IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE AGREEMENT AND THE UNCITRAL RULES OF 1976
BETWEEN:
WILLIAM RALPH CLAYTON, WILLIAM RICHARD CLAYTON, DOUGLAS CLAYTON, DANIEL CLAYTON AND BILCON OF DELAWARE, INC.
Claimants/Investors
AND:
GOVERNMENT OF CANADA
Respondent
WITNESS STATEMENT OF
MICHAEL G. WASHER

1. I am a Professional Engineer and Vice President of LB&W Engineering Inc. ("LB&W"). LB&W is an engineering firm based in Allentown, Pennsylvania that specializes in minerals processing engineering, including the design of aggregate crushing plants.

#### A. PROFESSIONAL BACKGROUND AND ROLE WITH LB&W

- 2. I obtained a Bachelors of Engineering from Stevens Institute of Technology, in Hoboken, New Jersey, in 1974. I qualified as a Professional Engineer in 1981. I am recognized as a Professional Engineer in 17 states, including the states of New York, New Jersey and Pennsylvania. I am a member of the American Institute of Steel Construction (AISC), American Society of Civil Engineers (ASCE), and am registered with the National Council of Examiners for Engineering and Surveying.
- 3. I have spent virtually all of my engineering career in the field of bulk material handling. I started as an entry level structural engineer and advanced to engineer, principal engineer and, eventually, project engineer.
- 4. In 1992, I co-founded LB&W with George Bickford and Ted Litke. I have been a practicing engineer and Engineer of Record with LB&W at all times since 1992.
- 5. My role with LB&W includes reviewing and, when required, sealing the engineering drawings issued on behalf of LB&W and preparing detailed project budgets or costing estimates for LB&W's clients.
- 6. Typically, at the start of a new project, LB&W provides the client with a rough order-of-magnitude budget. LB&W usually updates the order-of-magnitude budget as the conceptual design stage proceeds, although the overall estimate remains preliminary and a detailed costing analysis is not performed.

- 7. Once the client confirms the project design and LB&W begins the detail design stage, I prepare a detailed costing estimate for the client. To prepare the detailed costing estimate, I work closely with others at LB&W, the client and third parties to account for and cost the planned design elements, including raw materials, equipment, shipping, fabrication and construction.
- 8. Over the course of approximately 25 years with LB&W, I have prepared well over 75 detailed costing estimates for projects ranging from \$25,000 to \$30,000,000.

### B. COSTING OF WHITES POINT CRUSHING PLANT

- 9. In 2003, LB&W was engaged by Bilcon to provide design engineering services for a new quarry in Nova Scotia, Canada. LB&W prepared a preliminary budget estimate, but did not get to the point of preparing detailed costing because the project did not receive regulatory approval.
- 10. In 2016, in preparation for this arbitration and under instructions from Nash Johnston LLP, I prepared detailed costing for the plant and infrastructure for the Whites Point quarry. I based my detailed costing work on the "Revision D" plant design described in George Bickford's witness statement, and I took into account the subsequent changes to the Revision D design that Mr. Bickford outlines at paragraphs 64 and 65 of his witness statement.
- 11. Attached is a copy of my detailed costing for the Whites Point crushing plant infrastructure titled "Plant/Infrastructure Costing 2008 USD". I concluded that the grand total plant and infrastructure cost in
- 12. Also in 2016 and in preparation for this arbitration, I prepared a costing of the mobile equipment required for operating the Whites Point quarry. To determine

<sup>&</sup>lt;sup>1</sup> Plant/Infrastructure Costing (Washer Exhibit 1; Investors' Schedule of Documents, Tab C1011).

Bilcon of Delaware, Inc. et al v Canada

PCA Case No. 2009-04

the required mobile equipment, I referred to information from the Whites Point quarry manager, John Wall, and relied on my experience given the quarry design. Attached is a copy of my costing for the Whites Point quarry mobile equipment titled "Quarry Mobile Equipment Costing in 2008 USD".<sup>2</sup> I concluded that the total mobile equipment cost

13. With regard to the Plant/Infrastructure Costing and the Mobile Equipment Costing, I also prepared the attached "Cash Flow Projection"<sup>3</sup>, and I analysed the likely maintenance and repair costs associated with the plant and mobile equipment on the basis of a 50 year life for the quarry, which are attached and titled "Maintenance/Replacement Cost Projection".<sup>4</sup>

Dated: December 8, 2016

MICHAEL G. WASHER

<sup>&</sup>lt;sup>2</sup> Quarry Mobile Equipment Costing (Washer Exhibit 2; Investors' Schedule of Documents, Tab

<sup>&</sup>lt;sup>3</sup> Cash Flow Projection (Washer Exhibit 3; Investors' Schedule of Documents, Tab C1014).

<sup>&</sup>lt;sup>4</sup> Maintenance/Replacement Cost Projection (Washer Exhibit 4; Investors' Schedule of Documents, Tab C1013).

