

Devens Project Updates



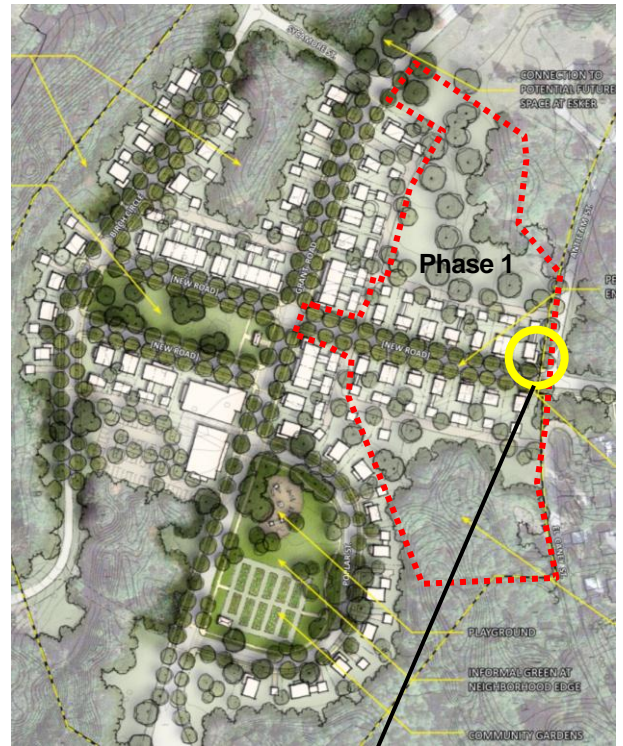
Date: January 2016
To: Devens Enterprise Commission
From: Peter Lowitt, Director and Neil Angus, Environmental Planner
RE: October 2015- January 2016 Quarterly Project Update

PREVIOUSLY PERMITTED PROJECTS UNDER CONSTRUCTION:

Grant Road Housing – Devens Village Green: Site work continues on the first phase of a 124-unit mixed residential community along portions of Grant Road. The Developer continues work on Phase I which will consist of 18 units of housing, including one moderate income affordable unit along a newly extended portion of Chance Street that now connects Antietam Street and Grant Road. The drainage, subgrade and base course of pavement have been installed for this new street and the first home is currently under construction, with the majority of the remaining lots reserved and/or under agreement already.



Devens Village Green Neighborhood – Artist's rendering

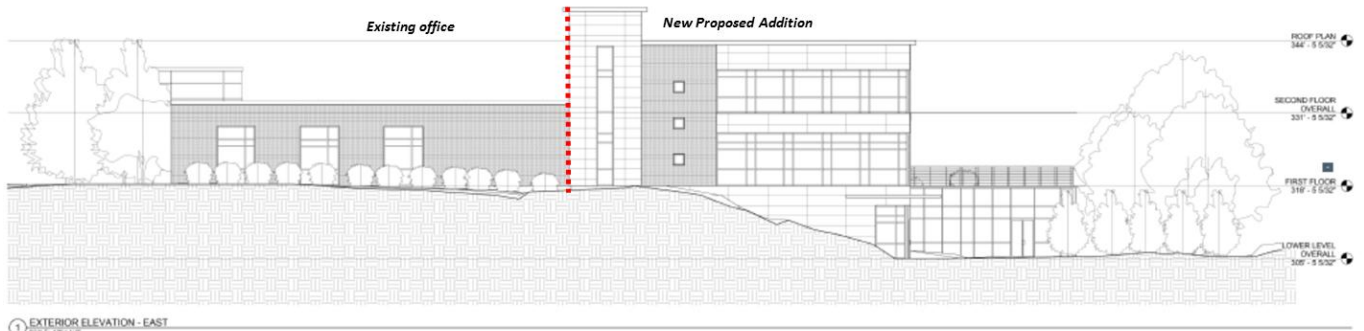


The entire project includes the phased construction of a mix of market-rate, low and moderate-income single-family, two-family and four-family units, and two (2) – 20 unit apartment buildings, in addition to new supporting infrastructure such as roads and sidewalks, water, sewer, electric, gas, and stormwater management. The layout of this development was designed to complement the existing housing along Elm and Walnut, but in a slightly more compact layout that respects the character of the existing neighborhood, while preserving more open space and creating a walkable, connected neighborhood designed for people first, not just cars.



