

Chicopee, Hampden County, MA

USACE Section 408 Request

River Mills at Chicopee Falls Site Redevelopment

June 2017

River Mills at Chicopee Falls Site Redevelopment

Prepared for:

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USACE Section 408 Request

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River Mills at Chicopee Falls Site Redevelopment

Prepared by: **BETA GROUP, INC.**

Prepared for: US Army Corps of Engineers, New England District

June 2017

EXECUTIVE SUMMARY

On behalf of the City of Chicopee, BETA Group, Inc. (BETA) has prepared this United States Army Corps of Engineers (USACE) Section 408 request to allow for the placement of backfill along an earthen levee on a portion of the Chicopee Falls Local Protection Project easement in order to facilitate future redevelopment of the former Uniroyal and Facemate properties.

The City will not be using federally-owned property for any of these activities. The entire project will be constructed on property owned by the City. The flood control works were designed and constructed by the USACE for locations along the Chicopee and Connecticut Rivers in the City of Chicopee in response to floods in the 1930s and 1950s. The USACE was responsible for the design and construction of the levees, while the City provided all of the lands, easements, and rights-of-way necessary for the construction. A permanent easement to the levee was provided to the City by the US Rubber Company in 1965 and the City subsequently acquired the former Uniroyal property (formerly US Rubber) and former Facemate property. Information on the real estate ownership, along with survey plans and deed references is provided in Section 2.1.7 and Appendix D.

The City of Chicopee has prepared a redevelopment plan for the former manufacturing complex. This project represents a significant economic opportunity for the City to meet its redevelopment goals for the site. An endorsement of the project from the City is included as Appendix B.

The fill will be supplied by importing excess construction fill from regional construction projects. BETA has prepared a Fill Management Plan (FMP) in support of the filling activities. The City anticipates that this plan will be reviewed and approved by the Massachusetts Department of Environmental Protection (MassDEP). Key excerpts from the FMP, related to the fill procedures, acceptance criteria, and quality control are provided in Section 3.0.

The fill will be placed and compacted so as to raise the elevation of the project site to the height of the flood control levee and to re-grade the entire site for future redevelopment. Abandoned Site buildings located on the lower elevations have either been demolished or future demolition is planned. As the levee was installed on this portion of the property to protect these abandoned buildings, it is the City's opinion that this alteration will not impair the usefulness of the USACE flood control project (including the projects authorized purpose).

A Slope Stability Analysis in support of the project was completed in September 2016 (Appendix C).

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1.0 PROJECT DESCRIPTION

The City of Chicopee proposes to place backfill along a portion of the Chicopee Falls Local Protection Project easement and adjacent upland areas in order to facilitate future redevelopment of the River Mills and Chicopee Falls redevelopment site. The former Facemate and Uniroyal Tire Complex properties are located adjacent to the Chicopee River in Chicopee, Massachusetts (Locus Map – Figure 1). The site is bounded by the Chicopee River and the Chicopee Falls Local Protection Project on the west, Oak Street to the north, Grove Street and West Main Street to the east and Front Street to the southeast.

