

Building Commission Meeting
Wednesday, June 19, 2019 - FINAL
6:00 PM
Glenview Village Hall

1. Call to Order, Chairman Heaney called for a motion to open the meeting - 1st - Commissioner Lindsay. 2nd - Commissioner Means. Vote - All in Favor - 3-0.
2. Roll call and declaration of a quorum - 6:15 pm
 - a. Commissioners in attendance:
 - i. Jeff Heaney - Chairman
 - ii. Eric Means
 - iii. Thomas Lindsay
 - iv. Greg Wozniak - arrived at 6:20 pm
 - b. Commissioners absent/ vacant:
 - i. Vacant seat - Previously - Brown
 - c. Also present:
 - i. Joe Footlik - Inspectional Services Manager
 - ii. Helen Wiseman - Plan Review Manager, Acting Secretary
3. Minutes - June 5, 2019 - Motion to approve the minutes as presented. 1st Commissioner Means, 2nd Commissioner Lindsay. Vote - All in favor: 3-0. Commissioner Wozniak abstained since he did not attend meeting last week.
4. General communications - Ms. Wiseman reviewed the open meetings act requirements related to emails with the Chairman and Commissioners. Ms. Wiseman distributed the example of a lateral bracing design which Commissioner Means provided via email to the Commissioners for an example. Commissioners began discussing the example. Commissioner Means stated that this example of a lateral bracing design was pretty straight forward. The client later determined that he wanted Commissioner Means 9 (a Structural Engineer) to provide calculations for Steel Beam design. He added that the Sunroom did not have enough walls and therefore required steel in the wall to taken the loads for bracing. Discussion ensued, that the Commissioner who were not Structural Engineers did not want to hire and Structural Engineer on each project. Commissioner Means stated that the code provides a prescriptive package method which would not require a Structural Engineer's Design, however, this example was from a different Village where the staff requires back up documentation for all bracing designs. Commissioner Means explained that the sunroom which does not have walls to be able to resist the load needed a steel frame designed. Commissioner Lindsay asked why wood would not work. Commissioner Means stated that the twisting at the connection was a problem. Ms. Wiseman asked if it needed a moment connection rather than a pinned one. Commissioner Means responded affirmatively and stated that the wood post did not have sufficient rigidity. The connection did not have appropriate strength to transfer the load. He stated that 16 inch by 16 inch corners would have worked. Commissioner Lindsay stated that these details have been done for centuries and nothing has blown over. Commissioner Means stated that he saved the client a lot of money by designing and putting plywood everywhere else. Commissioner Lindsay stated that the client was probably going to put plywood everywhere anyway. Commissioner Means stated that he used gypsum board in the middle of the home for the design. He added that the code states certain length walls are required for gypsum board and for plywood. The example is a Winnetka home example. He added that in Wilmette he must also provide a calculation package. Chairman Heaney stated that he will need to advise his clients that if he is quoting work in Palatine or Wilmette, they should prepare for a heavy fee. Commissioner Means stated that he has been providing a similar package in Lake Forest for 8 years. Commissioner Lindsay stated that he feels the bracing item should be handled the same was a sprinklers, pulling it from the code and

