Form & Function of Large Scale CHP in an Urban Environment
AGENDA

- Team Introductions
- Engineering Considerations
- Architectural Considerations
- Construction Considerations
TEAM INTRODUCTIONS

MICHAEL W THORNTON
Principal
VANDERWEIL

DOMINICK ROVETO, AIA, LEED AP
President
ELLENZWEIG

JESSE CONKLIN
Senior Project Manager
BOND
Project Objectives

- Provide resiliency in delivery of utilities during a flood condition of Charles River
- Increase reliability of existing MicroGrid
- Provide support to new science building and campus loads
- Improve efficiency of steam production while reducing operating costs
- Eliminate use of fuel oil except for required code back up
- Reduce greenhouse gas footprint
A: MIT and Community Sensitivities around Site and Building Aesthetics


NOVARTIS
TECH SQUARE
NORTH COURT
PFIZER
MAIN STREET
ALBANY STREET
VASSAR STREET
PEDESTRIAN CROSSING

Grand Junction Railroad
A: MIT and Community Sensitivities around Site and Building Aesthetics
B: Architectural Overview
Presentation Room
B: Architectural Overview
Plan at Main Turbine Hall (el. 30’-0”)

- N16A
- N16B
- HRSG 1
- HRSG 2
- CTG 1
- CTG 2
- Electrical
- Control Room Bridge
- View to Plant
- Ventilation Intake
- Ventilation Intake
- View to Turbines
- View to Turbines
- Ventilation Intake
- N4 Garage
B: Architectural Overview
Control Room Bridge
B: Architectural Overview
Plan at Main Electrical Floor (el. 50’-6”)
C: Finished Product

A: Site Challenges
A: Site Challenges
B: Façade Design Assist
D: Power Island Rough Set
ANY QUESTIONS?

https://www.youtube.com/watch?v=J1JhtGKb7j4&feature=youtu.be

BUILDING A BETTER SOCIETY THROUGH ENDURING RELATIONSHIPS
Michael Thornton
Principal, R.G. Vanderweil Engineers, P.C.
MThornton@Vanderweil.com
617.435.6516 cell

Dominick Roveto, AIA, LEED AP
President, Ellenzweig
ROVETO@ellenzweig.com
617.872.7365 cell

Jesse Conklin
Senior Project Manager, Bond Brothers, Inc.
jconklin@bondbrothers.com
617.938.4175 cell
Spare Slides
Form & Function of Large Scale CHP in an Urban Environment
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PRESENT

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Microgrid 2.0
Advancing Industry Growth
OCTOBER 29-31, 2018 • BALTIMORE, MD
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B: Architectural Overview
Plan at Roof Level
C: Finished Product

D: Construction Photos

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D: Construction Photos