

Eva J. Henry - District #1 Charles "Chaz" Tedesco - District #2 Erik Hansen - District #3 Steve O'Dorisio – District #4 Mary Hodge – District #5

STUDY SESSION AGENDA TUESDAY August 28, 2018

ALL TIMES LISTED ON THIS AGENDA ARE SUBJECT TO CHANGE

10:30 A.M. **ATTENDEE(S):** Terri Lautt / Pauline Hohn / Cindy Bero / Eric Rosales, Hays Companies / Sarah Manning, Hays **Companies / Chris Ewing, Hays Companies** ITEM: 2019 Benefit Renewal 11:15 A.M. **ATTENDEE(S):** Terri Lautt / Pete Luke ITEM: Personal Accrued Leave (PAL) - Cash Out Program 11:45 A.M. **ATTENDEE(S):** Justin Blair / Christy Fitch / Scott Blaha Ordinance No. 4, International Fire Code ITEM: 12:15 P.M. **ATTENDEE(S):** Kristin Sullivan / Doug Clark / Justin Blair / Christy Fitch / Scott Blaha ITEM: Ordinance No. 12, International Building Code **ATTENDEE(S):** 12:45 P.M. Kristin Sullivan / Doug Clark / Jen Rutter / Christine **Dougherty** Oil & Gas Monthly Update ITEM: **ATTENDEE(S):** 1:15 P.M. Kristin Sullivan / Doug Clark / Ben Dahlman / Nana Appiah / Andrea Berg / Emily Collins / Brandan **Slattery** ITEM: **Marijuana Regulations** 2:00 P.M. **ATTENDEE(S):** Nathan Mosley / Marc Pedrucci / Aaron Clark / **Shannon McDowell / Anneli Berube / Christine Ouinlan. The Conservation Fund** ITEM: **Open Space Project: Murata Brothers Farm** Acquisition **ATTENDEE(S):** 2:30 P.M. **Raymond Gonzales** Administrative Item Review / Commissioner ITEM: **Communications**



STUDY SESSION AGENDA ITEM

DATE: August 28, 2018

SUBJECT: 2019 Benefit Plan Renewal

FROM: Terri Lautt, Human Resources Director

AGENCY/DEPARTMENT: People & Culture Services

ATTENDEES: Patti Duncan, Terri Lautt, Pauline Hohn, Eric Rosales-Hays Companies, Sarah Manning-Hays Companies, Chris Ewing-Hays Companies

PURPOSE OF ITEM: To provide the Board with information and recommendations for the 2019

Benefit Plan Renewal.

STAFF RECOMMENDATION: To approve Recommendation "A" for the 2019 Benefit Plan

Renewal.

BACKGROUND:

Each year the county does a comprehensive benefit renewal analysis. This presentation includes information from that analysis and recommendations for the 2019 Benefit Plan Renewal.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Human Resources County Manager's Office Budget Office Finance Department

ATTACHED DOCUMENTS:

2019 Benefit Plan Renewal Presentation Medical Plan Summary Comparison Premium Comparison

Page 1 of 2 Revised: 2018-Jan05

FISCAL IMPACT: Please check if there is no fiscal impact \overline{\times}. If there is fiscal impact, please fully complete the section below. Fund: **Cost Center:** Object Subledger Amount Account Current Budgeted Revenue: Additional Revenue not included in Current Budget: **Total Revenues:** Subledger Object Amount Account Current Budgeted Operating Expenditure: Add'l Operating Expenditure not included in Current Budget: Current Budgeted Capital Expenditure: Add'l Capital Expenditure not included in Current Budget: **Total Expenditures:** New FTEs requested: YES Πon **Future Amendment Needed:** YES NO **Additional Note:** Budget for 2019 has not been finalized. APPROVAL SIGNATURES: Raymond H. Gonzales, County Manager Alisha Reis, Deputy County Manager

APPROVAL OF FISCAL IMPACT:

Bryan Ostler, Deputy County Manager

Budget

Patti Duncan, Deputy County Manager



August 28, 2018

2019 BENEFIT PLAN RENEWAL

Study Session Presentation



Benefit Plan Renewal Overview

- Multi-Year Benefits Strategy
- Medical Plan Renewal
 - Projections, Options and Recommendations
- Dental and Vision Plan Renewal
 - Projections and Recommendations
- Life and Disability Plan Renewal
 - Projections
- Next Steps Renewal Process
- •

Retiree Health Care Update



Multi-Year Benefits Strategy Considerations

Approved by BoCC: January 2018

Primary Goals:

- Remain an employer of choice with holistic focus on Total Rewards
- Provide value, stability, and security in benefits programs

Short-term Strategies 1 – 4 Yrs

- Manage risk pool (ongoing)
- Balance UHC/KP plan design
- Educate employees to become better health care consumers
- Consider options like High Deductible Health Plan/Health Savings Account

Long-term Strategies 5 – 10 Yrs

- Manage risk pool (ongoing)
- Balance UHC/KP plan design
- Consider options like narrow networks and/or direct contracts with providers





Medical Plans Renewal Projections - No Changes to Plans

Budgetary Impact

Plan	Current	Renewal	Change	% Change
United HealthCare	\$12,392,395	\$11,632,476	(\$759,919)	(6.1%)
Kaiser Permanente	\$12,821,005	\$14,093,526	\$1,272,521	9.9%
Total Health Plans	\$25,213,399	\$25,726,002	\$512,602	2.0%





Medical Plans – Renewal Options

Current Plans

United HealthCare (UHC) plans (Self-funded)

- Exclusive Provider Organization (EPO)
- Point of Service Plan (POS)

Kaiser Permanente (Fully Insured)

Health Maintenance Organization (HMO)

Option A – RECOMMENDED

- United EPO No change to plan design or employee premiums
- Replace United POS plan with UHC High Deductible Health Plan (HDHP)/Health Savings Account (HSA)
- Add UHC Colorado Doctors Plan (CDP) Narrow Network
- Kaiser Permanente Maintain current plan design and match employee premium with United EPO



Option B – Same as Option A without UHC Colorado Doctors Plan (CDP)



UHC High Deductible Health Plan/Health Savings Account

Why offer this type of plan?

- Provides additional choice for employees
- Attractive plan for employees who have minimum utilization
- Assists in mitigating adverse selection between UHC and Kaiser plans
- Educates employees to be better health care consumers

How does it work?

Health Savings Account (HSA)

- Employee owns the HSA account
- County funds HSA \$500 single/\$1,000 family per year
- Employees may also contribute pre-tax dollars
- Unused funds rollover from year-to-year
- Creates a savings account for current and future health care expenses

High Deductible Health Plan (HDHP)

- Deductible applies to all services
- Preventive services paid at 100%
- Employees must pay a copay to access the CareHere clinic



UHC Colorado Doctors Plan

Why offer this type of plan?

- Provides an alternative to Kaiser's HMO
- Reduces out-of-pocket cost for employees
- Provides deep discounts for employers

How does it work?

- No deductibles
- No copay for office visits or urgent care
- Restricts employees to using Centura network of participating providers only
 - Limited Network
 - No Out-of-Network benefits





Medical Plan Summary Comparison								
Plan Designs	#1 - UHC EPO (Current Plan)	#2 - UHC HDHP/HSA (New Plan)	#3 - UHC CDP (New Plan)	#4 - Kaiser (Current Plan)				
County HSA Contribution	N/A	\$500/\$1,000	N/A	N/A				
Deductible (Single/Family)	\$500/\$1,000	\$1,350/\$2,700	None	None				
Coinsurance	Plan pays 95%	Plan pays 80%	Plan pays 80%	None				
Out of Pocket Maximum (Single/Family)	\$4,500/\$9,000	\$6,650/\$13,300	\$2,000/\$4,500	\$2,000/\$4,500				
PCP	\$30	Deductible/Coinsurance	\$0	\$15				
Specialist	\$40/\$80	Deductible/Coinsurance	\$75	\$25				
HospitalInpatient	Deductible/Coinsurance	Deductible/Coinsurance	Coinsurance	\$250				
HospitalOutpatient	Deductible/Coinsurance	Deductible/Coinsurance	Coinsurance	\$200				
Urgent Care	\$40	Deductible/Coinsurance	\$0	\$50				
Emergency Room	\$200	Deductible/Coinsurance	\$500 /Coinsurance	\$150				
Prescription Drugs	\$20/\$40/\$80 *	Deductible/Coinsurance	\$10/\$35/\$50/\$100	\$15/\$30				
CareHere Clinic	\$0	\$60	\$0	\$0				



*\$100 single/\$300 family deductible applies



Medical Plans – Option A

Replace UHC POS Plan with HDHP/HSA & add Colorado Doctors Plan

Budgetary Impact

Plan	Current	Renewal	Change	% Change
United HealthCare	\$12,392,395	\$11,215,536	(\$1,176,858)	(9.5%)
Kaiser Permanente	\$12,821,005	\$14,093,526	\$1,272,521	9.9%
Total Medical Plans	\$25,213,399	\$25,309,062	\$95,663	0.4%



Recommended Option



Medical Plans — Option B Replace UHC POS Plan with HDHP/HSA — No CDP

Budgetary Impact									
Plan	Current	Renewal	Change	% Change					
United HealthCare	\$12,392,395	\$11,483,592	(\$908,803)	(7.3%)					
Kaiser Permanente	\$12,821,005	\$14,093,526	\$1,272,521	9.9%					
Total Health Plans	\$25,213,399	\$25,577,117	\$363,718	1.4%					





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	\$	1,087.98	\$	237.48	\$	1,007.18	\$	219.84	\$	(17.64)	\$	985.12	\$	207.53	\$	(41.56)	\$	985.12	\$	207.53	\$	(41.56)
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	\$	889.11	\$	238.04	\$	977.35	\$	261.67	\$	23.63	\$	989.93	\$	249.09	\$	11.05	\$	989.93	\$	249.09	\$	11.05
	\$	1,213.45	\$	407.56	\$	1,333.88	\$	448.01	\$	40.45	\$	1,355.41	\$	426.48	\$	18.92	\$	1,355.41	\$	426.48	\$	18.92





Dental Plans

Plan	Current	Renewal	Change	% Change
Delta Premier (Self-funded)	\$897,482	\$863,268	(\$34,214)	(3.8%)
Delta Exclusive Panel Option (Fully Insured)	\$586,738	\$557,374	(\$29,364)	(5%)
Total	\$1,484,220	\$1,420,642	(\$63,578)	(4.3%)

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Tier	Employee Premium	County Contribution	EE Impact						
Single	\$27.09	\$9.04	\$0						
2 Party	\$51.05	\$17.01	\$0						
Family	\$87.63	\$29.22	\$0						
Delta Dental Exclusive Panel Option Premiums with Renewal Projections									
Single	\$23.03	\$7.68	(0.41)						
2 Party (spouse)	\$43.61	\$14.54	(0.73)						
2 Party (child/ren)	\$56.97	\$18.99	(1.00)						
Family	\$88.43	\$29.48	(1.55)						





Vision Plan

Renewal Projections and Budgetary Impact								
Vision Service Plan (Self-funded)	Current	Renewal	Change	% Change				
	\$263,416	\$235,847	(\$27,569)	(10.5%)				

Vision Service Plan Premiums with Recommendation									
Tier	Employee Premium	County Contribution	EE Impact						
Single	\$3.44	\$1.55	\$0						
2 Party	\$8.43	\$3.78	\$0						
Family	\$15.12	\$6.80	\$0						





Life and Disability Plans

Renewal Projections - Budgetary Impact									
Unum Insurance Company (Fully Insured)	Current	Renewal	Change	% Change					
All lines of coverage	\$1,650,039	\$1,587,488	(\$62,551)	(3.8%)					

- Decrease applies to Short-term Disability Plan
- Life and Long-term Disability No changes





Total Renewal Recommendations

Budgetary Impact if All Recommendations are Approved

<u> </u>		• •	
Plan	Current	Renewal	Change
United HealthCare	\$12,392,395	\$11,215,536	(\$1,176,858)
Kaiser Permanente	\$12,821,005	\$14,093,526	\$1,272,521
Delta Premier	\$897,482	\$897,482	No change
Delta EPO	\$586,738	\$557,374	(\$29,364)
Vision Service Plan	\$263,416	\$263,416	No change
Unum Life & Disability	\$1,650,039	\$1,587,488	(\$62,551)
Total	\$28,611,075	\$28,614,822	\$3,748





Next Steps – Renewal Process

- Renewal Decisions from BoCC
- Implementation Plan:
 - Prepare for Open Enrollment in November
 - Delay due to implementation of new plans
 - Develop a communication strategy
 - Provide educational sessions throughout the county
 - Continue to educate employees on the importance of becoming better health care consumers





Retiree Health Care – Update

Adams County



Early Retiree Analysis - EE Only Tier of Coverage on the EPO Plan

UHC

	5 Years Ago	Today	2019*	2020**
Coverage	\$647.53	\$1,135.54	\$1,316.70	\$1,446.29
Adams County Contribution	\$105.93	\$186.22	\$157.97	\$0.00
Retiree Cost	\$541.60	\$949.32	\$1,158.73	\$1,446.29

KAISER

	5 Years Ago	Today	2019*	2020**
Coverage	\$582.63	\$577.99	\$635.42	
Adams County Contribution	\$50.00	\$50.00	\$50.00	
Retiree Cost	\$532.63	\$527.99	\$585.42	

^{*2019} UHC/Kaiser estimated renewals with continued phase-out

^{**2020} UHC Retirees with no blend and no Adams County Contribution. Kaiser will not offer a plan with no Adams County contribution.



Medical Plan Summary Comparison							
Plan Designs	#1 - UHC EPO (Current Plan)	#2 - UHC HDHP/HSA (New Plan)	#3 - UHC CDP (New Plan)	#4 - Kaiser (Current Plan)			
County HSA Contribution	N/A	\$500/\$1,000	N/A	N/A			
Deductible (Single/Family)	\$500/\$1,000	\$1,350/\$2,700	None	None			
Coinsurance	Plan pays 95%	Plan pays 80%	Plan pays 80%	None			
Out of Pocket Maximum (Single/Family)	\$4,500/\$9,000	\$6,650/\$13,300	\$2,000/\$4,500	\$2,000/\$4,500			
PCP	\$30	Deductible/Coinsurance	\$0	\$15			
Specialist	\$40/\$80	Deductible/Coinsurance	\$75	\$25			
HospitalInpatient	Deductible/Coinsurance	Deductible/Coinsurance	Coinsurance	\$250			
HospitalOutpatient	Deductible/Coinsurance	Deductible/Coinsurance	Coinsurance	\$200			
Urgent Care	\$40	Deductible/Coinsurance	\$0	\$50			
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Prescription Drugs	\$20/\$40/\$80 *	Deductible/Coinsurance	\$10/\$35/\$50/\$100	\$15/\$30			
CareHere Clinic	\$0	\$60	\$0	\$0			

^{*\$100} single/\$300 family deductible applies

	Premium Comparison																				
	Curr	ent 2	2018	Projected Renewal No Changes to Current Plans No Changes to Current Plans With HDHP/HSA and Implement Colorado Doctors Plan*					Option B Replace United HealthCare POS Plan with HDHP/HSA **					S Plan							
							1% decrea 9.9% increa						5% decrease 1.9% increase						% decreas 9% increas	_	
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\$	549.17	\$	82.46	\$	508.38	\$	76.34	\$	(6.12)	\$	496.32	\$	72.00	\$	(14.42)	\$	496.32	\$	72.00	\$	(14.42)
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										\$	496.50	\$	80.41	\$	(6.01)						
										\$	979.65	\$	231.02	\$	(18.07)						
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\$	889.11	\$	238.04	\$	977.35	\$	261.67	\$	23.63	\$	989.93	\$	249.09	\$	11.05	\$	989.93	\$	249.09	\$	11.05
\$	1,213.45	\$	407.56	\$	1,333.88	\$	448.01	\$	40.45	\$	1,355.41	\$	426.48	\$	18.92	\$	1,355.41	\$	426.48	\$	18.92

^{*}Assumes 30% migration to CDP and 15% migration to HDHP plan from current UHC plans ** Assumes 30% migration to HDHP Plan from current UHC plans ++Employee picks up 9.9% of increase *** Employee picks up 4.6% of increase



STUDY SESSION AGENDA ITEM

DATE: August 28, 2018

SUBJECT: Personal Accrued Leave (PAL) Cash-Out Program

FROM: Terri Lautt, Human Resources Director

AGENCY/DEPARTMENT: People & Culture Services

ATTENDEES: Patti Duncan, Pete Luke, Terri Lautt

PURPOSE OF ITEM: To provide the Board with information regarding a potential Cash-Out

Program for leave accruals.

STAFF RECOMMENDATION: To approve the new program.

BACKGROUND:

During the 2018 Summit we were asked to present information related to providing more flexibility with our leave benefits. We were given direction to research leave cash-out, conversion and sick leave donation programs. This presentation provides information and a potential program structure for a leave cash-out program.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Human Resources County Manager's Office Budget Office Finance Department IT Department

ATTACHED DOCUMENTS:

Personal Accrued Leave (PAL) Cash-Out Program Presentation

Page 1 of 2 Revised: 2018-Jan05

Please check if there is no fiscal in section below.	npact . If	there is fisc	al impact, pl	ease fully com	plete the
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Cost Center: 9252					
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Current Budgeted Capital Expenditure					
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Total Expenditures:					\$5,000,000
New FTEs requested:	YES	⊠ NO			
Future Amendment Needed:	☐ YES	⊠ NO			
Additional Note: This will be discussed in the 2019 but	lget developn	nent process.			
APPROVAL SIGNATURES:					
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Raymond H. Gonzales, County Mana	ger	Alisha	Reis, Deputy	County Manage	r
Bryan Ostler, Deputy County Manage	er	Patti D	uncan, Deputy	County Manag	ger
APPROVAL OF FISCAL IMPA	ACT:				

FISCAL IMPACT:

Page 2 of 2 Revised: 2018-Jan05

PEOPLE & CULTURE SERVICES

August 28, 2018

Personal Accrued Leave (PAL)
Cash-Out Program



PAL Cash-Out Presentation

- Background | Purpose | Intended Outcomes
- Proposed Cash-Out Program
- Eligibility & Budgetary Impact
- Next Steps: Future Benefit Enhancements
- -Q&A





Background – Summit 2018

Conducted SWOT Analysis on Existing Leave Benefits

- Strengths of Leave Benefits
 - Competitive sick leave accruals
 - Payout sick leave at termination
- Weaknesses of Leave Benefits
 - Vacation accrual rates below local market
 - More tenured employees less satisfied with leave benefits
 - 2015 50% of employees would like more leave flexibility
 - 2017 106 employees lost vacation accruals due to cap





Current Employee Input

- From March 2018 Focus Groups:
 - Employees want more flexibility with regard to using their accrued leave
 - Cashing out accrued leave is most popular option





Purpose of PAL Cash-Out Program

To provide options for more flexible use of earned employee leave time for the benefit of employees and business operations.





Intended Outcomes of PAL Cash-Out Program

- Enhanced flexibility of accrued leave benefits resulting in higher employee satisfaction and improved recruitment, retention and engagement.
- A sustainable program that reduces the County's financial liability related to paid leave benefits.
- Remain an employer of choice and leader in the market.





PAL Program R&D Team

- A multidisciplinary team was mobilized comprised of members representing:
 - Finance: Ben Dahlman, Laurie Arellano, Crystal Stout
 - Budget: Nancy Duncan
 - ITi: Brian Dobbins, Ross Kimball
 - **P&C Team:** Patti Duncan, Terri Lautt, Pete Luke, Jerry Hicks, DeAnna Guyer, Patsy Laughery, Pauline Hohn





Market Research: Cash-Out Programs

- Survey Data from 35 cities and counties:
 - 14 organizations offer a cash out program
 - Minimum balance required: 120 480 hours
 - Maximum cash out: 40 to 240 hours/year
 - Cash out ratio: 2:1 (50%) for sick leave and 1:1 (100%) for vacation leave
 - Frequency: Annual





Proposed PAL Cash-Out Program

Eligibility Requirements	Sick Leave	Vacation
Minimum Balance Required		
after Cash Out	160 Hours	80 Hours
Maximum Annual Cash Out		
of Leave Hours	80	40
Cash Out Ratio	2:1*	1:1
	80 hrs leave=	40 hrs leave=
Examples	40 cash	40 cash

^{*9} employees hired before 1983 can cash-out sick leave at a 1:1 ratio (100%).





2019 Employee Eligibility

	Number of Eligible Employees							
Date	Sick	Vacation						
3/31/2019	931	1130						
11/30/2019	1009	1159						





2019 Budget Impact – PAL Cash-Out Program*

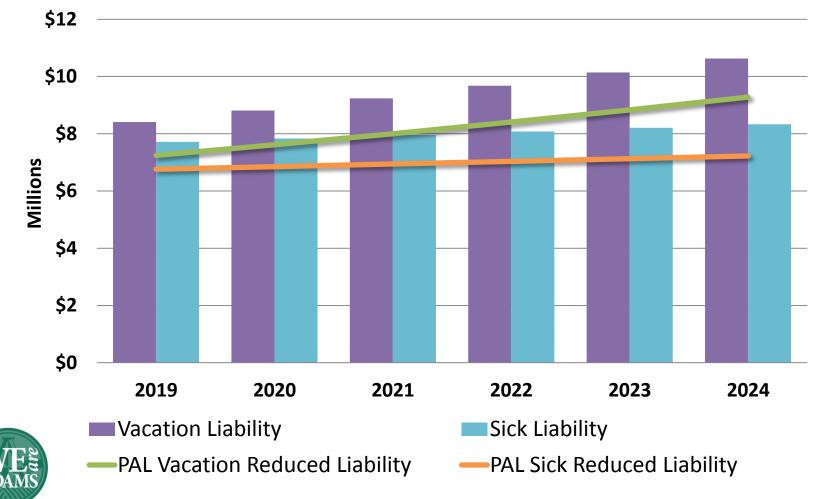
*Assumes ALL eligible employees cash out at the maximum of eligible hours

	First payout 3/31/2019	Second payout 11/30/2019
Total Cost	\$2.67 million	\$2.67 **

**Calculated at 8 months of accruals based on length of service. Assumes average leave used in 2019: 76 hours of vacation and 47 hours of sick leave.