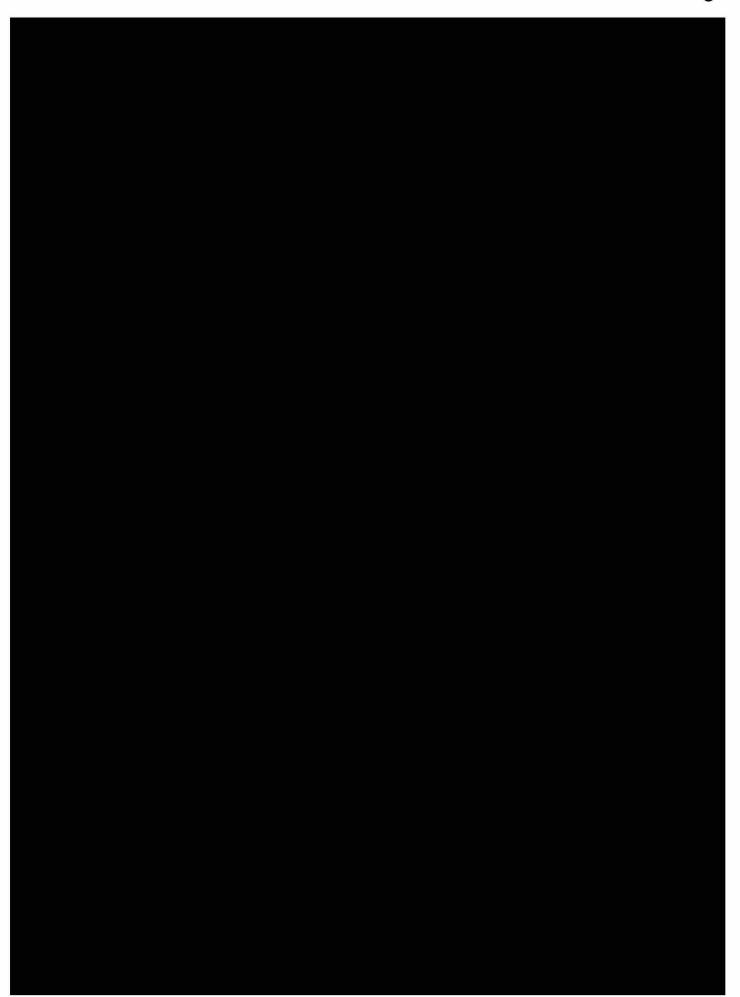
## EXHIBIT 1

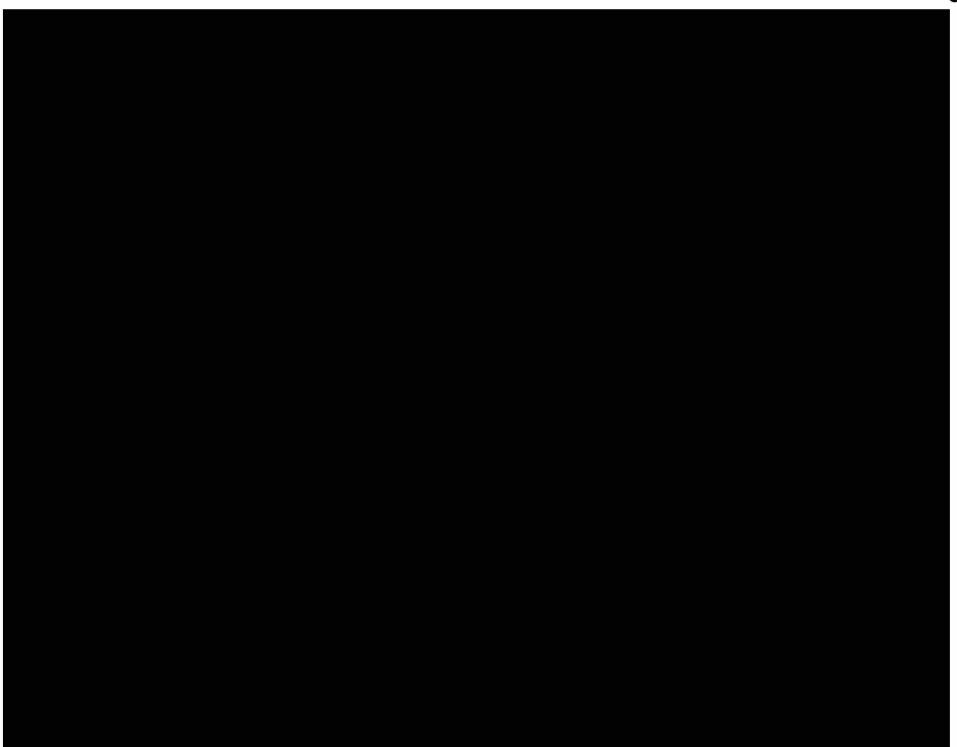
# WITNESS STATEMENT OF MICHAEL G. WASHER



