



**MINUTES OF THE  
FIRST BUILDING SUB-COUNCIL MEETING OF 2017**

**DATE:** January 26, 2017

**TIME:** 9:00 a.m. to 4:11 p.m.

**LOCATION:** Radisson Edmonton South, Edmonton

**PRESENT:** **Sub-Council Members**  
Bruce Schultz, Vice Chair South  
Mark Brodgesell  
Russell Croome, Vice Chair North  
Rick Gratton  
Lee Phillips  
Ulrik Seward  
Andrew Smith  
Robert Zifkin

**Safety Codes Council**  
Peter Thomas, Allison Karch, Danielle Paradis

**Alberta Municipal Affairs**  
James Orr (until 11:00 a.m.), Paul Chang, Richard Frederick

**Guests**  
Michael Bos (FSC Liaison), Yvette Werenka (BFSC Liaison)

**REGRETS:** Don Dessario, Chair  
Greg Beck  
Colin Belliveau  
Roger Clemens  
Kenneth Roskell  
Stephen Hill  
Terene Tharagan

**RECORDER:** Sandi Orr

**2017 MEETINGS:** March 23; May 18; September 28; November 16

## **1. Meeting Opening**

Vice Chair Bruce Schultz called the meeting to order at 9:12 a.m. and housekeeping notes were provided.

### **1.1. Agenda Adoption**

The agenda was reviewed and the following noted:

- Agenda item 4.1. is a duplicate of 3.
- 4.3.1. was corrected to read Schultz

**Mark Brodgesell / Russell Croome moved that the agenda be adopted, as amended, with a flexible order of business; CARRIED**

### **1.2. Previous Minutes**

#### **1.2.1. Adoption of December 8, 2016**

The minutes were reviewed and the following corrections were made:

- Attendance – Nagil corrected to read Nabil
- Under 2.1.3. – Fenestration Performance Generic Engineering Details Variance STANDATA, the word utilized was corrected to read utilize; following was corrected to read follow
- Under 2.1.3. – Elevator in a Barrier-Free Path of Travel Variance STANDATA – LULA was corrected to read lift; 006-BVC-005 was corrected to 006-BVC-006 and Elevators & Passenger Elevating Devices 06-BCI-028
- 3.2.2. Upcoming Code Cycle – the words “be held” were inserted between discussion and regarding
- Section A – where was corrected to read were
- Under 2.1.3. - CSA-A277-16 Procedure for Certification of Prefabricated Buildings, Modules, and Panels Province-wide Variance STANDATA – It was questioned regarding whether SIP panels would be covered within this STANDATA and there was uncertainty. was deleted and replaced with It was questioned and clarified that SIPs are not covered by this STANDATA.
- Cannabis – one-of changed to case-by-case.

**Ulrik Seward / Mark Brodgesell moved to adopt the minutes of the December 8, 2016 meeting, as corrected; CARRIED**

**2. Matters for Decision**  
**2.1. Matters for Decision**  
**2.1.1. STANDATA Review**

The Director of Codes and Standards reported that the department continues to work on getting all STANDATAs updated. Once feedback is received from the sub-council, the STANDATAs will be edited and published. Only those with substantive changes will be brought back to the sub-council for further feedback.

The format of the STANDATAs are being revised to create consistency across all disciplines, while still ensuring they are usable for SCOs in all disciplines.

**Interior Stairways for Roof Access Variance STANDATA**

The STANDATA was included in the portal and reviewed.

It was questioned regarding Occupational Health and Safety Regulations being referenced and it was clarified that this is simply to create awareness so an SCO can spot a gap between the Alberta Building Code and OHS Regulations. It is not the intent to have SCOs enforcing OHS Regulations.

Under Variance item 3, it was suggested that further detail be included regarding the owner being responsible for ensuring compliance with OHS requirements.

It was suggested there is a need to clarify where a ladder can begin. In some cases, stairs are first used and then a ladder is used higher up to access the roof.

It was suggested the diagrams need more details and/or labeling.

It was questioned regarding weight capacity for folding staircases for firefighting purposes and this led to a discussion regarding whether weight capacity needs to be referenced.

It was suggested that cross reference notes be added for any related STANDATAs from all disciplines.