5 year Sick & Vacation Liability Reduction projection





Proposed PAL Cash-Out Implementation Plan

Action	Date
Approval from BoCC	8/2018
Payroll testing and setup	9/2018
Communication to organization	10/2018
Initial Cash-Out	3/31/2019
Second Cash-Out	11/30/2019
Annual Cash-Out Starting in 2020	11/30/2020





Future Benefit Enhancements

- 1. Leave Conversion
- 2. Sick Leave Donation
- 3. Onsite Childcare
- 4. Paid Parental Leave
- 5. Adoption Assistance





Paid Parental Leave

- Survey data other cities and counties:
 - Most do not offer paid parental leave
 - Most offer FMLA, Paid Sick Leave and Short Term Disability benefits
 - City of Westminster Plan
 - 80 hours general leave (PTO) must use this first
 - 6 weeks of paid maternity leave can be used from major illness leave time
 - City of Boulder Plan
 - 12 weeks of Paid Parental Leave





Adams County's Plan

- Short Term Disability for eligible employees:
 - Begins at the end of the 14 calendar day waiting period or exhaustion of sick leave; whichever is later
 - Employee may supplement STD with accrued annual leave to equal 100% of pre-disability salary
- FMLA available to both parents for birth, adoption or foster care of a child
- Employees must use accrued leave while on FMLA



Scenario: Adams County Using City of Boulder's Parental Leave Policy

– Projections:

- Estimated 113 births: average for last two years
- Average employee salary: \$29.66
- 12 weeks of paid paternity leave

– Costs:

- Avg. cost/employee taking parental leave: \$15,232
- Total organization cost: \$1.7M for one year
- 12 weeks (480 hours) missed work hours per employee per year
- Additional 12 weeks (480 hours) of FMLA/employee





NEXT STEPS: Future Benefit Enhancements

- Seeking Direction from BoCC
 - 1. PAL Leave Conversion Program
 - 2. PAL Sick Leave Donation Program
 - 3. Onsite Childcare
 - 4. Paid Parental Leave
 - 5. Adoption Assistance





County Manager Recommendation:

Due to fiscal constraints and to follow the General Fund, Fund Balance Policy approved by the Board of County Commissioners, the County Manager recommends the first PAL payment be carried out in two payments, one occurring in March 2019 and one occurring in November 2019. Then in each subsequent year, PAL payouts will be considered during budget development and paid in November if fiscally appropriate to do so.





STUDY SESSION AGENDA ITEM

DATE: August 28, 2018

SUBJECT: 2018 International Fire Code

FROM: Fire Code Adoption and Revision Committee

AGENCY/DEPARTMENT: Community and Economic Development

ATTENDEES: Christy Fitch, Scott Blaha, Justin Blair, Fire Marshals (Fire Code Adoption and Revision Committee)

PURPOSE OF ITEM: Presentation of the 2018 International Fire Code and proposed amendments.

STAFF RECOMMENDATION: Staff is recommending that the board repeal the current Ordinance 4 (which adopted the 2012 IFC) and Adopt the 2018 Edition of the International Fire Code through the enactment of a new Ordinance 4.

BACKGROUND:

The current Ordinance 4, adopting the 2012 editions of the International Fire Code, was adopted in 2015 by the BoCC. The International Code Council (ICC) and the National Fire Protection Agency (NFPA) updates and publishes the code every three years. Adams County Fire Code adoption and Revision Committee along with the Community and Economic Development Department is recommending adopting the latest version to better align with current construction technologies captured in the most current edition.

Staff has reviewed the 2018 Editions of the International Fire Code and has developed amendments thereto. Staff is recommending repealing current Ordinance 4 and adopting the new Ordinance 4. These amendments have also been presented to the Fire Code Board of Appeals for their review.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Community and Economic Development, County Attorney, Adams County Fire, Bennett Fire, Brighton Fire, Byers Fire, Deertrail Fire, North Metro Fire, South Adams Fire, Southeast Weld Fire, Sable Altura Fire, and Strasburg Fire.

ATTACHED DOCUMENTS:

Power Point Presentation
Draft 2018 Ordinance 4 version A & B

Page 1 of 2 Revised: 2018-Jan05

FISCAL IMPACT:

Please check if there is no fiscal section below.	impact ⊠. If	there is fisc	al impact, pl	ease fully comp	olete the
Fund:					
Cost Center:					
			Object Account	Subledger	Amount
Current Budgeted Revenue:		-			
Additional Revenue not included in	Current Budge	t:			
Total Revenues:					
			Object Account	Subledger	Amount
Current Budgeted Operating Expen					
Add'l Operating Expenditure not inc		nt Budget:			
Current Budgeted Capital Expendito		2 1 4			
Add'l Capital Expenditure not inclu Total Expenditures:	ded in Current I	Budget:			
New FTEs requested: Future Amendment Needed: Additional Note:	☐ YES	⊠ NO		-	
APPROVAL SIGNATURES: Raymond H. Gonzales, County Man	nager	Alisha	Reis, Deputy	County Manager	
Bryan Østler, Deputy County Mana APPROVAL OF FISCAL IMI		Patti D	uncan, Deputy	/ County Manage	er
Budget 1M					

Page 2 of 2

Ordinance No. 4 2018 International Fire Code



Today's Objective

- Present proposed Ordinance 4 and amendments
- Residential fire sprinkler education
- Get the decision of the Board on version A or B of the draft Ordinance

History

- Adopted the 2012 Edition of the IFC August 18th, 2015
- Fire Code Adoption and Revision Committee reviewed 2018 codes and developed draft 2018 Ordinance No.4
- Fire Code Adoption and Revision Committee presented the draft and amendments to the Fire Code Board of Appeals
- Surveyed other jurisdictions

Overview of Significant Changes 2018 Edition

- Significant changes are categorized by the following:
 - Additions of new requirements
 - Modifications\Clarifications
 - Deletion

Overview of Significant Changes 2018 Edition

- Significant changes for the 2018 Ordinance
 No. 4
- Version A draft <u>does require</u> residential fire sprinklers (RFS)
- Both draft versions reduce fire apparatus access road width

Economic Impact Risk Factors

- Affordable Housing Impact
 - Fire sprinklers would increase overall construction costs by 5% for a typical SFD of \$300K
 - Costs offset by reduction in insurance premiums which ranges between 5%-10% on annual premium
- Reduction of growth or development
 - Development impact should remain the same
 - Reduced width of fire apparatus access road

Risk Reduction Benefits

- Requiring new SFD's to be sprinkled will save lives.
 - Potential for consumer savings on insurance premiums
 - Fire event will be less of an impact to consumer
 - High density development reduces risk of multiple structures involved
 - Reduces run-around and delays with permitting
- Better consistency of enforcement

Time line for Adoption

- August- Study Session with BoCC
- September- Public review and comments
- October- First reading of Ordinance 4
- November- Second Reading
- January 1, 2019- Ordinance 4 takes effect

Recommendation to the Board

Adopt 2018 IFC and Ordinance 4 as proposed

Questions?

STATE OF COLORADO) COUNTY OF ADAMS)

At a regular meeting of the Board of County Commissioners for Adams County, Colorado, held at the Government Center in Brighton, Colorado on the _____ day of _______, 2018 there were present:

Charles "Chaz" Tedesco	Commissioner
Eva J. Henry	Commissioner
Erik Hansen	
Steve O'Dorisio	Commissioner
Mary Hodge	Commissioner
Heidi Miller	County Attorney
Erica Hanna,	Deputy Clerk of the Board

when the following proceedings, among others were held and done, to-wit:

Resolution 2018-

ORDINANCE NO. 4

AN ORDINANCE REPEALING THE 2012 EDITION OF THE INTERNATIONAL FIRE CODE AND ADOPTING THE 2018 EDITION OF THE INTERNATIONAL FIRE CODE WITH AMENDMENTS THERETO

WHEREAS, in 2015 the Board of County Commissioners adopted the International Fire Code, 2012 Edition, as Ordinance No. 4; and,

WHEREAS, pursuant to § 30-15-401.5(2), C.R.S., the Community and Economic Development Department, the Adams County Fire Code Adoption and Revision Commission, and the Adams County Board of Fire Code Appeals has recommended that the Board of County Commissioners adopt the 2018 edition of the International Fire Code, with certain amendments; and,

WHEREAS, the Board of County Commissioners is authorized under § 30-15-401.5, et seq., C.R.S., to adopt an ordinance for the provision of fire safety standards; and,

WHEREAS, pursuant to §30-28-201, C.R.S., the 2018 edition of the International Fire Code is consistent with the 1988 edition of the Uniform Building Codes, as promulgated by the International Conference of Building Officials.

NOW, THEREFORE, BE IT ORDAINED, by the Board of County Commissioners, County of Adams, State of Colorado, that the 2012 edition of the International Fire Code be repealed and Ordinance No. 4, the 2018 edition of the International Fire Code, with certain amendments thereto, the full text of which is available at the Adams County Building Safety Division, and which is fully incorporated herein by this reference, be enacted and adopted.

BE IT FURTHER ORDAINED by the Board of County Commissioners, County of Adams, State of Colorado, that:

Section 1. ADOPTION

The Board of County Commissioners of Adams County hereby adopts, by reference, the International Fire Code, 2018 edition, with amendments as described in Section 5, and including the following

appendices: Appendix B, Fire-Flow Requirements for Buildings; Appendix C, Fire Hydrant Locations and Distribution; Appendix D, Fire Apparatus Access Roads; Appendix E, Hazard Categories; Appendix F, Hazard Ranking; and Appendix N, Indoor Trade Shows and Exhibitions.

Section 2. CODE DESCRIBED

The International Fire Code, 2018 edition, is published by the International Code Council, 4051 Flossmoor Road, Country Club Hills, IL 60478

Section 3. APPLICABILITY

Pursuant to § 30-28-201, et seq., C.R.S., this Ordinance shall apply to all of the unincorporated areas of Adams County and shall not be embraced within the limits of any incorporated city or town. The provisions of this Ordinance shall not overrule or otherwise restrict the authority of the Board of County Commissioners or any other applicable official of Adams County in authorizing land uses or otherwise acting under the authority of any other adopted codes or regulations of Adams County or enforcing the provisions thereof.

Section 4. BOARD OF APPEALS

The "Board of Appeals," as described in Section 109 of the International Fire Code, 2018 edition, shall be the Adams County Board of Fire Code Appeals as appointed by the Board of County Commissioners. Whenever the fire code official disapproves an application or refuses to grant a permit applied for, or when it is claimed that the intent of the Code has been incorrectly interpreted, the provisions of the Code do not fully apply, or an equivalent method of protection or safety is proposed, the applicant may appeal the decision of the fire code official to the Adams County Board of Fire Code Appeals within thirty days from the date the decision being appealed was made.

Section 5. AMENDMENTS

Any portion not listed as amended is adopted as written

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the Fire Code of <u>Adams County-[NAME OF JURISDICTION]</u>, hereinafter referred to as "this code."

- **102.5** Application of residential code. Where structures are designed and constructed in accordance with the International Residential Code, the provisions of this code shall apply as follows:
- 1. Construction and design provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access and water supplies. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 shall apply.
- 1. Construction and design provisions: Provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access, and water supplies. Where this code addresses fire sprinklers in residential occupancies, it refers to residential occupancies constructed pursuant to both the International Building Code and the International Residential Code. Construction permits for systems and equipment utilized in the interior or exterior of the structure shall also apply.

EXCEPTION: Dwelling unit fire sprinkler systems, or portions thereof, installed in accordance with Section P2904 of the 2018 International Residential Code do not require a permit.

Dwelling unit fire sprinkler systems, or portions thereof, installed in accordance with NFPA 13D require a permit pursuant to Section 105.7.1 of this code.

2. Administrative, operational and maintenance provisions of this code shall apply.

References in this code to Group R-3 or U occupancies or one and two family dwellings shall apply to structures under the scope of the International Residential Code where appropriate.

105.4.1 Submittals. Construction documents and supporting data shall be submitted in two one or more sets with each application for a permit and in such form and detail as required by the *fire code official*. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. where documents are submitted in support of an application for a construction permit required by Sections 105.7.1, 105.7.4, 105.7.7, 105.7.8, 105.7.11, 105.7.13, 105.7.20, 105.7.24, and 105.7.26. When requested, qualification statements shall be submitted to the fire code official for the registered design professional to demonstrate compliance with the professional qualifications defined in Section 202.

Exception: The *fire code official* is authorized to waive the submission of *construction documents* and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

105.6.47 Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure, a temporary *special event structure* or a tent having an area in excess of 400 square feet (37 m2).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Tents open on all sides, which comply with all of the following:
- 2.1. Individual tents having a maximum size of 700 square feet (65 m2).
- 2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m2) total.
- 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.
- 3. Temporary special event structures having a maximum size of 700 square feet (65 m²).
- **105.7.7 Fire alarm and detection systems and related equipment.** A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment-, including emergency alarm systems (Section 908) and smoke control systems (Section 909). Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.
- **105.7.25 Temporary membrane structures and tents.** A construction permit is required to erect an air-supported temporary membrane structure, a temporary stage canopy or a tent having an area in excess of 400 square feet (37 m2).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.
- 3. Tents and awnings open on all sides, which comply with all of the following:
- 3.1. Individual tents shall have a maximum size of 700 square feet (65 m2).
- 3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65m2) total.
- 3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.
- 4. Temporary special event structures having a maximum size of 700 square feet (65 m²).
- **105.7.26 Explosion control.** A construction permit is required to install or modify explosion control provided as required in Section 911.
- **110.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a [SPECIFY OFFENSE] class 2 petty offense, punishable by a fine of not more than [AMOUNT] one thousand dollars (\$1,000). or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
- **112.4 Failure to comply**. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] one thousand dollars (\$1,000). or more than [AMOUNT].

(b) CHAPTER 2 DEFINITIONS

REGISTERED DESIGN PROFESSIONAL. An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

REGISTERED DESIGN PROFESSIONAL. An engineer, licensed to practice professional engineering, as defined by the statutory requirements of the professional licensure laws of the State of Colorado, who shall be responsible and accountable to possess the required knowledge and skills to perform design, analysis, and verification in accordance with provisions of this code and applicable professional standards of practice.

(c) CHAPTER 3 GENERAL REQUIREMENTS

311.5 Placards. Any vacant or abandoned buildings or structure determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards shall may be marked as specified in Sections 311.5.1 through 311.5.5.

(d) CHAPTER 5 FIRE SERVICE FEATURES

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) twenty-four feet (7315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Exception: Fire apparatus access roads serving rural residential development shall be allowed to be not less than twenty (20) feet in unobstructed width when approved by the fire code official.

- **503.2.2 Authority**. The fire code official shall have the authority to require or permit modifications to the required access an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations. The fire code official shall have the authority to reduce minimum access widths and vertical clearances based on the fire department's apparatus. or where necessary to meet the public safety objectives of the jurisdiction.
- **504.3 Stairway access to roof.** New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3- percent slope), shall be provided with a stairway to the roof. When an exit enclosure is required by Section 1022, the stairway to the roof shall be located within an exit enclosure. Stairway access to the roof shall be in accordance with Section 1011.12 Stairway access to the roof shall be in accordance with Section 1011.12. Such stairway shall be marked at street and floor levels with a sign indicating that the stairway continues to the roof. Where roofs are used for roof gardens or for other purposes, stairways shall be provided as required for such occupancy classification.
- 511 Recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots. Recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots shall provide and maintain access roads and fire hydrants in accordance with Section 503 and 507.

EXCEPTION: Recreational vehicle parks located in remote areas shall be provided with protection and access roadways as required by the fire code official.

(e) CHAPTER 6 BUILDING SERVICES AND SYSTEMS

603.10 Carbon monoxide alarm and detector maintenance, inspection, and testing. The building owner shall be responsible to maintain all carbon monoxide alarms and detectors in an operable condition at all times. Maintenance, inspection, and testing shall be performed in accordance with manufacturer's instructions or nationally recognized standards. A written record shall be maintained and shall be made available to the fire code official upon request.

(f) CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY

903.2.5.1 General. An automatic sprinkler system shall be <u>installed in provided throughout all buildings containing</u> Group H occupancies.

903.2.6 Group I. An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

Exceptions:

- 1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
- 2. An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior *exit* door.
- 3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge,

an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge* and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

4. An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout all Group 1-1 facilities that meet the federal Fair Housing Act definition of senior housing or housing for older persons.

903.2.11.1.3 Basements. Where any portion of a basement is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the basement shall be equipped throughout with an approved automatic sprinkler system.

(g) CHAPTER 12 ENERGY SYSTEMS

1204.4 Ground-mounted photovoltaic panel systems. Ground-mounted photovoltaic panel systems shall comply with Section 1204.1 and this section. Setback requirements shall not apply to ground-mounted, free-standing photovoltaic arrays. A clear, brush-free area of 10 feet (3048 mm) shall be required and maintained around the array equipment for ground-mounted photovoltaic arrays. A fire break or other facility perimeter design acceptable to the fire code official shall be required to reduce or eliminate the interface risk from wildfire.

(h) CHAPTER 31 TENTS, TEMPORARY SPECIAL EVENT STRUCTURES, AND OTHER MEMBRANE STRUCTURES

3105.2 Approval. Temporary special event structures in excess of 400 square feet (37 m²) 700 square feet (65 m²) shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the fire code official. and the building official.

3105.5 Required documents. The following documents shall be submitted to the fire code official and building official for review before a permit is approved:

(i) CHAPTER 56 EXPLOSIVES AND FIREWORKS

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

- 1. Storage and handling of fireworks as allowed in Section 5604.
- 2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
- 3. The use of fireworks for fireworks displays as allowed in Section 5608.
- 4. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100–185, as applicable for consumer fireworks.
- 5. The sale or use of permissible fireworks, as defined under section 12-28-101(8), as amended, of the Colorado Revised Statutes.

6. The sale of permissible fireworks from temporary stands in accordance with Adams
County Development Standards and Regulations, Chapter 4, section 4-05-02-06, as amended.

(j) CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited allowed when such storage complies with Sections 5704.2.9.6.1 through 5704.2.9.6.3. within the limits established by law as the limits of districts in which such storage is prohibited [JURISDICTION TO SPECIFY].

5707.1 General. On-demand mobile fueling operations that dispense Class I, II and III liquids into the fuel tanks of motor vehicles shall comply with Sections 5707.1 through 5707.6.3.

Exception: Fueling from an *approved* portable container in cases of an emergency or for personal use-and fueling and dispensing of flammable and combustible liquids on farms and construction sites as allowed by Section 5706.2.

(k) APPENDIX D FIRE APPARATUS ACCESS ROADS

Within Table D103.4 Requirements for Dead-End Fire Apparatus Access Roads, the minimum width of a dead-end fire apparatus access road that is between 501-750 feet in length is reduced to 20 feet from 26 feet.

TABLE D103.4
REQUIREMENTS FOR DEAD-END
FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accor- dance with Figure D103.1
501-750	26 <u>20</u>	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accor- dance with Figure D103.1
Over 750		Special approval required

For SI: 1 foot = 304.8 mm.

Section 6. PENALTIES

Pursuant to § 30-15-402, C.R.S., any person who violates the provisions of this Ordinance commits a class 2 petty offense and, upon conviction thereof, shall be punished by a fine of not more than one thousand dollars for each separate violation.

Section 7. REPEAL OF CONFLICTING BUILDING CODES

All conflicting building codes previously adopted by the Adams County Board of County Commissioners are hereby repealed in their entirety and re-enacted in accordance with the provisions of this Ordinance.

Section 8. SEVERABILITY

The Board of County Commissioners hereby declares that should any article, section, paragraph, sentence, clause, or phrase of this Ordinance be held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of County Commissioners hereby declares that it would have passed this Ordinance, and each part or parts thereof, irrespective of the fact that any one part or parts be declared invalid or unconstitutional.

Section 9. SAFETY CLAUSE

The Board of County Commissioners hereby finds, determines, and declares that this Ordinance is necessary for the preservation of the public health, safety, and welfare.

Section 10. DATE OF EFFECT

The Board of County Commissioners of Adams County, Colorado, hereby determines that this Ordinance shall become effective on January 1, 2019.

Adopted this ____ day of November, 2018.

Mary Hodge, Chair Board of County Commissioners Adams County, Colorado

Upon motion duly made and seconded the foregoing Ordinance was adopted by the following vote:

Hodge	
O'Doriso	
Henry	
Tedesco	
Hansen	
Commissioners	

CERTIFICATE OF ATTESTATION

STATE OF COLORADO)
County of Adams)

CERTIFICATE OF ATTESTATION

I, Stan Martin, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing Order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.

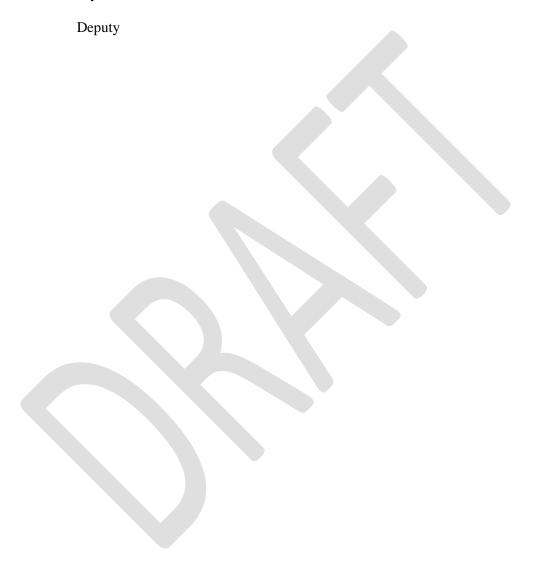
The foregoing text is the authentic text of Adams County Ordinance No. 4. The first reading of said Ordinance
took place on November, 2018, at a regular Board of County Commissioners meeting. It was published in
full in a newspaper of general circulation at least ten days before its adoption; to wit, in The Denver Post on
November, 2018. The Ordinance was adopted on second reading at a regular Board of County

Commissioners meeting on December _____, 2018, and shall become effective on January 1, 2019.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Brighton, Colorado this 18th day of November, 2014.

