

Technical Proposal For
**Professional Design, Engineering, and
Permitting Services
Bruce Freeman Rail Trail
Sudbury, Massachusetts
MassDOT Project # 608164**

Submitted to
Town of Sudbury, Massachusetts



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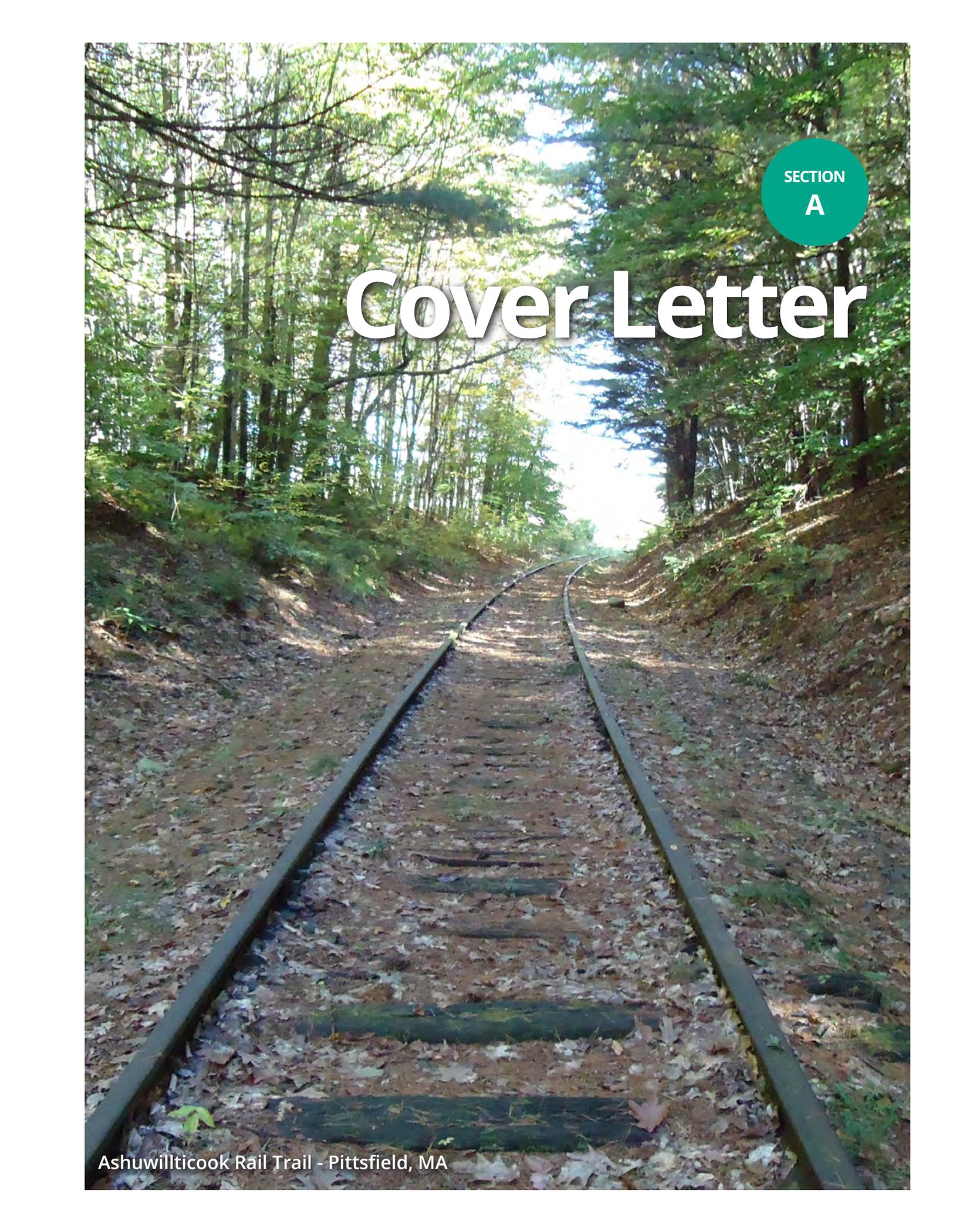
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SECTION
A

Cover Letter

Ashuwillticook Rail Trail - Pittsfield, MA



September 25, 2020

Planning and Community Development Department
Town of Sudbury
278 Old Sudbury Road
Sudbury, MA 01776

RE: Design, Engineering and Permitting Services for Bruce Freeman Rail Trail
MassDOT Project No. 608164

Dear Selection Committee:

The final design phase of the Bruce Freeman Rail Trail Project (BFRT) offers a unique opportunity for the Town of Sudbury to continue its partnership with MassDOT and develop a multi-use path through town that will promote a healthy lifestyle and encourage community input, address abutter concerns, and preserve the natural environment along the corridor. This next phase of the project development timeline is perhaps the most significant, since the MassDOT final design stages (75%, 100% and PS&E) are now the critical path to accessing millions of dollars in federal and state funding allocated for the construction of the project through the State Transportation Improvement Program (TIP). Compounding this sense of urgency to initiate the final design is the Town's solicitation for a new BFRT consultant. Selecting the right firm is difficult, but there are several key factors that should be considered for a successful partnership.

To achieve the vision and objectives of the BFRT, you will need a consultant that has a deep understanding of the site conditions, is rail trail experienced, MassDOT qualified, and offers a team that is committed from the notice to proceed through the start of construction. Ideally, your preferred consultant will bring a strong working relationship with the various MassDOT sections to help expedite the design, environmental and right-of-way process. Finally, you want a team that can work within your community and help facilitate public support, listen to concerns of abutters, and propose design solutions that are environmentally and context sensitive. Fortunately, Fuss & O'Neill brings more than 90 years of experience working with similar communities, and offers a project team with industry leading qualifications in rail trail design, public outreach, and sustainable solutions. In addition, ***Fuss & O'Neill commits to the Town of Sudbury a core team of dedicated rail trail engineers, planners and scientists with years of experience on similar shared use TIP projects and strong personal reputations with MassDOT's District 3, Rail Division and Right-of-Way Compliance Section.*** Through our prior MassDOT rail trail experience, Fuss & O'Neill knows how to deliver high quality and timely submittals that will not only keep the project on schedule for advertisement, but will work well within the Town's budget for design services.

Fuss & O'Neill is a multidisciplinary organization with technical expertise in design, permitting, and construction. With offices in Boston, Quincy, and Springfield, we have developed a strong reputation throughout Massachusetts from working with municipalities and MassDOT on numerous transportation, green infrastructure, and rail trail projects. Your team will be led by Principal-in-Charge Kevin Johnson, PE, PTOE, NETTCP. ***Kevin has more than 25 years of experience, and has worked on dozens of TIP projects for MassDOT and communities, particularly with multimodal accommodations, right-of-way impacts and environmental permitting.*** Beyond his leadership and technical abilities, he has a strong understanding of the site conditions, challenges,

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California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

and goals of this project. Kevin will provide technical mentoring, leadership oversight, and staffing support to our multidisciplinary team led by Project Manager Nick Lapointe, PE. ***Nick has nearly 15 years of experience managing and designing rail trail projects for municipalities and MassDOT throughout the Commonwealth; including the recently advertised Ashwilticook Rail Trail Extension in Pittsfield and the Connecticut River Bikeway Connection in Agawam.*** His collaborative, enthusiastic, detail-oriented approach to managing these kinds of projects makes him a highly respected PM by MassDOT, and he has our full support in leading this project. Together, Kevin and Nick will lead the BFRT project team highlighted in our proposal.

Our team has a strong track record of delivering outstanding TIP projects for MassDOT. We work frequently with communities on complex projects that require sensitivity in both environmental aspects and impacts to residents and key stakeholders. ***We understand Sudbury has a longstanding commitment to preserving the natural environment. Your mission is our culture.*** We have included Fuss & O'Neill's Chief Resilience Officer, Diane Mas, PhD, REHS/RS, to offer guidance to sustainable solutions, as she works with municipalities throughout Massachusetts navigate emerging environmental challenges. On this project, Eileen Gunn, formerly of MassDOT, will serve as our Sustainable Design Task Manager, and will draw on her 30 years of environmental and transportation expertise. ***A project like this will not only require professional outreach, but thoughtful communication with residents, abutters and key stakeholders to ensure that their voices are heard, and that the ultimate design takes all factors into consideration.*** To lead this effort, we have tapped Arnold Robinson, AICP, as our Planning and Community Engagement Task Manager. Arnold has more than three decades of experience working with communities, and is currently experiencing a very engaged community outreach effort for the Bristol, RI Bikeway Connector project, which has been adapted to continue to engage with local residents during a pandemic through social media outreach and other innovative digital avenues.

Our experienced project team is ready to provide the Town of Sudbury with top quality design, engineering, and permitting services to see this project through construction. ***Our pledge to the Town of Sudbury is to be responsive, committed, transparent, and collaborative during this final design of the BFRT.*** This project is important to your community and it's important to us.

We look forward to the opportunity to work with you on this project. If you should have any questions or require additional information, please contact our Principal-in-Charge, Mr. Kevin Johnson, Executive Vice President, at (800) 286-2469 x4541, kjohnson@fando.com or at 190 High Street, 3rd Floor, Boston, MA 02110.

Sincerely,



Nicholas Lapointe, PE
Project Manager



Kevin Johnson, PE, PTOE, NETICP
Executive Vice President | Principal-in-Charge

SECTION
B

Understanding and Approach

Redstone Trailway Multi-Use Path - East Longmeadow, MA

Section B: Project Understanding and Approach

Project Understanding

A successfully designed Phase 2D of the Bruce Freeman Rail Trail (BFRT) in Sudbury will be marked by a robust stakeholder engagement process to develop a cost-effective project that achieves safety, accessibility, design continuity, preservation and restoration. The BFRT is a priority for Sudbury, MassDOT, and the Governor's Interagency Trail's team, and will connect eight communities when completed. The intention is to create a safe, off-road trail for pedestrians, recreational cyclists and commuters that supports alternative transportation options, improves connectivity, economic growth and overall access to physical activity.

The 4.6-mile Phase 2D section is bounded to the south by the intersection with the Massachusetts Central Rail Trail near Union Ave to the Sudbury/Concord Town line to the north. Additionally, a previously designed half-mile section of trail in south Concord, from Powder Mill Road to the Sudbury Town line, will be incorporated into MassDOT design submissions and constructed as part of this project.

At this 25% design stage, significant work has been completed to identify the geometric trail layout option with flexibility at environmentally-sensitive areas; conduct geotechnical and hydraulic analysis to identify the structures in need of repair and preservation; perform vetting of a boardwalk option to protect wetlands; identify private encroachments and private and public crossings; identify safety/signal options; identify the three major wetland resource challenge areas; establish Right-of-Way (ROW) needs; complete ORAD, habitat and vernal pool studies; and identify future permitting requirements.



Fuss & O'Neill is highly qualified to lead public outreach programs in the era of COVID-19 and social distancing. This image, featuring Arnold Robinson (Sudbury Public Outreach Task Manager) was taken on September 19, 2020 as part of the Bristol Rhode Island Bicycle Connector Project.

The next project phase is to complete the 75%, 100% design and PS&E for planned advertising during winter of 2022. This will include addressing the comments received at 25%, further vetting the bridge design options, designing the culvert/cattle crossings as needed, and finalizing the decision on the boardwalk. This phase will involve significant coordination with MassDOT, abutters, the broader community, state and federal permitting agencies, and the Bruce Freeman Design Task Force. With most of the trail adjacent to wetlands, streams, vernal pools and regulatory floodways there is a tremendous opportunity to connect isolated wetlands and restore natural drainage in the floodplains and thereby improve flood control, protect surrounding assets, and improve wildlife habitat and water quality.

Challenges	Town's Opportunity
Public Involvement/ Social Distancing Issues	<ul style="list-style-type: none"> Embrace community engagement through the use of social media platforms Create social distancing interaction through interactive website and video conferences Provide routine public workshops and outreach events
Adverse Environmental Impacts	<ul style="list-style-type: none"> Embrace the community focus on being environmentally-conscious through innovative design solutions that minimize adverse environmental impacts. Explore climate resiliency and sustainable design solutions along the rail trail corridor
Adverse Right-of-Way Impacts	<ul style="list-style-type: none"> Schedule monthly MassDOT Right-of-Way Compliance meeting to keep project on track Coordinate with key abutters on a routine basis and through community outreach efforts Execute the MassDOT right-of-way process concurrently with the design schedule to ensure meeting advertising date Minimize right-of-way impacts through a transparent and collaborative approach. Examples include minor alignment adjustments and donations of land.
Incomplete or Rejected MassDOT Submittals	<ul style="list-style-type: none"> Engage a firm that has a proven track record of performance on rail trails, specifically for MassDOT Select a firm with a proven project manager and dedicated team Select a MassDOT preferred rail trail firm
Schedule Delays	<ul style="list-style-type: none"> Develop a critical path schedule that adheres to MassDOT design process and town requirements Identify key milestones and, if required, a project task force to meet deadlines Select a consultant that understands a critical path can be right-of-way, environmental permitting or community support.
Incorporating Context Sensitive Solutions	<ul style="list-style-type: none"> Select a consultant that understands the importance of context sensitive solutions and will incorporate these measures. Work with town and MassDOT on feasible bridge designs that also incorporate aesthetically-pleasing features, are forward-thinking with climate resilient features, and fit the natural environment of the trail.
Exceeding Design Budget	<ul style="list-style-type: none"> Select a consultant with a clear understanding of the scope of work Select a consultant with a proven track record of successfully working on municipal projects for MassDOT Select a consultant with a project manager that can lead a multi-disciplined team
Unforeseen Maintenance and Operations Costs	<ul style="list-style-type: none"> Work with task force and key town personnel on design and construction solutions that are feasible and low maintenance Ensure the final design is cost effective for Maintenance and Operations
Increased Flooding Severity and Frequency	<ul style="list-style-type: none"> Design project that is sensitive to the environment and incorporate feasible climate resiliency

Our Approach

Time is of the essence. With a planned advertising timeframe of winter of 2022, the Fuss & O'Neill team will immediately start the 75% design process with the Town and MassDOT while concurrently executing the public outreach, right-of-way and environmental process. We recognize that no two rail trail projects are the same, but we will call upon our recent and relevant experience on similar projects working with MassDOT. Through that experience and our understanding of the Town's vision and goals, we have created the following project approach that is simple yet highly effective.

Fuss & O'Neill will identify and address the public outreach, constructability, ROW, and environmental challenges early in the design process. While much of this has been highlighted during the 25% design stage, challenges and unforeseen issues evolve as projects advance through final design. We will meet each challenge as an opportunity to work with the Town on ideas and solutions that meet your objectives. Based on this understanding, we have established project success factors to ensure a constant communication line is provided to the Project Manager and ultimately to the Town (see figure to right).

Protecting the Environment

Fuss and O'Neill will apply our expertise in context sensitive design and our experience with environmental permitting of complex TIP projects to address the technical aspects of the proposed infrastructure and environmental challenges. We recognize that this project will interact with wetland resource areas for which the design will need to pay special attention to avoid or mitigate the impacts resulting from trail construction. Based on the wetland locations and boundaries previously established, design work will include boardwalk, wetland replication areas, or moving the trail to avoid direct impacts. We will work with our in-house specialists to incorporate floodplain restoration around Hop/Pantry Brooks, include green infrastructure at new parking areas, address invasive species removal, and make sure the project will be designed to adhere to the Town's bylaws to the extent practicable.

MassDOT Scope of Services

The Town has provided a robust scope of services (identified as Attachment A in the RFP) which generally followed the MassDOT Standardized Scope of Services Guidelines. Our proposal will follow that scope, while in doing so incorporating the applicable procedures and standards outlined in the MassDOT – Highway Division 2006 Project Development and Design Guide (PDDG) (with amendments) and the and the 2012 AASHTO Guide for the Development of Bicycle Facilities. Fuss and O'Neill will develop and obtain approval of MassDOT 75%, 100%, and PS&E design approval of construction-ready engineering plans and documents; and, will provide construction administration engineering services. Section C of this proposal includes the Fuss & O'Neill Scope of Services and our assumptions based on the project understanding and experience on other rail trail projects.

Project Success Factors

- Public outreach and responsiveness to stakeholders
- Create a safe and enjoyable experience for all trail users
- Incorporate context sensitive design solutions
- Limit ROW impacts
- Minimize and mitigate environmental resource impacts
- Expedite 75/100/PSE design milestones
- Incorporate landscaping and preserve historic elements
- Control project and maintenance costs



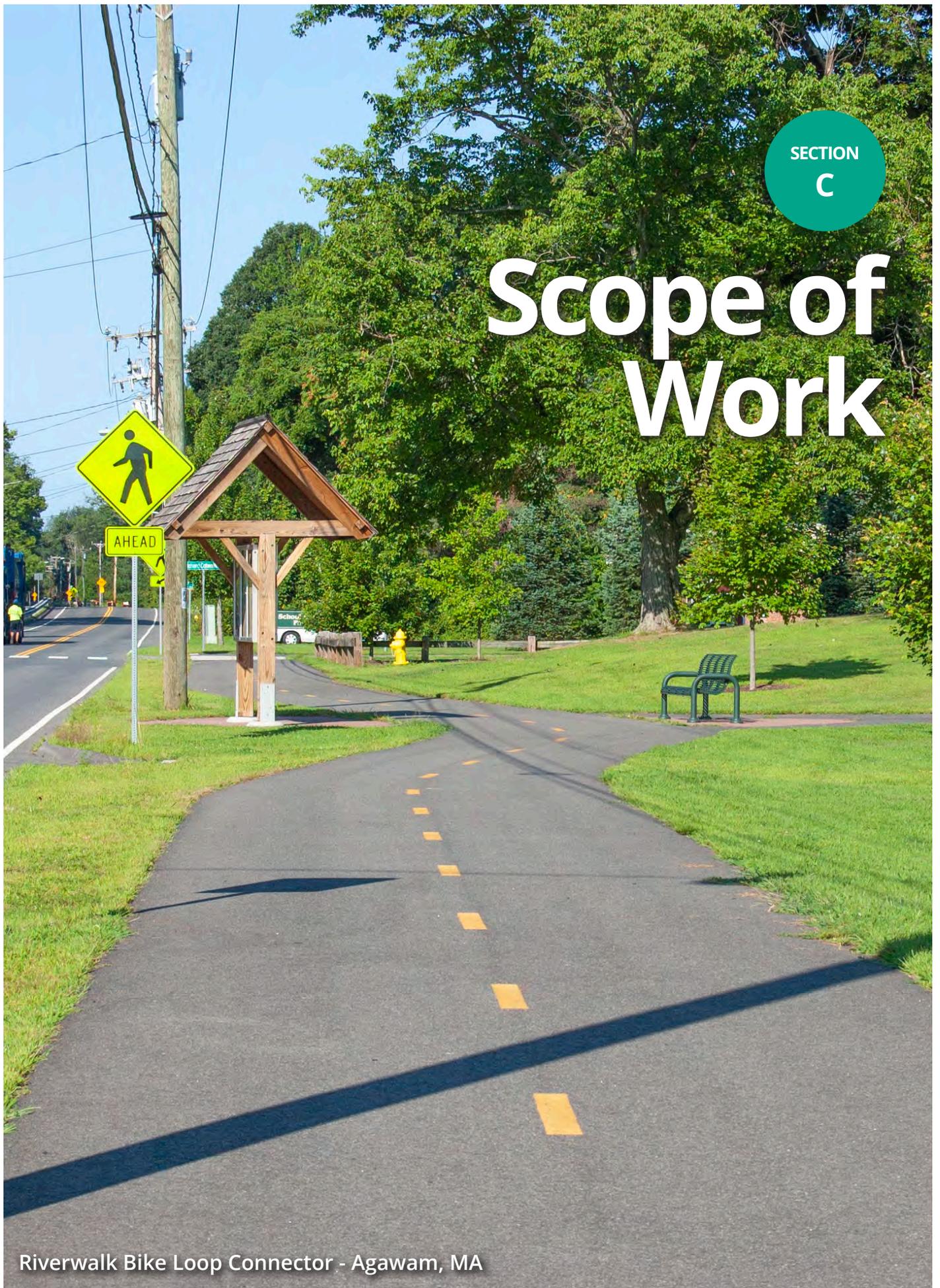
Fuss & O'Neill has outstanding experience designing boardwalks and pedestrian structures in environmentally-sensitive areas.



This code can be scanned with any smartphone to open a multi-use path project website developed by Fuss & O'Neill. We merge the latest technology and our public outreach experience to help educate communities and build support for high profile projects like the BFRT in Sudbury.

SECTION
C

Scope of Work



Riverwalk Bike Loop Connector - Agawam, MA

Section C: Scope of Work

We appreciate the thoughtfulness and attention to detail the town has invested into developing the scope of work as provided in Attachment A in the RFP. Our 30+ years partnering with Massachusetts municipalities and MassDOT have enabled us to gain valuable insights on the project delivery process under the TIP program for which the Town of Sudbury will benefit from while advancing this project to construction. We have thoroughly reviewed the scope tasks identified by the following:

TASK 100 – PROJECT DEVELOPMENT ENGINEERING

TASK 150 – ENVIRONMENTAL

TASK 200 – FUNCTIONAL DESIGN REPORT

TASK 220 – DESIGN JUSTIFICATION WORKBOOK

TASK 400 – 75% HIGHWAY DESIGN SUBMISSION

TASK 440 – PARKING LOT LAYOUT

TASK 450 – 100% HIGHWAY DESIGN SUBMISSION

TASK 470 – TOWN MEETINGS

TASK 500 – RIGHT OF WAY

TASK 700 – PROJECT DEVELOPMENT – STRUCTURAL

TASK 750 – FINAL STRUCTURAL DESIGN

TASK 800 – PS&E SUBMISSION

TASK 900 – CONSTRUCTION ENGINEERING



Fuss & O'Neill will adhere to the scope provided in the RFP, however there are subtasks that we have identified which we feel should be adjusted in order to provide more value to the Town. Any deviation or clarifications from the Town's proposed scope of work are presented below. These comments are based on our history of working on similar rail trail projects and TIP projects for MassDOT.

Any task identified as a potential critical path element have been tagged with the following symbol . These critical path elements will need to be carefully considered and discussed with the Town to ensure the project stays on schedule and budget.

TASK 100 – PROJECT DEVELOPMENT ENGINEERING

We will adhere to the scope provided in Attachment A. A breakdown of hours is provided in workbook.

TASK 150 – ENVIRONMENTAL

There is an extensive amount of environmental permitting required in order to advertise this project. We understand there has been many completed environmental actions, however in order to meet the aggressive advertisement schedule, we are treating the permitting as a critical path item for which our Task Manager Eileen Gunn will lead a team of experts in wetlands, permitting, climate resiliency and sustainable design solutions to keep the project moving forward through the various regulatory agencies.

Environmental Assumptions:

- We assume that any local Stormwater and/or WPA permitting related to the new parking areas identified under Task 440 will be combined with the overall permitting for the trail. Separate reporting, hearings, submissions for these parking areas if they are requested to be segmented from the overall trail permitting is not included
- Task 179 – NOI. Includes one submittal to Conservation Commission. Revisions to Notice of Intent based on MassDOT comments is not included.
- We will submit Draft ENF to MassDOT. We assume MassDOT will finalize and submit to MEPA as required.
- Any permitting that may be required (such as ACOE) for repair/replacement of the 16 culvert/cattle crossings beyond local Sudbury Conservation Commission is not included. Furthermore it is assumed any full replacements that may be required shall be precast structures for which bridge sketch plans or geotechnical report will not be required.
- Permitting or filing fees (if needed) are assumed to be paid by the Town.
- Licensed Site Professional services (LSP) are not anticipated
- Task 170 – ACOE PGP assumes one submission to the Corps.
- Task 181 – Chapter 91. Given our understanding of the two bridges, our scope and fee is limited to providing a determination of applicability only.
- Task 188 – Wetland Replication. This task shall be limited to areas within the Project limits.
- Task 190 – Sudbury Stormwater Application. It is assumed the Town will assist Fuss & O'Neill with the filing of the permit.

TASK 200 – FUNCTIONAL DESIGN REPORT **TASK 220 – DESIGN JUSTIFICATION WORKBOOK**

We will adhere to the scope provided in Attachment A. A breakdown of hours is provided in workbook

TASK 400 – 75% HIGHWAY DESIGN SUBMISSION **TASK 440 – PARKING LOT LAYOUT** **TASK 450 – 100% HIGHWAY DESIGN SUBMISSION** **TASK 800 – PS&E SUBMISSION**

The final design must deliver safe pedestrian movements into and around the residential community's social and event places, make it welcoming, well-lit at crossings, and attractive in design. Providing safe crossing locations at the 9 roadway and driveway crossings (2 private driveway, 1 private roadway, 6 public roadways) is paramount to safely connect adjacent residential neighborhoods and commercial areas. The BFRT starts at a Commercial Property driveway intersection. This has been noted as a significant safety concern for landscaping trucks pulling out conflicting with trail users.

Incorporating pedestrian level lighting is important. We will review the lighting at all grade crossings and ensure that the lighting adequately suited to an attractive and safe pedestrian level. We will pay special attention to the concerns identified by MassDOT and the Town at the 25% phase including:

- Gateways – to be designed with task force and property owners
- Signals – RRFBs and Hawks
- Morse Road & Codger Lane private driveways – stops signs and signage
- Private driveway treatments
- Hudson / Peakham Road – Review need for intersection signalization
- North Rd. Hawk signal

Final Design Assumptions

- All CAD files provided by 25% design consultant shall be in MassDOT standard format and standards, such as, but not limited to: HZ/VC datum, Civil 3D alignments/surfaces/styles/templates, Survey Topo TIN. Alignments and surfaces shall be free of all breaks and errors.
- Existing conditions survey is assumed to have enough ground survey points to create cross sections every 25'. All physical features within the limit of work shall be appropriately labeled and spatially located (x,y,z).
- Our scope assumes only one round of review comments at each design stage. In order to make for an efficient review process, we will request a good faith effort by MassDOT PM to compile comments and be diligent about internal review timeframes in order to reduce the number of “piecemeal” or perpetual commenting that often times results on these type of projects. We will hold a call with MassDOT Chief of Project Development, John Bechard, to layout these expectations to help maintain a smooth review process.
- Resubmission or multiple submissions of design plans at any stage is not included.
- Geometric improvements and preparation of a signal plan at Hudson Road Peakham road is not included. We will conduct analysis to see if the 8-hr warrant is met per notes from the 25% CRM. If it is determined that signalization of the intersection is justified we can prepare these design documents under a task amendment
- Town of Concord will provide Special Provisions and trail details (relating to historic, wayfinding, landscape features) to incorporate as appropriate in order to maintain trail consistency
- Task 430 – Coordination with Concord BFRT. We assume approve plans are at approved PS&E with MassDOT. All CAD files will be provided electronically to Fuss & O'Neill in MassDOT format and at the appropriate HZ/VC datum to easily be incorporated into the Town of Sudbury Phase 2D BFRT project. We assume no additional field survey are required in Concord

TASK 470 – TOWN MEETINGS

As with most community focused projects, public participation and engagement will lead to a smoother project. It is important for the Town and Fuss & O'Neill to be transparent in our design process while understanding the administrative and technical requirements of MassDOT. The Bruce Freeman Rail Trail Design Task Force has a vocal and strong influence over community actions within the community. We must make it a priority to engage with them to early in the design process to achieve the following:

- Encourage relevant and constructive comment
- Develop trust and commitment
- Engage a diverse range of participants from different socioeconomic, ethnic, and cultural perspectives and the traditionally underserved
- Provide clear explanations of the issues and opportunities
- Establish and maintain partnerships within the community
- Build confidence, compromise, and consensus

Fuss & O'Neill will facilitate these discussions throughout the design process in public forums and private communication so that the project may advance to final design with public support and ownership.

Town Meeting Assumptions

- At this time due to the current public health pandemic and COVID-19 social distancing requirements by the Commonwealth of Massachusetts, all meetings under Task 470 are assumed to be held virtually.
- Number of meetings budgeted in our scope assumes a full 12 month design period.

TASK 500 – RIGHT OF WAY

Abandoned rail corridors usually have a history of complicated deed recordings as well as multiple stakeholders and access agreements (also known as “lines of access”). Because a key goal of the BFRT will be to provide multiple trail access points, this project will be no exception to the comprehensive ROW process. The boundaries of private properties abutting the project define the lateral limits of the work. Accurate location of these lines at the outset is critical to identification of the land available for improvements and constraints on the design and avoidance of design changes. Prior to submission of any 75% plans to MassDOT we will ensure that all property ownership is clearly defined on the plans and any fee takings, permanent easements or layout alterations are fully vetted with the Town so we don't have to incorporate major rail trail alignment/access point changes in subsequent design phases. Fuss & O'Neill will lead this effort with our subconsultant GCG Associates.

Our year of experience with MassDOT Rail Division and Right of Way Compliance Section will lend itself useful to the Town of Sudbury on how to avoid costly design changes resulting from ROW impacts late in the design process.

