DIVISION OF BUILDING SAFETY

IDAHO BUILDING CODE BOARD
VIDEOCONFERENCE MEETING

OCTOBER 29, 2019

IDAHO BUILDING CODE BOARD

Agenda Item No. 01 **Agenda and Minutes**

PRESENTER: Andrew Bick, Chairman

OBJECTIVE: Approval of the October 29, 2019 Agenda, and August 13, 2019 Meeting Minutes

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ACTION: Consent

BACKGROUND:

PROCEDURAL HISTORY:

ATTACHMENTS: Tentative Agenda and Draft Minutes

TENTATIVE AGENDA

NOTICE OF PUBLIC MEETING

IDAHO BUILDING CODE BOARD
VIDEOCONFERENCE MEETING

Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian
1250 Ironwood Drive, Suite 220, Coeur d'Alene
2055 Garrett Way, Building 1, Suite 4, Pocatello

Teleconference – (877) 820-7831--529619
dbs.idaho.gov – (208) 332-7137

Tuesday, October 29, 2019

9:30 a.m. – 11:30 a.m. (MDT)
8:30 a.m. – 10:30 a.m. (PDT)

9:30 a.m. **CALL TO ORDER** – Andrew Bick, Chairman

- Roll Call & Introductions
- Open Forum
- Recognition – Allen Jensen

CONSENT AGENDA

1. Approval of the October 29, 2019 Agenda and August 13, 2019 Meeting Minutes – Andrew Bick

ACTION AGENDA

2. Schedule 2020 Board Meetings – Andrew Bick

3. Vote to Adopt or Reject the Pending Rule for Docket Number 07-0301-1901, which adopts the 2018 Building Codes – Spencer Holm, Deputy Attorney General

INFORMATIONAL AGENDA

4. Program Manager Report – Jeff Egan, Building Program Manager

5. Administrator Report – Chris L. Jensen, Administrator
   - Financial Report

11:30 a.m. **ADJOURN**

For additional agenda information, refer to the packet, available one week prior to this meeting, at the DBS's central and regional offices and https://dbs.idaho.gov/boards/bcboard/bcmeetings.html. All times, other than beginning, are approximate and scheduled in accordance to Mountain Daylight Time (MDT), unless otherwise noted. Agenda items may shift depending on the Idaho Building Code Board preference. 10/03/2019r

IDAHO BUILDING CODE BOARD
VIDEOCONFERENCE MEETING

Tuesday – August 13, 2019 – 9:30 a.m. (MDT)

Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian
1250 Ironwood Drive, Suite 220, Coeur d'Alene
2055 Garrett Way, Building 1, Suite 4, Pocatello

*DRAFT MINUTES OF THE AUGUST 13, 2019 MEETING

NOTE: The following report is not intended to be a verbatim transcript of the discussions at the meeting, but to record the significant features of those discussions.

Chairman Andrew Bick called the meeting to order at 9:36 a.m. (MDT)

Board Members Present:
Andrew Bick, Chairman
Jason Blais, Vice-Chairman
John Cotner
Stan Browning
Allen Jensen
Kent Soelberg – Teleconference
Phil Roberts
Chuck Bleth
Nick Guho
Mike Tracy

DBS Staff Members Present:
Chris L. Jensen, Administrator
Ron Whitney, Deputy Administrator
Spencer Holm, Deputy Attorney General
Jeff Egan, Building Program Manager
Larry Jeffres, Regional Manager, Region 1
Patrick J. Grace, Regional Manager, Region 2
Adam Bowcutt, Regional Manager, Region 3
Jamie Buckingham, Energy Program
Renee Bryant, Administrative Assistant 2

- **Open Forum**
  There were no new issues to discuss under open forum.

- **Approval of the August 13, 2019 Agenda and June 11, 2019 Meeting Minutes**
  When asked, the proposed changes to the four codes will be presented to the 2020 legislature as one package; however, the Board will vote on the codes individually.

  MOTION: Jason Blais made a motion to approve the August 13, 2019 agenda as presented. Allen Jensen seconded. All in favor, motion carried.

  MOTION: Jason Blais made a motion to approve the June 11, 2019 meeting minutes as written. Allen Jensen seconded. All in favor, motion carried.

- **Conduct Public Hearing, Negotiated Rulemaking and Vote on the Adoption of the 2018 Codes**
  International Energy Conservation Code (IECC)--Residential – Jamie Buckingham, DBS Energy Program Representative, addressed the changes requested at the June Board meeting. Additional changes to be made are: 1) Table R402.1.2, *Insulation and Fenestration*

Requirements by Component, Wood Frame Wall R-Value for climate zone 6 to be changed to 22 or 13+5, 2) Table R402.1.4 *Equivalent U-Factors*, Frame Wall U-Factor for climate zone 6 to be changed to 0.057, and 3) Subsection (h), the date at the end of the first sentence to be changed to June 30, 2021.

MOTION: Allen Jensen made a motion to adopt the IECC--Residential Code with the new modifications. Chuck Bleth seconded. All in favor, motion carried.

International Energy Conservation Code (IECC)--Commercial – Eric Makela, New Buildings Institute, reiterated the only change to the code is adding an "Exception" to C402.5 *Air Leakage-thermal envelope (mandatory).* The language was replicated from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2016, and is referenced in the 2018 IECC. For clarification, the last sentence in IDAPA 07.03.1.004.04.b was edited. Mr. Makela requested a moment to review the new language with the original ASHRAE language. It was decided to move forward to the next action item and then return to this topic for Mr. Makela's response.

International Building Code (IBC) and International Existing Building Code (IEBC) – Both codes will become the 2018 edition. Most of the language in the IBC correlates with the IRC custodial care, medical care, and personal care. The only addition since the June meeting was the cross-reference of title 39, chapter 43, Idaho Code and IDAPA 07.03.03 for modular.

MOTION: Mike Tracy made a motion to adopt the 2018 IBC as presented. Kent Soelberg seconded. All in favor, motion carried.

International Energy Conservation Code (IECC)--Commercial (Cont'd) – Mr. Makela approved the sentence as it does provide clarification.

MOTION: Allen Jensen made a motion to adopt the IECC-Commercial as presented. John Cotner seconded. All in favor, motion carried.

International Building Code (IBC) and International Existing Building Code (IEBC) (Cont'd) – Unsure if the original motion included both the IBC and IEBC, Chairman Bick requested another motion.

MOTION: Allen Jensen made a motion to adopt the IBC and IEBC as presented. Kent Soelberg seconded. All in favor, motion carried.

International Residential Code (IRC) – Patrick Sullivan, city of Nampa, explained the proposed changes to the IDAPA rules for the 2018 IRC. It was noted when converting the word document to PDF, headings for the three sections in Table 403.1, *Minimum Width of Concrete, Precast, or Masonry Footings (Inches)*, were missing. Deputy Attorney General Holm ensured the headings to the table would be in the final draft.

When questioned, the "Exception" in subsection (i), as it pertains to the air infiltration rate of a dwelling unit, is not necessary and should be removed. Dave Yorgason, Building

Contractors Association of Southwestern Idaho Representative, voiced concern that by removing the "Exception", the charging statement may not apply to every situation.

Dave Freelove, Idaho Energy Code Circuit Rider, offered to provide to the Idaho Association of Building Official's (IDABO) draft corrective actions for its board to send to all jurisdictions.

IDABO has scheduled five legislative luncheons in November to discuss the adoption of the 2018 codes. Leadership from the Idaho Building Contractors Association will be invited from each region.

MOTION: Chuck Bleth made a motion to adopt the proposed IRC with the new changes. Jason Blais seconded. All in favor, motion carried.

- **Approval of Pending Rules as Part of Reauthorization Process**
  Deputy Administrator Ron Whitney presented the background on the reauthorization process of the Idaho Building Code Board rules. Since the Board's special meeting in May 2019, the Governor's office has identified a method in the rulemaking process to make further cuts/consolidation to word counts in the rules; i.e., Red Tape Reduction Act. Rather than approve the pending rules today, a special meeting/hearing will be required once a Notice of Rulemaking has been published in the Administrative Bulletin.