County Clerk and ex-officio Clerk of the Board of County Commissioners Stan Martin:

By:



STATE OF COLORADO) COUNTY OF ADAMS)

At a regular meeting of the Board of County Commissioners for Adams County, Colorado, held at the Government Center in Brighton, Colorado on the _____ day of _______, 2018 there were present:

Charles "Chaz" Tedesco	Commissioner
Eva J. Henry	Commissioner
Erik Hansen	Commissioner
Steve O'Dorisio	Commissioner
Mary Hodge	Commissioner
Heidi Miller	County Attorney
Erica Hanna,	Deputy Clerk of the Board

when the following proceedings, among others were held and done, to-wit:

Resolution 2018-

ORDINANCE NO. 4

AN ORDINANCE REPEALING THE 2012 EDITION OF THE INTERNATIONAL FIRE CODE AND ADOPTING THE 2018 EDITION OF THE INTERNATIONAL FIRE CODE WITH AMENDMENTS THERETO

WHEREAS, in 2015 the Board of County Commissioners adopted the International Fire Code, 2012 Edition, as Ordinance No. 4; and,

WHEREAS, pursuant to § 30-15-401.5(2), C.R.S., the Community and Economic Development Department, the Adams County Fire Code Adoption and Revision Commission, and the Adams County Board of Fire Code Appeals has recommended that the Board of County Commissioners adopt the 2018 edition of the International Fire Code, with certain amendments; and,

WHEREAS, the Board of County Commissioners is authorized under § 30-15-401.5, et seq., C.R.S., to adopt an ordinance for the provision of fire safety standards; and,

WHEREAS, pursuant to §30-28-201, C.R.S., the 2018 edition of the International Fire Code is consistent with the 1988 edition of the Uniform Building Codes, as promulgated by the International Conference of Building Officials.

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appendices: Appendix B, Fire-Flow Requirements for Buildings; Appendix C, Fire Hydrant Locations and Distribution; Appendix D, Fire Apparatus Access Roads; Appendix E, Hazard Categories; Appendix F, Hazard Ranking; and Appendix N, Indoor Trade Shows and Exhibitions.

Section 2. CODE DESCRIBED

The International Fire Code, 2018 edition, is published by the International Code Council, 4051 Flossmoor Road, Country Club Hills, IL 60478

Section 3. APPLICABILITY

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Section 4. BOARD OF APPEALS

The "Board of Appeals," as described in Section 109 of the International Fire Code, 2018 edition, shall be the Adams County Board of Fire Code Appeals as appointed by the Board of County Commissioners. Whenever the fire code official disapproves an application or refuses to grant a permit applied for, or when it is claimed that the intent of the Code has been incorrectly interpreted, the provisions of the Code do not fully apply, or an equivalent method of protection or safety is proposed, the applicant may appeal the decision of the fire code official to the Adams County Board of Fire Code Appeals within thirty days from the date the decision being appealed was made.

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Any portion not listed as amended is adopted as written

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- 1. Construction and design provisions: Provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access, and water supplies. Where this code addresses fire sprinklers in residential occupancies, it refers to residential occupancies constructed pursuant to both the International Building Code and the International Residential Code. Construction permits for systems and equipment utilized in the interior or exterior of the structure shall also apply.

EXCEPTION: Dwelling unit fire sprinkler systems, or portions thereof, installed in accordance with Section P2904 of the 2018 International Residential Code do not require a permit.

Dwelling unit fire sprinkler systems, or portions thereof, installed in accordance with NFPA 13D require a permit pursuant to Section 105.7.1 of this code.

2. Administrative, operational and maintenance provisions of this code shall apply.

References in this code to Group R-3 or U occupancies or one and two family dwellings shall apply to structures under the scope of the International Residential Code where appropriate.

105.4.1 Submittals. Construction documents and supporting data shall be submitted in two one or more sets with each application for a permit and in such form and detail as required by the *fire code official*. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. where documents are submitted in support of an application for a construction permit required by Sections 105.7.1, 105.7.4, 105.7.7, 105.7.8, 105.7.11, 105.7.13, 105.7.20, 105.7.24, and 105.7.26. When requested, qualification statements shall be submitted to the fire code official for the registered design professional to demonstrate compliance with the professional qualifications defined in Section 202.

Exception: The *fire code official* is authorized to waive the submission of *construction documents* and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

105.6.47 Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure, a temporary *special event structure* or a tent having an area in excess of 400 square feet (37 m2).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Tents open on all sides, which comply with all of the following:
- 2.1. Individual tents having a maximum size of 700 square feet (65 m2).
- 2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m2) total.
- 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.
- 3. Temporary special event structures having a maximum size of 700 square feet (65 m²).
- **105.7.7 Fire alarm and detection systems and related equipment.** A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment-, including emergency alarm systems (Section 908) and smoke control systems (Section 909). Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.
- **105.7.25 Temporary membrane structures and tents.** A construction permit is required to erect an air-supported temporary membrane structure, a temporary stage canopy or a tent having an area in excess of 400 square feet (37 m2).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.
- 3. Tents and awnings open on all sides, which comply with all of the following:
- 3.1. Individual tents shall have a maximum size of 700 square feet (65 m2).
- 3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65m2) total.
- 3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.
- 4. Temporary special event structures having a maximum size of 700 square feet (65 m²).
- **105.7.26 Explosion control.** A construction permit is required to install or modify explosion control provided as required in Section 911.
- **110.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a [SPECIFY OFFENSE] class 2 petty offense, punishable by a fine of not more than [AMOUNT] one thousand dollars (\$1,000) or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
- **112.4 Failure to comply**. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] one thousand dollars (\$1,000). or more than [AMOUNT].

(b) CHAPTER 2 DEFINITIONS

REGISTERED DESIGN PROFESSIONAL. An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

REGISTERED DESIGN PROFESSIONAL. An engineer, licensed to practice professional engineering, as defined by the statutory requirements of the professional licensure laws of the State of Colorado, who shall be responsible and accountable to possess the required knowledge and skills to perform design, analysis, and verification in accordance with provisions of this code and applicable professional standards of practice.

(c) CHAPTER 3 GENERAL REQUIREMENTS

311.5 Placards. Any vacant or abandoned buildings or structure determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards shall may be marked as specified in Sections 311.5.1 through 311.5.5.

(d) CHAPTER 5 FIRE SERVICE FEATURES

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) twenty-four feet (7315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Exception: Fire apparatus access roads serving rural residential development shall be allowed to be not less than twenty (20) feet in unobstructed width when approved by the fire code official.

- **503.2.2 Authority**. The fire code official shall have the authority to require or permit modifications to the required access an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations. The fire code official shall have the authority to reduce minimum access widths and vertical clearances based on the fire department's apparatus. or where necessary to meet the public safety objectives of the jurisdiction.
- **504.3 Stairway access to roof.** New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3- percent slope), shall be provided with a stairway to the roof. When an exit enclosure is required by Section 1022, the stairway to the roof shall be located within an exit enclosure. Stairway access to the roof shall be in accordance with Section 1011.12 Stairway access to the roof shall be in accordance with Section 1011.12. Such stairway shall be marked at street and floor levels with a sign indicating that the stairway continues to the roof. Where roofs are used for roof gardens or for other purposes, stairways shall be provided as required for such occupancy classification.
- 511 Recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots. Recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots shall provide and maintain access roads and fire hydrants in accordance with Section 503 and 507.

EXCEPTION: Recreational vehicle parks located in remote areas shall be provided with protection and access roadways as required by the fire code official.

(e) CHAPTER 6 BUILDING SERVICES AND SYSTEMS

603.10 Carbon monoxide alarm and detector maintenance, inspection, and testing. The building owner shall be responsible to maintain all carbon monoxide alarms and detectors in an operable condition at all times. Maintenance, inspection, and testing shall be performed in accordance with manufacturer's instructions or nationally recognized standards. A written record shall be maintained and shall be made available to the fire code official upon request.

(f) CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY

903.2.5.1 General. An automatic sprinkler system shall be <u>installed in provided throughout all buildings containing</u> Group H occupancies.

903.2.6 Group I. An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

Exceptions:

- 1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
- 2. An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior *exit* door.
- 3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge,

an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge* and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

- 4. An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout all Group 1-1 facilities that meet the federal Fair Housing Act definition of senior housing or housing for older persons.
- **903.2.8 Group R.** An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

Exceptions:

- 1. An automatic residential fire sprinkler system shall not be required for a Group R-3 fire area when in compliance with all of the following conditions:
 - 1.2 The Group R-3 fire area does not exceed 3,600 square feet;
 - 1.3 The Group R-3 dwelling is within 1,000 (304.8 m) feet of a hydrant having the required fire flow; and
 - 1.4 The Group R-3 dwelling is on an approved fire apparatus access road.
- 2. An automatic residential fire sprinkler system shall not be required where *additions* or *alterations* are made to existing one- and two-family dwellings or *townhouses* that do not have an automatic residential fire sprinkler system installed in accordance with sections R313.1 and R313.2 and constructed under the International Residential Code.
- 903.2.8.3. An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout all Group R-2 occupancies that meet the Federal Fair Housing Act definition of senior housing or housing for older persons.
- **903.2.11.1.3 Basements.** Where any portion of a basement is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the basement shall be equipped throughout with an approved automatic sprinkler system.

(g) CHAPTER 12 ENERGY SYSTEMS

1204.4 Ground-mounted photovoltaic panel systems. Ground-mounted photovoltaic panel systems shall comply with Section 1204.1 and this section. Setback requirements shall not apply to ground-mounted, free-standing photovoltaic arrays. A clear, brush-free area of 10 feet (3048 mm) shall be required and maintained around the array equipment for ground-mounted photovoltaic arrays. A fire break or other facility perimeter design acceptable to the fire code official shall be required to reduce or eliminate the interface risk from wildfire.

(h) CHAPTER 31 TENTS, TEMPORARY SPECIAL EVENT STRUCTURES, AND OTHER MEMBRANE STRUCTURES

- **3105.2 Approval**. Temporary special event structures in excess of $\frac{400 \text{ square feet } (37 \text{ m2})}{500 \text{ square feet } (65 \text{ m}^2)}$ shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the fire code official. and the building official.
- **3105.5 Required documents.** The following documents shall be submitted to the fire code official and building official for review before a permit is approved:

(i) CHAPTER 56 EXPLOSIVES AND FIREWORKS

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

- 1. Storage and handling of fireworks as allowed in Section 5604.
- 2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
- 3. The use of fireworks for fireworks displays as allowed in Section 5608.
- 4. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100–185, as applicable for consumer fireworks.
- 5. The sale or use of permissible fireworks, as defined under section 12-28-101(8), as amended, of the Colorado Revised Statutes.
- 6. The sale of permissible fireworks from temporary stands in accordance with Adams County Development Standards and Regulations, Chapter 4, section 4-05-02-06, as amended.

(j) CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited allowed when such storage complies with Sections 5704.2.9.6.1 through 5704.2.9.6.3. within the limits established by law as the limits of districts in which such storage is prohibited [JURISDICTION TO SPECIFY].

5707.1 General. On-demand mobile fueling operations that dispense Class I, II and III liquids into the fuel tanks of motor vehicles shall comply with Sections 5707.1 through 5707.6.3.

Exception: Fueling from an *approved* portable container in cases of an emergency or for personal use-and fueling and dispensing of flammable and combustible liquids on farms and construction sites as allowed by Section 5706.2.

(k) APPENDIX D FIRE APPARATUS ACCESS ROADS

Within Table D103.4 Requirements for Dead-End Fire Apparatus Access Roads, the minimum width of a dead-end fire apparatus access road that is between 501-750 feet in length is reduced to 20 feet from 26 feet.

TABLE D103.4 REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accor- dance with Figure D103.1
501-750	26 <u>20</u>	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accor- dance with Figure D103.1
Over 750		Special approval required

For SI: 1 foot = 304.8 mm.

Section 6. PENALTIES

Pursuant to § 30-15-402, C.R.S., any person who violates the provisions of this Ordinance commits a class 2 petty offense and, upon conviction thereof, shall be punished by a fine of not more than one thousand dollars for each separate violation.

Section 7. REPEAL OF CONFLICTING BUILDING CODES

All conflicting building codes previously adopted by the Adams County Board of County Commissioners are hereby repealed in their entirety and re-enacted in accordance with the provisions of this Ordinance.

Section 8. SEVERABILITY

The Board of County Commissioners hereby declares that should any article, section, paragraph, sentence, clause, or phrase of this Ordinance be held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of County Commissioners hereby declares that it would have passed this Ordinance, and each part or parts thereof, irrespective of the fact that any one part or parts be declared invalid or unconstitutional.

Section 9. SAFETY CLAUSE

The Board of County Commissioners hereby finds, determines, and declares that this Ordinance is necessary for the preservation of the public health, safety, and welfare.

Section 10. DATE OF EFFECT

The Board of County Commissioners of Adams County, Colorado, hereby determines that this Ordinance shall become effective on January 1, 2019.

Adopted this ____ day of November, 2018.

Mary Hodge, Chair Board of County Commissioners Adams County, Colorado
Upon motion duly made and seconded the foregoing Ordinance was adopted by the following vote:
Hodge O'Doriso Henry Tedesco Hansen Commissioners
CERTIFICATE OF ATTESTATION
STATE OF COLORADO) County of Adams)
CERTIFICATE OF ATTESTATION
I, Stan Martin, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing Order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.
The foregoing text is the authentic text of Adams County Ordinance No. 4. The first reading of said Ordinance took place on November, 2018, at a regular Board of County Commissioners meeting. It was published in full in a newspaper of general circulation at least ten days before its adoption; to wit, in The Denver Post on November, 2018. The Ordinance was adopted on second reading at a regular Board of County Commissioners meeting on December, 2018, and shall become effective on January 1, 2019.
IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Brighton, Colorado this 18th day of November, 2014.
County Clerk and ex-officio Clerk of the Board of County Commissioners Stan Martin:

By:

Deputy



STUDY SESSION AGENDA ITEM

DATE: August 28, 2018

SUBJECT: 2018 International Building Codes

FROM: Kristin Sullivan, Director of Community and Economic Development

AGENCY/DEPARTMENT: Community and Economic Development

ATTENDEES: Kristin Sullivan, Doug Clark, Justin Blair, Christy Fitch, Scott Blaha

PURPOSE OF ITEM: Presentation of the 2018 International Building Codes and proposed amendments.

STAFF RECOMMENDATION: Adopt the 2018 Editions of the International Codes and the 2017 National Electric Code

BACKGROUND:

The current Ordinance 12 and 14 adopting the 2012 editions of the International Building Codes and the 2014 edition of the National Electric Code were adopted in 2014 by the BoCC. The International Code Council (ICC) and the National Fire Protection Agency (NFPA) updates and publishes the codes every three years. Community and Economic Development is recommending adopting the latest versions to better align with current construction technologies captured in the most current editions.

Building Safety staff has reviewed the 2018 Editions of the International Building Codes and has developed amendments thereto. Staff is recommending repealing Ordinance 12 and Ordinance 14 and adopting the new Ordinance 12 which combines both the International Codes and the National Electric Code into one Ordinance. These amendments have also been presented to the Building Code Board of Appeals for their review.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Community and Economic Development

ATTACHED DOCUMENTS:

Power Point Presentation
Draft 2018 Ordinance 12 version A & B

Page 1 of 2 Revised: 2018-Jan05

FISCAL	IMP	'AC	Ή	:

Please check if there is no fiscal section below.	impact ⊠. If	there is fisc	eal impact, pl	ease fully com	plete the
Fund:	····				
Cost Center:					
		{	Object Account	Subledger	Amount
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Add'l Capital Expenditure not inclu Total Expenditures:	ded in Current l	Budget:			
New FTEs requested: Future Amendment Needed: Additional Note:	☐ YES	⊠ NO			
APPROVAL SIGNATURES:					
Raymond H. Gonzales, County Ma Bryan Ostler, Deputy County Mana	No. of the Control of			County Manager County Manag	
APPROVAL OF FISCAL IMP	PACT:				

Page 2 of 2

Revised: 2018-Jan05

Ordinance No. 12 2018 International Building Codes



Today's Objective

- Present proposed Ordinance 12 and amendments
- Feedback and direction from the BoCC on version A or B

History

- Adopted the 2012 Editions of the I-Codes November 18th, 2014
- Adopted the 2014 Edition of the NEC Ord. 14 July 22nd, 2014
- Staff reviewed 2018 I-Codes and the 2017 NEC and developed draft 2018 Ordinance No.12
- Presented the draft amendments to the Building Code Board of Appeals
- Survey of other jurisdictions
- Informal survey of contractors

Overview of Significant Changes 2018 Edition

- Significant changes to the Codes are categorized by the following:
 - Additions of new code requirements
 - Modifications/ Clarifications to existing requirements
 - Deletion of obsolete requirements

Significant Changes 2018 Edition

- Significant changes for the 2018 Ordinance
 No. 12
- Version A draft requires residential fire sprinklers (RFS)
- Aligned plumbing code requirements with the State Plumbing Code (2015 IPC)
- Energy Code (Jump from 2006 to 2018)

Economic Impact Risk Factors

- Affordable Housing Impact
 - Residential fire sprinklers would increase overall construction costs by 5% for a typical SFD of \$300K
 - Costs offset by reduction in insurance premiums which ranges between 5%-10% on annual premium
 - Compliance with the 2018 Energy Code increases overall construction costs
- Reduction of growth or development
 - No significant reduction in growth or development anticipated

Risk Reduction Benefits

- Requiring new SFD's to be sprinkled will save lives.
 - Potential for consumer savings (insurance premiums)
 of 5%-10% on average.
 - Fire event will be less of an impact to consumer
- Better consistency of enforcement
- Reduced run-around and delays for permitting
- Energy code enforcement complications and issues reduced

Survey of Surrounding Counties

Jurisdiction	Current Edition Adopted	Residential Fire Sprinklers Amended	Plan to adopt 2018 Edition	Plans to <u>not</u> <u>amend</u> residential fire sprinklers out of the code
Adams County	2012	Yes	Yes\Fall 2018	Yes
Jefferson County	2015	Yes	Yes\Fall 2018	No
City and County of Broomfield	2015	Yes	Yes\2020	Potentially, Yes
Weld County	2012	Yes	Yes\Fall 2018	No
Arapahoe County	2015	Yes	No\2021 editions	No
City and County of Denver	2015	Yes	Yes\Summer 2019	No

Survey of Surrounding Cities

Jurisdiction	Current Edition Adopted	Residential Fire Sprinklers Amended out	Plan to adopt 2018 Edition	Plans to <u>not</u> <u>amend</u> residential fire sprinklers out of the code
Adams County	2012	Yes	Yes\Fall 2018	Yes
City of Westminster	2015	No (since 2009)	No	Yes
City of Thornton	2015	Yes	Yes\2019	Potentially, Yes
City of Northglenn	2009	Yes	No	No
City of Brighton	2012	Yes	Yes\Fall 2018	No
City of Aurora	2015	Yes	No\ Wait for 2021 edition	Yes

Time line for Adoption

- August- Study session with BoCC
- September- Public review and comments
- October- First reading of Ordinance 12
- November- Second Reading
- January 1, 2019- Ordinance 12 takes effect

Recommendation to the Board

Adopt 2018 Editions and Ordinance 12 as proposed

Questions?

STATE OF COLORADO) COUNTY OF ADAMS)

At a regular meeting of the Board of County Commissioners for Adams County, Colorado, held at the Government Center in Brighton, Colorado on the 18th day of November, 2014 there were present:

Charles "Chaz" Tedesco	Commissioner
Eva J. Henry	Commissioner
Erik Hansen	Commissioner
Steve O'Dorisio	Commissioner
Mary Hodge	Commissioner
Heidi Miller	County Attorney
Erica Hanna,	Deputy Clerk of the Board

when the following proceedings, among others were held and done, to-wit:

Resolution 2014-346

ORDINANCE NO. 12

AN ORDINANCE REPEALING THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODES AND ADOPTING THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODES AND THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE WITH AMENDMENTS THERETO

WHEREAS, on November 18th, 2014, the Board of County Commissioners adopted the 2012 Edition of the International Building Codes and applied it countywide; and,

WHEREAS, the Adams County Building Safety Division is recommending that the 2012 Edition of the International Building Codes and the 2014 National Electrical Code be repealed, and that the Board adopt a county building code modeled upon the building safety standards contained in the 2018 editions of the International Building Codes, which include the 2018 International Building Code, 2018 International Residential Code, 2018 International Plumbing Code, 2018 International Mechanical Code, 2018 International Fuel Gas Code, 2018 edition of the International Energy Conservation Code , 2018 International Swimming Pool and Spa Code, 2018 International Property Maintenance Code, and 2018 International Existing Building Code, with certain amendments thereto; and,

WHEREAS, the Adams County Building Safety Division is also recommending adoption of the 2017 edition of the National Fire Protection Association's National Electrical Code; and,

WHEREAS, pursuant to \$30-28-201 et seq., C.R.S., the Adams County Board of County Commissioners is authorized to adopt ordinances and a building code consistent with the Uniform Building Code, 1988 edition, as promulgated by the International Conference of Building Officials; and,

WHEREAS, the 2018 Edition of the International Building Codes and the 2017 National Electrical Code are consistent with the Uniform Building Codes, 1988 edition, as promulgated by the International Code Council and the National Fire Protection Association.

NOW, THEREFORE, BE IT ORDAINED, by the Board of County Commissioners, County of Adams, State of Colorado, that the 2012 Editions of the International Building Codes and the 2014 Edition of the National Electrical Code be repealed and Ordinance No. 12, the 2018 Edition of the International Building Codes and the 2017 Edition of the National Electrical Code, with certain amendments thereto, the full text of which is available at the Adams County Building Safety Division, and which is fully incorporated herein by this reference, be enacted and adopted.

