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To: Mr. Daniel Dominguez
Department of Planning and Development

From: William Boska
Christian M. Roche, P.E., LEED AP

Date: 24 May 2019

Re: Recycling Narrative
Block 24.01, Lot 1.01
Preliminary and Final Major Site Plan Application
RWJ Barnabas Health South Building Expansion
City of New Brunswick, Middlesex County, New Jersey
Langan Project No.: 130141101

This Recycling Analysis has been prepared in support of RWJ Barnabas Health South Building Expansion project on Block 24.01, Lot 1.01 in the City of New Brunswick, Middlesex County, New Jersey. The proposed project will consist of an approximate 29,000 square foot (sf) expansion of new hospital space and the renovation of approximately 60,000 sf of hospital space.

The project site is located adjacent to French Street approximately 100 feet east of the Paterson Street – French Street intersection (see Figure 1).



Figure 1

Technical Memorandum

RWJ Barnabas Health South Building Expansion
Preliminary and Final Major Site Plan Application
City of New Brunswick, Middlesex County, New Jersey
Langan Project No.: 130141101
24 May 2019- Page 2 of 2

A summary of the proposed project and recycling measures are provided herein.

Proposed Project

The proposed project will consists of an approximate 29,000 square foot (sf) expansion of new hospital space and the renovation of approximately 60,000 sf of hospital space.

Trash and recycling will be stored at a central location at the loading dock along French Street.

Recycling Analysis

Based on a study performed by the United States Environmental Protection Agency (EPA) in 2013, the average American generated 4.40 pounds of waste per day. The percent of waste that was recycled is 34.3 (of the 4.40 pounds of total waste) which equates to 1.51 pounds of recycled waste per day.

Based on the quantities obtained from the EPA the proposed building is estimated to generate approximately 2,654 pounds of waste per day (906 pounds of the waste are recyclables):

- $((4.40 \text{ pounds of waste per person}) * (145 \text{ persons})) = 550 \text{ pounds of waste (including recycling)}$
- $(34.3\%) * (550) = 189 \text{ pounds of recyclables}$

Assuming that the volume of the trash and recycling is 175 pounds per cubic yard (lb/yd³) before compaction; approximately 2.1 yd³/day of trash and 1.1 yd³/day of recycling will be generated. After the trash and recycling is compacted, using an approximate compaction rate of 4:1, the building will generate approximately 0.5 yd³/day of trash and 0.3 yd³/day of recycling. We anticipate multiple 8 cubic yard dumpsters will be utilized with the project.