

From: agouliau@aol.com
To: [Carpenter, Jennifer](#)
Cc: aklyver@adamklyverarchitect.com
Subject: Historical District Commission
Date: Thursday, November 9, 2023 9:37:34 AM

Hi Jennifer,

I'm writing to you to resign my position as an alternate on the Historic District Commission. I have been in touch with Adam Klyver and he recommended that I contact you. Unfortunately my teaching schedule has changed and I can no longer make the meetings. Please let me know any next steps I need to take to make this official.

Thanks,
Alyssa Stack

From: Kirstin Etela <kmetela@gmail.com>

Sent: Thursday, April 13, 2023 10:12 AM

To: Browne, Betsy <BBrowne@fairfieldct.org>

Subject: Resignation from Solid Waste and Recycling Commission

Good morning, Betsy,

I am writing to inform the town of my resignation from the Solid Waste and Recycling Commission. I have been presented with the opportunity to make a significant life change that means I am leaving Fairfield. I love this town, and it has been my privilege to serve on the Commission. I informed the other commissioners of my resignation at our meeting Monday.

Thank you,
Kirstin Etela
90 South Pine Creek Road
203-343-3654
kmetela@gmail.com

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Kirstin



Town of Fairfield

Office of the First Selectman
725 Old Post Road
Fairfield, CT 06824

BOARDS AND COMMISSIONS QUESTIONNAIRE

To be considered for appointment to a Board or Commission please fill out this form, save a copy and email the saved copy, along with a copy of your resume, to the First Selectman's office at firstselectmanffd@town.fairfield.ct.us. Please note that your resume and completed questionnaire are public documents. If you have any questions please contact the First Selectman's Office at 203-256-3030 or firstselectmanffd@town.fairfield.ct.us.

Board/Commission: **Police Commission**

Date: 6/8/2018

Name: Ronald Pine

Address: 36 Highlawn Rd Fairfield CT 06824

Party: Republican

email: rpinefusa@aol.com

home phone: **203 334-4746**

work phone: **203 521-1018**

cell phone: **203 521-1018**

1. How did you learn about this position? Commissioner Jamie Millington
2. Why are you interested in serving and how can you contribute to this board / commission? I have a long history of public/community service, and believe with my background, I can act as a valuable resource to the Board and the Town of Fairfield.
3. Have you attended any meetings or reviewed past minutes / agendas? If yes, please specify. I have reviewed past minutes, and have attended a commission meeting while in my capacity as Chairman of the Fairfield Parking Authority.
4. Have you spoken with the chair, any members, or the appropriate Department Head? I have spoken with some members of the commission, and some have encouraged me to apply for this position.
5. Have you read the written description of the board's role? Yes
6. Do you have any potential conflict of interest? none
7. Do you know the time, date and location of meetings and will you be able to attend and fulfill the obligations of the position? yes

8. Participation requires that you are registered voter in the town of Fairfield. Additionally, the town charter requires that party balance be maintained on all boards/commissions. Are you registered to vote and what is your party affiliation? I am registered to vote, and am a Republican.

9. Please use this space to ask any questions you may have or to provide additional information you'd like to share.

In my role as Chairman, and longtime member, of the Fairfield Parking Authority, I have had frequent contact with command staff of the Fairfield Police department, and have interacted with them on various issues. I have worked with them, and the CT DOT, in the implementation of surveillance cameras at both the Fairfield Center and Southport Stations, and the installation of magnetic locks on the doors to the waiting rooms. I have also worked with the Command Staff in streamlining and deployment of the Police Specials that are hired by the Parking Authority to patrol and issue tickets at both Railroad stations (Fairfield Center, Southport).

RONALD PINE

36 HIGHLAWN RD FAIRFIELD CT 06824 RTM District 3, 28th Senatorial District, 132nd State House District, 4th Congressional District

EDUCATION:

Westfield State University BS Criminal Justice Minor Psychology

Graduate of Drug Enforcement Commanders School (U.S Dept. Of Justice)

International Chiefs of Police Financial Crimes Investigations Course

Connecticut States Attorney Search and Seizure Course

Graduate of FBI SWAT School

State Election Enforcement Commission Rules and regulations Course

Fairfield Town Clerk seminar on Freedom of Information Laws

PROFESSIONAL:

Norwalk Police Department/ Retired Detective Sergeant

20 yrs. Investigative 9 yrs. Supervisory

Major Crime/Homicide

Narcotics/Vice/Organized Crime

Licensed Private Investigator, Department of Public Safety (State Police) License I-2558 (active)

Past Instructor at the Bridgeport Police Academy (Civil Liability, Penal Code, and Property Crimes)

Presently in charge of building security at FLHS

RECOGNITIONS:

Several Distinguished Service Commendations from the Norwalk Police Department

U.S. Attorney Award (Human Trafficking)

DEA Award (Colombian Drug Cartel)

Letter of commendation from the Director of the FBI (Gambino Crime Family)

CIVIC/Volunteer

Past 1st VP of Holland Hill PTA

Served two years on the PTA Council

Served on the Fairfield Board of Education's Curriculum Guidelines Committee

Served three terms on the Fairfield RTM (Old District 8) Served as both Chairman and Vice Chairman of the Education/Recreation committee. Partial Term on the RTM in District 3, served as secretary of the Public Works and Planning committee.

Volunteer Coach and Board member of the FYSA (Strikers) and then a Board member of the Fairfield United Soccer Association (FUSA) (combined FYSA and Fairfield FC)

Served on the Governor's Coalition against under Age Drinking

Past Commissioner to The Fairfield Parking Authority, serving both as Chairman and Vice Chairman

Appointed by Selectman Michael Tetreau to the Bi-Partisan Election Review Committee and served as Vice Chairman.

Past treasurer of the Fairfield Republican Town Committee.

Present member of the Fairfield Republican Town Committee from District 3.; (Vice District Leader)

Personal:

Resident of Fairfield since 1984

Married with three grown children, 4 grandchildren

All children attended and graduated from Fairfield Public Schools (K-12) and have degrees from Bentley College, UCONN, Providence College, and the University of Denver.

BOARD OF SELECTMEN MEETING
Monday, October 2, 2023, 4:00 pm
Via Webex & In-Person in the
First Floor Conference Room, Independence Hall
725 Old Post Road, Fairfield, CT 06824

A recording of this meeting can be found here: [BOS Regular Meeting 10/2/2023](#).

DRAFT MINUTES

MEMBERS PRESENT: First Selectwoman Brenda L Kupchick, Selectman Thomas M. Flynn, Selectwoman Nancy E. Lefkowitz

OTHERS PRESENT: Mill Hill Building Committee Chair Jason Li, Colliers Project Manager Mark Schweitzer, Director of Sustainability Aquarian Water Co. Carolyn Giampe, WPCF Superintendent John Bodie, WPCF Project Manager Christine Pacelli, CFO Jared Schmitt, Town Attorney James Baldwin, Attorney Rick Aiken, FairTV, Members of the public

1) **CALL TO ORDER**

First Selectwoman Brenda Kupchick called the meeting to order at 4:00 pm.

2) **PLEDGE OF ALLEGIANCE**

After the First Selectwoman led the Pledge of Allegiance, she called for a moment of silence for the Sacred Heart University students involved in a serious accident over the weekend.

3) **MILL HILL ELEMENTARY SCHOOL BUILDING COMMITTEE**

To hear, consider and act upon a request from the Mill Hill Elementary School Building Committee to disband

Selectman Flynn made a motion to approve Item 3. Nancy Lefkowitz seconded the motion.

Mill Hill Building Committee Chair Jason Li said when all invoices have been paid, there will be an estimated refund to the Town of about \$400,000-\$450,000. There was a discussion about invoices that were still outstanding and whether or not the Committee could disband before all invoices have been paid. Mr Li did explain that he was approved by the committee to still approve the invoices still not submitted as long as they were under \$10,000.

The motion carried unanimously.

4) **AQUARION WATER COMPANY**

To hear a presentation from the Aquarion Water Company on its “Value of Water Campaign”

Director of Sustainability Aquarian Water Co. Carolyn Giampe discussed her presentation which can be found both in the backup documents and the meeting recording.

Selectwoman Lefkowitz made a motion to waive the reading of Item 5. Selectman Flynn seconded the motion which carried unanimously.

- 5) **WATER POLLUTION CONTROL AUTHORITY (*requires BOF and RTM approval*)**
To hear, consider and act upon the following resolution:

WHEREAS, on June 27, 2022, the RTM approved \$300,000 for the design of the Fairfield Beach Pump Station including the force main; and

WHEREAS, on October 24, 2022, the RTM approved \$300,000 for the design of the Center Street Pump Station including the force main; and

WHEREAS, on October 24, 2022, the RTM approved \$300,000 for the design of the South Pine Creek Pump Station including the force main; and

WHEREAS, the WPCA has determined that the design of the three pump stations is more efficiently conducted as a single project; and

WHEREAS, in order to be eligible for grant funding, the State Department of Energy and Environmental Protection (DEEP) requires additional investigation of conditions relating to the pump stations, as well as the hiring of a qualified design consultant under DEEP's Quality Based Selection (QBS) Program; and

WHEREAS, the estimated additional cost to be in compliance with the QBS Program and to be eligible for grant funding is \$336,000; and

NOW, THEREFORE, BE IT RESOLVED, that, in accordance with the recommendation of the WPCA, the previous three authorizations of \$300,000 each in funding for the design of Fairfield Beach, Center Street, and South Pine Creek Pump Stations and force mains are combined, and that \$336,000 is added to the authorization to create a single appropriation of WPCA fund balance in the amount of \$1,236,000 (Phase I) to design the pump stations and comply with DEEP's QBS Program.

There was a very detailed discussion about this project and funding. This is only for the design for this project.

The motion carried unanimously.

- 6) **WATER POLLUTION CONTROL AUTHORITY (*requires BOF and RTM approval*)**
To hear, consider and act upon the following resolution:

RESOLVED, that in accordance with a recommendation from the WPCA, funding of up to \$235,000 from the WPCA fund balance for Quality Based Selection (QBS) of a design consultant for Toll House, Mill River, Eastfield, and Willow Street pump stations and force mains investigation (Phase II) be, and hereby is, approved.

Selectwoman Lefkowitz made a motion to approve Item 6. Selectman Flynn seconded the motion.

WPCF Superintendent John Bodie said these are the four remaining pump stations identified as needing updates. This is phase two of this type of projects.

The motion carried unanimously.

7) **RESIGNATION (*for information only*)**

Conservation Commission

Brian L. McCann (R) 110 Eleven O’Clock Road, term 11/2018-11/2023
(Resigned August 2, 2023)

The Board thanked Mr. McCann for his service.

8) **FIRST SELECTWOMAN APPOINTMENT (*for information only*)**

Conservation Commission

Kathryn M. O’Mahony (D) 140 Mill River Road, term 11/2019-11/2024
(to move from alternate to full member and replace Brian L. McCann (R) who resigned)

The Board thanked Ms. O’Mahony for serving.

9) To hear, consider and act upon any other business which shall properly come before this meeting

- First Selectwoman Kupchick said she participated in a press conference with the Ukraine Steering Committee to kick off its October event. She explained how the public donate to Ukraine; and
- The Board discussed the BOE redistricting which has been postponed; and
- There was a discussion about Spotted Lanternflies.

10) **TOWN ATTORNEY**

Executive Session – Pending Litigation – Laura Pulie v. Town of Fairfield with Attorney Rick Aiken and Town Attorney Jim Baldwin

Selectman Flynn made a motion to go into Executive Session at 5:11 pm. Selectwoman Lefkowitz seconded the motion which carried unanimously.

Selectman Flynn made a motion to come out of Executive Session at 5:24 pm. Selectwoman Lefkowitz seconded the motion which carried unanimously.

There were no votes taken.

11) **Adjourn**

Selectman Flynn made a motion to adjourn. Selectwoman Lefkowitz seconded the motion which carried unanimously.

The meeting adjourned at 5:25 pm.

Respectfully submitted,

Pru O’Brien
Recording Secretary

BOARD OF SELECTMEN MEETING
Monday, October 16, 2023, 4:00 pm
Via Webex & In-Person in the
First Floor Conference Room, Independence Hall
725 Old Post Road, Fairfield, CT 06824

A recording of this meeting can be found here: [BOS Regular Meeting 10/16/2023](#).

DRAFT MINUTES

MEMBERS PRESENT: First Selectwoman Brenda L Kupchick, Selectman Thomas M. Flynn, Selectwoman Nancy E. Lefkowitz

OTHERS PRESENT: Executive Director of Operations for Fairfield Public Schools (FPS) Angelus Papageorge, Director of Construction and Energy Management for FPS Sal Morabito, Superintendent of FPS Mike Testani, Director of Human Resources Cathleen Simpson, CAO Tom Bremer, Budget Director Frank Magneri

1) CALL TO ORDER

First Selectwoman Brenda Kupchick called the meeting to order at 4:00 pm.

2) PLEDGE OF ALLEGIANCE

First Selectwoman Kupchick led the Pledge of Allegiance.

3) MOMENT OF SILENCE

First Selectwoman Kupchick held a Moment of Silence for the terrorist attacks and lives lost in Israel. She said she contacted area Rabbis to express the Town's support and sorrow and noted that the Rabbis shared statements in her newsletter. Selectwoman Nancy Lefkowitz read a heartfelt statement about the attacks and how they affect Jewish people everywhere. Selectman Flynn also spoke about the tragedy in Israel.

4) RESIGNATION (*for information only*)

Bicycle and Pedestrian Committee

Mary M. Tomey-Streeto (D) 137 Beaumont Street, term 11/2022-11/2026

(Resigned July 19, 2023)

This item is for information only. The Selectpersons thanked Ms. Tomey-Streeto for her service.

5) MINUTES

To consider and act upon the minutes of September 11, 2023

Selectwoman Lefkowitz made a motion to approve the minutes of September 11, 2023, as written. Selectman Flynn seconded the motion which carried unanimously.

6) AC BUILDING COMMITTEE CHARGE

To hear, consider and approve changes to the May 1, 2023 approved Charge for the AC Building Committee.

Selectwoman Lefkowitz made a motion to approve Item 6. Selectman Flynn seconded the motion.

Executive Director of Operations for Fairfield Public Schools Angelus Papageorge explained that the Charge for the committee needs to be updated because additional projects that have received HVAC Indoor Air Quality and/or will receive OSCGR Construction Grants that are assigned to the HVAC Indoor Air Quality Building Committee were added. Mr. Papageorge asked for the word “grant” which appears throughout the Charge before the words “Building Committee” to be removed to allow the committee to apply for grants and other funding relating to the projects.

The motion which carried unanimously.

7) SUPERINTENDENT OF SCHOOLS

To hear, consider and adopt a bond resolution entitled, “A resolution appropriating \$6,286,480 for the cost of roof replacement projects at Holland Hill Elementary School and North Stratfield Elementary School and authorizing the issuance of bonds to finance such appropriation”. – 20 years

See Full Resolution in Backup. Requires BOF and RTM approval.

Selectwoman Lefkowitz made a motion to approve Item 7. Selectman Flynn seconded the motion.

Mr. Papageorge along with FPS’ Director of Construction and Energy Management Sal Morabito and FPS Superintendent Mike Testani went over the details of why they came before the BOS to request additional funding for this project. Selectman Flynn said he would like to see the entirety of the project’s cost. Selectwoman Lefkowitz agreed with Selectman Flynn, but stated that regardless of the amount, this project needs to be done. There was a discussion about the cost and the Town bond cap.

Selectman Flynn made a motion to postpone this vote until 10/19/23 to get more information. Selectwoman Lefkowitz seconded the motion which carried unanimously.

8) HUMAN RESOURCES DIRECTOR

To hear, consider and act upon compensation for Town department heads

Selectman Flynn made a motion to approve Item 8. Selectwoman Lefkowitz seconded the motion.

Human Resources Director Cathleen Simpson discussed how increases were determined. Budget Director Frank Magneri told the BOS that the money had been put into the contingency line in the budget.

The motion carried 2-0-1 (Lefkowitz abstained).

9) PENFIELD PAVILION

To Hear an Update on Penfield Pavilion

CAO Tom Bremer gave an update on Penfield Pavilion:

- The fence and barrier are up; and
- Construction will start by December; and
- Construction insurance is in place.

Selectwoman Lefkowitz asked about the RACE study to which Mr. Bremer responded that the study is being done and should be complete in December.

10) TAX COLLECTOR

To consider and act upon tax refunds as recommended by the Tax Collector in the amount of \$51,272.90

Selectwoman Lefkowitz made a motion to approve Item 10. Selectman Flynn seconded the motion which carried unanimously.

11) To hear, consider and act upon any other business which shall properly come before this meeting

First Selectwoman Kupchick discussed an event for Fairfield's Sister City, Kostiantynivka, the Town's new website, and the new ARPA-funded town electric vehicles.

12) Adjourn

Selectwoman Lefkowitz made a motion to adjourn. Selectman Flynn seconded the motion which carried unanimously.

The meeting adjourned at 5:52 pm.