BE IT FURTHER ORDAINED by the Board of County Commissioners, County of Adams, State of Colorado, that:

Section 1. ADOPTION

The Board of County Commissioners of Adams County hereby adopts, by reference, the International Building Codes, 2018 editions, and the National Electrical Code, 2017 edition, with amendments and definitions as described in Section 4, including the following appendices: Appendix C, Group U Agriculture Buildings, and Appendix I, Patio Covers, from the 2018 International Building Code; Appendix A, Sizing and Capacities of Gas Piping, Appendix E, Manufactured Housing Used as Dwellings, Appendix E, Manufactured Housing Used as Dwellings, Appendix E, Patio Covers, Appendix L, Permit Fees, and Appendix M, Home Daycare R-3 occupancies, from the 2018 International Residential Code.

Section 2. CODE DESCRIBED

The International Building Codes, 2018 editions, are published by the International Code Council, 4051 Flossmoor Road, Country Club Hills, Illinois.

The National Electrical Code, 2017 edition, as published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts.

Section 3. APPLICABILITY

Pursuant to \$30-28-201, et seq., C.R.S., this Ordinance shall apply to all of the unincorporated areas of Adams County and shall not be embraced within the limits of any incorporated city or town. The provisions of this Ordinance shall not overrule or otherwise restrict the authority of the Board of County Commissioners or any other applicable official of Adams County in authorizing land uses or otherwise acting under the authority of any other adopted codes or regulations of Adams County, or enforcing the provisions thereof.

Section 4. AMENDMENTS

(1) The following definitions shall be adopted and apply to all Adams County building codes:

Abandon or abandoned means the desertion of a building, structure or utility and when all utilities are disconnected and/or the building, structure or utility is left to the mercy of vandalism, dilapidation and deterioration and creates a fire hazard, an unsafe condition or a nuisance.

Authority having Jurisdiction [AHJ] means Adams County, or Adams County Building Safety Division.

Attached means if connected to the principal building or structure, not less than fifty percent of the applicable wall shall be common.

Building Department means one and the same in all respects as the Building Safety Division as used in this chapter and elsewhere in County communications and documents, and the two phrases shall be used interchangeably.

Building Permit means the official County document authorizing construction activity under the primary and secondary codes.

Dangerous Building Code when used herein refers to the latest edition of the Property Maintenance Code as published by the International Code Council.

Deterioration, as applied to buildings, structures, equipment and materials, includes corrosion, decay, wear and tear through abuse, obsolescence, effects of the elements, fire damage, lack of maintenance or by any other cause and also includes fatigue due to overstressing, disintegration of the component parts of a building, structure and equipment and the separation of materials and structural parts.

Health Department means the Tri-County Health Department designated as the County's health department.

Homeowner shall mean the individual shown as having record title of any building or structure as shown in the official records of the Adams County Clerk and Recorder.

IBC means the latest edition of the International Building Code, as published by the International Code Council.

IEBC means the latest edition of the International Existing Building Code, as published by the International Code Council.

IECC means the latest edition of the International Energy Conservation Code, as published by the International Code Council.

IFC means the latest edition of the International Fire Code, as published by the International Code Council.

IFGC means the latest edition of the International Fuel Gas Code, as published by the International Code Council.

IMC means the latest edition of the International Mechanical Code, as published by the International Code Council.

IPC means the latest edition of the International Plumbing Code, as published by the International Code Council.

IRC means the latest edition of the International Residential Code, as published by the International Code Council.

ISPSC means the latest edition of the International Swimming Pool and Spa Code, as published by the International Code Council.

NEC means the latest edition of the National Electric Code, as published by the National Fire Protection Association.

IPMC means the latest edition of the International Property Maintenance Code, as published by the International Code Council.

Principle Residence shall mean, for an individual, the residence as determined by the address given by the individual and shall be the location where the individual(s) habitation is fixed and to which that individual, whenever absent, has the present intention of returning after departure or absence regardless of the duration of such absence. In determining Principle Residence, the following circumstances shall be considered: voter registration address, motor vehicle registration address (as applicable), and or the address given for state income tax purposes

(2) Amendments to the 2018 International Building Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Building Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

105.2 Work exempt from Building Permit

Buildings/structures:

- 2. Fences not over 42" (1067 mm) 7 feet (2134 mm) high.
- 14. Replacement of asphalt shingles when over the aggregate roof area there *is* less than one square of replacement or repair.

(b) CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

1511.1 General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15.

Exceptions:

- 1. Roof replacement or roof recover of existing lowslope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage and have been evaluated by a registered design professional for the increase in loading due to potential ponding of water.
- 2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1503.4 for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1503.4.
- **1511.1.1 Extent of replacement**. When more than one square of asphalt shingles are required to be replaced over the aggregate area of any slope, the entire slope containing damaged shingles

shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.

- **1511.3.1 Roof recover.** The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:
- 1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
- 2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
- 3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1511.4.
- 4. The application of a new protective roof coating over an existing protective roof coating, metal roof panel, built-up roof, spray polyurethane foam roofing system, metal roof shingles, mineral-surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off of existing roof coverings.
- **1511.3.1.1 Exceptions:** A roof recover shall not be permitted where any of the following conditions occur:
- 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos cement tile.
- 3. Where the existing roof has two or more than one application of any type of roof covering.

(c) CHAPTER 16 STRUCTURAL DESIGN

- **1608.1 General.** Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less than 30 pounds per square foot (2.787 m2) or that determined by Section 1607.
- **1612.3 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 identified by the Federal Emergency Management Agency in a report entitled "The Flood Insurance Study for <u>Adams County and Incorporated Areas (Vol. 1. 2. 3) [INSERT NAME OF JURISDICTION]</u> "dated <u>February 17. 2017 [INSERT DATE OF ISSUANCE]</u>, as amended or revised with the accompanying Flood Insurance Rate Map FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

(d) CHAPTER 18 SOILS AND FOUNDATIONS

1809.5 Frost Protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extending 6 inches (152 mm) below the frost line, of the locality.
- 2. Constructing in accordance with ASCE 32.
- 3. Erecting on solid rock.

(3) Amendments to the 2018 International Residential Code

(a) CHAPTER 1 ADMINISTRATION

R101.1 Title. These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of Adams County [NAME OF JURISDICTION], and shall be cited as such and will be referred to herein as "this code."

R102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this Code, the *International Existing Building Code* and *International Property Maintenance Code* or the *International Fire Code*, or as is deemed necessary by the *building official* for the general safety and welfare of the occupants and the public.

R105.2 Work Exempt from Building Permit

Buildings/structures:

- 2. Fences not over 42" (1067 mm) 7 feet (2134 mm) high.
- 11. Replacement of asphalt shingle when over the aggregate roof area there is less than one square of repair or replacement.

(b) CHAPTER 3 BUILDING PLANNING

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND		WIN	D DESIGN		SEISMIC	SEISMIC SUBJECT TO DAMAGE FROM		WINTER ICE BARRIER		FLOOD	AIR	MEAN	
SNOW LOAD°	Speed ^d (mph)	Topographic effects ^k	Special wind region	Windborne debris zone™	DESIGN CATEGORY	Weathering	Frost line depth ^b	Termite ^c	DESIGN TEMP°	UNDERLAYMENT REQUIRED ^b	HAZARDS ⁹	FREEZING INDEX ⁱ	ANNUAL TEMP ⁱ
30	115	NO	NO	NO	В	SEVERE	36"	Slight to Moderate	1	NO	2017	1500	50.2
						MANUAL J DE	SIGN CRITER	IA ⁿ					
Elevation			Lattitude	Winter heating		mmer oling	Altitude correction fa		ndoor design temperature	Design temperature		Heating tem differe	
5,2	220'		39.8666505 N	6		90	.82		70	75		64	
Cooling temperatur	re differen	ce	Wind velocity heating	Wind veloc cooling		ncident t bulb	Daily range		Winter humidity	Summe			
15			15	7.5	6	0	Н		30%	50%			

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

(c) CHAPTER 4 FOUNDATIONS

R403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, crushed stone footings, wood foundations, or other *approved* structural systems that shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

Exception: Pre-manufactured one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.58 m2) may be supported on skids incorporated into the floor system. These structures shall be anchored to the ground with approved materials to resist all applicable loads.

- **R403.1.4.1 Frost protection.** Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:
- 1. Extended <u>6 inches (152 mm)</u> below the frost line specified in Table R301.2.(1);

(d) CHAPTER 9 ROOF ASSEMBLIES

- **R905.2.4 Asphalt shingles.** Asphalt shingles shall comply with ASTM D3462. <u>Asphalt shingles shall be approved and carry a manufacturer's national wind warranty for the wind speed indicated in table R301.2 (1).</u>
- **R908.1** General. Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of Chapter 9.

Exceptions:

- 1. Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide positive roof drainage and have been evaluated by a registered design professional for the increase in loading due to potential ponding of water.
- 2. For roofs that provide positive drainage, re-covering or replacing an existing roof covering shall not require the secondary (emergency overflow) drains or scuppers of Section R903.4.1 to be added to an existing roof.
- **R908.3.1.1 Roof recover not allowed.** A *roof recover* shall not be permitted where any of the following conditions occur:
- 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. Where the existing roof covering is slate, clay, cement or asbestos cement tile.
- 3. Where the existing roof has two or more than one applications of any type of roof covering.

R908.3.1.1.2 Extent of replacement. When more than one square of asphalt shingles are required to be replaced over the aggregate area of any slope the entire slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.

(e) CHAPTER 24 FUEL GAS

G2414.10.6 Welded joints. Welded joints shall be performed by a person holding a valid certificate of competency based on the requirements of the ANSI/ASME Boiler and Pressure Vessel Code, Section IX, Brazing and Welding Qualifications. Welded joints shall comply with ASTM 139.

G2415.12 (**404.12**) **Minimum burial depth**. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) below grade, except as provided for in Section G2415.12.1. <u>Underground plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.</u>

G2417.4.1 (**406.4.1**) **Test pressure.** The test pressure to be used shall be not less than 1½ times the proposed maximum working pressure, but not less than 3 20 psig (20 30 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *piping* greater than 50 percent of the specified minimum yield strength of the pipe.

(f) CHAPTER 25 PLUMBING ADMINISTRATION

P2503.5.1 Rough plumbing. DWV systems shall be tested on completion of the rough piping installation by water or, for piping systems other than plastic, by air, without evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

- 1. Water test. Each section shall be filled with water to a point not less than 5 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
- 2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

P2503.6 Shower liner test. Where shower floors and receptors are made water tight by the application of materials required by Section P2709.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of not less than 2 inches (51 mm) in height does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches (51 mm) in depth measured at the threshold. The water shall be retained for a test period of not less than 15 minutes and there shall not be evidence of leakage.

P2503.7 Water-supply system testing. Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an

air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

Exception: For PEX piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by the manufacturer's instructions for the PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws or regulations outside of this code.

P2503.8.2 Testing. Reduced pressure principle, double check, double check detector and pressure vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and every year thereafter.

(g) CHAPTER 26 GENERAL PLUMBING REQUIREMENTS

P2601.2 Connections to drainage system. Plumbing fixtures, drains, appurtenances and a*ppliances* used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste connections where required by the code.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to systems complying with Sections P2910 and P2911.

P2603.3 Protection against corrosion. Metallie Piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or masonry. Metallie Piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing material thickness shall be not less than 0.008 inch (8 mil) (0.203 mm) and shall be made of plastic. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

P2603.5 Freezing. In localities having a winter design temperature of 32°F (0°C) or lower as shown in Table R301.2 (1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 48 inches (1219 mm) below finish grade 12 inches (3.05 mm) deep and not less than 6 inches (152 mm) below the frost line.

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a not less than [NUMBER] inches (mm) below finished grade at the point of septic tank connection. Building sewers shall be not less than 12 [NUMBER] inches (305 mm) below grade.

(h) CHAPTER 27 PLUMBING FIXTURES

P2705.1 General. The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, where so designed, by screws, bolts, washers, nuts and similar fasteners of copper, copper alloy or other corrosion-resistant material.

- 2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.
- 3. Where fixtures come in contact with walls and floors, the contact area shall be water tight.
- 4. Plumbing fixtures shall be usable.
- 5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition or vanity or closer than 30 inches (762 mm) center-to-center between adjacent fixtures. There shall be a clearance of not less than 21 inches (533 mm) in front of a water closet, lavatory or bidet to any wall, fixture or door.

 6. The location of piping, fixtures or equipment shall not interfere with the operation of windows
- 6. The location of piping, fixtures or equipment shall not interfere with the operation of windows or doors.
- 7. In flood hazard areas as established by Table R301.2 (1), plumbing fixtures shall be located or installed in accordance with Section R322.1.6.
- 8. Integral fixture-fitting mounting surfaces on manufactured plumbing fixtures or plumbing fixtures constructed on site, shall meet the design requirements of ASME A112.19.2/CSA B45.1 or ASME A112.19.3/CSA B45.4.

Exception: Lavatory clearance from its center to any sidewall or partition may be reduced to a minimum of 12 inches.

P2708.3 Water supply riser. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure using support devices designed for use with the specific piping material or fittings anchored with screws. The rough-in height shall be not less than 75 inches (1.905 mm) above the shower or tub drain.

<u>P2708.6 Shower head location</u>. Shower heads shall be so located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.

P2717.2.1 Dishwasher drain. Dishwashers may drain into a standpipe complying with Section P2706.1.2. The standpipe shall be provided with an air break.

(i) Part VIII- Electrical

Delete chapters 34-43 (Electrical Provisions shall follow the NEC requirements)

(4) Amendments to the 2012 International Plumbing Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Plumbing Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

(b) CHAPTER 2 DEFINITIONS

Trap drain. The portion of horizontal piping between the weir of a trap and the point where it intersects with the vent serving that same trap (trap arm).

(c) CHAPTER 3 GENERAL REGULATIONS

305.4 Freezing. Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation

or heat or both. Exterior water supply system piping shall be installed not less than 48 inches (1219 mm) below finish grade. 6 inches (152 mm) below the frost line and not less than 12 inches (305 mm) below grade.

305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be installed not less than [NUMBER] inches (mm) below' finished *grade* at the point of septic tank connection. Building sewers shall be installed not less than 12 [NUMBER] inches (305 mm) below grade.

308.5 Interval of support. Pipe shall be supported in accordance with Table 308.5. <u>Hanger</u> support rods shall be sized in accordance with Table 308.5.1

Table 308.5.1 Hanger Rod Size					
Pipe and Tube Size	Rod Size				
1/2" – 4"	3/8"				
5" – 8"	1/2"				
10"-12"	5/8"				

308.7.1 Location. For pipe sizes greater than 4 inches (102 mm), restraints shall be provided for drain pipes <u>utilizing mechanical joints</u> at all changes in direction and at all changes in diameter greater than two pipe sizes. Braces, blocks, rodding and other suitable methods as specified by the coupling manufacturer shall be utilized.

312.1 Required tests. The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or, for piping system other than plastic, by air. After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

312.3 Drainage and vent air test. Plastic piping shall not be tested using air. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 psi (35.4 kPa) or sufficient to balance a 10 inch (254 mm)column of mercury. This pressure shall be held for a test period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperature or the seating of gaskets shall be made prior to the beginning of the test period.

312.9 Shower liner test. Where shower floors and receptors are made water tight by the application of materials required by Section 421.5.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor receptor area shall be filled with potable water to a depth of not less than 2" inch (51 mm) measured at the threshold. Where a threshold of 2 inches (51 mm) or higher does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2" (51 mm) deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes, and there shall not be evidence of leakage.

312.10.1 Inspections. Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether the assemblies are operable and air gaps exist.

312.10.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies and hose connection backflow preventers shall be tested at the time of installation, immediately after repairs or relocation and at least annually <u>by a certified cross connection control technician.</u> The testing procedure shall be performed in <u>its entirety</u> in accordance with one of the following standards: ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1.

(d) CHAPTER 4 FIXTURES, FAUCETS AND FIXTURE FITTINGS

403.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number shown in Table 403.1, based on the actual use of the building or space. Uses not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the International Building Code. <u>Lavatories to water closet or urinal ratios in accordance with Table 403.1 shall be maintained in all restrooms.</u>

405.3.2 Public Lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

Exception: In E occupancies, lavatories located outside a toilet room located within the classroom serving students from that classroom only shall be permitted. These toilet rooms and lavatories shall not count toward the total fixture count required by Table 403.1.

- **421.2 Water supply riser**. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure. The attachment to the structure shall be made by the use of support devices designed for use with the specific piping material or by fittings anchored with screws. The rough-in height shall be not less than 75 inches (1.905 mm) above the shower or tub drain.
- 421.2.1 Shower head location. Shower heads shall be located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.
- **421.2.1.2 Shower valve location**. A shower or tub /shower control valve shall be installed only where the spout and/or shower head discharges into an approved tub or shower compartment.

Exception: Emergency showers.

425.3 Water closet seats. Water closets shall be equipped with seats of smooth, non absorbent material. Seats of water closets provided for public or employee toilet facilities shall be hinged open-front type. Integral water closet seats shall be of the same material as the fixture. Water closet seats shall be sized for the water closet bowl type.

Exception: Water closets installed in public restrooms for the purpose of complying with accessible fixtures as required by Section 404 fitted with the "AXS-Wingman Universal Design Water Closet Seat" having a closed front are permitted.

(e) CHAPTER 5 WATER HEATERS

504.6.1. Collection of Relief Valve Discharge. A means shall be provided to capture the discharge from a relief valve and convey it to the sanitary drainage system or exterior of the structure either by gravity or a pumped discharge.

Exceptions:

- 1. Replacements for existing water heaters.
- 2. Where a water sensing device wired to a normally closed solenoid valve installed in the water service piping is placed within the water heater drain pan.
- **504.6.1.1 Pumped discharge of relief valve collection.** Pumps used to discharge the clear water collection of relief valves shall have an operating temperature equal to or exceeding that of the relief valve discharge temperature and shall have a gpm rating equal to or greater than the discharge of the relief valve.

(f) CHAPTER 6 WATER SUPPLY AND DISTIBUTION

605.15.2 Solvent cementing. Joint surfaces shall be clean and free from moisture, and an approved primer shall be applied. Solvent cement, orange in color, and conforming to ASTM F493, shall be applied to joint surfaces. The joint shall be made while cement is wet, in accordance with ASTM D2846 or ASTM F493. Solvent cement joints shall be permitted above or below ground.

Exception: A primer is not required where all of the following conditions apply: 1. The solvent cement used is a third party certified as conforming to ASTM F493.

- 2. The solvent cement used is yellow in color.
- 3. The solvent cement is used only for joining ½ inch (12.7 mm) through 2 inch diameter (51 mm) CVPC/AL/CPVC pipe and CPVC fittings.
- 4. The CVPC fittings are manufactured in accordance with ASTM D2846.

<u>608.17.11 Connection to graywater system.</u> The potable water system connection to a graywater system must be protected against backflow by an air gap or reduced pressure principle backflow prevention assembly.

(g) CHAPTER 7 SANITARY DRAINAGE

705.10.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent cement joints shall be permitted above or below ground.

Exception: A primer is not required where both of the following conditions apply:

- 1. The solvent cement used is third-party certified as conforming to ASTM D2564.
- 2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in nonpressure applications in sizes up to and including 4 inches (102 mm) in diameter.

(h) CHAPTER 8 INDIRECT/SPECIAL WASTE

802.1.6 Commercial dishwashing machines. The discharge from a commercial dishwashing machine shall be through an *air gap* or *air break* into a waste receptor in accordance with Section 802.3.

Exception: Domestic dishwashing machines may be connected to a separately trapped stand pipe provided with an air break.

(i) CHAPTER 9 VENTS

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than <u>6 inches (152 mm)</u> [NUMBER] above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall terminate not less than 7 feet (2134 mm) above the roof.

903.2 Frost closure. Where the 97.5 percent value for outdoor design temperature is 0°F (-18°C) or less, vent extensions through a roof or wall shall be not less than 3 inches (76mm) in diameter. Any increase in the size of the vent shall be made not less than 1 foot (305 mm) inside the thermal envelope of the building.

912.1 Horizontal wet vent permitted. Any combination of fixtures within two *bathroom groups* located on the same floor level is permitted to be vented by a horizontal wet vent. The wet vent shall be considered to be the vent for the fixtures and shall extend from the connection of the dry vent along the direction of the flow in the drain pipe to the most downstream *fixture drain* connection to the *horizontal branch drain*. Each wet-vented *fixture drain* shall connect independently to the horizontal wet vent. Only the fixtures within the *bathroom groups* shall connect to the wet-vented *horizontal branch drain*. Any additional fixtures shall discharge downstream of the horizontal wet vent.

Exception: Fixtures other than those considered to be bathroom group fixtures, of equivalent drainage fixture units, may be included in the wet vented section provided the total number of drainage fixture units does not exceed the total number included in two bathroom groups.

918.7 Vent required. Within each plumbing system, not less than one stack vent or vent stack shall extend outdoors to the open air. <u>Individual tenant spaces within a multi-unit building shall</u> have not less than one stack vent or vent stack that extends outdoors to the open air.

(j) CHAPTER 10 TRAPS, INTERCEPTORS AND SEPARATORS

1002.1 Fixture traps. Each plumbing fixture shall be separately trapped by a liquid-seal trap, except as otherwise permitted by this code. The vertical distance from the fixture outlet to the trap weir shall not exceed 24 inches (610 mm), and the horizontal distance shall not exceed 30 inches (610 mm) measured from the centerline of the fixture outlet to the centerline of the inlet of the trap. The height of a clothes washer standpipe above a trap shall conform to Section 802.3.3. A fixture shall not be double trapped.