- **Amendment of Modular Building Provisions within the Building Code Rules**
  Language in the Building Code rules is identical to the Modular Building provisions; therefore, the Board will need to vote whether to remove the language from its chapter. Again, due to the request from the Governor's office, this topic will need to be acted upon at a special board meeting, which the Chairman agreed to hold on October 2, 2019.

- **Program Manager Report**
  Building Program – Several staff members have taken on additional roles within the program.

  Construction – The following projects have begun or will be completed shortly: University of Idaho Basketball Arena, Moscow; State Hospital South, Blackfoot; and Boise State University Fine Arts Building, Boise.

- **Administrator Report**
  Financial Report – The Board's revenue is at 119 percent of what was anticipated for the year. Deputy Administrator Whitney explained the costs of plan reviews and building permits on several large projects throughout the state of Idaho.

  Permits/Inspections – There have been several days where DBS has exceeded 600 inspections a day. The permits are solid with 284 permits taken out overnight.

  Budget – The Division's budget for Fiscal Year 2021 is due on September 1, 2019 to the Governor's office.

- **Adjournment**

MOTION: Chuck Bleth made a motion to adjourn the meeting. Phil Roberts seconded. All in favor, motion carried.

The meeting adjourned at 11:37 a.m. (MDT)

ANDREW BICK, CHAIRMAN IDAHO BUILDING CODE BOARD	CHRIS L. JENSEN ADMINISTRATOR DIVISION OF BUILDING SAFETY
DATE	DATE

***These DRAFT minutes are subject to possible correction and final approval by the Idaho Building Code Board. 09/24/2019rb**

IDAHO BUILDING CODE BOARD

Agenda Item No. 02 **Schedule 2020 Board Meetings**

PRESENTER: Andrew Bick, Chairman

OBJECTIVE: Schedule board meetings for 2020.

ACTION: Vote to accept, reject or modify the 2020 meeting dates as addressed under *Background*.

BACKGROUND: The following 2020 dates were selected for the Board's consideration:

February 18th, April 21st, June 23rd, August 25th (Tentative) and October 20th

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PROCEDURAL HISTORY:

ATTACHMENTS: 2020 Board Meeting Calendar

DBS BOARD MEETINGS - 2020

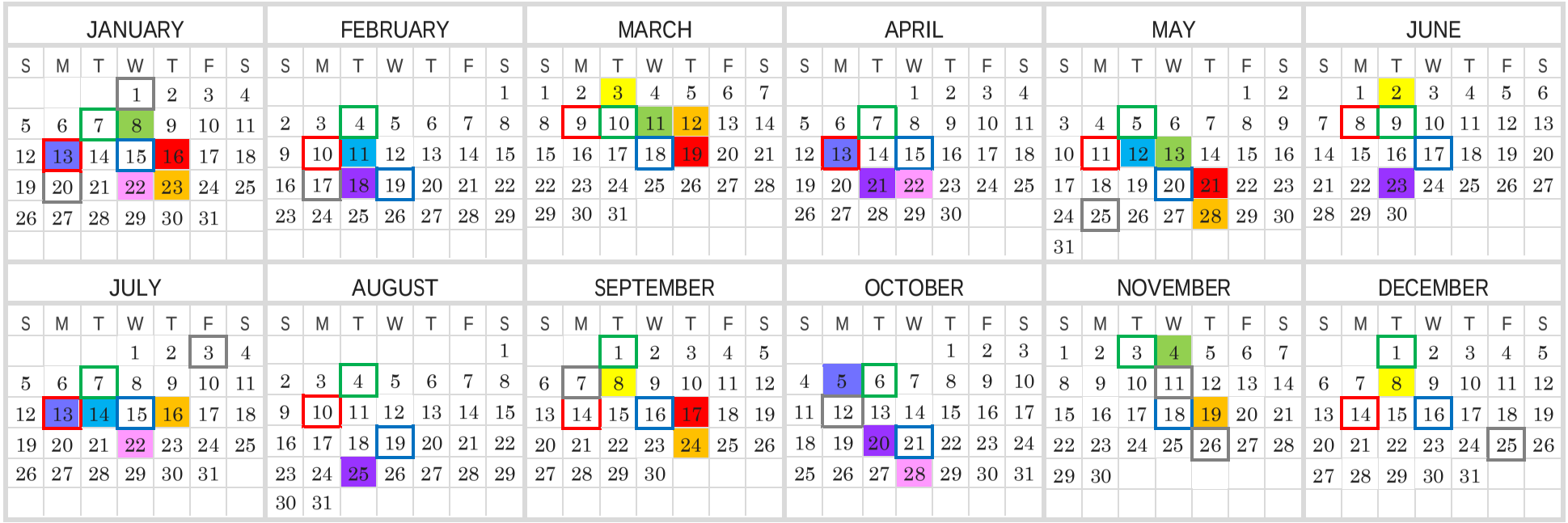
DAMAGE PREVENTION BOARD	JAN 23, MAR 12, MAY 28, JUL 16, SEP 24, NOV 19
FACTORY BUILT STRUCTURES ADVISORY BOARD	FEB 11, MAY 12, JUL 14
IDAHO BUILDING CODE BOARD	FEB 18, APR 21, JUN 23, AUG 25 (TENT), OCT 20
IDAHO ELECTRICAL BOARD	JAN 22, APR 22, JUL 22, OCT 28
IDAHO HEATING VENTILATION & AIR COND. BOARD	JAN 8, MAR 11, MAY 13, NOV 4
IDAHO PLUMBING BOARD	JAN 16, MAR 19, MAY 21, SEPT 17
PUBLIC WORKS CONTRACTORS LICENSE BOARD	JAN 13, APR 13, JUL 13, OCT 5
SCHOOL SAFETY & SECURITY ADVISORY BOARD	MAR 3, JUN 2, SEP 8, DEC 8

Board Meetings will be held at each Division of Building Safety regional office either in person or through video

1090 E WATERTOWER ST
SUITE 150
MERIDIAN, ID 83642

1250 IRONWOOD DR
SUITE 220
COEUR D'ALENE, ID 83814

2055 GARRETT WAY
BLD 1, SUITE 4
POCATELLO, ID 83201



Holidays outlined in GRAY--Management mtgs outlined in BLUE--Industrial Safety mtgs outlined in RED--Reg. Supervisor mtgs outlined in GREEN

IDAHO BUILDING CODE BOARD

Agenda Item No. 03 Vote to Adopt or Reject the Pending Rule for Docket Number 07-0301-1901, which adopts the 2018 Building Codes

PRESENTER: Spencer Holm, Deputy Attorney General

OBJECTIVE: Approve pending rule.

ACTION: Vote to adopt or reject the pending rule.

BACKGROUND: In August, the Board voted to adopt a proposed rule that adopts the 2018 building codes. The notice and text of the proposed rule was published in the October 2, 2019, Idaho Administrative Bulletin (attached). Idaho Code section 67-5222(1) requires the Division to receive comments about the proposed rule for 21-days after the notice and text publish in the Bulletin. The Division did not receive any comments on the proposed rule, so the rule is unchanged from what the Board approved in August. Idaho Code section 67-5224 requires the Board to adopt the proposed rule as a pending rule and publish a notice in the Bulletin before the rule can be reviewed by the Idaho Legislature.

PROCEDURAL HISTORY:

ATTACHMENTS: Notice and text of proposed rule

IDAPA 07 – DIVISION OF BUILDING SAFETY

07.03.01 – RULES OF BUILDING SAFETY

DOCKET NO. 07-0301-1901

NOTICE OF RULEMAKING – PROPOSED RULE

AUTHORITY: In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking procedures. The action is authorized pursuant to Section 39-4107, Idaho Code.

PUBLIC HEARING SCHEDULE: Public hearing(s) concerning this rulemaking will be scheduled if requested in writing by twenty-five (25) persons, a political subdivision, or an agency, not later than October 16, 2019.

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the hearing, to the agency address below.