The Chief Building Administrator agreed to take the feedback into consideration and will try to bring a redraft to the next meeting for further review. [Chang]

**Roof Anchors Interpretation STANDATA**

The STANDATA was included in the portal and reviewed.

It was suggested the Gas / Building Joint STANDATA be reviewed to ensure there are no conflicts within this redrafted STANDATA.

It was suggested that 3.6.4.7.(3) also be included.

It was noted that there are different terms used and this should remain consistent (e.g. low rise).

It was noted that a variance could be considered if the owner can demonstrate that maintenance can be achieved by other means rather than from the roof. Relative to alternative solutions, it was suggested not to confuse roof access with roof anchors by removing alternate access provisions and replacing with “not providing roof anchors”.

It was noted that these requirements are Alberta-specific and not included in the National Building Code. It is likely this may be further addressed during the harmonization review.

It was suggested that the variances issued by Calgary on what they are allowing as acceptable alternate solutions be reviewed for consideration as a Province-wide Variance. [Chang]

The Chief Building Administrator agreed to take the feedback into consideration and to conduct further research including paramountcy relative to OHS. [Chang]

### **Rooms Containing Gaseous Chlorine Interpretation STANDATA**

The STANDATA was included in the portal and reviewed.

Relative to 2 a) which states: no openings, doorways or operable windows between the chlorine room and the remainder of the building, it was questioned regarding whether an interior does is permissible as long as a door to the outside is provided.

The Chief Building Administrator will investigate whether the intent is to mandate that no openings are allowed into the interior of the building. [Chang]

### **Separation of Suites in Strip Malls Variance STANDATA**

The STANDATA was included in the portal and reviewed.

It was suggested that 3.3.1.1.(2) be added to the Code References.

Relative to Variance #6, it was questioned why daycares are highlighted when this should apply to all A2 occupancies.

The Chief Building Administrator will redraft the Variance for further review. [Chang]

## Visual Signals Interpretation STANDATA

The STANDATA was included in the portal and reviewed.

Background on the need for the Interpretation was provided, due to the recent code changes. It was noted that it is not intended for the visual signal to be in a bedroom as the brightness required could be blinding.

The current wording implies that the Authority Having Jurisdiction for the location of devices is the designer. Suggested that wording be revised to indicate the AHJ is the SCO.

It was suggested that the wording be changed to read: ...requiring a minimum of one device...

The Chief Building Administrator agreed to take the feedback into consideration and will try to bring a redraft to the next meeting for further review. [Chang]

## STANDATAs Supported at the December 2016 Meeting

It was questioned regarding the STANDATAs that were reviewed at the December 2016 meeting and the following update was provided:

- Stacked and Unstacked Townhouses STANDATA – still in progress
- Tall Wall Generic Engineering Details Variance STANDATA – revised, not yet published
- Fenestration Performance Generic Engineering Details Variance STANDATA – revised, not yet published
- Application of Energy Efficiency Requirements to Equipment Installations in Existing Buildings Interpretation STANDATA – this is being revised and will be brought back first
- Elevator in a Barrier-Free Path of Travel Variance STANDATA – revised, not yet published
- Barrier-Free Design Requirements: Relaxations Interpretation STANDATA – revised, not yet published
- CSA-A277-16 Procedure for Certification of Prefabricated Buildings, Modules, and Panels Province-wide Variance STANDATA – revised, not yet published
- Spans for Joists, Rafter and Beams Province-wide Variance STANDATA – not yet published

It was questioned whether the final drafts could be included in the portal as information prior to being published as these STANDATAs are not being brought back to the sub-council for any further feedback.

Council Administration and the Chief Building Administrator will work together on a process for sharing this information with sub-council members. [Karch / Chang]

### 3. Review Matters Arising/Action List

The action items were reviewed and the following status update noted:

	Item	Description	Action	Responsible	Date Initiated	Status / Update
1.	Walkways and Guardrails Joint Building and Gas STANDATA	Request for Chief Gas Inspector to reissue the STANDATA as Joint Gas and Building STANDATA.	STANDATA	Orr	Sept. 11/14	In progress
2.	Stacked Townhome Working Group	Produce revised documents for further consideration.		Working Group	Nov 13/14	Complete
2.	Stacked Townhome Working Group	Consider referencing Interpretation Guide by a STANDATA		Orr	Nov 13/14	In progress
2.	Stacked Townhome Working Group	Code changes considered for spatial separation, fire resistance rating; and firewall construction.		Working Group	Nov 13/14	Complete
2.	Stacked Townhome Working Group	City of Edmonton to provide additional feedback to WG Chair and Chief Building Administrator		Brodgesell	Dec 8/16	Complete
3.	Construction Site and Barrier Free Consideration.	Recommend to the Barrier Free Sub-Council that the Barrier Free Consideration document be referenced in the Barrier Free Design Guide as best practice.		Werenka	Jan. 29/15	Complete
4.	Off Site Review Clarification re: Pre-manufactured Structures	Development of an Information Bulletin on pre-manufactured structures.	Info Bulletin	Orr	Sept. 3/15	In progress
4.	Off Site Review Clarification re: Pre-manufactured Structures	Ask the Uniformed QMP to be reviewed relative to pre-manufactured structures.		Thomas	Oct. 20/16	Complete
5.	ABC 3.2.4.6. Application (Commissioning)	Draft of an Information Bulletin	Info Bulletin	Orr	Dec. 10/15	In progress
6.	NAFS	Draft of an Information Bulletin being considered.		Orr	Feb. 25/16	Complete
7.	Building Permit Application Requirements	Consider issuing an Information Bulletin re: requirements per building vs per unit. Include different practices by various AB municipalities	Info Bulletin	Orr	Feb. 25/16	In progress
8.	Air Leakage (Radon)	Follow up with the Chief Gas Administrator to determine if Edmonton/Calgary input received.		Orr	Mar. 31/16	In progress

	Item	Description	Action	Responsible	Date Initiated	Status / Update
8.	Air Leakage (Radon)	HVAC and Consumer Protection industry reps to follow up with nominating organizations to gather further information.		Tharagan / Gratton	Mar. 31/16	In progress
9.	Matrix Review	Current (revised) matrix to be posted to the portal		Thomas	Oct. 20/16	In progress
9.	Matrix Review	Explore AAMD&C's interest in continuing to provide representation on the BSC		Thomas	Oct. 20/16	In progress
10.	Professional & Constructor Responsibilities WG	Draft revisions to the professional schedules.		WG		Complete
10.	Professional & Constructor Responsibilities WG	AMA reviewing draft revisions	STANDATA	Orr		In progress
11.	NECB Compliance / Implementation	Request for consideration of highlighting the user guide and checklists on the AMA website		Orr	Sept. 3/15	In progress
12.	Existing STANDATA conflicts with ABC	Chair and Vice-Chair – South to compile a list of STANDATAs creating major issues.		Dessario / Schultz	Oct. 20/16	4.4.8. on today's agenda
13.	Orders/Variance s	Request for the Council to provide a summary of variances by category		Thomas	Oct. 20/16	4.5. on today's agenda
14.	Structural Insulated Panels	Consideration of the publication of a STANDATA based on the report provided to AMA		Orr	Nov. 14/13	Outstanding
15.	FCABC Shipping Containers	Discussion of when a Shipping Container is considered a building and whether other transportation regulations may be applicable.		FSC / BSC	Nov. 13/14	Complete
16.	Use of Explosives in Excavation/ Building Construction	Need to address gap relative to explosives used for excavations and building construction.		BSC	Jan. 29/15	CBA will look into
17.	Engineering Judgements for Fire Stop System	Consideration of the publication of a STANDATA based on the report provided to AMA		Orr	Sept. 3/15	In progress
18.	Overlapping Permit Reg between the Gas Authority and AB Sheet Metal Trade Authority	Consideration of highlighting the Permit Reg changes relative to the work Sheet Metal Workers can do but highlighted in a STANDATA or Safety Notice		Orr	Sept. 3/15	Outstanding
19.	NRC Format for Building Code	It was requested that AMA discuss with NRC the feasibility of creating an iPad friendly PDF version of the codes		Orr	Sept. 3/15	Complete

	Item	Description	Action	Responsible	Date Initiated	Status / Update
20.	Non- waterbourne Toilets	The Director of Codes & Standards will follow up with the Chief Plumbing Administrator regarding the status of creating and publishing this STANDATA		Orr		Complete
20.	Non- waterbourne Toilets	Development of this STANDATA is resting with the Chief Building Administrator.	Needs Building Permit			Outstanding

Relative to Non-waterbourne toilets, the Chief Building Administrator confirmed that a Building Permit, along with potentially other permits, would be required. The Plumbing Sub-Council accepted the interpretation but the Building Sub-Council did still see merit in an Information Bulletin STANDATA being published.