View of first new house at the Intersection of Chance and Antietam. January 2016

155 Jackson Road - Laddawn Office & Parking Expansion: The foundation and structural steel for this two-story building expansion in the rear of the existing building is complete and the owner has sealed the exterior of the building to allow construction to continue on the interior fit-up of the addition throughout the winter months. The 71 space parking lot expansion area is complete – up to the base course of pavement. Final paving and landscape plantings are expected to be completed in the spring of 2016. When complete, this addition will expand Laddawn’s corporate headquarters by 22,467 sq.ft., for a total of 32,567 sq.ft. Laddawn is a Member of EPA’s Green Power Partner Program and manufactures packaging products with 100% renewable energy from sources like wind and solar power. In 2016, they expect to purchase over 20 million kilowatt hours of renewable energy, which is the equivalent of producing 22 million fewer pounds of CO2 emissions – further contributing to their corporate sustainability goals as well as the sustainable redevelopment goals of the Devens Reuse Plan.



Side of Laddawn looking at existing building and new addition covered to allow for interior work to continue throughout the winter – January 2016



Laddawn parking lot expansion. Base course of pavement and light fixtures in place. Landscape berms also in place to provide visual screening from Jackson Road as well as adjacent residents.. Final landscaping, paving and striping to be completed in spring 2016.

85 Patton Road – Health Partners New England: Construction continues on this new +/- 78,000 sq.ft. 2-story building (Health Partners Treatment and Recovery Center) at 85 Patton Road. The foundation has been poured and the developer has been taking advantage of the mild temperatures and lack of snow and continues to work throughout the winter to get the building up and out of the ground.



Looking east - view of Health Partners Treatment and Recovery Center building footings and westerly foundation walls – January 2016.

Once complete, the facility will serve patients with psychiatric and co-occurring disorders. The site has a large excess of loam and the contractor has provided over 1000 cu.yds. of material to Devens Department of Public Works (stored in their maintenance area) to be utilized for regular maintenance activities throughout Devens. Red Tail Golf Course is also proposing to utilize some of this excess material for their regular operations and maintenance. Red Tail staff are currently working with the DEC and MassDevelopment to finalize a plan for long-term storage of this material prior to moving it.



Artists Rendering of Health Partners Treatment and Recovery Center entrance.



Draft architectural elevation of Health Partners Treatment and Recovery Center southeastern elevation on Patton Road (not finalized).

As part of this project, the Applicant will be constructing a new sidewalk from the intersection of Queenstown and Patton Road, to their new driveway entrance. MassDevelopment will construct the remaining portion from the Applicant’s driveway, to the Mirror Lake parking area –furthering the goals and objectives of the Devens Main Post Trails Plan, by providing increased accessibility to Mirror Lake and associated trails and recreational facilities for all of Devens and the surrounding region.

38 Jackson Road – BMS Phase 2: Construction is finishing up on Bristol-Myers Squibb's (BMS) new +/-231,000-gross square foot Biologics Development Building (BDB). The +/-131,500-gross square foot Clinical Manufacturing Building (CMB) is nearing completion as well. This ~\$250,000,000 expansion is adding space for research, development and manufacturing biotechnology drugs for clinical trials.



Aerial view of BMS upper Campus – December 2015



View of the front of the BDB (left) and the CMB (right) – January 2016

The stormwater management system upgrades are also complete and the majority of the landscaping has been installed. Both buildings are currently operating under a temporary certificate of occupancy. The BDB is expected to receive final Certificate of Occupancy by the end of January. Two additional stories were also added to the existing 3-story parking garage (180 spaces), to accommodate a portion of the expected 350-380 new employees.

Due to the location of this project within the viewshed protection district, and as a stormwater management and air quality mitigation effort, BMS installed a vegetated roof and vegetated wall on the BDB building. The green roof and green wall, coupled with the dark green color of the building, will help screen the building from the viewshed sensitive

38 Jackson Road – BMS Phase 2 cont...

receptors in Harvard (Fruitlands Museum and Prospect Hill Overlook), while helping to filter particulate matter from the air and absorb excess stormwater runoff. The plantings on the building will also aid in naturally insulating the building, helping BMS achieve energy reduction and additional LEED points since both buildings are pursuing the USGBC’s LEED green building certification – similar to the phase 1 Lab Office (LEED Gold Certified) and Manufacturing Building (LEED Silver Certified).