Respectfully submitted,

Pru O'Brien
Recording Secretary

BOARD OF SELECTMEN MEETING
Thursday, October 19, 2023 - 3:00 pm
Via Webex Only

[Board of Selectmen \(Special Meeting\) - 10/19/2023 - YouTube](#)

DRAFT MINUTES

MEMBERS PRESENT: First Selectwoman Brenda L Kupchick, Selectwoman Nancy E. Lefkowitz

MEMBERS ABSENT: Selectman Thomas M. Flynn

OTHERS PRESENT: Executive Director of Operations for Fairfield Public Schools (FPS) Angelus Papageorge, Director of Construction and Energy Services, Superintendent FPS Mike Testani, members of the public.

- 1) CALL TO ORDER
First Selectwoman Brenda Kupchick called the meeting to order at 3:00 pm.
- 2) PLEDGE OF ALLEGIANCE
Selectwoman Kupchick led the Pledge of Allegiance.
- 3) BOARD OF EDUCATION (*requires RTM approval*)
“RESOLVED, that the Town of Fairfield authorizes the Board of Education of the Town of Fairfield to apply to the Commissioner of Administrative Services and to accept or reject a grant for the Holland Hill Partial Roof Replacement Project at Holland Hill Elementary School; and
FURTHER RESOLVED, that the Holland Hill Elementary School Building Committee is hereby established as the building committee with regard to the Holland Hill Partial Roof Replacement Project at Holland Hill Elementary School; and
FURTHER RESOLVED, that the Town of Fairfield hereby authorizes at least the preparation of schematic drawings and outline specifications for the Holland Hill Partial Roof Replacement Project at Holland Hill Elementary School.
- 4) HOLLAND HILL ELEMENTARY SCHOOL PARTIAL ROOF BUILDING COMMITTEE
To hear, consider and approve a charge for the Holland Hill Elementary School Partial Roof Building Committee
- 5) FIRST SELECTWOMAN
To hear, consider and act upon the following resolution as recommended by the First Selectwoman: RESOLVED, that the Special Projects Standing Building Committee shall serve as the Holland Hill Elementary School Partial Roof Building Committee (HHRBC) for the purpose of performing a partial roof replacement at Holland Hill Elementary School
- 6) BOARD OF EDUCATION (*requires RTM approval*)
“RESOLVED, that the Town of Fairfield authorizes the Board of Education of the Town of Fairfield to apply to the Commissioner of Administrative Services and to accept or reject a grant for the North Stratfield Roof Replacement Project at North Stratfield Elementary School; and

FURTHER RESOLVED, that the North Stratfield Elementary School Roof Building Committee is hereby established as the building committee with regard to the North Stratfield Roof Replacement Project at North Stratfield Elementary School; and
FURTHER RESOLVED, that the Town of Fairfield hereby authorizes at least the preparation of schematic drawings and outline specifications for the North Stratfield Roof Replacement Project at North Stratfield Elementary School.”

- 7) NORTH STRATFIELD ELEMENTARY SCHOOL ROOF BUILDING COMMITTEE
To hear, consider and approve a charge for the North Stratfield Elementary School Roof Building Committee
- 8) FIRST SELECTWOMAN
To hear, consider and act upon the following resolution as recommended by the First Selectwoman:
RESOLVED, that the HVAC Indoor Air Quality Building Committee shall serve as the North Stratfield Elementary School Roof Building Committee (NSRBC) for the purpose of performing a roof replacement at North Stratfield Elementary School

Selectwoman Lefkowitz made a motion to approve Items 3-8. First Selectwoman Kupchick seconded the motion which carried unanimously.

- 9) Adjourn
Selectwoman Lefkowitz made a motion to adjourn. First Selectwoman Kupchick seconded the motion which carried unanimously.

The meeting adjourned at 3:07 pm.

Respectfully submitted,

Pru O'Brien
Recording Secretary



Town of Fairfield

Sullivan Independence Hall
725 Old Post Road

Fairfield, Connecticut 06824
Purchasing Department

(203) 256-3060
FAX (203) 256-3080

Award Recommendation Resolution:

On Friday, 18th August 2023, the Purchasing Authority awarded RFQ number 2023-140 Engineering Design and Inspection Services – Seven (7) Pump Stations to Tighe & Bond, Shelton, CT to provide multiple engineering, design and inspection services (to include structural, geotechnical, electrical and mechanical) for the upgrade of seven (7) pump stations as detailed in the RFP specifications.

Tighe & Bond was selected based on a combination of qualifications, specialized experience, technical competence, capacity and capability to complete all work on time and within budget, proposed approach, understanding of the work, and proven ability to provide cost-effective solutions.

The award of this contract to may be subject to the review and approval of the Board of Selectmen.

Brenda L. Kupchick, First Selectwoman

Adam B. Tulin, Director of Purchasing



Town of Fairfield

Sullivan Independence Hall
725 Old Post Road

Fairfield, Connecticut 06824
Purchasing Department

(203) 256-3060
FAX (203) 256-3080

RFQ #2023-140 Engineering, Design, and Inspection Services Seven (7) Pump Stations

TOWN OF FAIRFIELD
PURCHASING AUTHORITY
725 OLD POST ROAD
INDEPENDENCE HALL
FAIRFIELD, CT 06824.

Date Submitted _____ 2023

SEALED submissions are subject to the standard instructions set forth on the attached sheets.

Any modifications must be specifically accepted by the Town of Fairfield, Purchasing Authority.

Proposer:

Doing Business As (Trade Name) _____

Address _____

Town, State, Zip _____

(Mr. / Ms.) Name and Title, Printed _____

Signature _____

Telephone _____

Fax _____

E-mail _____


First Selectwoman


Director of Purchasing

5/3/2023
Date

Sealed submissions will be received by the Purchasing Authority at the office of the Director of Purchasing, First Floor, Independence Hall, 725 Old Post Road, Fairfield, Connecticut 06824, up to:

2:00pm, Thursday, 25th May, 2023

To provide qualifications for engineering firms to partner with the Town of Fairfield to provide multiple engineering, design, and inspection services for the upgrade of its seven (7) pump stations as detailed in the attached specifications.

NOTES:

1. Proposers are to complete all requested data in the upper right corner of this page and must return this page and the Proposal page with their bid.
2. Proposals shall not be accepted from, or contracts awarded to, any person/company/affiliate or entity under common control who is in arrears to the Town of Fairfield upon debt, or contract or who has been within the prior five (5) years, a defaulter as surety or otherwise upon obligations to the Town of Fairfield, and shall be determined by the Town.
3. Proposals are to be submitted in a sealed envelope and clearly marked "RFQ #2023-140" on the outside of the envelope, including all outer packaging, such as, DHL, FedEx, UPS, etc.
4. It is the sole responsibility of the Proposer to see that the submission is received by the Fairfield Purchasing Department prior to the time and date noted above. Proposals are not to be submitted via email or fax.
5. Proposals are not to be submitted with plastic binders or covers, nor may the proposal contain any plastic inserts or pages.

REQUEST FOR QUALIFICATIONS

Overview

The Town of Fairfield (Town) is requesting qualifications for engineering firms to partner with the Town of Fairfield to provide multiple engineering, design, and inspection services (to include structural, geotechnical, architectural, electrical and mechanical) for the upgrade of its seven (7) pump stations.

Phase I: Includes pump stations in need of immediate comprehensive full upgrade including force main replacement.

- Fairfield Beach Road Pump Station
- Center Street Pump Station
- Pine Creek Pump Station

Phase II: Includes pump stations that need a partial upgrade including Force Main Replacement.

- Toll House Pump Station
- Mill Hill Terrace Pump Station
- Eastfield Drive Pump Station
- Willow Street Pump Station

Any contract awarded under this request for qualifications is expected to be funded in part by the State of Connecticut, Department of Energy and Environmental Protection. This procurement will be subject to requirements contained in Section 22a-482-4(h), (i), and (o) of the regulations of Connecticut State Agencies. The State of Connecticut will not be party to this request for qualifications or any resulting contract.

Addenda / Requests for Information (RFI)

Addenda concerning important information and/or modifications to specifications will be posted on the Fairfield Purchasing Department website at **www.fairfieldct.org/purchasing**

- It is each Proposers's sole responsibility to monitor the above website for all updated information.
- Addenda will not be mailed, e-mailed or faxed out.
- Written requests for information will not be accepted after **11:00am on Thursday, 11th May, 2023.**
- Verbal requests for information via phone or other means will not be accepted.
- Failure to comply with these conditions will result in the Proposer waiving the right to dispute RFQ specifications and conditions, no exceptions.

Questions concerning this RFQ must be submitted in writing and directed only to:

Lee A. Flaherty, Buyer

lflaherty@fairfieldct.org

Responses will be in the form of an addendum that will be posted by approximately **Monday, 15th May, 2023** to the Town of Fairfield website, which is www.fairfieldct.org. It is the responsibility of each Proposer to retrieve addenda from the website. Any contact about this bid between a Proposer and any other Town official and/or department manager and/or Town of Fairfield employee, other than as set forth above, may be grounds for disqualification of that Proposer. No questions or clarifications shall be answered by phone, in person or in any other manner than specified above.

Submission Requirements

- You must submit one (1) original, (4) written copies, and one (1) USB copy of your proposal.
- Proposals must be received by **2:00pm on Thursday, 25th May 2023**, send sealed submissions, clearly marked **RFQ 2023-140** to:

Town of Fairfield
Purchasing Authority
725 Old Post Road
Fairfield, CT 06824

REQUIREMENTS

- A. It is recommended that prospective Respondents visit the sites to verify scope of the work, measurements, quantities, etc., prior to submitting. The Town reserves the right at all times to increase or decrease the amount of work if deemed in its best interest.
- B. The Town of Fairfield reserves the right to:
 - award the project to more than one Consultant, based on meeting the project specification(s), qualifications, availability, or any combination of these criteria;
 - award the project to a single bidder who meets the specifications for all phases,
 - add, subtract or delete any item and/or quantity as deemed in the best interest of the Town.
- C. The Respondent must not discriminate, nor permit discrimination, against any person on the grounds of race, color, national origin, religion, sex, handicap, or veteran status, in their employment practices, in any of their contractual arrangements, in all service and accommodations they offer to the public, and in any of their other business operations. The awarded Consultant must comply with the State of Connecticut's minority and women's business enterprise hiring requirements.
- D. It is a national policy to provide minority and women's business enterprises (M and WBEs) the maximum opportunity to participate in activities carried out under public funding and to award a fair share of contracts to M and WBEs.
- E. Award of the project, either partial or in its entirety, is contingent upon funding approval by the applicable boards of the Town of Fairfield, including state and federal agencies.
- F. **Upon Award, all RFQ documents shall constitute a legal contract including but not limited to the following; RFQ Submission, Addendum, Award Resolution, Town Purchase Order, and AIA Contract or equivalent when applicable.**

PROJECT SCOPE:

Below are the detailed services required for Phase I and Phase II. The scope of services from A-E are applicable to both Phase I and Phase II. The Town reserves the right to award these phases separately to more than one Consultant if deemed in the best interest of the Town.

- A. **Project Kickoff Meeting:** The Town and the selected Consultant will hold the project kickoff meeting before the commencement of the work.
- B. **Topographic Survey, A-2 Survey:**
 1. **Topographic Survey:** A-2 survey Ref: 1988 NAVD, MHW, MLW, MLLW, CJL and NAD 83 Datum and any other information required by the permitting agencies.
 2. **Easement Plans:** The Town may require assistance to acquire temporary and potential permanent easement during construction for the following pump stations:
 - a.) **Fairfield Beach Road Pump Station** (Phase I)
 - b.) **Eastfield Drive Pump Station (Phase-II)** – It is located partially on road right of way and partially on residential property.
 3. **Flood Elevation Certificate** for the pump stations that are in flood zone and will be raised above BFE.
 4. **Final as Built Survey** for all the pump stations in Phase I and Phase II.
 5. The Town has flood elevations for the following pump stations. Consultants shall verify the elevations for the following pump stations.
 1. Center Street Pump Station
 2. Fairfield Beach Pump Station
 3. Pine Creek Pump Station
 4. Willow Street Pump Station
 5. Mill Hill Terrace Pump Station
 6. **Wetland Delineation** – A wetland professional shall delineate the location of wetlands to determine the federal, state, and local jurisdictional inland or tidal wetland resources within the project area.

C. Permit Applications: The following permits are required for this project:

1. **State & Federal Permit:** The Consultant will prepare, apply, and submit regulatory permit applications to the CT Department of Energy and Environmental Protection (DEEP) and US Army Corps of Engineers (USACE). A Flood Management certificate may be required for obtaining grant funding from the State. The CT Bureau of Natural Resources (BNR) will review the proposed activities for impacts to any known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur in the vicinity of this property. The Consultant will prepare the results from the BNR review which will be incorporated into the certificate of permission (COP), permit application(s) if applicable for this project.
2. **Town of Fairfield Coastal Site Plan Application:** It is likely that the pump station reconstructions will require local regulatory approval from the Town of Fairfield Planning & Zoning Department under the Coastal Area Management (CAM) regulations. Drawings prepared for the State & Federal permit applications have typically been suitable for this review.
3. **Town of Fairfield Building and Fire Department Permit:** Consultants shall submit the plans to the Building and Fire Department for their review and permits. The Town of Fairfield Building Department and State of Connecticut codes are based on 2022 Connecticut State Building Codes. Design criteria shall be based on the most stringent criteria of the building codes and standards.
4. **Permit Level Documents and Plans:** The Consultant shall develop permit level documents and plans formatted to the requirements of the State and Federal regulatory agencies and may be required to attend meetings when required with the Town officials. The Town officials shall be included in any meetings and correspondence with the permitting agencies.
5. Town of Fairfield **Inland Wetlands Certificate or Permit:** This work will be performed by the Town. However, pending workload and at the Town's discretion, the Consultant may include this work as additional services, if directed to perform this work by the Town.

The following pump stations shall be confirmed for the Inland Wetland permit:

1. Pine Creek Pump Station (Phase I)
2. Mill Hill Terrace Pump Station (Phase II)
3. Toll House Pump Station – Within Conservation restricted area (Phase II)
4. Eastfield Drive Pump Station (Phase II)

D. FEMA Regulations: The Consultants shall follow the 2017-001 – CWF Memo – Storm Resiliency of Municipal Wastewater Infrastructure memorandum to meet the flood regulations. Please note these elevations should be confirmed with CT DEEP and FEMA after a full site survey and before the final designing and submission to the permitting agencies.

The selected Consultants should also seek options of relocating the pump stations out of the flood zones and assist the Town in finding the locations out of VE zones. The Town has not considered this option but would like to have recommendations from the selected Consultants. It is a high possibility that the raised structures may not be aesthetically pleasing to the neighborhood during the designing phase. The selected Consultants should recommend the best designs that are aesthetically pleasing to the neighborhood.

E. Schedule: This project may commence upon receipt of a notice to proceed. A completion date for the above scope of services will be determined after the project kickoff meeting (TBD by Town at a later date).

PHASE I-Pump Stations for Immediate Comprehensive Upgrade

The following pump stations are proposed for full immediate comprehensive upgrades:

- a. Center Street Pump Station
- b. Pine Creek Pump Station
- c. Fairfield Beach Pump Station

Immediate comprehensive upgrades of pump stations will require the following services:

1. Structural Design and Analysis
2. Geotechnical Investigation and Analysis
3. Existing Pump Replacement with the new pumps
4. Hydraulic Analysis for:
 - Discharging Pipes Replacement,
 - Flow Controlling Components Replacement (Valves, Flow Meter)
 - Force Main Replacement
 - Bypass Connections
 - Pump Station Pipes Replacement and inspection of the pump suction pipe for the following pump stations has been recommended:
 1. Center Street Pump Station – suction pipe and parshall flume flow meter
 2. Pine Creek Pump Station
 3. Fairfield Beach Pump Station
5. Wet Well/Dry Well Replacement and Upgrades.
6. Full Electrical Upgrades
7. Full Mechanical Upgrades
8. Site Upgrades/Improvements

1. **Structural Design and Analysis** of the pump stations: The Town of Fairfield Building Department and State of Connecticut codes are based on 2022 Connecticut State Building Codes. Design criteria shall be based on most stringent criteria of the building codes and standards.

Design consideration for elevating building on open foundation for flood zone VE shall include, but is not limited to the following:

- a. This shall include the existing foundation strength analysis, expected loads during construction and future services for the structures in both in VE and AE zones.
- b. Analysis of horizontal and vertical clearance on the property for the building close together for both AE and VE zone.
- c. Structural Analysis of the existing pump station for roof replacement, safety access handrails to wet wells, uneven and damaged floors for the buildings in the AE zone.

Consultants shall submit the design and analysis recommendations to the Town.

2. **Geotechnical Investigation and Analysis:** To evaluate the feasibility of shallow foundation, deep foundation, effects of scour conditions and potential for exposure to water or salt laden air.

Consultants shall include, but are not limited to the following:

- a. All soil borings and sub-surface investigations in their proposals.
- b. Geotechnical investigation shall include submission of geotechnical data reports, foundation design reports, and baseline reports. The geotechnical baseline report will provide a contractual understanding of the subsurface conditions to be expected during construction. Please note that these reports must provide the Town with a full understanding of the condition of the foundation of the building to be raised above flood zones. Determination of the onsite foundation conditions must not be left to the Contractor.