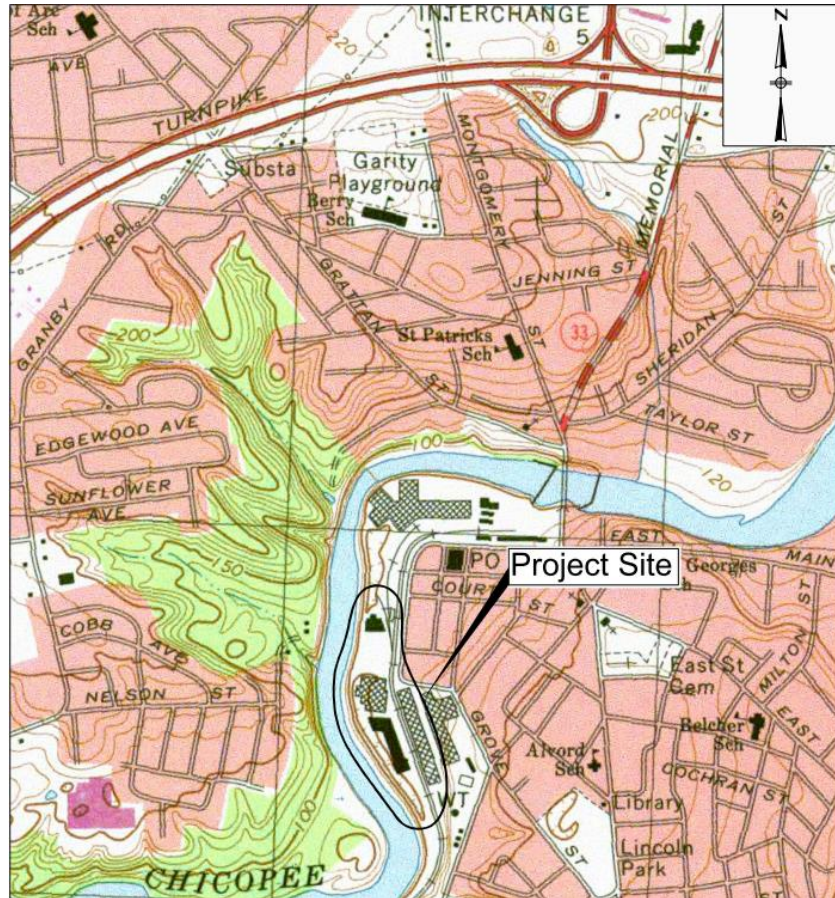


Figure 1. Project Locus

Former Uniroyal Site

The former Uniroyal Site was originally developed during the late 1800s. In 1870, the property was used as a lumber yard by the Chicopee Manufacturing Company. From 1896 to 1898 the property was owned by the Spaulding and Pepper Company, which manufactured bicycle tires. The Fisk Rubber Company, which later changed its name to United States Rubber Company and then to Uniroyal, Inc., manufactured bicycle, automobile and truck tires and adhesives from 1898 to 1981.

Uniroyal, Inc. closed its plant in 1980 and sold the property to the Facemate Corporation in 1981. Facemate leased portions of the Uniroyal buildings to various companies for manufacturing, printing, machine shops, office, storage and health care facilities. Several buildings on the site have been demolished to date.

Former Facemate Site

Between 1823 and 1915, the former Facemate property and much of the surrounding area was owned by the Chicopee Manufacturing Company. During this time, the property was used for the manufacture and processing of cotton cloth. In 1915, Johnson & Johnson Services, Inc. purchased the property, and continued the production of cotton cloth. Circa 1977, the Property was purchased by the Facemate Corporation which produced finished cotton and synthetic cloth at the Property. In 2003, Facemate filed for bankruptcy and was forced to shut down due to bank foreclosure proceedings. The property had been vacant since 2003. The City of Chicopee acquired ownership of the property in 2010 for the non-payment of taxes, and subsequently conducted assessment and remediation activities subdivided the former Facemate property into three separate lots for re-development: Lot 1, Senior Center Parcel (Lot 2) and Lot 4. The activities proposed under this submittal are to occur on Lot 1, located on the southern portion of the former Facemate property abutting the former Uniroyal property.

1.1 CHICOPEE FALLS FLOOD CONTROL SYSTEM DESCRIPTION

Flood control works were designed and constructed by the United States Army Corps of Engineers (USACE) for locations along the Chicopee and Connecticut Rivers in the City of Chicopee (City) in response to floods in the 1930s and 1950s. Construction along the Connecticut River and the North and South Banks of the Chicopee River was conducted in a series of construction contracts initiated in 1938 and completed in 1942, collectively known as the Chicopee Local Protection Project (CLPP).

The Flood Control Works in the City of Chicopee was constructed by the United States Army Corps of Engineers (USACE) in four separate systems (the Plainfield Street Flood Control System, the South Bank Chicopee River Flood Control System, the Willimansett Flood Control System, and the Chicopee Falls Flood Control System).

This project will be completed along a portion of an earthen levee associated with the Chicopee Falls Flood Control System. On behalf of the City of Chicopee, Baystate Environmental Consultants (BEC) prepared a FEMA accreditation report for the Chicopee Falls Flood Control System in 2010. The purpose of the report was for submittal to FEMA for their use in establishing risk zones for the National Flood Insurance Program (NFIP) maps and document compliance with the minimum design, operation, and maintenance standards for levee systems established in 44 CFR 65.10. This included an embankment, foundation and stability analysis. Excerpts of the BEC report are included in Appendix A.