offering an alternate prescriptive package design. Commissioner Means stated that the code is offering a prescriptive design. He added that in days of old plywood bracing was provided at corners of homes. Now, architects are designing homes without corners and windows all the way to the corners and all over. He added that homes are no longer designed with 8 ft. ceilings and more windows. Commissioner Lindsay asked how many homes are problem homes? Commissioner Means responded 1 per month. He stated that generally drywall and windows have failed. Commissioner Wozniak stated that to him the responsibility belongs to the Architect to design the home and not to the building code. Commissioner Lindsay stated that he would like to the code to address problems and not just increase requirements. Commissioner Means stated that previously the code required corner bracing at each corner 4 ft. wide in plywood and every 24 ft. thereafter. The Architect is now designing 18 inch wall lengths / shorter wall lengths necessitating the rearranging of bracing walls to accommodate the loads. He reiterated that homes have gotten taller with more windows. Commissioner Lindsay stated that he knows of plenty of 9 and 10 ft. story height homes. Commissioner Means added that most homes in Glenview are traditional. Homes with more glass and less walls rack. Commissioner Wozniak stated that houses should not act like this. These are bad designs. Commissioner Lindsay stated that this reminds him of the overkill of the plumbing. There is a cost to do this. He added that he understands portal framing, but, have never had a garage fail. Commissioner Wozniak stated that construction costs have gone up 25% in the last 5 years. These costs are attributed to labor, materials, code changes (specific examples are; Energy Code and Electrical Code changes). He added that we need to be careful where we have costs added. Commissioner Means stated that he does not think you can find an easier method that the cook book method that the code offers. Chairman Heaney stated that he feels the Village should not go the direction of Palatine or Wilmette. He believes in sheathing the entire home in ½ inch plywood. Commissioner Means stated that this is an option that is available in the code now and going forward. Chairman Heaney stated that a contemporary home with all glass will not work and must be specially designed. Commissioner Wozniak asked is this a responsibility of the code or the Architect? Commissioner Lindsay stated he proposes that ½ plywood or structural OSB (oriented strand board) be provided full perimeter. We can even provide fastener requirements sizes. We can make an exception for all glass homes. If Safebuilt says they must have all the information for this aspect per their legal department, we can figure out an exception or two or three. Ms. Footlik added that this is what the code is doing. Chairman asked why Wilmette is doing this then? Commissioner Means responded that they are asking you to prove it. Mr. Footlik asked Commissioner Lindsay about the proposal saying in your example the perimeter of the home would be ½ inch thick structural sheathing except the 12 inch corners. He added that the code is already addressing that when you have a design with all this glass. Commissioner Lindsay stated a prescriptive package option. Commissioner Means added that you are increasing the cost by requiring plywood throughout. Commissioner Lindsay stated that sheathing a home full perimeter in plywood is typical. Commissioner Means stated that he does not think you will find a better design to substitute the code with. Commissioner Lindsay stated that we have done that based on older codes. Previous design took hours, now, three years later another change. Commissioner Means added that the proposed code change in 2018 is easier than the past code version though. Commissioner Wozniak stated that Architects want to use prescriptive package options. Commissioner Means reiterated this is a prescriptive package option and we are considering throwing a red flag up in Glenview. Ms. Wiseman added that the bracing design was a prescriptive package introduced in the 2006 code which was adopted and continued in the codes since then. Commissioner Means stated that now the code change includes portal frame with a 2 x the benefit given. Another option would be to provide a Simpson proprietary Shear Wall design but it is costly. He stated that he would suggest Architects

to provide the continuous sheathing method. It is the easiest method in the IRC (International Residential Code) and allows you to go 10 ft. off the corners and then provide shear walls. The building code is very accommodating. From 2006 IRC to 2018 IRC it has gotten better and easier. Mr. Footlik asked if the 2018 IRC code has increased the costs of buildings? Commissioner Means answered No. Construction cost have gotten less expensive and easier to design. It has made the design more accommodating. Commissioner Wozniak asked for a traditional home, what is the cost? Commissioner Means responded, the same. Commissioner Lindsay asked Commissioner Means what the cost would be for e bracing design such as the example he provided. Commissioner Means responded \$1,000.00 fee. For the additional steel frame design the client wanted, it was an additional, \$600.00 to \$800.00. Mr. Footlik reconfirmed, so, for 98% percent of the homes, this code change will not increase the cost of homes. Commissioner Means responded correct. Commissioner Wozniak stated that he is concerned and that we need prescriptive options. Ms. Wiseman stated that the code methods are prescriptive. Mr. Footlik stated that some builders still use foam sheathing. Commissioners expressed concern about structural designs on each home. Commissioner Means stated that some Villages just want the proof. Commissioner Wozniak asked if staff would have concerns that requirements will come in to prove? Mr. Footlik responded that he thinks the code covers the prescriptive package options. Commissioner Means stated that Park Ridge is making you prove what is in the IRC. Mr. Footlik responded that Glenview understands that people do not want perfect plan reviews, they want fast plan reviews. Commissioner Means stated that if it is a crazy house, it should be flagged. Mr. Footlik stated that there should be consistent administration of the codes. If not kept consistently administered, there could be claims of discrimination etc. Commissioner Wozniak stated that he is comfortable moving forward. Chairman Heaney stated he is comfortable too. Commissioner Wozniak stated that it appears other Villages are using energy to create bureaucracy and not building better homes. Ridiculous. Mr. Footlik added that other villages may not review like we are and just adopt the codes as is. Commissioner Lindsay stated that an example of Glenview handling of code review is our evaluations of the sprinkler requirement and options. Mr. Footlik added that he spoke to Ron in Northfield about our amendment for other options. Northfield supported it and plans to mirror it. The Village has gotten nothing, but, compliments on how the Commission recommended handling this code aspect. He added that a lot of towns now follow what Glenview has done. ISO's (The Insurance Services Office) evaluation of building departments is another reason Villages update codes. Insurance rates are based on evaluations of Building Department's Certifications, adopting current codes, etc. This goes back to Hurricane Andrew. Commissioner Means asked what would be the case if building in Cook County. Chairman Heaney responded that 2009 IRC is applicable in Cook County. Chairman Heaney stated that he is good with the code as updated. Chairman Heaney asked if the Commission can now move on. Commissioners all agreed.