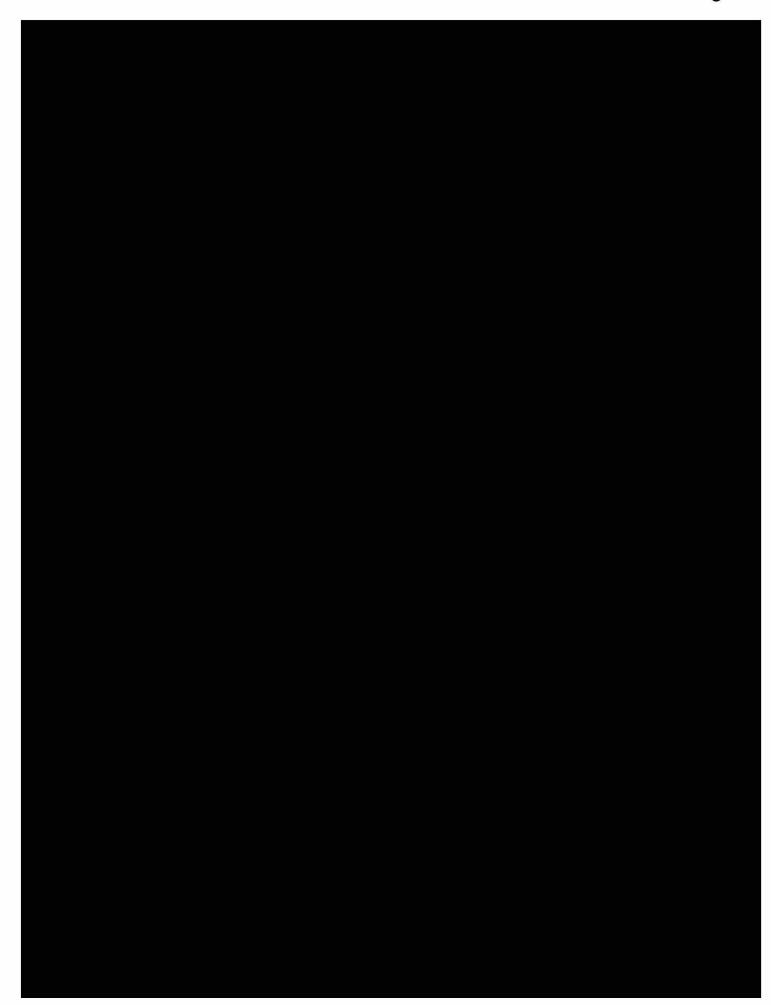












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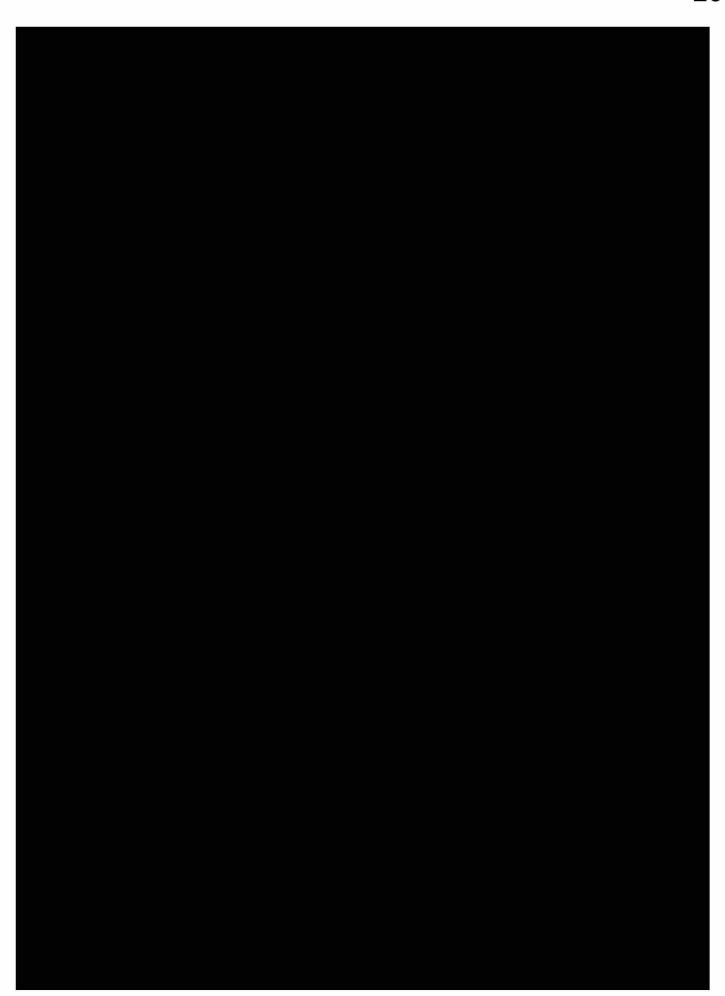




