete and prepared for PM inspections by noon.

17. Amend Section R109.4 to read as follows:

R109.4 Approval required. All projects will be afforded an initial and one re-inspection of the work in place for each required inspection. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official or his/her designee. The Building Official, upon notification, shall make the requested inspections and shall either indicate

the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the Building Official. All work shall be re-inspected until code compliance is achieved. Re-inspections required beyond the first two, or a contractor's failure to attend a scheduled inspection, will be billed to the contractor in accordance with Glen Ellyn Village Code Section 4-1-4.

18. Add new Section R109.5 to read as follows:

R109.5 Inspection Conditions. The following information must be present on site and accessible to the inspector at the time of inspection:

1. Copy of the approved permit drawings.
2. Copy of any approved drawing addenda that may have been issued.
3. Copy of all previously issued inspection reports.
4. Copy of manufacturer's instructions for the installation of all hard-wired or built-in equipment and appliances, or equipment or appliances that require connection to ventilation piping or ductwork.

Failure to have the aforementioned documentation on site at the time of inspection may be cause for failure of the inspection. The work to be inspected must also be prepared and complete and an approved means to access the work must be provided to the inspector. The inspector is not authorized to conduct an inspection if these conditions do not exist, and the inspection may be cancelled by the inspector. No further work may be completed until a reinspection fee is paid and a reinspection is requested, scheduled, completed and approved.

19. Amend Section R110.1 to add exception 3 to read as follows:

3. Additions, alterations and remodeling of existing buildings and structures as determined by the Building Official.

20. Delete Section R110.3 in its entirety and substitute the following:

R110.3 Certificate Issued. After the Building Official inspects the building or structure and finds no violations of the provisions of this Code or other regulations, the Building Official shall issue a certificate of occupancy that contains the following:

1. The address of the structure.
2. The name and address of the owner.
3. A description of the portion of the building for which the certificate is issued.
4. The use and occupancy of the portion of the building for which the certificate is issued.
5. Any special stipulation and conditions of the building permit.
6. The name of the Building Official.

21. Amend Section R110.4 to read as follows:

R110.4 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely and subject to payment of administrative fees in accordance with

Glen Ellyn Village Code Section 4-1-4. The Building Official shall set a time period during which the temporary certificate of occupancy is valid.

22. Amend Section R112.1 to read as follows:

    R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this Code, there shall be a Building Board of Appeals. The structure, responsibilities and procedures of the Building Board of Appeals is established in Chapter 7 Building Board of Appeals, Title 2 Boards And Commissions, in the Glen Ellyn Village Code.

23. Delete Section R112.2 in its entirety.

24. Delete Section R112.3 in its entirety.

25. Delete Section R112.4 in its entirety.

26. Amend Section R113.4 to read as follows:

    R113.4 Violation penalties. Any person who violates a provision of this Code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this Code, shall be subject to penalties as prescribed in section 4-1-5(J) in the Glen Ellyn Village Code.

27. Amend Section R202 definition of CRAWL SPACE to read as follows:

    CRAWL SPACE. A space below an interior floor that is not a basement, and with a minimum clear height of 36 inches below the floor joists, and a minimum of 24 inches clear height to the underside of other framing members, ductwork, conduits, or pipes.

28. Amend Section R202 to add the definition of UNDER-FLOOR SPACE to read as follows:

    UNDER-FLOOR SPACE. A space below an interior floor with a maximum clear height of 16 inches between the bottom of the floor joists and a concrete slab below.

29. Delete Table R301.2(1) in its entirety and replace with the following Table:

TABLE R301.2(1)	
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA	
Ground snow load:	30 psf
Wind speed:	115 mph
Wind topographic effects:	No
Special wind region:	No
Windborne debris zone:	No
Seismic design category:	B
Weathering:	Severe
Frost line depth:	42 inches
Termite:	Moderate
Winter design temp:	0 degrees F
Ice barrier underlayment required:	Yes
Flood hazards:	Yes
Air freezing index:	2,000
Mean annual temp:	50 degrees F
MANUAL J CRITERIA	

Elevation:	741
Latitude:	42
Winter heating:	0
Summer cooling:	88°F
Altitude correction factor:	0
Indoor design temperature:	68°F
Design temperature cooling:	75°F minimum
Heating temperature difference:	73°F
Cooling temperature difference:	16°F
Wind velocity heating:	8.4
Wind velocity cooling:	5.7
Coincident wet bulb:	74
Daily range:	M
Winter humidity:	30%
Summer humidity	50%

30. Add Section R301.2.4.2 to read as follows:

R301.2.4.2 Establishment of flood hazard areas. To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as defined by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study For The Village Of Glen Ellyn", as amended or revised with the accompanying flood insurance rate maps (FIRM) and related supporting data along with any revisions thereto. The adopted flood hazard maps and supporting data are hereby adopted by reference and declared to be part of this Section.

