


<b>D</b>	<b>Project Name</b> CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERA	<a href="#">PEC Activity Diagram</a>
	<b>Industry Code</b> 13 Pharmaceutical & Biotech	<b>Project Type</b> Brownfield
	<b>TIV (USD)</b> 75,000,000	
	<b>SIC Code</b> 2836 Biological Products, Except Diagnostic Substances	<b>Sector</b> Final Formulation (Oral, Solid, Parenteral, Topical, etc.)
<b>SIC Product</b> 2836*0035 Cellular and Gene Therapy Products		
<b>Status</b> Active	<b>Last Update</b> 06-Dec-2021	<b>Initial Release</b> 19-Jun-2020
<b>Environmental</b> Air (A) Water (W)	<b>Construction Labor Preference</b> Union, Non-Union	
	<b>Operations Labor Preference</b> Union	
<b>Square Footage</b>	<b>Existing Sq. Ft.</b> 46,000 Sq. Ft.	
	<b>Retrofitted/Renovated Sq. Ft.</b> 46,000 Sq. Ft.	

<b>Plant Owner</b> Emergent BioSolutions Incorporated	<b>Plant Parent</b> Emergent BioSolutions Incorporated
<b>Plant Name</b> Canton Advanced Viral Vector & Gene Therapy CDMO	<b>Unit Name</b>
<b>Plant ID</b> 3431813	
<b>Location</b> 80 Shawmut Road	<b>Phone</b> +1 781 302 3000
<b>City/State</b> Canton, Massachusetts 02021 U.S.A.	<b>Zone/County</b> MA*02, Norfolk

Project Responsibility	Project Company	Project Contact
<b>Project Manager</b>	Emergent BioSolutions Incorporated 50 Shawmut Road Canton, Massachusetts 02021 U.S.A.	Brian Timmins Deputy Director Engineering [Tel.] +1 781 302 3000 [E-Mail] timminsb@ebsi.com ; [LinkedIn] brian-timmins-87a6b52a
<b>Planning &amp; Scheduling</b>	Emergent BioSolutions Incorporated 50 Shawmut Road Canton, Massachusetts 02021 U.S.A.	Raymond Baker Process Engineer Manager [Tel.] +1 781 302 3000 x152970 [E-Mail] bakerr@ebsi.com ; [LinkedIn] raymond-baker-5232618
<b>Specification and Reliability</b>	Emergent BioSolutions Incorporated 50 Shawmut Road Canton, Massachusetts 02021 U.S.A.	Joe Blotner Facilities Technician [Tel.] +1 781 302 3000 [E-Mail] blotnerj@ebsi.com ; [LinkedIn] joe-blotner-72bba83
<b>G/C</b>	Columbia Construction Company P O Box 220 North Reading, Massachusetts 01864 U.S.A.	Patrick Ferrera Assistant Project Manager [Tel.] +1 508 572 2280 (Mobile) [E-Mail] pferrera@columbiacc.com ; [LinkedIn] patrick-ferrera-17956096