ROW Assumptions

- The extent of the ROW and/or permanent easement plans that may be required for the town parking improvement areas identified under Task 440 is not yet determined including the two culverts associated with Featherland Park/Broadacre Farm. Preparation of easement plans for these areas is not included.
- Easement plans shall be prepared for those identified under the 25% ROW plans. Additionally we feel that stamped Location Plans will likely be needed in order for lease agreements between MassDOT Rail / MassDOT Highway / Town of Sudbury. Preparation of these plans is included in our scope.
- Based on existing survey provided, it appears a full boundary survey is not required in order to establish the existing rail corridor. RR value station mapping and record plans shall be used to prepare lease agreement and easement with Rail Division.
- If establishment of field monumentation and boundaries are deemed necessary at grade crossings, we will perform this work as part of our scope/fee. However a full boundary outside of the grade crossings are not included.

TASK 700 – PROJECT DEVELOPMENT – STRUCTURAL 
TASK 750 – FINAL STRUCTURAL DESIGN

It will be paramount to have our structural staff familiarize the proposed improvements to Pantry and Hop Brook bridges as well as the 16 identified culvert/cattle crossings. We will follow the work tasks outlined in Task 700 and 750 as provided in Attachment A of the RFP. We understand that MassDOT is investigating alternatives to Boardwalk design submitted at 25% and providing Value Engineering on this matter. Alternative foundations explored = infeasible. 4 ft deep trenches – significant material to reuse or dispose. We will continue to coordinate with MassDOT and the Town to determine the appropriate approach relative to implementation of a Boardwalk or reclassification of wetlands in this area to mitigate impacts.

Structural Assumptions:

- Because loading conditions can vary depending on which fabricator/supplier is providing the Arch, we typically provide a preliminary foundation design after coordination with multiple pre-casters. This will allow for development of quantities for bidding and general structural requirements for footings that must be followed by the contractor. As such we assume that FINAL design of foundations for the proposed arch bridge over Pantry Brook will be provided by contractor during construction via shop drawings for our approval.
- Design of temporary excavation support systems, shoring, or temporary earth stabilization is not included.
- CCTV inspections of cattle crossings/culverts under Task 700 is assumed to not be required based on review of preliminary report. Our scope also excludes physically cleaning or debris removal from culverts. It is assumed that debris will only be moved if needed to properly perform structural
- All existing culverts/cattle crossings are anticipated to remain culverts. Design of new structures (If needed) are anticipated to be replaced in kind with prefabricated similar sized structures.
- Additional geotechnical reports and or soil borings (if required) for retaining walls or slope stability other than what is shown on the 25% plans are is not included.

- The structural design of the boardwalk will be limited to performance based specifications and typical details in an effort to foster creative, feasible, and context sensitive design solutions by the contractor.
- Any walls outside of the bridges and boardwalk that may be required are assumed to be proprietary designs for which contractors will submit shop drawings for approval. We will provide wall elevation, layout, and typical details as well as the required wall type (MSE, Gravity, etc). This is typical for MassDOT design procedure. The structural design will be limited to preparing feasibility checks to confirm the proposed wall type is appropriate and safe for

TASK 900 – CONSTRUCTION ENGINEERING

We will adhere to the scope provided in Attachment A with the following exception;

Construction Engineering Assumption

- Task 909 bi-weekly coordination can be held concurrently with field visits (Task 906) thus eliminating any “double” counting of hours associated with this task.



SECTION
D

Project Schedule

Airline and Hop River Trail Extensions - Windham, CT

Section D: Project Schedule

The draft schedule represented on the following pages has been created using the standard MassDOT approved Microsoft Project software. Key tasks and milestones are based on Fuss & O'Neill's understanding of the project (Section B) and the Town's RFP "Attachment A: Scope of Work" for the 75/100/PS&E Design (Section C). While this document is difficult to read at the scale provided to fit within this proposal submission, there are a few highlights that should be considered by the Town of Sudbury.

Anticipating the Unknown

The advertising date of the BRFT Phase 2D is scheduled for Winter 2021/2022. This is an aggressive deadline considering the current design stage, complexity of the rail trail scope of work and potential impacts on abutters and wetlands. Compounding this challenge are unforeseen delays that can impact the critical path causing a project to miss the advertising date. Fuss & O'Neill is experienced with fast track designs and crisis management on TIP projects. We recently completed the Ashuwillticook Rail Trail in Pittsfield for advertising on September 12, 2020. In July of 2020, Fuss & O'Neill was notified by an abutter that they were refusing to sign a donation of land for the rail trail. This property was critical to the rail trail alignment and the abutter, who previously agreed to the donation near the abandoned rail line, said the alignment would impact their tractor trail trucks and machinery to operate effectively. The project was in serious jeopardy of missing the advertising date and losing millions in federal and state funding. Immediately upon hearing about this unforeseen issue, Fuss & O'Neill established a "SWAT" team comprised of town officials, MassDOT representatives and Fuss & O'Neill's key personnel to meet weekly and redesign the segment of rail trail near this abutter. *Working collaboratively, and with a shared commitment the Town, MassDOT and Fuss & O'Neill were able to redesign a segment of the rail trail in one week, get the abutter's donation, record the right-of-way plans and advertise the project on time.*

This is just one of many project examples where the Fuss & O'Neill team had to react to unforeseen schedule impacts and keep the project on track for advertising. It demonstrates our experienced with high profile, challenging rail trail projects on tight schedules. *When other firms see challenges, we see opportunities to partner with our clients.*



West Springfield, MA – Connecticut Riverwalk Shared Use Path Ribbon Cutting

It is our corporate policy to commit managers and task managers for the entire project lifecycle in order to commit to our clients' (and in this case the Town of Sudbury) design schedule. Our preliminary design schedule follows on the subsequent pages.

Key Final Design Milestone	Date
75% Design Submission	April 1, 2021
Approve 75% ROW Plans	May 31, 2021
Submit Notice of Intent (NOI)	June 25, 2021
100% Design Submission	August 9, 2021
Plans, Specifications and Estimate (PS&E)	October 18, 2021
Advertising for Construction	January 29, 2022

WBS	ID	Name	Start	Finish	Duration	Actual Duration	Remaining Duration	Responsibility	Total Slack	Act. Start	Act. Finish	% Complete	Timeline											
													1st Quarter	3rd Quarter	1st Quarter	3rd Quarter	1st Quarter	3rd Quarter	1st Quarter	3rd Quarter	1st Quarter	3rd Quarter	1st Quarter	3rd Quarter
CNT	1	Contract/Project Management	Wed 1/2/19	Sun 5/19/24	1965d	0d	1965d		0d	NA	NA	0%	Contract/Project Management											
CNT.MS	2	Project Milestones	Wed 1/2/19	Sun 5/19/24	1965d	0d	1965d		0d	NA	NA	0%	Project Milestones											
CNT.MS.010	3	Issue Design Contract NTP	Wed 1/2/19	Wed 1/2/19	0d	0d	0d	MassDOT.PM	1575d	NA	NA	0%	◆ Issue Design Contract NTP											
CNT.MS.020	4	PM Submits Documents for Advertising	Mon 1/17/22	Mon 1/17/22	1d	0d	1d	MassDOT.PM	0d	NA	NA	0%												
CNT.MS.030	5	Submit Mylar Title Sheet and CDs	Mon 1/17/22	Mon 1/17/22	0d	0d	0d	Consultants.DES	428d	NA	NA	0%												
CNT.MS.040	6	Prepare for Advertise	Tue 1/18/22	Fri 1/28/22	11d	0d	11d	MassDOT.FAPO	0d	NA	NA	0%												
CNT.MS.050	7	Advertise Construction Contract	Sat 1/29/22	Sat 1/29/22	1d	0d	1d	MassDOT.PM	0d	NA	NA	0%	◆ Submit Mylar Title Sheet and CDs											
CNT.MS.060	8	Bid Opening	Tue 3/21/23	Tue 3/21/23	0d	0d	0d	MassDOT.PM	0d	NA	NA	0%												
CNT.MS.070	9	Issue Construction Contract NTP	Sat 5/20/23	Sat 5/20/23	0d	0d	0d	MassDOT.PM	0d	NA	NA	0%	◆ Advertise Construction Contract											
CNT.MS.080	10	Scope of Service Complete	Sun 5/19/24	Sun 5/19/24	0d	0d	0d	MassDOT.PM	0d	NA	NA	0%	◆ Bid Opening											
CNT.100	11	Project Development	Wed 1/2/19	Sun 1/26/20	390d	0d	390d		1575d	NA	NA	0%	◆ Issue Construction Contract NTP											
CNT.100.010	12	Finalize Project Plan and Design Schedule	Wed 1/2/19	Thu 1/31/19	30d	0d	30d	Consultants.DES	1575d	NA	NA	0%	◆ Scope of Service Complete											
CNT.100.020	13	Project Design Schedule Updates	Fri 2/1/19	Sun 1/26/20	360d	0d	360d	Consultants.DES	1575d	NA	NA	0%												
HWY	14	Highway Design	Sun 3/24/19	Mon 11/8/21	960d	531.34d	428.66d		923d	Sun 3/24/19	NA	55%	Project Development											
HWY.200	15	Functional Design Report	Mon 3/25/19	Fri 12/20/19	271d	271d	0d		0d	Mon 3/25/19	Fri 12/20/19	100%	Highway Design											
HWY.220	20	Design Justification Workbook	Thu 1/28/21	Sun 3/28/21	60d	0d	60d		1148d	NA	NA	0%	Functional Design Report											
HWY.220.010	21	Prepare Design Exception Report	Thu 1/28/21	Sun 3/28/21	60d	0d	60d	Consultants.DES	1148d	NA	NA	0%												
HWY.220.020	22	Submit Design Exception Report	Thu 1/28/21	Thu 1/28/21	0d	0d	0d	Consultants.DES	1148d	NA	NA	0%	◆ Submit Design Exception Report											
HWY.220.030	23	Review Design Exception Report	Thu 1/28/21	Fri 2/26/21	30d	0d	30d	MassDOT.HW	1148d	NA	NA	0%												
HWY.220.040	24	Approval of Design Exception Report	Fri 2/26/21	Fri 2/26/21	0d	0d	0d	MassDOT.HW	1148d	NA	NA	0%	◆ Approval of Design Exception Report											
HWY.220.050	25	Approval of Design Exception Report by Chief Engine	Sun 3/28/21	Sun 3/28/21	0d	0d	0d	MassDOT.HW	1148d	NA	NA	0%	◆ Approval of Design Exception Report by Chief Engineer											
HWY.230	26	Healthy Transportation Waiver	Mon 3/25/19	Sun 1/19/20	301d	301d	0d		0d	Mon 3/25/19	Sun 1/19/20	100%	Design Justification Workbook											
HWY.303	32	Conduct Survey	Tue 11/17/20	Wed 1/27/21	72d	72d	0d		0d	Tue 11/17/20	Wed 1/27/21	100%	◆ Submit Design Exception Report											
HWY.303.020	33	Conduct Survey - Parking Lot / Off-site	Tue 11/17/20	Wed 1/27/21	72d	72d	0d	Consultants.DES	0d	Tue 11/17/20	Wed 1/27/21	100%	◆ Approval of Design Exception Report											
HWY.250	34	Pre-25% Design	Sun 3/24/19	Tue 7/23/19	121d	121d	0d		0d	Sun 3/24/19	Tue 7/23/19	100%	Healthy Transportation Waiver											
HWY.300	39	25% Highway Design Submission	Wed 7/24/19	Wed 1/29/20	190d	190d	0d		0d	Wed 7/24/19	Wed 1/29/20	100%	Conduct Survey											
HWY.350	50	Design Public Hearing	Tue 2/4/20	Sat 8/29/20	208d	208d	0d		0d	Tue 2/4/20	Sat 8/29/20	100%	Pre-25% Design											
HWY.400	54	75% Highway Design Submission	Tue 11/3/20	Tue 5/11/21	190d	0d	190d		3d	NA	NA	0%	25% Highway Design Submission											
HWY.400.010	55	Prepare 75% Highway Design Submission	Tue 11/3/20	Thu 4/1/21	150d	0d	150d	Consultants.DES	3d	NA	NA	0%	Design Public Hearing											
HWY.400.020	56	Submit 75% Design Submission	Thu 4/1/21	Thu 4/1/21	0d	0d	0d	Consultants.DES	18d	NA	NA	0%	75% Highway Design Submission											
HWY.400.030	57	Prepare 75% Construction Contract Time Determination	Mon 4/12/21	Mon 4/26/21	15d	0d	15d	Consultants.Other	53d	NA	NA	0%	◆ Submit 75% Design Submission											
HWY.400.040	58	Review 75% Highway Design Submission	Fri 4/2/21	Sat 5/1/21	30d	0d	30d	MassDOT.HW	48d	NA	NA	0%												
HWY.400.011	59	Prepare 75% Highway Design Submission Rev1	Sat 5/1/21	Sat 5/1/21	0d	0d	0d	Consultants.DES	48d	NA	NA	0%												
HWY.400.021	60	Submit 75% Highway Design Submission Rev1	Sat 5/1/21	Sat 5/1/21	0d	0d	0d	Consultants.DES	48d	NA	NA	0%	◆ Submit 75% Highway Design Submission Rev1											
HWY.400.041	61	Review 75% Highway Design Submission Rev1	Sat 5/1/21	Sat 5/1/21	0d	0d	0d	MassDOT.HW	48d	NA	NA	0%												
HWY.400.050	62	All Sections 75% Highway Design Comments sent to	Sat 5/1/21	Sat 5/1/21	0d	0d	0d	MassDOT.HW	48d	NA	NA	0%	◆ All Sections 75% Highway Design Comments sent to DE											
HWY.400.070	63	Prepare 75% Design Responses	Sun 5/2/21	Tue 5/11/21	10d	0d	10d	Consultants.DES	85d	NA	NA	0%												
HWY.400.080	64	Comment Resolution Meeting @75% (Full Team)	Tue 5/11/21	Tue 5/11/21	0d	0d	0d	MassDOT.PM	85d	NA	NA	0%	◆ Comment Resolution Meeting @75% (Full Team)											
HWY.450	65	100% Highway Design Submission	Sun 5/2/21	Sat 9/18/21	140d	0d	140d		48d	NA	NA	0%	100% Highway Design Submission											
HWY.450.010	66	Prepare 100% Highway Design Submission	Sun 5/2/21	Mon 8/9/21	100d	0d	100d	Consultants.DES	48d	NA	NA	0%												
HWY.450.020	67	Submit 100% Design Submission	Mon 8/9/21	Mon 8/9/21	0d	0d	0d	Consultants.DES	69d	NA	NA	0%	◆ Submit 100% Design Submission											
HWY.450.030	68	Finalize Construction Contract Time Determination	Fri 8/20/21	Fri 9/3/21	15d	0d	15d	Consultants.Other	74d	NA	NA	0%												
HWY.450.040	69	Review 100% Highway Design Submission	Tue 8/10/21	Wed 9/8/21	30d	0d	30d	MassDOT.HW	69d	NA	NA	0%												
HWY.450.011	70	Prepare 100% Highway Design Submission Rev1	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	Consultants.DES	69d	NA	NA	0%												
HWY.450.021	71	Submit 100% Design Submission Rev1	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	Consultants.DES	69d	NA	NA	0%	◆ Submit 100% Design Submission Rev1											
HWY.450.041	72	Review 100% Highway Design Submission Rev1	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	MassDOT.HW	69d	NA	NA	0%												
HWY.450.070	73	Prepare 100% Design Responses	Thu 9/9/21	Sat 9/18/21	10d	0d	10d	Consultants.DES	69d	NA	NA	0%												
HWY.450.080	74	Comment Resolution Meeting @100% (Full Team)	Sat 9/18/21	Sat 9/18/21	0d	0d	0d	MassDOT.PM	69d	NA	NA	0%	◆ Comment Resolution Meeting @100% (Full Team)											
HWY.450.100	75	Approval of 100% Highway Design Submission	Sat 9/18/21	Sat 9/18/21	0d	0d	0d	MassDOT.HW	69d	NA	NA	0%	◆ Approval of 100% Highway Design Submission											
HWY.800	76	PS&E Submittal	Sun 9/19/21	Mon 11/8/21	51d	0d	51d		69d	NA	NA	0%	PS&E Submittal											
HWY.800.010	77	Prepare PS&E Submission	Sun 9/19/21	Mon 10/18/21	30d	0d	30d	Consultants.DES	69d	NA	NA	0%												
HWY.800.020	78	Submit PS&E Submission	Mon 10/18/21	Mon 10/18/21	0d	0d	0d	Consultants.DES	69d	NA	NA	0%	◆ Submit PS&E Submission											
HWY.800.040	79	Review PS&E Submission	Tue 10/19/21	Mon 10/25/21	7d	0d	7d	MassDOT.PM	69d	NA	NA	0%												
HWY.800.045	80	Peer Review of PS&E Submission (if applicable)	Tue 10/26/21	Mon 11/8/21	14d	0d	14d	Consultants.Other	69d	NA	NA	0%												
HWY.800.100	81	Approval of PS&E Submission	Mon 11/8/21	Mon 11/8/21	0d	0d	0d	MassDOT.HW	69d	NA	NA	0%	◆ Approval of PS&E Submission											
HWY.800.110	82	Submit Mylars	Mon 11/8/21	Mon 11/8/21	0d	0d	0d	Consultants.DES	498d	NA	NA	0%	◆ Submit Mylars											
HWY.800.120	83	Highway Design Scope Complete	Mon 11/8/21	Mon 11/8/21	0d	0d	0d	MassDOT.PM	923d	NA	NA	0%	◆ Highway Design Scope Complete											
BRD	84	Highway/Bridge Design	Thu 1/28/21	Sun 6/6/21	130d	0d	130d		1078d	NA	NA	0%	Highway/Bridge Design											

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WBS	ID	Name	Start	Finish	Duration	Actual Duration	Remaining Duration	Responsibility	Total Slack	Act. Start	Act. Finish	% Complete	Timeline											
													1st Quarter Nov	3rd Quarter Jan	1st Quarter Mar	3rd Quarter May	1st Quarter Jul	3rd Quarter Sep	1st Quarter Nov	3rd Quarter Jan	1st Quarter Mar	3rd Quarter May	1st Quarter Jul	3rd Quarter Sep
BRD.600	85	Geotechnical Design	Thu 1/28/21	Sun 6/6/21	130d	0d	130d		1078d	NA	NA	0%	Geotechnical Design											
ENV	92	Environmental	Wed 1/2/19	Sat 10/23/21	1026d	562.54d	463.46d		85d	Wed 1/2/19	NA	55%	Environmental											
ENV.MS	93	Environmental Milestones	Sun 7/25/21	Sat 10/23/21	90d	0d	90d		85d	NA	NA	0%	Environmental Milestones											
ENV.MS.010	94	Wetland Permits Filed - NOI, Other	Sun 7/25/21	Sun 7/25/21	0d	0d	0d	MassDOT.ENV	175d	NA	NA	0%	◆ Wetland Permits Filed - NOI, Other											
ENV.MS.020	95	Issue Environmental Clearance	Sat 10/23/21	Sat 10/23/21	0d	0d	0d	MassDOT.ENV	85d	NA	NA	0%	◆ Issue Environmental Clearance											
ENV.151	96	25% Early Environmental Coordination	Wed 1/2/19	Fri 12/20/19	353d	353d	0d		0d	Wed 1/2/19	Fri 12/20/19	100%	25% Early Environmental Coordination											
ENV.152	101	State or Federal Historic Review	Thu 11/21/19	Fri 4/3/20	135d	135d	0d		0d	Thu 11/21/19	Fri 4/3/20	100%	State or Federal Historic Review											
ENV.157	107	NEPA-Categorical Exclusion (CE)	Fri 4/2/21	Mon 5/31/21	60d	0d	60d		3d	NA	NA	0%	NEPA-Categorical Exclusion (CE)											
ENV.157.010	108	Prepare Categorical Exclusion	Fri 4/2/21	Fri 4/16/21	15d	0d	15d	Consultants.DES	3d	NA	NA	0%	◆ Prepare Categorical Exclusion											
ENV.157.020	109	Submit Categorical Exclusion	Fri 4/16/21	Fri 4/16/21	0d	0d	0d	Consultants.DES	3d	NA	NA	0%	◆ Submit Categorical Exclusion											
ENV.157.030	110	Review Categorical Exclusion	Sat 4/17/21	Sat 5/1/21	15d	0d	15d	MassDOT.ENV	3d	NA	NA	0%	◆ Review Categorical Exclusion											
ENV.157.040	111	Review Categorical Exclusion by FHWA	Sun 5/2/21	Mon 5/31/21	30d	0d	30d	Agencies.FHWA	3d	NA	NA	0%	◆ Review Categorical Exclusion by FHWA											
ENV.157.050	112	Approve Categorical Exclusion	Mon 5/31/21	Mon 5/31/21	0d	0d	0d	MassDOT.ENV or Agencies.FHWA	3d	NA	NA	0%	◆ Approve Categorical Exclusion											
ENV.171	113	404 Permit - ACOE PGP/SV	Fri 7/31/20	Sat 10/23/21	450d	0d	450d		85d	NA	NA	0%	404 Permit - ACOE PGP/SV											
ENV.171.010	114	Prepare ACOE PGP/SV	Fri 7/31/20	Sat 8/29/20	30d	0d	30d	MassDOT.ENV	415d	NA	NA	0%	◆ Prepare ACOE PGP/SV											
ENV.171.020	115	File ACOE Permit Application	Sun 7/25/21	Sun 7/25/21	0d	0d	0d	MassDOT.ENV	85d	NA	NA	0%	◆ File ACOE Permit Application											
ENV.171.030	116	Agency Review ACOE Application	Mon 7/26/21	Sat 10/23/21	90d	0d	90d	Agencies.ACOE	85d	NA	NA	0%	◆ Agency Review ACOE Application											
ENV.171.040	117	Approve ACOE PGP/SV	Sat 10/23/21	Sat 10/23/21	0d	0d	0d	Agencies.ACOE	85d	NA	NA	0%	◆ Approve ACOE PGP/SV											
ENV.173	118	De minimis 4(f) N/A	Tue 2/4/20	Tue 4/28/20	85d	85d	0d		0d	Tue 2/4/20	Tue 4/28/20	100%	De minimis 4(f) N/A											
ENV.182	126	Water Quality Certification	Fri 4/2/21	Sun 8/29/21	150d	0d	150d		140d	NA	NA	0%	Water Quality Certification											
ENV.182.010	127	Prepare Draft WQC	Fri 4/2/21	Sat 5/1/21	30d	0d	30d	Consultants.DES	140d	NA	NA	0%	◆ Prepare Draft WQC											
ENV.182.020	128	Submit Draft WQC	Sat 5/1/21	Sat 5/1/21	0d	0d	0d	Consultants.DES	140d	NA	NA	0%	◆ Submit Draft WQC											
ENV.182.030	129	Review Draft WQC	Sun 5/2/21	Mon 5/31/21	30d	0d	30d	MassDOT.ENV	140d	NA	NA	0%	◆ Review Draft WQC											
ENV.182.040	130	File WQC	Mon 5/31/21	Mon 5/31/21	0d	0d	0d	MassDOT.ENV	140d	NA	NA	0%	◆ File WQC											
ENV.182.050	131	Agency Review WQC	Tue 6/1/21	Sun 8/29/21	90d	0d	90d	Agencies.DEP	140d	NA	NA	0%	◆ Agency Review WQC											
ENV.182.060	132	Issue Water Quality Certification	Sun 8/29/21	Sun 8/29/21	0d	0d	0d	Agencies.DEP	140d	NA	NA	0%	◆ Issue Water Quality Certification											
ENV.185	133	Notice of Intent	Wed 5/12/21	Tue 8/24/21	105d	0d	105d		85d	NA	NA	0%	Notice of Intent											
ENV.185.010	134	Prepare Draft NOI	Wed 5/12/21	Fri 6/25/21	45d	0d	45d	Consultants.DES	85d	NA	NA	0%	◆ Prepare Draft NOI											
ENV.185.020	135	Submit Draft NOI	Fri 6/25/21	Fri 6/25/21	0d	0d	0d	Consultants.DES	85d	NA	NA	0%	◆ Submit Draft NOI											
ENV.185.030	136	Review Draft NOI	Sat 6/26/21	Sun 7/25/21	30d	0d	30d	MassDOT.ENV	85d	NA	NA	0%	◆ Review Draft NOI											
ENV.185.040	137	Municipality Review NOI	Mon 7/26/21	Tue 8/24/21	30d	0d	30d	Other.Municipality	145d	NA	NA	0%	◆ Municipality Review NOI											
ENV.185.050	138	Issue Order of Conditions	Tue 8/24/21	Tue 8/24/21	0d	0d	0d	Other.Municipality	145d	NA	NA	0%	◆ Issue Order of Conditions											
ROW	139	Right of Way	Wed 7/24/19	Thu 1/13/22	905d	134.85d	770.15d		3d	Wed 7/24/19	NA	15%	Right of Way											
ROW.501	140	25% ROW Plans	Wed 7/24/19	Mon 2/3/20	195d	195d	0d		0d	Wed 7/24/19	Mon 2/3/20	100%	25% ROW Plans											
ROW.503	147	Preliminary Municipal ROW Plans	Fri 7/31/20	Thu 1/13/22	532d	0d	532d		3d	NA	NA	0%	Preliminary Municipal ROW Plans											
ROW.503.01	148	Municipal Review Process	Mon 2/1/21	Wed 9/8/21	220d	0d	220d		3d	NA	NA	0%	Municipal Review Process											
ROW.503.01.010	149	Prepare 75% ROW Plans	Mon 2/1/21	Thu 4/1/21	60d	0d	60d	Consultants.DES	3d	NA	NA	0%	◆ Prepare 75% ROW Plans											
ROW.503.01.020	150	Submit 75% ROW Plans	Thu 4/1/21	Thu 4/1/21	0d	0d	0d	Consultants.DES	3d	NA	NA	0%	◆ Submit 75% ROW Plans											
ROW.503.01.030	151	Review 75% ROW Plans	Fri 4/2/21	Sat 5/1/21	30d	0d	30d	MassDOT.ROW	3d	NA	NA	0%	◆ Review 75% ROW Plans											
ROW.503.01.011	152	Prepare 75% ROW Plans Rev1	Sat 5/1/21	Sat 5/1/21	0d	0d	0d	Consultants.DES	3d	NA	NA	0%	◆ Prepare 75% ROW Plans Rev1											
ROW.503.01.021	153	Submit 75% ROW Plans Rev1	Sun 5/2/21	Mon 5/31/21	30d	0d	30d	Consultants.DES	3d	NA	NA	0%	◆ Submit 75% ROW Plans Rev1											
ROW.503.01.031	154	Review 75% ROW Plans Rev1	Mon 5/31/21	Mon 5/31/21	0d	0d	0d	MassDOT.ROW	3d	NA	NA	0%	◆ Review 75% ROW Plans Rev1											
ROW.503.01.040	155	Approve 75% ROW Plans	Mon 5/31/21	Mon 5/31/21	0d	0d	0d	MassDOT.ROW	3d	NA	NA	0%	◆ Approve 75% ROW Plans											
ROW.503.01.012	156	Prepare 100% ROW Plans	Fri 6/11/21	Mon 8/9/21	60d	0d	60d	Consultants.DES	48d	NA	NA	0%	◆ Prepare 100% ROW Plans											
ROW.503.01.022	157	Submit 100% ROW Plans	Mon 8/9/21	Mon 8/9/21	0d	0d	0d	Consultants.DES	48d	NA	NA	0%	◆ Submit 100% ROW Plans											
ROW.503.01.032	158	Review 100% ROW Plans	Tue 8/10/21	Wed 9/8/21	30d	0d	30d	MassDOT.ROW	48d	NA	NA	0%	◆ Review 100% ROW Plans											
ROW.503.01.013	159	Prepare 100% ROW Plans Rev1	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	Consultants.DES	48d	NA	NA	0%	◆ Prepare 100% ROW Plans Rev1											
ROW.503.01.023	160	Submit 100% ROW Plans Rev1	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	Consultants.DES	48d	NA	NA	0%	◆ Submit 100% ROW Plans Rev1											
ROW.503.01.033	161	Review 100% ROW Plans Rev1	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	MassDOT.ROW	48d	NA	NA	0%	◆ Review 100% ROW Plans Rev1											
ROW.503.01.050	162	Approve 100% ROW Plans	Wed 9/8/21	Wed 9/8/21	0d	0d	0d	MassDOT.ROW	48d	NA	NA	0%	◆ Approve 100% ROW Plans											
ROW.503.02	163	Municipal Acquisition Process	Fri 7/31/20	Thu 1/13/22	532d	0d	532d		3d	NA	NA	0%	Municipal Acquisition Process											
ROW.503.02.010	164	Hold Town Meeting	Fri 7/31/20	Sun 12/27/20	150d	0d	150d	Other.Municipality	158d	NA	NA	0%	◆ Hold Town Meeting											
ROW.503.02.020	165	Perform Title Exams (All TPI)	Tue 6/1/21	Thu 7/15/21	45d	0d	45d	Other.Municipality	3d	NA	NA	0%	◆ Perform Title Exams (All TPI)											
ROW.503.02.030	166	Contact Property Owners	Fri 7/16/21	Fri 9/3/21	50d	0d	50d	Other.Municipality	3d	NA	NA	0%	◆ Contact Property Owners											
ROW.503.02.040	167	Perform Appraisals (All TPI)	Sat 9/4/21	Sat 10/23/21	50d	0d	50d	Other.Municipality	3d	NA	NA	0%	◆ Perform Appraisals (All TPI)											
ROW.503.02.050	168	Prepare Layout Taking Plans & Instrument	Tue 6/1/21	Wed 6/30/21	30d	0d	30d	Consultants.DES	74d	NA	NA	0%	◆ Prepare Layout Taking Plans & Instrument											
ROW.503.02.060	169	Submit Layout TPIs	Wed 6/30/21	Wed 6/30/21	0d	0d	0d	Consultants.DES	74d	NA	NA	0%	◆ Submit Layout TPIs											
ROW.503.02.070	170	Review Layout TPIs	Thu 7/1/21	Wed 7/7/21	7d	0d	7d / and Other.Municipality	74d	NA	NA	0%	◆ Review Layout TPIs												

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A photograph of a wooden bridge over a lake with autumn foliage in the background. The bridge is made of light-colored wood and has a railing with vertical slats. The lake is calm, reflecting the surrounding trees and the bridge. The trees are in various stages of autumn, with some leaves turned red, orange, and yellow. The sky is clear and blue. In the foreground, there is a grassy bank with some dry grass and a small tree.