DESCRIPTIVE SUMMARY: The following is a nontechnical explanation of the substance and purpose of the proposed rulemaking:

This proposed rulemaking adopts and amends for Idaho the 2018 editions of the International Building Code (IBC), International Residential Code (IRC), International Existing Building Code (IEBC), and International Energy Conservation Code (IECC). Additionally, this proposed rulemaking eliminates or simplifies provisions in IDAPA 07.03.01 to comply with the Red Tape Reduction Act (Executive Order 2019-02).

FEE SUMMARY: The following is a specific description of the fee or charge imposed or increased: N/A

FISCAL IMPACT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year resulting from this rulemaking: N/A

NEGOTIATED RULEMAKING: Pursuant to Section 67-5220(1), Idaho Code, negotiated rulemaking was conducted. The Notice of Intent to Promulgate Rules - Negotiated Rulemaking was published in the June 5, 2019 Idaho Administrative Bulletin, **Vol. 19-6, pages 38 through 39**.

INCORPORATION BY REFERENCE: Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule:

The state has been operating under 2015 editions of the IBC, IEBC, and IECC and 2012 edition of the IRC. The 2018 editions of the IBC, IRC, IEBC, and IECC provide revisions and clarifications that streamline the codes and make them easier to understand and apply. The 2018 editions of these codes also provide enhanced building safety requirements and address emerging building technologies. In several ways, the 2018 editions of these codes reduce building requirements and expand building options. Adopting the 2018 editions of these codes will bring Idaho up to date with the latest building industry standards.

ASSISTANCE ON TECHNICAL QUESTIONS, SUBMISSION OF WRITTEN COMMENTS: For assistance on technical questions concerning the proposed rule, contact Jeff Egan, Building Code Program Manager, at (208) 332-7123 or at **jeff.egan@dbs.idaho.gov**.

Anyone may submit written comments regarding this proposed rulemaking. All written comments must be directed to the undersigned and must be delivered on or before October 23, 2019.

Dated this 30th day of August, 2019.

Ron Whitney, Deputy Administrator
Division of Building Safety
1090 E. Watertower St., Ste. 150
P. O. Box 83720, Meridian, ID 83642
Phone: (208) 332-7150 / Fax: (877) 810-2840
ron.whitney@dbs.idaho.gov

THE FOLLOWING IS THE PROPOSED TEXT OF DOCKET NO. 07-0301-1901
(Only Those Sections With Amendments Are Shown)

004. ADOPTION AND INCORPORATION BY REFERENCE.
Under the provisions of Section 39-4109, Idaho Code, the codes enumerated in this Section are hereby adopted and incorporated by reference into IDAPA 07.03.01, "Rules of Building Safety," Division of Building Safety. Pursuant to Section 39-4109, Idaho Code, the effective date of any edition of the codes adopted in this Section, or any amendments identified thereto, shall be January 1 of the succeeding year following legislative approval of the rulemaking establishing the edition or amendment. Copies of these documents may be reviewed at the office of the Division of Building Safety. The referenced codes may be obtained from International Code Council, 5360 Workman Mill Road, Whittier, California 90601-2298 or the International Code Council at http://www.iccsafe.org. (3-20-14)

01. International Building Code. 201~~5~~8 Edition with the following amendments: ~~(3-29-17)~~( )

a. Delete Section 305.2.3 and replace with the following: 305.2.3 Twelve (12) or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and having twelve (12) or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code. ~~(3-20-14)~~( )

b. Delete Section 308.2.4 and replace with the following: 308.2.4 Five (5) or fewer persons receiving custodial care. A facility with five (5) or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code. ( )

c. Delete Section 308.3.2 and replace with the following: 308.3.2 Five (5) or fewer persons receiving medical care. A facility with five (5) or fewer persons receiving medical care shall be classified as a Group R-3 occupancy. ( )

~~**b**~~**d.** Delete Section 308.~~6~~5.4 and replace with the following: 308.5.4 Persons receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having twelve (12) or fewer children receiving day care or having five (5) or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code. ~~(3-20-14)~~( )

~~**c**~~**e.** Delete Section 310.~~5~~4 and replace with the following: 310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4, E or I, including:1. Buildings that do not contain more than two (2) dwelling units. 2. Care facilities that provide accommodations for five (5) or fewer persons receiving personal care, custodial care or medical care. 3. Congregate living facilities (nontransient) with sixteen (16) or fewer occupants, including boarding houses (nontransient), convents, dormitories, fraternities and sororities, and monasteries. 4. Congregate living facilities (transient) with ten (10) or fewer occupants, including boarding houses (transient). 5. Dwelling units providing day care for twelve (12) or fewer children. 6. Lodging houses (transient) with five (5) or fewer guest rooms and ten (10) or fewer occupants. ~~(3-29-17)~~( )

~~*i. Buildings that do not contain more than two (2) dwelling units;. (3-20-14)*~~

~~*ii. Boarding houses (nontransient) with sixteen (16) or fewer occupants; (3-20-14)*~~

~~*iii. Boarding houses (transient) with ten (10) or fewer occupants; (3-20-14)*~~

~~*iv. Care facilities that provide accommodations for five (5) or fewer persons receiving care; (3-20-14)*~~

~~*v. Congregate living facilities (nontransient) with sixteen (16) or fewer occupants; (3-20-14)*~~

~~*vi. Congregate living facilities (transient) with ten (10) or fewer occupants; or (3-20-14)*~~

~~vii. Dwelling units providing day care for twelve (12) or fewer children. (3-20-14)~~

~~viii. Lodging houses with five (5) or fewer guest rooms. (3-29-17)~~

~~d~~**f.** Delete Section 310.~~5~~4.1 and replace with the following: 310.4.1 Care facilities within a dwelling. Care facilities for twelve (12) or fewer children receiving day care or for five (5) or fewer persons receiving personal care or custodial care that are within a ~~single~~ one- or two-family dwelling are permitted to comply with the International Residential Code. ~~(3-20-14)~~( )

~~e. Delete the last paragraph of section 2107.2.1 Lap Splices, and replace with the following: In regions of moment where the design tensile stresses in the reinforcement are greater than eighty percent (80%) of the allowable steel tension stress, FS, the lap length of splices shall be increased not less than fifty percent (50%) of the minimum required length, but need not be greater than 72 db. Other equivalent means of stress transfer to accomplish the same fifty percent (50%) increase shall be permitted. Where epoxy-coated bars are used, lap length shall be increased by fifty percent (50%). (3-28-18)~~

~~f. Add footnote (f) in the header row of the table column labeled "Drinking Fountains" of Table 2902.1 Minimum Number of Required Plumbing Fixtures, and add footnote (f) under Table 2902.1 to state the following: Drinking fountains are not required for an occupant load of thirty (30) or fewer. (3-29-17)~~

g. Delete footnote ~~(e) contained~~ under Table 2902.1 Minimum Number of Required Plumbing Fixtures and replace with the following: [e] For business occupancies, excluding restaurants, and mercantile occupancies with an occupant load of thirty (30) or fewer, service sinks shall not be required. ~~(3-29-17)~~( )

h. Delete footnote [f] from Table 2902.1 Minimum Number of Required Plumbing Fixtures, add footnote [f] in the header row of the column in Table 2902.1 labeled "Drinking Fountains," and delete footnote [f] under Table 2902.1 and replace with the following: [f] Drinking fountains are not required for an occupant load of thirty (30) or fewer. ( )

i. Delete Section 3113.1 and replace with the following: 3113.1 General. The provisions of this Section shall apply to relocatable buildings. Relocatable buildings manufactured after the effective date of this code shall comply with the applicable provisions of this code; title 39, chapter 43, Idaho Code; and IDAPA 07.03.03. Exception: This Section shall not apply to manufactured housing used as dwellings. ( )