<b>PEC® Timing</b> P1	<b>PEC® Activity</b> Preliminary Design								
<b>Project Probability</b> Medium (70-80%)									
<b>Scope</b>	Emergent BioSolutions Incorporated with Columbia Construction Company performs Preliminary Design for Biological Viral Vector and Gene Therapy CDMO Plant. DETAILS: Across from current manufacturing facility at 90 Shawmut Road, demolish interior of entire, recently acquired building at 80 Shawmut Road, and fit out approximately 46,000 sqft of space and equip for the contract multi-suite production and development of molecule-to-market viral vector and gene therapy substances. REQUIRES: Building Modifications, Building Automation Systems (BAS), Compressors (Air), Temperature and Humidity Controls, Fire and Security System, Voice/Data/Wireless System, Purification Equipment, Clean Steam Generators, Water-For-Injection System (WFO), Cleanrooms (ISO 5-8/Class 100-100,000), Single-Use Bioreactors (1,000L), Clarification Equipment, Checkweighers, Vial/Bottle Washers, Aseptic Fill/Finish Equipment, Isolators, Cell Expansion Tanks, Harvest Tanks, Laboratory Stations, Analytical Equipment, Controls (PLC, DCS), Centrifuges, Chromatography Equipment, Tangential Flow Filtration Equipment (TFF), Ultra/Diafiltration Equipment, Bar Coding and Labeling Equipment, Mixing and Blending Equipment, Water Purification System, Emergency Generator, Refrigeration, Electrical Panel Upgrades, Chiller, Industrial Gas Supply and Storage, Air/Gas Vacuum System, Conveyors (Roller/Belt), Aseptic Packaging Equipment, Data Recorders, Pumps, Motors, Valves. ENVIRONMENTAL: (A) HEPA Filtration System, Fume Hoods; Dust Collectors; (W) Pre-Wastewater Treatment System.								
<b>Schedule</b>	Emergent BioSolutions Incorporated with Columbia Construction Company continues with Preliminary Design through 4Q22 (Oct). Emergent selects A/E 4Q22 (Oct-Nov). Emergent with Columbia Construction Company releases any remaining Equipment RFQs plus Subcontractor Bid Documents 4Q22 (Dec)-3Q24 (Jul). Estimated Construction Kick-Off 1Q23 (Feb). Project Completion 4Q24 (Nov). **NOTE: ENTIRE BUILDING IS CURRENTLY BEING GUTTED. PROJECT TIMELINES ARE ESTIMATED. PROJECT MAY BE DESIGN-BID-BUILD OR DESIGN-BUILD.**								
<b>Details</b>	Dec-2021 Project in Preliminary Design								
<b>Project Milestones</b>	<table border="0"> <tr> <td><b>AFE</b> 202210</td> <td><b>Sub Bid Doc</b> 202212</td> <td><b>Completion</b> 30-Nov-2024</td> <td><b>Precision</b> YEAR</td> </tr> <tr> <td><b>Equip RFQ</b> 202212</td> <td><b>Kick-Off</b> 202302</td> <td><b>Kickoff Slippage</b> 29 Months</td> <td><b>Duration</b> 22 Months</td> </tr> </table>	<b>AFE</b> 202210	<b>Sub Bid Doc</b> 202212	<b>Completion</b> 30-Nov-2024	<b>Precision</b> YEAR	<b>Equip RFQ</b> 202212	<b>Kick-Off</b> 202302	<b>Kickoff Slippage</b> 29 Months	<b>Duration</b> 22 Months
<b>AFE</b> 202210	<b>Sub Bid Doc</b> 202212	<b>Completion</b> 30-Nov-2024	<b>Precision</b> YEAR						
<b>Equip RFQ</b> 202212	<b>Kick-Off</b> 202302	<b>Kickoff Slippage</b> 29 Months	<b>Duration</b> 22 Months						

Bidding Companies - Listing may be partial and subject to change	
Company Name	Project Responsibility
A/Z Corporation	G/C

BR+A Consulting Engineers Incorporated	A&E
CRB Consulting Engineers Incorporated	Design-Build
Columbia Construction Company	G/C
DPS Engineering Limited	A&E
Shawmut Design and Construction	C/M

<b>Engineering</b>	Electrical	Environmental HVAC	Instrumentation	Mechanical	Structural	Process
<b>Contracting</b>	Electrical	Environmental HVAC	Instrumentation	Mechanical	Structural	General [G/C]
<b>Project Key Needs</b>	Structural	Architectural	Control Room	Process Equip	Heat Transfer	
	Instrumentation	Electrical	Mechanical	HVAC	Storage	
	Piping/Fittings	Insulation/Coatings	Environmental	Utilities	Valves	
	Communications		Batch Process		Packaging	
	<b>Material Handling</b>					
<b>Matter Phase</b>	Liquid			Solid		
<b>Energy</b>	Boiler			Generator		
<b>Buy</b>						
<b>Sell</b>						

**Plant Standard Contacts**

Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID
<b>Plant Manager</b>	Joe Blotner	[Phn.] +1 781 302 3000	Dec-2021
<b>Facilities Technician</b>	blotnerj@ebsi.com	No	joe-blotner-72bba83
<b>Engineering Manager</b>	Richard Zolla	[Phn.] +1 978 501 4959	Dec-2021
<b>Facilities Director</b>	zollar@ebsi.com	Yes	
<b>Safety Manager</b>	Kim Shea	[Phn.] +1 781 302 2920	Dec-2021
<b>EHS Manager</b>	sheak@ebsi.com	No	kim-shea-6510721

**Historical Reports**

Project Name	Report Date	TIV	Phase
CANTON ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO BUILDING ADDITION	19-Jun-2020	75,000,000 USD	Project Scope (P1 - 03)
CANTON ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO BUILDING ADDITION	24-Jun-2020	75,000,000 USD	Project Scope (P1 - 03)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	05-Oct-2020	75,000,000 USD	Preliminary Design (P1 - 07)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	30-Dec-2020	75,000,000 USD	Demolition (P1 - 15)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	30-Dec-2020	75,000,000 USD	Demolition (P1 - 15)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	04-Jan-2021	75,000,000 USD	Demolition (P1 - 15)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	24-Mar-2021	75,000,000 USD	Planning and Scheduling (E2 - 25)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	05-Aug-2021	75,000,000 USD	Preliminary Design (P1 - 07)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	10-Aug-2021	75,000,000 USD	Preliminary Design (P1 - 07)
CANTON BROWNFIELD ADVANCED VIRAL VECTOR AND GENE THERAPY CDMO PLANT	06-Dec-2021	75,000,000 USD	Preliminary Design (P1 - 07)