Rear of new BDB (left) and existing Lab-Office (right) connected by new elevated pedway. The courtyard underneath serves as a fire lane as well as an outdoor recreational/socializing space for employees. – January 2016



Green roof and green wall on the new BDB Building – December 2015



BMS newly expanded stormwater management basin in the rear of their facility (off of Queenstown Road). This system consists of a lined forebay and pond which treat stormwater runoff from the campus and can be isolated and contained in the event of a chemical spill. The third pond was expanded to accommodate a portion of the new development. It is unlined and provides groundwater recharge. January 2016

18 Independence Dr.: This 321,460 sq.ft. former Sonoco building (Gillette packaging company) is currently being renovated into a multi-tenant building that will soon be home to SMC Global, a medical device manufacturing company based in Sterling, MA, and Instrumentation Laboratory (IL), another medical device manufacturing



SMC side of 18 Independence – August 2015



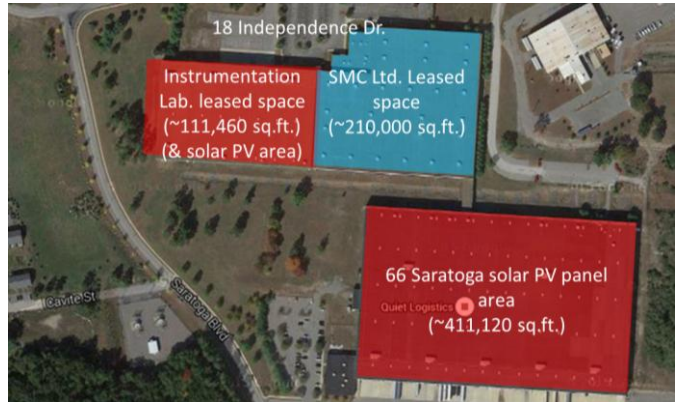
SMC New Loading Docks – January 2016

company based in Bedford, MA. SMC Global is leasing approximately 210,000 square feet and IL will be occupying

18 Independence cont...

the remainder. Interior construction is underway and the exterior parking lot and loading dock expansion for SMC is nearing completion (final paving and landscaping expected to be completed in spring 2016).

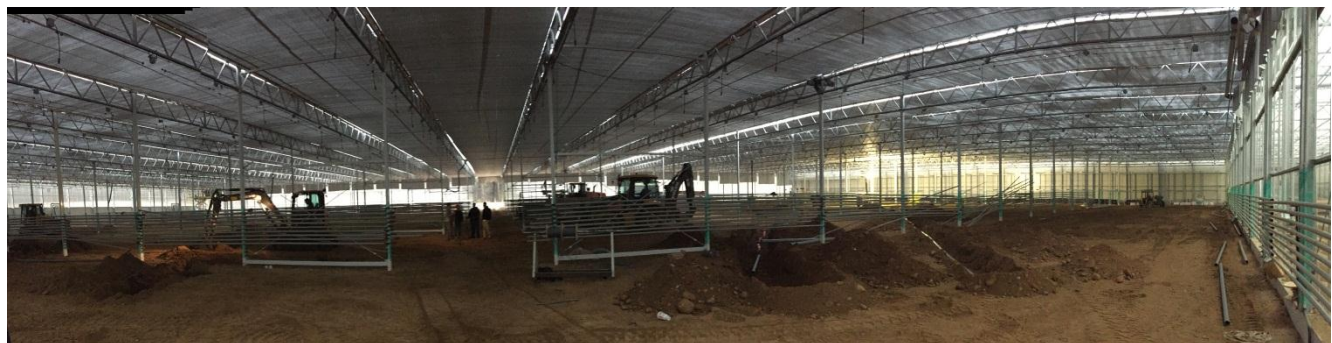
18 Independence and 66 Saratoga: The rooftops of 18 Independence and 66 Saratoga have been structurally reinforced and a third-party solar company is currently in the process of installing almost 3MW of solar photovoltaic panels on the roofs of these two facilities. Since these buildings are connected, once complete, this may be one of the largest rooftop solar PV installations in New England.