02. International Residential Code. 201~~2~~8 Edition with the following amendments: ~~(3-20-14)~~( )

a. Delete the exception ~~No. 1 contained~~ under ~~IRC~~ Section R101.2 ~~–~~Scope~~.~~, and replace with the following: Exception: The following shall also be permitted to be constructed in accordance with this code: 1. Owner-occupied lodging houses with five (5) or fewer guestrooms and ten (10) or fewer total occupants. 2. A care facility with five (5) or fewer persons receiving custodial care within a dwelling unit or single-family dwelling. 3. A care facility for five (5) or fewer persons receiving personal care that are within a dwelling unit or single-family dwelling. 4. A care facility with twelve (12) or fewer children receiving day care within a dwelling unit or single-family dwelling. ~~(3-20-14)~~( )

b. ~~Delete exception No. 2 contained under IRC section R101.2 – Scope, and replace with the following: Owner-occupied lodging houses with five (5) or fewer guestrooms shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-family Dwellings.~~ Delete Section R104.10.1 Flood hazard areas. ~~(4-11-15)~~( )

c. Delete item ~~No.~~ number 7 ~~contained~~ under the "Building" ~~subsection~~ subheading of ~~IRC~~ Section R105.2 ~~–~~Work exempt from permit, and replace with the following: 7. Prefabricated swimming pools that are not greater than four (4) feet (one thousand, two hundred nineteen (1219) mm) deep. ~~(4-7-11)~~( )

d. Add the following as item ~~No.~~ number 11 ~~at the end of~~ under the "Building" ~~subsection~~ subheading of ~~IRC~~ Section R105.2 ~~–~~Work exempt from permit: 11. Flag poles. ~~(3-20-14)~~( )

e. Delete ~~IRC s~~Section R109.1.3 and replace with the following: R109.1.3 Floodplain inspections. For

construction in areas prone to flooding as established by Table R301.2(1), upon placement of the lowest floor, including basement, the building official is authorized to require submission of documentation of the elevation of the lowest floor, including basement, required in ~~s~~Section R322. ~~(3-29-10)~~( )

f. Delete Section R301.2.1.2 Protection of Openings. ( )

~~**f**~~**g.** ~~*IRC Table R302.1(1) Exterior Walls -- d*~~Delete Table R302.1(1) and replace with the following:

TABLE R302.1(1) - EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour-tested in accordance with ASTM E 119, ~~*or*~~ UL263 or Section 703.3 of the International Building Code with exposure from both sides	< 3 feet
	Not fire-resistance rated	0 hours	≥ 3 feet
Projections	Fire-resistance rated	1 hour on the underside, or heavy timber, or fire retardant-treated wood[a,b]	≥ 2 feet to < 3 feet
	Not fire-resistance rated	0 hours	≥ 3 feet
Openings in Walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	≥ 3 feet to < 5 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	≥ 3 feet

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable
[a] The fire-resistance rating shall be permitted to be reduced to zero (0) hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
[b] The fire-resistance rating shall be permitted to be reduced to zero (0) hours on the underside of the rake overhang where gable vent openings are not installed. ~~(4-11-15)~~( )

h. Delete Section R302.13 Fire protection of floors. ( )

~~***g.*** *Delete the exception contained under IRC section R302.2 -- Townhouses, and replace with the following two (2) exceptions:* *(3-25-16)*~~

~~*i. When provided with an automatic fire sprinkler system per section R313.1, a common one (1) hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts, or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides, and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.* *(3-25-16)*~~

~~*ii. Two (2) one (1) hour fire-resistance-rated wall assemblies (as specified in Section R302.1) or a common two (2) hour fire resistance rated wall assembly tested in accordance with ASTM E 119 or UL 263 are*~~

~~*permitted for townhouses. If two (2) one (1)-hour fire-resistance-rated walls are used, plumbing and electrical installations within the wall cavity shall conform to fire resistance penetration requirements in accordance with section R302.4 through R302.4.2 for each of the two (2) one (1)-hour rated walls penetrated. The two (2)-hour fire-resistance-rated common wall shall not contain plumbing or mechanical equipment, ducts or vents within its wall cavity. The wall shall be rated for fire exposure from both sides, and shall extend to and be tight against the exterior walls and the underside of the roof sheathing. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.*~~ ~~*(3-25-16)*~~

~~*h*~~**i.** Delete ~~*IRC s*~~Section R303.4 and replace with the following: R303.4 Mechanical Ventilation. Dwelling units shall be provided with whole-house mechanical ventilation in accordance with Section M150~~7~~5.~~3~~4.

~~*Exception: Where the air infiltration rate of a dwelling unit is equal to 5 air changes per hour or greater when tested with a blower door at a pressure of 0.2 inch w.c. (50 pa) in accordance with Section N1102.4.1.2.*~~
~~*(4-11-15)*~~( )

~~*i*~~**j.** Delete the exception ~~*contained*~~ under ~~*IRC s*~~Section R313.1 -- Townhouse automatic fire sprinkler systems, and replace with the following: Exception: Automatic residential fire sprinkler systems shall not be required in townhouses where either two (2) one (1)-hour fire-resistance-rated walls or a common two (2)-hour fire-resistance rated wall, as specified in ~~*exception*~~ item number 2 of ~~s~~Section R302.2.2 is installed between dwelling units or when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed. ~~*(3-25-16)*~~( )

~~*j*~~**k.** Delete ~~*IRC s*~~Section R313.2 One- and two-family dwellings automatic fire sprinkler systems.
~~*(3-29-10)*~~( )

l. Delete the exceptions under Section R314.2.2 Alterations, repairs and additions, and replace with the following: Exceptions: 1. Work involving the exterior surfaces of dwellings, such as, but not limited to, replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck or electrical permits, are exempt from the requirements of this section. 2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section. ( )

~~*k*~~**m.** ~~*Add*~~ Delete the ~~*following to*~~ exceptions under ~~*IRC s*~~Section R315.~~3~~2.2 ~~*Where required in existing dwellings*~~ Alterations, repairs and additions, and replace with the following: Exceptions: 1. Work involving the exterior surfaces of dwellings, such as, but not limited to, replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck or electrical permits, are exempt from the requirements of this section~~*; and*~~. 2. Installation, alteration or repairs of noncombustion plumbing or mechanical systems are exempt from the requirements of this section. ~~*(3-20-14)*~~( )

~~*l*~~**n.** Delete ~~*IRC s*~~Section R322.1.10 As-built elevation documentation. ~~*(3-29-10)*~~( )

o. Delete Section R322.2.1 and replace with the following: R322.2.1 Elevation requirements. 1. Buildings and structures in flood hazard areas, including flood hazard areas designated as Coastal A Zones, shall have the lowest floors elevated to or above the base flood elevation. 2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floors (including basement) elevated to a height above the highest adjacent grade of not less than the depth number specified in feet (mm) on the FIRM, or not less than two (2) feet (610 mm) if a depth number is not specified. 3. Basement floors that are below grade on all sides shall be elevated to or above base flood elevation. Exception: Enclosed areas below the design flood elevation, including basements with floors that are not below grade on all sides, shall meet the requirements of Section R322.2.2. ( )

~~*m*~~**p.** Delete ~~*IRC section R322.2.2*~~ subparagraph 2.~~2~~1 of Section R322.2.2 Enclosed area below design flood elevation, and replace with the following: 2.1. The total net area of all openings shall be at least one (1) square inch (645 mm2) for each square foot (0.093 m2) of enclosed area, or the opening shall be designed and the construction documents shall include a statement that the design and installation of the openings will provide for equalization of hydrostatic flood forces on exterior walls by allowing the automatic entry and exit of floodwaters.
~~*(3-20-14)*~~( )

q. Delete Tables R403 Minimum Depth (D) and Width (W) of Crushed Stone Footings (inches),

R403.1(1) Minimum Width and Thickness for Concrete Footings for Light-Frame Construction (inches), R403.1(2) Minimum Width and Thickness for Concrete Footings for Light-Frame Construction and Brick Veneer (inches), and R403.1(3) Minimum Width and Thickness for Concrete Footings with Cast-In-Place or Fully Grouted Masonry Wall Construction (inches). ( )

r. Add the following as Table R403.1:

TABLE R403.1
MINIMUM WIDTH OF CONCRETE, PRECAST, OR MASONRY FOOTINGS (inches)[a]

	LOAD-BEARING VALUE OF SOIL (psf)			
	1,500	2,000	3,000	> 4,000
Conventional light-frame construction				
1-Story	12	12	12	12
2-Story	15	12	12	12
3-Story	23	17	12	12
4-inch brick veneer over light frame or 8-inch hollow concrete masonry				
1-Story	12	12	12	12
2-Story	21	16	12	12
3-Story	32	24	16	12
8-inch solid or fully grouted masonry				
1-Story	16	12	12	12
2-Story	29	21	14	12
3-Story	42	32	21	16

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kPa.