Riprap slope protection on the riverside and a toe drain on the landside were constructed on the levee. According to the BEC report, the typical cross section consists of compacted random fill on the landside with compacted impervious soil on the riverside with an impervious foundation cutoff. The Oak Street Pumping Station was built into the levee at Station 49+15. Two gate valves with catwalk access are located in this segment in close proximity to the pumping station. One was an intake for the now defunct U.S. Rubber Company facility with associated improvements, while the other is an outlet from the Oak Street Pumping Station.

This project includes a portion of the segment of earthen levee that extends from Station 25+45 to Station 54+15 (See Figure 2 from the BEC report below). A typical cross section of the levee is provided in Appendix A.

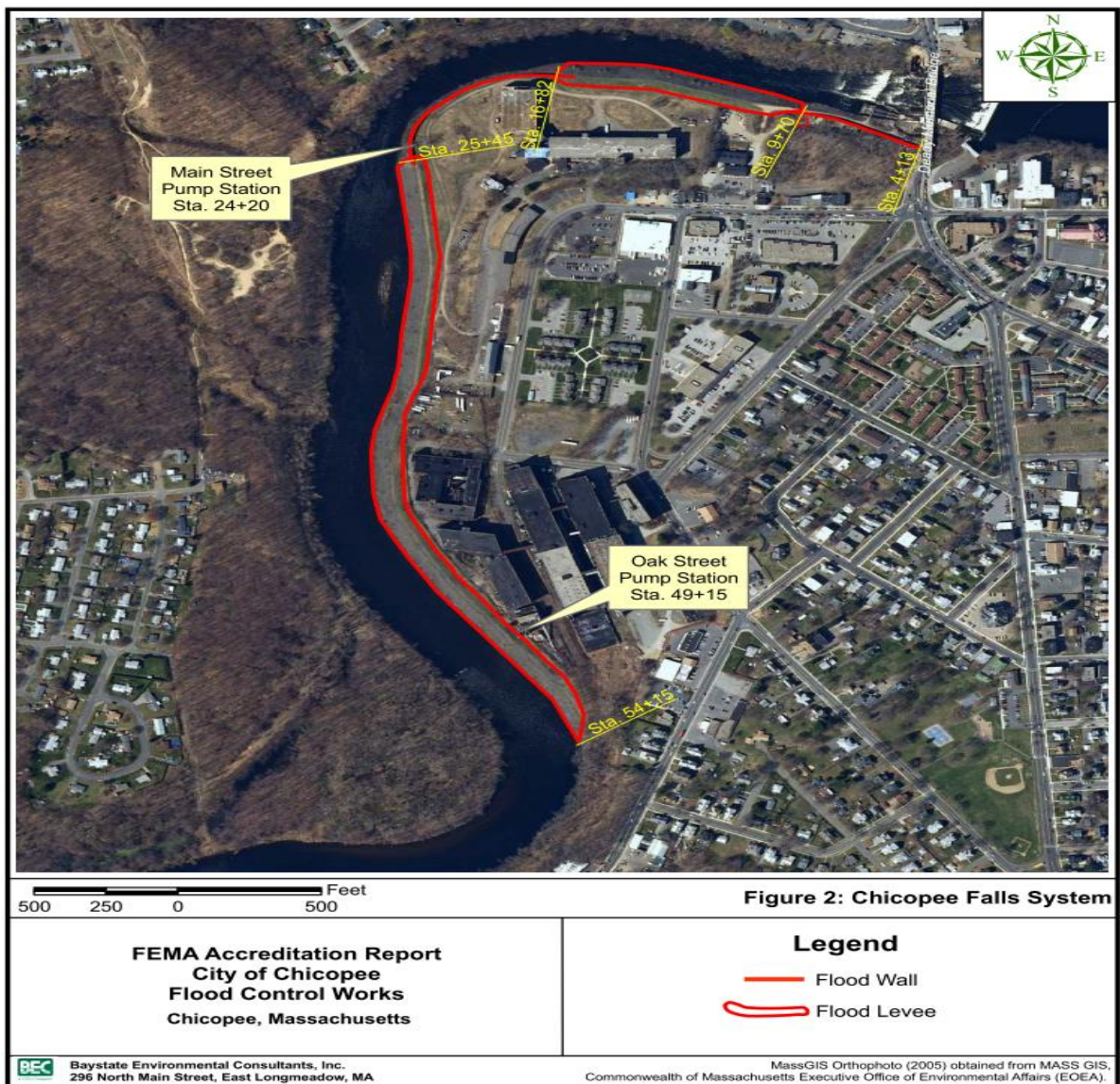


Figure 2. Chicopee Falls System, from BEC Report

2.0 PURPOSE, NEED AND SCOPE FOR THE PROPOSED ACTION

2.1.1 PROJECT PURPOSE

The purpose of the project is to provide the City of Chicopee a site suitable for redevelopment of the former Uniroyal/Facemate property and to eliminate long term operating and maintenance costs for a portion of the Chicopee Falls flood control levee drainage system as the vacant buildings at the lower elevations have been or are in the process of being demolished.