**4. Matters for Discussion**

**4.1. Review of Action List**

This item was duplicated and will be removed from future agendas. [Dessario / Karch]

**4.2. Request for Electrical Sub-Council Liaison on BSC**

A discussion was held regarding a potential request from the Electrical Sub-Council for a liaison between the Electrical and Building Sub-Councils, based on a recent ECAA matrix request. Like other liaisons already participating on the sub-council, the liaison would have no voting rights on Building Sub-Council matters. If the objective of the sub-councils is to work together on common issues, other liaisons such as this might warrant further discussion.

It was noted that all meetings are public and members could not recall the last time an electrical issue was brought to the Building Sub-Council.

This was received as information and will be removed from the agenda until a request is received from the Electrical Sub-Council. [Dessario / Karch]

**4.3 Technical Matters for Discussion**

**4.3.1. BSC/FSC Liaison Report**

An update was provided from the recent Fire Sub-Council meeting:

- Qualified Persons Registries is still in progress
- A special meeting is scheduled regarding harmonization and code change proposals
- Use of Sea Containers is still in progress as the FSC is dealing with the matter from a storage facility and fire code perspective



- STANDATAs are being worked on, including the review of the STANDATA regarding Occupant Loads

#### **4.3.2. BFSC Liaison Report**

It was reported that the Barrier Free Design Guide is still being worked on. A few items are being reviewed and revised from a technical perspective. Once the guide is published, a copy will be available on line.

#### **4.3.3. Residential Building SCO Certification – Inspect Residential Fire Suppression**

Vice Chair Russell Croome chaired this agenda item.

Bruce Schultz reported that the item was raised at the last meeting because of a residential subdivision under construction in Calgary where a contractual agreement has been made that all residences will be sprinklered to the NFPA Standard 13D.

Currently Building SCOs do not receive any sort of training in this area until a higher level of certification. It was suggested that the Council consider splitting this training between residential SCOs and Part 3 SCOs.

The Administrator of Certification reported there is reluctance to make any changes as the new training is still in the one-year transition period. However, there is merit for the future consideration of a change on a voluntary basis. In speaking with other jurisdictions, there is no support for this being a mandatory requirement. It was suggested that some sort of stand-alone certification be considered.

An in-depth discussion was held on the issue including what involvement the Plumbing SCOs may have relative to these systems and the need for the two disciplines to work together. It was questioned that if an order was issued, which discipline should issue it. Members were reminded that from the Building discipline perspective, the Building SCO would be looking at the purpose of the system, which is fire suppression. The Plumbing SCO would be looking at the plumbing installation. The issue would need to be looked at relative to what the deficiency is and this would determine which discipline would issue the order.

As this is a contractual sales agreement between the developer and builders, concern was expressed regarding enforcement challenges. This led to a discussion regarding any later additions to a building. It was noted that if sprinklered, you have to sprinkler according to the Standard.

It was suggested that since sprinklering could increase in residential housing once consumers see the value, the Building Sub-Council should keep this on their radar.

This led to a discussion regarding Fort McMurray and it was noted that their bylaws will be addressing fire suppression from external fire sources.

After an extensive discussion on the matter, the following request was made:

**Bruce Schultz / Robert Zifkin moved to request that the Council staff investigate the feasibility of creating or including the 13D module from Part 3 SCO training / certification to Residential SCO training / certification or as a stand-alone module and to report back to the Building Sub-Council at the next meeting; CARRIED with noted opposition – Mark Brodgesell [Paradis]**

#### **4.4. Municipal Affairs Report**

##### **4.4.1. Asbestos – Federal Ban**

The Liaison to the Fire Sub-Council advised that the following was reported at the last FSC meeting:

- The Federal Government has announced a complete ban on asbestos
- 85% of asbestos is currently used in automobiles, with 15% used in buildings
- No issues are foreseen with removing this from a future edition of the Alberta Building Code

##### **4.4.2. Federal Climate Change Report**

The Chief Building Administrator had nothing to report on the subject.