5. Pending Business:

- a. Meeting schedule confirmation – Ms. Wiseman asked the Commissioners if the next few meeting dates in July may be confirmed. All Commissioners but Commissioner Wozniak confirmed their availability for the 7/17 meeting. All Commissioners but Commissioner Means confirmed their availability for the 7/31 meeting. Ms. Wiseman reminded the Commissioners that in order to meet on both dates with a quorum, the remaining Commissioners would need to be in attendance on both 7/17 and 7/31. The Commissioners decided to leave the confirmation of August meeting dates for at a future meeting. Further discussion confirmed an August 7th date would work for all Commissioners if the choice is to add another meeting. Schedule will be revisited at the next meeting.

- b. Commissioners continue the review of remaining sections of Part 3 beginning with Section R802 2015 page 192 and 2018 page 160 in the Significant Code Changes books where they left off at the last Commission meeting.
- ✓ **IRC Part 3** – 2018 – R802 – Roof Framing – Modification – Commissioner Means stated that the change is a result of changes to the span tables for framing. Chairman Heaney added that our forests are getting younger and younger and consequently weaker. Commissioner Means stated that the rule of thumb he uses for 2 x 10 floor joists is a 14 ft. 9 inch span for 40 pds. per square foot live load and a 15 pd. per square foot dead load. Commissioner Lindsay asked why the tables for Ceiling Joists in the IRC stop at 2 x 10s and do not have 2 x 12s. Commissioner Means responded that he did not know why. He added that many times he has had to use 2 12s for spans. Chairman Heaney stated that he has no problem with this section. Commissioner Lindsay agreed that he had no problem with this section. All Commissioners agreed to retain this section.
 - ✓ 2018 – R802.1.5.4 – Labeling – Modification – Chairman Heaney stated that labeling is necessary. All Commissioners agreed to retain this section.
 - ✓ 2015 – Table R802.4 and Table R802.5 – Ceiling Joists and Rafter Tables - Modification – All Commissioners agreed to retain this section.
 - ✓ 2015 – Table R802.4 and Table R802.5 – Ceiling Joists and Rafter Tables - Modification – All Commissioners agreed to retain this section.
 - ✓ 2015 – R806.1 – Attic ventilation – Deletion – Commissioner Lindsay stated that he has become a fan of spray insulation at the underside of the rafters and not insulating the ceiling joists. Mr. Footlik stated that this is the way to go. Chairman Heaney stated that he has provided projects this way as well. Commissioner Lindsay stated that with this design the attic become tempered space. Commissioner Wozniak stated that he does not built conditioned attics, but, they do design the furnace to be in the attic. Commissioner Lindsay listed some advantages including; no duct insulation, No soffit vents, no ridge vents, knocks down the cost if a tempered attic. Commissioner Means stated that he was able to reduce the R Value of the roof insulation at his home with the cathedral ceiling setup (R49 to R38). Commissioner Lindsay continued that there are more places for a reduction in cost – HVAC can be downsized with everything being conditioned space. The worst part - the loss of heat is gone. Mr. Footlik stated that in theory the attic is the same temperature as outside air. This take the attic mold issue out of play. Commissioner Means added that there would be no ice damns either. Commissioner Lindsay stated that a lot of the time the insulation is batt insulation. The insulation tends to settle down and it much less efficient. Commissioner Wozniak added that closed cell insulation is very expensive. All Commissioners agreed to retain this section.
 - ✓ 2018 – R802.6 – Minimum Vent Area – Modification - All Commissioners agreed to retain this section.
 - ✓ 2018 – R806.5 – Unvented Attics – 2015 – Table R806.5 – Insulation for Condensation Control in Unvented Attics – Modification - All Commissioners agreed to retain this section. With regard to 2018 R806.5, Commissioner Lindsay asked about Zone 5 (which Glenview is located in). Ms. Wiseman responded that the Zone 5 references are noted as unchanged. All Commissioners agreed to retain this section.
 - ✓ 2015 – R905.1.1 Underlayment and 2018 – Tables R905.1.1 (1) and R905.1.1 (2) Underlayment Requirements for Photovoltaic Shingles – Modification – Commissioner Means stated that the tables changed the wind speed

terminology again. The noted 140 mph does not apply unless there is a hurricane (less than 140 mph. here). Commissioner Lindsay stated that the section includes photovoltaic and he has no problem with that. All Commissioners agreed to retain this section.