SECTION
E

Project Team

Lake of Isles Bridge, North Stonington, CT

Section 5: Project Team Information

The Fuss & O'Neill team is passionate, committed and responsive. Our team brings years of experience working on MassDOT and community projects with similar goals and challenges to the BFRT. What makes us unique is our in-house and diverse backgrounds in engineering, public outreach, sustainable design and protecting the environment. ***We solve problems collectively and work as one team to provide our clients with solutions that are feasible, low impact and supported by the community.***



Town of Sudbury, MA

Principal - in- Charge Kevin Johnson, PE, PTOE, NETTCP	Project Manager Nicholas Lapointe, PE	
Chief Resilience Officer Diane Mas, PhD, REHS/RS	QA/QC Stephen Savaria, PE, PTOE	

Planning and Community Engagement Arnold Robinson, AICP Charrettes/Community Outreach Matthew Skelly, PE, PTOE Branding/Graphics/Visualization Stephanie White, RLA, CNU-A, LEED AP COVID/Social Distancing Compliance Robert Levandoski, CSP, CIH, CHMM Historical/Cultural Permitting Arnold Robinson, AICP Landscape Architecture Jonathan Allard, PLA Website Design Phillip Cassidy	Shared Use Path Design Nicholas Lapointe, PE Bridge and Structural Engineering Jaime French, PE Bicycle/Pedestrian/ADA Accommodations Nicole Fox, PE Wayfinding, Signs and Markings Matthew Taylor, PE Utilities/Site Design Eric Bernardin, PE, LEED AP Traffic Engineering/Grade Crossings Mark Vertucci, PE, PTOE Geotechnical Engineering Andrea Judge, PE Survey and Right-of-Way GCG Associates, Inc.*	Sustainable Design Eileen Gunn Green Infrastructure Dean Audet, PE Wetlands Joshua Wilson, PWS Flood Resiliency Julianne Busa, PhD, SE Stormwater Treatment/Management Erik Mas, PE Permitting Victoria Houle, PE Eco-Friendly Lighting Kevin Sullivan, PE, LEED AP Hazardous Materials Daniel LaFrance, PE, LSP
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* Subconsultant



Project Team Summary

We have assembled a team of highly qualified engineers and scientists with extensive experience in their respective fields for this project. This team of seasoned professionals has worked together on numerous projects and is adept at coordinating various tasks seamlessly into the framework of the overall project and achieving or exceeding project goals. The narrative below summarizes the qualifications of key staff and outlines their roles for this project. Resumes for the full team follow.



**Kevin Johnson, PE,
PTOE, NETTCP**
Principal-in-Charge

Kevin is an Executive Vice President at Fuss & O'Neill and will serve as the Principal-in-Charge on this project. His leadership and experience translate to transportation solutions that improve existing infrastructure and establish long-term safety. He understands how innovative design can promote economic development and create livable communities. He considers projects from all angles: safety, public usability, stakeholder concerns, future growth, feasibility, practicality, funding, and constructability. Kevin works to deliver a project that exceeds your expectations.



Nicholas Lapointe
Project Manager, Task Manager –
Shared Use Path Design

Nick is an expert at MassDOT project delivery and managing complex multidisciplinary projects. He has a successful portfolio of managing rail trail projects, including the 2 mile extension of the famous Ashuwillticook Rail Trail in the Berkshires as well as the historic Redstone Rail Trail in East Longmeadow. Nick has been put in a leadership role at Fuss & O'Neill due to his responsiveness to clients and ability to “bring projects over the finish line” and getting them to advertisement and eventual construction.

“I believe in engaging with clients to really understand the ‘why’ behind a project. That will often result in a more comprehensive and conscientious design that works for the client and its users. It would be an honor to work on such a monumental project for Sudbury and the entire region. I’m extremely excited about that potential opportunity.”

“My job is about making connections between the best uses of community spaces and the residences of those communities. I look forward to engaging with key stakeholders and community members to learn more about how our team can develop the best solution possible for the Bruce Freeman Rail Trail.”



Arnold Robinson, AICP

Task Manager - Planning and Community Engagement

Arnold's diverse role at Fuss & O'Neill includes community planner, public process designer and facilitator, and historic buildings and communities consultant. He is passionate about effectively and efficiently engaging community residents, public officials and diverse stakeholders in the planning and review process in order to maximize consensus and minimize project delays.



Eileen Gunn

Task Manager - Sustainable Design

Eileen is seasoned veteran of the transportation industry and a familiar face to the Town of Sudbury. She is the former Municipal Grants Program Administrator for MassDOT's Highway Division and was responsible for assisting municipalities in all aspects of program and project implementation.

Her expertise includes water quality monitoring and environmental health education. At Fuss & O'Neill, she assists municipalities throughout Massachusetts to identify and meet their transportation and community-wide resiliency needs.

“Having worked in Sudbury during my years at MassDOT, I look forward to coming back to the area and putting my local knowledge to good use. Now at Fuss & O'Neill, I often work as a liaison to MassDOT and I work to hone in on the sustainable elements that can really make a difference on a project.”

“I work with communities to plan for and protect against climate change. Our team develops scopes and designs with resilience in mind, and it's my duty to our clients to evaluate and recommend solutions that will keep their facilities safe and functioning for all of their residents.”



Diane Mas, PhD, REHS/RS

Chief Resilience Officer

Diane is Chief Resilience Officer at Fuss & O'Neill, and a founding member of the company's environmental impact assessment practice. She has spent nearly 25 years working in the areas of water quality modeling, watershed management, and environmental impact assessment. She focuses on climate change resilience, helping communities develop strategies to help protect their facilities against adverse environmental impacts.



Stephen Savaria, PE, PTOE

QA/QC

With 40 years of transportation engineering experience, Steve is a valuable resource and will thrive in his role as QA/QC Manager for this project. He has extensive experience and technical expertise in the analysis, design, and specification of intersection geometrics, traffic signal system operation and equipment, signage and pavement markings, and pedestrian facilities and accessibility compliance.

“During my 40-year career, I have continually approached complex projects with the end-user in mind. Achieving a quality design not only takes strong technical expertise, but also takes a commitment to the needs of the client and the projects' users. I take this collaborative approach to every project on which I work.”

"Bridges connect people. During my career I have been able to work on some really interesting structural projects, but I always seem to enjoy projects that are really geared toward pedestrian and recreational users. The Bruce Freeman Rail Trail is such a great project that can connect so many throughout the region, and that is very exciting to me."



Jaime French, PE

Bridge and Structural Engineering
Jaime has 20 years of experience working on bridge and structural projects across New England. She works frequently with municipalities to design, maintain and inspect bridges. Jaime also has experience with MassDOT projects, including the management of successful bridge design in Stow, Great Barrington, Brookfield, Springfield, and Deerfield. She blends technical aptitude with a collaborative approach that leaves clients delighted.



Joshua H. Wilson, PWS

Wetlands

Josh is a Senior Ecologist and Risk Assessor with Fuss & O'Neill. He is a Professional Wetlands Scientist that has extensive field experience in the disciplines of soil science, botany, wildlife biology, and wetland ecology with 19 years of experience, Josh serves as Fuss & O'Neill's principal in-house wetland scientist and certified soil scientist. He coordinates with Federal, State and local authorities to ensure that wetland and permitting regulations are met on his projects.

"As a professional wetlands scientist, it's not only my job, but it is a passion of mine to serve the natural environment. When a potential client like the Town of Sudbury shows that they are equally committed to preserving the integrity of the natural landscape, it is energizing to me, and is the type of client with whom I want to work."

Our Teaming Partner

Supporting the Fuss & O'Neill team with survey and ROW needs on the BFRT is our subconsultant, GCG Associates Inc. GCG has a proven record of expertise in the research and location of boundaries and the preparation of legal descriptions of easements and fee takings and MassDOT approved right of way plans essential to the project. GCG Associates is a preferred vendor by MassDOT, having held multiple on-call agreements to provide layout, documentation, and easement plan preparation for the Highway Division. Fuss & O'Neill has partnered with GCG on many MassDOT projects, including both phases of the Ashuwillticook Rail Trail for which they provided all necessary plans for both the Rail Division legal team and the City of Pittsfield for them to obtain the ROW Certification from Highway Division.

GCG's point of contact is Michael Carter, PE, PLS. He can be reached at 84 Main Street, Wilmington, MA 01887 or at mike.carter@gcgassociates.net or at 978-657-9714. Survey and ROW services provided GCG are included in the MassDOT workbook tasks.



Kevin Johnson, PE, PTOE, NETTCP

Principal-in-Charge

"I am energized by the ability to lead and collaborate with my team on infrastructure projects that positively impact the lives of so many people while partnering with our clients to ensure we are developing the best solution for long-lasting improvements."

kjohnson@fando.com

800.286.2469 x4541

EDUCATION

BS, Civil Engineering - 1992
Roger Williams University

LICENSES & REGISTRATIONS

Professional Engineer RI
Professional Engineer MA
Professional Traffic Operations
Engineer

PROFESSIONAL AFFILIATIONS

Inst Transportation Engineers
Women in Transportation (WTS)
ACEC - RI
Intl Bridge and Tunnel Assoc

EXPERIENCE

26 years Professional Experience

Kevin brings more than 25 years of experience in transportation engineering, which includes a strong focus on highway, bridge, design-build, and traffic-related projects. Kevin has managed a wide range of projects for municipalities and Departments of Transportation throughout New England. He has a wealth of experience managing large-scale DOT and municipal transportation programs with multidisciplinary teams, specializing in: engineering and construction management projects for highways, ITS, tolling, intersection improvements, pavement management programs, traffic signal design, traffic management plans, traffic calming, transportation planning, multimodal/bicycle/pedestrian accommodations, roundabout design, and federal/state/municipal project funding. Kevin builds strong teams, both internally to support projects and externally to realize the visions of his clients.

REPRESENTATIVE PROJECTS:

Highway Projects, MassDOT: As Officer-in-Charge and Program Manager, Kevin was responsible for the quality of work, resources and timely deliverables to MassDOT. He has worked on numerous federal and state funded roadway and traffic projects throughout his career for MassDOT including several statewide, on-call contracts with various sections of MassDOT. These contracts include: Bridge Section - Statewide Hydraulic and Hydrological Engineering Services (Contract No. 63601); Highway Section - Statewide Engineering Design and Review Services (Contract No. 68386).

Acushnet Avenue Phase I, New Bedford, MA: As Project Manager, Kevin managed the final design of a 2-mile arterial roadway. The project involved right-

of-way acquisitions, closed loop traffic signals, drainage improvements, pedestrian facilities, ADA accessibility and bicycle lanes. The project also required early environmental coordination and developing plans and specifications in accordance with MassDOT guidelines since this project was listed on the Transportation Improvement Program.

All Electronic Tolling System (AETS), MassDOT: As Lead Design Manager, Kevin served as Infrastructure Design Manager for the \$130m design/build, 124-mile tolling infrastructure project along Interstate I-90 between the New York state line and Exit 14 in Weston. The roadway tolling infrastructure involves the final design to accommodate tolling collection systems at 16 proposed locations. Under his management, the work included new highway resurfacing, guardrail design, gantry foundations and structures, electrical and communications. Kevin was also responsible for ensuring environmental and ROW compliance on the project.

Pleasant Street Improvements, Brockton, MA: As Project Manager, Kevin managed the study and design of roadway improvements on Pleasant Street (Route 27) in Brockton. The project was 2-miles-long and required close coordination with the city and Massachusetts Department of Transportation MassDOT since the construction of the project was to be funded with state and federal money. The project development included a MassDOT Design Exception Report for narrow shoulders, pavement design, elimination of four high hazardous intersections, box widening, ADA accessibility, cold planing, reclamation, signing and stripping. Also included was the installation of six new traffic signal locations and coordination among four of them.

Traffic and Infrastructure Improvements,

Holbrook, MA: As Project Manager, Kevin managed the study and design of traffic and infrastructure improvements to Holbrook Square. The design included full-depth roadway reconstruction, ADA-conforming sidewalks and ramps, closed-loop traffic signals, period lighting, pedestrian and bicycle facilities, closed drainage system, and streetscaping to revitalize the downtown. Besides design services, he provided funding assistance for additional work to be included in this project, participated in public presentations, and prepared construction bid documents.

Traffic Signal Improvements, West Springfield,

MA: As Project Manager, Kevin managed the study, analysis, modeling, and design of traffic signal improvements for Riverdale Road (Route 5). The design included closed-loop coordination of four signals along Riverdale Road, including a new signalized driveway at National Amusements Cinemas. Besides design services, he provided permitting and analyses for each location. Traffic signal coordination perimeters were selected based on time-of-day and day-of-year events.

Brenton Road Reconstruction, Newport, RI:

As Project Manager, Kevin managed the mile-long roadway reconstruction project for Brenton Road. The project included full-depth reclamation, edge drains, drainage swales, and wetland permitting. Key to the project's success was the interactive meeting with the town and abutters to the site area. Kevin also designed alternative drainage features that met Best Management Practices (BMPs) while removing runoff and groundwater from the pavement and base course.



Nicholas Lapointe, PE

Project Manager

“It is very rewarding to be involved with projects that bring the once vibrant and bustling downtown streets of our communities back to life through creative streetscape and transportation designs.”

NLapointe@fando.com

800.286.2469 x4425

EDUCATION

BS, Civil / Environmental Engineering - 2008
University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer MA

PROFESSIONAL AFFILIATIONS

Inst Transportation Engineers

EXPERIENCE

13 years at Fuss & O'Neill
2 years at MassHighway Department

Nick has been responsible for numerous highway design projects and traffic engineering studies in Massachusetts and throughout Connecticut. Nick is highly versed in MassDOT design procedures and has coordinated many projects through the state review process into construction. He has assisted numerous communities in acquiring TIP funding and MassWorks infrastructure grants.

Nick's experience includes preliminary and final geometric design of highways and intersections, preparation of construction plans and cost estimates for large highway projects, bike path/rail trail design, Complete Streets implementation and design, parking lot design, municipal and college campus parking studies, traffic signal design, traffic impact studies, and multiple highway design projects conforming to MassDOT design standards.

REPRESENTATIVE PROJECTS:

Pittsfield/Lanesborough Ashuwillticook Rail

Trail Extension, Phase 1, Pittsfield, MA: Nick served as Project Manager for this MassDOT rail trail extension that provides bike and pedestrian trail connection to the north section of Pittsfield with the existing Ashuwillticook Trail in Lanesborough and Cheshire. Nick coordinated architectural designs and permitting of fully plumbed Public Restroom comfort station and trail maintenance facility. The team also designed two new parking lots (totaling 90 spaces), permitting in Pittsfield for stormwater by-law, detention and infiltration, wetland replication, compensatory flood design and culvert replacements. The project had complex right-of-way and MassDOT Lease Agreements, and Nick led multiple stakeholder meetings and all coordination efforts.

Redstone Rail Trail, East Longmeadow, MA: Nick was the Senior Project Engineer and Path Task Manager on this complex urban rail trail through the heart of East Longmeadow. This 1.6 mile trail on former rail bed included refurbishment of the former E.L. Rail station, linear stormwater BMP swales, historic markers, MEPA permitting, and significant amount of coordination with abutters, including major employers such as American Saw Company and Hasboro Gaming.

Connecticut Riverwalk/Agawam Bike Loop, Agawam, MA: Lead Project Engineer on the development of a 10' Shared-Use paved path extending along School Street. This project connected the Connecticut Riverwalk and Bikeway to the School Street wetlands conservation area. The design included over 1,300 feet of Mechanically Stabilized Earth (MSE) retaining walls to avoid impacting the conservation area. Environmental permitting included NOI, ACOE, and MEPA permits resulting in the design of a compensatory flood storage basin. Also included was wetland overlook areas and reclamation/reconstruction of over 1 mile of School Street.

Pittsfield/Lanesborough Ashuwillticook Rail Trail Extension, Phase 2, Pittsfield, MA: Nick served as Project Manager for this MassDOT rail trail extension from Crane Avenue to Merrill Road. with Phase 1 of the 10 mile trail being mostly rural/wooded, this phase representing the cities first major connection of the trail to a commercial center and place of major economic activity.

Foster Street Pedestrian and Roadway Improvements, Town of Littleton, MA: Nick was the Project Manager for transportation enhancements to support the MBTA commuter rail station, adjacent commercial and residential development, and vehicular movement along Foster Street. Project highlights include 3/4 mile, 10'

shared use path underneath Route 2, horizontal and vertical alignment improvements, upgrades to the drainage system, realignment of grime lane out of skew angle with MBTA rail to improve safety, installation of pedestrian scale lighting along the path at the MBTA station, full depth pavement reclamation, significant public and private utility relocations, and potential signals and/or roundabouts. Nick has assisted the Town in securing TIP funding by providing preliminary project development/planning, data and base map collection, and concept preparation. This project is currently programed on FY2024 TIP.

Broadway Ave./Memorial Ave. (Route 33) Signal and Corridor Improvements, Chicopee, MA: Nick was the Senior Project Engineer on this complex MassDOT signal project involving three major intersections. Broadway Ave is a 4-lane principal arterial that is the primary link to the Deedy Bridge and Route 33 commercial region. Improvements included GPS coordinated signal timing plan, ADA/Sidewalk upgrades, full pavement replacement, drainage improvements, retaining wall installation, landscape improvements, and significant geometric changes at all intersections. This project involved extensive traffic analysis and review with MassDOT and City officials.

North Street Phase 3 and 4 Streetscape, Pittsfield, MA: Phase 3 and Phase 4 streetscape projects involved bringing North Street back to life through innovative landscape and streetscape design, made possible by MassWork's Infrastructure grants. Nick served as the Project Manager, which focused on the pedestrian experience and making downtown a place people want visit. The projects totaled complex downtown urban streetscape and pedestrian design.



Eileen Gunn

Sustainable Design Task Manager

“When I was a young, learning about synthetic chemicals polluting our environment sparked my life-long passion for environmental protection. Climate resiliency is now an all hands on deck situation, and I want to utilize my skills and experience to develop and implement innovative solutions.”

egunn@fando.com

800.286.2469 x4720

EDUCATION

BA, Geology - 1985
University of Connecticut

MA, Urban Planning - 1998
Tufts University

EXPERIENCE

30 years Professional Experience

Eileen is a Transportation Business Line Manager in our Boston office. With her broad range of skills and knowledge, she assists municipalities throughout Massachusetts to identify and meet their transportation and community-wide resiliency needs.

Prior to joining Fuss & O'Neill she served as the Municipal Grants Program Administrator for Massachusetts Department of Transportation's (MassDOT) Highway Division and was responsible for assisting municipalities in all aspects of program and project implementation. She co-developed and managed the Complete Streets Funding Program and administered the Small Bridge Funding Program. In addition, she worked on the environmental review of transportation projects, asset climate vulnerability assessment, toxic use reduction, hazard communication and sustainable transportation efforts.

REPRESENTATIVE PROJECTS:

Municipal Vulnerability Preparedness Action

Grants, Multiple Communities, MA: Provided coordination and preparation of Action Grant applications for various communities throughout Massachusetts. Each application aimed to build on the top priorities identified through the MVP planning process. All applications were successfully funded.

Shared Streets Grants, Multiple Communities,

MA: Provided coordination and preparation of Shared Streets Grant applications for various communities throughout Massachusetts including Quincy, Dalton, and Belchertown. Each application involved the conceptualization of the projects and writing/reviewing the grant applications.

Complete Streets Vision Plan, New Britain, CT:

Eileen is the Project Manager for the development of the Complete Streets Vision plan for the City of New Britain, CT.

The following is experience prior to joining Fuss & O'Neill:

Municipal Grants Program Administrator, Highway Administrator's Office, Massachusetts Department of Transportation

Sustainable Transportation Manager, Planning Division, Massachusetts Department of Transportation

Program Manager, Asthma Regional Council of New England, Program of Health Resources in Action, MA National Pesticide-free Lawns Coalition and Alliance for Informed Mosquito Management National Campaign

Manager, Beyond Pesticides, Washington, DC

Toxics Use Reduction Institute Community Program Manager, UMASS Lowell, Lowell, MA

Water Quality Monitoring Program Manager, Buzzards Bay Coalition, Buzzards Bay, MA

Geologist/Project Manager, IEP, Inc., Sandwich, MA

Environmental Analyst, Water Compliance Unit, Connecticut Department of Environmental Protection, Hartford, CT



Arnold Robinson, AICP

Planning and Community Engagement Task Manager

"I'm so proud that the people I work with, the planners, engineers, preservationists, architects and citizen activists, can look at the world and see all the possible futures. They can see past the abandoned building, the polluted site, the flooded river and envision a future condition that is so much better. Even more impressive, after they have a vision, they have the skills and drive to make it happen!"

arobinson@fando.com

800.286.2469 x4597

EDUCATION

BA, American Studies - 1987
Bates College

MA, Preservation Studies - 1994
Boston University

LICENSES & REGISTRATIONS

AICP

EXPERIENCE

32 years Professional Experience

Arnold has been practicing in the fields of community planning, historic preservation and rehabilitation, education, and urban design for more than 30 years. His expertise includes work in the public, private and not-for-profit sectors as project manager, executive director, and designer. His diverse career has included master planning, feasibility analysis, multidisciplinary project collaboration, site design, public process facilitation, regulatory permitting, historic rehabilitation project design, bidding and construction administration.

Arnold's diverse role at Fuss & O'Neill includes community planner, public process designer and facilitator, and historic buildings and communities consultant. He is passionate about effectively and efficiently engaging community residents, public officials and diverse stakeholders in the planning and review process in order to maximize consensus and minimize project delays.

REPRESENTATIVE PROJECTS:

Bristol Bicycle Connector Improvements, Bristol, RI: Arnold is serving as project manager for the planning and design effort in Bristol to create safe and convenient bicycle and pedestrian connections between the terminus of the East Bay Bike Path and the southern areas of town. The project conducted an alternatives analysis to evaluate four potential routes, and then implemented an intensive community engagement process that included online meetings, a robust project website, community surveys and GIS-based mapping and public commenting tools to receive input from residents and key stakeholders to build consensus for a preferred route and facility design. Community engagement has continued through online avenues and socially-distanced community events during the pandemic.

Placemaking and Bike Path Improvements,

Warren, RI: Arnold served as project manager for bike path improvements for in Warren, RI which increased safety and urban design function at one of the busiest bike/roadway crossings in the state. Improvements included integration of public sitting areas, bike parking areas and public art installation/performance areas that mesh with existing local businesses and attractions.

Municipal Vulnerability Preparedness (MVP) Program Grant Applications and Project Implementation, Statewide, MA:

Arnold served as planning lead for Fuss & O'Neill's Municipal Vulnerability Preparedness (MVP) Program Grant practice, which assisted municipalities across Massachusetts identify threats and hazards associated with climate change and flooding events. Our team works with municipality officials to acquire funding for these projects, mitigate these challenges as well as develop strategies to implement long-term solutions.

Integrated Economic Redevelopment and Flood Resilience Plan, Brockton, MA:

Arnold is serving as team Planner and community engagement coordinator for the City of Brockton's integrated comprehensive planning to understand and make decisions about flood prone areas that should be abandoned and restored to natural conditions, allowing the City to focus on active redevelopment of more viable, sustainable sites in other areas.

Transit-oriented Area Planning for BUILD Funding,

Manchester, NH: Arnold provided planning and community engagement services for this community planning charrette and transit-oriented economic development study for the City of Manchester. More

than 80 stakeholders and municipal officials joined forces to create a consensus vision for a 120-acre area of the city that has the potential to become vibrant housing and economic revitalization.

Jenks Park Site Improvements, Central Falls,

RI: Arnold is serving as project manager for comprehensive site improvements for historic Jenks Park in Central Falls, RI. The Park serves as the "living room" for this dense urban community; as its playground, debate stage, schoolroom, performance stage and green oasis. Planning involves a broad range of constituencies from dozens of cultures.

The following projects were completed prior to joining Fuss & O'Neill:

- Expert Witness Testimony Regarding Historic Preservation and Planning and Zoning, Various Locations, RI, CT, and MA
- Fort Adams Rehabilitation, Newport, RI
- Plum Beach Lighthouse Restoration, North Kingston, RI
- Inn at Castle Hill Rehabilitation and Historic Tax Credit Certification, Newport, RI
- Aquidneck Mill/International Yacht Restoration School Rehabilitation and Historic Tax Credit Certification, Newport, RI
- Belvedere Hotel Rehabilitation and Historic Tax Credit Certification, Bristol, RI
- Animal Shelter Siting Feasibility Assessment, Town of Bristol, RI
- Shoreby Hill National Register Nomination, Town of Jamestown, RI
- Historic District Community Workshops, Town of Jamestown, RI



Stephen Savaria, PE, PTOE

QA/QC

“Since the pyramids, our built environment has been as much the result of political and financial imperatives as scientific and technological innovation. I believe as design professionals our task is to inform the process as much as possible with consideration of societal benefit, public safety, and our legacy to future generations.”

SSavaria@fando.com

800.286.2469 x4434

EDUCATION

BS, Civil Engineering - 1979
Northeastern University

LICENSES & REGISTRATIONS

Professional Engineer MA
Professional Traffic Operations
Engineer

PROFESSIONAL AFFILIATIONS

Inst Transportation Engineers
Springfield Regional Chamber

EXPERIENCE

40 years Professional Experience

Steve is a Senior Project Manager in the Springfield office and has served in responsible charge for all aspects of the planning, permitting, and design of transportation construction projects throughout New England. He has extensive experience in the analysis, design, and specification of intersection geometrics, traffic signal system operation and equipment, signage and pavement markings, pedestrian facilities and accessibility compliance, and methods, measures, and techniques for the alleviation of congestion and the promotion of traffic safety. Steve is an expert in the assessment of the transportation characteristics, requirements and impacts of private commercial, institutional, and residential development projects.

REPRESENTATIVE PROJECTS:

Connecticut Riverwalk/Agawam Bike Loop,

Agawam, MA: Project Manager on the development of a 10' Shared-Use paved path extending along School Street. This project connected the Connecticut Riverwalk and Bikeway to the School Street wetlands conservation area. The design included over 1,300 feet of Mechanically Stabilized Earth (MSE) retaining walls to avoid impacting the conservation area. Environmental permitting included NOI, ACOE, and MEPA permits resulting in the design of a compensatory flood storage basin. Also included was wetland overlook areas and reclamation/reconstruction of over 1 mile of School Street.

The “X” Corridor Project, Springfield, MA: Steve is serving as the Project Manager for the “X” Corridor

project in Springfield. Rated as the 16th most dangerous intersection in the State, the City of Springfield sought solutions to address public safety issues, decrease the number of crashes, ease traffic congestion, and create an enhanced “sense of place” by making the area a more walkable environment. The improvements included widening parts of Sumner Avenue to five lanes, adding bike lanes, introducing left turn lanes, installing four new traffic signals, and creating mini-roundabouts at two intersections to create a more aesthetically pleasing pedestrian environment while balancing the needs of motor vehicles.

Main Street Reconstruction, Great Barrington, MA:

Project manager for the reconstruction of Main Street from Cottage Street to Taconic Avenue. Planning and design of 1/2 mile downtown corridor improvements. Work included: pavement milling and overlay and full depth reconstruction. Sidewalks reconstructed, drainage improved and traffic signals coordinated. Street lighting and landscaping included. Shared accommodations for all users have been provided in accordance with applicable guidelines.

Route 131 Reconstruction, Southbridge, MA:

Project Manager for the Massachusetts Department of Transportation project to reconstruct approximately 1.9 miles of Route 131 along Main Street and East Main Street. The proposed improvements will take place mostly within the existing roadway with minor widening at intersections for auxiliary lanes. Project features included: installation or upgrading of traffic control signals at five intersections, replacement of the existing storm sewer, replacement of existing sidewalks, new sidewalks, closed loop traffic control

system with spread spectrum radio interconnect.

Boston Road Corridor Improvements, Springfield,

MA: Project Manager for the planning and engineering for the design of roadway and traffic control improvements along Boston Post Road from State Street easterly to the intersection of Pasco Road (Route 20). This roadway required improvements due to sub-standard roadway widths, safety concerns, traffic congestion, lack of pedestrian accessibility, and unacceptable levels of service. Work included data gathering, field survey, solicitation of public input, roadway design, drainage design, traffic control signal design, estimation of costs and advice during construction.