3. **New Pump Replacement:** The following pump stations require full upgrades:

- a. **Fairfield Beach Pump Station:** At present this pump station is a wet well/dry well concrete structure.
- b. **Center Street Pump Station:** Wet well/dry well pumps and a full pump replacement is recommended. Conversion to submersible pump is possible due to flood zone.
- c. **Pine Creek Pump Station:** The Pine Creek pumps have not exceeded their expected life, but is recommended a replacement due to operator access and to eliminate space requirements.

4. **Hydraulic Analysis:** Flows at Center Street, Fairfield Beach Road pump stations were identified as under capacity and should be monitored closely. As per the preliminary analysis of the pump stations, the Fairfield Beach Road pump station was replaced in 2016 and despite the pump station replacement this pump station is estimated to be below capacity by 15%. Further flow analysis of this pump station is recommended to confirm these capacities. The Consultant shall perform actual rate and flow measurements for the piping system, force main replacements, and bypass connections for full upgrade and shall include but is not limited to the following:
- Analysis of the preliminary report of pump curves for pump capacity, and selection of pumps if required.
 - Flow Rate monitoring and analysis for force main, discharging pipes and suction pipes.
 - Analysis of the existing valves for flow control, minor losses for fittings, and bends in pipe connections.
 - Flow meter analysis where required, i.e. parshall flume at the Center Street pump station is not functional.
 - Flow analysis for bypass connections at Fairfield Beach - accessed at ground surface and other pump stations that need bypass connections.
 - Force main replacement is recommended at the following pump stations:
 1. Center Street Pump Station
 2. Fairfield Beach Pump Station
 3. Pine Creek Pump Station: the force main has not exceeded its expected life, Consultants shall investigate and evaluate force main capacity.
5. **Wet Well/Dry Well Evaluation:** Two of the pump stations Center Street and Fairfield Beach Road on the immediate comprehensive upgrade list have exceeded their design life. The analysis of the wet well capacity will be required to confirm its functionality. Pine Creek Pump Station has a steel dry well and has been corroded. This may have to be removed if a submersible pump will be installed because of elevating the structure above BFE (see 2017-001-CWF Memo for these pump stations). Consultants shall evaluate the existing conditions of wet well/dry well and for the conversion to submersible pumps in flood zones.
6. **Full Electrical Upgrades:** The following pump stations require full electrical upgrades. A brief summary of work as per preliminary analysis is mentioned below:
1. **Center Street Pump Station**
 - Replacement of full electrical infrastructure
 - New natural gas generator, need conversion to natural gas from diesel
 - Needs extension of the natural gas line
 2. **Pine Creek Pump Station**
 - New permanent generator
 - Replacement of full electrical infrastructure
 3. **Fairfield Beach Pump Station**
 - Review of stand-by generator and location due to its age.
7. **Full Mechanical upgrade:** The wet well and dry well ventilation at the three (3) pump stations is not adequate, and they do not meet NFPA 820 guidelines for a Class I, Division 2, and Group D space.
8. **Site Improvements:** Site design and improvements shall include re-grading the site for improved access and drainage, repairing the fence gate, replacing the fence meeting industry codes for safe access, replacing railings for safety access, zoning setbacks and installation of new gutters. The existing site may have to be fully regraded due to the proposed raised elevations in flood zone.

Additional Services: The Town may require Consultants to attend WPCA Commission meetings and Town Board meetings during after work hours. The Consultant may be asked to coordinate with utilities including field meetings for Electrical and Mechanical upgrades.

Plans Submission:

A. Final Civil Design Plans shall include the following:

1. A-2 Survey plans, Topographic survey plans, representative cross sections,
2. Existing Site Plans
3. Profiles and cross section
4. Proposed Site Plans
5. Demolition Site Plan
6. Site Access Plans- Restricted area for heavy equipment, temporary/permanent easement plans for encroachment.
7. Contractor Staging Area including site access plans for restricted area for heavy equipment.
8. Dewatering Plans (if required)
9. Bypass Pumping Plan
10. Emergency Flow bypass Plan
11. Groundwater Monitoring Plans (if applicable)
12. Soil Erosion & Control Plans
13. Excavation Plans
14. Maintenance and Traffic Protection Plan

B. Structural Plans

C. Mechanical Plans

D. Electrical Plans

E. Architectural Plan

F. Specification and Construction Drawings/Details

Deliverables: shall include, but are not limited to the following:

1. Recommendations, options, inspection, analysis & design reports including any calculations.
2. Inspection reports including any calculations.
3. Wetland Delineation report by a certified soil scientist.
4. Copies of all permit applications submitted to the permitting agencies.
5. Consultant shall prepare updated summary reports to be shared with the Town's staff (Project Team) every two (2) weeks. These reports shall describe progress items, milestones achieved, a look ahead project schedule, and how deficiencies are being addressed.
6. Contract plans shall include plans and specification detailing proposed design.
7. Final As-built survey plans.

Provide reports and plans both in digital (ACAD) and PDF Formats. Consultants shall be responsible for submitting all deliverables in a timely manner and submit a work schedule, project plan of action including all permitting deadlines after project kickoff meeting.

PHASE II - PARTIAL UPGRADES

The following pump stations are recommended for partial upgrades:

1. Toll House Pump Station - Should be checked for flood proofing eligibility.
2. Mill Hill Pump Station – AE Flood Zone
3. Willow Street Pump Station – Close proximity to flood zone
4. Eastfield Drive Pump Station –Not in flood zone

Partial upgrades will require the following services:

1. Structural Design and Analysis
2. Geotechnical Investigation and Analysis
3. New Pump Replacement.
4. Hydraulic Analysis for:
 - Discharging Pipes Replacement,
 - Flow Controlling Components Replacement (Valves, Flow Meter)
 - Force Main Replacement
 - Bypass Connections
 - Pump Station Pipes Replacement and inspection of the pump suction pipe for the following pump stations has been recommended:
 1. Center Street Pump Station – suction pipe and parshall flume flow meter
 2. Pine Creek Pump Station
 3. Fairfield Beach Pump Station
5. Wet Well/Dry Well Replacement and Upgrades
6. Force Main Inspection
7. Full Electrical Upgrades
8. Partial Mechanical Upgrades
9. Site Upgrades

1. **Structural Assessment and Design of the Pump Stations:** The Town of Fairfield Building Department and State of Connecticut codes are based on 2022 Connecticut State Building Codes. Design criteria shall be based on the most stringent criteria of the building codes and standards.

Design consideration for elevating the building for Flood Zone AE shall include the following:

- Strength analysis for the existing foundation, expected loads during construction, and future services for the structures in AE zone.
- Analysis of horizontal and vertical clearance on the property for the buildings close together for AE zone.
- Structural analysis of the existing pump stations for roof replacement, safety access handrails to wet wells, uneven and damaged floors for these buildings. Below are the pump stations as per the preliminary analysis that require structural analysis if determined not to be raised above the base flood elevation:
 1. Mill River Pump Station – Analysis of the monorail beam supported by the CMU wall and wooden roof structure is not in use due to safety concerns.
 2. Toll House Pump Station - Cracks along CMU joints were observed. The existing concrete floor is uneven and damaged. A portion of the concrete pad is broken for the wet well.
 3. Willow Street Pump Station – An access ladder to the dry well shall be designed.

If flood proofing is opted for the above mentioned pump stations for any reason, the following, but not limited to the following, will be required:

1. The Consultants shall perform condition assessment of structure that will be relied on to resist flood loads.
2. Existing structure should be checked for adequate strength and stiffness to resist flood loads and buoyancy.
3. Foundation design may be required if the existing structure does not meet the above two criteria.
4. Waterproofing system shall be designed. Perform seepage calculations.
5. Design Sump pumps to expel the expected seepage volume.

*Note: Please see attached Clean Water Fund Memorandum, pages 3-4, for more information on flood proofing measures.

2. **Geotechnical Investigation and Analysis:** - If the structures in AE zones are raised above 500 – year BFE plus one feet consultants shall evaluate the feasibility of shallow foundation, deep foundation, effects of scour conditions, and potential for exposure to water or salt laden air. Consultants shall include but are not limited to the following:
- All soil borings and sub-surface investigations in their proposals.
 - Geotechnical Investigation shall include submission of geotechnical data reports, foundation design reports and baseline reports. The geotechnical baseline report will provide a contractual understanding of the subsurface conditions to be expected during construction. Please note that these reports must provide the Town with a full understanding of the condition of the foundation of the building to be raised above flood zones. Determination of the onsite foundation conditions must not be left to the Contractor.
3. **New Pump Replacement:** If the structure is raised above 500 years plus one feet submersible pump station should be considered. The selected Consultant shall review the preliminary analysis reports and recommend the best options and design for the following pump stations. A brief overview is mentioned below:
- Toll House Pump Station:** The pump has exceeded more than its expected life. It is a submersible pump. Full pumping and wet well replacement is recommended.
 - East field Drive Pump Station:** As per the preliminary analysis this pump has exceeded its expected life.
 - Willow Street Pump Station:** Replacement of can styled pump station with a packaged submersible pump station. Pump has not exceeded the expected design life.
 - Mill Hill River Terrace Pump Station:** This pump has not exceeded the expected life, but due to its lowest payback period it is recommended that pump 1 and pump 3 should be replaced.
4. **Hydraulic Analysis:** The pump stations recommended for partial upgrades have exceeded their design life for valves and discharging pipes. Similar to the full upgrade of the pump stations, the partial upgrade pump stations will also require an evaluation of the capacity of each pump station. Further flow analysis is recommended to confirm these capacities. The Consultant shall perform actual rates and flow measurements for piping system, force main, bypass connections and flow rates for full upgrade and shall include but not limited to the following:
- Analysis of pump curves for pump capacity and for the selection of pumps if required
 - Flow rate monitoring and analysis for force main, discharging pipes and suction pipes
 - Valves for flow control, minor losses for fittings and bends in pipe connections
 - Flow meter analysis if required
 - Flow analysis for bypass connections if required
 - Emergency pump bypass and bypass plan during construction
 - Pump Suction Pipes
5. **Wet Well/Dry Well Evaluation and Replacement:** Wet well/drywell has not exceeded its design life. It is recommended that capacity should be evaluated for its future functionality. Wet well/dry well may have to be replaced with submersible pump if the structure is raised above the 500-year storm plus one feet for Toll House and Mill Hill Terrace pump stations in AE zone.

6. **Force Main Inspection:** This shall also include the hydraulic analysis of the existing force main, restricted pipe diameters, tuberculation on the interior of the pipes and partially or fully closed valves that can cause the increased head. Hydraulic analysis will be required to fix the above problems. The selected Consultant shall provide force main recommendations to the Town. A brief summary of the evaluation is described below:
- Toll House Pump Station:** The force main fittings and piping in the valve vaults are corroded and should be replaced. Piping and valve vaults are corroded. This pump station will require an inspection under the Merritt Parkway.
 - Mill River Pump Station:** Structural inspection of Mill River for force main. Bypass connection is recommended to be replaced.
 - Willow Street Pump Station**
 - Eastfield Drive Pump Station**
7. **Full Electrical Upgrades** at the following locations are recommended as per the preliminary analysis. Further analysis may be required:
- Toll House Pump Station:** Electrical infrastructure to be upgraded and tie in with SCADA and the stand-by generator which is recommended to be replaced.
 - Mill River Pump Station:** Electrical equipment must be replaced in its entirety and new variable frequency drivers are to be installed.
 - Willow Street Pump Station:** Control panel to be relocated from the buried dry-well to an above grade building or panel board to reduce potential confined space.
 - Currently the above pump stations have mission alarm systems and shall be further reviewed and analyzed during the design phase.
8. **Partial Mechanical Upgrades:** If pump stations in AE zones are required to be raised, full mechanical replacement may be required due to the conversion to submersible pumps. The following pump stations are recommended for the partial upgrades:
- Toll House Pump Station:** Unit heater to be replaced.
 - Mill River Pump Station:** Pump and control room and Wet well/dry well ventilation to be upgraded.
 - Eastfield Drive Pump Station:** Wet well ventilation to be upgraded.
 - Willow Street Pump Station:** Dry well ventilation to be upgraded.
9. **Site Upgrades:** Site design and improvements include re-grading the site for improved access, drainage, repairing the fence gate, replacing the fence meeting industry codes for safe access, replacing railings for safety access zoning setbacks, and installation of new gutters. Please note that the pump station in the AE zone may be required to be raised.

PHASE III - Construction Phase

After design completion the Town may hire one (1) of the three (3) top rated Consultants to perform, but not limited to the following work:

- Design services during construction and review of shop drawings.
- Produce finalized detailed construction cost estimates for the pump stations.
- Weekly inspection of the work in progress or as determined by the intensity of the work including any special inspection required for pump. For the purpose of the bid proposal - assume eight (8) hours/week. Consultants can make a note if more or less hours are anticipated. Consultants shall submit a weekly report to the Town.
- Assist Town in reviewing Contractors invoices and change orders for any discrepancies.
- Post-Construction closeout requirements. These requirements will be discussed at later date dependent on the design and specifications approved by the Town.

Submission Information Required

This section of the RFQ establishes certain standards of experience and financial capabilities that the Town requires for a Respondent to be deemed qualified. Submissions that do not meet the prescribed standards will be considered by the Town to be non-responsive. The Town, at its sole discretion, will decide if a Respondent meets the standards. Each Respondent must answer the questions honestly and completely; the following section describes the submission requirements:

- A. Provide an executive summary – maximum three (3) pages, single spaced – that includes the full name, tax identification number and office address of the primary Respondent. Include annual reports, 10k, balance sheets and any other information detailing the financial stability and organizational ability of the Respondent must have been in business for a minimum of five (5) years.
- Note:** Financial information is to be submitted in a separate sealed envelope that is clearly marked with the contents; this information will be reviewed only if the Respondent is a final Respondent; all financial information will be returned to the Respondent at the conclusion of the selection process.
- B. Provide the business history of the primary Respondent. Include any changes in the Respondent's status as the result of merger, acquisition, spin-off, reorganization or other change in business organizational status. Identify when the Respondent was organized and, if a corporation, where incorporated and number of years engaged in providing full service contract operations under that name. Provide a comprehensive description of Respondent's corporate ownership and/or operating name.
- C. State whether any selectman or other officer, employee, or person who is payable in whole or in part from the Town currently has any direct or indirect personal interest in the Respondent. If so, describe the circumstances.
- D. State whether the Respondent or any of its employees or officers has been named as a defendant in any litigation brought as a result of any contract operations for operations and maintenance. If so, name the owner and describe the circumstances, including the outcome of the litigation.
- E. State whether the Respondent has ever been terminated, fired, or replaced on a project other than those contracts that have been terminated due to completion. If so, name the owner and describe the circumstances.
- F. The primary Respondent must demonstrate the capability to successfully analyze, design, inspect and provide related services with the emphasis on municipal sanitary sewer and related engineering projects. Describe Respondent's experience with sanitary sewer design, provide documentation on expertise in pump station design in coastal zones, electrical, mechanical, structural, geotechnical services and cost effective ways of protecting critical infrastructure in the flood zones such as flood proofing, utility conflicts, public conflicts, Federal, State and Municipal regulations, and related construction supervision. Also describe any experience with the DEEP, ACOE, conservation and other permits. List any pump station project(s) in coastal flood zone that your company has been involved with.
- G. Provide a complete list of specialized experience and technical competence in;
- Investigating, Planning & Designing public works projects (ex. sanitary sewer trunk mains, Force Mains etc.).
 - Design and Inspection experience in Structural, Geotechnical, Mechanical, Water Resources (hydrology, hydraulics) and Electrical Engineering.
 - Designing and Inspecting Pump stations in Coastal VE zones and AE Flood Zones.
 - Project Scheduling.
 - Flood mitigation control projects as they relate to municipal public works infrastructure, Pump Stations, Sanitary Sewers, and force mains.
 - Developing construction contract documentation including plans and specifications.
 - Producing quality designs with references and prior experience on similar projects.
 - Providing sufficient technical oversight during construction-reviewing shop drawings and inspection.
 - Coordination with utility companies.
 - Coordination with federal, state and local agencies, including all aspects of permitting.
- H. Include resumes and project lists of the key personnel who are proposed to work on this project.
- I. Identify any subcontractors and/or sub-design consultants, if any, who will perform work on this project. If so, what type of work and how much is contracted out and to whom is the work contracted? The Town retains the right to reject any and all proposed subcontractors. This provision applies through the term of the contract.
- J. State your relevant prior experience, including a list of all clients served during the past five (5) years, complete with names, addresses and telephone numbers of contact persons for each. Provide the client name, contact, address, and phone number of at least one municipal project that Respondent has designed, if available.
- K. Provide examples of work produced for similar projects completed within the past five (5) years.
- L. Consultants shall provide information on the projects the firm is currently working on and what new projects are expected which could impact the Town's project deliverables.

