

1:00 P.M. to 3:00 P.M. EST, Wednesday, November 6th, 2024
Delta Hotel by Marriott, Waterloo, ON

Committee Attendance:

Paul Proctor (Past Chair)	Atlantic	Mitchell Swisher	Cleveland Cliffs
Pat Mayne (New Chair)	Atlantic	Colin Rojahn	Cleveland Cliffs
Terry Dunn	Atlantic	Jonathon Paton	Warner
Scott MacRae	Armtec	Mike Mounts	Valgroup
Darren Bauman	Armtec	Todd Gray	ACI
Bruce Matheson	Frontier	Derek Niezen (abs)	Ironside
Jaclyn Pittman (abs)	Hubb-Cap	Chuck Skeen (abs)	MarMac
Kamran Derayeh	AMD	Richard Northcutt	MarMac
Byron Nelson (abs)	Leland	Mike McGough (abs)	NCSPA
Dave Watson	Leland	Ray Wilcock	CSPI

Members in Attendance

Lucas Cooper	AMD	Rodrigo Silva	Armtec
Sam Mitra	Armtec	Matt Field	Atlantic
Liz Bouchard	Armtec	Ian Kalverda	Hubb-Cap
Roger Leger	Armtec	Mike Williamson	Hubb-Cap

1. Welcome and Opening Remarks

Paul opened the meeting and welcomed everyone. Attendance was taken and is recorded above.

2. Review Minutes from September 11th, 2024, and Approve

Minutes were reviewed and a motion for approval was made by **Scott MacRae**, second by **Pat Mayne** and was carried unanimously.

3. TAC Chair Replacement

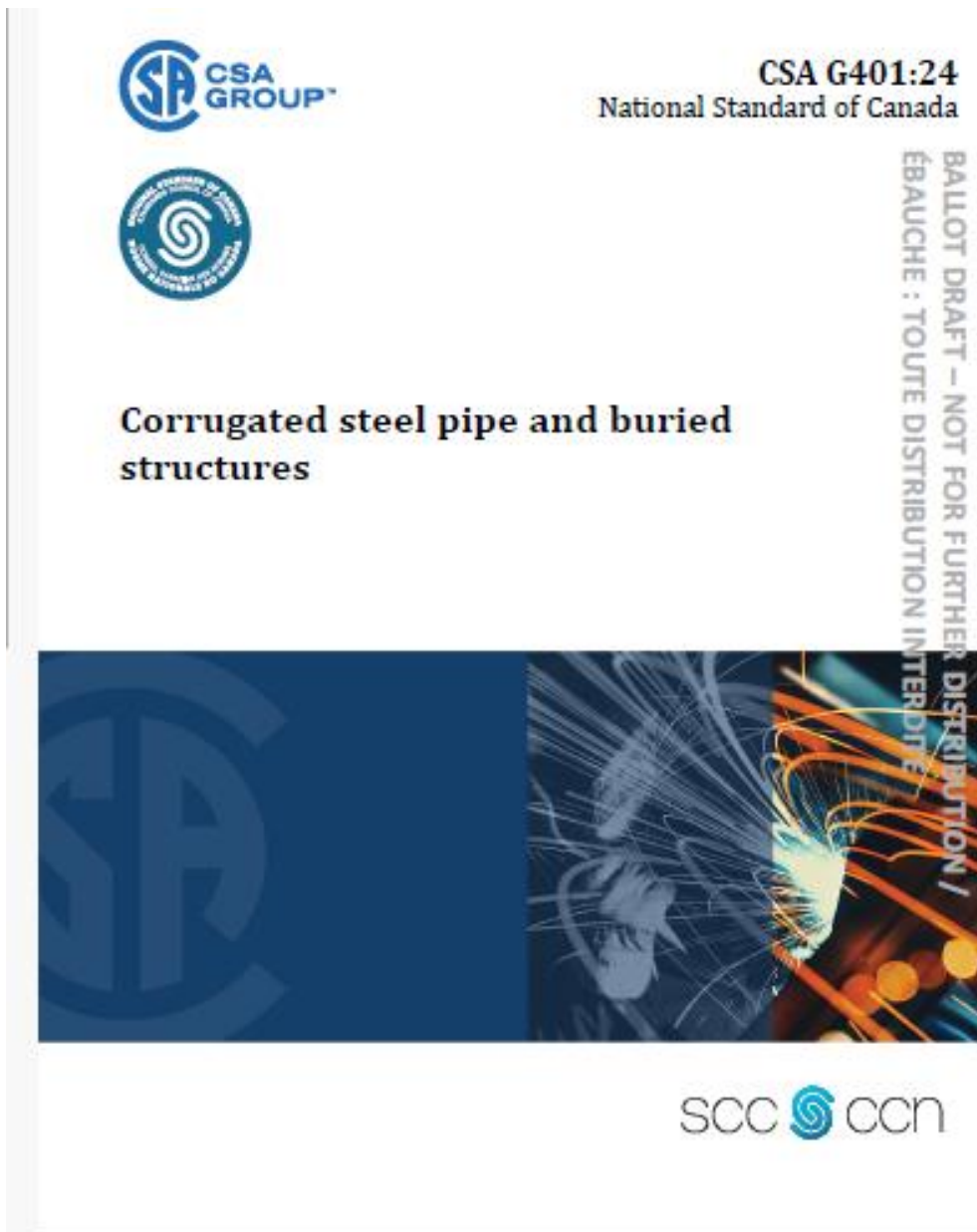
Paul announced that he was stepping down from the chair position due to his pending retirement from Atlantic Industries. He put forth Pat Mayne as his replacement and asked if there were any other nominations. There were none. Paul asked for a motion for approval.