Six Corners Roundabout, Springfield, MA:

Steve served as Project Manager for the City of Springfield to develop intersection improvements in the Six Corners neighborhood. Fuss & O'Neill worked with the City to develop a series of potential roundabout design options for the six-legged intersection, which was plagued with long delays, high crash rates, and unsafe pedestrian accommodations. The design balanced complex geometry challenges to meet the City's integrated goal of improved traffic circulation, improved safety, and creating a public space connecting the neighborhood.

Intersection Signalization, Amherst, MA:

Project Manager for the intersection signalization at Route 9/Gatehouse Road. Implementation of traffic signal control at high hazard location, including widening for auxiliary lanes, right-of-way acquisition, and environmental permitting.



Diane Mas, PhD, REHS/RS

Chief Resilience Officer

“There is a perception that engineering is not a “people” profession, but I’ve always felt that nothing could be further from the truth. Environmental engineering is at the intersection of science, law, policy, and public health. It is the ability of the issues at the heart of the profession to impact the daily lives of people that has always appealed to me.”

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EDUCATION	LICENSES & REGISTRATIONS	PROFESSIONAL AFFILIATIONS	EXPERIENCE
BA, Geology - 1992 Amherst College MSE, Civil Engineering - 1995 Princeton University PhD, Civil Engineering - 2006 University of Massachusetts at Amherst	Reg Env Health Spec/San Registered Sanitarian CT	Assoc of Climate Change Officers National Environmental Health Association CT Association of Flood Managers	26 years Professional Experience

Diane is a Water Resources Engineer, Sanitarian, and Chief Resilience Officer at Fuss & O’Neill, and a founding member of the company’s environmental impact assessment practice. She has spent nearly 25 years working in the areas of water quality modeling, watershed management, and environmental impact assessment. Her current areas of water resources practice focus on climate change resilience and adaptation for water resources; water quality assessment, modeling, and watershed management; harmful algal bloom impacts to drinking and recreational waters; and the relationship between water quality and public health. She also provides technical leadership for the preparation of state and federal environmental impact assessments, continuing to look for ways to streamline and focus analysis on key issues to assess and mitigate potential environmental effects.

REPRESENTATIVE PROJECTS:

Vector-born Disease Public Health Capacity

Building for Climate Change, Framingham, MA:

As part of Framingham’s Municipal Vulnerability Preparedness Program Planning Grant, Diane utilized her skills as a registered sanitarian/registered environmental health specialist to develop a framework for capacity building to address public health concerns associated with anticipated changes in vector-borne disease under future climate. The plan identified specific strategies utilizing the National Environmental Health Association’s Vector Control Tools & Resources (VeCToR) Toolkit.

Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment, Nationwide: Cyanobacteria and water quality

technical specialist contributing to this EPA-funded project that developed a modeling framework that predicts the effect of climate change on cyanobacteria concentrations (CyanoHABs) in large reservoirs in the contiguous U.S. The modeling framework generates both regional and nationwide projections useful as a screening-level assessment of climate impacts on CyanoHAB prevalence as well as potential lost recreation days and associated economic value.

Publication at <https://pubs.acs.org/doi/full/10.1021/acs.est.7b01498>

Climate Change Adaptation Plan for Providence

Water, Scituate, RI: Primary author for the development of a climate change adaptation plan for the Scituate Reservoir Watershed, the primary surface water supply for the Providence Water Supply Board. The plan identifies anticipated vulnerabilities based on current climate projections and potential adaptation actions for this major water supply reservoir in Rhode Island.

State of Island Waters Best Management Practices

Prioritization, Aquidneck Island, RI: Technical specialist for development of the State of Island Waters report which included the use of a prioritization tool for the implementation of stormwater best management practices. The tool incorporated a variety of factors in the prioritization process including resilience to future climate conditions, BMP performance for pollutants of concern, and community acceptable and engagement. The tool is an easy-to-use, transparent and flexible means to develop a prioritization for implementation of previously identified BMPs.

Narrow River Nature-based Systems Resilience

Project, Narragansett, RI: Diane was the Senior Technical Specialist for restoration plans to address water resource challenges and make this estuarine system more resilient to future climate impacts using nature-based systems. Projects included planning, design, and permitting for green infrastructure retrofit improvements at more than 20 sites along the public right-of-way; green infrastructure in residential neighborhoods; a living shoreline; and salt marsh elevation.

Coastal Flood Resilience, City of Milford, CT:

Diane served as the Senior Technical Specialist for resilience projects to improve neighborhood resiliency to existing and projected coastal flooding. In the Beachland Avenue neighborhood, a road was raised to provide access during projected future high tide events and protect private property on the inland side of the road from tidal following. In the Bayview Beach neighborhood, four storm drains were reconstructed and raised, and tide check valves were installed. Sand dunes were raised, beach grass was reestablished, and two new pump stations were implemented.

Pocasset River Flood Resilience Watershed Plan and Design, Cranston and Johnston, RI:

Senior Technical Specialist for a comprehensive watershed plan designed to protect existing communities and infrastructure that are currently in the floodplain and that routinely flood. The plan utilizes a hybrid approach of green and gray infrastructure to maximize the resiliency of the watershed to future flooding. This includes removal of more than 150 structures and restoring that property to natural floodplain, flood-proofing of some selected structures, and construction of two new flood walls and pump stations.



Jaime French, PE

Bridge and Structural Engineering

“As a bridge engineer, I find it satisfying to figure out how all the pieces of a project fit together, put them on paper, and see a project through construction. I am able to see my ideas come to life in the field.”

jfrench@fando.com

800.286.2469 x2170

EDUCATION

BS, Civil Engineering - 2000
Michigan Technological
University

LICENSES & REGISTRATIONS

Professional Engineer VT
Professional Engineer NH
Professional Engineer ME
Professional Engineer MA

PROFESSIONAL AFFILIATIONS

Structural Engineers of NH
ACEC - ME

EXPERIENCE

20 years Professional Experience

Jaime is Fuss & O'Neill's Bridge Team Lead in our Manchester, NH office. Her management experience includes working directly with clients, overseeing the technical aspects of projects, directing the activities of staff engineers, and coordinating with the non-structural disciplines associated with projects. She has more than 20 years of technical experience include the design of steel, reinforced concrete, and precast concrete structures, bridge inspection, bridge rating and construction inspection.

REPRESENTATIVE PROJECTS:

Park Street over Housatonic River, MassDOT, Great Barrington, MA

Fiskdale Road over Quabog River, MassDOT, Brookfield, MA

Interstate 291 Over Page Boulevard, MassDOT, Springfield, MA

McClelland Farm Road Over BMRR, MassDOT, Deerfield, MA

Gleasondale Road over Assabet River, MassDOT, Stow, MA

Henri Burque Pedestrian Bridge Repairs, Nashua, NH

Georges Mill Road over Star Lake Outlet, NHDOT, Springfield, NH

Bridge Inspection and Management Program, Manchester, NH



Joshua Wilson, PWS

Wetlands

"I love that I have the opportunity to work on a wide range of projects across the varied ecosystems in New England. One day I can be studying salt marshes in Rhode Island and the next I can be delineating wetlands in the Berkshires. All with the goal of complementing society's needs with environmental responsibility."

JWilson@fando.com

800.286.2469 x5303

EDUCATION

BA, Biology - 1997
Connecticut College

MS, Environmental Science - 2001
Yale University

LICENSES & REGISTRATIONS

Prof Wetland Scientist

PROFESSIONAL AFFILIATIONS

Society of Soil Scientists of
Southern New England

EXPERIENCE

19 years Professional Experience

Josh is an Ecologist and Risk Assessor with Fuss & O'Neill. He is an experienced field scientist in the disciplines of soil science, botany, wildlife biology, and wetland ecology. Josh serves as Fuss & O'Neill's principal in-house wetland scientist and certified soil scientist. He is responsible for performing and overseeing wetland and watercourse delineations, vegetation surveys, and ecological surveys in accordance with state and federal regulations and guidelines. Josh is responsible for coordinating and conducting ecological risk assessments at Fuss & O'Neill. He has led ecological risk assessment services in support of various projects such as site investigations and remediation, brownfields investigations, and landfill compliance.

REPRESENTATIVE PROJECTS:

Wetlands Assessment, Airline & Hop River Trail Extension, Windham, CT

Field Delineation and Wetlands Assessment, Still River Greenway, Brookfield, CT

Muddy Creek Wetland Restoration, Chatham/Harwich, MA

Wetland Restoration Plan, Falls Creek Farm, Sterling, CT

Thousand Acre and Phillipston Reservoirs Dam Removal, Athol/Phillipston, MA

Ninigret Pond Breachway Dredging and Salt Marsh Restoration, Charlestown, RI

Gorham's Pond/Goodwives River Restoration, Darien, CT

Bantam Lake Dock and Parking Redesign, Morris, CT



Matthew Skelly, PE, PTOE

Charrettes/Community Outreach

“Helping to improve the lives of the people around me has always been at the root of what drives me. I am lucky to have the opportunity to affect real change in my community and make it a better place to live.”

MSkelly@fando.com

800.286.2469 x5341

EDUCATION

BS, Civil / Environmental Engineering - 2006
University of Massachusetts at Amherst
MS, Civil / Environmental Engineering - 2013
University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer CT
Professional Traffic Operations Engineer
Professional Engineer RI
Professional Engineer MA

PROFESSIONAL AFFILIATIONS

Inst Transportation Engineers
NBM Highway Assoc

EXPERIENCE

11 years Professional Experience

Matthew is a transportation engineer in the Traffic/Highway Group of Fuss & O'Neill's Transportation Business Line. He has a wide range of experience in traffic impact analysis, feasibility and planning studies, transit planning studies, traffic calming, traffic signal design, and roadway design. His expertise includes transportation planning, traffic assessment studies and traffic signal design. Matthew is familiar with Massachusetts and Connecticut Department of Transportation procedures and permitting processes, as well as roadway and traffic signal construction practices. Computer application experience includes SYNCHRO, HCM, AutoCAD, MicroStation, and Arcview GIS.

REPRESENTATIVE PROJECTS:

Traffic Study, Green Meadows, Hamilton, MA
Signal Design, West Natick Fire Department, Natick, MA
Traffic Impact Study, 131 Rumford Avenue, Newton, MA
Traffic Review, 78 Narragansett Avenue, Jamestown, RI
Shared Parking Study, Main Street, East Greenwich, RI
Ricciuti Drive Road Safety Audit, Quincy, MA
Ricciuti Drive Roundabout Design, Quincy, MA
Quincy Avenue Shared Streets Design: Quincy, MA
Signal Design, West Natick Fire Department, Natick, MA
Traffic Impact Study, 131 Rumford Avenue, Newton, MA
Public Safety Facility Traffic Design, Charlton, MA
Bristol Bicycle Connector Improvements and Public Outreach, Bristol, RI
Ricciuti Drive Road Safety Audit, Quincy, MA



Stephanie White, RLA, CNU-A,

Branding/Graphics/Visualization

“What is most rewarding about my job is being able to create memorable and enjoyable places that have positive impacts in the way we live, work and play.”

swhite@fando.com

800.286.2469 x3005

EDUCATION

BS, Landscape Architecture - 2001
University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Reg Landscape Architect CT
LEED-AP
Reg Landscape Architect MA
Reg Landscape Architect NH
Reg Landscape Architect RI

PROFESSIONAL AFFILIATIONS

American Society of Landscape Architects
Congress for New Urbanism
Council of Landscape Arch. Registration Board

EXPERIENCE

19 years Professional Experience

Stephanie is a Project Manager with Fuss & O’Neill’s design studio. With more than 19 years of experience, she has been involved in all facets of the site design and implementation process. Her expertise ranges from sophisticated planting designs, park master planning, housing, education facilities, and, most recently, new urbanism techniques. She is a licensed landscape architect and an accredited professional with the Congress of New Urbanism and U.S. Green Building Council. Stephanie holds a Bachelor of Science in Landscape Architecture from the University of Massachusetts Amherst.

Stephanie has been a team member on two award-winning design projects recognized by the American Society of Landscape Architects. With a keen sense of design and attention to detail, she seeks to deliver creative and sustainable solutions to every design challenge.

REPRESENTATIVE PROJECTS:

- North Street Streetscape Improvements, City of Pittsfield, MA
- Veterans’ Park, Town of Ware, Ware MA
- Town Green Revitalization and Roundabout, Town of Bloomfield, CT
- Downtown Redevelopment, Windsor Locks, CT
- Langworthy Field Master Planning, Hopkinton, RI
- Windsor Locks Transit-oriented Development, Town of Windsor Locks, CT
- Landscape Architectural Services, Berkshire Community College, Pittsfield, MA
- Green Infrastructure Design, Morrill Science Courtyard, University of Massachusetts, Amherst, MA
- Filley Park, Town of Bloomfield, CT
- Sears Park, Town of East Hampton, East Hampton, CT



Robert Levandoski, CSP, CIH, CHMM

COVID Social Distancing Compliance

"My experience as a firefighter early on in my life led to my interest in pursuing a career in occupational safety and health. Working hand-in-hand with clients to understand their needs and developing solutions that improve productivity and safety in the workplace is a rewarding aspect of my job."

rlevandoski@fando.com

800.286.2469 x5362

EDUCATION

BS, Safety Studies - 1988
Keene State College

MS, Occupational Safety - 1992
University of New Haven

LICENSES & REGISTRATIONS

Emergency Med Tech CT
Certified Safety Professional
Asbestos Inspector CT
Certified Industrial Hygienist
Certified Hazardous Materials

PROFESSIONAL AFFILIATIONS

Aircraft Ownrs and Pilots Assoc
American Brd of Ind Hygiene
American Industrial Hygiene
Association
American Society of Safety

EXPERIENCE

28 years Professional Experience

Robert directs staff for OSHA abatement, citation resolution, program implementation, and certification of program or engineering resolutions. He directs the resolution of complex machine guarding solutions and conducts detailed analyses of airborne chemical exposures and chemical monitoring for health exposure evaluations. He acts as an expert witness for the resolution of health exposure claims related to releases of extremely hazardous substances as well as for resolution of hazards associated with chemical processing and storage.

Robert has directed a wide variety of safety and industrial hygiene compliance projects during his career. He has extensive experience in various safety subjects, including machine safeguarding, program development, training, recordkeeping, and citation resolution.

REPRESENTATIVE PROJECTS:

Site-Specific Health and Safety Program, Cambridge, MA

Compliance and Operational Projects, West Hartford, CT

Integrated Contingency Plan, Pawtucket, RI

Employee Training and Staff Activity Coordination, Manchester, CT

Safety and Environmental Compliance, Trumbull, CT

On-Site EH&S Consultation Services, West Hartford, CT

Emergency Response Plan, Bridgeport & Farmington, CT

Industrial Hygiene Compliance Assessment, Simoniz USA, Manchester, CT



Jonathan Allard, PLA

Landscape Architecture

“What humbles me the most is seeing a creative thought, born from my own imagination, and implemented into reality. Every day presents a new and different challenge, but the result is always the same; connecting people to place through design and ingenuity.”

jallard@fando.com

800.286.2469 x4442

EDUCATION

BS, Landscape Architecture -
2006
University of Massachusetts at
Amherst

LICENSES & REGISTRATIONS

Reg Landscape Architect MA
Reg Landscape Architect CT

PROFESSIONAL AFFILIATIONS

American Society of Landscape
Architects
Council of Landscape Arch.
Registration Board

EXPERIENCE

14 years Professional Experience

Jon is a Landscape Architect in Fuss & O'Neill's Community Development Business Line. Jon has developed expertise in a wide array of projects including green infrastructure design and implementation, planting design, town-wide planning, as well as educational institutions. He has been involved in many charrette-based planning studies focused on downtown revitalizations. Jon possesses a unique and highly creative set of skills, allowing him to understand and communicate a site's complexity through graphic visualizations. He has been a part of an award winning team and designs recognized by the American Society of Landscape Architects. His energy and willingness to collaborate in a team environment, coupled with his experience working within both the public and private sectors, adds value to his projects in a variety of situations across many professional disciplines.

REPRESENTATIVE PROJECTS:

North Street Phase 5 Conceptual Infrastructure Study, Pittsfield, MA

King Street (Route 5) Corridor Improvements, Northampton, MA

Veterans' Park Master Planning, Ware, MA

Jaime Ulloa Park, Springfield, MA

Rear Main Street Redevelopment, Gardner, MA

Landscape Design Services, Riverside Park and Gatehouse Park, South Hadley, MA

North Street Streetscape Improvements, City of Pittsfield, MA

New Park Avenue Planning Study, West Hartford, CT

Merritt Parkway Multi-Use Trail Feasibility Study (Various, CT)

Langworthy Field Park Master Plan, Town of Hopkinton, RI



Phillip Cassidy

Website Design

“Growing up on a farm I learned at a young age that plants are an important bridge to the natural and built world. As a Landscape Designer, I get to combine my love of plants with my passion for design to create projects that bring about positive change in the community.”

pcassidy@fando.com

800.286.2469 x6106

EDUCATION

BS, Landscape Architecture -
2013
University of Massachusetts at
Amherst

EXPERIENCE

9 years Professional Experience

Phil is a Landscape Designer in our Springfield, Massachusetts office. He contributes to a variety of landscape design projects including, streetscape design, green infrastructure, site renderings, 3D visualizations, and town-wide planning. Phil brings a unique skill-set by combining GIS mapping with AutoCAD that enhances the capabilities of the landscape design and planning work.

Phil is a natural collaborator and works seamlessly on our multidisciplinary teams to efficiently provide design work. He also brings his global experience to New England, having spent a number of years in the Czech Republic studying European urban planning and landscape planning.

REPRESENTATIVE PROJECTS:

Holyoke Community College, Holyoke, MA
Shaker Lane Pedestrian and Roadway Improvements, Littleton, MA
Westlawn Cemetary Planning, Littleton, MA
Site Assessment, MassDevelopment, Holyoke, MA
Lyman and Newton Street, South Hadley, MA
Jaime Ulloa Park, Springfield, MA
Construction Administration, Derby Drive, Gardner, MA
Phase 2 Design, Rear Main, Gardner, MA
Ashuwillticook Rail Trail Extension, Pittsfield, MA
King/Summer/North Intersection Improvements, Northampton, MA
Pomperaug River Watershed Management Plan, Woodbury, CT



Nicole Fox, PE

Bicycle/Pedestrian/ADA Accommodations

“My focus in transportation engineering is to use creative solutions to improve safety and mobility for all modes of travel. I enjoy solving puzzles and working out the best design solutions for challenging situations. I see what we do as a way to serve our communities while fulfilling client needs.”

nfox@fando.com

800.286.2469 x2121

EDUCATION

BS, Civil Engineering - 1999
University of Florida

LICENSES & REGISTRATIONS

NHDOT LPA Labor Comp NH
Professional Engineer ME
Professional Engineer NH
Professional Engineer VA
Professional Engineer VT

PROFESSIONAL AFFILIATIONS

Women in Transportation (WTS)

EXPERIENCE

21 years Professional Experience

Nicole is a Project Manager with experience in all phases of transportation design and planning. Her practice includes roadway, intersection, pedestrian, and bicycle facility design, crash analyses, corridor studies, and traffic control plans. She leads Fuss & O'Neill's internal Bike and Pedestrian Team, and has a great interest in these types of projects.

Nicole is a skilled listener and excels at fostering open communication between clients, agencies, and other consultants. As a good communicator and team leader, she has excellent project management skills and experience managing municipal and state projects.

REPRESENTATIVE PROJECTS:

Delaware & Hudson Rail Trail Resurfacing,
Southwestern VT

Community Trail Improvements, Dover, NH

VT Route 100 Sidewalk Design, Stowe, VT

Sidewalk Replacement Study, Stowe, VT

Brock Street Reconstruction, Rochester, NH

South Street Improvements, South Hero, VT

Route 125 Reconstruction/Rehabilitation, MaineDOT,
Lisbon, ME

ME Routes 26/11 Intersection Improvements,
MaineDOT, Mechanic Falls/Poland, ME

Route 236 and Vine Street, South Berwick, ME



Matthew Taylor, PE

Wayfinding, Signs and Markings

"It gives me great satisfaction to drive through my community and know that I've contributed to making the roadways and intersections safer and more efficient."

mtaylor@fando.com

800.286.2469 x4487

EDUCATION

BS, Civil Engineering - 2003
University of Massachusetts at
Amherst

LICENSES & REGISTRATIONS

Professional Engineer
Professional Engineer NH

EXPERIENCE

16 years Professional Experience

Matt is a Senior Transportation Engineer in our Transportation Business Line out of our Springfield, MA office. He is responsible for geometric design of roadways, roundabouts, and stormwater and drainage design. He also has experience with horizontal and vertical design and construction inspection for roadways. Matt is well versed in MassDOT and New Hampshire DOT design standards and is experienced in MicroStation, InRoads, and Civil 3D. He is a Licensed Engineer and New Hampshire LPA certified.

REPRESENTATIVE PROJECTS:

Pittsfield/Lanesborough Ashuwillticook Rail Trail Extension, Phase 2, Pittsfield, MA

Mass Central Rail Trail Crossing Improvements, Belchertown, MA

Berkshire Medical Center Roadway and Intersection Improvements, Pittsfield, MA

Projects Conducted at a Previous Firm:

I-93 Corridor Widening, NHDOT, Windham, NH

F.E. Everett Turnpike Widening Preliminary Design, NHDOT, Nashua to Manchester, NH

Spaulding Turnpike Widening, NHDOT, Newington/Dover, NH

Cheshire Rail Trail LPA Design and Construction, Keene, NH

Maple Avenue Roundabout LPA Construction Inspection, Keene, NH

Lempster Wind Power Access Roads, Ibedrola Renewables, Lempster, NH



Eric Bernardin, PE, LEED AP

Utilities/Site Design

"It is always an inspiration for me to see our client's vision become a functional, beautiful, and sustainable work of life. What keeps me motivated is the ability to enrich the community while building trusting relationships and developing enduring solutions that align with sustaining our natural environment."

EBernardin@fando.com

800.286.2469 x4430

EDUCATION

BS, Agricultural Engineering -
1985
University of Connecticut

LICENSES & REGISTRATIONS

Professional Engineer MA
Professional Engineer NY
LEED-AP BD&C

PROFESSIONAL AFFILIATIONS

American Society of Civil
Engineers
National Assoc. of Industrial &
Office Products

EXPERIENCE

35 years Professional Experience

Eric is a Vice President in our Springfield, MA office. Fascinated by the interaction between the built and natural environments around him, Eric is a LEED Accredited Professional who embraces sustainable and enduring site solutions. Eric has completed designs for commercial and residential site developments, as well as manufacturing, industrial, and educational facilities. He excels at directing complicated design and permitting projects and has led project teams to successfully design master plans, roadway work, urban redevelopment projects, stormwater management plans, planning assessments for infrastructure improvements, and site development.

REPRESENTATIVE PROJECTS:

North Street Phase 3 and 4 Streetscape, Pittsfield, MA
Intersection Improvements at Roosevelt Ave and Island Pond Road, Springfield, MA
Reconstruction of Royalston Road (Route 68), Templeton, MA
Rear Main Street Redevelopment, Gardner, MA
Six Corners Intersection Improvements, Springfield, MA
Reconstruction of Connors and Knowlton Streets, Gardner, MA
Statewide Engineering Services, Massachusetts Department of Conservation and Recreation
Veteran's Park Reconstruction, Ware, MA
Department of Public Works Engineering On-Call, Springfield, MA



Mark Vertucci, PE, PTOE

Traffic Engineering/Grade Crossings

“As a child, I drew chalk roads on my driveway and installed paper road signs around my house. I coerced my mother to take me on long day trips just to drive along roads I had never been on before. Transportation has always been a passion of mine. To me, it is not all about the destination. Getting there is half the fun.”

mvertucci@fando.com

800.286.2469 x5381

EDUCATION

BS, Civil Engineering - 1998
Rensselaer Polytechnic Institute

LICENSES & REGISTRATIONS

Professional Engineer MA
Professional Engineer CT
Professional Traffic Operations
Engineer
Professional Engineer RI
Professional Engineer NY

PROFESSIONAL AFFILIATIONS

Inst Transportation Engineers

EXPERIENCE

24 years Professional Experience

Mark is an Associate in our Transportation Business Line. He has many years of experience in traffic engineering, transportation planning, site development, and roadway improvement projects. Throughout his career, he has prepared numerous traffic impact studies, planning studies, corridor studies, parking studies, and traffic management plans.

Mark has extensive experience with traffic signal design projects, roadway design projects, and intelligent transportation systems. Mark is certified by the Institute of Transportation Engineers (ITE) as a Professional Traffic Operations Engineer (PTOE), and is a Past President and current Vice President of the Connecticut Chapter of ITE.

REPRESENTATIVE PROJECTS:

Still River Greenway, Brookfield, CT

City-wide Bicycle and Pedestrian Improvements, Stamford, CT

Clearance Interval and Pedestrian Timing Revisions, CT DOT, Various Locations, CT

Traffic Management Plans, East Hartford, CT

Greenwich Avenue Corridor Improvements and Roundabout Design, Stamford, CT

Two-way Street Conversion Study, New Haven, CT

Greater Bridgeport Regional Planning Agency (GBRPA) Traffic Signal Evaluation and Management System, Bridgeport, Stratford, Fairfield, and Trumbull, CT

West River Neighborhood Planning Study, New Haven, CT

LOTICIP Roundabout, New London, CT



Andrea Judge, PE

Geotechnical Engineering

“The best part of my work at Fuss & O’Neill is seeing our designs in construction after the trials of design. I strive to work collaboratively with Contractors and Owners to develop practical solutions to challenges that invariably arrive during construction.”

ajudge@fando.com

800.286.2469 x4581

EDUCATION

BS, Civil Engineering Technologies
- 2004
Dawson College

BE, Civil Engineering - 2008
Concordia University - Quebec

LICENSES & REGISTRATIONS

Professional Engineer MA

PROFESSIONAL AFFILIATIONS

American Society of Cert Engr
Techs
Assoc State Dam Safety Offcls

EXPERIENCE

12 years Professional Experience

Throughout her career, Andrea has completed a wide range of geotechnical engineering, dam engineering improvement and removal projects of varying scale and complexity. Andrea brings a strong practical background to the team, providing expertise in construction engineering, constructability reviews, and preparation of technical specifications. Typical projects have included dam removal and improvement design, dam construction administration services, design of building foundations for vertical construction, waterfront, and bridge structures.

REPRESENTATIVE PROJECTS:

Blackstone Roadway Rehabilitation Project,
Massachusetts Department of Transportation,
Blackstone, MA

Lanesborough Bridge Repair Project, Massachusetts
Department of Transportation, Lanesborough, MA

Meeting House Road Bridges, Massachusetts
Department of Transportation, Pelham, MA

Mill Creek Dike, Herring River Salt Marsh Restoration,
Friends of Herring River, Wellfleet, MA

Central Bridge Project, Rhode Island Department of
Transportation, Barrington, RI

Emergency Roadway Repairs, RIDOT - Nate Whipple
Highway, Cumberland, RI

Roadway Drainage Improvements, Johnson and
Whales University, East Providence, RI



Dean Audet, PE

Green Infrastructure

“Solving complex engineering challenges is what primarily drives me. I like working with our clients to develop holistic solutions that best meet their long-term needs, not only from a design standpoint, but from a financial one as well. This includes thinking outside of the box to find the most suitable funding sources and creative engineering options.”

Daudet@fando.com

800.286.2469 x4560

EDUCATION

BS, Civil Engineering - 1986
University of Connecticut

ME, Environmental Engineering -
1998; University of Hartford

LICENSES & REGISTRATIONS

Professional Engineer RI
Professional Engineer SC
Professional Engineer MA
Professional Engineer CT
Professional Engineer NH

PROFESSIONAL AFFILIATIONS

American Public Works Assoc
New England Water Env Assoc
Water Environment Federation
American Society of Civil
Engineers

EXPERIENCE

34 years Professional Experience

Dean leads our Water and Natural Resources Business Line. Throughout his career, he has completed a wide range of civil and environmental engineering projects, working with multiple technical disciplines. These projects have included stormwater management, watershed management, wastewater, solid waste, site remediation, environmental compliance, and land development.

Dean's principal strength has been managing large and complex multidisciplinary projects, where his range of technical experience is very valuable.

REPRESENTATIVE PROJECTS:

- On-call Services, Natural Resources Conservation Service, RI and MA
- Tidal Restoration, Herring River, MA
- On-call Stormwater Management, Massachusetts Port Authority, MA
- Water Street Green Street, Warren, RI
- Green Infrastructure Retrofits, Narragansett, RI
- Narrow River Phase II Green Infrastructure Improvements, Narragansett, RI
- Stormwater Management Plan, Hanscom Air Force Base, U.S. Air Force, Bedford, MA
- Green Infrastructure Drainage Retrofits, South Kingstown, RI
- Green Infrastructure Planning, Providence College, Providence, RI
- Ninigret Pond Thin Layer Deposition Salt Marsh Restoration, Charlestown, RI



Julianne Busa, PhD, SE

Flood Resiliency

Science and policy are often seen as separate worlds, but now more than ever it's important for ecologists to participate in the public policy and management efforts seeking to apply meaningful solutions that positively affect local environments and communities—consulting offers an avenue to link my analytical work to what's happening at the ground-level, where planning and decision-making takes place.

jbusa@fando.com

800.286.2469 x6119

EDUCATION

BA, Ecology & International Studies - 2003
Ohio State University
PhD, Evolution, Ecology, Organic Biology - 2009
Ohio State University

LICENSES & REGISTRATIONS

Cert Senior Ecologist
Certified Soil Scientist

EXPERIENCE

11 years Professional Experience

Julie is an environmental scientist in the Water and Natural Resources Business Line. She has experience in the areas of global biodiversity and forest conservation, sustainability, and ecological modeling. Before joining Fuss & O'Neill, she worked in academia, conducting and publishing ecological research and serving as a project manager and technical adviser for stream and wetlands restoration projects. She has served as President of the Society for Conservation Biology's Working Group for Ecological Economics and Sustainability Science and has taught extensively, holding positions on the environmental studies faculties of multiple colleges. Her work has taken her around the globe, where she has conducted field research in places as varied as India and Appalachia, exploring conservation issues at the intersection of human and natural systems in an aim to empower communities to shape their own futures around ecologically, economically, and socially sound systems.