105 Walker Road – Little Leaf Farms: Construction is nearing completion on the first phase of this +/- 221,000 square-foot greenhouse and support facility with parking, landscaping, drainage and associated site improvements on approximately 13 acres of land located at 105 Walker Road within the Environmental Business Zone on the North Post. The first phase includes 114,404 sq.ft. of greenhouse and office space, a small parking area and utilities, including a large rainwater harvesting basin that will be used to collect roof runoff and supply up to 80% of the water needed for irrigation. Once complete, the greenhouse operation will grow hydroponic lettuce and leafy greens indoors in a completely



Little Leaf Farms new greenhouse (left) and associated office building (right). December 2015.



Inside new greenhouse during construction. Insulating blankets installed overtop of growing area – December 2015.

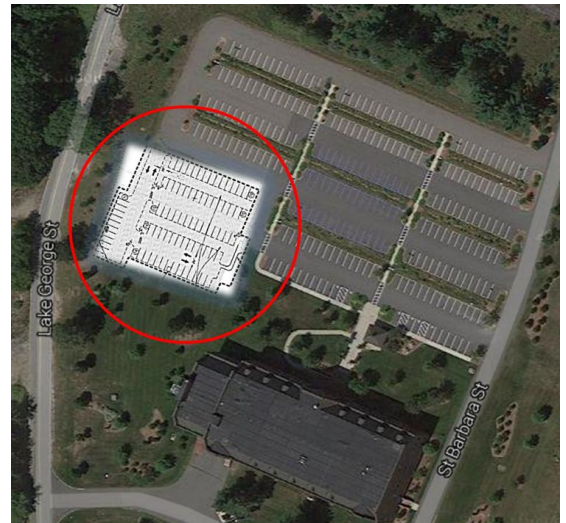
automated fashion. This state of the art facility features high light transmission glass, close to 800 LED growing lights, retractable insulation blankets, and an automated packaging and bagging system. When finished, the facility will utilize over 25,000 mobile gutters in the greenhouse which will automatically move the plants as they grow through their 21 day growing cycle.

105 Walker Road – Little Leaf Farms cont...

Currently, over 98% of lettuce in the US is produced in California and Arizona and it can take up to 7 days to get to the New England market. Little Leaf Farms will harvest, package and deliver lettuce to grocers the same day. This will result in fresher product, longer shelf life, reduced greenhouse gas emissions, enhanced water conservation and contribute to the locally grown movement in MA.

Due to the lack of public sewer in this portion of Devens, the project was approved with an on-site septic system to service its operations. The system is currently under review by the Nashoba Associated Boards of Health (DEC contracting agency). Domestic water to the site is being provided by the Shirley Water Department. The facility will run on natural gas via a new line which was installed in the fall of 2015, from the Devens Wastewater Treatment Plant. The owner has connecting electrical service from the existing 13.8 kV electrical line that services the Citizens Energy Solar farm in Devens and the new solar farm in Shirley. The facility is expected to commence operations in late January or early February.

27 Jackson Road: The owners of One Jackson Place completed the construction of 84 new parking spaces at this former military intelligence building that is now host to a number of tenants, including: Mount Wachusett Community College, Applewild pre-school/kindergarten, R3 Education (administrative organization for medical schools) and Dresser-Rand (international engineering firm). This parking addition is consistent with the original approval which contemplated 3 phases of parking to be built as demand warranted. This third phase contains two additional biofiltration landscape islands to treat and infiltrate stormwater runoff directly on-site. This site has been a great model example of how low-impact development (LID) techniques such as these biofiltration landscape islands provide economic, environmental and aesthetic benefits over traditional closed drainage system designs and raised landscape islands. Final landscaping is expected to be completed in the spring.



84 new parking spaces at 27 Jackson Road (biofiltration landscape islands installed without landscaping) December 2015.