[a]Where minimum footing width is twelve (12) inches, use of a single wythe of solid or fully grouted twelve (12)-inch nominal concrete masonry units is permitted. ( )

s. Delete Section R403.1.1 and replace with the following: R403.1.1 Minimum size. Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 and Figure R403.1(1). The footing width (W) shall be based on the load bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least six (6) inches in thickness (T). Footing projections (P) shall be at least two (2) inches and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2 and Figures R403.1(2) and R403.1(3). ( )

~~***n.*** *Delete IRC section R501.3 and its exceptions.* *(3-20-14)*~~

~~***o***~~**t.** Delete ~~*IRC s*~~Section R602.10 and replace with the following: R602.10 Wall bracing. Buildings shall be braced in accordance with this Section or, when applicable ~~*s*~~Section R602.12, or the most current edition of APA System Report SR-102 as an alternate method. Where a building, or portion thereof, does not comply with one (1) or more of the bracing requirements in this Section, those portions shall be design~~*at*~~ed and constructed in accordance with ~~*s*~~Section R301.1. ~~*(3-20-14)*~~( )

~~***p.*** *Add an Appendix R, titled Tiny Homes to include the following provisions:* *(3-28-18)*~~

~~***i.*** *Section AR101 Scope. This appendix shall be applicable to tiny houses used as single dwelling*~~

~~units. Tiny houses shall comply with this code except as otherwise stated in this appendix.~~ ~~(3-28-18)~~

~~ii. Section AR102 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.~~ ~~(3-28-18)~~

~~(1) Tiny House. A dwelling that is four hundred (400) square feet (thirty-seven (37) m) or less in floor area excluding lofts.~~ ~~(3-28-18)~~

~~(2) Escape and Rescue Roof Access Window. A skylight or roof window designed and installed to satisfy the emergency escape and rescue opening requirements in Section R310.~~ ~~(3-28-18)~~

~~(3) Landing Platform. A landing provided as the top step of a stairway accessing a loft.~~ ~~(3-28-18)~~

~~(4) Loft. A floor level located more than thirty (30) inches (762 mm) above the main floor and open to it on at least one (1) side with a ceiling height of less than six (6) feet eight (8) inches (2032 mm), used as a living or sleeping space.~~ ~~(3-28-18)~~

~~(iii) Section AR103 Minimum Ceiling Height. Habitable space and hallways in tiny houses shall have a ceiling height of not less than six (6) feet eight (8) inches (2032 mm). Bathrooms, toilet rooms, and kitchens shall have a ceiling height of not less than six (6) feet four (4) inches (1930 mm). Obstructions shall not extend below these minimum ceiling heights including beams, girders, ducts, lighting and other obstructions. Exception: Ceiling heights in lofts are permitted to be less than six (6) feet eight (8) inches (2032 mm)~~ ~~(3-28-18)~~

~~iv. Section AR104 Lofts.~~ ~~(3-28-18)~~

~~(1) AR104.1 Minimum loft area and dimensions. Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AR104.1.1 through AR104.1.3.~~ ~~(3-28-18)~~

~~(a) AR104.1.1 Minimum area. Lofts shall have a floor area of not less than thirty five (35) square feet (3.25 m).~~ ~~(3-28-18)~~

~~(b) AR104.1.2 Minimum dimensions. Lofts shall be not less than five (5) feet (1524 mm) in any horizontal dimension.~~ ~~(3-28-18)~~

~~(c) AR104.1.3 Height effect on loft area. Portions of a loft with a sloping ceiling measuring less than three (3) feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. Exception: Under gable roofs with a minimum slope of 6:12, portions of a loft with a sloping ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.~~ ~~(3-28-18)~~

~~(2) AR104.2 Loft Access. The access to and primary egress from lofts shall be any type described in Sections AR104.3 through AR104.6.~~ ~~(3-28-18)~~

~~(3) AR104.3. Stairways. Stairways accessing lofts shall comply with this code or with Sections AR104.3.1 through AR104.3.5.~~ ~~(3-28-18)~~

~~(a) AR104.3.1 Width. Stairways accessing a loft shall not be less than seventeen (17) inches (432 mm) in clear width at or above the handrail. The minimum width below the handrail shall be not less than twenty (20) inches (508 mm).~~ ~~(3-28-18)~~

~~(b) AR104.3.2 Headroom. The headroom in stairways accessing a loft shall be not less than six (6) feet two (2) inches (1880 mm), as measured vertically, from a sloped line connecting the tread or landing platform nosings in the middle of their width. Exception: The headroom for a landing platform, where stairways access lofts, shall be not less than four (4) feet six (6) inches (1372 mm).~~ ~~(3-28-18)~~

~~(c) AR104.3.3 Treads and Risers. Risers for stairs accessing a loft shall be not less than seven (7) inches (178 mm) and not more than twelve (12) inches (305 mm) in height. Tread depth and riser height shall be~~

~~calculated in accordance with one of the following formulas:~~ ~~(3-28-18)~~

~~(i) The tread depth shall be twenty (20) inches (508 mm) minus 4/3 of the riser height, or~~ ~~(3-28-18)~~

~~(ii) The riser height shall be fifteen (15) inches (381 mm) minus 3/4 of the tread depth.~~ ~~(3-28-18)~~

~~(d) AR104.3.4 Landing Platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than six (6) feet two (2) inches (1880 mm) where the stairway meets the loft. The landing platform shall be eighteen (18) inches to twenty-two (22) inches (457 to 559 mm) in depth measured from the nosing of the landing platform to the edge of the loft, and sixteen (16) to eighteen (18) inches (406 to 457 mm) in height measured from the landing platform to the loft floor.~~ ~~(3-28-18)~~

~~(e) AR104.3.5 Stairway Handrails. Handrails shall comply with Section R311.7.8.~~ ~~(3-28-18)~~

~~(f) AR104.3.6 Stairway Guards. Guards at open sides of stairways shall comply with Section R312.1.~~ ~~(3-28-18)~~

~~(4) AR104.4 Ladders. Ladders accessing lofts shall comply with Sections AR104.4.1 and AR104.4.2.~~ ~~(3-28-18)~~

~~(a) AR104.4.1 Ladder Size and Capacity. Ladders accessing lofts shall have a rung width of not less than twelve (12) inches (305 mm) and ten (10) inches (254 mm) to fourteen (14) inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a two hundred (200) pound (75 kg) load on any rung. Rung spacing shall be uniform within 3/8-inch (9.5 mm).~~ ~~(3-28-18)~~

~~(b) AR104.4.2 Ladder Incline. Ladders shall be installed at seventy (70) to eighty (80) degrees from horizontal.~~ ~~(3-28-18)~~

~~(5) AR104.5 Alternating Tread Devices. Alternating tread devices accessing lofts, and handrails of alternating tread devices shall comply with sections 1011.14.1 and 1011.14.2 of the International Building Code, excluding the exception. The clear width at and below the handrails shall be not less than twenty (20) inches (508 mm).~~ ~~(3-28-18)~~

~~(6) AR104.6. Ships Ladders. Ships ladders accessing lofts, and treads and handrails of ships ladders shall comply with sections 1011.15.1 and 1011.15.2 of the International Building Code. The clear width at and below handrails shall be not less than twenty (20) inches (508 mm).~~ ~~(3-28-18)~~

~~(7) AR104.7 Loft Guards. Loft guards shall be located along the open side of lofts. Loft guards shall not be less than thirty-six (36) inches (914 mm) in height or one (1)-half of the clear height to the ceiling, whichever is less.~~ ~~(3-28-18)~~