REPRESENTATIVE PROJECTS:

Municipal Vulnerability Preparedness Planning, Belchertown, MA

Municipal Vulnerability Preparedness Planning, Charlton, MA

Municipal Vulnerability Preparedness Planning, Spencer, MA

Municipal Vulnerability Preparedness Planning, Swansea, MA

Municipal Vulnerability Preparedness Planning, Rehoboth, MA

Municipal Vulnerability Preparedness Planning, Brockton, MA

Municipal Vulnerability Preparedness Planning, Northampton, MA

Municipal Vulnerability Preparedness Planning, Leicester, MA

Municipal Vulnerability Preparedness Planning, Carver, MA



Erik Mas, PE

Stormwater Treatment and Management

“Applying math and science to solve environmental problems is what first attracted me to engineering, but working with really bright, passionate people on real-world projects – both simple and complex – is what I enjoy the most about being a consultant.”

emas@fando.com

800.286.2469 x4433

EDUCATION

BS, Civil Engineering - 1992
Tufts University

MSE, Civil Engineering - 1995
Princeton University

LICENSES & REGISTRATIONS

Professional Engineer CT
Professional Engineer MA

PROFESSIONAL AFFILIATIONS

New England Water Env Assoc
Water Environment Federation
American Society of Civil Engineers

EXPERIENCE

27 years Professional Experience

Erik is a manager in our Water and Natural Resources Business Line. His principal areas of expertise include stormwater and watershed management, environmental impact assessment, and wetland and natural resource permitting. Erik has managed and served as the primary author of state and local stormwater design guidance manuals and regulations. He has also managed the preparation of watershed-based plans in Connecticut, Massachusetts, and New York, and serves on the national Water Environment Federation (WEF) Non-point Sources Committee. In addition to his water resources expertise, Erik also leads Fuss & O'Neill's practice in environmental impact assessment and manages projects involving compliance with the National Environmental Policy Act (NEPA) and state environmental policy acts in the northeast.

REPRESENTATIVE PROJECTS:

Municipal Stormwater Technical Assistance, Statewide MA

Connecticut Stormwater Quality Manual, CT DEEP, CT

Stormwater Bylaw and Regulations Development, Nantucket, MA

Neponset Valley Regional Stormwater Collaborative, Neponset River Watershed Association, Canton, MA

MS4 Support Services, Ashland, MA

Belchertown Stormwater Utility Feasibility Study, Town of Belchertown, MA

Town-Wide Road Stream Crossing Assessment and Climate Change Adaptation Plan, Town of Belchertown, MA

Infrastructure Planning for Climate Change Resilience, City of Northampton, MA

Children's Beach Flood Mitigation Planning and Design, Nantucket, MA



Victoria Houle, PE

Permitting

“I believe that every problem can be solved using a combination of math, physics, creativity, and compassion.”

vhoule@fando.com

800.286.2469 x4422

EDUCATION

BS, Civil Engineering - 2002
University of Massachusetts at Amherst

MA, Business Administration - 2008
Bay Path College

LICENSES & REGISTRATIONS

Professional Engineer CT

PROFESSIONAL AFFILIATIONS

EXPERIENCE

16 years Professional Experience

Victoria is a Project Manager in our Community Development Business Line. Victoria's background is a combination of civil/environmental engineering and public administration, both of which contribute to her success in public sector projects. Her engineering project management experience has focused on planning, budgeting, designing, and construction administration of capital infrastructure improvements. She also has 10+ years of experience in public administration, including budget preparation, capital improvement planning, public communications, and collaboration with government agencies.

REPRESENTATIVE PROJECTS:

Cider Mill Road Bridge Replacement and Construction Administration, Town of North Brookfield, MA
Churchill Brook Culvert Replacement, Pittsfield, MA
West Street Culvert Replacement, Pittsfield, MA
MVP Stormwater Quality Improvements, Auburn, MA
Elm Street Bridge Preservation, Town of Blackstone, MA
Site Design, Permitting, and Stormwater Management, Pukka Pot, East Brookfield, MA
Civil Engineering Services for Hartford Hospital Substation Replacement, Bard, Rao + Athanas Consulting Engineers, Hartford, CT
Palmer Street Array Design, Permitting, and Stormwater Engineering, BlueWave Solar, Palmer, MA
Dan Casey Drive Culvert Replacement, Pittsfield, MA



Kevin Sullivan, PE, LEED AP

Eco-Friendly Lighting

"I have always liked solving problems and building things. I find it rewarding to help someone solve a problem that they are dealing with, and it is great to be able to drive by a project and say I helped build that."

KSullivan@fando.com

800.286.2469 x4704

EDUCATION

BS, Electrical Engineering - 1994
Northeastern University

LICENSES & REGISTRATIONS

Professional Engineer CT
Professional Engineer NY
Professional Engineer PA
LEED-AP
Professional Engineer ME

LICENSES & REGISTRATIONS

Professional Engineer NH
Professional Engineer MA
Professional Engineer RI
Professional Engineer VT

EXPERIENCE

26 years Professional Experience

Kevin is a Vice President and Regional Office Manager in our Greater Boston office. Throughout his career he has managed a wide variety of successful multidiscipline projects. Kevin is the key point of contact and has the day-to-day responsibility for the project including: overseeing daily progress; developing and managing schedules and budgets; and coordination and interface with the project team. His specific area of expertise is electrical engineering, where he has acquired a considerable amount of experience including extensive field investigation, conceptual design, detail engineering and design, specifications, cost estimating, feasibility reports, master plans and construction administration/supervision. Kevin has a strong interest and special expertise in energy conservation and the application of alternative energy systems for variety of projects.

REPRESENTATIVE PROJECTS:

Main Street Lighting, Webster, MA

Calvin Coolidge Memorial Bridge, Northampton and Hadley, MA

Electrical and Lighting Design, Interstate I195, Providence, RI

Site Improvements, VA Jamaica Plain, Jamaica Plain, MA

Electrical Study and Design, Hanscom Air Force Base Exterior Lighting, Bedford, MA

Electrical Study and Design, Chelsea By-Pass Road, Massport East Boston, Boston, MA

State Route 66 Willimantic Bridge, Connecticut DOT, Willimantic, CT

Bus Maintenance Facility Electrical Upgrades, RIPTA, Providence, RI



Daniel LaFrance, PE, LSP

Hazardous Materials

“I love the fact that my work involves many different types of projects, from brownfield redevelopments to construction administration. It’s gratifying to help bring projects to successful completion, especially when they improve our communities and add value to our neighborhoods.”

DLaFrance@fando.com

800.286.2469 x4538

EDUCATION

BS, Civil Engineering - 2008
Worcester Polytechnic Institute

MS, Environmental Engineering
- 2012
Worcester Polytechnic Institute

LICENSES & REGISTRATIONS

Professional Engineer MA
Licensed Site Professional MA
Professional Engineer RI

PROFESSIONAL AFFILIATIONS

Licensed Site Prof Assoc

EXPERIENCE

12 years Professional Experience

Dan is a Project Manager and Licensed Site Professional at Fuss & O’Neill, working out of the firm’s Quincy office. His has experience with assessment and remediation, geotechnical, facilities, solid waste, and natural resources projects. His primary focus is remediation of hazardous materials in the environment.

Dan has worked on operations for all phases of environmental projects from initial assessment through cleanup and long-term operation and monitoring. His experience includes public and private construction projects. Dan has been a member on the LSP Association since 2011. Currently, he is chairman of the Regulations committee where he was responsible for managing the Association’s response to the proposed Mass Contingency Plan amendments.

REPRESENTATIVE PROJECTS:

Site Investigation, I-195 District, Providence, RI

Site Assessment and Remediation, Coca-Cola Enterprises, Needham, MA

Estuary Restoration, Multiple Sites, Southeast MA

Dam Restoration, Southbridge Reservoir #5, Southbridge, MA

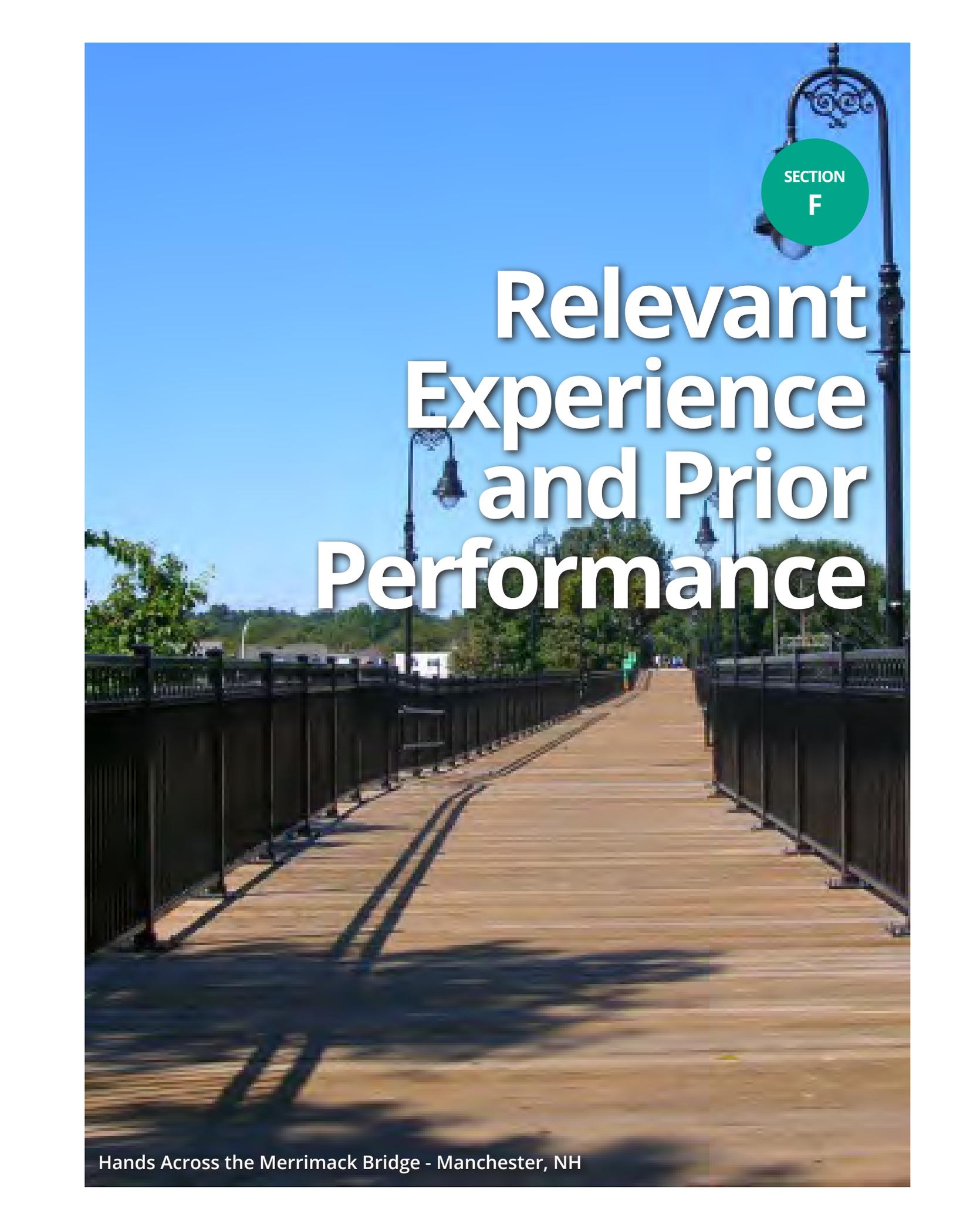
Stormwater Management and Redevelopment Planning, Port of Providence, RI

Antenna Test Facility Environmental Baseline Survey, Ipswich, MA

Soil Remediation, Woonsocket Middle Schools, Woonsocket, RI

Site Redevelopment, Former Nu-Style Facility, Franklin, MA

Site Plan Development, Brookfield Mill, Brookfield, MA



SECTION
F

Relevant Experience and Prior Performance

Hands Across the Merrimack Bridge - Manchester, NH

Section F: Relevant Experience and Prior Performance

The Fuss & O'Neill team is proud of our reputation with MassDOT for designing complex and high-profile rail trail and shared use path projects throughout the Commonwealth.

Often rail trail projects can be more complicated than traditional transportation projects due to ROW encroachment, concerned abutters, challenging access points, environmental resource impacts, public safety needs, structural engineering, and hazardous material elements usually associated with abandoned rail corridors. Each bike path or rail trail project has its unique set of hurdles. We will be able to apply our knowledge from the lessons learned on these prior projects to make informed decisions with confidence that the outcome will be a success.

Throughout New England we have completed numerous rail trail projects including the Redstone Rail Trail in East Longmeadow, Massachusetts; the award winning Still River Greenway in Brookfield, Connecticut; the five mile stretch of the Coventry Greenway in Rhode Island; and Merrimack Riverwalk in downtown Manchester, New Hampshire. In this section, we have included these New England projects with an emphasis on the rail trail/shared use path projects in Massachusetts, as well as our current ongoing transportation work with MassDOT projects.

Experience with MassDOT

Fuss & O'Neill has extensive experience coordinating with MassDOT on municipal rail trail and shared use path projects. We have partnered with MassDOT for more than 30 years, and have managed dozen of municipal TIP projects during that time. Our Ashuwillticook Rail Trail project in Pittsfield is currently heading to construction on time and budget. We have also just submitted 25% design plans for the highly anticipated Phase 2 extension to Merrill Road (Route 9), which includes a HAWK signal, new parking lot, stormwater management, and biking amenities.

Our team assists clients with obtaining Federal and State funding for these types of rail trail and multi-use path projects.



Relevant Experience

The following project descriptions represent Fuss & O'Neill's relevant and recent history on rail trail and shared use paths. The listing includes more than five projects as requested in the RFP since we felt it was important for the Town of Sudbury to better understand the breadth of experience and qualifications in multi-use path designs across New England. Many of the Fuss & O'Neill key personnel identified in the project team of Section E were actively involved in these projects. Projects such as, but not limited to, the Ashuwillticook Rail Trail in Pittsfield and the Redstone Trailway in East Long Meadow were designed in accordance with MassDOT design guidelines. These projects were originally developed by Fuss & O'Neill as potential TIP projects. We worked with the communities, regional planning agencies and MassDOT to help secure millions of dollars in federal and state funding to advance the projects through the 25/75/100/PSE design stages. In addition, Fuss & O'Neill was responsible for the ROW compliance, environmental permitting, wetlands replication, parking lot designs and public outreach on these rail trails.

Past Performance and Sample Material

For a complete documentation of the project fee, client contacts and team members of relevant projects please refer to the Reference Section G and the following pages for the project descriptions. Each of the projects documented in this proposal had unique goals and challenges to meet the client's expectations including the budget and schedule. The names associated with each project can attest the level of commitment and experience of the Fuss & O'Neill team. Section G includes 3 key references that we highly recommend the Town of Sudbury contact. Following the projects descriptions, we have included a sample bid set from a recently advertised rail trail project with MassDOT. The design sheets show the complexity and amount of detail required for the construction of the rail alignment, grading, signing, parking lot layout, wetland replications, and landscaping elements.



Rail Trail/Shared-Use Path Experience in Massachusetts

MassDOT Project #	City/Town	Description
602338	East Longmeadow	EAST LONGMEADOW- MULTI-USE PATH CONSTRUCTION (RED STONE TRAIL)
603731	Agawam	AGAWAM- CONSTRUCTION OF BIKEWAY LOOP CONNECTING CONNECTICUT RIVERWALK WITH MAIN STREET
603730	West Springfield	WEST SPRINGFIELD- CONNECTICUT RIVERWALK AND BIKEWAY FROM ELM STREET TO DOTY CIRCLE
606891	Pittsfield	PITTSFIELD- ASHUWILLTICOOK RAIL TRAIL EXTENSION TO CRANE AVENUE
609054	Littleton	LITTLETON - RECONSTRUCTION OF FOSTER STREET (SHARED -USE PATH TO MBTA)
609289	Pittsfield	PITTSFIELD - ASHUWILLTICOOK RAIL TRAIL EXTENSION (PHASE II) TO MERRILL ROAD
610702	Littleton	LITTLETON - GREAT ROAD (RT 119) & BEAVER BROOK ROAD INTERSECTION IMPROVEMENTS & SHARED USE PATH

Active MassDOT Project List

MassDOT Project #	City/Town	Description
608424	Templeton	TEMPLETON- RECONSTRUCTION OF ROUTE 68, FROM KING PHILLIP TRAIL (ROUTE 202) NORTH TO THE PHILLIPSTON TOWN LINE
608724	Greenfield	GREENFIELD-RECONSTRUCTION OF WISDOM WAY
608717	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")
608881	Longmeadow	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET
606233	Pittsfield	PITTSFIELD- INTERSECTION & SIGNAL IMPROVEMENTS AT FIRST STREET & NORTH STREET (NEAR BERKSHIRE MEDICAL CENTER)
610921	Greenfield	MAIN STREET IMPROVEMENT PROJECT
610931	Uxbridge	UXBRIDGE - DOUGLAS ST (ROUTE 16) MOBILITY & RECONSTRUCTION PROJECT
609054	Littleton	LITTLETON - RECONSTRUCTION OF FOSTER STREET (SHARED -USE PATH TO MBTA)
609289	Pittsfield	PITTSFIELD - ASHUWILLTICOOK RAIL TRAIL EXTENSION (PHASE II) TO MERRILL ROAD
610702	Littleton	LITTLETON - GREAT ROAD (RT 119) & BEAVER BROOK ROAD INTERSECTION IMPROVEMENTS & SHARED USE PATH
609076	Great Barrington	GREAT BARRINGTON - BRIDGE REPLACEMENT, G-11-006, COTTAGE STREET OVER HOUSATONIC RIVER
605342	Stow	STOW - BRIDGE REPLACEMENT, S-29-001, (ST 62) GLEASONDALE ROAD OVER THE ASSABET RIVER



Ashuwillticook Rail Trail Extension Phases 1 & 2

City of Pittsfield, MA



Fuss & O'Neill, in coordination with the City of Pittsfield and MassDOT provided the design for the Ashuwillticook Rail Trail extension.

Included in the design is a fully mechanically plumbed user comfort station for which we coordinated architecture design and permitting, two new parking lots at both ends of the trail, extensive stormwater management and linear BMPs, and permitting.

This project required an extremely complex three way lease agreement and with Rail Division, City of Pittsfield, and Petricca Industries (one of the largest employers in Berkshire County). Extensive right-of-way (ROW) coordination and easement plan preparation was included in our scope. We successful helped negotiate this challenging agreement while maintaining advertisement year.



The project area borders many wetland resources. We are providing the environmental permitting and subsequent wetland delineation for this portion of the trail extension.



Public outreach and communication with adjacent property owners throughout the design process was imperative to the success of the project.



Redstone Trailway

Town of East Longmeadow, MA



The Redstone Trailway follows the route of the old Boston and Main railroad corridor near the center of East Longmeadow. Redevelopment of this abandoned railbed provided space for recreation, an opportunity to showcase the historic train depot, and the incorporation of native red sandstone boulders.

The multi-use path accommodates a wide array of users as it includes multiple access point and rest areas. Fuss & O'Neill provided permitting and design services for construction through MassDOT. Design issues included coordination with utilities in the right-of-way, adjustments for abutting properties, and minimizing impacts. This trail is an integral component of the Pioneer Valley bikeway system.



Abandoned Railbed - East Longmeadow's Redstone Trailway is a popular multi-use trail integrating unique community features.



Re-use of Local Brownstone - Benches along the trail and interpretive signage made use of local brownstone. The bike path was aligned to consider adjacent business owners' concerns as a result of an informational meeting.



Connecticut River Bike Loop Connection

Town of Agawam, MA



The Agawam Bike Loop is a ten-foot shared-use path that extends along School Street and connects the Connecticut Riverwalk and Bikeway to the School Street wetlands conservation area.

The design included over 1,300 feet of Mechanically Stabilized Earth (MSE) retaining walls to avoid impacting the conservation area. Environmental permitting included NOI, ACOE, and MEPA permits resulting in the design of a compensatory flood storage basin. Also included was wetland overlook areas and reclamation/reconstruction of over 1 mile of School Street.

The project was successfully administered through the MassDOT design process involving preliminary design and final 75%/100% plans, specifications and estimates for advertising.



MassDOT Project - Our team worked closely with the Town of Agawam and the Massachusetts Department of Transportation to understand the key issues and concerns about the project.



Environmental Impacts - Fuss & O'Neill prepared an Environmental Notification Form (ENF) to identify potential alteration of wetlands, areas of rare species habitat, public shade trees, and flood zones.



Connecticut Riverwalk and Bikeway

City of West Springfield – MA



Completion of this riverfront park with a shared use trail and canoe access achieved a major goal of the Town's Open Space and Master Plans, providing recreational access to the scenic Connecticut River. Fuss & O'Neill provided design engineering and permitting services for this MassDOT milestone project.

Amenities include bicycle storage locker, bus-stop shelter, information kiosk, parking areas, boat launch area, and picnic area with tables and benches overlooking the river. Path length included over a mile of construction including restoration of flood control dike and stormwater BMP below Interstate 91.

Permitting for this project included filing of a MEPA Environmental Notification Form (ENF), coordinating with MESA, due to rare and endangered species on the project site, and submitting a Notice of Intent (NOI) and local Conservation Commission application, in accordance with the Massachusetts Wetlands Protection Act.



Design engineering - Combined vehicular and pedestrian access connecting parking area boat launch along the Connecticut River.



ADA compliant amenities - The overall park design incorporated special considerations for disabled patrons, facilitating access above and beyond ADA and AAB Accessibility Standards.



Foster Street Reconstruction and Shared Use Path

Town of Littleton, MA



Fuss & O'Neill has designed pedestrian and roadway improvements, including a shared use path underneath Route 2, near Foster Street in Littleton

Transportation enhancements support the MBTA commuter rail station, adjacent commercial and residential development, and vehicular movement along Foster Street. Our team is designing horizontal and vertical alignment improvements, upgrades to the drainage system, realignment of grime lane out of skew angle with MBTA rail to improve safety, installation of pedestrian scale lighting along the path at the MBTA station, full depth pavement reclamation, significant public and private utility relocations, and potential signals and/or roundabouts.

The project is currently programmed on FY2024.



Pedestrian Safety Improvements - A realignment of a grime lane out of skew angle and pedestrian scale lighting along the path at the MBTA station will provide much needed safety enhancements.



TIP Funding - Fuss & O'Neill assisted the Town in securing TIP funding by providing preliminary project development/planning, data and base map collection, and concept preparation.



Coventry Greenway

Town of Coventry, RI



Fuss & O'Neill was selected to design approximately five miles of shared-use path, primarily on existing railroad bed, and an adjacent equestrian trail over part of the project area. The path contained spurs to connect other recreational amenities.

The project included the design of a shade structure to reflect the architecture of a former rail freight platform and an ADA-accessible canoe launch ramp. Fuss & O'Neill's tasks included completing a Design Study Report, preliminary and final designs, procuring environmental permits from Rhode Island Department of Environmental Management, completion of the Section 106 process due to potential historic and tribal impacts, and bidding assistance.



RIDOT Coordination - Close coordination with RIDOT was required for this project, which is part of the East Coast Greenway, stretching from Maine to Florida.



Bridge Rehabilitation - The project included the rehabilitation of three bridges, two of which cross the Pawtuxet River.



Dover Community Trail

City of Dover, NH

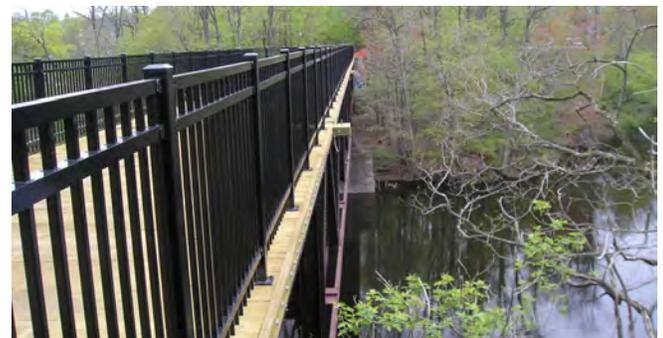


The Newington Branch rail line passes through downtown Dover and presented a unique opportunity to create a new bicycle and pedestrian trail. Fuss & O'Neill worked with the City as a consultant for this NHDOT TE/CMAQ project to complete preliminary and final design, provide technical assistance to the City in the areas of environmental documentation and permitting, and construction administration.

The crossings of Silver Street (NH Route 9) and the Cocheco River presented challenges. The deck of the former bridge at Silver Street had been removed and the gap filled to create an at-grade roadway. The bridge over the Cocheco River, built in 1908, needed to be assessed and retrofitted before it was ready to serve as a link in the trail system. Following a thorough inspection, a new timber deck and an industrial-style, 3-bar railing were added for a functional and safe river crossing. The crossing of Silver Street was made with the installation of a cost-efficient, corrugated, aluminum plate underpass structure. The ends of the old bridge granite block walls were left exposed as a reminder of the sites' history.



Public Outreach - There was an extensive public outreach effort including the formation of a community based design group and multiple public meetings to garner input from residents.



Trail Connection - The completed trail serves as a connection to the Dover Transportation Center, a hub for local COAST bus service and Amtrak's Downeaster passenger train between Portland and Boston.



Bristol Bicycle Connector

Bristol, RI

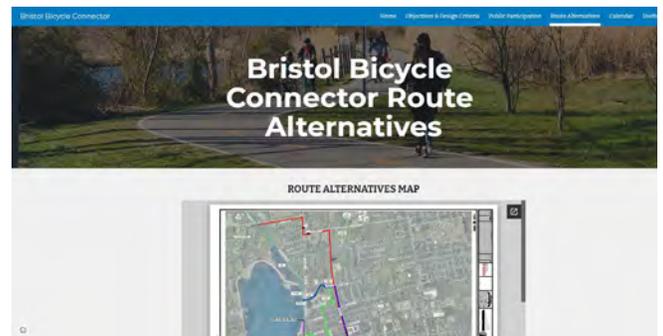


The Bristol Bicycle Connector is a planning and design effort with the Town of Bristol, RI which creates safe and convenient bicycle and pedestrian connections between the terminus of the East Bay Bike Path and the southern areas of town. The connections are an important link in local and regional bicycling infrastructure and provide a safe pathways for students, commuters and recreational users.

The project conducted an alternatives analysis to evaluate four potential routes and then engaged the community. An open public process of intensive community engagement utilized on-line meetings, a robust project website, community surveys and GIS-based mapping/public comment tools to receive input from property owners, civic organizations, elected officials and interested citizens to build consensus for a preferred route and facility design. The project will be constructed and designed in phases as funding becomes available.



Community Engagement at the State Street Fair - Fuss & O'Neill staff are trained in community engagement and interface with a wide range of stakeholders and interested citizens.



Project Website - Robust and interactive online engagement focused on the project website allows participants to learn about the project in great detail and share their recommendations and concerns.



Still River Greenway Multi-use Trail

Town of Brookfield – CT



Fuss & O'Neill was contracted to design a 1.2-mile, ten-foot-wide, paved, multi-use trail along the Still River in Brookfield, CT.

The Still River Greenway Multi-use Trail generally follows the river, but also runs through vacant land. This allowed us to make the most of desirable landscape features and existing Town amenities. Special considerations were given to floodplain management BMPs, delineation of state and federal wetlands, Phase I/II archeological surveys, and detailed hydraulic modeling for a new, 160-foot pedestrian bridge over the Still River.

This project involved design, preparation, and full-time construction inspection, including of contract documents for a 1.5 mile trail including 160-foot span prefabricated steel truss pedestrian bridge (with 130-foot and 280-foot multi-span timber approach bridges), three timber boardwalk wetland crossings (varying from 60 feet to 100 feet in length), and two segmental concrete block retaining walls.



A Trail of Many Uses - The Still River Greenway Multi-use Trail includes integrated canoe launches, enhanced river vistas, and naturalistic rest areas.



Connectivity - This site links to Town recreation facilities and a commercial center.



Hands Across the Merrimack Bridge

City of Manchester, NH



Fuss & O'Neill provided the design to replace the existing truss bridge that crosses the Merrimack



River into a designated pedestrian and bicycle bridge. The Hands across the Merrimack Bridge is the key feature in the Riverfront Development Plan.