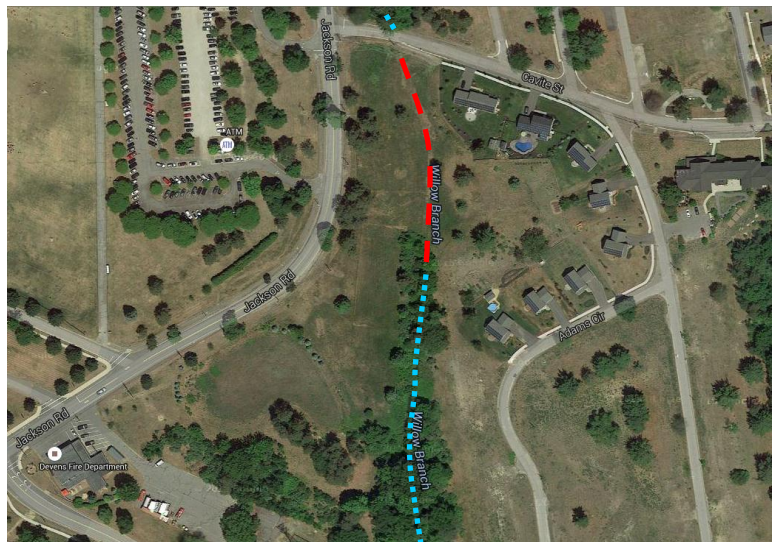
Jackson Road Phase IV: MassDevelopment has completed the rough grading, drainage, subgrade and base course of pavement for over 4000 linear feet of Jackson Road from Barnum Road to Verbeck Gate. These planned improvements included the realignment of portions of the roadway to 'soften' existing curves, improve drainage and convert the existing one-way section from Antietam Street to the Verbeck Gate, to a two way street. The road has been re-opened for the winter and is now 2-way the full length of the road. Sherman Ave has been closed between Antietam St. and West Main St./Jackson Rd. This portion of Jackson Road will be closed down again in the spring temporarily to complete the remaining work, including sidewalks, curbing, landscaping and final course of pavement. As the sidewalks have not yet been installed, MassDevelopment is requesting that

Jackson Road Phase 4 cont...

residents and the general public continue to avoid walking on Jackson Road, but if you must, please use extreme caution.

The final layout of the new road will be two (2) eleven-foot lanes in either direction with five-foot shoulders on both sides, to be designated as bike lanes. Concrete sidewalks will be built on both sides of the street from Barnum Road to Cavite Street and on one side the rest of the way. ADA accessible ramps and crosswalks will be provided at all intersections. A 20MPH school zone is also included in the vicinity of Parker Charter School. All these upgrades will improve safety, accessibility and connectivity in and through Devens, while greatly enhancing water quality in Willow Brook at the same time. MassDevelopment continues to keep local residents and businesses informed of the construction schedule and detour routes through regular e-mail updates and on the www.devenscommunity.com website.

Willow Brook Daylighting: MassDevelopment MassDevelopment received approval in October 2015 for the reconstruction of approximately 400 linear feet of Willow Brook that currently flows underground through a 30” culvert pipe. Willow Brook was heavily altered and impacted by past military activities associated with the development and operation of Fort Devens. Since the base closure, MassDevelopment has been working to upgrade all infrastructure – both natural and artificial. Stormwater management has been an important part of ensuring the redevelopment efforts in Devens comply with Federal, State and local requirements, including the Devens Reuse Plan, Bylaws and DEC Rules and Regulations. This project will remove the existing pipe and re-create an open surface channel for the brook to flow (daylighting). Willow Brook is a tributary of Nonacoicus Brook in Ayer – a tributary of the Nashua River. The project also includes the design and construction of three new stormwater management systems that will tie in drainage from Cavite and Jackson Road, as well as portions of the Elm/Walnut residential areas and a portion of Rogers Field. Drainage from these areas currently flows into Willow Brook with very limited pre-treatment. The project is also consistent with the Devens Open Space and Recreation Plan goal of preserving and restoring important water resources and will complete an action item identified within the Plan (Goal II Objective C, Action 1.). Construction is expected to commence in the summer of 2016 (during low-flow conditions) to reduce the potential for construction impacts to the stream corridor.



Willow Brook proposed daylighting. Blue depicts the existing open channel and red indicates the existing culverted section that is to be daylighted.

Raytheon Electronic Toll Testing: North Post – Airfield: Last year Raytheon was awarded a \$130,000,000 contract from MassDOT to develop and install all electronic high speed tolling stations on the MassPike. Raytheon is currently leasing a portion of the former airfield from MassDevelopment to test high speed, all-electronic, image-based tolling. Raytheon has installed a gantry, along with a series of cameras and ground sensors as part of this testing. Testing is expected to continue throughout 2016.