Exceptions:

1. This section shall not apply to fixtures with integral traps.

- 2. A combination plumbing fixture is permitted to be installed on one trap, provided that one compartment is not more than 6 inches (152 mm) deeper than the other compartment and the waste outlets are not more than 30 inches (762 mm) apart.
- 3. A grease interceptor intended to serve as a fixture trap in accordance with the manufacturer's installation instructions shall be permitted to serve as the trap for a single fixture or a combination sink of not more than three compartments where the vertical distance from the fixture outlet to the inlet of the interceptor does not exceed 30 inches (762 mm) and the *developed length* of the waste pipe from the most upstream fixture outlet to the inlet of the interceptor does not exceed 60 inches (1524 mm).
- 4. Floor drains in multilevel parking structures that discharge to a building storm *sewer* shall not be required to be individually trapped. Where floor drains in multilevel parking structures are required to discharge to a combined *building sewer* system, the floor drains shall not be required to be individually trapped provided that they are connected to a main trap in accordance with Section 1103.1.
- 5. Trench and floor drains connected to a sand oil interceptor need not be individually trapped provided the drain piping from the trench or floor drains is turned down after entering the interceptor so the discharge point is a minimum of 4 inches below the standing water level of the interceptor.
- **1003.1** Where required. Interceptors and separators shall be provided to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the public sewer, the private sewage system or the sewage treatment plant or processes.

Exception: Where special regulations exist by the local waste water and/or sanitation district into which the grease trap or interceptor effluent is transported and/or treated. These regulations may supersede this requirement.

(k) CHAPTER 11 STORM DRAINAGE

1101.3 Prohibited drainage. Storm water shall not be drained into *sewers* intended for sewage only. Storm water from roof drains shall not discharge over public walkways.

1301.4 Typical Graywater Collection System

Exception: Secondary drains.

This figure is typical only, not a schematic)

SANITARY SEWER

WYE FITTING INSTALLED AS SHOWN TO PROVIDE OVERFLOW

WYEASH FROM GRAYWATER FILLENT TO SANITARY SEWER.

GRAYWATER OVERFLOW LINE TO SANITARY SEWER

GRAYWATER OVERFLOW LINE TO SANITARY SEWER

TO SUBSURVATE

SECURISH TO SANITARY

OVERFLOW

TO Water closet or Urinal

DISINFLUENT

INFELUENT

INFELUENT

TO SANITARY

OVERFLOW

TO SANITARY

INDIRECT DISCHARGE

SYSTEM

Fresure

SANITARY SEWER

OVERFLOW

TO SANITARY

TO S

(I) CHAPTER 13 NONPOTABLE WATER SYSTEMS

1301.9.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow pipe shall be protected from insects or vermin. The overflow drain shall not be equipped with a shutoff valve and shall discharge into the sanitary sewer either directly or indirectly with a trap in the drain line to keep odors from escaping the tank. A cleanout shall be provided on each overflow pipe in accordance with Section 708.

1301.9.9 Draining of tanks Delete the text "shall discharge as required for overflow pipes and". Replace it with: shall discharge into the sanitary sewer either directly or indirectly with a trap in the drain line to keep odors from escaping the tank

1301.11 Trenching requirements for nonpotable water piping. Nonpotable water collection and distribution piping and reclaimed water piping shall be separated from the *building sewer* and potable water piping underground by 5 feet (1524 mm) of undisturbed or compacted earth. Nonpotable water collection and distribution piping shall not belocated in, under or above cesspools, septic tanks, septic tank drainage fields or seepage pits. Buried nonpotable water piping shall comply with the requirements of Section 306.

Exceptions:

- 1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the *sewer* is not less than 12 inches (305 mm) above the top of the highest point of the *sewer* and the pipe materials conform to Table 702.3.
- 2. The required separation distance shall not apply where the bottom of the potable water service-pipe within 5 feet (1524 mm) of the nonpotable water pipe is not less than 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.
- 1301.12 Outdoor outlet access. Sillcocks, hose bibbs, wall hydrants, yard hydrants and other outdoor outlets- supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.
- **1302.1 General.** The provisions of ASTM E2635 and Section 1302 shall govern the construction, installation, alteration and repair of on-site nonpotable water reuse systems for the collection, storage, treatment and distribution of on-site sources of nonpotable water as permitted by the jurisdiction. All plumbing systems utilizing nonpotable water reuse systems shall have a double check valve installed at the water service entrance immediately downstream of the building water service shut off valve.
- **1302.5 Filtration.** Untreated water collected for reuse shall be filtered as required for the intended end use. Filters shall be provided with *access* for inspection and maintenance. Filters shall utilize a pressure gauge or other *approved* method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance. <u>Graywater used for dispersed subsurface irrigation system requires a cartridge filter. The cartridge filter must be a minimum of 60 mesh located between the storage tank and the irrigation system.</u>

1302.6.1 Gray water used for fixture flushing. Gray water used for flushing water closets and urinals shall be disinfected and treated by an on-site water reuse treatment system complying with NSF 350. <u>Graywater used for toilet and urinal flushing shall be dyed with blue or green food grade vegetable dye and be visibly distinct from potable water.</u>

1302.7.3 Overflow. Storage tank for on-site nonpotable systems must include an overflow line without a shut off valve. The overflow line shall be connected to the sanitary sewer either directly or indirectly. The overflow line must be the same or larger diameter line than the tank influent line. The overflow line connected indirectly must be trapped to prevent the escape of gas vapors from the tank

1302.7.4 Venting. Storage tank for on-site nonpotable systems must be vented. Indoor tanks must be vented to the atmosphere outside the building or connected to the plumbing vent system.

1302.7.5 Tank Drains. Storage tank for on-site nonpotable systems must include a valved drain. The drain shall be indirectly connected to the sanitary sewer. The tank drainline must be the same or larger diameter line than the tank influent line.

1302.8.1 Bypass valve. One three way diverter valve listed and labeled to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated on site reuse sources to the sanitary *sewer* to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be provided with *access* that allows for removal. Two shutoff valves shall not be installed to serve as a bypass valve.

1302.8.1 System Bypass One three-way diverter valve listed and labeled to NSF 50 or other approved device shall be installed on collection piping upstream of any graywater treatment equipment, as applicable, to divert untreated on-site reuse sources to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be installed in accessible locations. Two shutoff valves shall not be installed to serve as a bypass valve. In addition to the bypass valve a series of drainage fittings shall be installed in the collection piping upstream of the bypass valve in a configuration that will allow the graywater from the plumbing fixtures to automatically flow directly into the sanitary sewer system in the event the filter or other parts of the collection system become clogged to the point of not allowing the effluent free flow through the system. The overflow line connected to the sanitary sewer shall be equipped with a backwater valve.

Section 1303 Nonpotable rainwater collection and distribution systems Delete in its entirety

Chapter 14 Subsurface landscape irrigation systems Delete in its entirety

- (5) Amendments to the 2018 International Mechanical Code
 - (a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Mechanical Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

(6) Amendments to the 2018 International Fuel Gas Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Fuel Gas Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

101.2.2 Piping systems. These regulations cover *piping* systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.7. Coverage shall extend from the *point of delivery* to the outlet of the *appliance* shutoff valves. *Piping* system requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation, and maintenance.

(b) CHAPTER 4 GAS PIPING INSTALLATIONS

403.10.6 Welded Joints. Welded joints shall be performed by a person holding a valid certificate of competency based on the requirements of the ANSI/ASME Boiler and Pressure Vessel Code, Section IX, Brazing and Welding Qualifications. Welded joints shall comply with ASTM 139.

404.12 Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) below grade except as provided for in Section 404.12.1. <u>Underground</u> plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

406.1 General. Prior to acceptance and initial operation, all *piping* installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code. <u>Inspection and pressure testing shall apply to temporary installations connected to a primary fuel gas source for the purpose of supplying temporary heat.</u>

406.4.1 Test pressure. The test pressure to be used shall be not less than 1½ times the proposed maximum working pressure, but not less than 3 20 psig (20 30 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *piping* greater than 50 percent of the specified minimum yield strength of the pipe.

408.4 Sediment trap. Where a sediment trap is not incorporated as part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. The sediment trap shall be either a tee fitting having a capped nipple of any length installed vertically in the bottommost opening of the tee as illustrated in Figure 408.4 or other device approved as an effective sediment trap. Illuminating appliances, ranges, clothes dryers, decorative vented appliances for installation in vented fireplaces, gas fireplaces and outdoor grills need not be so equipped.

409.5.3 Located at manifold. Where the *appliance* shutoff valve is installed at a manifold, such shutoff valve shall be located within 50 feet (15 240 mm) of the *appliance* served and shall be readily accessible and permanently identified. The *piping* from the manifold to within 6 feet

(1829 mm) of the *appliance* shall be designed, sized and installed in accordance with Sections 401 through 408.

409.6.1 Electric Solenoid Valve. A remotely located electric solenoid emergency shutoff valve may be used for compliance to Section 409.6, when all the following requirements are met.

- 1. The emergency control shutoff "panic button" shall be readily accessible, located within the laboratory space served, adjacent to the egress door from the space and shall be identified by approved signage stating "Gas Shutoff".
- 2. The gas solenoid valve shall be a "normally closed" type valve with a manual reset

(7) Amendments to the 2018 International Energy Conservation Code

(a) [CE] CHAPTER 1 SCOPE AND ADMINISTRATION

C101.1 Title. This code shall be known as the *Energy Conservation Code* of <u>Adams County</u> [NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as "this code."

(b) [CE] CHAPTER 4 COMMERCIAL ENERGY EFFICIENCY

C403.6.1 Variable air volume and multiple-zone systems. Supply air systems serving multiple zones shall be variable air volume (VAV) systems that have zone controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone to one of the following:

- 1. Twenty percent of the zone design peak supply for systems with <u>Direct Digital Control</u> (DDC) and 30 percent for other systems.
- 2. Systems with Direct Digital Control (DDC) where all of the following apply:
- 2.1. The airflow rate in the deadband between heating and cooling does not exceed 20 percent of the zone design peak supply rate or the zone design peak supply rate or higher allowed rates under Items 3, 4 and 5 of this section.
- 2.2. The first stage of heating modulates the zone supply air temperature setpoint up to a maximum setpoint while the airflow is maintained at the deadband flow rate.
- 2.3. The second stage of heating modulates the airflow rate from the deadband flow rate up to the heating maximum flow rate that is less than 50 percent of the zone design peak supply rate.

(c) [RE] CHAPTER 1 SCOPE AND ADMINISTRATION

R101.1 Title. This code shall be known as the *Energy Conservation Code* of <u>Adams County-</u>[NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as "this code."

(d) [RE] CHAPTER 4 RESIDENTIAL ENERGY EFFICENCY

R402.4.1.2 Testing. The *building* or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour or 0.30 cubic feet per minute for multifamily units and not exceeding three air changes per hour or 0.24 cubic feet per minute for all other residential buildings and dwelling units. in *Climate Zones* 1 and 2, and three air changes per hour in *Climate Zones* 3 through 8. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the *code official*, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

(8) Amendments to 2018 International Existing Building Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Existing Building Code* of <u>Adams County [NAME OF JURISDICTION]</u>, hereinafter referred to as "this code."

(b) CHAPTER 2 DEFINITONS

[BS] DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below or meets the definition of dangerous as stated in Section 108.1.5 of the International Property Maintenance Code shall be deemed dangerous:

- 1. The building or structure has collapsed, partially collapsed, moved off its foundation or lacks the support of ground necessary to support it.
- 2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

(9) Amendments to the 2018 International Swimming Pool and Spa Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *International Swimming Pool and Spa Code* of Adams County [NAME OF JURISDICTION], hereinafter referred to as "this code."

105.6.2 Fee schedule. The fees for work shall be as indicated in the following schedule: [JURISDICTION TO INSERT APPROPRIATE SCHEDULE] Building Permit Fee Schedule

105.6.3 Fee refunds. The code official shall authorize the refunding of fees as follows:

- 1. The full amount of any fee paid hereunder that was erroneously paid or collected.
- 2. Not more than <u>80%</u> [SPECIFY PERCENTAGE] percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

(b) CHAPTER 2 DEFINITIONS

Residential Swimming Pool (Residential Pool). A pool intended for use which is accessory to a *residential* setting *One and Two Family Dwelling* and available only to the household and its guests. Pools accessory to townhomes shall be designed and constructed as Public Swimming Pools Class C. All other pools shall be considered *public pools* for purposes of this code.

(c) CHAPTER 3 GENERAL COMPLIANCE

- **305.1 General.** The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas or hot tubs or pools are located shall not be required to comply with Sections 305.2 through 305.7.
- **320.1 Backwash water or draining water.** Backwash water or draining water shall be discharged to the <u>sanitary sewer</u> or <u>storm sewer</u>, or into an *approved* disposal system on the premise, or shall be disposed of by other means approved by the state or local authority. Direct connections shall not be made between the end of the backwash line and the disposal system. Drains shall discharge through an air gap.
- **321.2** Artificial lighting required. When a pool is open during periods of low natural illumination, artificial Artificial lighting shall be provided so that all areas of the pool, including the bottom *main drains*, will be visible.
- **321.3 Emergency illumination**. *Public pools* and pool areas that operate during periods of low illumination shall be provided with sufficient emergency illumination to permit evacuation of the pool and securing of the area in the event of power failure. The emergency lighting intensity shall be not less than 1 foot-candle at the water surface and the walking surface of the deck.

(10) Amendments to 2018 International Property Maintenance Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *International Property Maintenance Code* of Adams County [NAME OF JURISDICTION], hereinafter referred to as "this code."

(b) CHAPTER 3 GENERAL REQUIREMENTS

- **302.4 Weeds.** *Premises* and *exterior property* shall be maintained free from weeds or plant growth in excess of <u>6 inches</u>-[JURISDICTION TO INSERT HEIGHT IN INCHES]. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.
- **304.14 Insect screens.** During the period from [DATE] to [DATE], Every door, window and other outside opening required for *ventilation* of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with *approved*

tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other *approved* means, such as air curtains or insect repellent fans, are employed.

(c) CHAPTER 6 MECHANICAL AND ELECTRICAL EQUIPMENT

602.3 Heat supply. Every *owner* and *operator* of any building who rents, leases or lets one or more *dwelling units* or *sleeping units* on terms, either expressed or implied, to furnish heat to the *occupants* thereof shall supply heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, *bathrooms* and *toilet rooms*.

Exceptions:

- 1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the *International Plumbing Code*.
- 2. In areas where the average monthly temperature is above $30^{\circ}F$ (-1°C), a minimum temperature of $65^{\circ}F$ (18°C) shall be maintained.
- **602.4 Occupiable work spaces.** Indoor occupiable work spaces shall be supplied with heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

Exceptions:

- 1. Processing, storage and operation areas that require cooling or special temperature conditions.
- 2. Areas in which persons are primarily engaged in vigorous physical activities.

(11) Amendments to 2017 National Electrical Code

(a) ARTICIAL 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

110.14 (D) Installation. Where tightening torque is indicated as a numeric value on equipment or in installation instructions provided by the manufacturer, a calibrated torque tool shall be used to achieve the indicated torque value, unless the equipment manufacturer has provided installation instructions for alternative method of achieving the required torque. A self certified torque report indicating required torque requirements by the manufacturer's installation instructions have been met shall be provided to the authority having jurisdiction.

(b) ARTICIAL 230 SERVICES

230.70(A) (1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors. When the location of the service meter is at a distance of greater than 50 ft. (16m) from the main structure(s) or building(s), an additional service disconnecting means for each structure or building shall be provided at this location. These

disconnects may be cold sequenced or hot sequenced depending on the utility providers preference.

(c) ARTICIAL 300 UNDERGROUND INSTALLATIONS

300.5 (D) (3) Protection from damage. Underground service conductors <u>rated 110 volts to</u> <u>ground or more</u> that are not encased in concrete and that are buried 450 mm (18 in.) or more below grade shall have their location identified by a warning ribbon that is placed in the trench as least 300 mm (12 in.) above the underground installation. <u>Trenches less than 18 inches, an appropriate depth above the conductors or raceway shall be determined by the installer so as to provide sufficient warning of the presence of the conductors/raceway.</u>

(d) ARTICIAL 830 NETWORK-POWERED BROADBAND COMMUNICATIONS SYSTEMS

830.133 (B) Support of Network-Powered Broadband Communications System Cables.Raceways shall be used for the intended purpose. Network-powered broadband communications cables shall not be strapped, taped, or attached by any means to the exterior of any conduit or raceway as a means of support. Independent support wires used for support above a drop ceiling shall be independent of all other systems and clearly marked, tagged, or other effective means so as to identify them as being used for Network Powered Broadband Communication Cables. This shall apply to Communication Cables as listed Article 800 also.

Section 5. PENALTIES

Pursuant to \$30-28-209, C.R.S., any person who violates the provisions of this Ordinance commits a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than one hundred dollars (\$100), or by imprisonment in the county jail for not more than ten days, or by both such fine and imprisonment. Each day during which such illegal activity occurs shall be deemed to be a separate offense.

Section 6. REPEAL OF CONFLICTING BUILDING CODES

All conflicting building codes previously adopted by the Adams County Board of County Commissioners are hereby repealed in their entirety and re-enacted in accordance with the provisions of this Ordinance.

Section 7. SEVERABILITY

The Board of County Commissioners hereby declares that should any article, section, paragraph, sentence, clause or phrase of this Ordinance be held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of County Commissioners hereby declares that it would have passed this Ordinance, and each part or parts thereof, irrespective of the fact that any one part or parts be declared invalid or unconstitutional.

Section 8. SAFETY CLAUSE

The Board of County Commissioners hereby finds, determines, and declares that this Ordinance is necessary for the preservation of the public health, safety, and welfare.

Section 9. DATE OF EFFECT

The Board of County Commissioners of Adams County, Colorado, hereby determines that this Ordinance shall become effective on <u>January 1, 2019</u> .	is
Adopted this day of November, 2018.	
Mary Hodge, Chair Board of County Commissioners Adams County, Colorado	
Upon motion duly made and seconded the foregoing Ordinance was adopted by the following vote:	3
Hodge O'Doriso Henry Tedesco Hansen Commissioners	
CERTIFICATE OF ATTESTATION	
STATE OF COLORADO) County of Adams)	
CERTIFICATE OF ATTESTATION	
I, Stan Martin, County Clerk and ex-officio Clerk of the Board of County Commissioners in a for the County and State aforesaid do hereby certify that the annexed and foregoing Order is to copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.	
The foregoing text is the authentic text of Adams County Ordinance No. 12. The first reading said Ordinance took place on October, 2018, at a regular Board of County Commissione meeting. It was published in full in a newspaper of general circulation at least ten days before adoption; to wit, in The Denver Post on November, 2018. The Ordinance was adopted on	ers

County Clerk and ex-officio Clerk of the Board of County Commissioners Stan Martin:

second reading at a regular Board of County Commissioners meeting on November_____, 2018,

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at

and shall become effective on January 1, 2019.

Brighton, Colorado this ____ day of November, 2018.

By:

Deputy



STATE OF COLORADO) COUNTY OF ADAMS)

At a regular meeting of the Board of County Commissioners for Adams County, Colorado, held at the Government Center in Brighton, Colorado on the 18th day of November, 2014 there were present:

Charles "Chaz" Tedesco	Commissioner
Eva J. Henry	Commissioner
Erik Hansen	Commissioner
Steve O'Dorisio	Commissioner
Mary Hodge	Commissioner
Heidi Miller	County Attorney
Erica Hanna.	Deputy Clerk of the Board

when the following proceedings, among others were held and done, to-wit:

Resolution 2014-346

ORDINANCE NO. 12

AN ORDINANCE REPEALING THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODES AND ADOPTING THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODES AND THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE WITH AMENDMENTS THERETO

WHEREAS, on November 18th, 2014, the Board of County Commissioners adopted the 2012 Edition of the International Building Codes and applied it countywide; and,

WHEREAS, the Adams County Building Safety Division is recommending that the 2012 Edition of the International Building Codes and the 2014 National Electrical Code be repealed, and that the Board adopt a county building code modeled upon the building safety standards contained in the 2018 editions of the International Building Codes, which include the 2018 International Building Code, 2018 International Plumbing Code, 2018 International Plumbing Code, 2018 International Mechanical Code, 2018 International Fuel Gas Code, 2018 edition of the International Energy Conservation Code, 2018 International Swimming Pool and Spa Code, 2018 International Property Maintenance Code, and 2018 International Existing Building Code, with certain amendments thereto; and,

WHEREAS, the Adams County Building Safety Division is also recommending adoption of the 2017 edition of the National Fire Protection Association's National Electrical Code; and,

WHEREAS, pursuant to \$30-28-201 et seq., C.R.S., the Adams County Board of County Commissioners is authorized to adopt ordinances and a building code consistent with the Uniform Building Code, 1988 edition, as promulgated by the International Conference of Building Officials; and,

WHEREAS, the 2018 Edition of the International Building Codes and the 2017 National Electrical Code are consistent with the Uniform Building Codes, 1988 edition, as promulgated by the International Code Council and the National Fire Protection Association.

NOW, THEREFORE, BE IT ORDAINED, by the Board of County Commissioners, County of Adams, State of Colorado, that the 2012 Editions of the International Building Codes and the 2014 Edition of the National Electrical Code be repealed and Ordinance No. 12, the 2018 Edition of the International Building Codes and the 2017 Edition of the National Electrical Code, with certain amendments thereto, the full text of which is available at the Adams County Building Safety Division, and which is fully incorporated herein by this reference, be enacted and adopted.

BE IT FURTHER ORDAINED by the Board of County Commissioners, County of Adams, State of Colorado, that:

Section 1. ADOPTION

The Board of County Commissioners of Adams County hereby adopts, by reference, the International Building Codes, 2018 editions, and the National Electrical Code, 2017 edition, with amendments and definitions as described in Section 4, including the following appendices: Appendix C, Group U Agriculture Buildings, and Appendix I, Patio Covers, from the 2018 International Building Code; Appendix A, Sizing and Capacities of Gas Piping, Appendix E, Manufactured Housing Used as Dwellings, Appendix E, Manufactured Housing Used as Dwellings, Appendix E, Patio Covers, Appendix L, Permit Fees, and Appendix M, Home Daycare R-3 occupancies, from the 2018 International Residential Code.

Section 2. CODE DESCRIBED

The International Building Codes, 2018 editions, are published by the International Code Council, 4051 Flossmoor Road, Country Club Hills, Illinois.

The National Electrical Code, 2017 edition, as published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts.

