BRY-CO
ENGINEERING LTD.

November 30, 2018

Project No: 18-67

LORING & DISTRICT LOCAL SERVICE BOARD
P.O. Box 146
Port Loring, ON P0H 1Y0

Attention: Mr. Larry Bain and Service Board Members

Reference: Argyle Community Centre

Location: 10812 Hwy 522, Arnstein, ON

Subject: Roof Structure Evaluation

Mr. Bain and Service Board Members

As requested by Mr. Bain our William J. Bryant, P.Eng. and Elisha Sloan-Keats, P.Eng. attended to the Argyle Community Centre on November 29, 2018 and in the presence of Mr. Gilbert Moore and Mr. Larry Bain carried out a visual review of the roof structure for the building.

We will be producing a final report for submission in the near future however we were informed that the community centre has been closed due to structural concerns by another engineering company. This preliminary report is being issued to allow your organization to consider reopening the community centre to the public.

We have reviewed the report produced by that engineering firm and noted that their major concern is the structural capacity of the two plywood box beams and the condition of the original roof joists that are now ceiling joists.

The history of the building indicates that this existing roof framing has been in place for a number of decades. We noted no significant visual evidence of structural distress during our review however we were unable to determine the type of connection that was constructed where the east west plywood box beam intersects the north south plywood box beam girder. As such we propose that a connector hanger be designed to ensure the connection is structurally adequate.

That being stated we recommend that a temporary shoring post, consisting of a built-up 4 ply 2x6

SPF#1-2 post, be installed immediately. This post is to be positioned such that the bearing of the east end of the east west plywood box beam and the underside of the north south box beam girder at the intersection point is supported. The base of the temporary shoring post is to be founded on the top of the original foundation wall below the intersection point. If it is desired this temporary shoring post may be left in place permanently and the hanger that is proposed to be designed and installed for the connection of the two plywood box beams be disregarded.

The framing method used for the hip roof, that was constructed over the original roof, shows no significant signs of structural distress. This would be in the form of longitudinal cracks in the roof rafters. We noted that the underside of the original roof structure was sagged slightly. This is natural since wood elements sag over time when spanning from bearing point to bearing point. Since there was no evidence of the very old ceiling tiles being displaced from their original mounted positions it is our opinion that the existing sagging was in place when the ceiling tiles were installed and the sagging has not continued even though the upper roof rafters are provided with intermediate support bearing on the original roof joist framed system.

Our opinion is that the building, with the temporary shoring post in place, is structurally sound. This opinion is based on the history of the building and the visual evidence of the lack of structural distress indicators. We suggest that the building be opened up again to the public as long as the temporary shoring post is installed or the new plywood box beam connection is installed.

This letter is to be considered as a preliminary report with a final report will be issued at a later date.

Our opinions are based on the information made available to us and on our visual investigation. The visual investigation performed could not include the inaccessible areas of the structure. We request that should any new information pertaining to this matter becomes available that we be advised immediately in order that this new information can be evaluated in conjunction with the above commentary in the event that our present opinion may be affected.

Should you wish further discussions in this matter we will remain available.

Your truly,

William J. Bryant, P.Eng.

Copy to Elisha Sloan-Keats, P.Eng.