- M. The firm must have had demonstrable experience with all regulatory agencies having jurisdiction over the site. Please include experience your firm has in dealing with grant and loan programs such as the DEEP's Clean Water Fund. Work experience within Connecticut with similar projects is essential.
- N. Consultants shall describe their firm's project quality control measures
- O. Consultant shall provide an estimated Project Schedule/calendar for design completion, permitting, and construction. Any additional information, past projects, methods or services that may separate firms from one another.

Selection Process

1. Candidates will be evaluated based on the following criteria:
 - a. Qualifications, demonstrated specialized experience, and technical competence of the personnel assigned to the project team.
 - b. Overall experience of the proposed personnel as a team, and the capacity and capability to complete all work on-time and within budget.
 - c. Examples of quality work produced for and past performance on similar projects.
 - d. Experience with and knowledge of federal, state and municipal processes, requirements and procedures.
 - e. Suggestions for improvements / innovations.
2. The Town's evaluation team will individually review and rank each Respondent's sealed Statement of Qualification using the evaluation matrix attached.
3. The Town's team will meet to discuss the Respondents credentials and qualifications.
4. The evaluation team may short-list Respondents for interview in order to clarify qualifications and verify its evaluation. Additional services or significant changes to the submittals during the interview will not be entertained.
5. Based on the responses received, the Town may choose to continue or cancel the RFQ process.

In addition to the data and documentation submitted in response to this process, the Town reserves the right to make an on-site inspection and evaluation of any facility at which the firm has provided similar services. If the Town chooses to exercise this right, the Respondent shall provide a representative, with or without notice, to accompany the Town or its delegated representatives on any on-site inspection. The inspection may not be limited to one facility. All costs for transportation and subsistence to inspect any facilities incurred by Town personnel shall be borne by the Town.

The Town shall utilize an evaluation panel consisting of employees of the Purchasing, Public Works, Engineering, WPCF and potentially other Town departments. Approximately one (1) to four (4) firms will be pre-qualified, using a standard evaluation matrix that is weighted for qualifications/experience of the firms and the enclosed proposals with fee proposals / schedules.

The Town's evaluation panel will choose the highest scoring proposal for the project contract based on items listed previously. Should the negotiations fail to result in an executed contract within a reasonable time, the Town may elect to terminate negotiations with the highest ranked Respondent and begin negotiations with the second ranked Respondent. The Town always retains the exclusive right to cancel the process and make no award. The Town's evaluation panel may also elect to interview firms or consultants if it so desires, but will use the standard evaluation matrix for selection as stated above.

Clean Water Fund Memorandum (2017-001)**Storm Resiliency of Municipal Wastewater Infrastructure****I. PURPOSE**

To provide municipalities with requirements to prepare existing and proposed wastewater infrastructure to be resilient and better withstand the effects from severe weather events and expected climate change impacts including, but not limited to, increases in the frequency and severity of precipitation events, flooding, storm surge, wave action and sea level rise concerns.

II. GOVERNING AUTHORITIES

- A. In 1998, Section 7 of Public Act 08-98 “An Act Concerning Global Warming Solutions” required the Governor’s Steering Committee on Climate Change to establish an Adaptation Subcommittee to evaluate projected impacts of climate change on Connecticut agriculture, infrastructure, natural resources and public health, and develop mitigative and adaptive strategies to address those impacts. The 2011 Connecticut Climate Preparedness Plan created on the heels of this Public Act made a series of recommendations related to wastewater infrastructure including:

“Consider climate change as a part of DEEP facility planning checklist for public/community wastewater treatment plants financed through the Clean Water Fund” and “Consider climate change effects and adaptation in life cycle and asset planning for treatment plant reconstruction and operations and maintenance”

- B. CGS Section 22a-92 establishes goals and policies under the Connecticut Coastal Management Act. In 2012, Public Act 12-101 added CGS Section 22a-92(5), which indicates that projects subject to the Connecticut Coastal Management Act shall:

“...consider in the planning process the potential impact of a rise in sea level, coastal flooding and erosion patterns on coastal development so as to minimize damage to and destruction of life and property and minimize the necessity of public expenditure and shoreline armoring to protect future new development from such hazards”.

- C. In 2013, Public Act 13-15 added Section 22a-478 (a) (8) to the Connecticut General Statutes (CGS), so that Clean Water Fund (CWF) projects must consider:

“the necessity and feasibility of implementing measures designed to mitigate the impact of a rise in sea level over the projected life span of such project.”

- D. Public Act 13-179 redefined “Rise in sea level” in CGS Section 22a-93 as:

“the arithmetic mean of the most recent equivalent per decade rise in the surface level of the tidal and coastal waters of the state, as documented in National Oceanic and Atmospheric Administration online or printed publications for said agency's Bridgeport and New London tide gauges.”

- E. Chapter 476a of the CGS (Section 25-68) defines Connecticut Flood Management Act (FMA) requirements in the State.

CGS Section 25-68d requires all state-funded projects to secure a certification or exemption if the projects is located within or affects floodplains or natural or man-made storm drainage facilities.

- F. Sections 25-68h-1 through 25-68h-3 of the Regulations of the Connecticut State Agencies (RCSA) are the Connecticut floodplain management regulations. Section 25-68h-2(b) establishes restrictions which pertain to all new and substantially improved structures within the floodplain.

- G. CGS Section 8-23 establishes a requirement for municipalities to amend or adopt a plan of conservation and development at least once every ten years. CGS Section 8-23(d)(11) indicates that the plan of conservation and development shall consider sea level rise.

III. FLOOD PROTECTION CRITERIA AND REQUIREMENTS

For all state-funded wastewater projects, the design criteria must adhere with the minimum flood protection levels included in the FMA requirements pursuant to CGS Section 25-68. The DEEP has also determined that state-funded wastewater projects must also adhere to the minimum flood protection levels in *TR-16 Guides for the Design of Wastewater Treatment Works* (TR-16), as may be amended. If there are any discrepancies between the applicable design standards regarding minimum levels of protection, the more conservative level shall prevail.

Notwithstanding any of the requirements listed herein, new or rehabilitated wastewater infrastructure must be able to provide for uninterrupted operation and be protected from physical damage during a 100-year storm.

To meet these requirements, the DEEP strongly encourages municipalities to avoid the placement of new wastewater infrastructure within the 100-year floodplain, if possible. Should this avoidance be technically and/or economically unfeasible, all critical wastewater equipment and structures must be flood protected to the 100-year storm plus 3 feet, at a minimum. In addition, the DEEP may determine that certain critical activities may require flood protection to the 500-year (0.2%) flood elevation, as it is required with

the storage of hazardous materials. All non-critical wastewater plants, facilities and pump stations must be flood protected to the 100-year storm plus 2 feet, at a minimum.

A resiliency evaluation must be conducted during planning and/or early stages of design to determine for each existing or new structure and treatment system component whether it is considered critical per the FMA requirements pursuant to CGS Section 25-68b; and/or TR-16. The DEEP reserves the right to make a final determination on the criticality (i.e., critical versus non-critical status) of structures and equipment and the minimum levels of protection to be incorporated on a case-by-case basis.

Planning and/or design scopes of work previously approved without the resiliency evaluation will require amending to include this evaluation.

IV. GUIDANCE

Municipalities performing facility planning and/or design of upgrades to existing or planned wastewater infrastructure must evaluate and recommend, as applicable, all necessary measures to prepare critical infrastructure or equipment to better withstand the effects from severe weather events and climate change impacts, using best available actionable science and design criteria.

Greater vulnerability and complexity of wastewater infrastructure may require a more comprehensive resiliency evaluation. Facilities located in or near the coastal zone or in tidal areas must consider projected sea level rise over the life span of wastewater infrastructure or equipment. In addition, where appropriate, other factors such as storm surge, wave run-up, shoreline erosion, etc. should also be considered.

First, the resiliency evaluation should confirm the Base Flood Elevation (BFE), and Top Of Concrete (TOC) elevations associated with existing or proposed infrastructure within the entire footprint of the treatment or conveyance facility to determine what lies in the 100-year floodplain. It is also useful to determine what lies in the 500-year floodplain, such as hazardous materials. The resiliency evaluation should also include hydraulic profiles identifying areas of vulnerability.

The BFE may be determined using the appropriate Federal Emergency Management Agency (FEMA) Flood Insurance Study and accompanying Flood Insurance Rate Map (FIRM). More recent FEMA flood mapping products, including Advisory Base Flood Elevation Maps, working maps, preliminary updated Flood Insurance Rate maps or FEMA non-regulatory RiskMAPs may be available in some locations. Check with the National Flood Insurance Program state coordinator at the DEEP; or the FEMA flood map service center at msc.fema.gov for the status of FEMA flood mapping products in your project area.

If more recent FEMA maps have higher BFEs, those elevations should be considered. If the FIRM depicts the project area within a floodplain that is suspected to be overly

conservative, a revised floodplain must be supported with extensive field data, subject to DEEP approval. Such data should include a bathymetric study of the waterbody(ies) associated with the mapped floodplain, and a detailed topographic survey of the area prone to flooding. It is not sufficient for the municipality to say that its staff has never seen the project area flood, and therefore the project area does not require flood protection.

The resiliency evaluation should account for the hydrostatic and dynamic forces exerted by flood waters. The resiliency evaluation should also consider several worst-case scenarios that may occur during severe weather, which will be unique to each facility and each municipality.

The resiliency evaluation may select the appropriate level of protection using one or more of the following approaches:

- Freeboard Value Approach (FVA): Freeboard (100-year base flood elevation + X, where X is 3 feet for critical actions and 2 feet for other actions);
- Climate-Informed Science Approach (CISA): Utilizing the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science;
- 0.2 percent annual chance Flood Approach: 0.2 percent annual chance flood (also known as the 500-year flood); or
- The elevation and flood hazard area that result from using any other method identified in an update to the Federal Flood Risk Management Standard (FFRMS).

Existing facilities planned for upgrade shall be improved to the maximum extent possible to meet the flood protection criteria described above. However, floodproofing measures may be allowed where elevation of equipment or structures may not be feasible, including but not limited to:

- The use of stop logs at entrances;
- Raising motor drives and pumps;
- Lab cabinets with positive latching systems to prevent lab chemicals from mingling with floodwaters;
- Storage at the highest practical elevation;
- The use of water tight enclosures;
- The use of equipment capable of withstanding flooding and;
- The use of quick-connect and/or disconnect mechanisms to enable equipment relocation and facilitate post-storm recovery tasks.

DEEP will verify adherence to the above-discussed requirements through the review of facilities planning reports, plans and specifications documents, and flood management certification process. Failure to comply with these requirements may render all or portions of a project ineligible for CWF funding assistance.

V. ADDITIONAL RESOURCES FOR MUNICIPALITIES

The Connecticut Institute for Resilience and Climate Adaptation (CIRCA) at UCONN helps communities identify critical infrastructure that is at risk, measures the vulnerability, and identifies ways to reduce that vulnerability. CIRCA's mission is to help Connecticut's towns and cities be more resilient to the impacts of climate change and extreme weather. In order to do so, CIRCA researchers are making climate change predictions for Connecticut.

Importantly, a recent CIRCA report developed a predicted static sea level rise of 0.5 meters by 2050 along the Connecticut coastline. This static sea level rise prediction does not take into account tidal cycle, wave action or any other factors that may exacerbate storm surge. Information relating to calculating current and future flood risk from precipitation changes under climate change, modeling sea level rise and storm surge inundation, and others can be found on CIRCA web site at <http://circa.uconn.edu/>.

VI. DEFINITIONS

Base Flood Elevation (BFE) is the topographic elevation having a one percent chance of being equaled or exceeded by flood waters in any given year. This is the regulatory standard also referred to as the "100-year flood" elevation.

CISA: Climate-Informed Science Approach

CIRCA: Connecticut Institute for Resilience and Climate Adaptation at UCONN

CGS: Connecticut General Statutes

Critical Activity: Any activity deemed to be vital to the core operation of wastewater facilities or that will prevent a facility to return to full function as safely and quickly as possible after a flood event. Per CGS Section 25-68b, this means any activity, including, but not limited to, the treatment, storage and disposal of hazardous waste and the siting of hospitals, housing for the elderly, schools or residences, in the 0.2 per cent floodplain in which the commissioner determines that a slight chance of flooding is too great.

Critical Equipment: According to TR-16, critical equipment includes conveyance and treatment system components identified for protection including, but not limited to, all electrical, mechanical, and control systems associated with pump stations and treatment facilities that are responsible for conveyance of wastewater to and through the treatment facility to maintain primary treatment and disinfection during the flood event. Other equipment that, if damaged by flood conditions, will prevent the facility from returning to pre-event operation after cessation of flood conditions is also critical equipment.

CWF: Connecticut Clean Water Fund

DEEP: Connecticut Department of Energy and Environmental Protection

EPA: Environmental Protection Agency

FEMA: Federal Emergency Management Agency

FFMRS: Federal Flood Management Risk Standard

FIRM: Flood Insurance Rate Map

Floodplain: That area located within the real or theoretical limits of the base flood or base flood for a critical activity.

FMA: Connecticut Flood Management Act

FVA: Freeboard Value Approach

PFA: Percent Annual Chance Flood Approach

RCSA: Regulations of the Connecticut State Agencies

TOC: Top of concrete elevation is defined as the lowest elevation that would provide infrastructure with structural protection from severe weather impacts such as from anticipated flood conditions.

TR-16: Technical Report #16, as may be amended, entitled *Guides for the Design of Wastewater Treatment Works*, prepared by the New England Interstate Water Pollution Control Commission.

November 14, 2017
Date


Denise Ruzicka, Director
Water Planning & Management Division
Bureau of Water Protection & Land Reuse



QUALIFICATIONS FOR

RFQ # 2023-140

Engineering, Design, and Inspection Services- Seven Pump Stations



South Benson Pump Station and Drainage Improvement Study, Fairfield, CT

SUBMITTED TO

Town of Fairfield
Fairfield, CT

G-04390-P078
May 25th, 2023

Town of Fairfield
Purchasing Authority
725 Old Post Road
Independence Hall
Fairfield, CT 06824

**Re: Request for Qualifications — RFQ #2023-140 Engineering, Design, and Inspection Services
Seven (7) Pump Stations**

Dear Proposal Reviewer:

Reliable, continuous pumping of wastewater is crucial to the health and safety of our communities and the environment. The Town of Fairfield is responsible for the long-term operation and maintenance of an extensive sanitary sewer collection system, treatment systems, and pump stations. To maintain the long-term reliability and functionality of these valuable assets, the Town is seeking a qualified consultant to provide services for engineering, design, and construction inspections for seven pump stations. The Town intends to comprehensively upgrade the Center Street, Pine Creek, and Fairfield Beach Pump Stations and provide partial upgrades to Toll House, Mill Hill, Willow Street, and Eastfield Drive Pump Stations. The upgrades include replacing aging structures, equipment, piping, ancillary support systems, and more importantly, identifying resiliency and flood protection measures that can be implemented at these stations to minimize the effects of a storm and allow for recovery in a timely and efficient manner after a flood event.

Tighe & Bond is a multi-disciplinary, full-service consulting firm with over 500 employees and 13 offices throughout New England and New York with the experience, resources, and technical expertise to provide the Town with the engineering services identified in the RFQ. Our proposed Project Manager and other key staff are located in our Shelton, CT office and can be at your facilities within 20 minutes. Working with Tighe & Bond offers the following benefits:

In-House Design Team Our team includes **Miles Moffatt**, Project Director, and Vice President with over 35 years of broad project delivery experience for similar projects and clients. **Prashanth Emmanuel and Lori Carriero**, our Senior Project Managers, are ready to serve the Town of Fairfield and have significant experience in wastewater processes and pump stations. **Damien Foster**, our pump station technical advisor, is highly experienced in the design of wastewater pump station projects. Our in-house design team includes architectural, structural, geotechnical, HVAC/Plumbing, electrical, and instrumentation engineers that understand the ins and outs within pump stations and their supporting infrastructure.

Town of Fairfield Knowledge and Experience **Prashanth Emmanuel** has played a key part in the preparation of the 2018 Wastewater Facility Plan and Pump Station Evaluation Report for the Town of Fairfield; Easton Turnpike Pump Station Upgrade; and the update to the 2018 Fairfield Pump Station Evaluation Report in 2022. **Jonathan Richer and Lori Carriero** have assisted the Town with the wastewater treatment plant hardening project and SSES projects respectively. We are familiar with the Town's standards and processes and are confident that this knowledge will allow us and the Town to be successful in meeting the needs of this project.

Extensive Pump Station Experience Tighe & Bond has extensive engineering experience in the evaluation, design, and construction oversight of wastewater pump stations. Over the past several decades, Tighe and Bond has evaluated, designed, and provided construction phase services for over 200 pump stations throughout New England.

Resiliency Experience Tighe & Bond has recently completed a project that addressed very similar concerns in Stratford, CT. Their coastal pump stations are adjacent to salt marshes, beaches, Long Island Sound, and the Housatonic River. Based on our experience in successfully completing this and similar projects, we will completely meet the goals for this upgrade. Additionally, the Stratford Five Pump Station Project received the prestigious **ACE (Achievement in Civil Engineering) Award from the Connecticut Society of Civil Engineers in 2023**. The Town will now benefit from the station's markedly improved



reliability, resiliency, and energy efficiency. The precedent-setting custom applications for structural improvements to each of the facilities will help the community for decades to come.