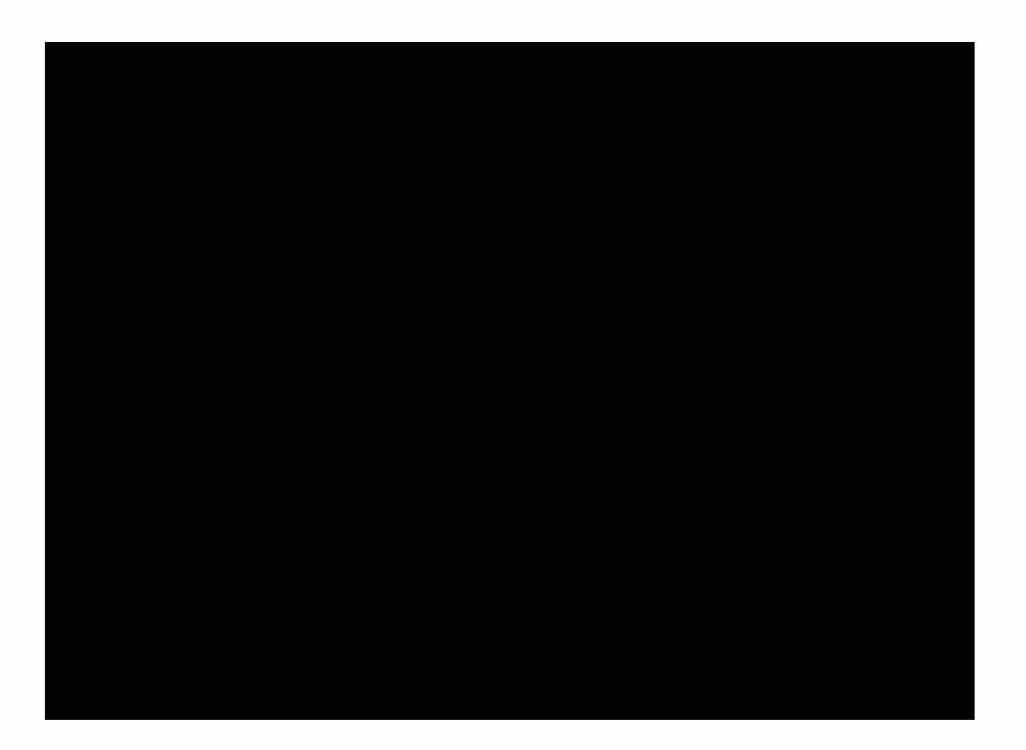




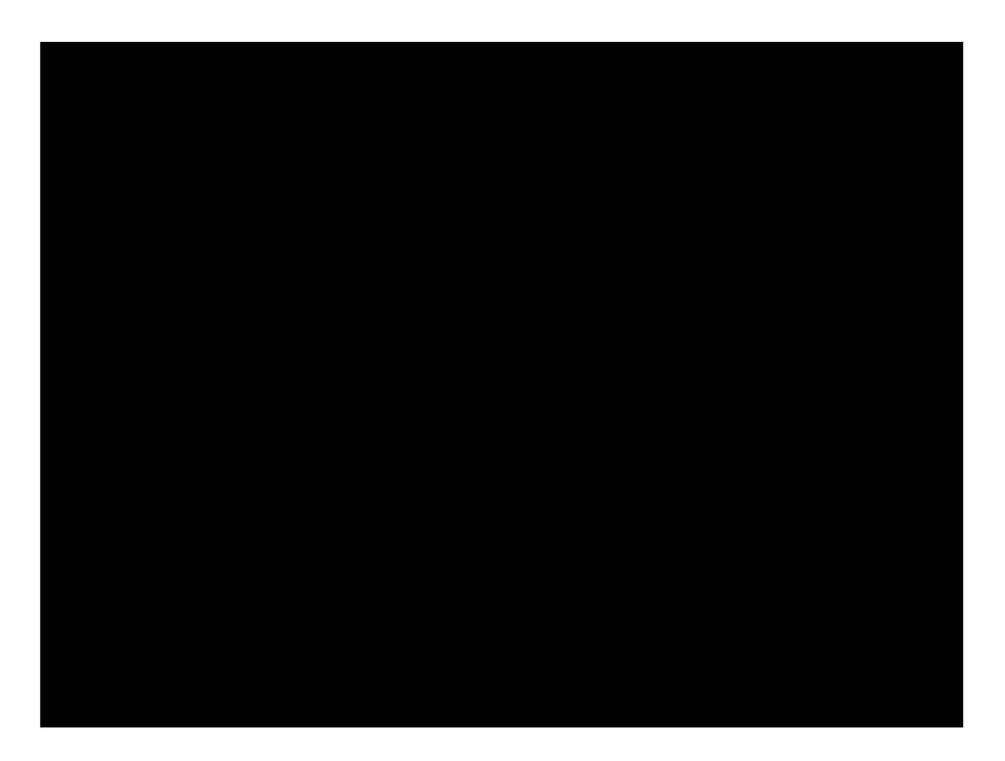






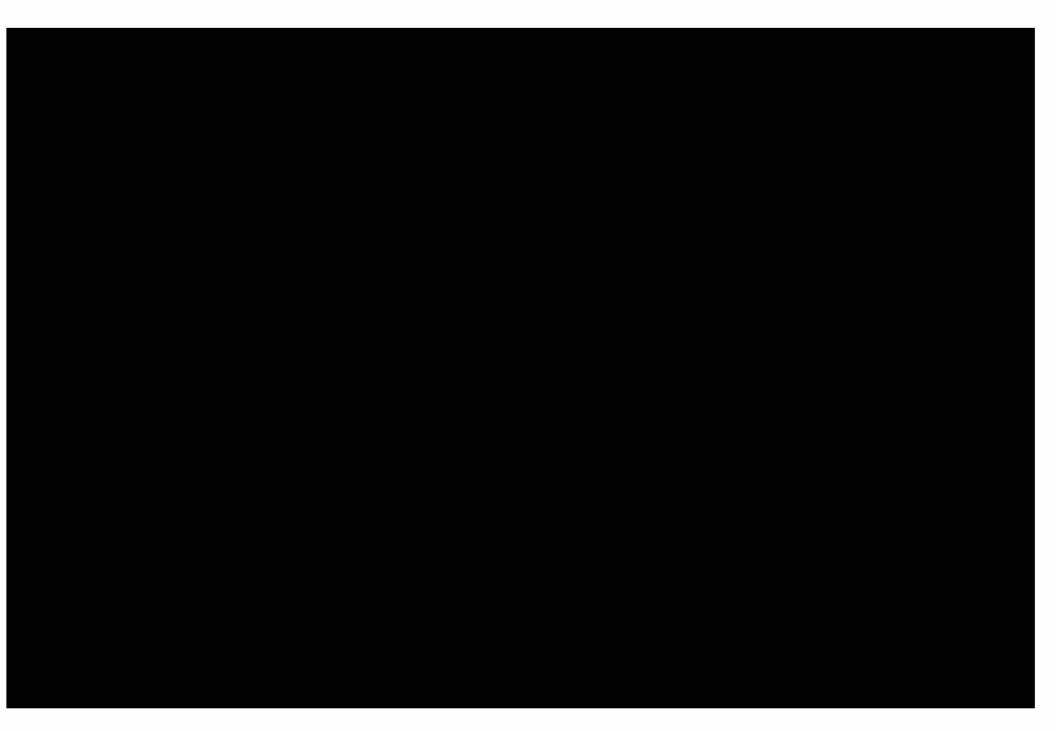