~~v. SECTION AR105. Emergency Escape and Rescue Openings. Tiny houses shall meet the requirements of Section R310 for emergency escape and rescue openings. Exception: Escape and rescue roof access windows in lofts used as sleeping rooms shall be deemed to meet three (3) requirements of Section R310 where installed such that the bottom of the opening is not more than forty-four (44) inches (1118 mm) above the loft floor, provided the escape and rescue roof access window complies with the minimum opening area requirements of Section R310.~~ ~~(3-28-18)~~

03. International Existing Building Code. 201~~5~~8 Edition. ~~(3-29-17)~~( )

04. International Energy Conservation Code. 201~~5~~8 Edition with the following amendments: ~~(3-29-17)~~( )

~~a. Delete the Residential Provisions of the 2015 International Energy Conservation Code (IECC) set forth in chapters 1 [RE] through 6 [RE], including Appendix RA (pages R-1 through R-57), and replace with the Residential Provisions of the 2012 IECC set forth therein in chapters 1 [RE] through 5 [RE] (pages R-1 through R-47) and as such provisions may be further amended herein these rules.~~ ~~(3-29-17)~~

~~b~~**a.** Add the following as ~~new subs~~Section C101.5.~~3~~2: C101.5.2 Industrial, electronic, and manufacturing equipment. Buildings or portions thereof that are heated or cooled exclusively to maintain the required operating temperature of industrial, electronic, or manufacturing equipment shall be exempt from the provisions of this code. Such buildings or portions thereof shall be separated from connected conditioned space by building thermal envelope assemblies complying with this code. ~~(3-25-16)~~( )

b. Add the following as an exception under Section C402.5 Air leakage—thermal envelope (Mandatory): Exception: For buildings having over fifty thousand (50,000) square feet of conditioned floor area, air leakage testing shall be permitted to be conducted on less than the whole building, provided the following portions of the building are tested and their measured air leakage is area-weighted by the surface areas of the building envelope: 1. The entire floor area of all stories that have any spaces directly under a roof. 2.The entire floor area of all stories that have a building entrance or loading dock. 3. Representative above-grade wall sections of the building totaling at least twenty-five percent (25%) of the above-grade wall area enclosing the remaining conditioned space. Floor area tested under subparagraphs 1. or 2. of this exception shall not be included in the twenty-five percent (25%) of above-grade wall sections tested under this subparagraph. ( )

c. Add the following as exception ~~No. (10)~~ number 7 under ~~s~~Section C403.~~3~~5 Economizers (Prescriptive): 7. Unusual outdoor air contaminate conditions – Systems where special outside air filtration and treatment for the reduction and treatment of unusual outdoor contaminants, makes an air economizer infeasible. ~~(3-29-17)~~( )

d. Delete Table C404.5.1 and replace with the following:

TABLE C404.5.1
PIPING VOLUME AND MAXIMUM PIPING LENGTHS

NOMINAL PIPE SIZE (inches)	VOLUME (liquid ounces per foot length)	MAXIMUM PIPING LENGTH (feet)	
		Public lavatory faucets	Other fixtures and appliances
1/4	0.33	31	50
5/16	0.5	N/A - non-standard size	50
3/8	0.75	17	50
1/2	1.5	10	43
5/8	2	7	32
3/4	3	5	21
7/8	4	N/A - non-standard size	16
1	5	3	13

TABLE C404.5.1 PIPING VOLUME AND MAXIMUM PIPING LENGTHS			
NOMINAL PIPE SIZE (inches)	VOLUME (liquid ounces per foot length)	MAXIMUM PIPING LENGTH (feet)	
		Public lavatory faucets	Other fixtures and appliances
1 1/4	8	2	8
1 1/2	11	1	6
2 or larger	18	1	4

For SI: 1 inch = 25.4 mm; 1 foot = 304.8 mm; 1 liquid ounce = 0.030 L; 1 gallon = 128 ounces. (4-11-19)

e. Delete the ~~*values contained*~~ rows in Table R402.1.~~*1*~~2 for climate zones "5 and Marine 4" and ~~*climate zone*~~ "6" and replace with the following:

TABLE R402.1.~~*1*~~2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT [a]										
Climate Zone	Fenestration U- Factor[b]	Skylight[b] U-factor	Glazed Fenestration SHGC[b, e]	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value[i]	Floor R-Value	Basement[c] Wall R-Value	Slab[d] R-Value & Depth	Crawlspace[c] Wall R-Value
5 ~~*and Marine 4*~~	0.3~~5~~2	0.~~60~~55	NR	38	20 or 13+5[h]	13/17	30[g]	1~~0~~5/1~~0~~3~~3~~9	10, 2 ft	1~~0~~5/1~~3~~9
6	0.3~~5~~0	0.~~60~~55	NR	49	2~~0~~2 or 13+5[h]	15/~~19~~20	30[g]	15/19	10, 4 ft	1~~0~~5/1~~3~~9

~~*(4-11-19)*~~( )

f. Add the following as footnote [k] to the title of Table R402.1.~~*1*~~2 - Insulation and Fenestration Requirements by Component: [k.] For residential log home building thermal envelope construction requirements see ~~*s*~~Section R402.6. ~~*(3-25-16)*~~( )

g. Delete the ~~*values contained*~~ rows in Table R402.1.~~*3*~~4 for climate zones "5 and Marine 4" and ~~*climate zone*~~ "6" and replace with the following:

TABLE R402.1.~~3~~4 EQUIVALENT U-FACTORS [a]								
Climate Zone	Fenestration U-factor	Skylight U-factor	Ceiling ~~R-Value~~ U-factor	~~Wood~~ Frame Wall ~~R-Value~~ U-factor	Mass Wall ~~R-Value~~ U-factor[b]	Floor ~~R-Value~~ U-factor	Basement Wall ~~R-Value~~ U-factor	Crawlspace Wall ~~R-Value~~ U-factor
5 ~~and Marine 4~~	0.3~~5~~2	0.~~60~~55	0.030	0.0~~57~~60	0.082	0.033	0.05~~9~~0	0.0~~6~~55
6	0.3~~5~~0	0.~~60~~55	0.026	0.057	0.060	0.033	0.050	0.0~~6~~55

~~(4-11-19)~~( )

~~h.~~ ~~Delete Table R402.2.6 and replace with the following:~~

~~TABLE R402.2.6 STEEL-FRAME CEILING, WALL AND FLOOR INSULATION (R-VALUE)~~	
~~Wood Frame R-value Requirement~~	~~Cold-formed Steel Equivalent R-valuesa~~
	~~Steel Truss Ceilingsb~~
~~R-30~~	~~R-38 or R-30 + 3 or R-26 + 5~~
~~R-38~~	~~R-49 or R-38 +3~~
~~R-49~~	~~R-38 + 5~~
	~~Steel Joist Ceilingsb~~
~~R-30~~	~~R-38 in 2 x 4 or 2 x 6 or 2 x 8 R-49 in any framing~~
~~R-38~~	~~R-49 in 2 x 4 or 2 x 6 or 2 x 8 or 2 x 10~~
	~~Steel Framed Wall~~
~~R-13~~	~~R-13 + 5 or R-15 + 4 or R-21 + 3 or R-0 + 10~~
~~R-19~~	~~R-13 + 9 or R-19 + 8 or R-25 + 7~~
~~R-21~~	~~R-13 + 10 or R-19 + 9 or R-25 + 8~~
	~~Steel Joist Floor~~
~~R-13~~	~~R-19 in 2 x 6 R-19 + 6 in 2 x 8 or 2 x 10~~
~~R-19~~	~~R-19 + 6 in 2 x 6 R-19 + 12 in 2 x 8 or 2 x 10~~
~~a. Cavity insulation R-value is listed first, followed by continuous insulation R-value. b. Insulation exceeding the height of the framing shall cover the framing.~~	

~~(4-11-19)~~

~~i~~h. Delete ~~s~~Section R402.4.1 and replace with the following: R402.4.1 Building thermal envelope. 1. Until June 30, 2021, ~~T~~the building thermal envelope shall comply with ~~s~~Sections R402.4.1.1 (Installation) and either