##### **4.4.3. NECB**

The Chief Building Administrator had nothing to report on the subject.

##### **4.4.4. ABC 9.36 Calculation Error**

It was reported that there is an error relative to Table 9.36.4.2. regarding gas- and oil-fired water heaters. The calculation listed in the code has brackets in the wrong location. The Chief Building Administrator is working on this directly with NRC. [Chang]

##### **4.4.5. Cannabis Legalization**

The Liaison to the Fire Sub-Council advised that the following was reported at the last FSC meeting:

- A cross-ministry STANDATA is being worked on
- Mass production facilities are not agricultural and will be designated as F1, F2 or F3 occupancies or a combination thereof
- Although there are security considerations, this is outside of the Safety Codes Act

#### **4.4.6. Food Trucks Update**

The Liaison to the Fire Sub-Council advised that the following was reported at the last FSC meeting:

- A STANDATA is being worked on and hopefully will be available at the next FSC meeting
- This will be a Joint STANDATA including Fire, Gas, Plumbing, Electrical and Building

#### **4.4.7. Upcoming Code Cycle – Adoption of 2020 Codes**

It was reported that the department is in the first stage of creating a 5-column document to compare the Alberta Building Code with the National Building Code with the goal to harmonize for the 2018 code to allow for automatic code adoption of the 2020 National Building Code.

Discussions have been brought forward on whether there is any merit in waiting for the 2020 code for harmonization and noted that if this was recommended to the Minister it would have to be for both the Building and Fire Codes.

A document outlining the significant technical changes in the 2015 NBC is available at;  
[http://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes\\_centre/technical\\_changes\\_2015.html](http://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre/technical_changes_2015.html)

A discussion was held of the pros and cons of skipping a code cycle:

- Referenced standards could be an issue unless another mechanism is available
- A lot of new codes recently came into force, including the Building, Fire and Energy Codes, and this has put a lot of pressure on the SCOs and their employers relative to financial resources and training time
- If deferred, SCOs could be faced with a large amount of changes all at once
- If deferred, new codes would not be in force until at least 2020
- The 2018 code adoption process could be delayed because of an election anticipated for 2019, which could delay cabinet approval

It was suggested that further discussion regarding the matter be deferred until the Chair and the Director of Codes and Standards are present.

The Director of Codes and Standards was asked to address timelines of the next code adoption and the status of harmonization at the next meeting. [Orr]

#### **4.4.8. Building Code Interpretations Issued by Chief Building Administrator**

Vice Chair Russell Croome chaired this agenda item.

Concern was expressed regarding a recent interpretation issued by the Chief Building Administrator that conflicted with the interpretation provided by the Authority Having Jurisdiction. It was suggested that a process be developed that if an individual is requesting an

interpretation from the Chief Administrator that they be asked if they have consulted with their local authority. If interpretations are issued, it was questioned how local authorities will be advised.

The Chief Building Administrator reported that this occurred in the first week of his new position and explained the process he used.

It was reported that an Interpretation STANDATA is being drafted regarding the matter and this will likely be presented at the next meeting.

### **Other Matters**

The Liaison to the Fire Sub-Council advised that the following was reported at the last FSC meeting:

- The Fire discipline will be provided more support and direction from AMA
- A Building / Fire Technical Advisor is being recruited
- Relative to Persons with Development Disabilities, buildings housing 3 or fewer PDD clients will be treated as residential
- The next sector of care facilities to be reviewed will be Supportive Living (4 to 10 occupants) of which there are 411 sites with 255 of them having some PDD clients
- The Care Facilities Working Group is currently dormant
- The Council Variances Policy is being reviewed

It was asked that AMA provide a report to the sub-council on the status of the Care Facilities Working Group at the next meeting. [Orr]

### **4.5. Council Items**

An overview was provided of Allison Karch's new role with the sub-councils as well as changes in roles of other staff members:

- Director of Operations: Tyler Wightman
- Director of Corporate Strategy and Communications: Erin Stroud
- Director of Strategic Projects: Gerry Baron
- Administrator of Accreditation: Peter Thomas
- Manager of Policy and Legislation: Vacant, being filled
- Manager of Stakeholder Relations: Vacant, being filled

Members were reminded of considering submitting nominations for the Dr. Sauer Award and of the upcoming Safety Codes Council Conference at the end of May.