Relationship with CTDEEP Tighe & Bond enjoys an excellent working relationship with the staff of CTDEEP, and on behalf of the Town of Stratford, we successfully made the case to CT DEEP to modify its Clean Water Fund Policy lifting limitations on the amount of money that can be borrowed in a single year. As a consequence, the Town of Stratford was able to move forward with the upgrade and hardening of five of its wastewater pumping stations as a single project. Doing so the Town saved money and time and enabled it to obtain similar equipment manufacturers at all sites and thus standardize equipment for the Town.

If selected, Tighe & Bond would like the opportunity to discuss using previously accepted contract terms in any resulting contract.

We would enthusiastically welcome the opportunity to meet with you to discuss how Tighe & Bond can help the Town meet its goals. Please feel free to contact Miles Moffatt at (203) 712-1100 (office), (413) 644-6291 (cell), or email at MMoffatt@TigheBond.com if you have any questions or need any additional information.

Very truly yours,

TIGHE & BOND, INC.



Miles Moffatt, PE, BCEE
Vice President



Prashanth Emmanuel, PE
Senior Project Manager

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Town of Fairfield

Sullivan Independence Hall
725 Old Post Road

Fairfield, Connecticut 06824
Purchasing Department

(203) 256-3060
FAX (203) 256-3080

RFQ #2023-140 Engineering, Design, and Inspection Services Seven (7) Pump Stations

TOWN OF FAIRFIELD
PURCHASING AUTHORITY
725 OLD POST ROAD
INDEPENDENCE HALL
FAIRFIELD, CT 06824.

Date Submitted May 25th 2023

SEALED submissions are subject to the standard instructions set forth on the attached sheets.

Any modifications must be specifically accepted by the Town of Fairfield, Purchasing Authority.

Thomas R. Re
First Selectwoman

[Signature]
Director of Purchasing

5/3/2023
Date

Proposer:

Tighe & Bond, Inc.

Doing Business As (Trade Name)
53 Southampton Road

Address

Westfield, MA 01085

Town, State, Zip

Miles Moffatt, PE, BCEE, Vice President

(Mr. / Ms.) Name and Title, Printed

[Signature]

Signature

413-572-3208

Telephone

Fax

mmoffatt@tighebond.com

E-mail

Sealed submissions will be received by the Purchasing Authority at the office of the Director of Purchasing, First Floor, Independence Hall, 725 Old Post Road, Fairfield, Connecticut 06824, up to:

2:00pm, Thursday, 25th May, 2023

To provide qualifications for engineering firms to partner with the Town of Fairfield to provide multiple engineering, design, and inspection services for the upgrade of its seven (7) pump stations as detailed in the attached specifications.

NOTES:

1. Proposers are to complete all requested data in the upper right corner of this page and must return this page and the Proposal page with their bid.
2. Proposals shall not be accepted from, or contracts awarded to, any person/company/affiliate or entity under common control who is in arrears to the Town of Fairfield upon debt, or contract or who has been within the prior five (5) years, a defaulter as surety or otherwise upon obligations to the Town of Fairfield, and shall be determined by the Town.
3. Proposals are to be submitted in a sealed envelope and clearly marked "RFQ #2023-140" on the outside of the envelope, including all outer packaging, such as, DHL, FedEx, UPS, etc.
4. It is the sole responsibility of the Proposer to see that the submission is received by the Fairfield Purchasing Department prior to the time and date noted above. Proposals are not to be submitted via email or fax.
5. Proposals are not to be submitted with plastic binders or covers, nor may the proposal contain any plastic inserts or pages.



Town of Fairfield

Sullivan Independence Hall
725 Old Post Road

Fairfield, Connecticut 06824
Purchasing Department

(203) 256-3060
FAX (203) 256-3080

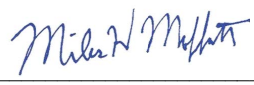
ADDENDUM #1
RFQ #2023-140
Engineering, Design, and Inspection Services
Seven (7) Pump Stations

5th May, 2023 – It is intended that this Addendum incorporating the following corrections, revisions, additions, deletions and clarifications become part of the Contract Documents, including pricing as submitted.

Clarification:

- Please disregard request for Fee Proposal on page 12 of 12 of the RFQ document. The Town of Fairfield is not requesting this as Fee Proposals are not part of this RFQ solicitation process.*
- It is not required to visit the sites of the pump stations before submitting the RFQ. If it is necessary for you to visit the sites, please call the Engineering Department at 203-256-3025 (Megha Jain, Senior Engineer)*

End of Addendum #1

Company: Tighe & Bond, Inc. Miles Moffatt, PE, BCEE,
Name: Vice President Signature:  Date: 5/25/23



Town of Fairfield

Sullivan Independence Hall
725 Old Post Road

Fairfield, Connecticut 06824
Purchasing Department

(203) 256-3060
FAX (203) 256-3080

ADDENDUM #2 RFQ #2023-140

Engineering Design and Inspection Services – Seven (7) Pump Stations

17th May 2023 – It is intended that this Addendum incorporating the following corrections, revisions, additions, deletions and clarifications become part of the Contract Documents, including pricing as submitted.

Questions:

1. Are there any established MWBE / SDVOB goals for this opportunity?

Response: No, there are no established MWBE/SDVOB goals for this opportunity.

2. Could the Town please provide further scope clarification on Number 2 (Geotechnical Investigation and Analysis) on page 5 and 9 of the RFQ?

Response: Pump Stations in VE coastal zones and most likely in AE flood zones will have to be raised above the BFE. This will require the geotechnical investigation and analysis for the building foundation that will have to be raised above flood zones. For example, pump stations in VE coastal zones will call for a deep foundation and in AE zones could be just shallow foundation depending on the type of soil underneath and the existing foundation conditions. This is why this RFQ requires the subsurface exploration and a baseline report to have a good understanding of the foundation before construction and for the structural design and analysis purposes.

3. On page 10 of the RFQ For Item 6. Force Main Inspection – Items A and B include summaries; however, C and D are missing summaries. Could the Town please provide?

Response: Willow Street: It will require full evaluation such as hydraulic analysis for pipe size, increase head any tuberculation in the pipes, flows analysis, etc. as mentioned across force main inspection. At present it is a 4" ductile iron pipe.

Eastfield Drive: This also includes full hydraulic evaluation and inspection of a force main. This force main runs via yard and is recommended for pipe reconfiguration and for new valves.

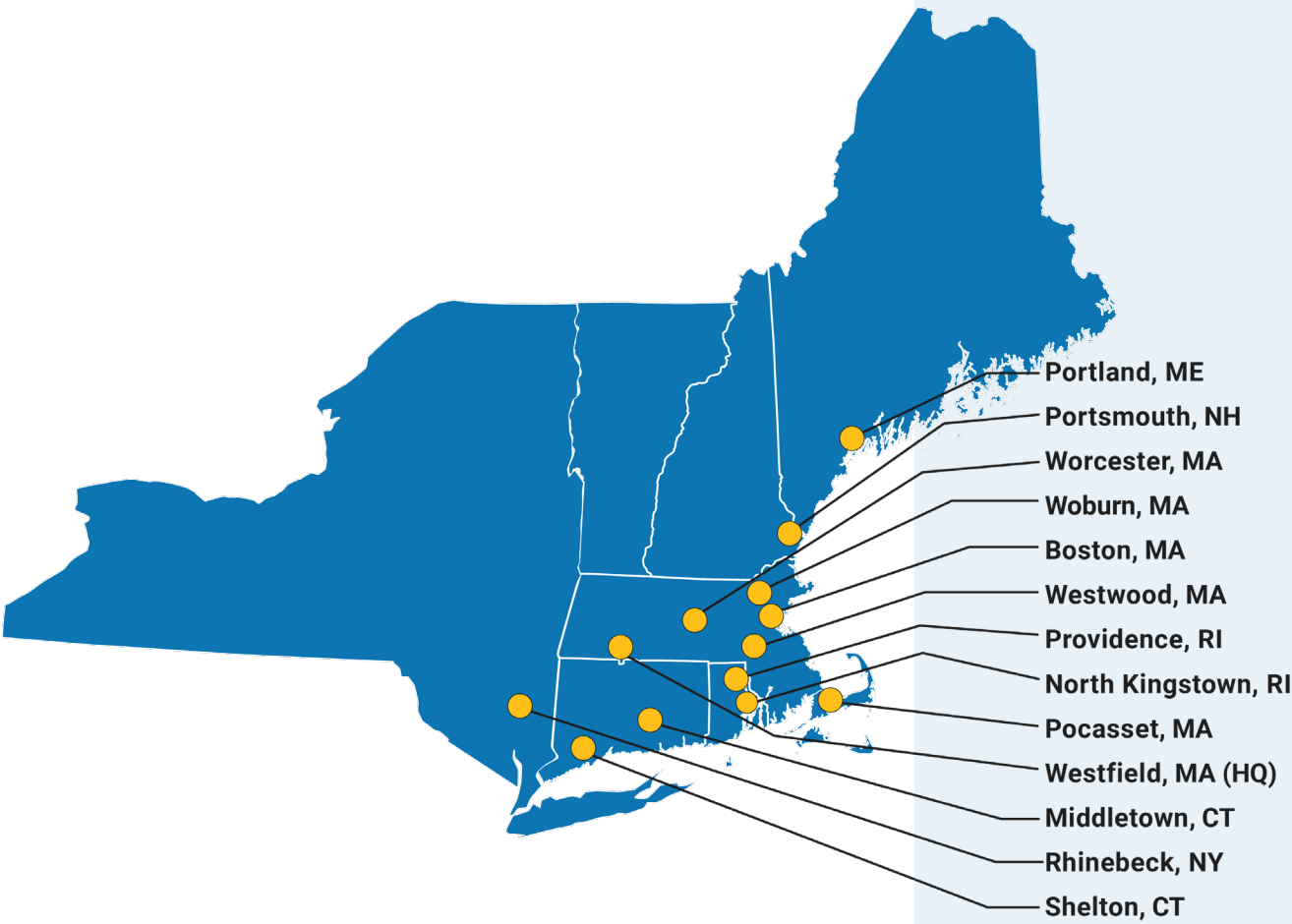
4. On page 12 of the RFQ under Selection Process it states in number 2 that an evaluation matrix is attached. Could the Town please provide the evaluation matrix as specified in the RFQ?

Response: The Town will be utilizing the criteria listed on page 12 item 1. of the RFQ to evaluate the RFQ submissions.

End of Addendum #2

Company: Tighe & Bond, Inc. Name: Miles Moffatt, PE, BCEE Signature: *Miles H. Moffatt* Date: 5/25/23

OUR LOCATIONS



With 13 offices across the Northeast, we are ready to provide responsive, high-quality professional services to efficiently meet your project goals, schedule, and budget.



FOUNDED

1911

TEAM MEMBERS

~500

ZWEIG GROUP

BEST FIRMS
TO WORK FOR

BANKER AND
TRADESMAN'S BEST
OF 2022

#1
for Engineering &
Environmental Services

ENR NEW ENGLAND
TOP DESIGN FIRMS

#7

Firm Overview

For more than a century, Tighe & Bond has been a leading multi-disciplinary consulting firm in the Northeast, manifesting its clients' vision for a better-built environment by providing full-service engineering, landscape design, site planning, and environmental services. Innovative thinking and exceptional service have always been at the core of our work.

In addition to our engineering and environmental expertise, Tighe & Bond's landscape design studio (Halvorson | Tighe & Bond Studio) offers a unique perspective creating more holistic solutions to unlock each site's potential.

Our experienced professionals provide concept-to-completion expertise to comprehensively address the needs of our public and private clients. The Tighe & Bond team develops creative, collaborative responses to complex challenges by focusing on bright ideas, green strategies, and clear solutions. We always continue evolving to keep pace with our ever-changing industry because moving forward is what we do.



SERVICES

Building Services: MEP,
Structural & Geotechnical
Engineering

Coastal & Waterfront
Solutions

Environmental Consulting
GIS/Asset Management

Landscape Architecture
& Urban Design

Site Planning & Design

Transportation
Engineering

Water & Wastewater
Engineering

Our **Creativity** Makes it Possible.

Our **Experience** Makes it Practical.

Tighe&Bond

OUR CORE VALUES



Integrity



Excellence



Reliability



Commitment



Respect



Safety

Executive Summary



Tighe & Bond's Shelton office is only 20 minutes away from Fairfield, allowing us to provide prompt response to the town as necessary.

Company Name

Tighe & Bond, Inc.

Tax Identification Number

04-2821431

Main Office Address

53 Southampton Road, Westfield, MA 01085

Local Office

1000 Bridgeport Avenue, Suite 320, Shelton, CT 06484

Financial Information

Our most recent audited financial statements are included in a separate sealed envelope. As a privately-held company, we are not required to prepare 10k annual reports.

As an approximately 500 person firm generating over \$90 million in annual revenues, we have the appropriate staff and capacity to successfully execute this project. We have no 3rd party debt (i.e. no commercial loans) and a healthy backlog of project work that is typical for a multi-discipline consulting firm of our size. Tighe & Bond is confident that we have sufficient resources for this assignment, and we've selected a well-qualified project team that is immediately available.

In addition, we will be coordinating our efforts from our Shelton Office, which is located less than 20 minutes from Fairfield. Our experience in Fairfield includes working with the Town over the past few years on several high profile projects including the Pine Creek Culvert Replacement, Turney Creek Culvert Replacement, WWTP Hardening Project, South Benson Pump Station Study, Kings Highway Pedestrian Improvements Project, Post Road Circle Study, and Black Rock Corridor Study.



Firm History

Our firm was founded in 1911 by James Tighe, who played a critical role in developing the water supply, distribution and treatment system for the rapidly growing industrial city of Holyoke, Massachusetts. In 1926, he formed a partnership with Philip Bond, who added expertise in municipal infrastructure engineering. Since then, Tighe & Bond has evolved into a full-service engineering and environmental consulting firm, staffed by approximately 500 professionals working together in thirteen offices across the Northeast, including two in Connecticut. Our full array of services includes marine and waterfront solutions, site planning and design, environmental consulting, building engineering (MEP, structural, and geotechnical), water and wastewater engineering, transportation engineering, and GIS and asset management. Our urban planning and landscape architecture practice was strengthened with the 2020 addition of Halvorson | Tighe & Bond Studio. In 2021, RT Group joined the firm, augmenting our waterfront and geotechnical service offerings. Earlier this year (2023), acquiring WorldTech Engineering bolstered the firm's transportation services.

Tighe & Bond was incorporated in Massachusetts in 1984. In 2000, the firm acquired Allan Davis Associates, Inc. of Norwalk, Connecticut. This office was relocated to Shelton, Connecticut in 2004. Tighe & Bond is a privately-held, employee-owned corporation incorporated in the Commonwealth of Massachusetts. The company is governed by a Board of Directors, and 100 employees, including officers, associates, and Stock Ownership Program members, own 70% of the company stock. The remaining 30% of the firm's stock is owned by the Employee Stock Ownership Program (ESOP).

Staff gather for the annual Lobsterfest at the Westfield Headquarters to catch up and rekindle friendships.



Respondent Information

Per the Town of Fairfield's Request for Qualifications, we have provided the following required information:

- We confirm that no selectman or other officer, employee, or person who is payable in whole or in part from the Town currently has any direct or indirect personal interest in Tighe & Bond.
- Tighe & Bond does not have any contract operations for operations and maintenance. Moreover, there has been no litigation brought against any of its employees or officers for any form of contract that the company has.
- Tighe & Bond has never been terminated, fired, or replaced on a project other than those contracts that have been terminated due to completion.



Wastewater Services Overview

Designing efficient, cost-effective wastewater management systems helps our clients achieve compliance with federal, state, and local regulations. The following list is an overview of many of the wastewater services that Tighe & Bond provides associated with wastewater permitting, design, and construction.

Pump Stations/Force Mains

- Evaluation
- Replacement
- Upgrades
- Resiliency Improvements
- Odor Control
- Corrosion Resistance
- Code Compliance
- Manual and Mechanical Screening
- Energy Efficient Control of Pumps
- NPDES Permit Renewal
- NPDES Permit Appeal Support
- Groundwater Discharge Permit Applications
- Industrial Pretreatment Permitting (IPP)
- Compliance Studies & Reporting
- Sewer Extension & Connection Permits
- Incinerator Air Permitting

FUNDING ASSISTANCE

- State Revolving Fund Loans
- Rural Development/USDA
- Community Development Block Grants
- Hazard Mitigation Grants

PLANNING

- Facility Planning
- Asset Management
- Water Resource Management Planning
- Geographic Information

Systems (GIS)

- Health & Safety
- Rate Studies
- Vulnerability Assessment & Resiliency

Wastewater Treatment

- Preliminary Treatment
- Primary Treatment
- Secondary Treatment
- Biological Nutrient Removal
- BioWin Process Modeling
- Metals Removal
- Tertiary Treatment
- Disinfection
- Odor Control Systems
- Biosolids Thickening/Dewatering
- Biosolids Pelletization
- Biosolids Disposal
- Operational Support

COLLECTION SYSTEMS

- CMOM
- Planning
- Surge Protection Planning
- Surge Protection
- Corrosion Protection / Odor Control
- Collector Sewers
- Hydraulic Modeling
- Infiltration / Inflow Mitigation
- Pipe & Manhole Rehabilitation
- Trenchless Pipeline Design
- Sewer System Evaluation
- Surveys Sewer System Rehabilitation
- Sewer System Extensions/Replacement

Project Experience

Wastewater Engineering

Tighe & Bond designs efficient, cost-effective wastewater treatment systems to achieve compliance with federal, state, and local regulations. Our projects range from small industrial pretreatment systems to large municipal treatment facilities. For many cities and towns, we have prepared detailed facilities plans and permit applications, assisted in obtaining funding, completed detailed design of collection, pumping, and treatment facilities, and provided construction oversight and startup services. The firm designs and builds turnkey systems and provides consulting services which include plans and specifications, bidding and construction supervision, startup oversight, operator training, and permitting.