~~s~~Section R402.4.1.2 (Testing) or Section R402.4.1.3 (Visual inspection). 2. Effective July 1, 2021, the building thermal envelope of a minimum of twenty percent (20%) of all new single-family homes constructed by each builder shall comply with Section R402.4.1.1 (Installation) and Section R402.4.1.2 (Testing). The authority having jurisdiction may: 2.1. Determine how to enforce this requirement, starting with the fifth house and continuing with each subsequent fifth house. 2.2. Waive this requirement if significant testing indicates the five (5) air changes per hour (ACH) requirement is consistently being met or exceeded (resulting in a lower ACH). 2.3. Grant exceptions to this requirement in rural areas where testing equipment is not available or cost effective. 3. Effective July 1, 2021, the building thermal envelope of eighty percent (80%) of all new single-family homes constructed by each builder shall comply with Section R402.4.1.1 (Installation) and either Section R402.4.1.2 (Testing) or Section R402.4.1.3 (Visual inspection). 4. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. ~~(4-11-19)~~( )

~~j~~**i.** Delete ~~s~~Section R402.4.1.1 and replace with the following: R402.4.1.1 Installation. The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. ~~(4-11-19)~~( )

~~k. Delete the criteria requirement for the "Fireplace" component of Table R402.4.1.1 Air Barrier and Insulation Installation, and replace with the following: An air barrier shall be installed on fireplace walls. (4-11-19)~~

~~l~~**j.** Delete ~~s~~Section R402.4.1.2 and replace with the following: R402.4.1.2 Testing. Testing ~~option, B~~building envelope tightness and insulation installation shall be considered acceptable when tested air leakage is less than ~~seven~~ five (~~7~~5) air changes per hour (ACH) when tested with a blower door at a pressure of 33.5 psf (50 Pa). Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2-inch w.g. (50 Pascals). During testing: 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed. 2. Dampers shall be closed, but not sealed, including exhaust, intake, makeup air, backdraft and flue dampers. 3. Interior doors shall be open. 4. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed. 5. Heating and cooling system(s) shall be turned off. 6. HVAC ducts shall not be sealed. 7.Supply and return registers shall not be sealed. ~~(4-11-19)~~( )

~~i. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed; (3-20-14)~~

~~ii. Dampers shall be closed, but not sealed, including exhaust, intake, makeup air, backdraft and flue dampers; (3-20-14)~~

~~iii. Interior doors shall be open; (3-20-14)~~

~~iv. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed; (3-20-14)~~

~~v. Heating and cooling system(s) shall be turned off; (3-20-14)~~

~~vi. HVAC ducts shall not be sealed; and (3-20-14)~~

~~vii. Supply and return registers shall not be sealed; (3-20-14)~~

~~m~~**k.** Add the following as Section R402.4.1.3: R402.4.1.3 Visual inspection ~~option,~~. Building envelope tightness and insulation installation shall be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by code official an approved party independent from the installer of the insulation shall inspect the air barrier and insulation. ~~(4-11-19)~~( )

~~n~~**l.** Add the following as ~~s~~Section~~:~~ R402.6: R402.6 Residential ~~L~~log ~~H~~home ~~T~~thermal ~~E~~envelope. Residential log home construction shall comply with ~~s~~Section~~s~~ R401 ~~(General)~~, Section R402.4 ~~(Air Leakage)~~, Section R402.5 ~~(Maximum Fenestration U-Factor and SHGC)~~, Section R403.1 ~~(Controls)~~, ~~R403.2.2 (Sealing), R403.2.3 (Building Cavities),~~ the mandatory sections of Sections R403.3 through R403.9 ~~(referred to as the mandatory provisions)~~, Section R404 ~~(Electrical Power and Lighting Systems)~~, and either ~~i~~1., ~~ii~~2., or ~~iii~~3. as follows:

1. Sections R402.2 through R402.3, Section R403.3.1, Section R404.1, and Table R402.6. 2. Section R405. 3. REScheck (U.S. Department of Energy Building Codes Program). ~~(4-11-19)~~( )

~~i. Sections R402.2 through R402.3, R403.2.1, R404.1 and Table R402.6; (3-25-16)~~

~~ii. Section R405 Simulated Performance Alternative (Performance); or. (3-25-16)~~

~~iii. REScheck (U.S. Department of Energy Building Codes Program). (4-7-11)~~

~~e~~**m.** Add the following as Table R402.6 ~~Log Home Prescriptive Thermal Envelope Requirements By Component to be used only in accordance with item i. of section R402.6 above to appear as follows~~:

TABLE R402.6
LOG HOME PRESCRIPTIVE THERMAL ENVELOPE REQUIREMENTS BY COMPONENT

For SI: 1 foot = 304.8 mm.

Climate Zone	Fenestration U-factor[a]	Skylight U-factor	Glazed Fenestration SHGC	Ceiling R-value	Min. Average Log Size In Inches	Floor R-value	Basement Wall R-value[d]	Slab R-value & Depth[b]	Crawl Space Wall R-value[d]
5, 6 - High efficiency equipment path[c]	0.32	0.60	NR	49	5	30	15/19	10, 4 ft.	10/13
5	0.32	0.60	NR	49	8	30	10/13	10, 2 ft.	10/13
6	0.30	0.60	NR	49	8	30	15/19	10, 4 ft.	10/13

[a]The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

[b]R-5 shall be added to the required slab edge R-values for heated slabs.

[c]90% AFUE natural gas or propane, 84% AFUE oil, or 15 SEER heat pump heating equipment (zonal electric resistance heating equipment such as electric base board electric resistance heating equipment as the sole source for heating is considered compliant with the high efficiency equipment path).

[d]"15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

~~(4-11-19)~~( )

n. Delete Section R403.5.3 and replace with the following: R403.5.3 Hot water pipe insulation (Prescriptive). Insulation for hot water piping with a thermal resistance, R-value, of not less than R-3 shall be applied to the following: 1. Piping serving more than one (1) dwelling unit. 2. Piping located outside the conditioned space. 3. Piping located under a floor slab. 4. Buried piping. 5. Supply and return piping in recirculation systems other than demand recirculation systems. ( )

~~p~~**o.** Delete ~~s~~Section R404.1 and replace with the following: R404.1 Lighting equipment (Mandatory). A minimum of ~~fifty~~ seventy-five percent (75~~0~~%) of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or a minimum of ~~fifty~~ seventy-five percent (75~~0~~%) of the permanently installed lighting fixtures shall contain only high efficacy lamps. ~~(4-11-19)~~( )

p. Delete Section R406.3 and replace with the following: R406.3 Energy Rating Index. The Energy Rating Index (ERI) shall be determined in accordance with RESNET/ICC 301. Energy used to recharge or refuel a vehicle used for transportation on roads that are not on the building site shall not be included in the ERI reference design or the rated design. ( )

q. Delete Table R406.4 and replace with the following:

Table R406.4 - Maximum Energy Rating Index

Climate Zone	Energy Rating Index[a]
5	68
6	68

[a] Where on-site renewable energy is included for compliance using the ERI analysis of Section R406.4, the building shall meet the mandatory requirements of Section R406.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code. ( )

05. References to Other Codes. Where any provisions of the codes that are adopted in this Section make reference to other construction and safety-related model codes or standards which have not been adopted by the involved authority having jurisdiction, to the extent possible, such reference should be construed as pertaining to the equivalent code or standard that has been duly adopted by such jurisdiction. (3-29-10)

IDAHO BUILDING CODE BOARD

Agenda Item No. 04 **Program Manager Report**

PRESENTER: Jeff Egan, Building Program Manager

OBJECTIVE: Provide the Board with an overview of the Program's current activities.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho Building Code Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: No Documentation

IDAHO BUILDING CODE BOARD

Agenda Item No. 05 **Administrator Report**

PRESENTER: Chris L. Jensen, Administrator

OBJECTIVE: Provide the Board with an overview of the Division's current activities.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho Building Code Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: Financial Report

Division of Building Safety

IDAHO BUILDING CODE FUND 0229-02
Fiscal Year 2020 Financial Statements
As of 09/30/2019