Example of high-speed electronic tolling gantry.

USFWS Visitor Contact Station and Canoe Launch: After numerous delays due to contract and budgeting issues, the USFWS Visitor Contact Station is substantially complete. The station features composting toilets, a stone dust trail leading to an outdoor amphitheater and an education pavilion and parking made of porous concrete. On a hot day, the difference in temperature on the asphalt vs. the porous concrete can be as much as



USFWS visitor contact station and parking. Pervious concrete parking area leading to composting toilets and the education pavilion. – July 2014



USFWS canoe launch accessing the Nashua River – just off Hospital Road – January 2016

30 degrees – another example of how this site is a great sustainable development demonstration project - showing how this technique can aid in stormwater as well as urban heat island mitigation. Other sustainable design features include reclaimed wood used in the building construction, biofiltration landscape islands, reinforced turf parking and green roofs. An educational welcome kiosk will have a series of panels which will display information on the Oxbow National Wildlife Refuge, local trails and information on Devens and how its redevelopment efforts are integrating the natural and built environment. The canoe launch, parking area and observation platform are still not officially open as the USFWS finalizes installation of safety measures for vehicles and determine how the canoe launch will actually connect directly to the river with minimal disturbance.

Staff continues to monitor all ongoing projects to ensure compliance with their respective unified permit record of decision and conditions of approval.

UPCOMING PROJECTS

29 Saratoga - Integra Expansion: Integra is an engineering, product, manufacturing and fabrication company that currently operates in an existing +/-29,000 square foot building situated between Ryerson Steel to the north and the US Army Post to the south. They have submitted a Unified Permit application to construct a 41,000 sq.ft. building expansion (half warehouse and half office space), along with 96 new parking spaces, stormwater management, lighting landscaping and associated utilities. A public hearing is scheduled for January 26, 2016 at 6:45PM at 33 Andrews Parkway, Devens, MA.

249 Barnum Road: MassDevelopment recently sold these buildings to a construction company who is looking into the restoration and renovation of the former Civilian Military Training Camp (CMTC) buildings between Barnum Road and Adams Circle. These red historic buildings are located within the Rail, Industrial and Trade Related Uses District as well as the Open Space and Recreation District. A Unified Permit application for the redevelopment of these buildings is expected to be submitted in early February for a March Public Hearing. In the meantime, the new owner is undertaking interior work to weatherize the buildings for the winter. Eight large pine trees were authorized to be removed around the existing buildings as they were extremely close to the buildings and posed the potential for damage. These buildings are listed as eligible for the National Register of Historic Buildings and therefore any alterations will also need to be approved by MassHistoric.



Existing CMTC Buildings off of Barnum Road.

Alteros Energy – North Post: Alteros Energy develops autonomous tethered airborne platforms using aerostats (industrial versions of blimps). They are currently negotiating with the Army to utilize the existing hangars and a portion of the airfield on the North Post, to test their aerostats which can be used for producing energy and communication systems (retractable wind turbines and wireless communication networks). The aerostats are filled with helium and are tethered by cables attached to autonomous aerial lift platforms and modern flight control systems.



Alteros inflatable aerostat

OTHER UPDATES:

Route 2 Bridge Repair: The State Department of Transportation continues repair work to the Route 2 bridge at Jackson Gate. The bridge deck and center support column are being replaced and traffic has been restricted to a single lane over this bridge. On Route 2, both eastbound and westbound lanes have been reconfigured to provide a safe area for work on the center bridge support column, while still allowing Route 2 traffic to flow freely in two lanes in both directions. This lane reconfiguration has resulted in the elimination of shoulders and the eastbound acceleration lane for Jackson Road traffic exiting Devens. Since the implementation of the reconfiguration, there have been a number of traffic accidents on the eastbound ramp as traffic from Jackson Road attempts to merge onto Route 2 eastbound with no acceleration lane. As a result, on January 6, MassHighway closed the Jackson Road/Route 2 eastbound entrance ramp completely. Detours have been posted for trucks and cars. Full details, including temporary detour maps, can be found on the DEC website at: <http://www.devensec.com/news.html> . This state project is expected to last a year and a half.