A motion to appoint Pat Mayne as Chair of the TAC Committee was made by Kamran Derayeh, second by Terry Dunn and was carried unanimously.

On behalf of all CSPI members, we thank Paul for his leadership of the committee during the last two and a half years. A token of appreciation is forthcoming and will be presented before the end of the year.

4. Project List Update

a) CSA G401-24 update



- The final meeting was held on October 24th with 12 members attending, which was quorum.
- Final votes were all positive for 138 errata changes.
- CSA will now edit and republish standard in English and French hopefully before yearend.
- Once published we will notify all members and partners with sign up with CSPI approval to obtain a copy.

Discussion / Issues:

- Obtain information for partner data base (E-Blasts) from those requesting CSA standard.

b) EPD's update

- The final N.A. EPD after all corrections was sent to CSA for publication on October 30th. It is now on the CSA site.
- It will be posted to the website along with AMD's XCARB EPD.
- The carbon calculator will be updated in November / December time frame. It will show the following comparison:
 1. N.A. like the one from 2018, shows zero improvement.
 2. AMD XCARB shows an improvement greater than 40%.
 3. New RCP EPD released in 2024.

Discussion / Issues:

None

c) MTO – OPSS for Structural Plate Package

Sent MTO an outline for discussion. MTO responses in red as follows:

1. Guidelines for the design of SPCS
2. Product details & fabrication (profiles, open / closed bottom) (It will be good if you can provide some input and send us some typical details, we can review, fabrication will be covered in the OPSSs)
3. Structural design (foundations, footings)
4. Standard drawings (please see No. 2)
5. Material selection (will be in OPSS covering the material requirements)
6. Durability – water & soil chemistries (will be in both Material and Construction OPSSs)
7. Installation & construction (Will be in OPSS of the Construction requirements)
8. Sustainability (We may need to address this in Specifications and design)
9. Inspection, maintenance & rehabilitation (I imagine this could be addressed after standards are developed for the new construction)

MTO expects to have a draft by year end.

Action:

1. Pat has a few drawings that he will run by Scott for review.
2. Reach out to MTO that we are working to provide the standard drawings by year end.

3. With regards to inspection, we need to address all DOT standards. With the elimination of CA's (Contract Administrator), contractors and manufacturers are being delegated the task of overseeing and approving installation. This is not the responsibility of the manufacturer. Further discussion is required.

d) Handbook Update

- Meeting held on October 31st
- 5 Members attended
- Minutes issued
- Division of duties discussed
- Word files to be set up in the member section of the website
- Look to complete 25% by March 2025
- Next meeting January 16th, 2025

Action:

1. Upload word files to the website member section, chapter by chapter.
2. Update NCSPA status at next meeting.

e) SWM Committee discussion - update

Members to include thus far Paul, Terry, Scott, Bruce, Kamran, Pat, (Hubb-Cap?) Darren Bauman & Doug Leitch (Armtec), Mike Mounts.

Discussion last meeting:

- Discussion involved doing case studies on past installations
- Training for sales reps on pre and post development
- Webinars for consultants
- Converting the CD to a program that can be posted to our website
- Dealing with the misconceptions of using steel in SWM.

Action & Discussion:

1. Hold two webinars in the Jan – Mar time frame. Internal for members (sales training) and external for consultants and others in the CSPI database. Deal with all misconceptions.
2. Convert the CD to an online calculator or convert the NCSPA to metric. Cost to be explored and discussed at the next meeting.
3. Redo old case studies and two new ones for a project Darren identified (3600mm Aluminized from 2010) and one in Montreal (3000mm polymer laminated).
4. Rodrigo to replace Doug Leitch.
5. Explain retention versus detention
6. Include conservation authorities who have the authority to approve.
7. Emphasize the issues that plastic will have under railways (creep).

5. Member / Ongoing Items update

a) AMD

No update.

b) Cleveland Cliffs

No update.

c) Valgroup – Lighter polymer laminate & galvanize

Mike stated the brochure on lighter polymer and galvanized coatings for the storm sewer market should be available next week.

d) Leland

No update.

e) Warner

No Update.

f) Ironside – machinery update

No update.

g) ACI update

Todd stated the issue of stenciling the lighter polymer coating needs to be addressed. Performance tests revealed there were no issues in low abrasion conditions equal to original coatings. This is compatible for the storm sewer market.

h) MarMac

Richard has videos of coupler installations available to all members.