2.1.2 PROJECT NEED/CITY ENDORSEMENT



A Photo of the flood control levee and former Uniroyal Building 8 footprint (Summer 2016).

The City of Chicopee has prepared a redevelopment plan for the former manufacturing complex in Chicopee Falls. In order to further the redevelopment of the former Uniroyal/Facemate portion of the complex the City needs to generate revenue to prepare the site for future redevelopment in accordance with the redevelopment plan.

The importation of excess construction fill from the region will enable the City to raise the site elevation and provide future developers a suitable site.

In addition, the City is incurring ongoing operation and maintenance costs for the Chicopee Falls flood control levee storm drainage system adjacent to the site. Placement of fill adjacent to the levee will enable the abandonment of the existing storm drainage system and eliminate the ongoing O&M costs.

Finally, there is a recognized need for suitable sites in the region where excess construction fill can be properly disposed. The Project site represents an opportunity to develop such a site, suitably managed and properly constructed to fulfill both the regional need for disposal sites and meet the City's redevelopment goals for the site. An endorsement of the project from the City is included as Appendix B.

2.1.3 DESCRIPTION OF PROPOSED ALTERATION

The scope of work (SOW) will affect two areas:

Former Uniroyal Site

This proposed fill area is located on the northwestern portion of the former Uniroyal Property, located at 154 Grove Street in Chicopee, Massachusetts. The proposed SOW will affect the lower tier of the former Uniroyal Site, which is abutted to the east by Site buildings and a railroad spur and to the west by the levee associated with the Chicopee Falls flood control dike along the Chicopee River. The topography of the lower tier slopes downward sharply towards the Chicopee River; the elevation of the lower tier is approximately seventeen (17) feet below the top of the flood control levee.

Former Facemate Site

The proposed SOW will affect the lower elevation areas along the southern portion of Lot 1 on the former Facemate property, located at 5 West Main Street. The topography of this area slopes downward in an area where a former building was located. The elevation of this area is approximately ten (10) feet below the top of the flood control levee.

These two areas are shown on the Backfill Management Plan provided as Figure 3.

2.1.4 TECHNICAL ANALYSIS AND DESIGN

Excess construction fill will be imported from construction sites in the area. The fill will be placed and compacted so as to raise the elevation of the Project site to the height of the flood control levee and to grade the entire site for future redevelopment. Abandoned Site buildings located in the lower tier of the former Uniroyal property have either been demolished or future demolition is planned. As the levee was installed on this portion of the property to protect these abandoned buildings, it is the City's opinion that this alteration will not impair the usefulness of the USACE flood control project (including the projects authorized purpose).

In September 2016, a Slope Stability Analysis was completed. This study is described in Section 2.1.8 and included as Appendix C. A Site plan indicating the fill area, property boundaries and a cross section of the proposed fill area is attached as Figures 3 through 6.

2.1.5 AUTHORIZATION PURSUANT OF SECTION 10/404/103

The City is not pursuing authorization pursuant to Sections 10/404/103. There are no Navigable Waters or Waters of the United States that will be affected by the proposed project. Further, the proposed project does not involve the transportation of dredged material to a designated ocean disposal site.

2.1.6 SECTION 221 OF THE FLOOD CONTROL ACT OF 1970

As described on federalregister.gov (Guidelines for Carrying Out Section 221(a)(4) of the Flood Control Act of 1970, as Amended):

- Section 221 is a comprehensive authority that addresses the affording of credit for the value of in-kind contributions provided by a non-Federal sponsor toward its required cost share (excluding the required 5 percent cash for structural flood damage reduction projects and the

additional 10 percent cash payment over 30 years for navigation projects) if those in-kind contributions are determined to be integral to a study or project.