Jackson Road Bridge over Route 2 – looking south – Northbound lane of bridge decking removed. Southbound lane still open but only for access to south post – January 2016

Fitchburg Line Rail Improvements: Fitchburg Line improvements were completed by Thanksgiving. Signal improvements, double tracking and bridge replacements were made resulting in the Fitchburg line being the most improved component of the MBTA Commuter Rail lines and previews of new schedules for 2016 show considerably reduced commuting times. A new rail schedule was released and then withdrawn in November after the MBTA received criticism for lack of any public outreach on the new schedule. The public outreach component is currently in process. The DEC, MassDevelopment, Devens businesses and the Nashoba Valley Chamber of Commerce are working with MART and others to develop a shuttle service from Devens to the newly enhanced commuter rail service. What is really exciting is that the MBTA has heard our concerns and we now have service arriving in Littleton in the 7:30 AM time frame. Equally encouraging is the provision of rail service all the way to Fitchburg prior to 9AM. MART has plans to provide fixed route service between Shirley and the Ayer train station through Devens. This is part of the ongoing discussions we are having with Devens businesses, MART and others. These changes will hopefully prove of benefit to Devens residents and businesses, including enabling a viable reverse commute. Commuters seeking additional information can access project updates at http://www.mbta.com/about_the_mbta/t_projects/default.asp?id=155855 .

Website Updates: The DEC continues to update its website with meeting and public hearing notices, staff reports, important community news and events information, and other general information on living, working and playing at Devens <http://www.devensec.com/news.html> . Recent news and events postings include an invasive species alert on Water Chestnut in the Nashua River, Devens Water Use Restrictions, and Army noise reports (South Post training area). The News and Events page also has details on the Central MA Mosquito Control Project (CMMCP), which Devens participates in.

City of Bridgeport, CT EcoPark Information Exchange: On January 13, 2016, DEC Staff met with the Planning and Economic Development team in the City of Bridgeport, CT to tour their eco-technology park. This visit was part of an information exchange as both Bridgeport and Devens share many similar goals in their redevelopment efforts and have much to learn from each other as they both pursue sustainable redevelopment initiatives. Like Devens, Bridgeport is working on sustainable housing and infrastructure, renewable energy technologies and efficiencies. There appear to be numerous opportunities for Bridgeport and Devens to benefit from each other’s experience and continue an open dialogue. There are potential eco-industrial exchange opportunities between Devens and Bridgeport as well. Bridgeport has implemented fuel cell technology and district heating programs that are innovative approaches to decentralized energy generation and distribution.



Rendering of Bridgeport EcoTechnology Park Entrance design (visible from I-95), emphasizing green infrastructure and highlighting the economic (jobs created), environmental (renewable energy generated and carbon footprint reduction) and social (multi-modal accessibility and public access) attributes of the planned park (triple-bottom line benefits).

DEC Staff have invited the Bridgeport team to visit Devens to continue this information exchange. In June of this year, Devens will again host an International Symposium - the 13th Industrial Symbiosis Research Symposium (June 17-18, 2016). This event is an annual gathering of researchers and practitioners from around the world to discuss the latest trends and research in eco-industrial development. Bridgeport has agreed to participate and present their eco-technology park efforts, along with Devens. This will help provide additional international exposure for both the redevelopment efforts at Devens as well as Bridgeport.

DEC Peer Review Consultants: in September, 2015, after publicly advertising and interviewing several candidates, the DEC renewed its peer review services contract with Nitsch Engineering (traffic, engineering and site plan), Carol R. Johnson Associates (Landscape Architecture) and Tech Environmental (Industrial Performance Standards). The DEC is required to readvertise for these services every three years. There were a number of highly qualified firms that responded to the advertisement, however the DEC determined that the existing peer review consultants still stood out as the best fit for the DEC currently. Special thanks to DEC Commissioners Dix Davis and Paul Routhier who volunteered their time to review the submittals and participate in conducting the interviews. The DEC also renewed the existing Inspectional Services contract with Gabe Vellante (building inspection) and his team (Bob Friedrich, plumbing and gas inspection) and Phil Horgan (electrical inspection) for another 3-year term as well.