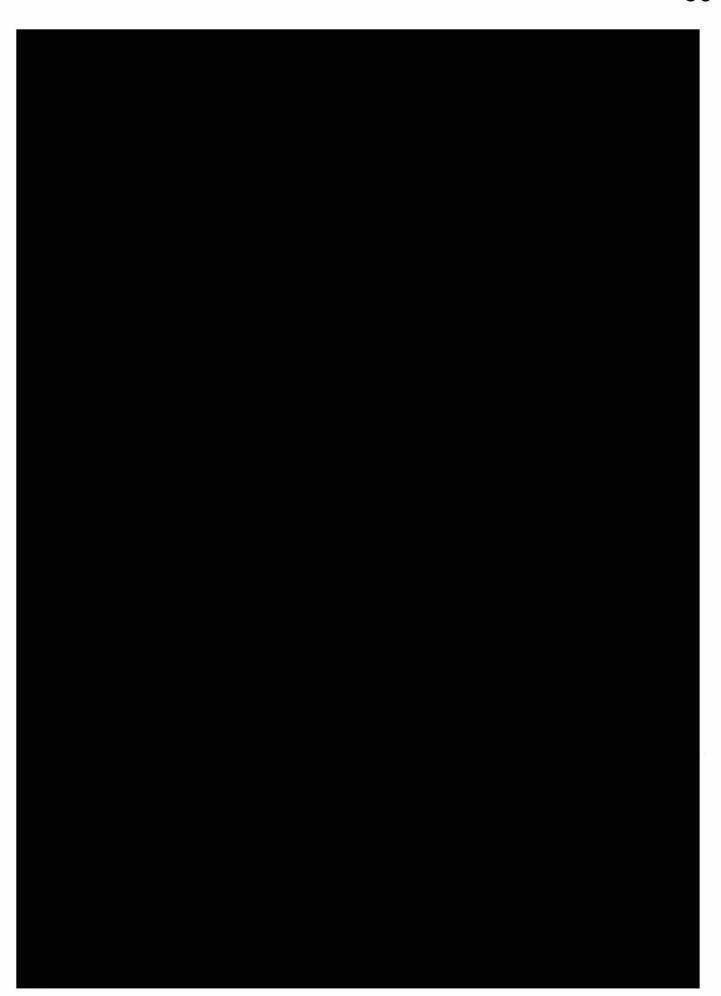














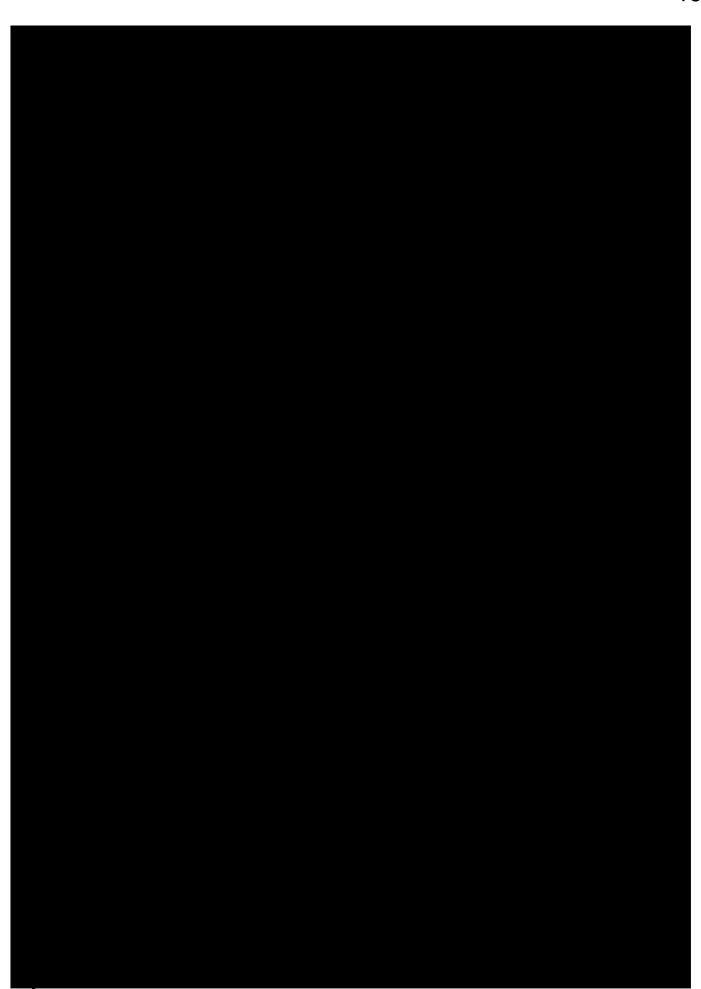








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