31. Add Section R301.5.1 to read as follows:

R301.5.1 Lateral load on decks. The lateral design live load for decks shall include the wind load determined in accordance with Section R301 plus a simultaneously applied minimum horizontal live load of 10 pounds per square foot distributed over the walking surface of the deck and stair treads. The horizontal live load shall be assumed to act in the same direction as the wind. Framing member connections and connections to the principal structure shall be designed to withstand lateral loads acting in any direction.

32. Amend Table R302.6 to read as follows:

DWELLING-GARAGE SEPARATION	
Separation	Material
From the residence and attics	Not less than 5/8-inch Type X gypsum board or equivalent applied to the garage side with all joints flat taped
Structure(s) supporting floor/ceiling assemblies used for separation required by this Section	Not less than 5/8-inch Type X gypsum board or equivalent with all joints flat taped
Garages located less than 20 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of all exterior walls and ceilings with all joints flat taped

33. Add new Section R302.15 to read as follows:

R302.15 Fire protection improvements in existing buildings. All exposed combustible framing members, combustible voids or similar spaces throughout an existing building or structure shall be covered with five-eighths (5/8") inch Type X gypsum board, or provided with equivalent protection, when any addition or basement renovation to the building or structure is constructed that exceeds $15,000 in hard cost and the building or structure is not equipped throughout with an approved fire sprinkler system.

34. Add new Section R310.2.1.1 to read as follows:

    R310.2.1.1 Window style . The use of awning or hopper windows for emergency escape and rescue openings shall not be permitted.

35. Amend Section R311.4 to read as follows:

    R311.4 Vertical Egress. Egress from habitable levels including basements but excluding unfinished habitable attics, not provided with an egress door in accordance with section R311.2, shall be by ramp in accordance with section R311.8 or a stairway in accordance with section R311.7.

36. Amend Section R312.1.3 to include Exception 3 to read as follows:

    3. *Cable rails.* The spacing between centerlines of adjacent cables serving as infill for guard and handrail systems shall be not more than 3 inches on center.

37. Add new Section R312.4 to read as follows:

    R312.6 Window Well Guards. Window and door wells that extend more than 30 inches below the adjacent grade shall be provided with bars, grilles, covers, screens or similar devices that are designed and listed to resist human impact unless other guards that comply with Section R312 of this Code are provided. Window well guards enclosing emergency escape and rescue openings shall meet the minimum opening area requirement and be operable from the inside of the well without the use of keys, tools, or special knowledge or effort.

38. Amend the Exception in Section R313.1 to read as follows:

    Exception: An automatic residential fire sprinkler system shall be required in accordance with Section 1103.5 of the Glen Ellyn Fire Code where additions, alterations or remodeling of townhouses is performed.

39. Amend Section R313.1.1 to read as follows:

    R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with NFPA 13D standards.

40. Amend Section R313.2 to read as follows:

    R313.2 One-and two-family dwelling automatic fire sprinkler systems. Automatic residential fire sprinkler systems for one- and two-family dwellings shall be designed and installed in accordance with NFPA 13D standards.

41. Amend the Exception in Section R313.2 to read as follows:

    Exception: An automatic residential fire sprinkler system shall be required in accordance with Section 1103.5 of the Glen Ellyn Fire Code where additions, alterations or remodeling of one- and two-family dwellings are constructed.

42. Add new Section R313.3 to read as follows:

R313.3 Existing buildings. Fire sprinkler systems shall be required in accordance with Sections 1103.5.5 through 1103.5.10 of the Glen Ellyn Fire Code where additions, alterations or remodeling of one- and two-family dwellings and townhouses are constructed.

43. Add new Section R328 to read as follows:

R328 Safeguards During Construction.

44. Add new Section R328.1 to read as follows:

R328.1 General. The provisions of this Section shall govern safety during construction and the protection of adjacent public and private properties.

45. Add new Section R328.2 to read as follows:

R328.2 Safety and security fence. The demolition or construction of a principal building or structure, or part thereof, or an excavation over 30 inches deep, with the exception of drilled pier excavations, shall require the installation of a safety and security fence, with a latching gate or equivalent opening, that encloses and secures the work area. The fencing shall be a minimum of 6 feet high and constructed of chain link fabric secured to steel posts not to exceed 8 feet on center or equivalent materials approved by the Building Official. Fence posts shall be driven into the ground, sandbagging of posts is not permitted. The fence shall be maintained in an upright and stable condition and the gate shall be locked at all times the demolition or construction site is unattended.

