August 4, 2023

Mr. Minon Desai
RainSmart Solutions, Pty Ltd
13 Butterfield Street
Blacktown NSW 2148
Australia
email: minon@rainsmartsolutions.com

Re: Stormwater Chamber Compression Test Report

Dear Mr. Desai:

TRI/Environmental, Inc. (TRI) is very pleased to present this final test report for laboratory testing of RainSmart Stormwater Chambers.

Testing

TRI received samples of Storm Vault underground stormwater storage chambers for testing and analysis. The samples were received and tested under TRI log number 23-002813.

Compression testing was based on a bench-scale compression test, ASTM D2412, *Standard Test Method of the Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading.* The test method was modified to apply the compressive load at a constant rate of 2.0% of the height of the chamber per minute as directed in ASTM F2418, *Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers* and ASTM F2922, *Standard Specification for Polyethylene (PE) Corrugated Wall Stormwater Collection Chambers*. Compression testing was conducted on an Instron Model 5889 Tensile/Compression Testing Machine equipped with a 135k pound capacity load cell and Blue Hill data acquisition software. Reinforced loading platens were used for applying the compressive load. Load was applied until specimen failure or the maximum capacity of 135k pounds was reached.

Results

Product	Test Specimen	Maximum Compressive Load(lb)	Maximum Compressive Stress (psi)	Extension at Max Load (in)
Storm Vault – Lateral Configuration	1	17,859	37.6	0.779
	2	17,904	37.7	0.807
	3	17,799	37.5	0.807
	Avg.	**17,854**	**37.6**	**0.798**

Photos

Pre-Test

Post-Test

TRI is very pleased to present this final report for testing services. If you have any questions or require any additional information, please contact me at JNelson@tri-env.com or telephone number 512 263 2101.

Sincerely,

Jarrett A. Nelson

Jarrett A. Nelson
Technical Director
TRI Geosynthetic Services
www.GeosyntheticTesting.com