- ✓2015 – R905.7.5 – Wood Shingle Application – Modification – Commissioner Means noted that the code wants $\frac{3}{4}$ inch sheathing. Commissioner Lindsay stated that all sheathing should be 4 ply now. All Commissioners agreed to retain this section.
- ✓R2015 – R905.8.6 – Wood Shake Application – Modification – Commissioner Means asked what the difference was between wood shingles and wood shakes? Chairman Heaney responded that wood shingles are thicker. All Commissioners agreed to retain this section.
- ✓2015 – R905.16 – Photovoltaic Shingles (Modification), 2015 – R907 – Rooftop-Mounted Photovoltaic Systems (Addition), and 2018 - R905.17 – Building Integrated Photovoltaic Panels (Addition) - All Commissioners agreed to retain this section.
- ✓2018 – R1005.8 – Chimney Insulation Shield – Addition - All Commissioners agreed to retain this section.

6. New Business:

- a. Commissioners continue the review of the IRC (International Residential Code) beginning in Part 5 Section R802 2015 page 192 and 2018 page 160 in the Significant Code Changes books where they left off at the last Commission meeting. **IRC Part 4** – Energy Conservation was skipped since the State of Illinois mandates compliance with a version of the International Energy Conservation Code which is amended by the State of Illinois and is mandated to be enforced by Glenview.

- ✓**IRC Part 5** – 2018 – M1305.1.1 – Access to Furnaces within Compartments – Deletion – Chairman Heaney still noted that the section referred to per manufacturer’s specification. All Commissioners agreed to retain this section.
- ✓2018 – M1305.1.3.2 – Appliances in Pits – Modification – Commissioner Lindsay stated that he was in favor of this section although he could not think of an instance that it would apply. Ms. Wiseman mentioned may a crawl with a furnace where the crawl was deepened to allow vertical clearance. All Commissioners agreed to retain this section.
- ✓2018 – M1502.3.1 – Dryer Exhaust Duct Termination – Modification – Chairman Heaney stated that if one could get a standard duct part than he supports. Commissioner Lindsay stated he supports the change. All Commissioners agreed to retain this section.
- ✓2018 – M1502.4.2 – Concealed Dryer Exhaust Ducts – Modification – Chairman Heaney stated that a deformed dryer vent would not be allowed. Makes sense. He asked in Commissioner Wozniak would have an issue with this. Commissioner Wozniak responded No, that he would not. Mr. Footlik added that from an inspection standpoint a crushed vent would need to be changed. Oval shaped would not be a problem. A problem may exist if a screw is put through it or if lint collects and causes a fire. All Commissioners agreed to retain this section.
- ✓2015 – M1502.4.4 and M1502.4.5 – Dryer Exhaust Duct Power Ventilators – Addition – Mr. Footlik stated that this section is interesting since he has seen dryers that are exhaustless, catch moisture and run it to a drain. Commissioner Lindsay asked what happens with the lint? Mr. Footlik

- responded that he does not know. It is a European model. All Commissioners agreed to retain this section.
- ✓2015 – M1502.4.6 – Dryer Duct Length Identification – Modification – A Commissioner asked about the label requirement. Ms. Wiseman responded that this changes makes the label no longer required of less than 35 ft. in length of duct. All Commissioners agreed to retain this section.
 - ✓2018 – M1503 – Domestic Cooking Exhaust Equipment – Modification - All Commissioners agreed to retain this section.
 - ✓2015 – M1503.4 – Make-Up Air for Range Hoods – Modification – Mr. Footlik stated that he is so glad ICC (International Code Council) took this requirement out of the code. Commissioner Lindsay added that it makes no sense creating holes in the roof for no reason. Most first floors are open anyway. Commissioner Wozniak stated that the right way is a motorized damper. This is expensive though. All Commissioners agreed to retain this section.
 - ✓2018 – M1503.6 – Make Up Air for Kitchen Exhaust Systems – Modification - All Commissioners agreed to retain this section.
 - ✓2015 – M1506.2 – Exhaust Duct Length – Addition - All Commissioners agreed to retain this section.
 - ✓2015 – M1601.1.1, Table M1601.1.1, and M1601.2 – Above-Ground Duct Systems – Modification - All Commissioners agreed to retain this section.
 - ✓2018 – M1601.1.2 – Underground Duct Systems – Modification – Mr. Footlik asked the Commissioners if they would expect that Manual J calculations be a part of submittal requirements. Commissioners responded, yes. General rule is to make sure there are returns on all sides. Mr. Footlik added since it was brought up I will provide a heads up related to hot water. The State of Illinois will be requiring Temperature Relief Valves. This requires a tempering device to be placed where hot water comes out of pipe. Children are getting scalded. Chairman Heaney stated that they should make the Hot Water Heater have a maximum temperature. Chairman Heaney mentioned that talking to the Congressman or State Representative may have an impact. Commissioner Lindsay expressed that this reminds him of building homes in 1994 when existing homes had a maximum water service of ¾ inch and the State Code required sizable water services – 2 inch was mentioned. Mr. Footlik stated that initially Glenview followed the State Code, then went to the State with amendments to reduce the service size required advising the State that Glenview would be following our amendments. All Commissioners agreed to retain this section.
 - ✓2015 – M1601.4 Duct Installation – Modification – Mr. Footlik stated that this section was requiring duct tape to be UL Listed. All Commissioners agreed to retain this section.
 - ✓2015 – M1602 – Return Air – Modification - All Commissioners agreed to retain this section.
 - ✓2018 – M1901 – Ranges and Ovens – Clarification - All Commissioners agreed to retain this section.
 - ✓2018 – M2101.0 – Hanger Spacing for PEX Tubing – Modification - All Commissioners agreed to retain this section.
 - ✓2018 – M2101.10 – Pressure Tests for Hydronic Piping – Modification - All Commissioners agreed to retain this section.
 - ✓2018 – M2103.2 – Thermal Barrier for Radiant Floor Heating Systems – Modification - All Commissioners agreed to retain this section.