Section 3. APPLICABILITY

Pursuant to \$30-28-201, et seq., C.R.S., this Ordinance shall apply to all of the unincorporated areas of Adams County and shall not be embraced within the limits of any incorporated city or town. The provisions of this Ordinance shall not overrule or otherwise restrict the authority of the Board of County Commissioners or any other applicable official of Adams County in authorizing land uses or otherwise acting under the authority of any other adopted codes or regulations of Adams County, or enforcing the provisions thereof.

Section 4. AMENDMENTS

(1) The following definitions shall be adopted and apply to all Adams County building codes:

Abandon or abandoned means the desertion of a building, structure or utility and when all utilities are disconnected and/or the building, structure or utility is left to the mercy of vandalism, dilapidation and deterioration and creates a fire hazard, an unsafe condition or a nuisance.

Authority having Jurisdiction [AHJ] means Adams County, or Adams County Building Safety Division.

Attached means if connected to the principal building or structure, not less than fifty percent of the applicable wall shall be common.

Building Department means one and the same in all respects as the Building Safety Division as used in this chapter and elsewhere in County communications and documents, and the two phrases shall be used interchangeably.

Building Permit means the official County document authorizing construction activity under the primary and secondary codes.

Dangerous Building Code when used herein refers to the latest edition of the Property Maintenance Code as published by the International Code Council.

Deterioration, as applied to buildings, structures, equipment and materials, includes corrosion, decay, wear and tear through abuse, obsolescence, effects of the elements, fire damage, lack of maintenance or by any other cause and also includes fatigue due to overstressing, disintegration of the component parts of a building, structure and equipment and the separation of materials and structural parts.

Health Department means the Tri-County Health Department designated as the County's health department.

Homeowner shall mean the individual shown as having record title of any building or structure as shown in the official records of the Adams County Clerk and Recorder.

IBC means the latest edition of the International Building Code, as published by the International Code Council.

IEBC means the latest edition of the International Existing Building Code, as published by the International Code Council.

IECC means the latest edition of the International Energy Conservation Code, as published by the International Code Council.

IFC means the latest edition of the International Fire Code, as published by the International Code Council.

IFGC means the latest edition of the International Fuel Gas Code, as published by the International Code Council.

IMC means the latest edition of the International Mechanical Code, as published by the International Code Council.

IPC means the latest edition of the International Plumbing Code, as published by the International Code Council.

IRC means the latest edition of the International Residential Code, as published by the International Code Council.

ISPSC means the latest edition of the International Swimming Pool and Spa Code, as published by the International Code Council.

Version B

NEC means the latest edition of the National Electric Code, as published by the National Fire Protection Association.

IPMC means the latest edition of the International Property Maintenance Code, as published by the International Code Council.

Principle Residence shall mean, for an individual, the residence as determined by the address given by the individual and shall be the location where the individual(s) habitation is fixed and to which that individual, whenever absent, has the present intention of returning after departure or absence regardless of the duration of such absence. In determining Principle Residence, the following circumstances shall be considered: voter registration address, motor vehicle registration address (as applicable), and or the address given for state income tax purposes

(2) Amendments to the 2018 International Building Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Building Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

105.2 Work exempt from Building Permit

Buildings/structures:

- 2. Fences not over 42" (1067 mm) 7 feet (2134 mm) high.
- 14. Replacement of asphalt shingles when over the aggregate roof area there *is* less than one square of replacement or repair.

(b) CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY

903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

Exceptions:

- 1. An automatic residential fire sprinkler system shall not be required for a Group R-3 fire area when in compliance with all of the following conditions:
 - 1.2 The Group R-3 fire area does not exceed 3,600 square feet;
 - 1.3 The Group R-3 dwelling is within 1,000 (304.8 m) feet of a hydrant having the required fire flow; and
 - 1.4 The Group R-3 dwelling is on an approved fire apparatus access road.
- 2. An automatic residential fire sprinkler system shall not be required where *additions* or *alterations* are made to existing one- and two-family dwellings or *townhouses* that do not have an automatic residential fire sprinkler system installed in accordance with sections R313.1 and R313.2 and constructed under the International Residential Code.

Version B

3. An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout all Group R-2 occupancies that meet the Federal Fair Housing Act definition of senior housing or housing for older persons.

(c) CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

1511.1 General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15.

Exceptions:

- 1. Roof replacement or roof recover of existing lowslope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage and have been evaluated by a registered design professional for the increase in loading due to potential ponding of water.
- 2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1503.4 for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1503.4.
- 1511.1.1 Extent of replacement. When more than one square of asphalt shingles are required to be replaced over the aggregate area of any slope, the entire slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.
- **1511.3.1 Roof recover.** The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:
- 1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
- 2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
- 3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1511.4.
- 4. The application of a new protective roof coating over an existing protective roof coating, metal roof panel, built-up roof, spray polyurethane foam roofing system, metal roof shingles, mineral-surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off of existing roof coverings.
- **1511.3.1.1 Exceptions:** A roof recover shall not be permitted where any of the following conditions occur:

- 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos cement tile.
- 3. Where the existing roof has two or more than one application of any type of roof covering.

(d) CHAPTER 16 STRUCTURAL DESIGN

1608.1 General. Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less than 30 pounds per square foot (2.787 m2) or that determined by Section 1607.

1612.3 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 identified by the Federal Emergency Management Agency in a report entitled "The Flood Insurance Study for Adams County and Incorporated Areas (Vol. 1. 2. 3) [INSERT NAME OF JURISDICTION] "dated February 17, 2017 [INSERT DATE OF ISSUANCE], as amended or revised with the accompanying Flood Insurance Rate Map FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

(e) CHAPTER 18 SOILS AND FOUNDATIONS

1809.5 Frost Protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extending 6 inches (152 mm) below the frost line. of the locality.
- 2. Constructing in accordance with ASCE 32.
- 3. Erecting on solid rock.

(3) Amendments to the 2018 International Residential Code

(a) CHAPTER 1 ADMINISTRATION

R101.1 Title. These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of Adams County [NAME OF JURISDICTION], and shall be cited as such and will be referred to herein as "this code."

R102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this Code, the *International Existing Building Code* and *International Property Maintenance Code* or the *International Fire Code*, or as is deemed necessary by the *building official* for the general safety and welfare of the occupants and the public.

Rl05.2 Work Exempt from Building Permit

Buildings/structures:

- 2. Fences not over 42" (1067 mm) 7 feet (2134 mm) high.
- 11. Replacement of asphalt shingle when over the aggregate roof area there is less than one square of repair or replacement.

(b) CHAPTER 3 BUILDING PLANNING

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND	WIND DESIGN				SEISMIC	SUBJECT TO DAMAGE FROM			WINTER	ICE BARRIER	FLOOD	AIR	MEAN
SNOW LOAD°	Speed ^d (mph)	Topographic effects ^k	Special wind region!	Windborne debris zone ^m	DESIGN CATEGORY	Weathering*	Frost line depth ^b	Termite ^c	DESIGN TEMP ^e	UNDERLAYMENT REQUIRED ^b	HAZARDS	FREEZING INDEX ⁱ	ANNUAL TEMP ⁱ
30	115	NO	NO	NO	В	SEVERE	36"	Slight to Moderate	1	NO	2017	1500	50.2
						MANUAL J DE	SIGN CRITER	IA ⁿ					
Elevation			Lattitude	Winter heating		mmer oling	Altitude correction fa		ndoor design temperature	Design temperature		Heating tem differe	
5,2	220'		39.8666505 N	6		90	.82		70	75		64	
Cooling temperatur	re differer	nce	Wind velocity heating	Wind veloc cooling		ncident t bulb	Daily range	12	Winter humidity	Summe humidi			
15			15	7.5	6	0	Н		30%	50%	(-		

. For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in *townhouses*.

Exception: An automatic residential fire sprinkler system shall not be required where *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed.

R313.2 One- and two-family dwellings automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed one- and two-family *dwellings*.

Exceptions:

- 1. An automatic residential fire sprinkler system shall not be required for a one- and two family dwelling when in compliance with all of the following conditions:
 - 1.2 The Group R-3 fire area does not exceed 3,600 square feet;
 - 1.3 The one- and two family dwelling is within 1,000 (304.8 m) feet of a hydrant having the required fire flow; and
 - 1.4 The one-and two family dwelling is on an approved *fire apparatus* access road.
- 2. An automatic residential fire sprinkler system shall not be required for *additions* or *alterations* to existing buildings that are not already provided with an automatic residential sprinkler system.

(c) CHAPTER 4 FOUNDATIONS

R403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, crushed stone footings, wood foundations, or other *approved* structural systems that shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

Exception: Pre-manufactured one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.58 m2) may be supported on skids incorporated into the floor system. These structures shall be anchored to the ground with approved materials to resist all applicable loads.

- **R403.1.4.1 Frost protection.** Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:
- 1. Extended 6 inches (152 mm) below the frost line specified in Table R301.2.(1);

(d) CHAPTER 9 ROOF ASSEMBLIES

R905.2.4 Asphalt shingles. Asphalt shingles shall comply with ASTM D3462. <u>Asphalt shingles shall be approved and carry a manufacturer's national wind warranty for the wind speed indicated in table R301.2 (1).</u>

R908.1 General. Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of Chapter 9.

Exceptions:

- 1. Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide positive roof drainage and have been evaluated by a registered design professional for the increase in loading due to potential ponding of water.
- 2. For roofs that provide positive drainage, re-covering or replacing an existing roof covering shall not require the secondary (emergency overflow) drains or scuppers of Section R903.4.1 to be added to an existing roof.
- **R908.3.1.1 Roof recover not allowed.** A *roof recover* shall not be permitted where any of the following conditions occur:
- 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. Where the existing roof covering is slate, clay, cement or asbestos cement tile.
- 3. Where the existing roof has two or more than one applications of any type of roof covering.

R908.3.1.1.2 Extent of replacement. When more than one square of asphalt shingles are required to be replaced over the aggregate area of any slope the entire slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.

(e) CHAPTER 24 FUEL GAS

G2414.10.6 Welded joints. Welded joints shall be performed by a person holding a valid certificate of competency based on the requirements of the ANSI/ASME Boiler and Pressure Vessel Code, Section IX, Brazing and Welding Qualifications. Welded joints shall comply with ASTM 139.

G2415.12 (**404.12**) **Minimum burial depth**. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) below grade, except as provided for in Section G2415.12.1. <u>Underground plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.</u>

G2417.4.1 (**406.4.1**) **Test pressure.** The test pressure to be used shall be not less than 1½ times the proposed maximum working pressure, but not less than 3 20 psig (20 30 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *piping* greater than 50 percent of the specified minimum yield strength of the pipe.

(f) CHAPTER 25 PLUMBING ADMINISTRATION

P2503.5.1 Rough plumbing. DWV systems shall be tested on completion of the rough piping installation by water or, for piping systems other than plastic, by air, without evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

- 1. Water test. Each section shall be filled with water to a point not less than 5 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
- 2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

P2503.6 Shower liner test. Where shower floors and receptors are made water tight by the application of materials required by Section P2709.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of not less than 2 inches (51 mm) in height does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches (51 mm) in depth measured at the threshold. The water shall be retained for a test period of not less than 15 minutes and there shall not be evidence of leakage.

P2503.7 Water-supply system testing. Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an

air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

Exception: For PEX piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by the manufacturer's instructions for the PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws or regulations outside of this code.

P2503.8.2 Testing. Reduced pressure principle, double check, double check detector and pressure vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and every year thereafter.

(g) CHAPTER 26 GENERAL PLUMBING REQUIREMENTS

P2601.2 Connections to drainage system. Plumbing fixtures, drains, appurtenances and a*ppliances* used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste connections where required by the code.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to systems complying with Sections P2910 and P2911.

P2603.3 Protection against corrosion. Metallie Piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or masonry. Metallie Piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing material thickness shall be not less than 0.008 inch (8 mil) (0.203 mm) and shall be made of plastic. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

P2603.5 Freezing. In localities having a winter design temperature of 32°F (0°C) or lower as shown in Table R301.2 (1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 48 inches (1219 mm) below finish grade 12 inches (3.05 mm) deep and not less than 6 inches (152 mm) below the frost line.

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a not less than [NUMBER] inches (mm) below finished grade at the point of septic tank connection. Building sewers shall be not less than 12 [NUMBER] inches (305 mm) below grade.

(h) CHAPTER 27 PLUMBING FIXTURES

P2705.1 General. The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, where so designed, by screws, bolts, washers, nuts and similar fasteners of copper, copper alloy or other corrosion-resistant material.

- 2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.
- 3. Where fixtures come in contact with walls and floors, the contact area shall be water tight.
- 4. Plumbing fixtures shall be usable.
- 5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition or vanity or closer than 30 inches (762 mm) center-to-center between adjacent fixtures. There shall be a clearance of not less than 21 inches (533 mm) in front of a water closet, lavatory or bidet to any wall, fixture or door.

 6. The location of piping, fixtures or equipment shall not interfere with the operation of windows
- 6. The location of piping, fixtures or equipment shall not interfere with the operation of windows or doors.
- 7. In flood hazard areas as established by Table R301.2 (1), plumbing fixtures shall be located or installed in accordance with Section R322.1.6.
- 8. Integral fixture-fitting mounting surfaces on manufactured plumbing fixtures or plumbing fixtures constructed on site, shall meet the design requirements of ASME A112.19.2/CSA B45.1 or ASME A112.19.3/CSA B45.4.

Exception: Lavatory clearance from its center to any sidewall or partition may be reduced to a minimum of 12 inches.

P2708.3 Water supply riser. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure using support devices designed for use with the specific piping material or fittings anchored with screws. The rough-in height shall be not less than 75 inches (1.905 mm) above the shower or tub drain.

P2708.6 Shower head location. Shower heads shall be so located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.

P2717.2.1 Dishwasher drain. Dishwashers may drain into a standpipe complying with Section P2706.1.2. The standpipe shall be provided with an air break.

(i) Part VIII- Electrical

Delete chapters 34-43 (Electrical Provisions shall follow the NEC requirements)

(4) Amendments to the 2012 International Plumbing Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Plumbing Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

(b) CHAPTER 2 DEFINITIONS

Trap drain. The portion of horizontal piping between the weir of a trap and the point where it intersects with the vent serving that same trap (trap arm).

(c) CHAPTER 3 GENERAL REGULATIONS

305.4 Freezing. Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation

or heat or both. Exterior water supply system piping shall be installed not less than <u>48 inches</u> (1219 mm) below finish grade. 6 inches (152 mm) below the frost line and not less than 12 inches (305 mm) below grade.

305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be installed not less than [NUMBER] inches (mm) below' finished *grade* at the point of septic tank connection. Building sewers shall be installed not less than 12 [NUMBER] inches (305 mm) below grade.

308.5 Interval of support. Pipe shall be supported in accordance with Table 308.5. <u>Hanger</u> support rods shall be sized in accordance with Table 308.5.1

Table 308.5.1 Hanger Rod Size						
Pipe and Tube Size	Rod Size					
1/2" – 4"	3/8"					
5" – 8"	1/2"					
10"-12"	5/8"					

308.7.1 Location. For pipe sizes greater than 4 inches (102 mm), restraints shall be provided for drain pipes <u>utilizing mechanical joints</u> at all changes in direction and at all changes in diameter greater than two pipe sizes. Braces, blocks, rodding and other suitable methods as specified by the coupling manufacturer shall be utilized.

312.1 Required tests. The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or, for piping system other than plastic, by air. After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

312.3 Drainage and vent air test. Plastic piping shall not be tested using air. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 psi (35.4 kPa) or sufficient to balance a 10 inch (254 mm)column of mercury. This pressure shall be held for a test period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperature or the seating of gaskets shall be made prior to the beginning of the test period.

312.9 Shower liner test. Where shower floors and receptors are made water tight by the application of materials required by Section 421.5.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor receptor area shall be filled with potable water to a depth of not less than 2" inch (51 mm) measured at the threshold. Where a threshold of 2 inches (51 mm) or higher does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2" (51 mm) deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes, and there shall not be evidence of leakage.

312.10.1 Inspections. Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether the assemblies are operable and air gaps exist.

312.10.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies and hose connection backflow preventers shall be tested at the time of installation, immediately after repairs or relocation and at least annually <u>by a certified cross connection control technician.</u> The testing procedure shall be performed in <u>its entirety</u> in accordance with one of the following standards: ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1.

(d) CHAPTER 4 FIXTURES, FAUCETS AND FIXTURE FITTINGS

403.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number shown in Table 403.1, based on the actual use of the building or space. Uses not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the International Building Code. <u>Lavatories to water closet or urinal ratios in accordance with Table 403.1 shall be maintained in all restrooms.</u>

405.3.2 Public Lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

Exception: In E occupancies, lavatories located outside a toilet room located within the classroom serving students from that classroom only shall be permitted. These toilet rooms and lavatories shall not count toward the total fixture count required by Table 403.1.

- **421.2 Water supply riser**. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure. The attachment to the structure shall be made by the use of support devices designed for use with the specific piping material or by fittings anchored with screws. The rough-in height shall be not less than 75 inches (1.905 mm) above the shower or tub drain.
- **421.2.1 Shower head location.** Shower heads shall be located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.
- **421.2.1.2 Shower valve location**. A shower or tub /shower control valve shall be installed only where the spout and/or shower head discharges into an approved tub or shower compartment.

Exception: Emergency showers.

425.3 Water closet seats. Water closets shall be equipped with seats of smooth, non absorbent material. Seats of water closets provided for public or employee toilet facilities shall be hinged open-front type. Integral water closet seats shall be of the same material as the fixture. Water closet seats shall be sized for the water closet bowl type.

Exception: Water closets installed in public restrooms for the purpose of complying with accessible fixtures as required by Section 404 fitted with the "AXS-Wingman Universal Design Water Closet Seat" having a closed front are permitted.

(e) CHAPTER 5 WATER HEATERS

504.6.1. Collection of Relief Valve Discharge. A means shall be provided to capture the discharge from a relief valve and convey it to the sanitary drainage system or exterior of the structure either by gravity or a pumped discharge.

Exceptions:

- 1. Replacements for existing water heaters.
- 2. Where a water sensing device wired to a normally closed solenoid valve installed in the water service piping is placed within the water heater drain pan.
- **504.6.1.1 Pumped discharge of relief valve collection.** Pumps used to discharge the clear water collection of relief valves shall have an operating temperature equal to or exceeding that of the relief valve discharge temperature and shall have a gpm rating equal to or greater than the discharge of the relief valve.

(f) CHAPTER 6 WATER SUPPLY AND DISTIBUTION

605.15.2 Solvent cementing. Joint surfaces shall be clean and free from moisture, and an approved primer shall be applied. Solvent cement, orange in color, and conforming to ASTM F493, shall be applied to joint surfaces. The joint shall be made while cement is wet, in accordance with ASTM D2846 or ASTM F493. Solvent cement joints shall be permitted above or below ground.

Exception: A primer is not required where all of the following conditions apply: 1. The solvent cement used is a third party certified as conforming to ASTM F493.

- 2. The solvent cement used is yellow in color.
- 3. The solvent cement is used only for joining ½ inch (12.7 mm) through 2 inch diameter (51 mm) CVPC/AL/CPVC pipe and CPVC fittings.
- 4. The CVPC fittings are manufactured in accordance with ASTM D2846.

<u>608.17.11 Connection to graywater system.</u> The potable water system connection to a graywater system must be protected against backflow by an air gap or reduced pressure principle backflow prevention assembly.

(g) CHAPTER 7 SANITARY DRAINAGE

705.10.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent cement joints shall be permitted above or below ground.

Exception: A primer is not required where both of the following conditions apply:

- 1. The solvent cement used is third-party certified as conforming to ASTM D2564.
- 2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in nonpressure applications in sizes up to and including 4 inches (102 mm) in diameter.

(h) CHAPTER 8 INDIRECT/SPECIAL WASTE

802.1.6 Commercial dishwashing machines. The discharge from a commercial dishwashing machine shall be through an *air gap* or *air break* into a waste receptor in accordance with Section 802.3.

Exception: Domestic dishwashing machines may be connected to a separately trapped stand pipe provided with an air break.

(i) CHAPTER 9 VENTS

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than <u>6 inches (152 mm)</u> [NUMBER] above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall terminate not less than 7 feet (2134 mm) above the roof.

903.2 Frost closure. Where the 97.5 percent value for outdoor design temperature is 0°F (-18°C) or less, vent extensions through a roof or wall shall be not less than 3 inches (76mm) in diameter. Any increase in the size of the vent shall be made not less than 1 foot (305 mm) inside the thermal envelope of the building.

912.1 Horizontal wet vent permitted. Any combination of fixtures within two *bathroom groups* located on the same floor level is permitted to be vented by a horizontal wet vent. The wet vent shall be considered to be the vent for the fixtures and shall extend from the connection of the dry vent along the direction of the flow in the drain pipe to the most downstream *fixture drain* connection to the *horizontal branch drain*. Each wet-vented *fixture drain* shall connect independently to the horizontal wet vent. Only the fixtures within the *bathroom groups* shall connect to the wet-vented *horizontal branch drain*. Any additional fixtures shall discharge downstream of the horizontal wet vent.

Exception: Fixtures other than those considered to be bathroom group fixtures, of equivalent drainage fixture units, may be included in the wet vented section provided the total number of drainage fixture units does not exceed the total number included in two bathroom groups.

918.7 Vent required. Within each plumbing system, not less than one stack vent or vent stack shall extend outdoors to the open air. <u>Individual tenant spaces within a multi-unit building shall</u> have not less than one stack vent or vent stack that extends outdoors to the open air.

(j) CHAPTER 10 TRAPS, INTERCEPTORS AND SEPARATORS

1002.1 Fixture traps. Each plumbing fixture shall be separately trapped by a liquid-seal trap, except as otherwise permitted by this code. The vertical distance from the fixture outlet to the trap weir shall not exceed 24 inches (610 mm), and the horizontal distance shall not exceed 30 inches (610 mm) measured from the centerline of the fixture outlet to the centerline of the inlet of the trap. The height of a clothes washer standpipe above a trap shall conform to Section 802.3.3. A fixture shall not be double trapped.