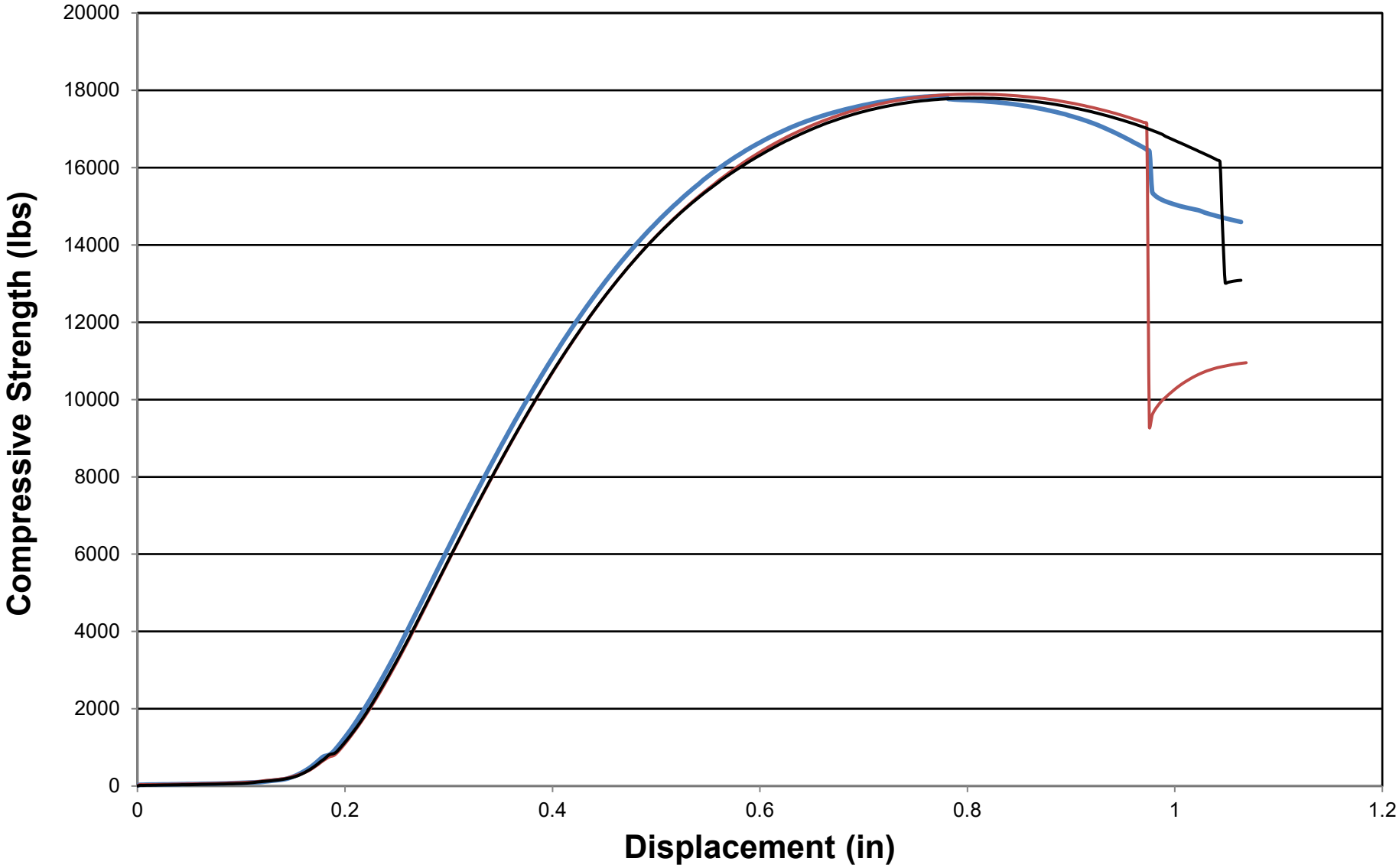
Attachments: Stress/Strain Curves

TRI ENVIRONMENTAL

Compression Test Results

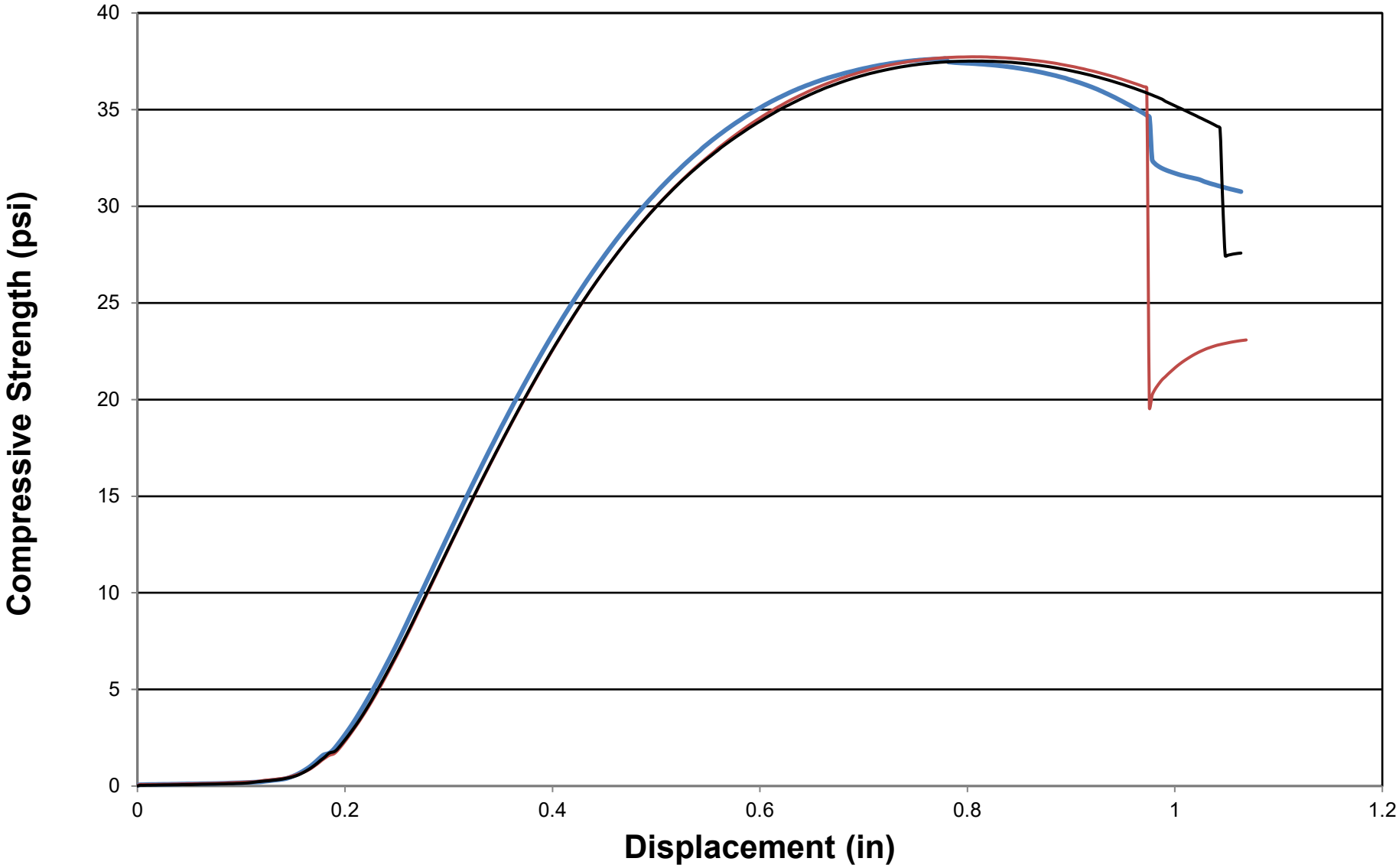
TRI Client: RainSmart

Product: Storm Vault - Lateral



TRI ENVIRONMENTAL

Compression Test Results

TRI Client: RainSmart

Product: Storm Vault - Lateral