We also provide planning, design, and construction phase engineering services focusing on sewers, collections systems, pump stations, and wastewater treatment facilities.

Experience Working with Municipalities

Tighe & Bond has worked with hundreds of municipalities. We have performed wastewater planning, design, and construction phase services for a number of these communities to meet similar project objectives to Fairfield's. Tighe & Bond has extensive experience in providing permitting, design, and construction services for pump stations, wastewater collection, treatment and effluent disposal system improvement projects. Whatever your engineering or environmental consulting needs, you can count on us for innovative, cost-effective and sustainable strategies to solve the most complex challenges that you face. Our goal is to provide personalized attention and high-quality services to you and to each of our clients.

Tighe & Bond offers a comprehensive array of engineering and environmental services tailored to serve your unique needs. We've provided solutions to many communities dealing with challenges related to:

- Wastewater Improvements and compliance
- Environmental site assessment, remediation, and demolition
- Geographic Information systems for water and sewer utilities

- Civil/site infrastructure improvements and new development
- Solid waste management
- Energy generation and conservation, and sustainable design
- Regulatory compliance and permitting
- Stormwater management

Sanitary Sewer Design

Tighe & Bond has significant experience with designs of sewer systems in Connecticut over the last several years. We perform all services related to the planning, design, and construction inspection of sewers. As part of design services, we perform survey and geotechnical explorations to determine alignments and ground conditions suitable for installing the sewer. We coordinate permitting services with local commissions and make applications to CT DOT for its permit reviews, which include traffic control plans. We are currently performing sewer design service for the Town of Vernon for sewer extensions near Route 84 exit 67, and the City of Stamford for sewer work off High Ridge Road.

Pump Station Experience

Tighe & Bond has extensive experience in the evaluation, design and construction oversight of wastewater pump stations. Projects have ranged from small pump station evaluations to the design and construction oversight of large built-in-place pump facilities. Over the past several decades, Tighe & Bond has evaluated, designed and provided construction phase services for approximately 200 pump stations throughout New England. We have all the key resources to complete this pump stations rehabilitation project, including Civil, Architectural, Structural, Mechanical, Instrumentation and Control, Electrical, Plumbing, HVAC, and Geotechnical. Tighe & Bond's engineering disciplines are all "in-house" and readily available to serve the Town on this project.

Resiliency and Redundancy

Tighe & Bond is fully knowledgeable in wastewater regulations, 2017-001 CWF Memo on Storm Resiliency of Municipal Wastewater Infrastructure, and requirements for safeguarding wastewater infrastructure against flooding. State and Federal regulatory agencies are placing a higher level of importance on keeping key wastewater collection and treatment components operational during extreme storm events, especially since Super Storm Sandy created widespread damage in 2012.

Specifically, Executive Order 13690 was recently reinstated by President Biden to direct federal agencies to do what they can to avoid the impacts from flooding where development has taken place.

These policy updates have also been reflected in an update of the design guidelines that are used in Connecticut: "Guides for the Design of

Project Experience



The Stratford Five Pump Station Project received the prestigious ACE (Achievement in Civil Engineering) Award from the Connecticut Society of Civil Engineers in 2023. The Town will now benefit from the station's markedly improved reliability, resiliency, and energy efficiency. The precedent setting custom applications for structural improvements to each of the facilities will help the community for decades to come.

Wastewater Treatment Works" (TR-16), as published by the New England Interstate Water Pollution Control Commission. Some key revisions include the following:

- Increasing the elevation at which critical features of pump stations are installed to three feet above the 100-year flood elevation, or the 500-year flood elevation. Critical facilities include electrical systems, motors and generators that cannot be easily and quickly replaced if exposed to water, wave action, or salt.
- Requiring backup power generation with at least three days of fuel storage.

In addition, the State of Connecticut floodplain management regulations require that sewerage systems located in the floodplain have watertight manhole covers, and any vents on the system or at pumping stations must extend above the 100-year flood elevation to allow continued operation at floods up to this level.

Additionally, FEMA standards for structures located in Zone VE and impacted by Limit of Moderate Wave Action require:

- Buildings must be elevated on pile, post, pier, or column foundations, and must be adequately anchored to the foundation.
- Structural fill is prohibited.
- The bottom of the lowest horizontal structural member be at or above Base Flood Elevation (BFE).
- The area below the BFE must be built with flood-resistant materials and free of obstructions. If it is enclosed, the enclosure must be made of lightweight wood lattice, insect screening, or breakaway walls.
- The building design and method of construction must be certified by a design professional.

Tighe & Bond has significant experience evaluating and implementing solutions that meet these regulations and safeguard existing wastewater infrastructure against flooding. Approaches we have evaluated and employed include:

- Above Grade Hardening such as flood walls, flood proof building doors, raising louvers, raising generators and fuel storage, and deployable measures, like stop logs
- Below Grade Hardening such as foundation wall reinforcing and water proofing, fiberglass reinforcement of foundation walls, and interior pilasters
- Buoyancy Hardening such as the addition of concrete ballast, buoyancy collars, and micropiles

Tighe & Bond has recently completed a project for the Town that included installation of two storm water pump stations in the coastal zone. Our Structural, Geotechnical, Mechanical and Electrical Engineers are familiar with scope requirements of this RFQ and can successfully help the Town address the needs of this project.

In addition, Tighe & Bond has recently completed a project that addressed very similar concerns in Stratford, CT. Their coastal pump stations

are adjacent to salt marshes, beaches, Long Island Sound, and the Housatanic River. Based upon our experience in successfully completing this and similar projects, we will completely meet the goals for this upgrade.

Permitting

Tighe & Bond is well versed in a variety of design standards, guidelines, and regulations. Understanding regulations is not only critical from a technical standpoint but allows us to assist owners in developing strategies and priorities to address their project problems while still complying with regulatory requirements.

The majority of our projects involve some form of permitting at the federal, state, or local levels. Tighe & Bond is fully capable of preparing and assisting our clients in obtaining all types of wetlands permits including Notice of Intents, Water Quality Certifications, Chapter 91 Waterways Licenses, Flood Management Certification Environmental Permits, and U.S. Army Corp of Engineers permits. We also have experience in assisting in obtaining state highway access permits, sewer extension permits, and preparing preliminary and definitive subdivision plans for local approval. At the local level, we often coordinate with public works departments, planning and zoning boards, water pollution control authorities, environmental protection boards, and public utility companies.

Tighe & Bond meets with the regulators early on in the design phase to establish design objectives and to present improvement concepts. This process streamlines the design and permitting process and improves the likelihood of obtaining permits in a timely manner. Tighe & Bond regularly provides design services in accordance with the regulations and accepted guidelines of the Clean Water Fund (CWF), the US Environmental Protection Act (EPA), and the Connecticut Department of Energy and Environmental Protection (CTDEEP).

Tighe & Bond maintains strong relationships with the regulators such as the U.S. Army Corps of Engineers, the Federal Emergency Management Agency, the state of CTDEEP, Connecticut Department of Transportation, State Traffic Commission, and local commissions that help facilitate negotiations.

Structural

Our firm's capabilities in structural engineering include building design for new facilities, additions and/or renovation to existing buildings. We also conduct conditions assessments of existing facilities where our team reviews all accessible and visible structural building systems including roof decks, beams and girders, columns, masonry bearing walls, below grade concrete walls, and structural slabs. In addition, our structural engineers design equipment support structures, tanks, and containment structures, including, vehicular and pedestrian bridges. We are known for innovative yet practical solutions to a broad range of structural challenges.

We have also evaluated and retrofitted existing buildings to provide flood protection and resiliency. Our evaluations were conducted in accordance with the Connecticut State Building Code and the American Society of Civil Engineers (ASCE) ASCE 24 - Flood Resistant Design and Construction.

Design considerations for elevating building structures located in the AE zones will include evaluating the below grade foundations in accordance with ASCE 7-16 - Minimum Design Loads and Associated Criteria for Building and Other Structures, for the proposed hydrostatic and lateral earth pressures, and proposed gravity loads, wind loads, and seismic loads from the building superstructure. If required by analysis, the building foundations will be strengthened in accordance with the American Concrete Institute Building Code Requirements for Structural Concrete (ACI-318) and the Connecticut State Building Code.

The existing building superstructures located in the coastal A zones will be analyzed to determine if the structures can be elevated to meet the minimum elevation requirements for structures in coastal A zones as outlined in ASCE-24.

At a minimum, the existing above grade pump station walls and roof structures will be evaluated for the current loadings as required by the Connecticut Building Code and ASCE 7-16. If necessary, the structures will be strengthened to meet the building code requirements for snow load, wind loads, seismic loads, and flood loads.

The Mill River Pump Station masonry walls and roof structure supporting a monorail beam and hoist will be analyzed to confirm that the building structure can safely support the loads from the monorail hoist. If required, the structure will be strengthened to support the monorail loads.

The masonry wall joints at the Toll House Pump Station will be re-pointed to provide a tight mortar joint. In addition, the spalled concrete floor surfaces will be evaluated to determine the cause of the deterioration and repaired.

Safety guardrail and access ladders for entry into wet wells will be designed where required at each of the pump stations to allow for safe access into the pump station wet wells.

Electrical and Mechanical Engineering

As our projects have become more complex, we have developed a dedicated electrical and mechanical engineering department to support these efforts. Our electrical engineering capabilities range from design of power distribution systems, standby and emergency power systems, indoor and outdoor lighting, and fire detection and alarm systems, to design, integration, and maintenance of full function SCADA systems. Our electrical engineers are experienced with wastewater system design and electrical requirements, such as the advantages and challenges

associated with variable frequency drives and the potential for premature pump bearing failure due to stray voltage. We also understand the importance of electrical safety, having performed numerous Arc Flash potential and utility coordination studies at water pumping and treatment facilities to be sure that electrical equipment is properly labeled and appropriate personal protective equipment (PPE) is available for operators.

Tighe & Bond has a strong background in building system operations and the ability to apply energy efficient designs involving the selection of efficient equipment. We deliver complete system designs for new construction as well as to upgrade or replace systems in buildings undergoing renovation. We develop design drawings in current CAD and Revit formats to best suit the project needs.

Our seasoned engineers design heating, ventilation and air conditioning, plumbing and other mechanical systems on a wide variety of pumping and treatment projects. The firm delivers complete system designs for new construction as well as to upgrade or replace systems in buildings undergoing renovation. Tighe & Bond also provides commissioning services during building design, construction, and post-occupancy to support energy efficient building design and operation.

Geotechnical Engineering

Tighe & Bond's geotechnical engineers have experience with the design of pump stations throughout New England, especially with projects requiring support of excavation, dewatering, ground improvements for supporting foundations and slabs, supporting structures on shallow or deep foundations, site retaining walls, and excavation of bedrock. Our geotechnical engineers also have local experience with the geology in Fairfield, Connecticut, including compressible organic soils.

The geotechnical engineering services for each site will include a subsurface investigation including soil borings and laboratory testing, submission of a geotechnical data report with the results of the subsurface investigation and laboratory testing, a baseline report with known ground conditions at a project site, and a foundation design report with recommendations for suitable foundation and slab types, recommendations for foundation design, and geotechnical construction recommendations.

Architecture

Tighe & Bond provides architecture support services for many of the firm's engineering projects. Services include design of new construction; building renovation and rehabilitation; and building systems upgrades. We are experienced in door and window replacement and restoration; roofing system replacement, including both modern and traditional roofing systems; interior alterations and accessibility upgrades.

Tighe & Bond's building services group prepares schematic design, design development, and construction drawings. The group coordinates architectural design aspects of the project and also provides structural, mechanical, electrical, and plumbing disciplines.

Environmental Consulting

Tighe & Bond's environmental expertise spans many disciplines and allows us to deliver invaluable services to our clients. With environmental engineers and scientists, we provide expert advice to help organizations and communities comply with complex, changing federal and state regulations and avoid costly penalties and fines. We conduct audits to evaluate current compliance status and work with clients to develop comprehensive environmental management systems tailored to minimize regulatory risk. We address our clients' remediation needs, assessing sites for potential contamination, and designing innovative, cost-effective solutions for remediation of groundwater and soil. We provide emergency response and due diligence and consult on projects from brownfields to underground storage tanks. We also design and build turnkey remediation systems and are often called upon to provide expert testimony and litigation support.

Demolition and Hazardous Materials

Engineering the demolition of industrial, municipal, commercial or institutional buildings requires specialized engineering expertise, and the ability to handle the hazardous materials often generated. We have supervised demolition at a wide variety of sites with a team of skilled structural engineers, asbestos designers, and licensed environmental professionals. We can handle it all safely, quickly and cost-effectively. We prepare detailed demolition specifications and bidding documents, conduct bidding and supervise abatement, remediation, demolition and site restoration.

We have efficiently completed many projects where demolition requirements were complicated by existing conditions and/or desired end-uses of a site. A sound demolition strategy, precise demolition contract documents, and vigilant construction-phase oversight are essential to achieving project redevelopment goals. This also helps to avoid delays, liability, and unforeseen costs.

Our demolition engineering efforts consider all issues associated with preparing a site for redevelopment. This includes cost control, material salvage, public relations, permitting, environmental issues, structural issues, protection of historic structures, selective and complete demolition, and logistical constraints.

Site/Civil Planning and Design

For more than a hundred years, Tighe & Bond has engineered the infrastructure of countless cities and towns throughout New England.

We have provided design services for roadway improvements, sidewalks and crosswalks, bicycle lanes, intersections, curbing and drainage improvements, streetlights and roadway signs, stormwater management systems, dams, water distribution, wastewater collection systems, parks and public spaces. We provide planning services, cost-effective design, bidding assistance, and construction administration and observation services. Regulatory experts on staff help ensure that permitting is achieved smoothly and swiftly with federal, state, and local authorities.

Tighe & Bond has been instrumental in providing comprehensive site planning and design services to our municipal clients. Our professional staff help clients evaluate site development criteria based on the unique project needs, such as infrastructure improvements, traffic and parking improvements, stormwater management, and more. We complete designs for roadways and site utilities utilizing state of the art software such as Civil 3D, reducing the chances of field conflicts during construction and improving efficiency for our clients. Our in-house experts also help clients navigate the often-complex regulatory approval process. We also regularly help our municipal clients identify and secure grant opportunities to fund their projects, an important consideration with strained municipal budgets.

Tighe & Bond regularly assists municipalities review their existing stormwater management programs and develop new ones to meet MS4 and industrial stormwater permitting requirements. We have extensive experience with hydrologic and hydraulic studies, stormwater modeling software, GIS development for stormwater mapping, as well as the design and construction expertise to carry out these stormwater improvement projects to completion. Our field staff routinely perform inspections of stormwater outfalls and drainage systems and conduct sampling to meet permit requirements.

We implement low-impact development (LID) techniques to limit the consequences of site disturbance and stormwater runoff. Our innovative solutions are customized for the nature of the municipality and range from hydrodynamic separators and tree box filters to vegetated bioretention and rain gardens.

Construction Phase Services

As our engineering projects transition to the construction phase, we provide the administrative services to carry the design through construction to substantial completion.

Our construction phase services include bidding and contract award assistance, construction administration, and construction observation.

Bidding & Contract Award Assistance

During the bidding process, Tighe & Bond provides assistance to the Client from the preparation of contract documents to advertising and bid result analysis. Our bidding services typically include:

- Preparation and compilation of municipal front end contract

documents such as bid forms, specifications, and plan sets

- Bid advertisement and distribution of contract documents, including our internal project bidding website to facilitate electronic tracking of contractors, electronic communications with prospective bidders, and cohesive issuance of contract changes
- Attendance at pre-bid meetings
- Preparation and issuance of addenda responding to questions and comments during the bidding period on our design deliverables
- Opening and review of bids; contacting references when appropriate; developing bid tabulations and analyses to verify that bids are compliant with requirements
- Investigating and evaluating the qualifications of low bidders and providing recommendations as to the “lowest qualified bidder”

Construction Administration

Tighe & Bond provides construction administration support services throughout the entirety of the construction phase and project close-out. At the beginning of the construction phase, our staff reviews shop drawings for conformance with project plans and specifications, and evaluates material substitutions proposed by the contractor. During construction, Tighe & Bond maintains open communication between field personnel, the client, and contractors to relay information and answer any questions or RFI's. If necessary, additional sketches or plan revisions can be provided for clarification or field changes.