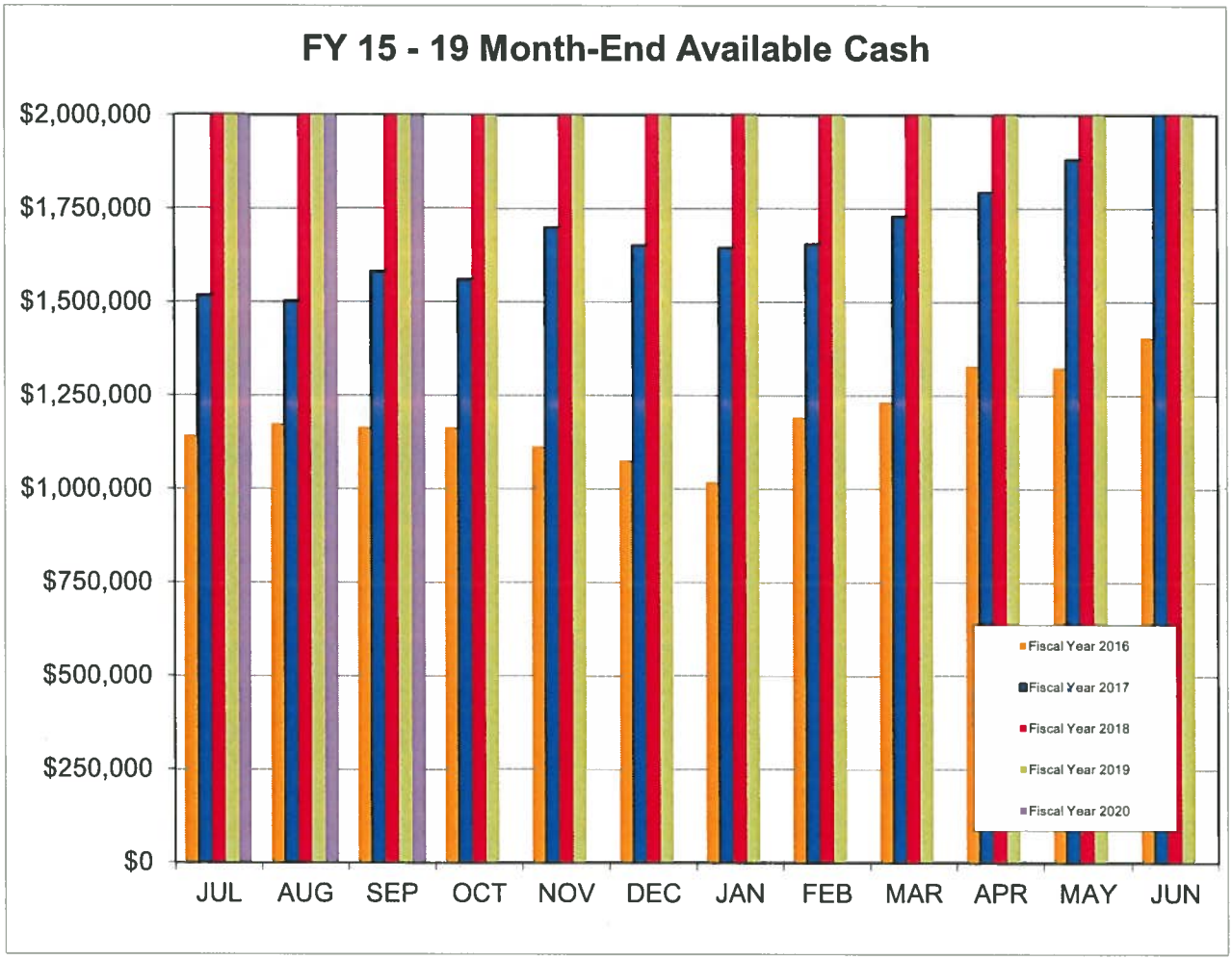
Statement of Revenues and Expenditures

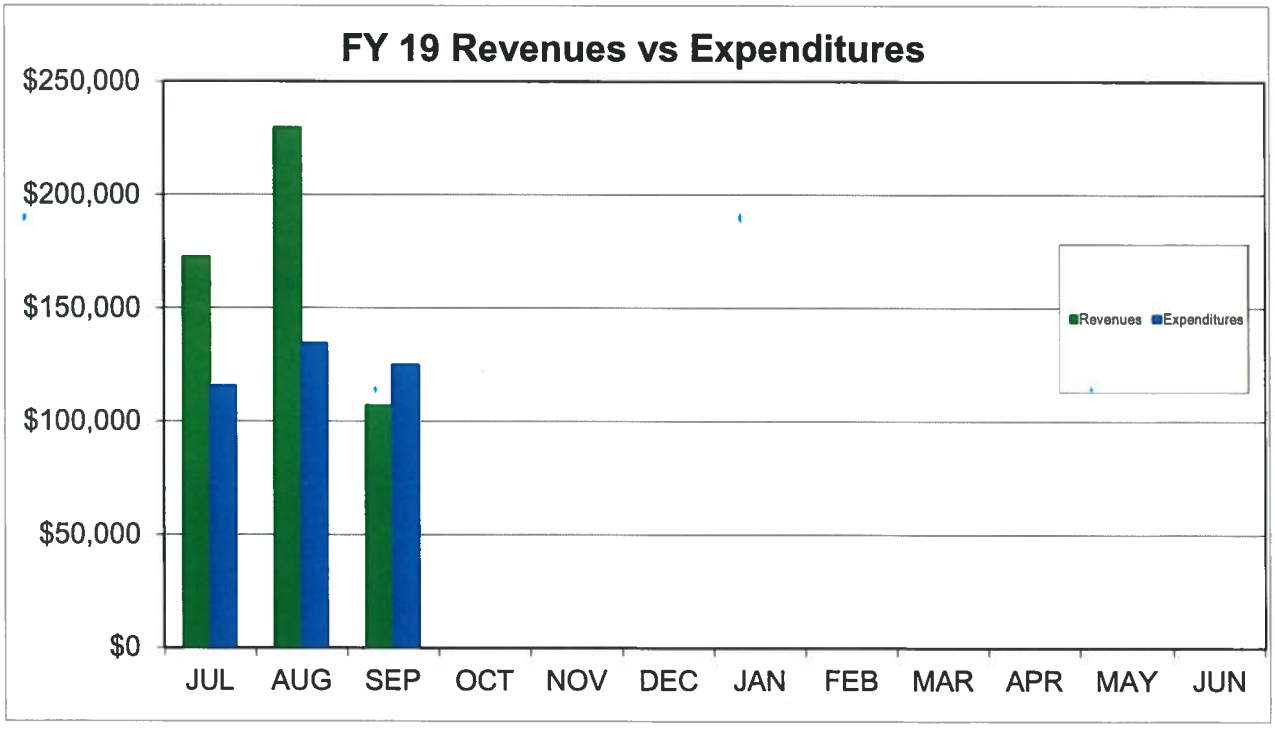
Class	Budget	Fiscal Year To Date	YTD as a % of Budget	Remaining Budget	Projected for Remainder of Year	Projected Year End Totals	Projected Total as a % of Budget
Revenues:	2,061,700	508,672	24.7%	1,553,028	1,490,763	1,999,435	97.0%
Expenditures							
Personnel:	1,590,000	309,905	19.5%	1,280,095	1,033,016	1,342,921	84.5%
Operating:	400,100	64,721	16.2%	335,379	217,227	281,948	70.5%
Capital:	71,600	-	0.0%	71,600	71,600	71,600	100.0%
Total Expenditures	2,061,700	374,626	18.2%	1,687,074	1,321,843	1,696,469	82.3%
Net for FY 2020	-	134,047			168,920	302,966	

Statement of Cash Balance

July 1, 2019 Beginning Cash Available	Fiscal Year to Date Revenues	Fiscal Year to Date Expenditures and Encumbrances	Other Changes in Cash	Available Cash as of Septemeber 30, 2019	Projected Change in Cash for Remainder of Year	Projected Year End Available Cash
3,332,737	508,672	(374,626)	6,647	3,473,430	168,920	3,642,350

IDAHO BUILDING CODE FUND 0229-02





IDAHO BUILDING CODE FUND 0229-02