Thant Zeya <u>tzeya000@citymail.cuny.edu</u> Crystal Rodwell CRodwell.ccny.cuny.edu September 6th, 2023

Greetings Ms. Rodwell,

I'm writing this letter to convey my eternal passion and commitment to the field of civil engineering, to lay out my short and long term career goals, and to share my vision for the future role of civil engineers. I have been greatly inspired by the manner that Civil Engineering is changing the world we live in ever since I first encountered its concepts. As a child, I marveled at towering skyscrapers, intricate bridges, and the intricate network of roads that connected cities, not just as feats of engineering, but as symbols of human progress and innovation. I decided to major in civil engineering because of my interest in this field, and I plan on dedicating the rest of my life to it.

My short-term professional objectives include earning a Bachelor's degree in civil engineering and receiving real-world experience through internships and entry-level jobs at renowned engineering firms. I want to finish college and build a solid foundation in a variety of Civil Engineering sub-disciplines, such as structural engineering, transportation engineering, and environmental engineering, during this time. As for the long-term goal, I see myself rising to the position of leading authority in the field of developing sustainable infrastructure, with a particular emphasis on green and renewable energy options. One of my goals is also to solve the threat of climate change that the world is facing each and every day. Without a doubt, I believe that civil engineers will be essential in overcoming these difficulties.

Civil engineers will mix teamwork, creativity, and innovation to address the issues of the future. Resilient structures that can resist natural catastrophes will be built using innovative methods like self-healing concrete and nanomaterials. Real-time infrastructure monitoring using intelligent sensors and artificial intelligence will allow for failure prevention and maintenance forecasting. Additionally, 3D printing and modular building methods will change the way we build, making it quicker, more affordable, and more ecologically friendly. Cities in my anticipated future will be centers of innovation and development that are smart and sustainable. Skyscrapers will not only be works of art, but also self-sufficient ecosystems capable of producing their own clean energy, recycling materials, and reducing their influence on the environment. Technologies that are effective, clean, and automated will be used in transportation systems, which will lessen traffic congestion and carbon emissions. The frontline of these revolutionary developments will be civil engineers.

In conclusion, my decision to pursue a profession in civil engineering is a lifetime commitment to making the world a better, more sustainable place. I think that civil engineers will be the primary builders of a better future by consistently pushing the limits of innovation and adopting the concepts of sustainability.

Sincerely,

Thant Zeya