- The types of in-kind contributions eligible for credit include planning activities (including data collection and other services needed for a feasibility study); design related to construction; and construction (including management; mitigation; and construction materials and services).

Credit under Section 221 of the Flood Control Act of 1970, as amended, or other law or approval under Section 204(f) of the WRDA 1986 will not be sought.

2.1.7 PROPERTY OWNERSHIP/REAL ESTATE REQUIREMENTS

The project does not involve any federally owned property. The project will be totally constructed on property owned by the City. As described in the BEC report, the flood control project was a “cooperative Federal/City effort, the USACE was responsible for the design and construction of the levees, while the City provided all of the lands, easements, and rights-of-way necessary for the construction. The City also agreed to maintain and operate the flood control works after completion, in accordance with federally prescribed regulations. These requirements are detailed in the Code of Federal Regulations, 33 CFR 208.10 which is entitled, “Local flood protection works; maintenance and operation of structures and facilities”.

A permanent easement to the levee was granted to the City by the US Rubber Company in 1965. A copy of the easement recorded in the Hampden County Registry of Deeds is provided in Appendix D. The City acquired the former Uniroyal property (formerly US Rubber) and former Facemate property in 2009. A 2009 survey plan of the Chicopee Flood Control Works (by Heritage Surveys, Inc.) is also provided in Appendix D. The Heritage survey plan depicts the former Uniroyal and Facemate properties including the easement, property boundaries, levee and provides associated deed references. The location of the easement and utilities in reference to the proposed fill areas are provided as Figure 3 through 5. Any future conveyance by the City of all or any relevant portion of the subject property would retain an easement to the City to the easement areas as shown on survey plans provided in Appendix D.

2.1.8 HYDROLOGIC AND HYDRAULIC SYSTEM PERFORMANCE ANALYSIS

A Massachusetts-registered Professional Engineer, Michael J. Talbot of O’Reilly, Talbot and Okun (OTO), conducted a slope stability analysis for the Uniroyal Filling project to evaluate the potential impacts of the project. The OTO work included review of previous plans and reports prepared by the U.S. Army Corps of Engineers (USACE) and Baystate Environmental Consultants (BEC), stability analyses of the proposed conditions, and preparation of a report (See Appendix C).

The OTO slope stability analysis was based on information provided in the following documents:

- Plan titled “Topographic Plan of Land in Chicopee, Massachusetts, Surveyed for The City of Chicopee” by Heritage Surveys, Inc., dated December 12, 2009;
- Plan set titled “Connecticut River Flood Control Project, Chicopee Falls, Mass” prepared by Green Engineering Affiliates, Inc. for the U.S. Army Engineer Division, New England, dated April 1963;
- Design memorandum titled “Chicopee Falls Local Protection Project, Design Memorandum No. 5” by the U.S. Army Engineering Division, New England, dated March 1963;
- “FEMA Accreditation Report, Chicopee Falls Flood Control System” by Baystate Environmental Consultants, Inc., dated November 2010; and

- “Design and Construction of Levees Engineering Manual”- EM 1110-2-1913, U.S. Army Corps of Engineers, dated April 2000.

The information obtained from these sources that were used in their evaluation included the following:

- Details on levee construction;
- Design flood elevations and river levels;
- Existing ground surface topography;
- Subsurface information; and
- Soil properties.