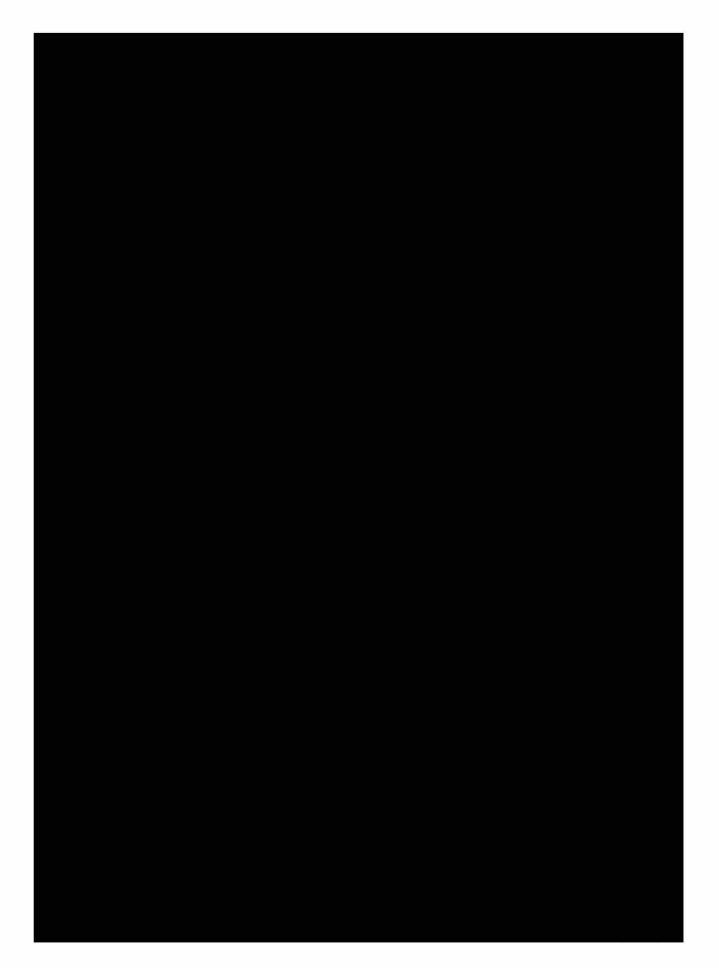






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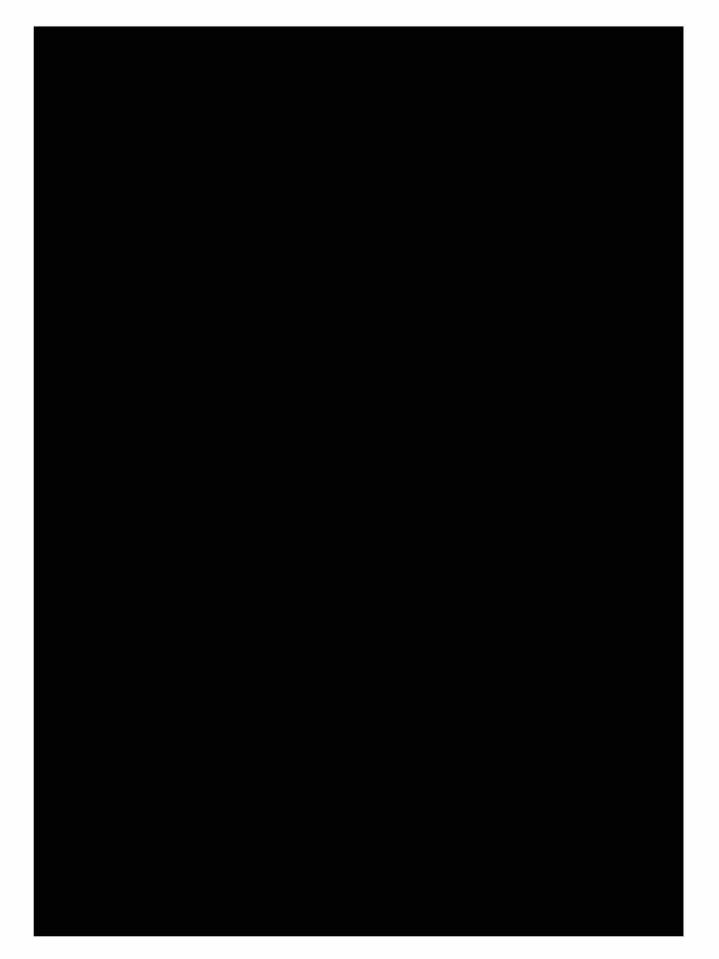




