46. Add new Section R328.3 to read as follows:

R328.3 Tree preservation. Measures to protect public and private trees shall be taken in accordance with Glen Ellyn Village Code Sections 4-8-3 (B) and (C). Tree protection fencing shall be checked daily and maintained according to the approved Tree Preservation Plan; unsecured fabric or unstable posts shall be immediately repaired; a copy of the approved Tree Preservation Plan shall be displayed and maintained at the coordination site in a prominent location visible from the public way and within 5 feet of the property line.

45. Add new Section R328.4 to read as follows: *R328.4 Earth retention systems.* All excavations that cannot be made in accordance with the United States Department of Labor Occupational Health and Safety Administration's (OSHA) requirements for sloping and benching shall utilize an earth retention system designed by an Illinois licensed design professional to protect adjoining property.

47. Add new Section R328.5 to read as follows:

R328.5 Fire safety during construction. A 20-ABC fire extinguisher shall be maintained on the site.

48. Add new Section R328.6 to read as follows:

R328.6 Site Conditions. The site shall be maintained on a daily basis to ensure:

1. Public walks and streets, and adjoining properties, are free from construction gravel, dirt and debris at the end of each workday. Adjacent streets and sidewalks shall be swept clean on a daily basis. No litter shall be placed or allowed to collect in the public rights-of-way at any time.
2. Stockpiled equipment and material shall be kept away from neighboring properties, outside of the side yard setback.
3. Stockpiled material shall not be placed in a manner that affects the natural surface water runoff patterns in a detrimental way to properties upstream or downstream of the site; any stockpile of earth to remain in place for more than three days shall be protected with silt

fence, coir logs, or other perimeter erosion control barrier; stockpiles in place for more than 14 days must be stabilized or covered.

4. Silt fencing and other erosion control measures shall be inspected and maintained according to the approved Site or Site Management Plan, Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan; only clear water may be discharged into the street; muddy water must be filtered; storm sewer inlets shall be protected with filtration devices.

5. A clearly defined, minimum 36-inch wide clear, stable and walkable path between the public right-of-way and the point of construction access shall be maintained at all times to provide access for construction workers, building inspectors, emergency responders and other personnel.

49. Amend Section R401.4.1 to read as follows:

R404.4.1 Geotechnical evaluation. In lieu of a complete geotechnical evaluation, the soil bearing capacity shall be assumed to be 1,500 psf. Where the Building Official determines that in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable soil bearing capacity shall be determined by a soils investigation performed by an approved testing agency.

50. Amend Section R402.1 to read as follows:

R402.1 Wood Foundations. Wood foundations shall not be permitted.

51. Delete Sections R402.1.1 and R402.1.2 in their entirety.

52. Amend Section R402.4 to read as follows:

R402.4 Masonry. Masonry foundations shall not be permitted.

53. Add Section R403.1.1 to read as follows:

R403.1.1 Design. All footing underpinning work shall be designed by an Illinois licensed structural engineer.

54. Add new Section R403.5 to read as follows:

R403.5 Foundations for detached garages. One-story frame detached garages are permitted on trench wall and slab foundations monolithically poured, consisting of a minimum 4" concrete slab, with minimum 6x6-W1.4xW1.4 welded wire fabric reinforcing, on a minimum 4" compacted gravel base, with a continuous thickened minimum 20" wide perimeter edge, and extending down a minimum of 12" below the undisturbed ground surface to undisturbed subsoil. Where applicable, the depth of footing shall also conform to Section R403.1.4.1. Turned down footings shall have not fewer than one No. 4 continuous rebar at the top and bottom of the footing.

55. Add new Section R403.6 to read as follows:

R403.6 Foundations for gazebos and pergolas. Gazebos and pergolas shall be anchored to the ground with any of the following foundation systems:

1. Concrete slab constructed in accordance with Section R403.5.
2. Concrete piers designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.

56. Add new Section R403.7 to read as follows:

R403.7 Foundations for accessory structures. Accessory structures less than 150 square feet in area shall be anchored to the ground with any of the following foundation systems:

1. Concrete slab constructed in accordance with Section R403.5.
2. Concrete piers designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.
3. Helical pile foundations designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.
4. Soil anchor screws designed in accordance with Section R404.4.1 to resist vertical dead and live loads, plus overturning loads due to wind.