2.1.8.1 SLOPE STABILITY ANALYSIS

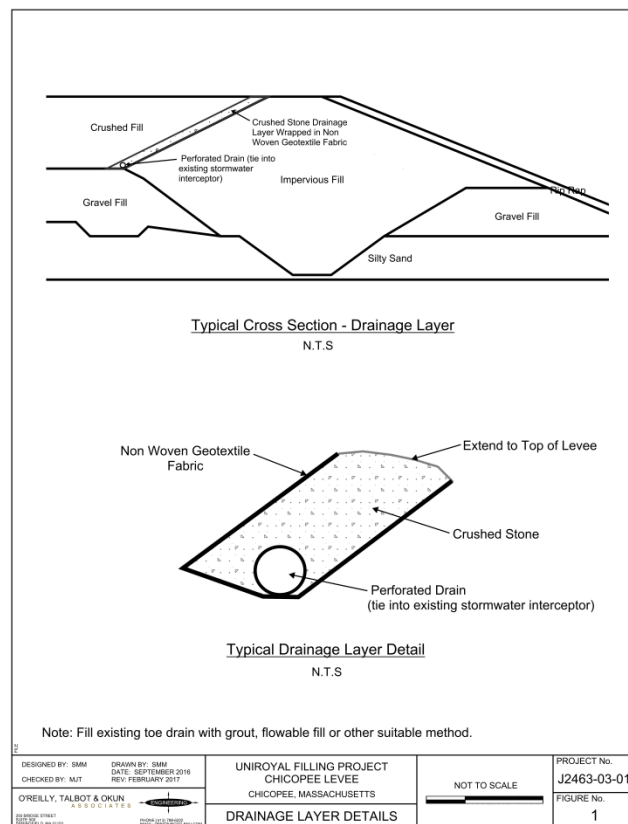
Slope stability was evaluated by OTO using the SLOPE/W computer program using the Spencer method. The SLOPE/W program performs a limit equilibrium analysis using various analytical methods to determine the factor of safety and the critical failure surface. The Spencer method, which assumes that the resultant interslice forces have constant slope through the sliding mass, was chosen per USACE guidance.

The slope stability for typical design conditions of the work area was evaluated using a limit equilibrium analyses. The Spencer Method determines the critical failure surface and the minimum factor of safety. Levee slope stability was analyzed for critical design condition as described in the USACE *Design and Construction of Levees*, EM 1110-2- 1913, namely under normal, 100 year flood conditions, and rapid drawdown. For these analyses, only failure into the river side was considered, since the placement of fill on the landward side increases the resistance to failures in that direction.

Results

In the USACE design manual, the recommended minimum factor of safety for rapid drawdown is between 1.0 to 1.2, and the recommended minimum factor of safety for long term (steady seepage) is 1.4. OTO used a value of 1.4 for normal water conditions as a specific factor of safety for normal conditions was not provided in the USACE design manual. OTO concluded that the computed factors of safety for the proposed conditions met or exceeded the required minimums specified above. Additionally, values computed by OTO were similar to those computed by BEC. Based upon their evaluation, OTO concluded that the proposed fill will likely have little effect on the stability of the levee.

To limit the buildup of hydrostatic pressures against the landside of the levee, OTO



recommended that a drainage layer be placed between the landside slope and proposed construction fill. The drainage layer should consist of a minimum of one foot of crushed stone wrapped in a non-woven geotextile fabric and be tied into the existing toe drain.

A typical drainage detail from the OTO is shown to the right. The OTO report is included as Appendix C.

2.1.9 ENVIRONMENTAL COMPLIANCE

To comply with NEPA, the planning and decision-making process for actions proposed by Federal agencies involves a study of other relevant environmental statutes and regulations. The NEPA process, however, does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them collectively in the form of an EA or EIS, which enables the decision maker to have a comprehensive view of major environmental issues and requirements associated with the proposed action. According to CEQ regulations (40 CFR 1500.2), the requirements of NEPA must be integrated “with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively.”

BETA group prepared an Environmental Assessment (EA) to examine potential effects of the proposed action and No Action alternative on resource areas including land use; air quality; noise; geology and soils; water resources; biological resources; cultural resources; socioeconomics and environmental justice; utility infrastructure; and hazardous and toxic materials/wastes. This EA is included as Appendix E

2.1.10 REAL ESTATE REQUIREMENTS

See Section 2.1.7.

2.1.11 EXECUTIVE ORDER 11988 CONSIDERATIONS

Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

Compliance: The Proposed Action would not affect the 1% Annual Chance floodplain or the Regulatory Floodway associated with the Chicopee River adjacent to the site. The Chicopee Falls Local Protection Project borders the project site to the west and confines the floodplain and floodway in the project area. The project complies with the Executive Order.

2.1.12 REQUESTER REVIEW PLAN REQUIREMENT

Per EC 1165-2-214, a Type II independent external peer review (IEPR) shall be conducted on design and construction activities for any project where potential hazards pose a significant threat to human life (public safety). The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health, safety, and welfare. This applies to new projects and to the major repair, rehabilitation, replacement, or modification of existing facilities.