- ✓2018 – M2301 – Solar Thermal Energy Systems – Modification - All Commissioners agreed to retain this section.
 - ✓**IRC Part 6** – Fuel Gas – Mr. Footlik stated that he had reviewed the entire chapter. All the modifications made sense to him. The Commissioners agreed to retain this section.
 - ✓**IRC Part 7** – Plumbing Section P2904 Only – Fire Sprinklers – As a point of clarification, the State of Illinois mandates the enforcement of the current State Plumbing Code which Glenview currently has State Approved Amendments to. Ms. Wiseman confirmed that neither the 2015 nor the 2018 had changes or modifications. The Commissioners confirmed that the Amendments that currently exist from the 2012 adoption should be carried over to the 2018 code version.
 - ✓ **IRC Part 8** – The electrical chapters of the IRC do not apply since Glenview has adopted the National Electric Code 2011 with amendments. Mr. Footlik stated that Glenview may evaluate the update of the Electrical Code at a future time.
 - ✓The Commissioners discussed the possibility of adjourning the meeting, but, decided to continue progressing through the IRC (International Residential Code) to complete its review this evening.
 - ✓**IRC Part 9** – Commissioners turned to page 318 in the 2015 Significant Changes book and page 295 in the 2018 Significant Change book.
 - ✓**IRC Part 9** – 2018 Appendix Q – Tiny Houses – Addition - All Commissioners felt that this section should be eliminated pending determination by the Plan Commission /Zoning Ordinance to address such housing types. This construction type to be prohibited at this time.
 - ✓2015 and 2018 – Appendix R – Light Straw Clay Construction – Addition (2015) and Modification (2018) – Generally a construction type used in the West, all Commissioners felt that this section should be eliminated with a statement that it is prohibited in Glenview.
 - ✓2015 and 2018 – Appendix S – Strawbale Construction - Addition (2015) and Modification (2018) - Generally a construction type used in the rural southwestern States, all Commissioners felt that this section should be eliminated with a statement that it is prohibited in Glenview.
 - ✓2018 – Appendix T – Solar Ready Zone – Modification – Commissioner Lindsay asked if there was a definition of Solar Ready. Ms. Wiseman responded that the IRC code as it stands does not contain a definition of Solar Ready. Commissioner Lindsay stated that it could be kept in or taken out. Ms. Wiseman stated that the Village has issued permits for existing solar systems. At this time, in the next room, there is a meeting going on to review solar energy systems company programs and present the options to the residents. The Commissioners agreed to retain this section as an appendix to the code.
- b. Review and discussion of the International Building Code (IBC) continued to the next meeting on 6/26/ 2019 at 6:00 pm.
7. Discussion – Commissioner Lindsay asked if staff can provide a list of the items to be revisited from discussion from the IRC (International Residential Code). Ms. Wiseman responded that this can be prepared.
8. Adjournment -
 Close Meeting. Chairman Heaney asked for a motion to adjourn the meeting. 1st – Commissioner Means. 2nd – Commissioner Lindsay. All in favor – 4-0. 8:20 pm