Exceptions:

1. This section shall not apply to fixtures with integral traps.

- 2. A combination plumbing fixture is permitted to be installed on one trap, provided that one compartment is not more than 6 inches (152 mm) deeper than the other compartment and the waste outlets are not more than 30 inches (762 mm) apart.
- 3. A grease interceptor intended to serve as a fixture trap in accordance with the manufacturer's installation instructions shall be permitted to serve as the trap for a single fixture or a combination sink of not more than three compartments where the vertical distance from the fixture outlet to the inlet of the interceptor does not exceed 30 inches (762 mm) and the *developed length* of the waste pipe from the most upstream fixture outlet to the inlet of the interceptor does not exceed 60 inches (1524 mm).
- 4. Floor drains in multilevel parking structures that discharge to a building storm *sewer* shall not be required to be individually trapped. Where floor drains in multilevel parking structures are required to discharge to a combined *building sewer* system, the floor drains shall not be required to be individually trapped provided that they are connected to a main trap in accordance with Section 1103.1.
- 5. Trench and floor drains connected to a sand oil interceptor need not be individually trapped provided the drain piping from the trench or floor drains is turned down after entering the interceptor so the discharge point is a minimum of 4 inches below the standing water level of the interceptor.
- **1003.1** Where required. Interceptors and separators shall be provided to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the public sewer, the private sewage system or the sewage treatment plant or processes.

Exception: Where special regulations exist by the local waste water and/or sanitation district into which the grease trap or interceptor effluent is transported and/or treated. These regulations may supersede this requirement.

(k) CHAPTER 11 STORM DRAINAGE

1101.3 Prohibited drainage. Storm water shall not be drained into *sewers* intended for sewage only. Storm water from roof drains shall not discharge over public walkways.

1301.4 Typical Graywater Collection System

Exception: Secondary drains.

This figure is typical only, not a schematic)

WE FITTING INSTALLED AS SHOWN TO PROVIDE OVERFLOW
BYPASS FROM GRAYWATER SPLUENT TO SANITARY SEWER.

GRAYWATER SPLUENT TO SANITARY SEWER.

GRAYWATER OVERFLOW LINE TO SANITARY SEWER.

GRAYWATER COUNTY IN WATER COUNTY IN WATER

(I) CHAPTER 13 NONPOTABLE WATER SYSTEMS

1301.9.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow pipe shall be protected from insects or vermin. The overflow drain shall not be equipped with a shutoff valve and shall discharge into the sanitary sewer either directly or indirectly with a trap in the drain line to keep odors from escaping the tank. A cleanout shall be provided on each overflow pipe in accordance with Section 708.

1301.9.9 Draining of tanks Delete the text "shall discharge as required for overflow pipes and". Replace it with: shall discharge into the sanitary sewer either directly or indirectly with a trap in the drain line to keep odors from escaping the tank

1301.11 Trenching requirements for nonpotable water piping. Nonpotable water collection and distribution piping and reclaimed water piping shall be separated from the *building sewer* and potable water piping underground by 5 feet (1524 mm) of undisturbed or compacted earth. Nonpotable water collection and distribution piping shall not belocated in, under or above cesspools, septic tanks, septic tank drainage fields or seepage pits. Buried nonpotable water piping shall comply with the requirements of Section 306.

Exceptions:

- 1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the *sewer* is not less than 12 inches (305 mm) above the top of the highest point of the *sewer* and the pipe materials conform to Table 702.3.
- 2. The required separation distance shall not apply where the bottom of the potable water service-pipe within 5 feet (1524 mm) of the nonpotable water pipe is not less than 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.
- 1301.12 Outdoor outlet access. Sillcocks, hose bibbs, wall hydrants, yard hydrants and other outdoor outlets- supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.
- **1302.1 General.** The provisions of ASTM E2635 and Section 1302 shall govern the construction, installation, alteration and repair of on-site nonpotable water reuse systems for the collection, storage, treatment and distribution of on-site sources of nonpotable water as permitted by the jurisdiction. All plumbing systems utilizing nonpotable water reuse systems shall have a double check valve installed at the water service entrance immediately downstream of the building water service shut off valve.
- **1302.5 Filtration.** Untreated water collected for reuse shall be filtered as required for the intended end use. Filters shall be provided with *access* for inspection and maintenance. Filters shall utilize a pressure gauge or other *approved* method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance. <u>Graywater used for dispersed subsurface irrigation system requires a cartridge filter. The cartridge filter must be a minimum of 60 mesh located between the storage tank and the irrigation system.</u>

1302.6.1 Gray water used for fixture flushing. Gray water used for flushing water closets and urinals shall be disinfected and treated by an on-site water reuse treatment system complying with NSF 350. Graywater used for toilet and urinal flushing shall be dyed with blue or green food grade vegetable dye and be visibly distinct from potable water.

1302.7.3 Overflow. Storage tank for on-site nonpotable systems must include an overflow line without a shut off valve. The overflow line shall be connected to the sanitary sewer either directly or indirectly. The overflow line must be the same or larger diameter line than the tank influent line. The overflow line connected indirectly must be trapped to prevent the escape of gas vapors from the tank

1302.7.4 Venting. Storage tank for on-site nonpotable systems must be vented. Indoor tanks must be vented to the atmosphere outside the building or connected to the plumbing vent system.

1302.7.5 Tank Drains. Storage tank for on-site nonpotable systems must include a valved drain. The drain shall be indirectly connected to the sanitary sewer. The tank drainline must be the same or larger diameter line than the tank influent line.

1302.8.1 Bypass valve. One three way diverter valve listed and labeled to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated on site reuse sources to the sanitary *sewer* to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be provided with *access* that allows for removal. Two shutoff valves shall not be installed to serve as a bypass valve.

1302.8.1 System Bypass One three-way diverter valve listed and labeled to NSF 50 or other approved device shall be installed on collection piping upstream of any graywater treatment equipment, as applicable, to divert untreated on-site reuse sources to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be installed in accessible locations. Two shutoff valves shall not be installed to serve as a bypass valve. In addition to the bypass valve a series of drainage fittings shall be installed in the collection piping upstream of the bypass valve in a configuration that will allow the graywater from the plumbing fixtures to automatically flow directly into the sanitary sewer system in the event the filter or other parts of the collection system become clogged to the point of not allowing the effluent free flow through the system. The overflow line connected to the sanitary sewer shall be equipped with a backwater valve.

Section 1303 Nonpotable rainwater collection and distribution systems Delete in its entirety

Chapter 14 Subsurface landscape irrigation systems Delete in its entirety

- (5) Amendments to the 2018 International Mechanical Code
 - (a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Mechanical Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

(6) Amendments to the 2018 International Fuel Gas Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Fuel Gas Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

101.2.2 Piping systems. These regulations cover *piping* systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.7. Coverage shall extend from the *point of delivery* to the outlet of the *appliance* shutoff valves. *Piping* system requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation, and maintenance.

(b) CHAPTER 4 GAS PIPING INSTALLATIONS

403.10.6 Welded Joints. Welded joints shall be performed by a person holding a valid certificate of competency based on the requirements of the ANSI/ASME Boiler and Pressure Vessel Code, Section IX, Brazing and Welding Qualifications. Welded joints shall comply with ASTM 139.

404.12 Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) below grade except as provided for in Section 404.12.1. <u>Underground</u> plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

406.1 General. Prior to acceptance and initial operation, all *piping* installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code. <u>Inspection and pressure testing shall apply to temporary installations connected to a primary fuel gas source for the purpose of supplying temporary heat.</u>

406.4.1 Test pressure. The test pressure to be used shall be not less than 1½ times the proposed maximum working pressure, but not less than 3 20 psig (20 30 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *piping* greater than 50 percent of the specified minimum yield strength of the pipe.

408.4 Sediment trap. Where a sediment trap is not incorporated as part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. The sediment trap shall be either a tee fitting having a capped nipple of any length installed vertically in the bottommost opening of the tee as illustrated in Figure 408.4 or other device approved as an effective sediment trap. Illuminating appliances, ranges, clothes dryers, decorative vented appliances for installation in vented fireplaces, gas fireplaces and outdoor grills need not be so equipped.

409.5.3 Located at manifold. Where the *appliance* shutoff valve is installed at a manifold, such shutoff valve shall be located within 50 feet (15 240 mm) of the *appliance* served and shall be readily accessible and permanently identified. The *piping* from the manifold to within 6 feet

(1829 mm) of the *appliance* shall be designed, sized and installed in accordance with Sections 401 through 408.

409.6.1 Electric Solenoid Valve. A remotely located electric solenoid emergency shutoff valve may be used for compliance to Section 409.6, when all the following requirements are met.

- 1. The emergency control shutoff "panic button" shall be readily accessible, located within the laboratory space served, adjacent to the egress door from the space and shall be identified by approved signage stating "Gas Shutoff".
- 2. The gas solenoid valve shall be a "normally closed" type valve with a manual reset

(7) Amendments to the 2018 International Energy Conservation Code

(a) [CE] CHAPTER 1 SCOPE AND ADMINISTRATION

C101.1 Title. This code shall be known as the *Energy Conservation Code* of <u>Adams County</u> [NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as "this code."

(b) [CE] CHAPTER 4 COMMERCIAL ENERGY EFFICIENCY

C403.6.1 Variable air volume and multiple-zone systems. Supply air systems serving multiple zones shall be variable air volume (VAV) systems that have zone controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone to one of the following:

- 1. Twenty percent of the zone design peak supply for systems with <u>Direct Digital Control</u> (DDC) and 30 percent for other systems.
- 2. Systems with Direct Digital Control (DDC) where all of the following apply:
- 2.1. The airflow rate in the deadband between heating and cooling does not exceed 20 percent of the zone design peak supply rate or the zone design peak supply rate or higher allowed rates under Items 3, 4 and 5 of this section.
- 2.2. The first stage of heating modulates the zone supply air temperature setpoint up to a maximum setpoint while the airflow is maintained at the deadband flow rate.
- 2.3. The second stage of heating modulates the airflow rate from the deadband flow rate up to the heating maximum flow rate that is less than 50 percent of the zone design peak supply rate.

(c) [RE] CHAPTER 1 SCOPE AND ADMINISTRATION

R101.1 Title. This code shall be known as the *Energy Conservation Code* of <u>Adams County-</u>[NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as "this code."

(d) [RE] CHAPTER 4 RESIDENTIAL ENERGY EFFICENCY

R402.4.1.2 Testing. The *building* or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour or 0.30 cubic feet per minute for multifamily units and not exceeding three air changes per hour or 0.24 cubic feet per minute for all other residential buildings and dwelling units. in *Climate Zones* 1 and 2, and three air changes per hour in *Climate Zones* 3 through 8. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the *code official*, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

(8) Amendments to 2018 International Existing Building Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Existing Building Code* of <u>Adams County [NAME OF JURISDICTION]</u>, hereinafter referred to as "this code."

(b) CHAPTER 2 DEFINITONS

[BS] DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below or meets the definition of dangerous as stated in Section 108.1.5 of the International Property Maintenance Code shall be deemed *dangerous*:

- 1. The building or structure has collapsed, partially collapsed, moved off its foundation or lacks the support of ground necessary to support it.
- 2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

(9) Amendments to the 2018 International Swimming Pool and Spa Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *International Swimming Pool and Spa Code* of Adams County [NAME OF JURISDICTION], hereinafter referred to as "this code."

105.6.2 Fee schedule. The fees for work shall be as indicated in the following schedule: [JURISDICTION TO INSERT APPROPRIATE SCHEDULE] Building Permit Fee Schedule

105.6.3 Fee refunds. The code official shall authorize the refunding of fees as follows:

- 1. The full amount of any fee paid hereunder that was erroneously paid or collected.
- 2. Not more than <u>80%</u> [SPECIFY PERCENTAGE] percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

(b) CHAPTER 2 DEFINITIONS

Residential Swimming Pool (Residential Pool). A pool intended for use which is accessory to a *residential* setting *One and Two Family Dwelling* and available only to the household and its guests. Pools accessory to townhomes shall be designed and constructed as Public Swimming Pools Class C. All other pools shall be considered *public pools* for purposes of this code.

(c) CHAPTER 3 GENERAL COMPLIANCE

- **305.1 General.** The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas or hot tubs or pools are located shall not be required to comply with Sections 305.2 through 305.7.
- **320.1 Backwash water or draining water.** Backwash water or draining water shall be discharged to the <u>sanitary sewer</u> or <u>storm sewer</u>, or into an *approved* disposal system on the premise, or shall be disposed of by other means approved by the state or local authority. Direct connections shall not be made between the end of the backwash line and the disposal system. Drains shall discharge through an air gap.
- **321.2** Artificial lighting required. When a pool is open during periods of low natural illumination, artificial Artificial lighting shall be provided so that all areas of the pool, including the bottom *main drains*, will be visible.
- **321.3 Emergency illumination**. *Public pools* and pool areas that operate during periods of low illumination shall be provided with sufficient emergency illumination to permit evacuation of the pool and securing of the area in the event of power failure. The emergency lighting intensity shall be not less than 1 foot-candle at the water surface and the walking surface of the deck.

(10) Amendments to 2018 International Property Maintenance Code

(a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *International Property Maintenance Code* of Adams County [NAME OF JURISDICTION], hereinafter referred to as "this code."

(b) CHAPTER 3 GENERAL REQUIREMENTS

- **302.4 Weeds.** *Premises* and *exterior property* shall be maintained free from weeds or plant growth in excess of <u>6 inches</u>-[JURISDICTION TO INSERT HEIGHT IN INCHES]. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.
- **304.14 Insect screens.** During the period from [DATE] to [DATE], Every door, window and other outside opening required for *ventilation* of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with *approved*

tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other *approved* means, such as air curtains or insect repellent fans, are employed.

(c) CHAPTER 6 MECHANICAL AND ELECTRICAL EQUIPMENT

602.3 Heat supply. Every *owner* and *operator* of any building who rents, leases or lets one or more *dwelling units* or *sleeping units* on terms, either expressed or implied, to furnish heat to the *occupants* thereof shall supply heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, *bathrooms* and *toilet rooms*.

Exceptions:

- 1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the *International Plumbing Code*.
- 2. In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.
- **602.4 Occupiable work spaces.** Indoor occupiable work spaces shall be supplied with heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

Exceptions:

- 1. Processing, storage and operation areas that require cooling or special temperature conditions.
- 2. Areas in which persons are primarily engaged in vigorous physical activities.

(11) Amendments to 2017 National Electrical Code

(a) ARTICIAL 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

110.14 (D) Installation. Where tightening torque is indicated as a numeric value on equipment or in installation instructions provided by the manufacturer, a calibrated torque tool shall be used to achieve the indicated torque value, unless the equipment manufacturer has provided installation instructions for alternative method of achieving the required torque. A self certified torque report indicating required torque requirements by the manufacturer's installation instructions have been met shall be provided to the authority having jurisdiction.

(b) ARTICIAL 230 SERVICES

230.70(A) (1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors. When the location of the service meter is at a distance of greater than 50 ft. (16m) from the main structure(s) or building(s), an additional service disconnecting means for each structure or building shall be provided at this location. These

disconnects may be cold sequenced or hot sequenced depending on the utility providers preference.

(c) ARTICIAL 300 UNDERGROUND INSTALLATIONS

300.5 (D) (3) Protection from damage. Underground service conductors <u>rated 110 volts to</u> <u>ground or more</u> that are not encased in concrete and that are buried 450 mm (18 in.) or more below grade shall have their location identified by a warning ribbon that is placed in the trench as least 300 mm (12 in.) above the underground installation. <u>Trenches less than 18 inches, an appropriate depth above the conductors or raceway shall be determined by the installer so as to provide sufficient warning of the presence of the conductors/raceway.</u>

(d) ARTICIAL 830 NETWORK-POWERED BROADBAND COMMUNICATIONS SYSTEMS

830.133 (B) Support of Network-Powered Broadband Communications System Cables.Raceways shall be used for the intended purpose. Network-powered broadband communications cables shall not be strapped, taped, or attached by any means to the exterior of any conduit or raceway as a means of support. Independent support wires used for support above a drop ceiling shall be independent of all other systems and clearly marked, tagged, or other effective means so as to identify them as being used for Network Powered Broadband Communication Cables. This shall apply to Communication Cables as listed Article 800 also.

Section 5. PENALTIES

Pursuant to \$30-28-209, C.R.S., any person who violates the provisions of this Ordinance commits a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than one hundred dollars (\$100), or by imprisonment in the county jail for not more than ten days, or by both such fine and imprisonment. Each day during which such illegal activity occurs shall be deemed to be a separate offense.

Section 6. REPEAL OF CONFLICTING BUILDING CODES

All conflicting building codes previously adopted by the Adams County Board of County Commissioners are hereby repealed in their entirety and re-enacted in accordance with the provisions of this Ordinance.

Section 7. SEVERABILITY

The Board of County Commissioners hereby declares that should any article, section, paragraph, sentence, clause or phrase of this Ordinance be held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of County Commissioners hereby declares that it would have passed this Ordinance, and each part or parts thereof, irrespective of the fact that any one part or parts be declared invalid or unconstitutional.

Section 8. SAFETY CLAUSE

The Board of County Commissioners hereby finds, determines, and declares that this Ordinance is necessary for the preservation of the public health, safety, and welfare.

Section 9. DATE OF EFFECT

The Board of County Commissioners of Adams County, Colorado, hereby determines that this Ordinance shall become effective on <u>January 1, 2019</u> .
Adopted this day of November, 2018.
Mary Hodge, Chair Board of County Commissioners Adams County, Colorado
Upon motion duly made and seconded the foregoing Ordinance was adopted by the following vote:
Hodge O'Doriso Henry Tedesco Hansen Commissioners
CERTIFICATE OF ATTESTATION
STATE OF COLORADO) County of Adams)
CERTIFICATE OF ATTESTATION
I, Stan Martin, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing Order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.
The foregoing text is the authentic text of Adams County Ordinance No. 12. The first reading of said Ordinance took place on October, 2018, at a regular Board of County Commissioners meeting. It was published in full in a newspaper of general circulation at least ten days before its adoption; to wit, in The Denver Post on November, 2018. The Ordinance was adopted on second reading at a regular Board of County Commissioners meeting on November, 2018, and shall become effective on January 1, 2019.

County Clerk and ex-officio Clerk of the Board of County Commissioners Stan Martin:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at

Brighton, Colorado this ____ day of November, 2018.

By:

Deputy





STUDY SESSION AGENDA ITEM

DATE:

August 28, 2018

SUBJECT:

Oil and Gas Update

FROM:

Kristin Sullivan, Director

AGENCY/DEPARTMENT: Community & Economic Development

ATTENDEES: Kristin Sullivan, Doug Clark, Jen Rutter, Christine Dougherty

PURPOSE OF ITEM: Update on oil and gas activity, regulation amendments, and COGCC rulemaking.

STAFF RECOMMENDATION: Update

BACKGROUND:

Staff will brief the Board on current oil and gas activity, County regulation amendments, and the Colorado Oil & Gas Conservation Commission (COGCC) rulemaking on the State Pooling and Hearing Process.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

ATTACHED DOCUMENTS:

FISCAL IMPACT:

Please check if there is no fiscal impact . It section below.	f there is fisc	cal impact, ple	ease fully com	plete the
Fund:				
Cost Center:				
		Object Account	Subledger	Amount
Current Budgeted Revenue:				
Additional Revenue not included in Current Budge	et:			
Total Revenues:			•	
		Object Account	Subledger	Amount
Current Budgeted Operating Expenditure:				
Add'l Operating Expenditure not included in Curre	ent Budget:			
Current Budgeted Capital Expenditure:				
Add'l Capital Expenditure not included in Current Total Expenditures:	Budget:			
New FTEs requested: YES Future Amendment Needed: YES	□ NO			
Additional Note:				
APPROVAL SIGNATURES:				
Raymond H. Gonzales, County Manager	Alisha	Reis Denuty (County Manager	r
BunOu	_			
Bryan Östler, Deputy County Manager	Patti D	uncan, Deputy	County Manag	er
APPROVAL OF FISCAL IMPACT:				
Many Dunco	_			



STUDY SESSION AGENDA ITEM

DATE: August 28, 2018

SUBJECT: Marijuana Regulation and Licensing Update

FROM: Kristin Sullivan, Director, Doug Clark, Deputy Director, Andrea Berg, Customer and Process Development Manager, Nana Appiah, Development Services Manager, Brandan Slattery,

Licensing Administrator. Emily Collins, Planner III

AGENCY/DEPARTMENT: Community and Economic Development

ATTENDEES: Kristin Sullivan, Doug Clark, Ben Dahlman, Nana Appiah, Andrea Berg, Brandan Slattery, Emily Collins

PURPOSE OF ITEM: To provide an update and staff recommendations on marijuana regulations

and licensing

STAFF RECOMMENDATION: Informational

BACKGROUND:

At the Board of County Commissioners (BoCC) study session on May 1, 2018, the Community and Economic Development Department staff discussed with the BoCC the current status and implementation of the County's marijuana regulations and licensing. After this discussion, the BoCC directed staff to review the State's current marijuana regulations and make a policy recommendation as to whether any changes are required to the County's regulations as a result of changes in the State's regulations.

Staff and the BoCC also discussed the status of the remaining marijuana licenses in the County. Currently, the County has a cap of 10 licenses for operation of marijuana facilities. Specifically, the cap allows for a maximum of three retail sales facilities, three retail manufacturing facilities, three cultivation facilities, and one testing facility. Overall, the County has issued eight permits for the operation of marijuana establishments. Of the eight locations that have been permitted, seven are in operation.