6. Other Associations - Updates

a) NCSPA update

The Ohio / Montana report on polymer sites was discussed.

1. From the photos, there appears to be pull apart (tenting) at the lockseams.
2. There were saw cut particles at the ends of the pipe. It was difficult to determine if there was any penetration through the polymer coating, thus no degradation of the substrate could be determined.
3. This will be discussed at the NCSPA meeting on November 12th.
4. Potential Technical Bulletin on saw cut particles to be discussed.

b) ASTM update

1. A762 was reviewed and comments provided.
2. A807 up for 5-year renewal

c) TAC update / 2025 Fall Conference & Meetings

Discuss potential abstracts at next meeting.

d) TRB / AREMA / AISI

TRB	No update
AREMA	No update
AISI	No update

7. Discussion / Old / New Business

a) Gorilla water tape or Flex Seal tape versus Denso Tape – update polymer repair TB

- Include Ranvar along with tape for external repairs
- Look at “Flex Seal Spray” – Mike Mounts to comment

Action:

- Mike to perform the tests on “Flex Seal Spray” this winter

b) Bolt issue identified in Newfoundland and Labrador in Caplin Cove with salt seepage. Future visit with Dave.

- Visit in June after the annual meeting.

c) Alberta Transportation - Open Bottom Structures. Cookie cutter design, headwalls, cross sectional drawings, standard drawings, this number of boxes, arches, etc. Mimic concrete. ISG Engineering coordinating.

- No update currently.

d) From SWAT Team – produce a Life Cycle Environmental Analysis (Darren to address).

- EPD for structural plate.
- Estimate in the 40,000 to 50,000 range.
- Future project down the road.

- Defer for now due to cost.
- e) **Technical Bulletin #13, Performance Guideline for Buried Steel Structures – reference to AASHTO electrochemical tests to previous version. Update in progress with Scott.**
- Will be ready for sign off at next meeting.
- f) **Ian Moore from Queen’s University – asked if CSPI would participate in a stormwater detention system project. Reached out to Ian – feedback.**
- Queens went ahead without contacting CSPI. Ian did know which system was used.
 - Committee asked to find out what system was used and why.
- g) **Canadian Water Resources Association – reached out to see if CSPI would be interested in running a one-day workshop on culvert design. Update.**

CSPI suggested the following format:

- Product Details & Fabrication
- Hydraulics & Hydrology
- Culvert Location
- Structural Design
- Installation & Construction Procedures
- Durability & Sustainability
- Inspection, Maintenance & Rehabilitation

Response:

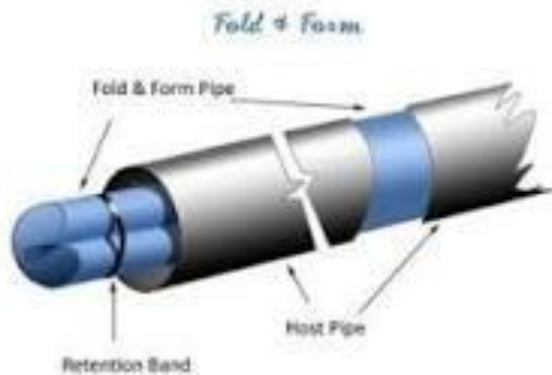
- Q1 2025
- Topics agreed
- Board meeting on Sept 19th and will respond with details

Discussion:

- Follow up and convey to committee the timing, location, agenda, etc. Once known, determine with members who will handle what section.
- h) **Minimum Thickness for 1220 galvanize coating needs to be 5.0mm as 4.0mm is too thin to pick up 1220 galvanize coating thickness. This would be an industry issue not just specific to one manufacturer or supplier. Scott to review and address at meeting.**
- Scott determined that 4.0mm is OK for 1220 galvanize coating thickness.
 - Leave as is - complete.

i) **Fold and form and CIPP liners used for rehabilitation. How to sell against these systems. Anyone has experience in this area? (Ian Kalverda)**

- A liner is folded to reduce its size before insertion and reversion to its original shape by the application of pressure and/or heat. (Polyethylene or PVC)



- No experience from the group. CSPI will reach out to MTO and NCSPA to determine what criteria is used to determine when this method is used particularly when structural integrity is involved.

j) **G401 Bolts and nuts for CSP Couplers – ASTM F568M (bolts), ASTM A563M (nuts) – suppliers meeting compliance. (Mike Williamson)**

- Section 4.5.2 Bolts and nuts for CSP couplers, was reviewed by Al Palmer of Leland. CSA G401-24 was updated. Complete.

New Business

No new business.

8. Adjourn & Next Meeting in 1st Q – TBD by the Chair

The meeting was adjourned at **2:44 pm** motioned by **Scott MacRae** and second by **Kamran Derayeh** and was carried unanimously. Next meeting March 6th, 2025 (virtual) at 10am EST.

Pat Mayne
Chair

Ray Wilcock
Executive Director