57. Amend Section R404.1 to read as follows:

R404.1 Concrete And Masonry Foundation Walls. Concrete foundation walls shall be selected and constructed in accordance with the provisions of Section R404.1.3-2.

Masonry foundation walls shall not be permitted.

58. Within Section R404.1.1 delete the reference to masonry foundation walls.

59. Delete Sections R404.1.2 and R404.1.2.1 in their entirety.

60. Add Section R404.1.2 to read as follows:

R404.1.2 Design. All foundation and retaining wall underpinning work shall be designed by an Illinois licensed structural engineer.

61. Amend Section R404.2 to read as follows:

R404.2 Wood Foundation Walls. Wood foundation walls shall not be permitted.

62. Delete Sections R404.2.1 through R404.2.6 in their entirety.

63. Amend Section 404.4 to read as follows:

404.4 Retaining walls. Retaining walls shall be designed by an Illinois licensed design professional to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning. This Section shall not apply to foundation walls supporting buildings.

Exceptions:

1. Segmental retaining walls that retain less than 48-inches of unbalanced fill with no surcharge load and are designed in accordance with the segmental wall unit manufacturer's written recommendations for design.
2. Retaining walls, other than segmental retaining walls, that are not laterally braced at the top and that retain less than 48-inches of unbalanced fill with no surcharge load.
3. Retaining walls that are less than 24-inches in height that resist surcharge or lateral loads in addition to soil.

64. Add Section 404.4.1 to read as follows:

404.4.1 Surcharge load. The design surcharge load for retaining walls shall be a minimum of 250 pounds per square foot.

65. Add Section 405.3 to read as follows:

405.3 Window wells. Window wells shall be designed for proper drainage by connecting to the building's foundation drainage system required by Section R405.1 or by an approved alternative method.

66. Amend the title of Section R408 to read as follows:

Section 408

Crawl Space

67. Amend Sections R408.1 through 408.7 to replace all references to "under-floor" with "crawl".

68. Add new Section R409 to read as follows:

Section 409

Under-Floor Space

69. Add new Sections R409.1 to read as follows:

R409.1 Ventilation. Under-floor spaces shall be ventilated as required by Sections 408.1 and 408.2 for crawl spaces.

Exception: Under-floor spaces shall not require ventilation where all of the following conditions exist.

1. A concrete slab is installed throughout the entire under-floor space in accordance with Section 506.
2. The perimeter of the concrete slab shall be sealed to prevent water and moisture infiltration into the under-floor space.
3. All floor framing, wall framing, and sill plates supporting the floor above the under-floor space shall be preservative-treated in accordance with Section 317.
4. No water or gas piping shall be permitted to be installed within the under-floor space.
5. The under-floor space shall be fully insulated in accordance with the International Energy Conservation Code.

70. Add new Sections R409.2 to read as follows:

R409.2 Access. Access to under-floor spaces shall not be required.

71. Add new Section R502.1.8 to read as follows:

R502.1.8 Light-Weight Floor Framing. Light-weight floor framing including, but not limited to, wood floor trusses, parallel chord trusses, wood I-beams or joists, box beams, metal web trusses, metal trusses, or bar joists shall be permitted only in dwellings or parts thereof equipped throughout with an automatic fire sprinkler system installed in accordance with NFPA standards.

72. Amend Section R506.2.1 to read as follows:

R506.2.1 Floor systems. Joists framing from opposite sides over a bearing support shall lap not less than 3 inches and shall be nailed together with a minimum three 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the nailed lap is permitted. Lateral restraint shall be provided by blocking between the joists along the length of the bearing support in accordance with Section R502.7.

Exception: The line of blocking may be offset from the face of the bearing support by a distance not greater than the depth of the joist to allow for passage of ductwork, piping and conduits into a wall above.

73. Amend Section R502.7 to read as follows:

R502.7 Lateral restraint at supports. Joists shall be supported at each end and at each point of support by any of the following methods based on the support condition:

1. Solid blocking between joists not less than 2 inches nominal in thickness and not less than 60 percent of the joist depth in accordance with Table 602.3(1), item 29.

2. Attachment to a full-depth header, band or rim joist with metal joist hangers with a depth of not less than 60 percent of the depth of the joists and all fasteners recommended by the hanger manufacturer installed.