In this follow-up study session, the staff will present the current state regulations on marijuana operations, provide recommendations on local licensing changes, and provide information on the option of pursuing an excise tax.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Community and Economic Development, County Attorney, Finance

ATTACHED DOCUMENTS:

PowerPoint presentation

Page 1 of 2 Revised: 2018-Jan05

FISCAL IMPACT:

Please check if there is no fiscal impact \boxtimes . If t section below.	here is fisc	al impact, pl	ease fully comp	olete the
Fund:				
Cost Center:				
		Object Account	Subledger	Amount
Current Budgeted Revenue:				
Additional Revenue not included in Current Budget:	!			
Total Revenues:			_	
		Object Account	Subledger	Amount
Current Budgeted Operating Expenditure:				
Add'l Operating Expenditure not included in Curren	t Budget:			
Current Budgeted Capital Expenditure:	1 .			
Add'l Capital Expenditure not included in Current B Total Expenditures:	udget:			
New FTEs requested: YES Future Amendment Needed: YES	⊠ NO			
Additional Note: APPROVAL SIGNATURES:				
AMM				
Raymond H. Gonzales, County Manager Bryan Ostler, Deputy County Manager			County Manager County Manage	
APPROVAL OF FISCAL IMPACT: Budget		,		

Page 2 of 2

Revised: 2018-Jan05

Marijuana Regulations

Community and Economic Development

Background

- Prior study session with the BoCC
- Direction:
 - Research current state regulations to include changes to licensing and make recommendations for any County policy adjustments
 - Provide recommendations regarding the possibility of adding additional license types and numbers, as well as hours of operation
 - Research home grow regulations
 - Explore excise tax

Overview

- Update regarding state regulations and licensing
 - Transporter/Storage license
 - Operator license
 - Off-premise storage permit
 - Hours of operation
 - Home grow regulations
- Excise Tax Information
- Status of existing licenses
 - County license types and current approved/operational licenses
- Additional license options and scenarios
- Discussion and recommendations

New State License Types

- Transporter License
 - Provide transportation and temporary storage services
 to MED licensed businesses (Section 12-43.3-406 C.R.S. 01/01/2017)
 - Some licensees transport only, others provide transport and temporary storage services

Jurisdiction	Number
Denver	8
Pueblo	1
Pueblo West	1
Boulder	1
Manitou Springs	1

New State License Types

- Operator License
 - Provide professional operational services to one or more MED licensed marijuana businesses (section 12-43.3-406 C.R.S.)
 - Provide contract service for a licensed business and receives compensation

Jurisdictions
Pueblo West
Castle Rock
Highlands Ranch
Commerce City
Moffat
Woodland Park
Thornton

New State Permit Type

- Off-Premises Storage Permit
 - Retail Store, MIPs, Cultivator, Testing must obtain a permit to store product in a location other than their licensed facility
 - Only one off-premises storage facility permit per licensee
 - Licensed transporters are allowed to have more than one permit
 - Local jurisdiction must allow for the use of marijuana storage for the off-premises permit to be located in that jurisdiction

Recommendation

- Staff does not recommend adding a corresponding local Transporter license type
 - Dual license with all local governments not necessary; state license authorizes transport across city and county borders
 - No current demand for the Transporter license type
- Staff does not currently see a need to add an Operator license type
- Staff does not currently see a need to add an Off-Premises Permit type

Hours of Operation

- State statute 8:00am 12:00am
- County licensing regulations 9:00 a.m. to 9:00 p.m.
- Adams County Retail Stores
 - The Green Solution: 9:00am 8:45pm
 - Native Roots: 9:00am 9:00pm
 - Starbuds: 9:00am 9:00pm
- Others 8:00am 10:00pm
 - Broomfield, Commerce City, Denver, Northglenn
- Thornton 8:00am 12:00am

Recommendation

 No modifications to the regulations to change hours of operations

Home Grow Overview

- Colo. Const. Art XVIII, Section 16(3): Establishes a constitutional right to "possess, grow, process, or transport" six marijuana plants, three of which are flowering
- Effective January 1, 2018, C.R.S. § 18-18-406: Makes it unlawful to "cultivate, grow, or produce" more than twelve marijuana plants on or in a residential property unless a "county, municipality, or city and county law **expressly permits** the cultivation, growth or production of more than twelve marijuana plants on or in a residential property"
- Other Jurisdictions
 - Prior to January 1, 2018, a few local jurisdictions used their land use authority to establish 12 plant limits on home grow operations: Douglas County, El Paso County, Denver, Carbondale, Lafayette

Recommendation

Follow State regulations regarding home grows

Excise Tax

Location potential is estimated to be:

Potential Excise Tax						
Excise Tax Rate	One Location		Two Locations		Three Locations	
1%	\$	13,000	\$	26,000	\$	39,000
3%	\$	39,000	\$	78,000	\$	117,000
5%	\$	65,000	\$	130,000	\$	195,000

Assumptions:

That locations would be approximately \$1,300,000 in annual taxable sales
The numbers provided above do not incorporate specific vendor data
Maximum rate that can be charged in the County is 5%
That tax would be for Unincorp. Adams County, not for sales in cities

 This tax may compete with the County's future efforts to extend Open Space and Capital Facilities Sales Tax

Recommendation

Not to seek voter approval at this time for new excise tax

State Licensing Numbers

Current numbers (Medical)

Туре	Number
Center	495
Cultivator	725
MIPS	253
Testing	11

Current Numbers (Retail)

Туре	Number
Store	538
Cultivator	744
MIPS	289
Testing	11

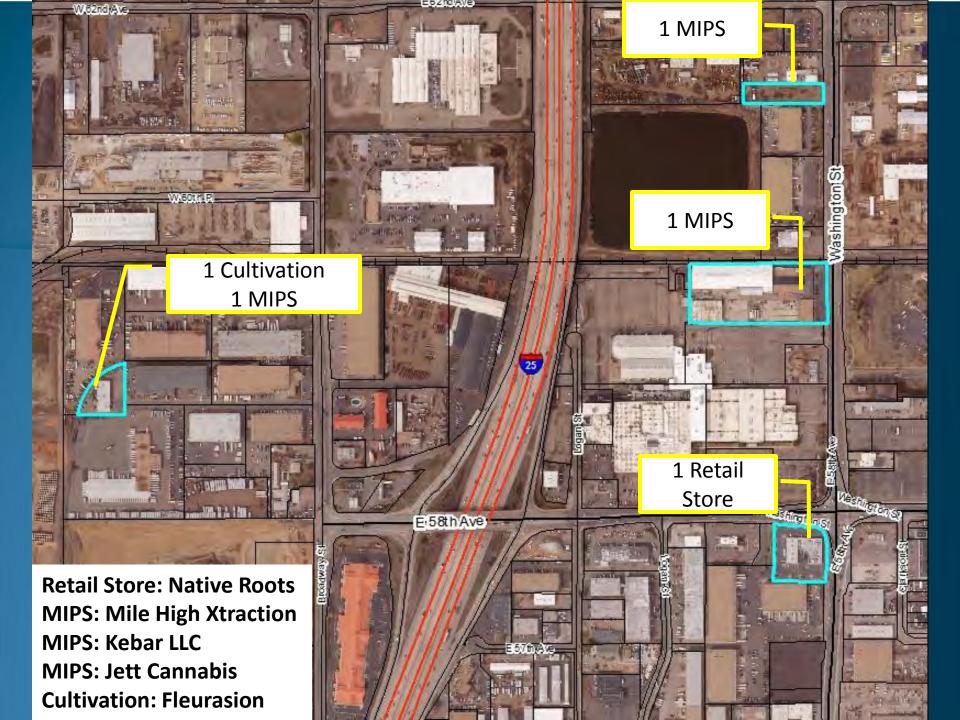
Adams County Current Marijuana Licenses

License Type	Сар	Approved	In Operation
Retail	3	3	3
Cultivation	3	2	2
Manufacturing	3	3	2
Testing	1	0	0
Total	10	8	7

Location of Existing Facilities and Maps

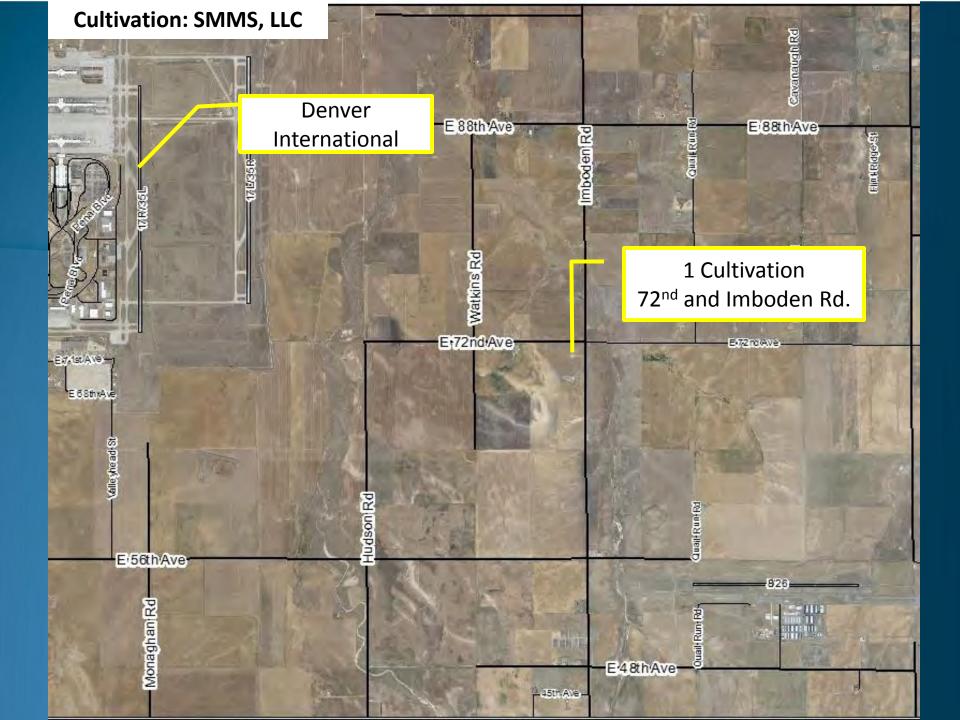
Facility Type	Zone District	School/ Daycare	Community Facilities	Residential Uses
Retail Store*	Commercial or Industrial	1,000 ft	100 ft	50 ft
Manufacturing	Industrial	1,000 ft 100 ft		50 ft
Cultivation	Ag (35+ acres) Commercial Industrial	1,000 ft	100 ft	50 ft
Testing	Industrial	1,000 ft	100 ft	50 ft

^{* 750} ft minimum separation between stores





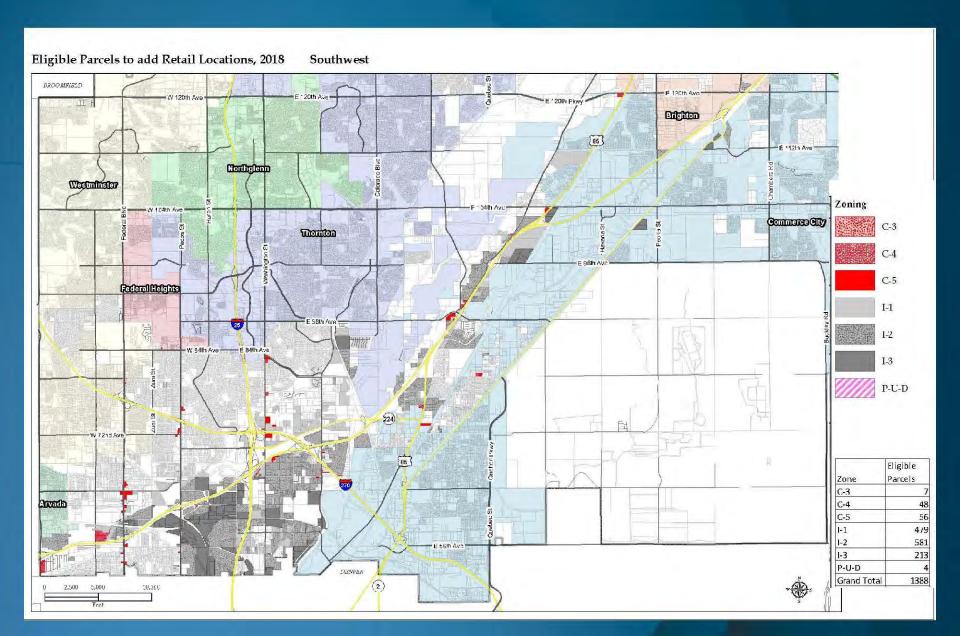




Scenario Testing

 Staff reviewed several scenarios in GIS to determine if there was still sufficient supply of land to implement various options and recommendations

Scenarios Map



New License Options

- Recommendation Option 1
 - Convert open testing license to retail (1 new)
 - Total: 4 retail stores
- Recommendation Option 2
 - Convert the testing license to retail and allow two additional retail licenses (3 new)
 - Total: 6 retail stores
- Recommendation Option 3
 - Convert testing license to retail (1 new)
 - Allow retail co-location with existing MIPS and Cultivation sites (up to 6 new)
 - Total: Up to 10 retail stores

Application Options

- Recommendation Option 1
 - Applicants email CEDD (time/ date stamped)
 - Staff review each application for completeness
 - Select first 3 complete applications to process
- Recommendation Option 2
 - Allow only existing MIPS and Cultivators to apply for new retail licenses
- Recommendation Option 3
 - Lottery for new retail licenses

Recommendations

- 1. New License Types
 - Not recommended (transporter, operator, storage)
- 2. Hours of operation
 - Keep current hours (9a-9p)
- 3. Home grow
 - Follow State regulations
- 4. Excise tax
 - Not to seek voter approval at this time
- 5. Add Retail licenses
 - Convert Testing license to Retail
 - Convert Testing to Retail and add 2 additional licenses
 - Convert Testing to Retail and add up to 6 additional licenses
- 6. Application process
 - Apply via email
 - Existing MIPS and Cultivators only
 - Lottery



STUDY SESSION AGENDA ITEM

DATE: August 28, 2018

SUBJECT: Open Space Project: Murata Brothers Farm Acquisition

FROM: Nathan Mosley and Marc Pedrucci

AGENCY/DEPARTMENT: Parks & Open Space

ATTENDEES: Nathan Mosley, Marc Pedrucci, Aaron Clark, Shannon McDowell, Anneli Berube, Christine Quinlan of The Conservation Fund

PURPOSE OF ITEM: Update the BoCC on a proposed open space acquisition in the District Plan Area

STAFF RECOMMENDATION: That the Board of County Commissioners gives the Parks & Open Space Dept. approval to move forward with the Murata Brothers Farm Acquisition.

BACKGROUND:

The Parks & Open Space Department (POSD) wishes to purchase a 37-acre agricultural property, along with 30 shares of Fulton Ditch, known as the Murata Brothers Farm. The property is within the District Plan Area, and is directly adjacent to other agricultural properties that have already been conserved as open space. We are partnering with the The Conservation Fund (TCF) to accomplish the property acquisition. TCF has assisted the County on several land preservation projects in the past, including the Berry Patch Farms which is directly south of the Murata Brothers Farm. Parks will need to execute a Purchase and Sale Agreement with TCF to finalize the details of the Murata Brothers Farm Acquistion. If acquired by the County, a conservation easement would then be granted over the property to the City of Brighton.

The POSD prepared and submitted an ADCO Open Space Grant for this property acquisition to the Open Space Advisory Board in the current grant cycle. The grant request is for \$1,450,000, which represents 68% of the estimated total cost of \$2,133,000. If the grant request is fully funded, we would need an additional amount of \$683,000 to close on the property. The 2018 Budget includes an approved project for District Plan Acquisitions of \$500,000 that would be directed to the acquisition, and the remaining amount of \$183,000 would come from the 30% shareback of the Open Space Sales Tax.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

Parks & Open Space, Community & Economic Development, The Conservation Fund, City of Brighton

ATTACHED DOCUMENTS:

PowerPoint Presentation

FISCAL IMPACT:	
Please check if there is no fiscal impact . section below.	If there is fiscal impact, please fully complete the

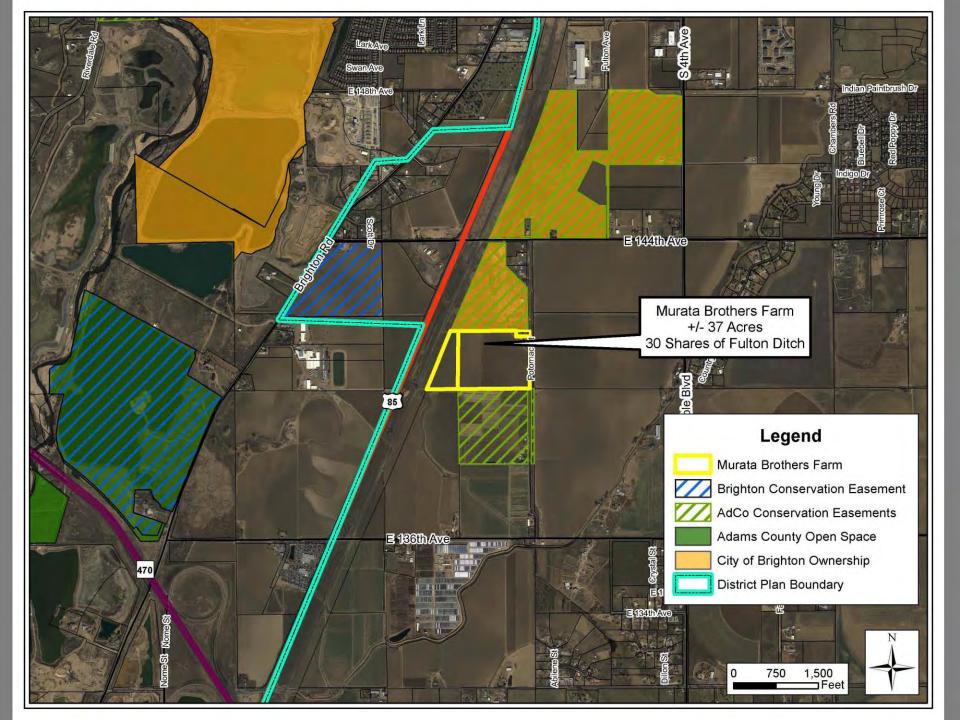
Please check if there is no fiscal section below.	impact . If	there is fisc	cal impact, pl	lease fully com	plete the
Fund: 27		-	···		<u>, </u>
Cost Center: 27, 6107					
			Object Account	Subledger	Amount
Current Budgeted Revenue:			27.6930	 -	\$183,000
Additional Revenue not included in *pending open space grant request	Current Budge	t:			\$1,450,000
Total Revenues:	:				\$1,633,000
		,	Object	Subledger	Amount
Current Budgeted Operating Expen	difure:		Account	·	
Add'l Operating Expenditure not in		nt Budget:	9010	61071802W	\$1,500,00
Current Budgeted Capital Expendit		2 4484	9010	61071803W	\$500,000
Add'l Capital Expenditure not inclu		Budget:			\$183,000
Total Expenditures:					\$2,183,00
New FTEs requested: Future Amendment Needed:	☐ YES ⊠ YES	⊠ no □ no			
Additional Note: The additional amount will be required in 2018 will need to have an amend APPROVAL SIGNATURES:		Amendment	to the 2018 b	udget. All future	e purchases
Raymond H. Gonzales, County Ma	nager	Alisha	Reis, Deputy	County Manager	
Banco		uncan, Deput	y County Manage	er	

APPROVAL OF FISCAL IMPACT:



Project Outline

- 38 Acres along Potomac Street
- Immediately North of Berry Patch Farm
- Immediately South of 144th Ave Farmland (Brighton)
- Close to Anderson-Hattendorf Farm
- Close Proximity to other AdCo Open Space
 - Riverdale Bluffs, Willow Bay, E-470 Property

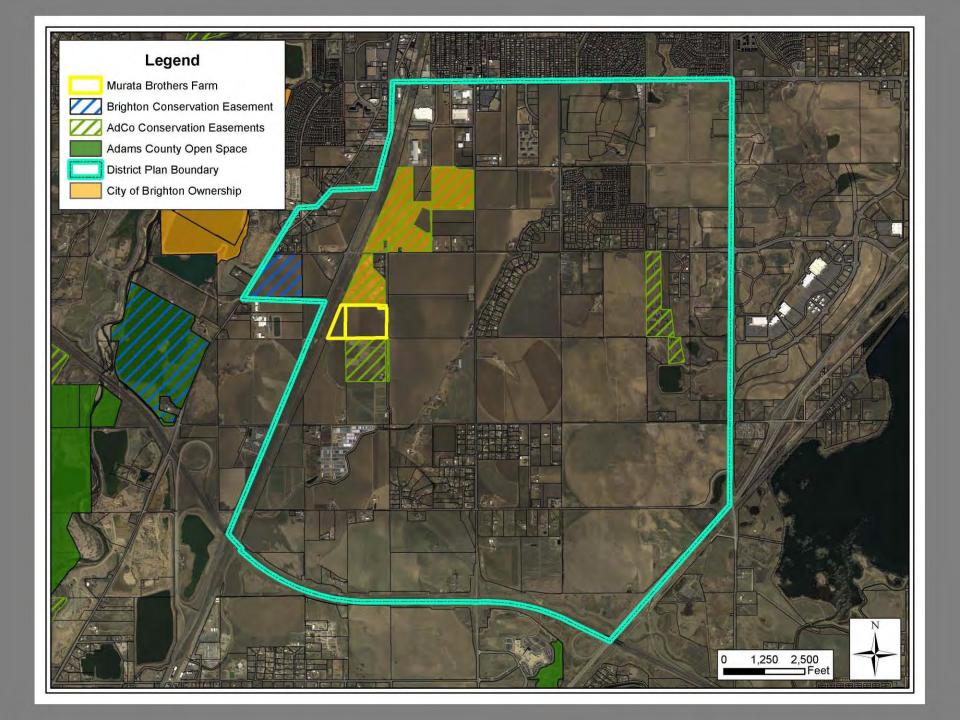


Project Outline

- Agricultural Heritage Preservation/Considerations
 - 38 Acres of Farmland
 - 30 Shares in Fulton Ditch
 - Connectivity with other preserved farms
 - Ag lease will be in place at time of conveyance to AdCo

Project Outline

- Scenic Views
 - Potomac Street/US 85/Others
- Priority Parcel in AdCo Plans
 - Open Space Plan (2012)
 - AdCo/Brighton District Plan (2016)



Project Timeline

• TCF/Murata Agreement of Sale – Fall 2018

TCF/AdCO Agreement of Sale — Early 2019

• Closing (TCF to AdCO) — Summer 2019

Project Timeline

- After lease term ends, AdCo will conduct bid process for new lessee
- Same process as other County ag properties