Other factors to consider for conducting a Type II review of a project or components of a project are:

- a. The project involves the use of innovative materials or techniques where the engineering is based on novel methods, presents complex challenges for interpretations, contains

precedent-setting methods or models, or presents conclusions that are likely to change prevailing practices;

- b. The project design requires redundancy, resiliency, and robustness:
 - Redundancy is the duplication of critical components of a system with the intention of increasing reliability of the system, usually in the case of a backup or failsafe.
 - Resiliency is the ability to avoid, minimize, withstand, and recover from the effects of adversity, whether natural or manmade, under all circumstances of use.
 - Robustness is the ability of a system to continue to operate correctly across a wide range of operational conditions (the wider the range of conditions, the more robust the system), with minimal damage, alteration or loss of functionality, and to fail gracefully outside of that range.
- c. The project has unique construction sequencing or a reduced or overlapping design construction schedule; for example, significant project features accomplished using the Design-Build or Early Contractor Involvement (ECI) delivery systems.

If the district determines, by following the procedures of EC 1165-2-214, that a Type TII IEPR is required, the City will be required to submit a Type II IEPR review Plan. The City believes, based upon the nature of the project and the findings of the stability analysis that the project does not pose a significant threat to human life or safety.

2.1.13 LEVEE OPERATION AND MAINTENANCE

Until the City obtains approvals from the USACE for modifications, all current operation and maintenance activities and required inspections related to the levee and Oak Street pumping station will be adhered to.

3.0 FILL MATERIAL HANDLING AND PLACEMENT

3.1 FILL MANAGEMENT PLAN

BETA has prepared a Fill Management Plan (FMP) in support of the filling activities at the former Uniroyal and Facemate Sites. Key excerpts from the FMP, related to the fill procedures, proposed fill acceptance criteria, and quality control are provided below.

The purpose of the FMP is to formalize the fill management/acceptance process in order to meet the applicable soil re-use requirements and to give Generators a sufficient level of comfort that their material is being handled appropriately. The City's LSP (Alan Hanscom, BETA Group, Inc.), in coordination with LSPs/QEPs at Generator sites, is responsible for reviewing fill characterization data so that only fill meeting acceptance standards and approved under this FMP are brought to the proposed fill areas.

Soils may be accepted for re-use from properties that are Massachusetts Contingency Plan (MCP) Disposal Sites, as defined in 310 CMR 40.0006, and from properties that are not MCP Disposal Sites so long as they meet the screening requirements. It is estimated that approximately 100,000 cubic yards (150,000 tons) of soil of acceptable chemical and physical quality will be needed to bring the site to required grade for development. Upon completion of the filling and remedial activities, an Activity and

Use Limitation (AUL) will be implemented in connection with Massachusetts Contingency Plan (MCP) and Toxic Substance Control Act (TSCA) cleanup work being undertaken at the former Uniroyal Site by Michelin North America, Inc..

3.1.1 INITIAL SCREENING REQUIREMENTS

All soils considered acceptable for use must meet the following initial criteria:

- Soils, including certain sediments, must not contain any hazardous waste, as defined under RCRA Subtitle D and the Massachusetts Hazardous Waste Regulations (310 CMR 30.000). Soils are considered to contain a hazardous waste when, if generated, they exhibit one or more characteristics of a hazardous waste (toxicity, ignitability, corrosivity or reactivity) or if they contain a listed hazardous waste;
- Soils must not include large stones (cobbles or boulders), masonry, stumps, asphalt, or waste material, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or associated parts. Soils with a high percentage of organic matter will not be accepted; and,
- Soils must not meet the MCP definition of “Contaminated Soil” or “Remediation Waste”, as defined in 310 CMR 40.0006. Specifically, the concentrations of analytes in soil must be below the MCP Reportable Concentrations in Soil applicable to the generation site.

3.1.2 FIELD SCREENING REQUIREMENTS

The following criteria are applicable to all soils proposed for re-use, regardless of whether they were generated from an MCP Disposal Site.