3. Attachment to a rim joist in accordance with Table 602.3(1), item 26.

4. Attachment to an adjoining stud with minimum three 10d face nails.

5. Other approved method to prevent rotation of the joist.

74. Amend Section R502.11.1 to read as follows:

R502.11.1 Design. Wood trusses shall be designed in accordance with approved engineering practice, The truss design drawings shall be signed and sealed by an Illinois licensed structural engineer. Each sheet of the design drawings shall be signed and sealed by the design professional. In lieu of signing and sealing each individual sheet of the truss design drawings, the design drawings may include a cover sheet with a sheet index and a statement that the structural engineer's signature and seal applies to all sheets listed within the sheet index. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1.

75. Amend Section R502.11.4 to include the following:

13. Number of plies, if greater than one.

14. Elevation view of each truss designation.

15. Truss placement diagram.

76. Amend Section R502.11.4.2 to read as follows:

R502.11.4.2 Truss placement diagram. The truss manufacturer shall provide a truss placement diagram that identifies the proposed location for each individually designated truss. The truss placement diagram shall be provided as part of the truss submittal package and with the shipment of trusses delivered to the site.

77. Add Section R507.3.2 to read as follows:

R507.3.2 Helical piers. Helical piers shall be designed by an Illinois licensed design professional. The minimum required installation torque shall be indicated on the permit submittal documents and verified by field testing.

78. Amend Section R507.8 to read as follows:

R507.8 Vertical and lateral supports. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to

withdrawal nor shall such attachment be made to any masonry veneer. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. Connections of decks with cantilevered framing members to exterior walls or other framing members shall be designed for both of the following:

1. The reactions resulting from the dead load and live load specified in Table R301.5, or the snow load specified in Table R301.2(1), and the lateral design load specified in Section R301.5.1, acting on all portions of the deck.
2. The reactions resulting from the dead load and live load specified in Table R301.5, or the snow load specified in Table R301.2(1) acting on the cantilevered portion of the deck, and no live load or snow load on the remaining portion of the deck. The lateral design load specified in Section R301.5.1 shall be applied to all portions of the deck.

79. Amend Section R507.9.2 to read as follows:

R507.9.2 Lateral connection. Lateral loads shall be transferred to the ground or to a structure capable of transmitting them to the ground. Where the lateral load connection is provided in accordance with Figure R507.9.2(1), hold down tension devices shall be installed in not less than two locations per deck, within 24 inches of each end of the deck. Each device shall have an allowable stress design capacity of not less than 1,500 pounds. Where the lateral load connections are provided in accordance with Figure R507.9.2(2), the hold-down tension devices shall be installed in not less than four locations per deck, and each device shall have an allowable stress design capacity of not less than 750 pounds.

Exception: Lateral load connections shall not be required for decks that are less than 30 inches above grade level at all points along the perimeter of the deck.

80. Amend Section R507.5.2 to add the following Exceptions:

Exceptions: Double-bolted beam to post connections shall not be required when any of the following conditions exist:

1. Posts supporting beams are embedded a minimum of 24 inches into concrete piers which are extended to frost. The minimum diameter of the pier foundation shall be not less than the 2 times the nominal dimension of the post.
2. Wood braces are installed each side of beam to post connections. Braces shall be of same dimension as the post and anchored with a minimum of two ½-inch diameter lag screws a minimum of 24 inches horizontally and vertically from the point of the beam to post connection.
3. Any other approved method.

81. Amend Section R801.3 to read as follows:

R801.3 Roof Drainage. All dwellings shall have a controlled method of water disposal from roofs, consisting of gutters and downspouts or equivalent means, which will collect and discharge roof drainage to the ground surface at least 5 feet from the foundation walls or to an approved drainage system.

82. Amend Section R802.10.1 to include the following:

13. Number of plies, if greater than one.
14. Elevation view of each truss designation.
15. Truss placement diagram.

83. Amend Section R802.10.1.1 to read as follows:

R802.10.1.1 Truss placement diagram. The truss manufacturer shall provide a truss placement diagram that identifies the proposed location for each individually designated truss. The truss placement diagram shall be provided as part of the truss submittal package and with the shipment of trusses delivered to the site.

84. Amend Section R802.10.2 to read as follows:

R802.10.2 Design. Wood trusses shall be designed in accordance with approved engineering practice, The truss design drawings shall be signed and sealed by an Illinois licensed structural engineer. Each sheet of the design drawings shall be signed and sealed by the design professional. In lieu of signing and sealing each individual sheet of the truss design drawings, the design drawings may include a cover sheet with a sheet index and a statement that the structural engineer's signature and seal applies to all sheets listed within the sheet index. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1.