## **5. Other Business and Meeting Finalization**

### **5.1. Other Business**

The Administrator of Accreditation will check on the current terms of the Chair and Vice Chair appointments. [Thomas]

It was emphasized that the sub-council members need time to review documents if they are expected to provide any valuable feedback. Members were reminded that if they do not feel they have had sufficient time to review a document, it can be received as information and discussion deferred to the next meeting.

### **5.2. 2017 Meeting Dates**

The following 2017 schedule was reconfirmed:

- Thursday, March 23 – 9:00 a.m. in Edmonton
- Thursday, May 18 – 9:00 a.m. in Edmonton
- Thursday, September 28 – 9:00 a.m. in Edmonton
- Thursday, November 16 – 9:00 a.m. in Edmonton

### **5.3. Meeting Adjournment**

The meeting was adjourned at 4:11 p.m.

– ACTION ITEMS FROM TODAY’S MEETING –

**2.1.1. STANDATA Review**

**Interior Stairways for Roof Access Variance STANDATA**

The Chief Building Administrator agreed to take the feedback into consideration and will try to bring a redraft to the next meeting for further review. [Chang]

**Roof Anchors Interpretation STANDATA**

It was suggested that the variances issued by Calgary on what they are allowing as acceptable alternate solutions be reviewed for consideration as a Province-wide Variance. [Chang]

The Chief Building Administrator agreed to take the feedback into consideration and to conduct further research including paramountcy relative to OHS. [Chang]

**Rooms Containing Gaseous Chlorine Interpretation STANDATA**

The Chief Building Administrator will investigate whether the intent of is to mandate that no openings are allowed into the interior of the building. [Chang]

**Separation of Suites in Strip Malls Variance STANDATA**

The Chief Building Administrator will redraft the Variance for further review. [Chang]

**Visual Signals Interpretation STANDATA**

The Chief Building Administrator agreed to take the feedback into consideration and will try to bring a redraft to the next meeting for further review. [Chang]

**STANDATAs Supported at the December 2016 Meeting**

Council Administration and the Chief Building Administrator will work together on a process for sharing this information with sub-council members. [Karch / Chang]

**4.1. Review of Action List**

This item was duplicated and will be removed from future agendas. [Dessario / Karch]

#### **4.2. Request for Electrical Sub-Council Liaison on BSC**

This was received as information and will be removed from the agenda until a request is received from the Electrical Sub-Council. [Dessario / Karch]

#### **4.3.3. Residential Building SCO Certification – Inspect Residential Fire Suppression**

Council staff investigate the feasibility of creating or including the 13D module from Part 3 SCO training / certification to Residential SCO training / certification or as a stand-alone module and to report back to the Building Sub-Council at the next meeting. [Paradis]

#### **4.4.4. ABC 9.36 Calculation Error**

It was reported that there is an error relative to Table 9.36.4.2. regarding gas- and oil-fired water heaters. The calculation listed in the code has brackets in the wrong location. The Chief Building Administrator is working on this directly with NRC. [Chang]

#### **4.4.7. Upcoming Code Cycle – Adoption of 2020 Codes**

The Director of Codes and Standards was asked to address timelines of the next code adoption and the status of harmonization at the next meeting. [Orr]

#### **Other Matters**

It was asked that AMA provide a report to the sub-council on the status of the Care Facilities Working Group at the next meeting. [Orr]

#### **5.1. Other Business**

The Administrator of Accreditation will check on the current terms of the Chair and Vice Chair appointments. [Thomas]

– MOTIONS –

**1.1. Agenda Adoption**

**Mark Brodgesell / Russell Croome moved that the agenda be adopted, as amended, with a flexible order of business; CARRIED**

**1.2.1. Adoption of December 8, 2016**

**Ulrik Seward / Mark Brodgesell moved to adopt the minutes of the December 8, 2016 meeting, as corrected; CARRIED**

**4.3.3. Residential Building SCO Certification – Inspect Residential Fire Suppression**

**Bruce Schultz / Robert Zifkin moved to request that the Council staff investigate the feasibility of creating or including the 13D module from Part 3 SCO training / certification to Residential SCO training / certification or as a stand-alone module and to report back to the Building Sub-Council at the next meeting; CARRIED with noted opposition – Mark Brodgesell**