Regularly scheduled construction meetings are coordinated to review construction progress and project updates. Our project coordinators interface with our clients and field staff to develop construction meeting agendas and developing meeting summaries documenting the meeting discussions for all parties involved. With support from the field personnel, Tighe & Bond reviews contractor pay requisitions and proposed contract change orders, including reviewing both the requested changes and associated costs to ensure proper value is assigned to the changes.

During close-out of the construction phase, Tighe & Bond prepares recommendations for final acceptance of the project including conducting a final site walkthrough and preparing the punch list to identify any incomplete items or corrective action items. Our construction administrators review project records to document item changes and reconcile quantities and project costs. We track materials testing results and provide guidance to the contractor with respect to non-conforming materials that were identified through the materials testing process. This process ensures the project is in conformance with the contract documents and standards.

Construction Observation

Tighe & Bond provides on-site construction observation services, both part-

time or full-time based on project requirements, budgets and required level of oversight of the work to meet the construction reporting requirements. During the construction phase, Tighe & Bond field personnel document the contractor's activities with well-organized field reports and photographs. The information collected typically includes a daily summary of the work completed, contractor's staff and equipment, measurement and calculation of payment, and a summary of general site conditions and key activities.

Field staff work closely alongside the contractor to ensure the construction and materials are in compliance with the contract documentation. Under the scenario when unanticipated conditions are encountered our observers provide the experience to work cooperatively with the contractor to identify the proper course of action to address issues and if needed document the extra work as cost plus or direct changes in quantities. Working in concert with office support staff, our observers understand when additional design support is needed to ensure the correct course of action is taken. If required for the project, field sampling and materials testing are coordinated with the office staff and testing agencies. Tasks performed by office and field staff provide effective and efficient support of the project through the construction phase.

State Regulatory Agency Experience

Familiarity with State and Federal Regulations

Tighe & Bond is well versed in a variety of design standards, guidelines, and regulations. Understanding regulations is not only critical from a technical standpoint but allows us to assist owners in developing strategies and priorities to address their project problems, while still complying with regulatory requirements.

We meet with the regulators early on in the design phase to establish design objectives and to present improvement concepts. This process streamlines the design and permitting process and improves the likelihood of obtaining permits in a timely manner. We have strong relationship with the regulators such as the U.S. Army Corps of Engineers, the Federal Emergency Management Agency, the state of Connecticut Department of Energy and Environmental Protection, and local commissions that help facilitate negotiations.

CT DEEP Clean Water Fund

Tighe & Bond's Connecticut offices have prepared many Clean Water Fund (CWF) applications in recent years. We work very closely with the community's finance department in preparing the Economic Data component of the CWF application. Through this experience, our staff is able to guide and support our clients through the CWF process.

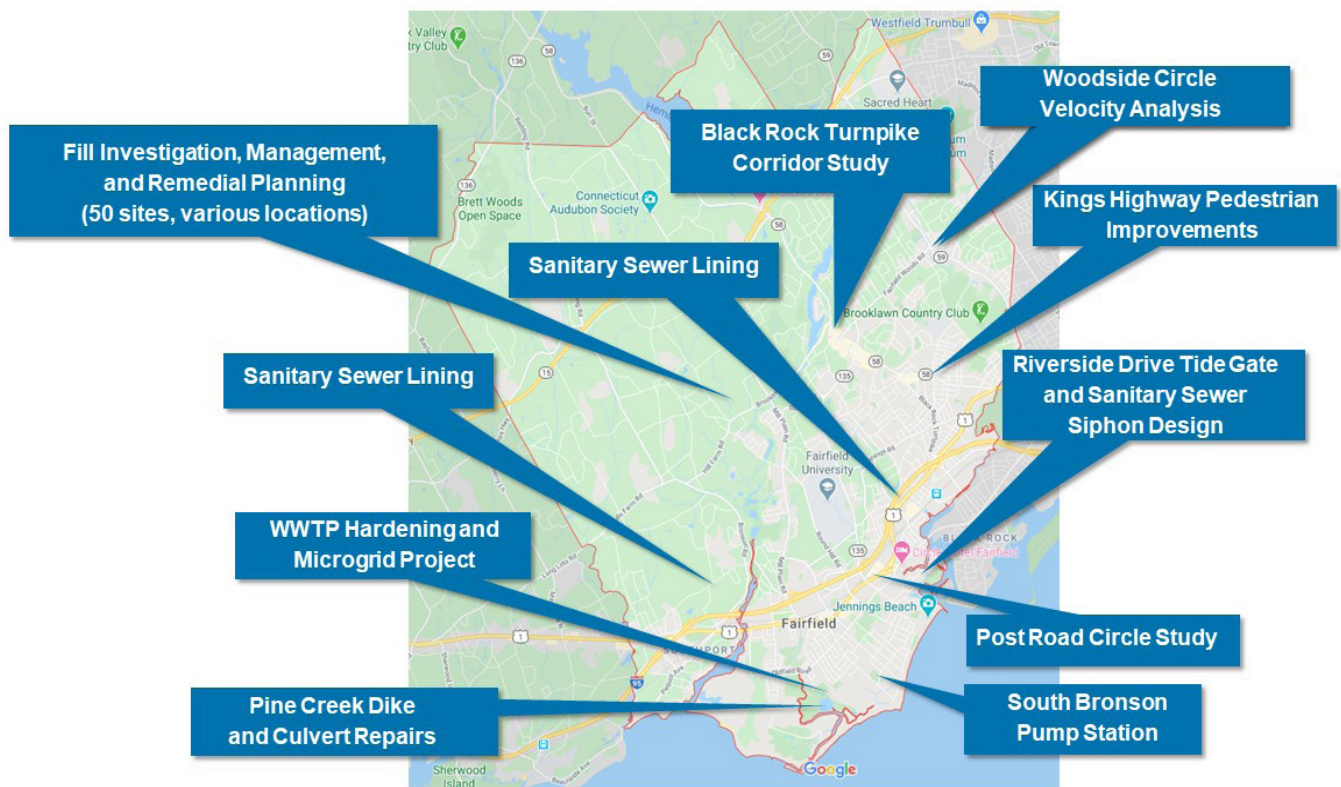
Tighe & Bond has worked on numerous projects that involve review/ approval from the CT DEEP, and/or Clean Water Funding, including pump stations in Southington, Stratford, and Middletown, CT.

Our relationships with regulators at CT DEEP were leveraged to the

benefit of our Stratford client. After preparing the opinion of probable costs for the improvement of five pump stations, we discussed the options to bid the projects in the most economical way for both the Town and CT DEEP. These discussions resulted in CT DEEP issuing CWF Memo 2018-001, which removed the low interest loan limit from \$4 million per year. This resulted in the Town of Stratford being able to move forward with the construction of five stations in one package, reducing overhead costs, effort on the Town's Departments and enabling critical equipment upgrades to be replaced more quickly. The alternate would have been implementing one pump station a year – extending the duration of the project and likely having different equipment manufacturers across their facilities.

Fairfield Presence

Tighe & Bond has had the opportunity to collaborate with the Town of Fairfield on many projects. Our Shelton office is located 20 minutes away which means we can be in the Town easily when needed. The figure below illustrates some of our recent projects with the Town.



Relevant Experience

Working in collaborative teams across disciplines and specialties, we regularly provide the services requested in this RFQ. Below, you will find a table showcasing our experience with the experience and technical competence requested by the Town of Fairfield. Full project summaries can be found in Appendix B.

Project/Location	Public Works Project	Experience in Structural/ Geotechnical/Mechanical/ Water Resources and Electrical Engineering	Pump Stations in Coastal VE zones and AE Flood Zones	Project Scheduling	Flood Mitigation Control Project	Development of Construction Contract Documentation	Technical Oversight During Construction	Coordination with Utility Companies	Coordination with Federal, State, and Local Agencies, including Permitting
WWTP Hardening Project, Fairfield, CT	X	X	X	X	X	X	X		X
West Main Street Pump Station Upgrade, Beacon, NY	X	X		X		X			X
South Benson Pump Station and Drainage Improvement Study, Fairfield, CT	X		X		X				
Francis T. Patnaude Intermunicipal Pumping Station, Middletown, CT	X	X		X		X	X	X	X
Blatchley Pump Station Demolition, Southington, CT	X	X		X		X	X	X	X
Plantsville Pump Station Upgrade, Southington, CT	X	X	X		X	X	X	X	X
South End Road Pump Station Upgrade, Southington, CT	X	X		X		X	X	X	X
Three Pump Station Upgrades, Southington, CT	X	X	X	X	X	X	X	X	X
West Queen Street Pump Station Upgrade, Southington, CT	X	X	X	X		X			X
Perna Lane Sanitary Sewers, Stamford, CT	X	X		X		X	X	X	X
Pump Station Evaluations and Upgrades, Stratford, CT	X	X	X	X	X	X	X	X	X
Pump Station No. 2 Upgrade, Westport, CT	X	X		X					X



Designing for coastal wastewater resiliency—WWTP hardening in Fairfield, Connecticut

LAURA PULIE, PE, Town of Fairfield Engineering Department, Fairfield, Connecticut
JONATHAN RICHER, PE, Tighe & Bond, Shelton, Connecticut

ABSTRACT | In October 2012 Hurricane Sandy caused record storm surge flooding in coastal areas of Fairfield, Connecticut, and widespread damage throughout the town. Portions of the town's wastewater treatment plant (WWTP), located directly adjacent to a low-lying coastal salt marsh, were submerged and substantially damaged due to the storm. Consequently, the WWTP's influent did not receive full treatment for more than a week. The town used emergency funding through the U.S. Department of Housing and Urban Development and the Connecticut Department of Housing to design and construct a flood control structure and pump station to protect the WWTP and surrounding critical town facilities from a 100-year flood. This article provides an overview of the project, discusses the design process and challenges, and highlights the risks to wastewater facilities in similar coastal environments.

KEYWORDS | Coastal resiliency, wastewater, pump station, flooding, floodwall

The Fairfield wastewater treatment plant (WWTP) is a 9 mgd (34 ML/d) facility that treats sewage from 17,000 customers within the town. The facility is in a Federal Emergency Management Agency (FEMA)-defined AE flood zone (base floodplain where base flood elevations are provided), subject to inundation by the 1 percent annual chance (100-year) flood. Based on the National Hurricane Center's national storm surge hazard maps, the WWTP site is vulnerable to storm surge from a Category 2 storm, with most of the surrounding area and access to the site vulnerable to a Category 1 storm. Fairfield's unique geography makes it particularly susceptible to coastal storm surge events. The area of the town south of Interstate 95—where the WWTP is located—was historically an expansive, low-lying coastal salt marsh. This salt marsh is protected by a system of dunes and barrier beaches that absorb the wave energy from Long Island Sound, two creeks, Ash Creek to the north and Pine Creek to the south, drain the salt marsh and allow tidal flushing. Over time, the salt marsh was partially infilled for residential development and the construction of municipal

facilities, including the WWTP. During large coastal storm events, the area floods through two sources: tidal flooding through the unprotected outlets of Ash Creek and Pine Creek and overtopping of the dunes and barrier beaches. During Hurricane Sandy, the storm surge overtopped the barrier beaches and became trapped in the low-lying salt marsh surrounding the WWTP. This area remained flooded for more than a week. Despite the extensive damage to the WWTP facility, Hurricane Sandy was categorized as a Category 1 storm when it hit Fairfield. Had the storm surge from Hurricane Sandy gone any higher, larger areas of the WWTP would have been fully submerged. A 100-year flood event would fully inundate the WWTP and damage much of the facility, costing an estimated \$35 million to \$50 million to repair.

PROJECT DESCRIPTION
The town's immediate priority after Hurricane Sandy was to repair the vast damage that the storm inflicted on the town's seawalls, bulkheads, roadways, dikes, and other coastal infrastructure to restore access and safety for the public. Once the initial repair and recovery was completed, the



town assessed the additional coastal vulnerabilities that Hurricane Sandy had exposed and planned to improve resiliency against even larger storm events. The town used emergency funding through the U.S. Department of Housing and Urban Development (HUD) and the Connecticut Department of Housing for some of these resiliency improvements. In 2015, it secured funding through HUD's Community Development Block Grant—Disaster Recovery (CDBG-DR) program for several coastal resiliency projects, including the WWTP hardening project. This program funds projects after a Presidentially declared major disaster for disaster relief, long-term recovery, and restoration of infrastructure. The hardening project included the construction of approximately 2,900 lf (884 m) of sheet pile wall around the WWTP and surrounding critical facilities, including the Fairfield County fire training school, town conservation building, and town animal shelter. The project also raised parts of Richard White Way, the main access road to the site; it intersects with the sheet pile wall to provide access to the WWTP during major storm events while maintaining a continuous

flood control structure. This continuous floodwall ringing the plant creates a "bathub" to trap rainfall within the plant during rainfall events. To address this condition, two stormwater pump stations were designed to discharge rainfall collected within the floodwall against a potential storm surge event.

DESIGN CONSIDERATIONS AND SOLUTIONS
The main design considerations for protecting and hardening the WWTP included the floodwall materials and configuration, stormwater pump stations, and facility access.

Floodwall Design
The primary consideration in the design of a structure to protect the WWTP was the desired extent of flood protection and the resultant height requirement for the associated structure. The NEIWPCC document *Technical Report No. 16—Guides for the Design of Wastewater Treatment Works*, commonly referred to as TR-16, provides design criteria for all Connecticut state-funded wastewater projects. Largely as a result of Hurricane Sandy, TR-16 was

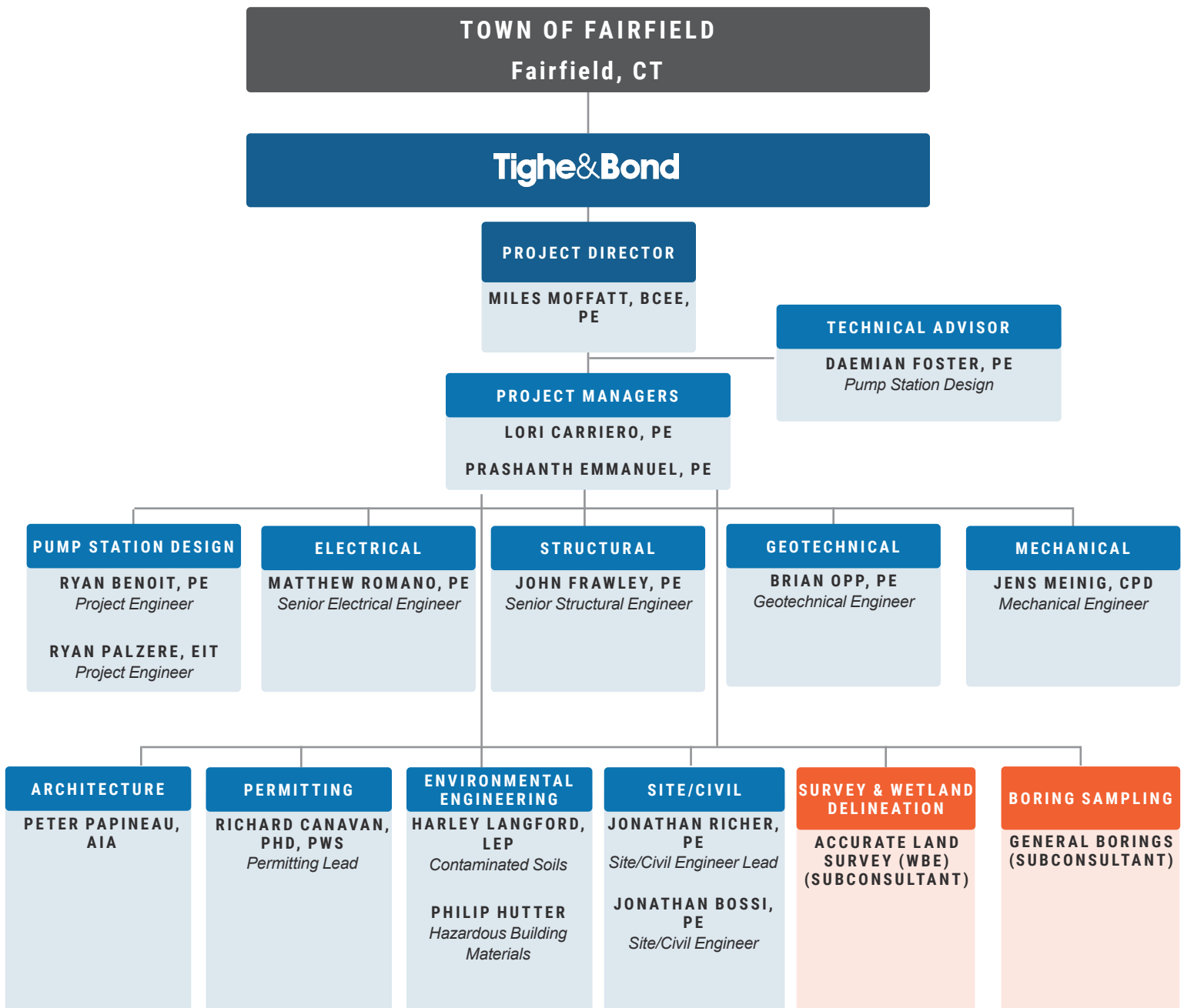
WWTP Hardening Project in Fairfield, CT featured in the *Journal of the New England Water Environment Association*, Spring 2022 issue.