We provided the design calculations for the new bridge including connection of the new bridge to the existing truss and plate girders, pedestrian rail, ramp transition, deck design, overlooks, and substructure modifications. This project was in conjunction with the Riverwalk and Bikeway master plan and design, which was the motivating force for the revitalization of downtown Manchester adding value to increased tourism, commercial development, and recreational and transportation needs and its patrons.



Environmental Permitting and Cultural Resources - As part of this project included environment permitting coordination and Section 106 Cultural Resources.



Construction Administration - Fuss & O'Neill provided construction inspection and administration for the project.

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

LANESBOROUGH - PITTSFIELD ASHUWILLTICOOK RAIL TRAIL EXTENSION			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	1	205
PROJECT FILE NO.		606891	
TITLE SHEET & INDEX			

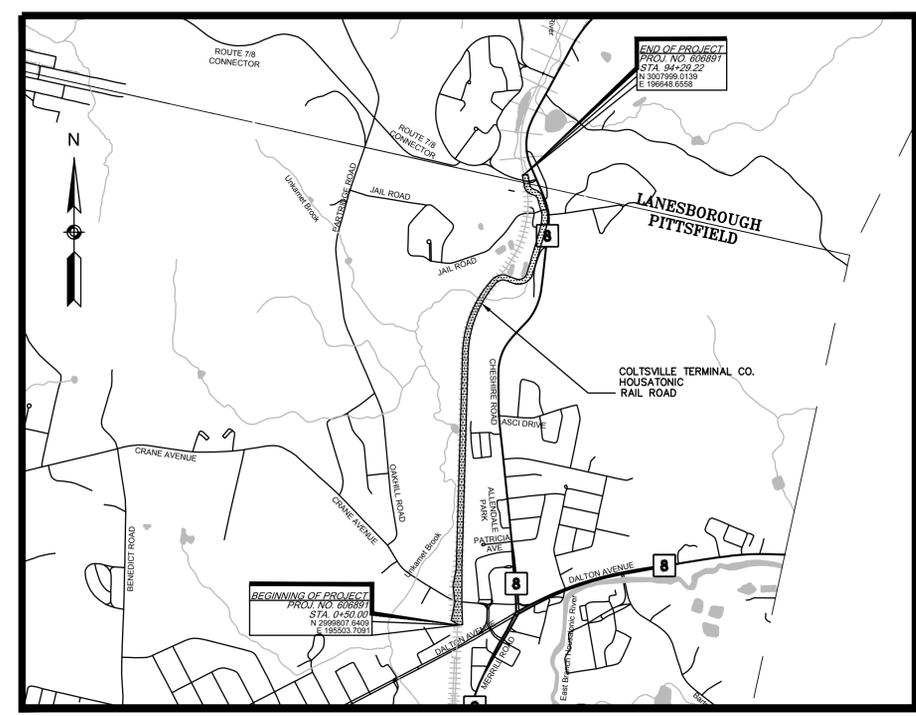
ASHUWILLTICOOK RAIL TRAIL EXTENSION

IN THE TOWN/CITY OF
LANESBOROUGH - PITTSFIELD
BERKSHIRE COUNTY

FEDERAL AID PROJECT NO.
CMQ-003S(360)X

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	KEY PLAN
4-6	TYPICAL SECTIONS
7-26	CONSTRUCTION PLANS & PROFILE
27-38	CURB & BASELINE TIE PLANS
39-49	GRADING PLANS
50-52	PAVEMENT MARKING & SIGNING PLANS
53	TRAFFIC SIGN SUMMARY SHEET
54-60	TEMPORARY TRAFFIC CONTROL PLANS
61-63	DRAINAGE & UTILITY PLANS
64-76	LANDSCAPE PLANS
77	WETLAND REPLICATION PLANS
78-85	CONSTRUCTION DETAILS
86-87	WHEELCHAIR RAMP DETAILS
88-205	CROSS SECTIONS



LENGTH OF PROJECT = 8,906.07 FEET = 1.687 MILES

SHARED-USE PATH DESIGN DESIGNATION

ASHUWILLTICOOK RAIL TRAIL	
DESIGN SPEED	18 MPH
FUNCTIONAL CLASSIFICATION	OFF ROAD PEDESTRIAN/BICYCLE FACILITY

ADJACENT ROADWAY DESIGN DESIGNATION

	CRANE AVE.	RT. 7/RT. 8 CONNECTOR
DESIGN SPEED	35 MPH	35 MPH
ADT (2013)	7,632 vpd	6,435 vpd
ADT (2019)	8,102 vpd	6,831 vpd
T (PEAK HOUR)	2.9%	2.0%
T (AVERAGE DAY)	3.7%	3.1%
FUNCTIONAL CLASSIFICATION	RURAL MAJOR COLLECTOR	RURAL MAJOR COLLECTOR

FUSS & O'NEILL
1550 MAIN STREET, SUITE 400
SPRINGFIELD, MA 01103
413.452.0445
www.fando.com



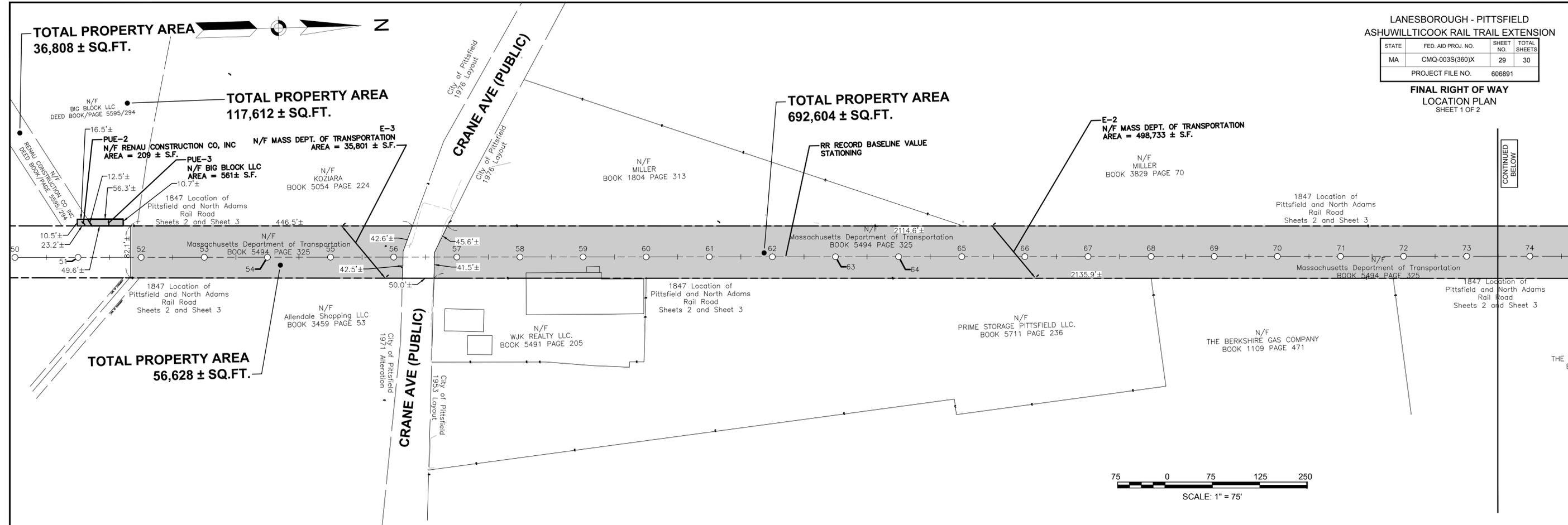
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_____ CHIEF ENGINEER	_____ DATE	

LANESBOROUGH - PITTSFIELD
ASHUWILLTICOOK RAIL TRAIL EXTENSION

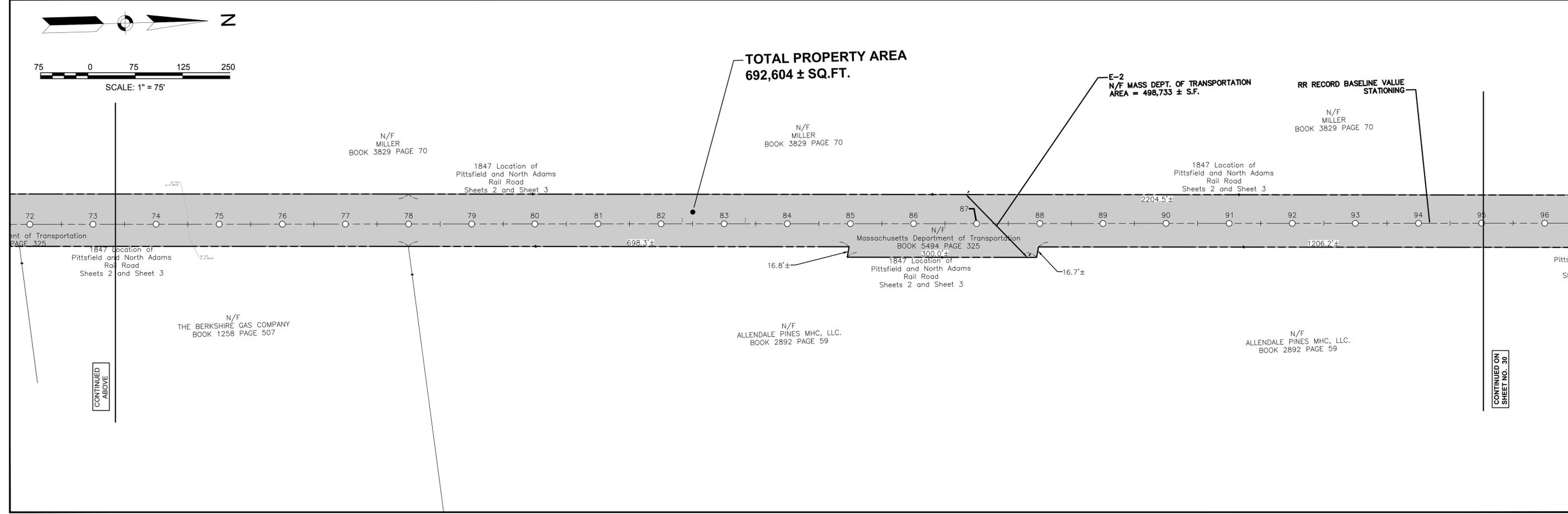
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MA	CMQ-003S(360)X	29	30

PROJECT FILE NO. 606891
FINAL RIGHT OF WAY
LOCATION PLAN
SHEET 1 OF 2

4-Aug-2020
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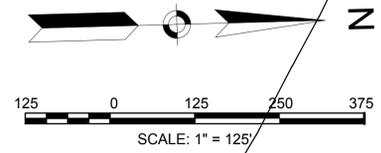
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LANESBOROUGH - PITTSFIELD
ASHUWILLTICOOK RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	30	30

PROJECT FILE NO. 606891

FINAL RIGHT OF WAY
LOCATION PLAN
SHEET 2 OF 2



TOTAL PROPERTY AREA
4,258,298 ± SQ.FT.

TOTAL PROPERTY AREA
3,755,395 ± SQ.FT.

TOTAL PROPERTY AREA
692,604 ± SQ.FT.

TOTAL PROPERTY AREA
698,313 ± SQ.FT.

TOTAL PROPERTY AREA
90,539 ± SQ.FT.

TOTAL PROPERTY AREA
148,104 ± SQ.FT.

TOTAL PROPERTY AREA
147 ± SQ.FT.

TOTAL PROPERTY AREA
24,814 ± SQ.FT.

TOTAL PROPERTY AREA
54,839 ± SQ.FT.

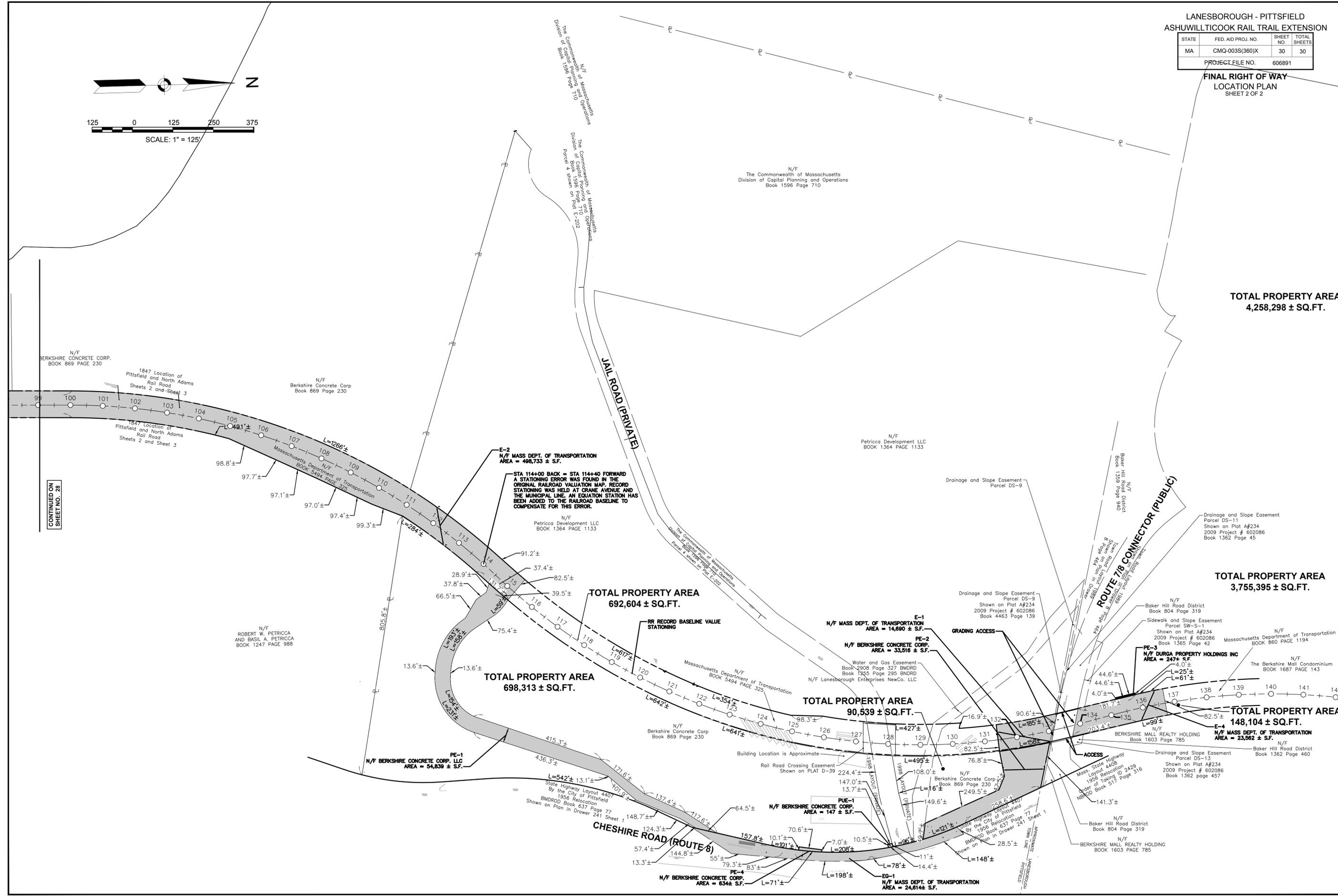
TOTAL PROPERTY AREA
498,733 ± S.F.

TOTAL PROPERTY AREA
14,690 ± S.F.

TOTAL PROPERTY AREA
33,516 ± S.F.

TOTAL PROPERTY AREA
247 ± S.F.

TOTAL PROPERTY AREA
23,562 ± S.F.



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SHEET NO. 2B

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20100916A60_PVT01.DWG 22-JUL-2020

NOTES:

- ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON PLANS
- ALL PROPOSED PAVEMENT MARKING LINES ON ROADWAYS SHALL BE 6" WIDE, EXCEPT STOP BARS WHICH SHALL BE 12" WIDE. ALL MARKINGS ARE TO BE PAINTED.
- SIGN SUPPORTS FOR SHARED-USE PATH SHALL BE 4"x4" PRESSURE TREATED WOOD POSTS AND PLACED AS SHOWN ON THE "TYPICAL SIGN PLACEMENT DETAIL" IN THE CONSTRUCTION DETAILS.
- ANY SIGN LABELED WITH AN "*" SHALL BE MOUNTED ON A STANDARD P-5 POST AT STANDARD MUTCD HEIGHT UNLESS OTHERWISE SHOWN ON PLANS.

XXXX PROPOSED SIGN DESIGNATION
 XXXX EXISTING SIGN DESIGNATION

MARKING LEGEND

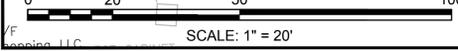
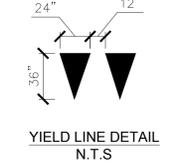
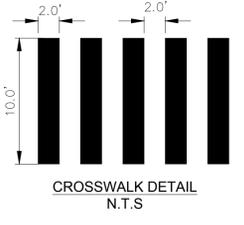
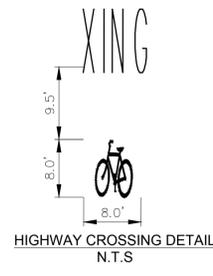
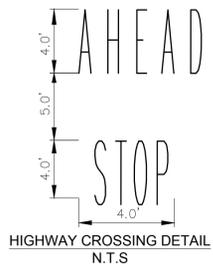
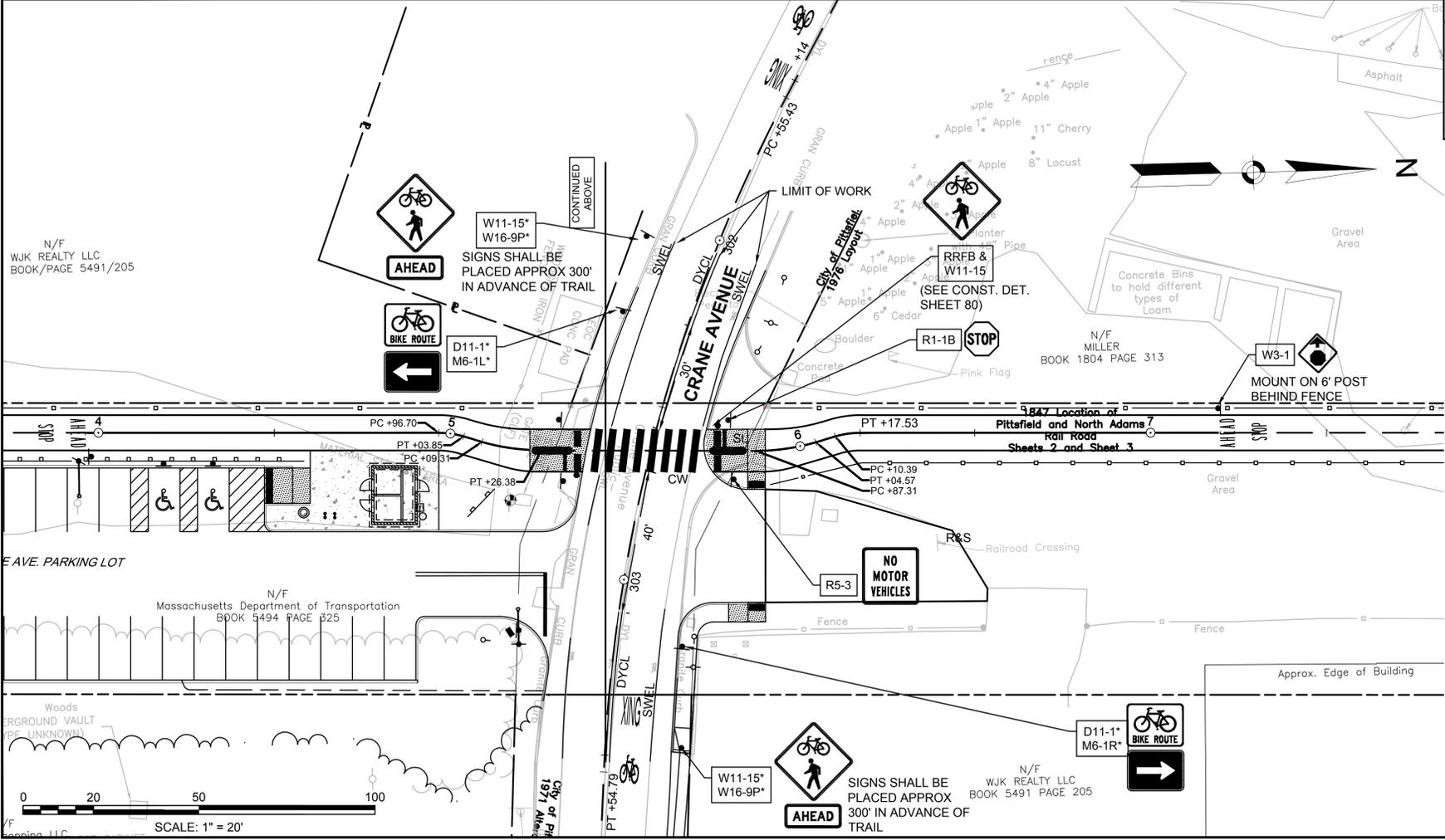
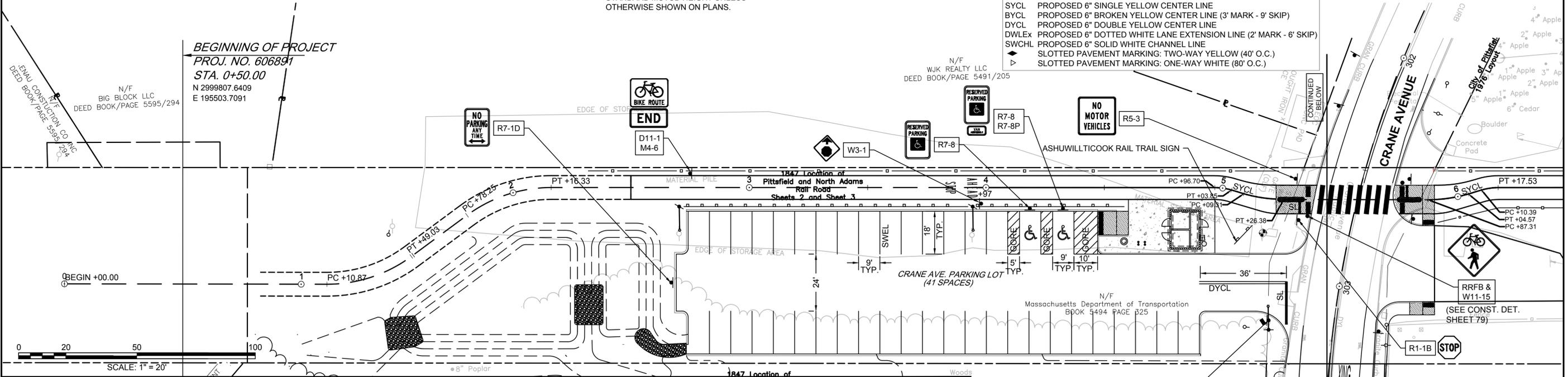
- BICYCLE DETECTOR PAVEMENT MARKING
- PROPOSED SIGN
- SL PROPOSED 12" WHITE STOP LINE
- CW PROPOSED 24" WHITE CROSS WALK
- SWEL PROPOSED 6" SINGLE WHITE EDGE LINE
- SWLL PROPOSED 6" SINGLE WHITE LANE LINE
- BWLL PROPOSED 6" SINGLE BROKEN WHITE LANE LINE (10' MARK - 30' SKIP)
- SYEL PROPOSED 6" SINGLE YELLOW EDGE LINE
- SYCL PROPOSED 6" SINGLE YELLOW CENTER LINE
- BYCL PROPOSED 6" BROKEN YELLOW CENTER LINE (3' MARK - 9' SKIP)
- DYCL PROPOSED 6" DOUBLE YELLOW CENTER LINE
- DWLEX PROPOSED 6" DOTTED WHITE LANE EXTENSION LINE (2' MARK - 6' SKIP)
- SWCHL PROPOSED 6" SOLID WHITE CHANNEL LINE
- SLOTTED PAVEMENT MARKING: TWO-WAY YELLOW (40' O.C.)
- SLOTTED PAVEMENT MARKING: ONE-WAY WHITE (80' O.C.)

LANESBOROUGH - PITTSFIELD
 ASHWILLTICOOK RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	50	205

PROJECT FILE NO. 606891

PAVEMENT MARKING & SIGNING PLAN



MARKING LEGEND

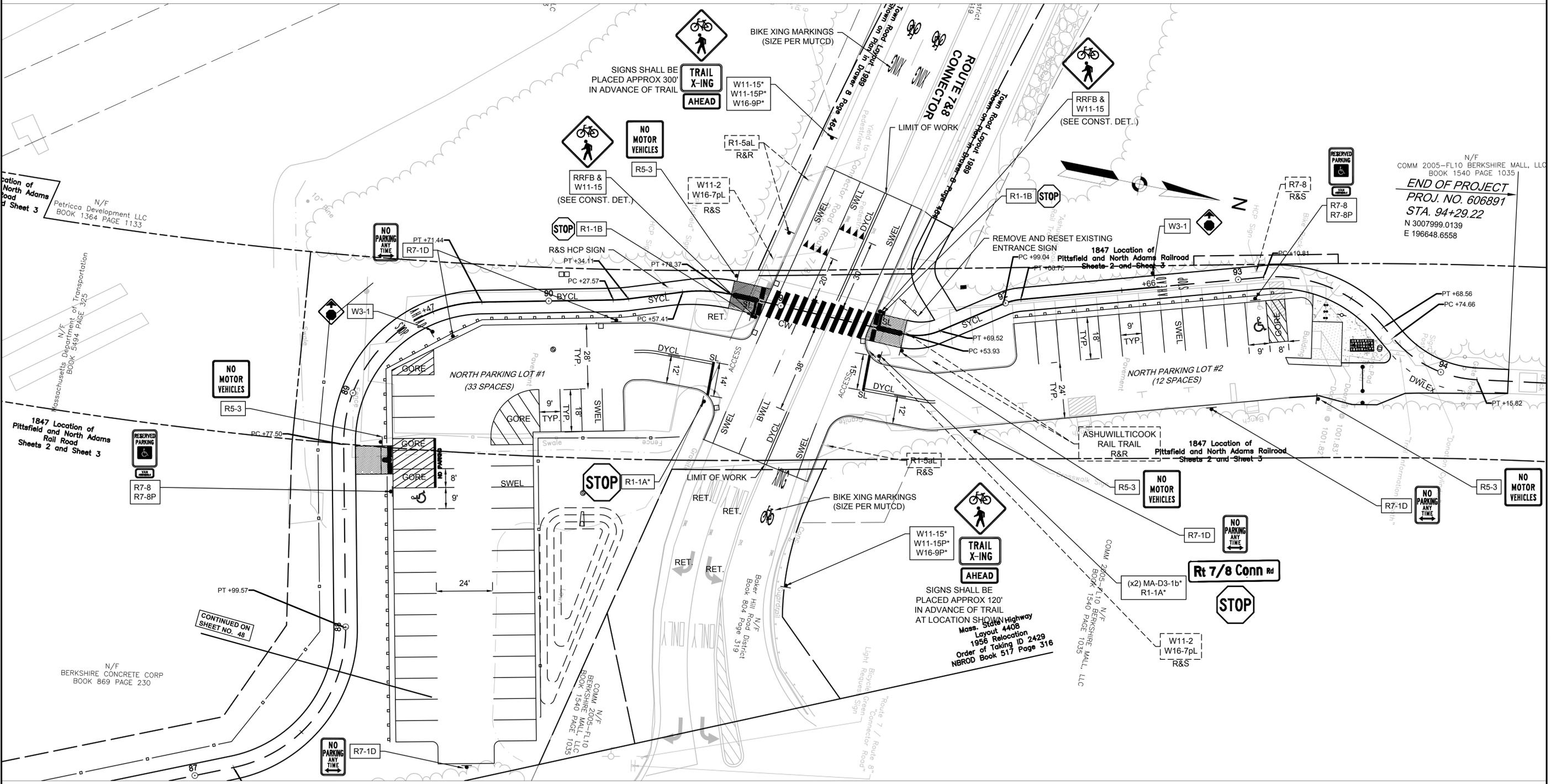
	BICYCLE DETECTOR PAVEMENT MARKING
	PROPOSED SIGN
SL	PROPOSED 12" WHITE STOP LINE
CW	PROPOSED 24" WHITE CROSS WALK
SWEL	PROPOSED 6" SINGLE WHITE EDGE LINE
SWLL	PROPOSED 6" SINGLE WHITE LANE LINE
BWLL	PROPOSED 6" SINGLE BROKEN WHITE LANE LINE (10' MARK - 30' SKIP)
SYEL	PROPOSED 6" SINGLE YELLOW EDGE LINE
SYCL	PROPOSED 6" SINGLE YELLOW CENTER LINE
BYCL	PROPOSED 6" BROKEN YELLOW CENTER LINE (3' MARK - 9' SKIP)
DYCL	PROPOSED 6" DOUBLE YELLOW CENTER LINE
DWLEX	PROPOSED 6" DOTTED WHITE LANE EXTENSION LINE (2' MARK - 6' SKIP)
SWCHL	PROPOSED 6" SOLID WHITE CHANNEL LINE
	SLOTTED PAVEMENT MARKING: TWO-WAY YELLOW (40' O.C.)
	SLOTTED PAVEMENT MARKING: ONE-WAY WHITE (80' O.C.)