85. Amend Section G2406.2 item 4 to read as follows:

4. A single wall-mounted unvented room heater is installed in a bedroom and such unvented room heater is equipped as specified in section G2445.6 and has an input rating not greater than 10,000 Btu/h (2.93 kW). The bedroom shall meet the required volume criteria of section G2407.5 and be provided with a carbon monoxide detector that is listed, labeled and complies with the standards of an approved testing agency.

86. Delete Section P2501.1 in its entirety and substitute the following:

P2501.1 Scope. The design, construction, installation, alteration, repair and maintenance of plumbing systems and their components shall comply with the standards and regulations established in the Illinois Department of Public Health Plumbing Code as currently adopted.

87. Delete Section P2501.2 in its entirety and substitute the following:

P2501.2 Structure Protection. In the process of installing or repairing any part of a plumbing and drainage installation, the structural framing members shall not be cut, bored or notched beyond the limitations in this Code unless restored to a safe structural condition in accordance with the building requirements in this Code.

88. Add new Section P2501.3 to read as follows:

P2501.3 Piping Protection. In concealed locations, where piping, other than cast iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1-1/2 inches from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than .0575 inch (no. 16 gauge). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 2 inches above sole plates and below top plates.

89. Add new Section P2501.4 to read as follows:

P2501.4 Through Wall Protection. Any pipe that passes through a foundation wall shall pass through a pipe sleeve of a greater size that allows the installation of a sealant in accordance with the sealant manufacturer's specifications. All annular spaces between sleeves and pipes shall be filled and water sealed in accordance with the building requirements in this Code or as approved by the Building Official.

90. Add new Section P2501.5 to read as follows:

P2501.5 Tank Leak Protection. Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a material thickness of not less than .0236 inch (no. 24 gauge) or other pans approved for such use. Listed pans shall comply with CSA LC3. The pan shall be not less than 1-1/2 inches deep and drained by an indirect waste pipe having a minimum diameter of ¾-inch and terminate over a suitably located indirect waste receptor or shall extend to the exterior of the building and discharge not more than 24 inches or less than 6 inches from grade. A leak protection pan shall not be required if a water heater tank is located on a concrete floor on grade and a floor drain is provided on the same floor level.

91. Delete Section P2502 in its entirety.

92. Delete Section P2503 in its entirety.

93. Delete Chapters 26, 27, 28, 29, 30, 31, and 32 in their entirety.

94. Delete Chapters 34, 35, 36, 37, 38, 39, 40, 41, 42, and 43 in their entirety.

95. Appendix F, RADON CONTROL METHODS, of the 2018 ICC International Residential Code, is hereby adopted as part of this Code.

96. Amend Section AF101.1 to read as follows:

    AF101.1 General. The provisions of this appendix shall control the design and construction of radon mitigation systems for new construction. All new construction, including one- and two-family dwellings and townhouses, and additions and new basement remodeling thereto shall include a radon mitigation system.

(Ord. 5995, 5-14-2012; Ord. 6603, 5-29-2018)

Attachment IRC-4
Major changes to the International Residential Code
2012, 2015 and 2018 Editions

The following is an overview of major changes that have occurred in the International Code Council's *International Residential Code* 2012, 2015 and 2018 editions. The information provided comes from a variety of sources, including:

- *International Residential Code* 2012, 2015 and 2018 editions. Additions and deletions of code sections within each publication are identified in the margin adjacent to or between code sections.
- *Significant Changes to the International Residential Code* 2012 and 2018 Edition.
- International Code Council seminars on *International Residential Code* updates.
- Evaluations performed by other municipalities if available.

Items determined to have greater impact on the maintenance of existing buildings and properties within the Village are highlighted in yellow.

2012, 2015 and 2018 International Residential Code			
Code Year	**Amendment** New, Change or Addition	**Cost Impact** Decrease Increase Unknown	**Description**
2012	Change	Decrease	Table R302.1(2) When a sprinkler system is installed the 2012 IRC permits non-rated walls that are that are less than 3 feet from the lot line, this 3-foot dimension is the new threshold for exterior wall construction, projections, openings and penetrations. For dwellings without sprinkler systems, the 5-foot separation distance identified in the 2009 IRC still applies. Footnote allows unrated walls of dwellings equipped with sprinkler systems to be placed on the lot line if all dwelling in the subdivision are equipped with a sprinkler system and the adjacent lot maintains a 6-foot setback for buildings on the opposite side of the lot line. Under these conditions, openings and penetrations are unrestricted, but projections that are less than 2-feet from the lot line still require 1-hour protection on the underside. This provision allows flexibility in placing buildings on the lot for maximum effective use of the buildable area while still maintaining minimum 6 feet of clearance between buildings.
2012	Change	Unknown	Table R301.5 Minimum Uniformly Distributed Load. Modification. Attics other than habitable attics are now labeled as uninhabitable attic for consistency with the 2010 edition of the ASCE 7-10 Minimum Design Loads for Buildings and Other Structures.