- Field screening results of soil headspace from representative samples must not exhibit an average reading of Total Organic Vapors (TOV) in the jar headspace exceeding five parts per million by volume (ppmv) due to constituents attributable to volatile compounds. If screening has not been performed by the Generator, it may be performed at the staging areas on the former Uniroyal and Facemate properties by the Operator or Site LSP or another designated party as appropriate to verify certain loads. If screening results in exceedances of the criteria above, the load(s) will be rejected.
- The soil must not exhibit any visual staining, discolorations or olfactory odors indicative of OHM releases as demonstrated by the representative of the soil to be imported. Soils containing nuisance odors such as petroleum, chemicals, solvents, and/or organic material/hydrogen sulfide will be rejected.
- The soils must not contain any refuse or trash. Inert solid wastes that comprise less than 1% of the total volume will be permitted. The soil may contain ancillary non-coated or non-painted brick pieces or non-coated/stained or non-impregnated concrete pieces less than 6-inches diameter or cobbles/rock fragments less than 6-inches diameter if it is contained within certain fill soils in very small quantities. This material must be less than 50% of the fill material. If soils contain more than this amount, they must be designated as Asphalt, Brick, Concrete (ABC) material. Loads received that contain more than the acceptable amount of solid debris will be rejected and sent back to its origin at the Generator’s cost.

-
- Soil may contain naturally deposited silt and clay and a certain portion of naturally occurring organic content and moisture since drainage of the soil can occur on EU-7 and Lot 1 while it is being stored, blended, and re-worked as supervised by the Operator. The physical quality will be reviewed by the Operator and soil will be placed in accordance with the soil blending plan for final disposition.

3.1.3 SOIL HANDLING AND PLACEMENT

In general, material will be accepted between 7:00 am and 5:00 pm Monday through Friday. Material may be accepted after these hours or on weekends with coordination with City.

Once the truck is weighed, the driver will proceed to the Site staging area. The access road for both proposed fill areas is located adjacent to the intersection of Oak Street and West Main Street, as shown on Figure 3.

The Site Operator will collect the MSR or BOL from the driver, record the name of the trucking company, verify the source of the material against the “approved list”, and visually inspect the contents of the trucks for unacceptable fill materials and any visual or olfactory evidence of contamination, including nuisance odors. If the fill does not contain unacceptable material and there is no visual or olfactory evidence of contamination, it will be directed to the area for off-loading. Otherwise, it will be rejected. The Generator of the rejected material will be notified immediately not to ship any additional fill to the Site until the source of the unacceptable fill is identified and corrective action taken to prevent future problems. In addition, the Generator must remove the rejected material off-site at the Generator’s expense.

The City’s Representative will maintain a daily log of the following activities:

- Identification of the truck transporting fill material;
- Weight and source of material for each truck;
- Physical characteristic and results of headspace screening if any for each truck; and
- Location of the fill placed

3.1.4 GRADING AND FILLING PLAN

Prior to filling operations, a survey of both fill areas will be conducted to determine existing surface elevations, to establish a benchmark for elevation reference, and to determine the final elevations for the fill material and the cap. Utility poles with overhead utility lines will need to be removed and the electric lines will need to be relocated, likely in an underground conduit, outside the proposed fill area.

During filling activities, surface elevations will be surveyed on a quarterly basis to monitor the progress of fill operations, and to adjust operations as needed.

Final elevations will be surveyed at the completion of filling activities, and after construction of the final cap. These elevations will be used to create record drawings of the fill areas upon completion of the project, including plan and section views of the backfill area and cap.

Manholes associated with the interceptor drain are present in the proposed fill area. These manholes will be raised in elevation to meet the proposed grade at the Site.

3.2 REPORTING

The City's LSP will prepare an inspection report documenting the findings of each inspection, including laboratory analytical results, and will submit each report on a quarterly basis to the MassDEP and the City of Chicopee Health Department. The report will include, but not be limited to, the following information:

- Details regarding the filling activities compared to the requirements of this FMP;
- Any deviations from this FMP, and any corrective actions taken by the City;
- A table summarizing the quantities of fill received and placed since the last report, and a summary of the number of truck loads and quantity of fill materials rejected;
- A table summarizing the analytical results of soil samples collected during the inspections; and
- Copies of the laboratory analytical reports, including the chain of custody documentation.

In addition to the above requirements, each report will be signed by the LSP and will include the following certification signed by the LSP, and an authorized City representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the information is true, accurate and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information.

4.0 IMPLEMENTATION SCHEDULE

An implementation schedule for the project is provided below.

FIGURES

**APPENDIX A – Excerpts of FEMA
Accreditation Report, BEC, Nov 2010**

APPENDIX B – City of Chicopee Project Endorsement

**APPENDIX C – Slope Stability Analysis, OTO,
Sept. 2016**

APPENDIX D – Easement and Survey Plans

**APPENDIX E – Environmental Assessment,
BETA, Nov. 2016
(Not included, submitted as separately
bound report)**