XXXX	PROPOSED SIGN DESIGNATION
XXXX	EXISTING SIGN DESIGNATION

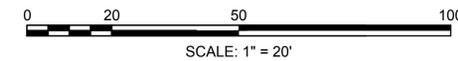
LANESBOROUGH - PITTSFIELD
ASHUWILLTICOOK RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	52	205
PROJECT FILE NO.		606891	

PAVEMENT MARKING & SIGNING PLAN



N/F
COMM 2005-FL10 BERKSHIRE MALL, LLC
BOOK 1540 PAGE 1035
END OF PROJECT
PROJ. NO. 606891
STA. 94+29.22
N 3007999.0139
E 196648.6558



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22-JUL-2020
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 MS VIEW: LAYER STATE: -

20100916A60_HFN01.DWG 21-JUL-2020

HIGHWAY GUARD DETAILS
 TIMBER GUARDRAIL STA. 2+72 TO 4+58 LT

TRAFFIC SIGNAL CONDUIT
 NONE

WATER SUPPLY ALTERATIONS
 SEE DRAINAGE AND UTILITY PLANS

DRAINAGE DETAILS
 SEE BELOW

- NOTES:
- REMOVE AND DISCARD ALL EXISTING RAILS LOCATED WITHIN THE PROJECT LIMITS. COST FOR R&D SHALL BE PAID UNDER ITEM 129.5 TRACK EXCAVATION.
 - SEE TYPICAL SECTIONS FOR FORMATION OF SHARED USE PATH SHOULDERS AND MATERIAL SPECIFICATIONS
 - ALL EXISTING STRUCTURES WITHIN CURB RAMP AREAS SHALL BE ADJUSTED TO BE FLUSH WITH CURB RAMP SURFACE.
 - SEE LANDSCAPE PLANS FOR PROPOSED TREE PLANTINGS

LEGEND:

PROPOSED WHEELCHAIR RAMP DETAIL # [X#]

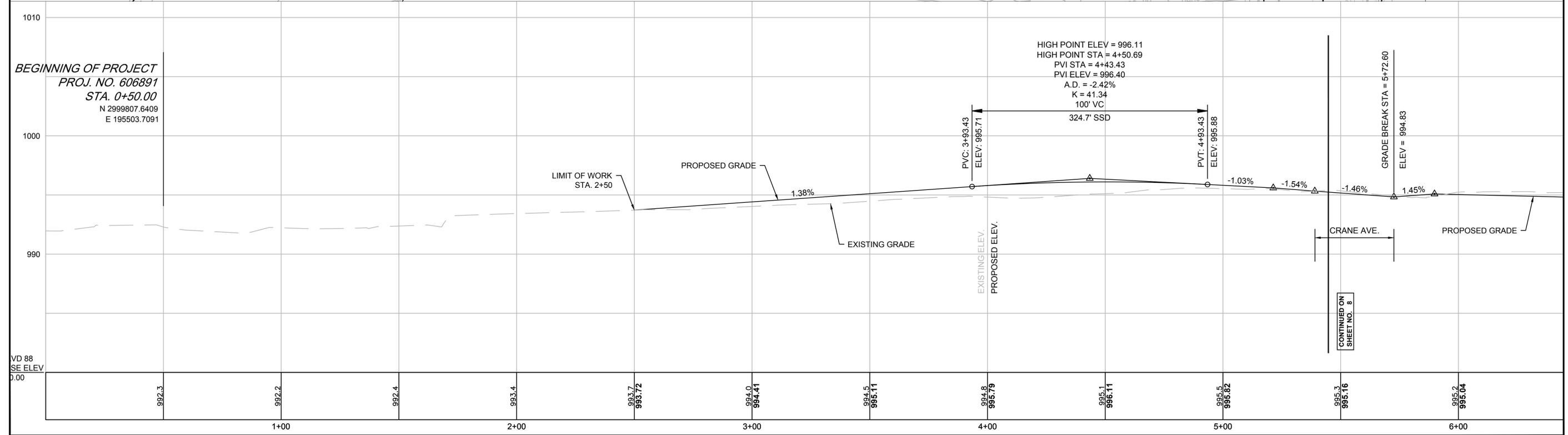
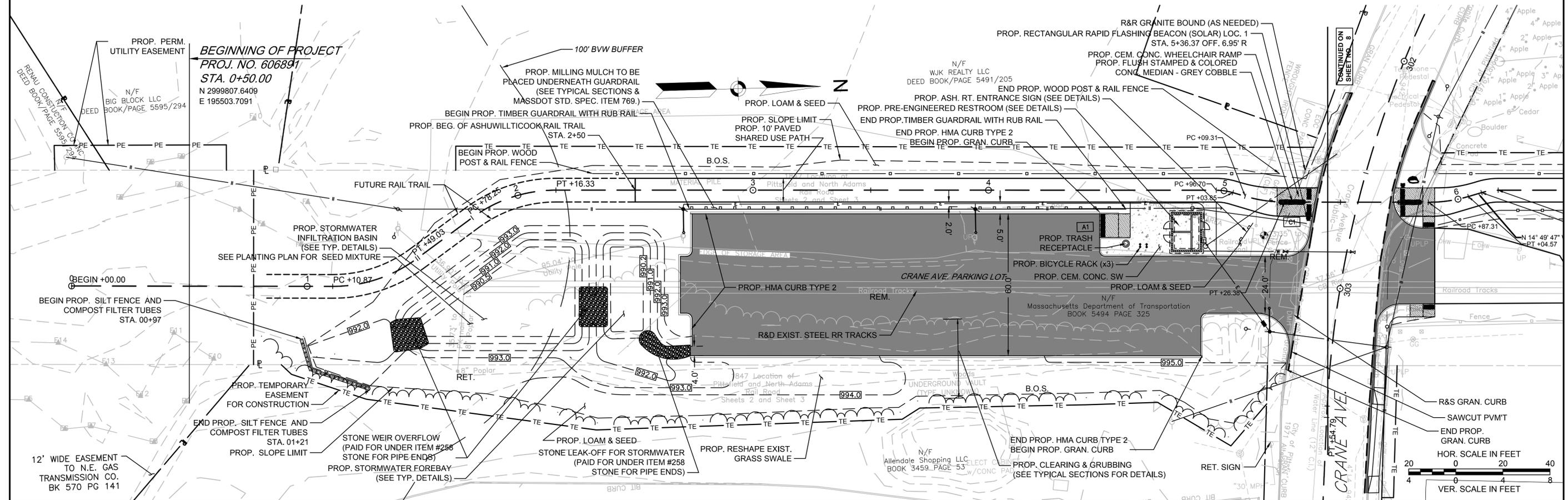
PROPOSED DRIVEWAY DETAIL # [DR#-#]

LANESBOROUGH - PITTSFIELD
 ASHWILLTICOOK RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	7	205

PROJECT FILE NO. 606891

CONSTRUCTION PLAN & PROFILE



CONTINUED ON SHEET NO. 8

HIGHWAY GUARD DETAILS

TIMBER GUARDRAIL
STA 83+46.39 TO 86+22.22

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

NOTES:

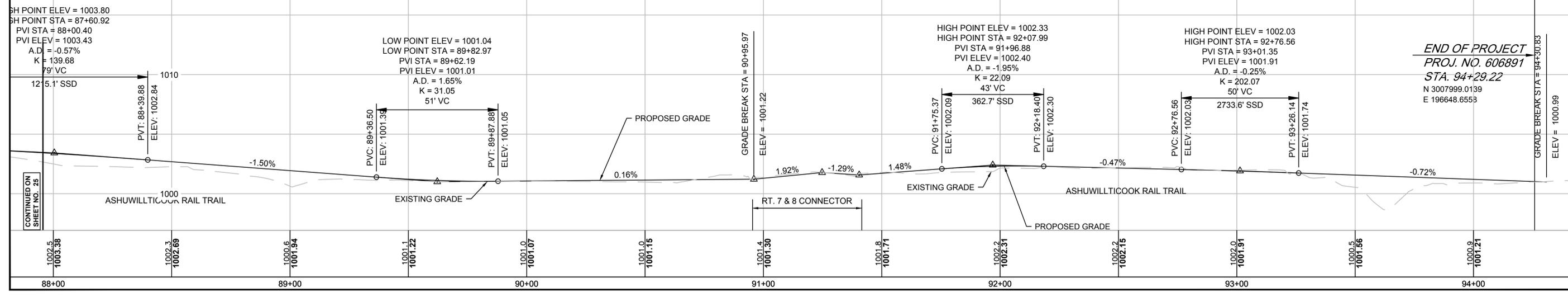
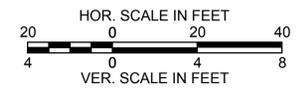
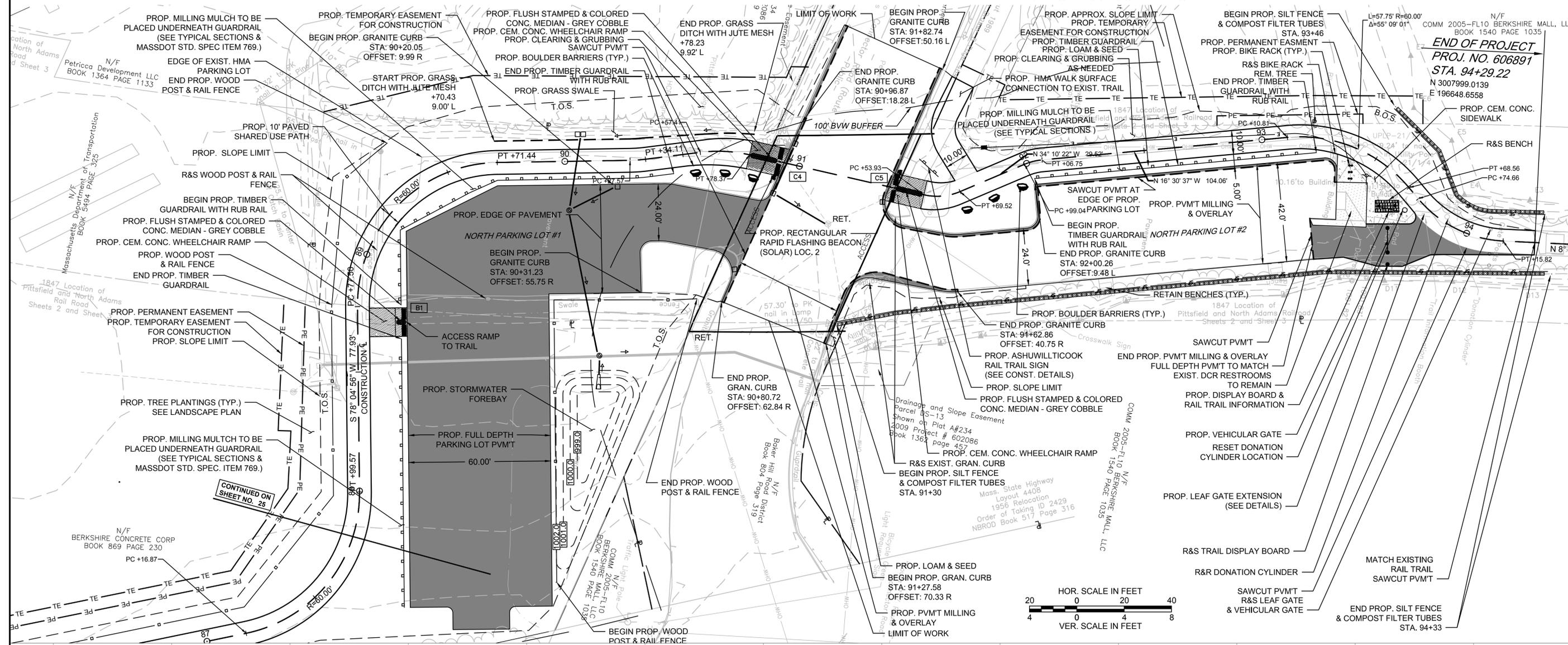
- REMOVE AND DISCARD ALL EXISTING RAILS LOCATED WITHIN THE PROJECT LIMITS. COST FOR R&D SHALL BE PAID UNDER ITEM 129.5 TRACK EXCAVATION.
- SEE TYPICAL SECTIONS FOR FORMATION OF SHARED USE PATH SHOULDERS AND MATERIAL SPECIFICATIONS
- ALL EXISTING STRUCTURES WITHIN CURB RAMP AREAS SHALL BE ADJUSTED TO BE FLUSH WITH CURB RAMP SURFACE.
- SEE LANDSCAPE PLANS FOR PROPOSED TREE PLANTINGS

LANESBOROUGH - PITTSFIELD
ASHUWILLTICOOK RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	26	205

PROJECT FILE NO. 606891

CONSTRUCTION
PLAN & PROFILE



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LAYER STATE: -

21-Jul-2020 20100916A60_HFN01.DWG

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

SEE BELOW

DRAINAGE DETAILS

SEE BELOW

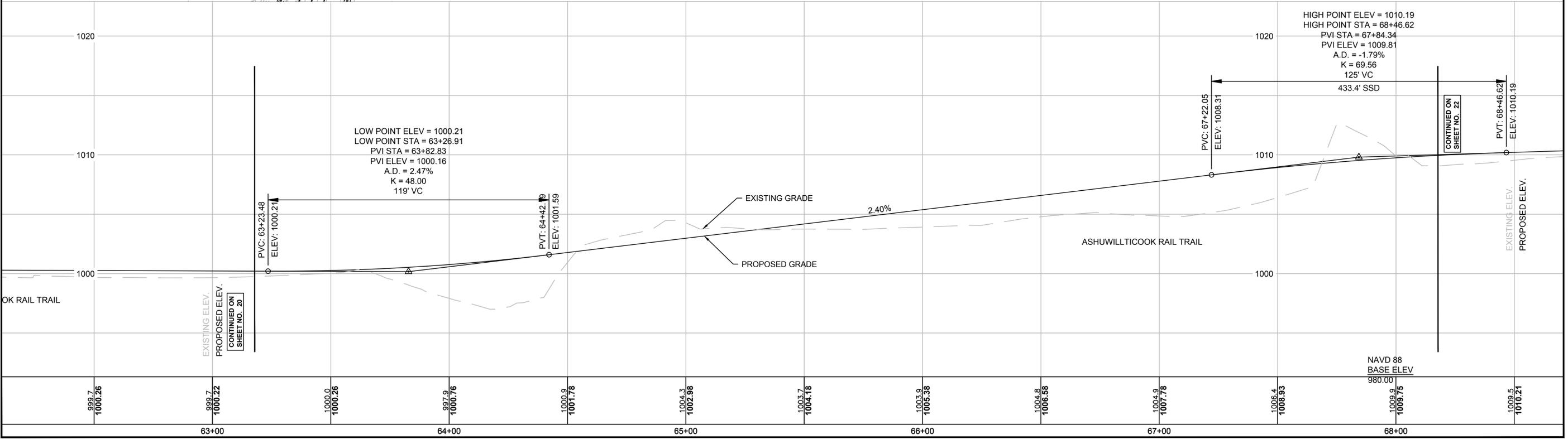
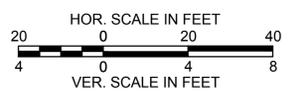
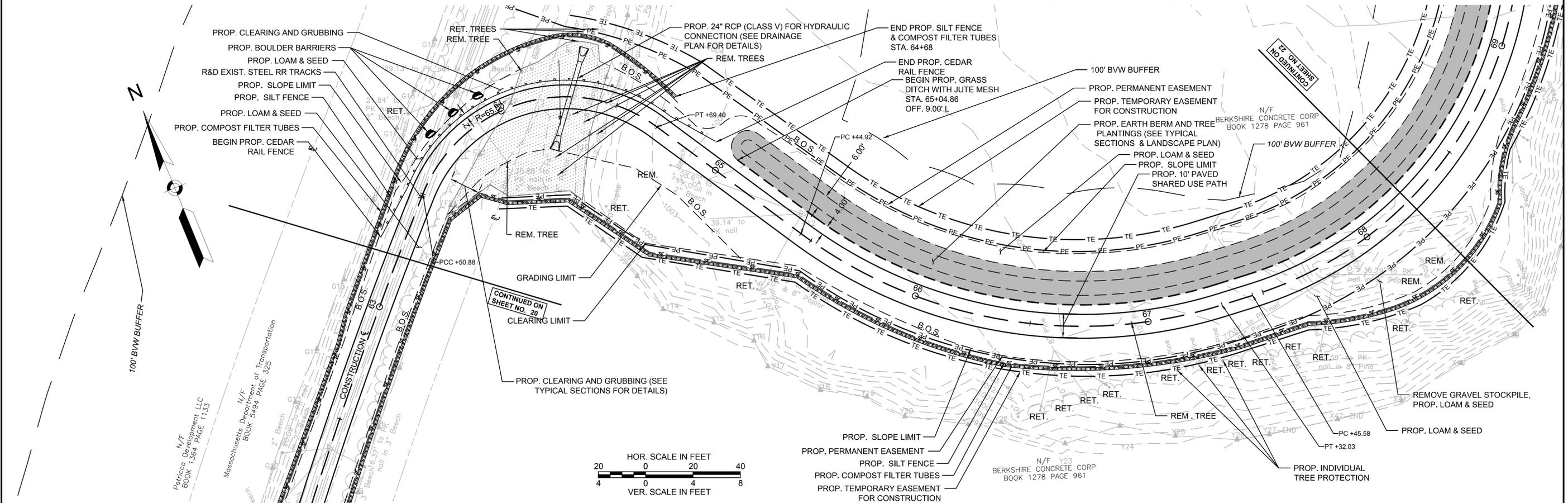
NOTES:

1. REMOVE AND DISCARD ALL EXISTING RAILS LOCATED WITHIN THE PROJECT LIMITS. COST FOR R&D SHALL BE PAID UNDER ITEM 129.5 TRACK EXCAVATION.
2. SEE TYPICAL SECTIONS FOR FORMATION OF SHARED USE PATH SHOULDERS AND MATERIAL SPECIFICATIONS
3. ALL EXISTING STRUCTURES WITHIN CURB RAMP AREAS SHALL BE ADJUSTED TO BE FLUSH WITH CURB RAMP SURFACE.
4. SEE LANDSCAPE PLANS FOR PROPOSED TREE PLANTINGS

LANESBOROUGH - PITTSFIELD
ASHUWILLTICOOK RAIL TRAIL EXTENSION

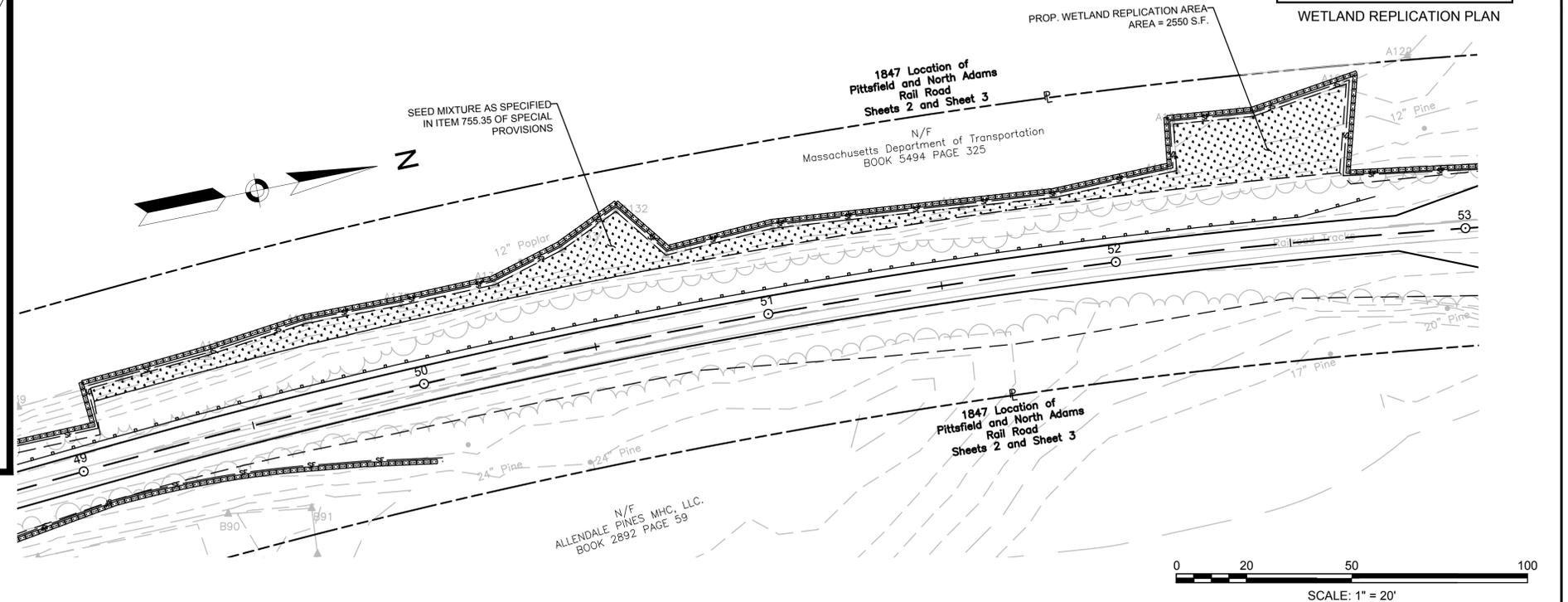
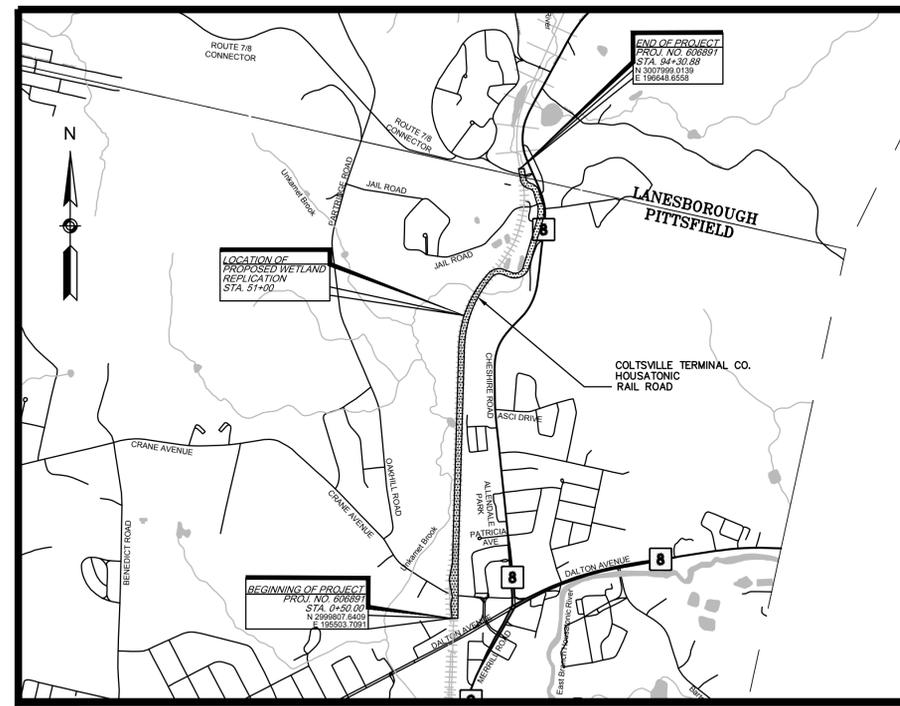
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MA	CMQ-003S(360)X	21	205
PROJECT FILE NO.		606891	

CONSTRUCTION
PLAN & PROFILE

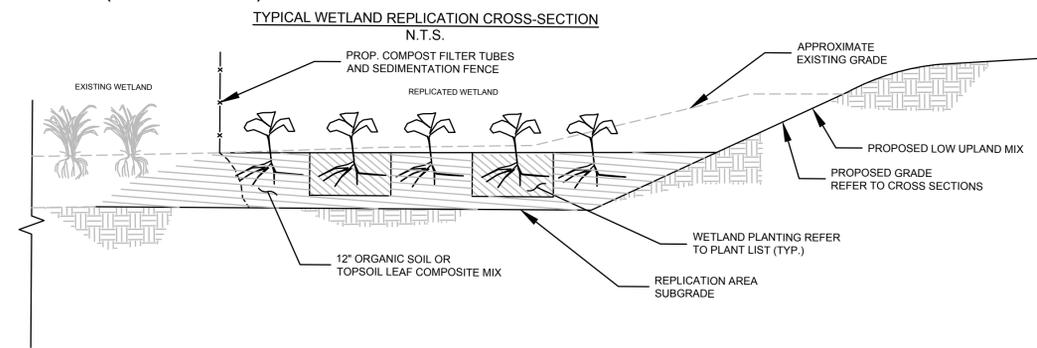


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20100916A60_HFN01.DWG 21-Jul-2020

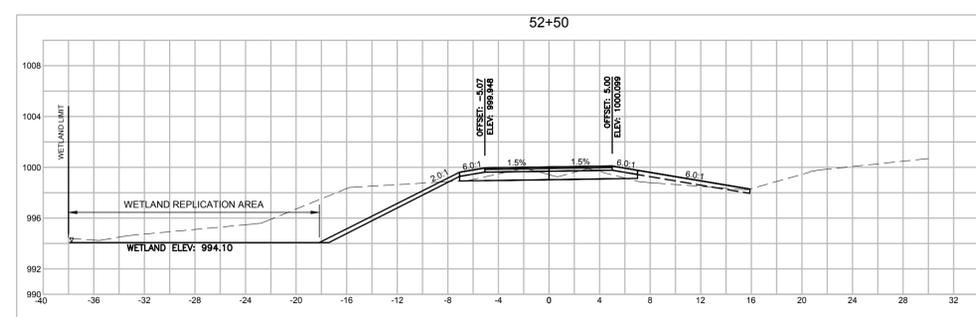
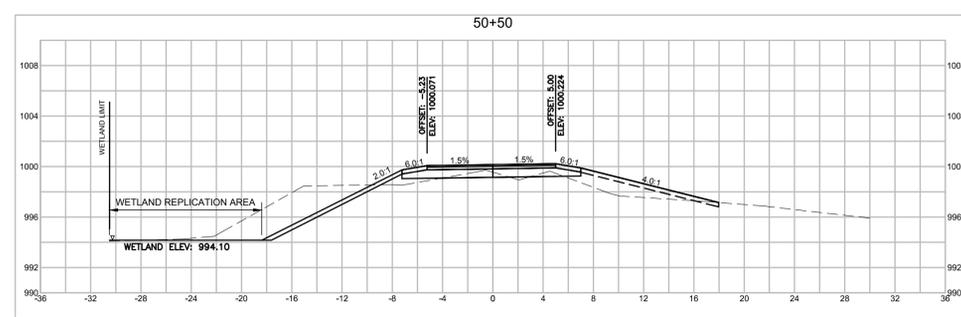
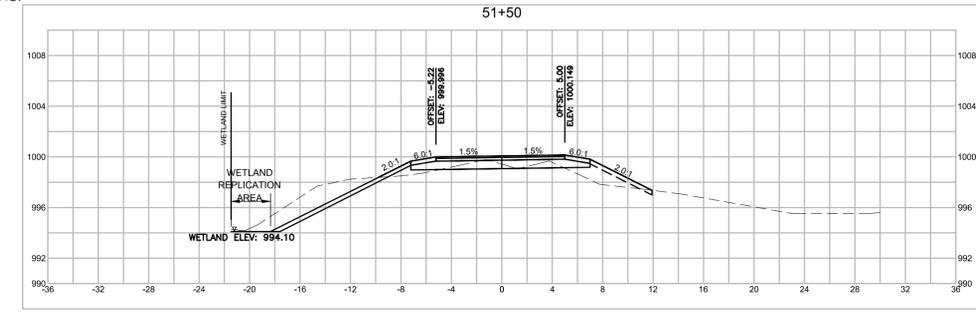
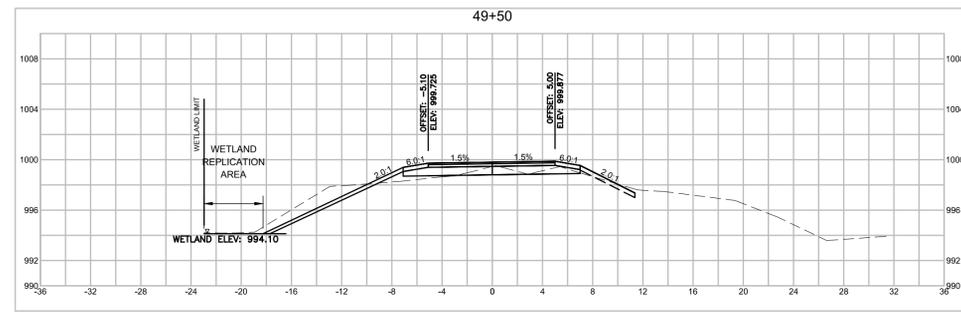


LEGEND



WETLAND PLANT LIST				
QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
6	EASTERN COTTONWOOD	POPULUS DELTOIDES	4'-6'	DETERMINED BY WETLAND SPECIALIST
12	RED MAPLE	ACER RUBRUM	4'-6'	DETERMINED BY WETLAND SPECIALIST
6	COMMON WINTERBERRY	ILEX VERTICILLATA	18"-24"	DETERMINED BY WETLAND SPECIALIST
6	HIGHBUSH BLUEBERRY	VACCINIUM CORYMBOSUM	18"-24"	DETERMINED BY WETLAND SPECIALIST
63	SENSITIVE FERN	ONOCLEA SENSIBILIS	5" PLUG	DETERMINED BY WETLAND SPECIALIST
63	CINNAMON FERN	OSMUNDASTRUM CINNAMOMEUM	5" PLUG	DETERMINED BY WETLAND SPECIALIST

WETLAND REPLICATION CROSS-SECTIONS
N.T.S.