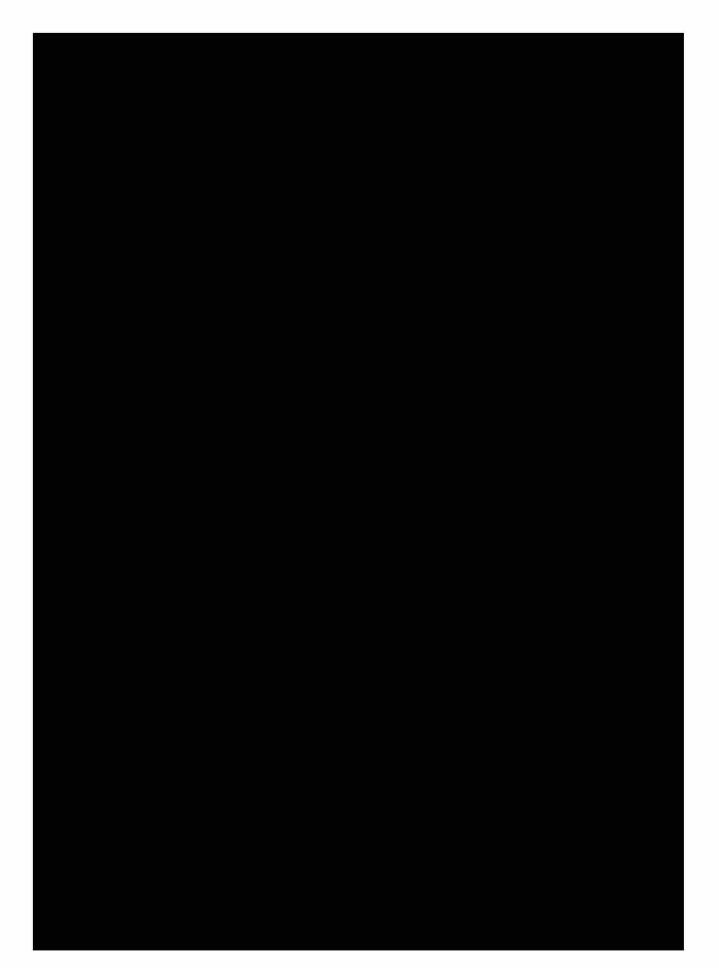




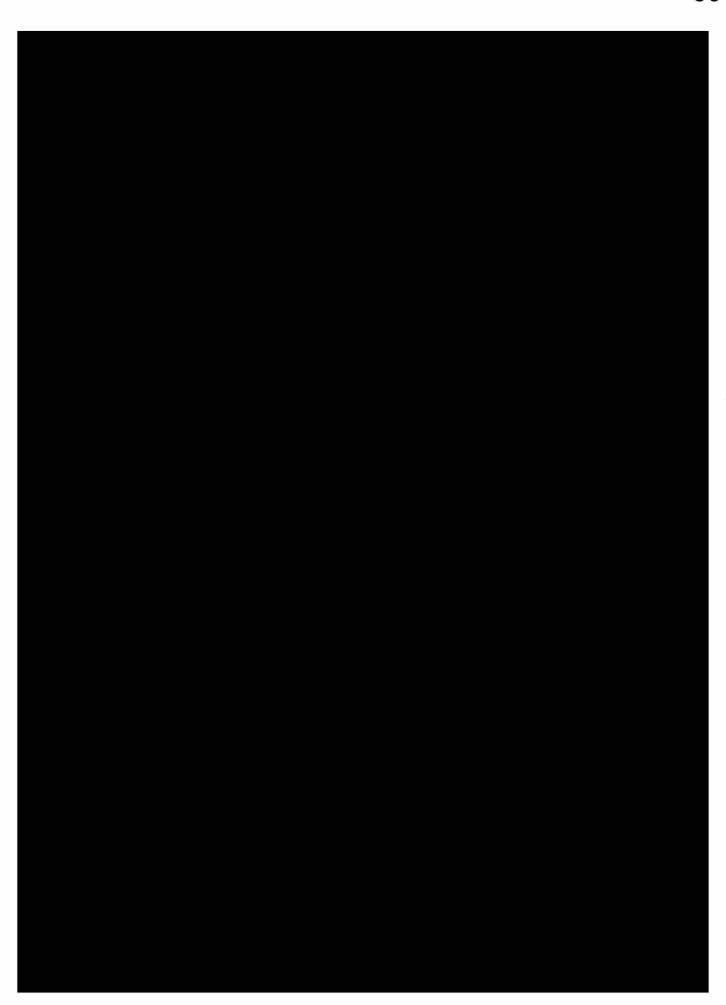


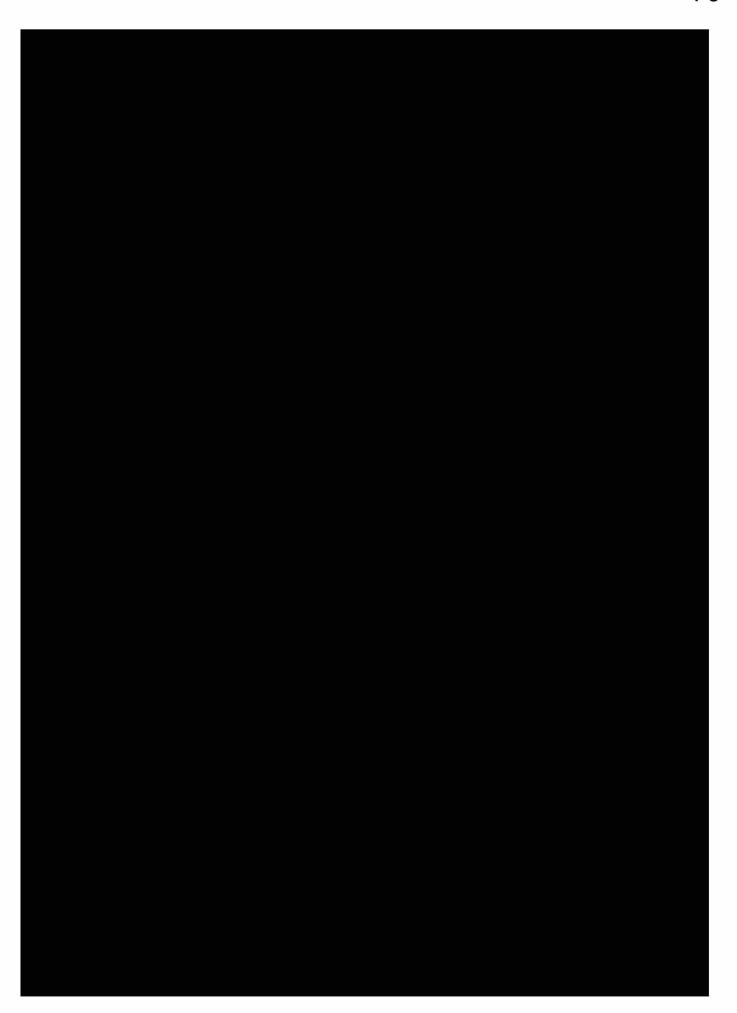












### **EXHIBIT 2**

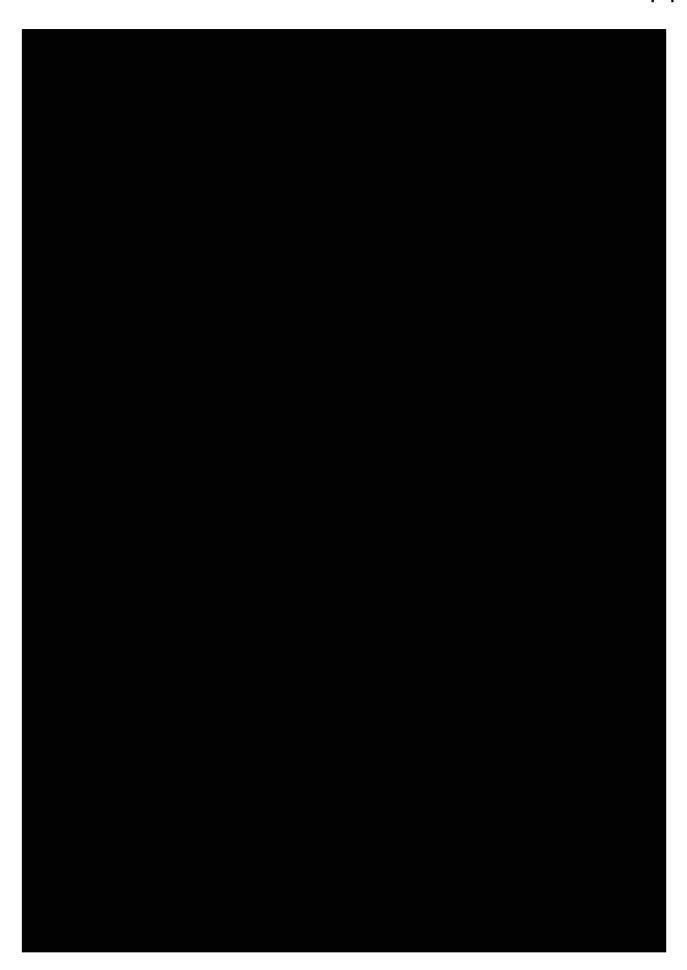
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### **EXHIBIT 3**

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### EXHIBIT 4

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