2012	New	Increase	R302.5.1 Garage opening protection, doors between garage and dwelling require self-closing devises.
2012	Change	Unknown	R303.5 and P3103.5 Ventilation intake openings, the minimum vertical clearance between a contamination source and an outdoor air intake below has increased from 2 feet to 3 feet.
2012	Change	Unknown	R308.4.6 Glazing adjacent to stairs and ramps. For glazing that is not considered to be in a hazardous location the rule for the minimum height above tread at the side of stairway is now 36 inches to correspond to the height of a guard as previously found in the exception. Other revisions to the text clarify the meaning and application of the glazing requirements at stairways.
2012	Change	Unknown	R308.4.7 Glazing adjacent to the bottom stair landing. The provisions for glazing installed near the landing at the bottom of a stairway has been revised to clarify the application. The threshold for the minimum height above the walking surface is now 36 inches for determining that the glazing is not a hazardous location.
2012	New	Unknown	R314.5 Interconnection. The code now specifies wireless technology in lieu of interconnection for smoke alarms installations in both new and existing dwelling units. The interconnection provisions have been moved out of the sections related to location and power source and places in new section R314.5.
2012	New	Increase	R501.3 Fire protection for floors. With some exceptions (solid lumber 2x10 or larger) the code now requires ½ inch gypsum board or equivalent material to the underside of the floor assemblies in buildings regulated by the IRC.
2012	New	N/A	R507 Exterior decks. This is a new section for consolidating all exterior deck information in one location.
2012	New	Unknown	R602.1.1. End joint lumber. End jointed lumber, commonly called finger joints, used in fire rated assemblies must have HRA (Heat Rated Adhesive) on the grade mark.
2012	Change	Unknown	R802.11.1 Roof uplift resistance. The provisions for roof connections to resist wind uplift forces have been updated to current standards and simplified for ease of use. Table R802.11 has been replaced to provide accurate values for both low and high and low slops roofs in Wind Exposures Categories B and C.

2012	New	Unknown	R1005.7 Factory built chimney offsets. Factory built chimney assemblies must be installed vertically with offsets greater than 30 degrees. No more than four elbows are permitted within the entire length of the chimney assembly.
2012	Change	Decrease	M1502.4.2 Duct installation. The maximum support spacing for dryer exhaust ducts has increased from 4 feet to 12 feet. Dryer exhaust ducts now specifically require mechanical fastening. Screw fasteners are permitted to penetrate the exhaust duct no more than 1/8 inch. The maximum specified length of dryer exhaust duct has been increased from 25 to 35 feet and now matches the corresponding dryer exhaust provisions of the IMC, IFGC, and the IRC fuel-gas provision.
2012	New	Unknown	M1506 Exhaust Openings. Minimum clearance between air exhaust terminations and openings into the building have been introduced into the IRC.
2015	New	Unknown	R308.4.7 Glazing adjacent to the bottom stair landing. Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60-inch horizontal arc less than 180 degrees from the bottom tread nosing shall be considered to be a hazardous location unless protected by a guard.
2015	New	Decrease	R310.6 Alterations or repairs of existing basements. An emergency escape and rescue opening is not required where existing basements undergo alterations or repairs. Exception: New sleeping rooms created in an existing basement shall be provided with emergency escape and rescue openings in accordance with Section R310.1.
2015	Change	Unknown	R315 Carbon Monoxide Alarm. Has been rewritten to provide more detail for alarm and detector, minimal cost impact per NAHB.
2015	Change	Decrease	R403.1.1 Minimum size of footing. Table of footings has been replaced with an expanded, engineered based, table that reduces the minimum footing width for common one- and two-story dwelling foundations.
2015	Change	Unknown	R404.1.1 Revises retaining wall definition and provision and requires foundation wall to be supported at both the top and bottom prior to backfilling.
2015	Change	Unknown	R507.1 Decks. Changes include new floor joist and beam span tables, allowable post sizes and construction details and alternative to lateral connection.
2015	Change	Increase	R602.3(1) Fastening schedule for structural members. Schedule has been significantly revised, in most cases the minimum number of box nails increased by one.