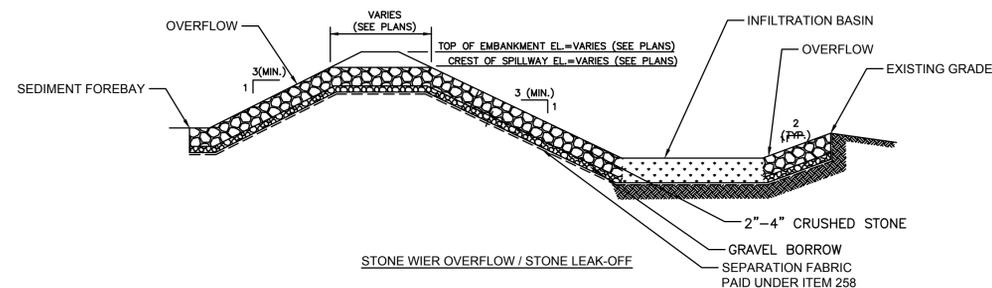


WETLAND REPLICATION NOTES:

- PLANT LOCATIONS OF PLANTS LISTED WITHIN THE WETLAND PLANT LIST TO BE DETERMINED PER WETLAND SPECIALIST.
- WETLAND REPLICATION SHALL BE CONDUCTED IN ACCORDANCE WITH THESE DRAWINGS. SPECIAL PROVISIONS AND REQUIREMENTS OUTLINED IN THE ORDER OF CONDITIONS AS ISSUED BY THE CITY OF PITTSFIELD CONSERVATION COMMISSION.
- THE WETLAND REPLICATION SITE WILL BE ACCESSED FROM THE ASHWILLTICOOK RAIL TRAIL.
- ALL EXISTING WETLAND DELINEATION WITHIN 100 FEET OF THE WORK AREA WILL BE RE-FLAGGED EVERY 25 FEET.
- A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, THE ENGINEER, SUPERVISING WETLAND SPECIALIST AND OTHER KEY PERSONNEL PRIOR TO THE COMMENCEMENT OF WORK TO REVIEW SEDIMENT AND EROSION CONTROL MEASURES, CONSTRUCTION METHODS AND WETLAND REPLACEMENT PROCEDURES.
- THE SEDIMENTATION EROSION CONTROLS WILL BE PLACED AS SHOWN ON THE PLAN AND AS DIRECTED BY THE ENGINEER, SUPERVISING WETLAND SPECIALIST, OR OTHER KEY PERSONNEL. SEDIMENTATION EROSION CONTROLS SHALL BE MAINTAINED UNTIL THE SITE HAS COMPLETELY STABILIZED.
- THE SUBGRADE OF WETLAND REPLACEMENT AREAS WILL BE GRADED A MINIMUM OF ONE FOOT BELOW THE ADJACENT WETLANDS. NO GRADING WILL BE PERMITTED WITHIN THE EXISTING WETLAND AREAS EXCEPT TO CUT OPENINGS IN BERMS TO ESTABLISH HYDRAULIC CONDUCTIVITY BETWEEN THE REPLACEMENT WETLAND AND THE WETLAND REPLICATION.
- A TWELVE-INCH LAYER OF ORGANIC SOIL OR MIXTURE OF EQUAL PARTS OF GOOD QUALITY TOPSOIL AND CLEAN LEAF COMPOST WILL BE PLACED IN THE BOTTOM OF THE REPLACEMENT AREA.
- THE DISTURBED SOILS WITHIN THE WETLAND REPLACEMENT AREA WILL BE SEEDED LIGHTLY WITH WET SEED MIX OR EQUIVALENT AT RATES OF 1 LBS / 2500 FT² IN AREAS WITH EXPOSED SOILS AND 25 LBS / 2500 FT² IN VEGETATED AREAS AS TOP-SEEDING. THE AREA WILL BE MULCHED WITH TWO INCHES OF CLEAN LEAF COMPOST OR STRAW.
- SIDE SLOPES WILL BE GRADED WITH A MINIMUM OF FOUR INCHES OF THE SOIL MIXTURE AS DESCRIBED ABOVE AND SEEDED WITH 'SHOULDER SEED MIX'. SLOPES WILL THEN BE MULCHED WITH THREE INCHES OF STRAW.
- DURING AND AFTER THE FIRST AND SECOND GROWING SEASON, THE SUCCESS OF THE VEGETATIVE GROWTH WILL BE REVIEWED AND EVALUATED. ADDITIONAL VEGETATION WILL BE PLANTED AS NECESSARY TO REPLACE STRESSED OR MISSING VEGETATION AND TO ACHIEVE THE 75% VEGETATIVE DENSITY SPECIFIED IN THE SPECIAL PROVISIONS.
- GRADING AND PLANTINGS WILL NOT BE CONDUCTED DURING PERIODS OF HIGH WATER. CONSTRUCTION OF THE REPLACEMENT AREA WILL CONTINUE UNINTERRUPTED TO AVOID EROSION AND THE SILTATION OF WETLANDS.
- THE CONSTRUCTION OF THE WETLAND REPLICATION AREA WILL BE SUPERVISED BY A QUALIFIED WETLAND SPECIALIST IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- THE STABILITY OF THE AREA WILL BE MONITORED AND ADJUSTMENTS WILL BE MADE AS NECESSARY TO PREVENT IMPACTS TO THE RESOURCE AREAS.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CMQ-003S(360)X	83	205
PROJECT FILE NO.		606891	

CONSTRUCTION DETAILS

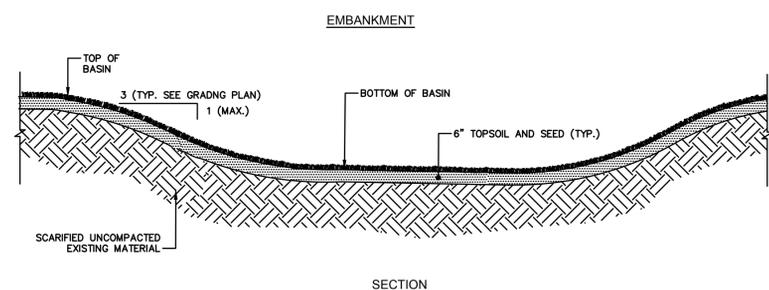


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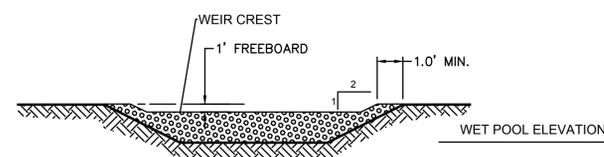
1. IMPERVIOUS MATERIAL FOR USE IN BASIN EMBANKMENT AREAS AND WHERE SHOWN ON THE PLANS SHALL BE COMPOSED OF CLAYS, SILTY CLAYS, OR CLAYEY SILTS. THE SOIL SHALL BE FREE OF RUBBISH, ICE, VEGETATIVE MATTER, LOAM, OR OTHER DEBRIS AND HAVE THE FOLLOWING GRADATION AS DEFINED BY A STANDARD SEIVE TEST (ASTM D422):

MIN. PERCENT PASSING (BY WT.)	SEIVE SIZE
100	3.5"
80-100	3/4"
40-90	No. 4
30-85	No. 40
25-75	No. 200

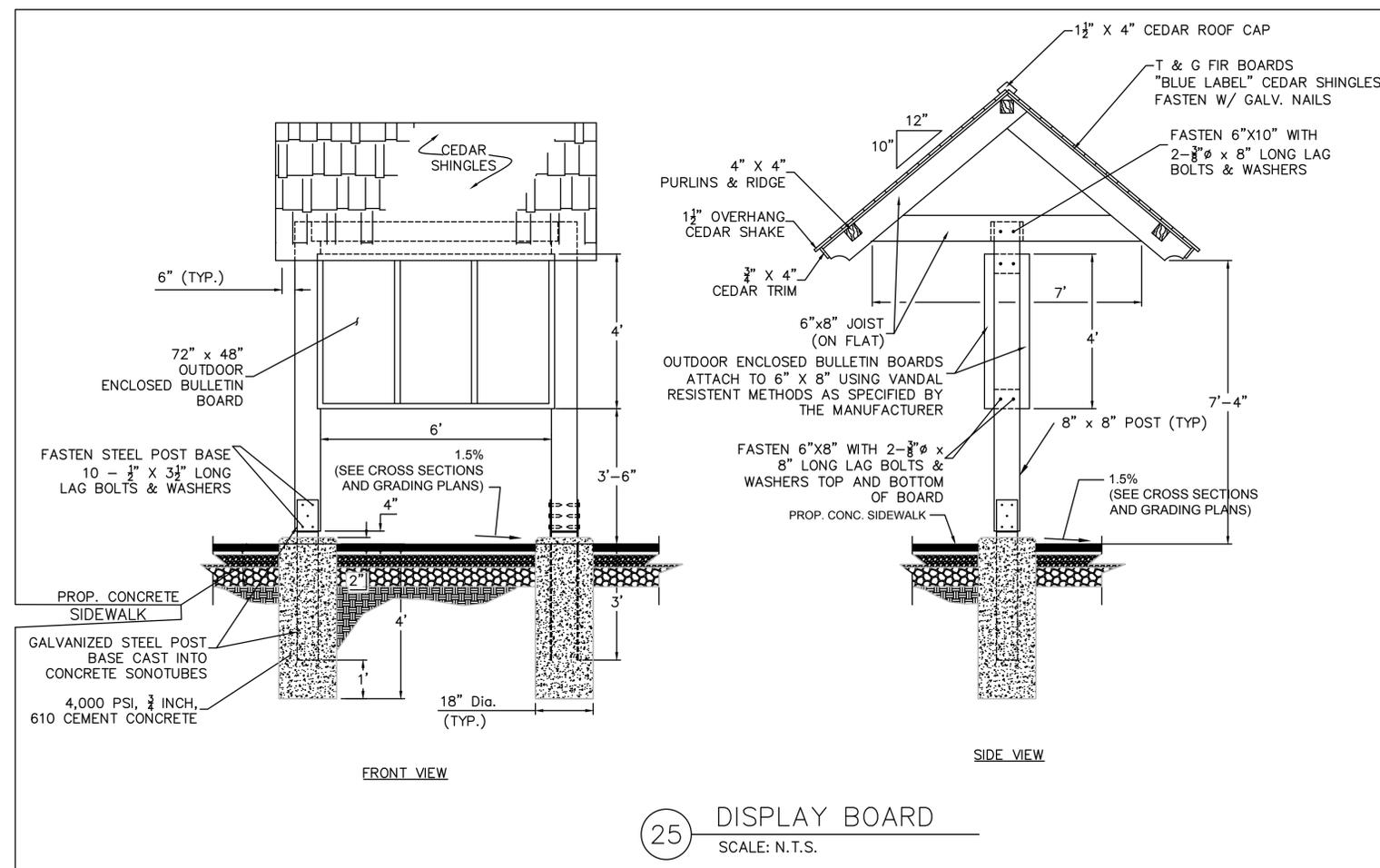
2. PERVIOUS BACKFILL MATERIAL FOR USE IN FILL AREAS ASSOCIATED WITH BASIN EMBANKMENTS SHALL BE COMPOSED OF ORDINARY BORROW MATERIAL (ITEM 150.) OR EXCAVATED MATERIAL FROM THE SITE DEEMED RE-USEABLE BY THE ENGINEER. SATISFACTORY ON-SITE MATERIAL SHALL HAVE SOIL CLASSIFICATION GROUPS OF GW, GP, GM, SW, SP, AND SM ACCORDING TO ASTM D 2487, OR A COMBINATION OF THESE GROUPS AND SHALL BE FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES (75 MM) IN ANY DIMENSION, DEBRIS, SOILS, FERTILIZERS, VEGETATION, AND OTHER DELETERIOUS MATTER.



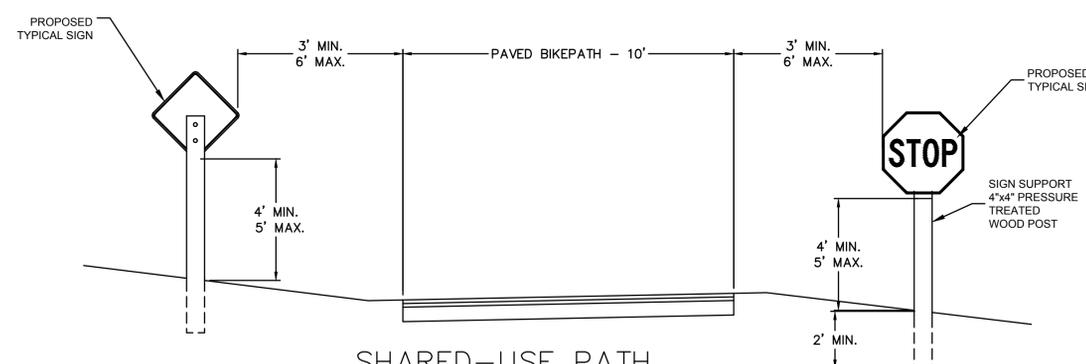
24 INFILTRATION BASIN
SCALE: N.T.S.



26 SEDIMENT FOREBAY
SCALE: N.T.S.

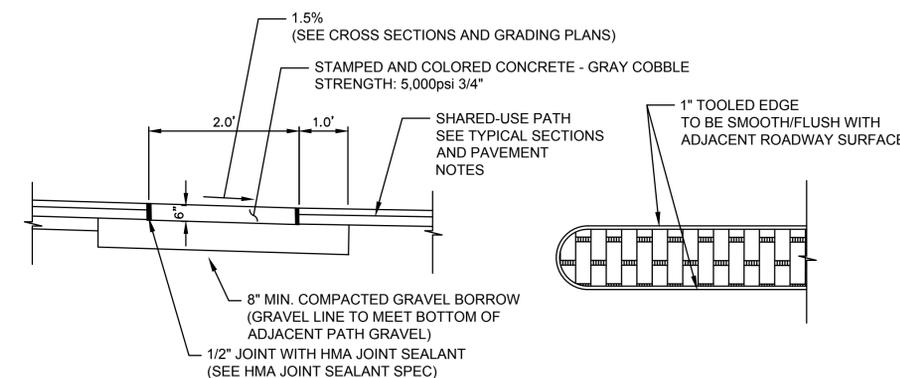


25 DISPLAY BOARD
SCALE: N.T.S.



27 SHARED-USE PATH
TYPICAL SIGN PLACEMENT
SCALE: N.T.S.

NOTES:
1. ALL HARDWARE SHALL BE GALVANIZED.
2. WOOD POSTS SHALL BE PAID FOR UNDER ITEM 847.11".



NOTES:
1) MEDIANS SHALL BE INSTALLED IN A SINGLE CONCRETE POUR WITH NO CONSTRUCTION (COLD) JOINTS IN THE CONCRETE.
2) A 1" TOOLED EDGE SHALL BE INSTALLED TO MAKE A SMOOTH TRANSITION TO THE ADJACENT PAVEMENT

28 STAMPED & COLORED CONCRETE MEDIAN - GREY COBBLE
SCALE: N.T.S.

SECTION
G

References



Connecticut Riverwalk and Bikeway - West Springfield, MA

Section G: References

We are proud of the quality of our work and encourage you to contact any of the references listed below. The three following references are both firm references and personal references of our Principal-in-Charge, Kevin Johnson, PE, PTOE, NETTCP, and Project Manager, Nicholas Lapointe, PE.

Firm and Personal References
Pamela Marquis, PE Right of Way Compliance Administrator Massachusetts Department of Transportation – Highway Division pamela.marquis@dot.state.ma.us 508-929-3793
Ricardo Morales Commissioner of Public Services & Utilities City of Pittsfield, MA rmorales@cityofpittsfield.org 413-448-9768
John Bechard, PE Deputy Chief Engineer of Project Development Massachusetts Department of Transportation – Highway Division john.bechard@dot.state.ma.us 857-368-9325



Connecticut Riverwalk Bikeway Connector Loop – Agawam, MA

Complete List of Municipal Transportation Projects Completed by Project Team

The following list shows our project team's municipal transportation project list from the last 5 years. All projects show a contract amount of more than \$100,000 and/or a construction value of \$1,000,000. We also encourage you to contact these project references. All design projects were funded with Chapter 90 funding, and all State and Federal funding was procured through the Transportation Improvement Program (TIP) unless otherwise noted within the project description.

Name/Location	Fuss & O'Neill Project Manager	Description of Services	Date	Owner Contact	Eng. Costs	Const. Costs
Ashwillticook Rail Trail, Pittsfield, MA	Nicholas Lapointe	Prepare design and construction drawings (PS&E) for a 1.56 mile bikeway along the former Housatonic Railroad corridor in the north end of Pittsfield. Work includes preparation of construction plans through the MassDOT design review stages, design report, evaluation of alternative alignments, preparation of environmental permitting, and right of way plans.	2020	Ricardo Morales Commissioner of Public Services and Utilities 413-448-9768 rmorales@cityofpittsfield.org	\$600,000	\$3,100,000 (estimated)
North Street Reconstruction Phase 4 Pittsfield, MA	Nicholas Lapointe	Preparation of design and PS&E for major multi-lane arterial street reconstruction and streetscape improvements. Construction funded by MassWorks grant.	2017	Ricardo Morales Commissioner of Public Services and Utilities 413-448-9768 rmorales@cityofpittsfield.org	\$407,100	\$4,548,531
King Street Intersection Improvements, Northampton, MA	Nicholas Lapointe	This project will include intersection improvements at the intersections of King Street and North/Summer Streets and King Street and Finn Street. Improvements will include an additional turn lane on North Street and Finn Street to King Street, the possible reduction of King Street from 4 lanes to 2 lanes, on street parking improvements, and traffic signal upgrades. Work will also consist of improved bicycle and pedestrian accommodations, new signage and pavement markings.	2020	Wayne Feiden Director of Planning and Development 413-587-1265 wfeiden@northamptonma.gov	\$259,000	\$3,600,000 (estimated)
Roadway Design of Improvements - Roosevelt Avenue/Island Pond Road Springfield, MA	Nicholas Lapointe	Provide final design for a City roadway and intersection improvement project involving approximately 4,500 feet of roadway. Work includes development of 75% through final PS&E plans for this project in accordance with MassDOT standards and design guidelines. Preparation of preliminary and final right-of-way plans are also included in	2019	Christopher Cignoli Director of Public Works 413-750-2808 ccignoli@springfieldcityhall.com	\$168,000	\$2,120,000

Name/Location	Fuss & O'Neill Project Manager	Description of Services	Date	Owner Contact	Eng. Costs	Const. Costs
Reconstruction of Gaylord Street South Hadley, MA	Nicholas Lapointe	MassWorks project to reconstruct 2500 L.F. of Gaylord street and install a new 10" water main. Also included was replacement and upgrade of existing HMA sidewalks to Concrete and ADA ramps, driveway aprons, RRFB's, 48" culvert headway repair,	2019	Richard Harris Planner 413-538-5011 cpac@southhadley.org	\$100,000	\$1,028,000
Connecticut Riverwalk/Agawam Bike Loop, Agawam, MA	Stephen Savaria	This project is the development of a 10' Shared-Use paved path extending along School Street. This project connected the Connecticut Riverwalk and Bikeway to the School Street wetlands conservation area. The design included over 1,300 feet of Mechanically Stabilized Earth (MSE) retaining walls to avoid impacting the conservation area. Environmental permitting included NOI, ACOE, and MEPA permits resulting in the design of a compensatory flood storage basin. Also included was wetland overlook areas and reclamation/reconstruction of over 1 mile of School Street.	2015	Deborah Dachos Planning and Conservation Director 413-786-0400 ddachos@agawam.ma.us	\$200,000	\$2,400,000
Main St. (Route 7) Reconstruction Great Barrington, MA	Stephen Savaria	Preparation of conceptual plans, preliminary design, and final PS&E for roadway, sidewalk, and traffic signal improvements for the major multi-lane arterial road (Main Street, Route 7) in downtown. Project work included design of four signalized	2016	Christopher Rembold, AICP Town Planner 413-528-1619 crembold@townofgb.org	\$683,320	\$4,977,000
West Housatonic St./ Center St. Reconstruction Pittsfield, MA	Stephen Savaria	Prepare design improvements for this major signalized intersection on Route 20, including construction plans through the PS & E stage; involves preparation of an RSA, bike and pedestrian accommodation improvements, as well as preparation of Right Of Way plans.	2017	Ricardo Morales Commissioner of Public Services and Utilities 413-448-9768 rmorales@cityofpittsfield.org	\$470,000	\$2,900,000
Signal & Intersection Improvements at Memorial Drive (Route 33) & Broadway, Chicopee, MA	Stephen Savaria	This project involves city-owned signalized intersection improvements at one location on Memorial Drive (Route 33) at Montgomery/Sheridan Streets; and two locations on Broadway Road at Main/East Main/Church Streets, and on Broadway Road at East/Belcher Streets.	2018	Stan Kulig DPW Director 413-594-3557 skulig@chicopeema.gov	\$387,272	\$2,766,688
Dwight Road Corridor Improvements, Longmeadow, MA	Stephen Savaria	The proposed project is for the construction of improvements to alleviate congestion in the Dwight Road corridor abutting the proposed medical campus site frontage and the immediately adjacent intersections.	2018	Michael Crowley Crowley Associates mcrowley@crowleyassociates	\$159,000	\$2,069,331

Name/Location	Fuss & O'Neill Project Manager	Description of Services	Date	Owner Contact	Eng. Costs	Const. Costs
Springfield Road (US Rt. 20) Corridor Improvements Westfield, MA	Stephen Savaria	The goal of this project is to improve access to the 99 Springfield Road site and increase the level of safety through geometric and capacity improvements within the intersection. Multiple signalized intersections within the corridor will be coordinated for through traffic progression.	2020	Mark Cressotti City Engineer 413-572-6219 m.cressotti@mail.cl.westfield.ma.us	\$192,000	\$1,200,000
Six Corners Intersection Roundabout Design Springfield, MA	Daniel DeLany	Provide design services to the City in the preparation of construction plans, specifications, and estimates for replacing the six corners intersection with a roundabout. Work involves conceptual plan development, review meetings, preliminary and final design development, and preparation of construction bid documents.	2020	Christopher Cignoli Director of Public Works 413-750-2808 ccignoli@springfieldcityhall.com	\$209,570	\$2,700,000
Connecticut Riverwalk, West Springfield, MA	Daniel DeLany	Fuss & O'Neill provided the engineering associated with the design and permitting of the CT Riverwalk and Bikeway project on Riverdale Road. The design included 25%, 75%, and 100% submissions and ENF and wetlands NOI, and the final PS&E, Right-of-Way Plans, and Bid Stage documents.	2016	James Lyons Town Engineer 413-263-3249 jlyons@west-springfield.ma.us	\$182,000	\$1,900,000
April Lane Reconstruction Pittsfield, MA	Daniel DeLany	Fuss & O'Neill provided the engineering associated with the reconstruction of April Lane from Dalton Division Road approximately 1,300 linear feet. Sidewalks were replaced with new cement concrete walks and included ADA assessable ramps and driveway aprons. Sidwalk was also added to portions of the roadway where none had previously existed. Roadway reconstruction consisted of pavement reclamation followed by repaving of the roadway. Existing precast concrete curbing was replaced with granite curbing and utility frams and covers were replaced. Street lights were also added.	2018	Ricardo Morales Commissioner of Public Services and Utilities 413-448-9768 rmorales@cityofpittsfield.org	\$68,000	\$600,000
Derby Drive Roadway Extension Gardner, MA	Jonathan Allard	Design services for the extension of Derby Drive through the 158 Rear Main Street property; including the installation of roadway drainage, as well as the extension of the existing 8" water line.	2018	Trevor Beauregard Director of Community Development and Planning 978-630-4014 tbeauregard@gardner-ma.gov	\$100,000	\$800,000

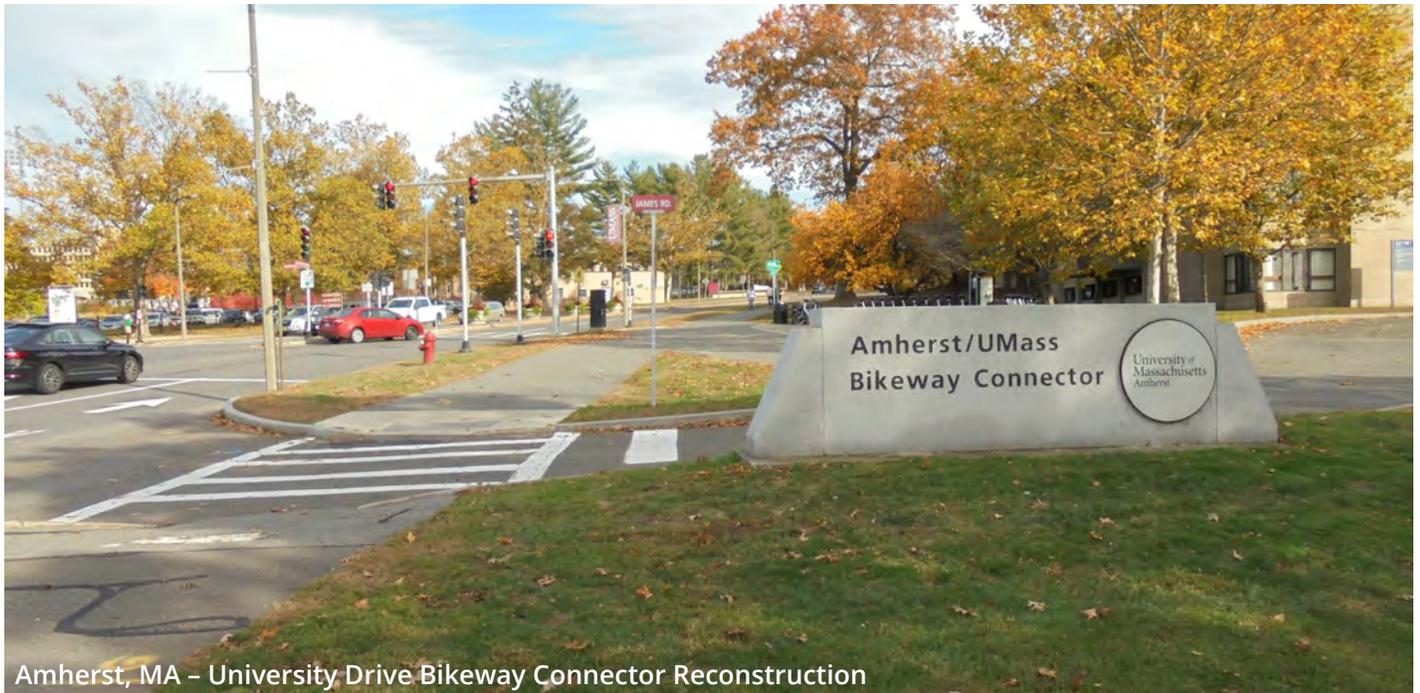
SECTION
H

Competing Commitments

BRO LANE

NO
PARKING
ANY
TIME

Coventry Greenway - Coventry, RI



Amherst, MA - University Drive Bikeway Connector Reconstruction

Section H: Competing Commitments

The Bruce Freeman Rail Trail (BFRT) is a high-profile project for the Commonwealth, MassDOT, region, and most importantly, for the Town of Sudbury. These type of signature projects require the focus of not only the project team but also the senior leadership of the firm to dedicate the necessary staff. Fuss & O'Neill is fully committed to the successful completion of this project. Beyond the staff listed in the organizational chart, the firm has the ability to call upon the support of 300 employees across New England – including our three Massachusetts offices in Springfield, Quincy, and downtown Boston – to provide expertise and guidance as required.

Nick Lapointe is a “hands-on” Project Manager with frequent and open communication with his staff to discuss workload and project commitments. Nick understands he has the full support of the firm through his weekly project meetings with Kevin Johnson. If Nick determines a key task needs additional resources, Kevin will ensure he has the support to keep the project on track. No other project commitments of key staff will take precedence over the BFRT final design. It's too important to you and to our personal reputations with MassDOT to keep this landmark project on schedule.

Our policy is to assign a permanent team to all multidisciplinary projects such as the BFRT. Meeting milestones and ensuring this project is advertised on time is a key success factor. Through the assignment of a permanent team, we prevent the picking up and putting down of the project, which can cost time and money for new staff to get up to speed on the project history and design nuances. A vested design team creates a passion for project success. A project of this magnitude, with the added complexity of ROW impacts, environmentally sensitive areas and a rapidly approaching advertisement date doesn't need a dedicated team, it demands one to be successful. The Fuss & O'Neill team recognizes the significance of this project to the Town of Sudbury. You have the full commitment of the firm and our project team leadership that the key personnel listed in Section E – Project Team are available and dedicated to your project.



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