2015	New	Increase	R602.7.5 Full height stud is required on each end of header and one additional full height studs required when header span increases to 10 feet.
2015	Change	Decrease	R602.10.3(1) Bracing requirements based on wind speed. Tables have been expanded; commentary indicates that a range of engineering fees could be saved if braced walls for irregular shaped dwellings designs do not require engineering.
2018	Change	N/A	Definitions added or modified include access to, readily accessible, ready access to, clean out, crawl space, carbon monoxide detector, carbon monoxide alarm, habitable attic, vertical fenestration, slights and slope glazing, solar energy system, solar thermal collector, solar thermal systems.
2018	Change	N/A	R301.2(1) IRC now requires that the jurisdiction to establish the applicable design criteria based on local data related to Manual J and sizing of HVAC equipment. Allows for consistency in design proposals.
2018	Change	Unknown	R302.2 Townhouses. Code modification now provides two paths for achieving fire-resistant separations between townhouse dwelling units, either by constructing two one-hour fire-resistant rated wall assemblies or by constructing a common wall that is rated for fire exposure on both sides.
2018	New	Increase	R302.5. Dwelling-garage opening protection. Code now allows automatic closing devices, similar to what is seen in commercial construction, where there is an electro-mechanical hold open device that is activated by the fire alarm.
2018	New	Increase	R302.13 Fire protection of floors. Fire-resistant membrane (i.e., gypsum board or equivalent) is now required on floor farming above a crawl space containing fuel-fired or electric powered heating appliance.
2018	Change	N/A	R308.4.7 Glazing adjacent to the bottom stair landing. This issue has been clarified with a new diagram.
2018	Change	Decrease	R310.1 Emergency escape and rescue opening required. If an automatic fire sprinkler system is installed in the dwelling the emergency escape and rescue opening is no longer required in the bedroom but is still required in the remaining space of the basement.
2018	Change	Increase	R314.2.2 Alterations, repairs and additions. The exemption for interconnected smoke alarms during alterations based on feasibility has been removed, if a permit is required smoke detectors are required.
2018	Change	Increase	R315.2.3 Alterations, repairs and additions. If more than one carbon monoxide detector is required in the dwelling (i.e., bedrooms on 2nd floor and basement) they shall be interconnected.

2018	New	Unknown	R317.3.1 Fasteners for preserved treated wood. Fasteners used on preserved treated or fire-retardant treated wood shall be per the manufacture's specifications.
2018	New	N/A	R324 Rooftop photovoltaic systems. Roof mounted solar panel information has been consolidated to this one section (not necessary to adopt the Solar Provisions Code 2018). Items consolidated include structural requirements, live load, dead load wind load, roof access and pathways, ridge setback as well as a new section to address emergency escape and rescue opening access.
2018	Change	Unknown	R325.3 Are limitations. Mezzanine area has increase from 1/3 to 1/2 of room below.
2018	Change	N/A	R325.6 Habitable attic. Definition has been expanded so that it is not considered a story when complying with four requirements.
2018	New	N/A	R505 Exterior deck. This section was first assembled in the 2012 edition and has been reorganized for ease of use. Modifications were made to sections: R507.2.1 Wood material; R507.2.2 Engineered wood products; R507.2.2.5 Fasteners and connectors; R507.4 Flashing;R507.3 Footings size and depth; R507.4 Deck posts; R507.5 Deck beams; R507.6 Deck joists; R507.7 Decking.
2018	Change	Unknown	R610 Structural insulated panels. Modification made to address panel to panel connection, corner framing and thermal barrier.
2018	New	Increase	R703.2 Soffit installation. Minimum standard has been set for plywood and vinyl soffit materials, this was due to widespread water damage during hurricane Charley when wind swept rain damaged attic and wall insulation.
2018	Change	N/A	R802 Roof framing. This section has been reorganized and modifications have been made to: R802.2 design and construction; R802.3 Ridge; R803.4.1 Rafter sizing; R802.4.2 Framing detailsR802.4.3 Hip and valley; R802.4 Rafter support; R802.26 Collar ties; R802.5 Ceiling joists; R802.5.1 Ceiling joist span; R802.5.2 Ceiling joist and rafter connections. R802.5.2.1 Ceiling joist lapped, R802,5.2.2. Rafter ties, R802.5.2.3 Blocking.
2018	New	Increase	R905.1.1 Underlayment requirements for photovoltaic shingles. Number of layers vary depending on slope of roof.

2018	New	Increase	R905.17 Building integrated photovoltaic panels. This is a new section addresses required slope of roof, deck requirements, underlayment, ice barrier, material, attachment and wind resistance.
2018	New	Unknown	R1005.8 Chimney insulation shields. Provides specifications for material thickness, height, fastening and clearances.