Wastewater Treatment Plant Hardening, Fairfield, CT

Project Team

The team we have assembled for this project has experience in the services outlined in the RFQ. Below, please find our Organizational Chart with profiles of key personnel on the following page. Full resumes can be found in Appendix A.



Key Personnel



MILES MOFFATT, PE, BCEE | PROJECT DIRECTOR

Miles Moffatt is vice president and technical director with 35 years of experience working on water and wastewater projects. He is experienced in planning, design and construction phase engineering support. His specialty has been program and project management of raw water supply, drinking water treatment and wastewater system programs. He supports the firm's project management, standardization, and quality program delivery.



PRASHANTH EMMANUEL, PE | PROJECT MANAGER

Prashanth Emmanuel specializes in the planning, evaluation, design, and construction management of wastewater projects. His wastewater experience includes facilities planning, design and construction management of pump stations, odor control systems & wastewater treatment facilities and inflow/infiltration studies.



LORI CARRIERO, PE, BCEE | PROJECT MANAGER

Lori Carriero is a Senior Project Manager who has experience in extensions, repairs, and upgrading of public sewers and water systems. She has overseen the evaluation and installation of several trenchless technologies, including folded and formed, and cured-in-place pipelines. In addition, she has managed and provided design engineering on gravity, low-pressure, and vacuum sewer systems. The Academy of Environmental Engineers has recognized her as a Board-Certified Environmental Engineer (BCEE).



DAEMIAN FOSTER, PE | PUMP STATION DESIGN TECHNICAL ADVISOR

Daemian Foster is an experienced Design Engineer who has worked on a broad range of water, wastewater, and environmental projects for both municipal and industrial clients. His background in project management and water and wastewater treatment process design includes experience with various conventional treatment processes, as well as ultraviolet disinfection and membrane technologies. In addition to his treatment experience, he has participated in the design and construction of water and sewage transmission systems, including both pumped and gravity systems.



MATTHEW ROMANO, PE | SENIOR ELECTRICAL ENGINEER

Matthew Romano's 17 years of experience and background in electrical engineering and computers equips him to design and specify power, lighting, HVAC, fire and intrusion detection, instrumentation and control, public address, and telephone systems. He has worked on a broad array of projects focused on water resources, wastewater treatment, industrial waste, solid waste, and electrical demolition.



JOHN FRAWLEY, PE | SENIOR STRUCTURAL ENGINEER

John Frawley is a design engineer with experience in design of a variety of building types and structures, conducting condition assessments for existing building and structures, and providing construction oversight for a wide range of building and infrastructure projects. John has analyzed and designed structures constructed of various building materials including reinforced concrete, reinforced masonry, structural steel, and wood. Over his career, John has been the structural engineer for projects that include the design or retrofit of water and waste-water structures including, building foundations, building superstructures, water retaining structures, equipment platforms and pads, retaining walls, dams, and spillways.



BRIAN OPP, PE | GEOTECHNICAL ENGINEER

Brian is a geotechnical engineer with more than 20 years of experience in civil engineering and environmental science for a wide range of heavy construction, transportation and energy, government, private-sector, and commercial projects. He has worked throughout the Mid-Atlantic and New England states, and is licensed as a Professional Engineer in Maryland, Pennsylvania, New York, New Jersey, Connecticut, Rhode Island, Massachusetts, and Vermont. Project experience includes design and construction of foundations for transmission lines, low- and medium-rise buildings, bridges, communication towers, photovoltaic panels, as well as pavement design, slope stability analyses, removal of unsuitable material, analysis and observation of reinforced earth retaining structures, installation and monitoring of geo-instrumentation, and general construction administration.



JENS MEINIG, CPD | MECHANICAL ENGINEER

Jens Meinig is a mechanical engineer specializing in design for heating, ventilation, air conditioning and plumbing systems. He has experience in product and process design, start-up and troubleshooting of heat treatment equipment, glass manufacturing, and utility design for various manufacturing and food processing companies. He also has construction administration experience and is adept at ensuring that designs are constructed in accordance with drawings and specifications.



JONATHAN RICHER, PE | SITE/CIVIL ENGINEER LEAD

Jonathan Richer is a Senior Project Manager with a broad range of civil engineering experience for both private and municipal clients. His design work includes roadway design, site layout, storm and sanitary sewer system design, utility design, coastal resiliency, and permitting. Jon has led projects through all phases, from planning, design and permitting through construction. His hands-on construction administration experience has provided him with a solid understanding of scheduling and cost estimating.



PETER PAPINEAU, AIA | SENIOR ARCHITECT

Peter has experience in public, municipal, and private sector work and oversees the architectural design of new construction and renovation projects. His areas of expertise include space planning, building restoration, and building systems and component upgrades. Peter's portfolio includes a wide range of projects including office and school buildings, housing, and industrial buildings including water treatment plants and pump stations. He has worked on numerous restoration projects involving both exterior envelope and interior finish repairs and restoration involving Period detailing and construction methods necessary to maintain the historical character of the building or structure being restored.



RICHARD CANAVAN, PHD, PWS | PERMITTING LEAD

Richard Canavan is a Principal Environmental Scientist with over 25 years of experience in environmental research, teaching and consulting. His research projects have examined nutrient and pollutant chemistry in lakes, agricultural soil and coastal sediment. As a consultant, he has directed environmental permitting for a range of clients including private developers, municipalities, public utilities and state agencies. This work has included wetland delineation and field assessment, design review, and coordination with regulatory staff, local commissions and stakeholders on permit applications. He has provided environmental planning services for the development of water quality monitoring programs, data analysis and watershed planning.



HARLEY LANGFORD, LEP | CONTAMINATED SOILS

Harley Langford is a project manager and Licensed Environmental Professional who has experience in environmental site assessment, remediation, Brownfields redevelopment, and hazardous materials abatement and demolition design. He is well versed in contractor management, health and safety compliance oversight, regulated waste management, environmental sampling, feasibility testing, and remediation system operation and maintenance.

ACCURATE LAND SURVEYING, LLC | SURVEY AND WETLAND DELINEATION (SUBCONSULTANT) WBE

Founded in 2013, Accurate Land Surveying, LLC, a subsidiary company of B&B Engineering, LLC strives to provide fast, accurate and quality land surveying services to our clients in order to meet their specific needs. A survey provides essential understanding of property limits and rights and, most importantly, determines the true potential or limitation of the property. It is imperative that a survey be completed with the highest level of scrutiny, integrity and thoroughness. Accurate Land Surveying is conveniently located on Route 69 in Woodbridge which is approximately 20 minutes from Wallingford. Accurate Land Surveying is a registered Small/Minority Business Enterprise with the State of Connecticut Department of Administrative Services.

GENERAL BORINGS | BORING SAMPLING (SUBCONSULTANT)

General Borings, Inc, located in Prospect , CT offers a variety of drilling services. Tighe & Bond has utilized General Borings, Inc on previous Town of Fairfield Projects. Soil boring testing provides an informed foundation and structure, contributing to the projects cost-effective and safe approach.

Team Experience

In April 2023, Prashanth Emmanuel became a valuable addition to the Tighe & Bond team, bringing with him 18 years of experience in the wastewater industry. Emmanuel's recent accomplishments include conducting resiliency studies for municipalities in Connecticut and Rhode Island. He played a pivotal role in various Fairfield projects, such as contributing to the preparation of the 2018 Wastewater Facility Plan and Pump Station Evaluation Report, overseeing the upgrade of the Fairfield Easton Turnpike Pump Station, and providing updates to the 2018 Fairfield Pump Station Evaluation Report in 2022. Emmanuel will collaborate closely with Lori, who has previously collaborated with all the team members mentioned in this proposal.



The Stratford Five Pump Station project ribbon cutting, Stratford, CT.

Relevant Prior Experience

Below is a representative list of some of the clients we have served during the past five years, complete with names, addresses and telephone numbers of contact persons for each. Additional client information can be provided upon request. We have provided design services for all clients listed below.

TOWN OF STRATFORD, CT

John Casey, PE, Town Engineer
2725 Main Street
Stratford, CT 06615
(203) 385-4013 / jcasey@townofstratford.com

TOWN OF VERNON, CT

Robert Grasis, WPCF Director
5 Park Street
Vernon, CT 06066
(860) 870-3545 / rgrasis@vernonct.gov

TOWN OF SOUTHTON, CT

James Grappone, Assistant Town Engineer
196 North Main Street
Southington, CT 06489
(860) 276-6231 / grapponej@southington.org

TOWN OF WESTPORT, CT

Bryan Thompson, WPCA Coordinator
110 Myrtle Avenue
Westport, CT 06880
(203) 341-1129 / BThompson@westportct.gov

CITY OF STAMFORD, CT

William Brink, Executive Director
111 Harbor Avenue
Stamford, CT 06902
(203) 977-4590 / wbrink@StamfordCT.gov



South End Road Pump Station Upgrade, Southington, CT

Quality Control Measures

Quality Management

The quality of Tighe & Bond's services and deliverables are critical to achieving our continued success and growth. Every interaction we have with our clients contributes to their perception of our service quality; from responsiveness returning messages and accurate invoicing, to delivering technically accurate projects on time and within budget.

Effective quality control is not just about correcting errors but having procedures in place to ensure that errors do not occur, and then to find and correct them if they do. For that reason, quality control needs to be a documented and consistent process throughout the life of a project. Tighe & Bond's QA/QC Program includes Project Management processes designed to ensure consistency and accuracy in our work practices and deliverables. This QA/QC Program applies to all of our projects regardless of size, complexity or type of service provided.

Tighe & Bond has prepared templates for Project Plans, documentation of QC and QA reviews, and Final Project Reviews. These templates are designed to be scalable to all types and sizes of projects. It is expected that all projects have a completed Project Plan, at least one completed Technical (QC) Review Form, and one completed Quality Assurance Review Form filed in the project's central QA/QC folder for future reference.

Implementing and adhering to a QA/QC program is vital for ensuring the quality of services and deliverables. We document our QA/QC process with customizable forms to ensure consistent review as a best practice and provide evidence of the standard of care provided in performing our work.

What follows is a description of the tools we used to manage quality assurance and quality control.

Quality Control Plan

The Quality Control Plan will describe the specific QA/QC procedures planned for the given project. This element of the Project Plan will be completed by the Project Manager and approved by the Client Manager for all projects regardless of size or type. The QC Plan will document the intended use of Tighe & Bond design checklists, list project deliverables (including draft and interim client submittals) and associated technical and QA reviewers, and set a schedule to ensure that appropriate QA/QC review will be performed prior to submitting a deliverable to the client.

Quality Control Review

The purpose of the Quality Control Review is to provide a detailed examination of the accuracy and quality of a work product before it is delivered to the client. All deliverables receive a Quality Control Review. The QC (Technical) Reviewer will be identified in the Project Plan and will not be the primary individual responsible for preparing the document. If they have not prepared the review document, the Project Manager may, and often will, serve as the Technical Reviewer. Tighe & Bond has identified Technical Specialists in a variety of areas of expertise. These Technical Specialists are responsible for maintaining the firm's leadership understanding of their specialty and are also potential Technical Reviewers. In some cases, a deliverable may have more than one QC Review and Reviewer (e.g. reviews for each discipline, separate review of design calculations, etc.).

The Technical Reviewer will be responsible for reviewing the accuracy of the deliverable, including assumptions and calculations. This review will include a thorough check of all calculations (unless there is a separate documented QC Review), drawings and specifications for accuracy, style and functionality. Generally, calculations will be reviewed by a Technical Reviewer as soon as they have been completed so that any errors can be caught before additional related work proceeds. Tighe & Bond has prepared checklists for several types of projects, which are used by reviewers. The Technical Reviewer will review every word in the specifications and all drawings.

Tighe&Bond										Job Number: _____		
										Date: _____		
										Revision: _____		
PROJECT PLAN												
QUALITY MANAGEMENT PLAN												
Project Checklists ☐ Yes ☐ No										Type of Checklist		
QM Reviews	Deliverable	QC Review (Check Applicable Reviews)					QA Review		QA/QC Reviewers/Firm (include name and type of review)			
		PM	TD	TS	Constructability Review	Peer Review	PD	BLL or TD				
		☐	☐	☐	☐	☐	☐	☐				
		☐	☐	☐	☐	☐	☐	☐				
		☐	☐	☐	☐	☐	☐	☐				
Other Comments:												
Internal Progress Meetings (>\$10K)	Frequency:											
	Date/Time:											
	Attendees:											
Client Progress Reports (>\$10K)	Type & Frequency:											
	Person Responsible:											
SAFETY PROGRAM												
Safety Checklist										☐ Yes ☐ NA		Comments
Site-Specific Safety Plan										☐ Yes ☐ NA		
Health and Safety Plan										☐ Yes ☐ NA		
Notification of Corporate Safety Officer										☐ Yes ☐ NA		
PLAN APPROVALS												
PM: _____				PD: _____				TD: _____				

Quality Assurance Review

The final review of a work deliverable before it is delivered to the client is the Quality Assurance review, often performed by the project's Client Manager. The QA review is intended to ensure that the Company's QA/QC procedures have been followed for this project. This includes a review

for conformance with the Project QC Plan and Tighe & Bond standards for style and format. In addition, the QA review can include “spot checks” for accuracy, functionality, and consistency with the client’s expectations.

Roles & Responsibilities

The key QA/QC roles on a project are described below. On a given project the same person may play more than one QC role, but all deliverables (draft and final) will be reviewed by at least two people prior to delivery to the client.

- **Project Manager** - The Project Manager (PM) has ultimate responsibility for technical and service quality delivery on a project. It is the PM’s responsibility to deliver a cost-effective solution that meets the client’s needs and prepare deliverables that are on schedule and on budget. The PM is responsible for developing the QC Plan for the project, obtaining Client Manager approval and assuring that it is properly implemented, including making sure that all technical and QC comments are properly addressed. On a design project the PM is responsible for appropriate use of design checklists, master specifications, and standard details.
- **QC (Technical) Reviewer** - The Technical Reviewer is responsible for reviewing the accuracy, completeness, and functionality of the review document. Some projects may utilize multiple Technical Reviewers for each deliverable (e.g. calculations, separate disciplines). For a design project, the Technical Reviewer is also responsible for ensuring that the design meets the project design intent and applicable design standards and codes. If required by the project QC Plan, the Technical Reviewer will review and approve the design in accordance with the appropriate design checklist.
- **QA (Client Manager) Reviewer** - The primary responsibility of the QA reviewer is to ensure that the project QC Plan has been followed and that the deliverable is clearly presented and meets Tighe & Bond standards for style and format. In addition, the QA Reviewer provides a final, less thorough check for technical accuracy.

Communication

The project will require continuous coordination of the project team, the client, and other regulatory agencies. Communication must be precise, clear, and well-documented. All communication, meetings and interaction with the client and regulatory agencies are to be part of and included in the project tasks. The scope of work will include the specific number of meetings with the client and regulatory agencies. Other meetings with stakeholders and the public will also be defined based on discussions with the client. To keep the lines of communication open throughout the project and to maintain close coordination with the client, they will be copied on all external correspondence.

Notable Awards

Grand Award - Environmental Sustainability

American Academy of Engineers and Scientists



*Transformation of the
Mt. Tom Coal-Fired Power Plant*

Grand Award for Engineering Excellence

American Council of Engineering Companies | CT



*Southington Water Pollution Control Facility
Design and Engineering Improvements*

Grand Award for Engineering Excellence

American Council of Engineering Companies | CT



*Great Hill Tunnel
Pipeline Restoration*

Accolades

American Academy of Environmental
Engineers and Scientists

American Council of
Engineering Companies
CT | MA | NH | RI

Connecticut Society
of Civil Engineers

Design Merit Award
American Institute of Architects
New Hampshire

Environmental Business Council
of New England

Design Merit Award
AIA New Hampshire

Nicholas Humber Award - Collaboration
Environmental Business Council of NE

Tax Credit Excellence - HUD Preservation
Charles L. Edison Award

Climate Change Project of the Year
Environmental Business Council | NE

Tighe&Bond

Schedule

Project Schedule

Milestone	Anticipated Completion Date
Select Engineer	July 2023
Negotiate & Execute Contract	July 2023
Data and Information Gathering	August 2023
Flow Analysis	September 2023
Develop Pump Station Preliminary Report	October 2023
Present Draft Engineering Report to Town	December 2023
Town Approves Report	January 2024
Final Design & Permitting	October 2024
Advertise Projects to Bid	December 2024
Begin Construction	February 2025
End Construction	April 2026

Commitment and Availability

Tighe & Bond is approximately 500 employees and an annual revenue exceeding \$90 million. We possess the necessary staff and resources to effectively carry out the engineering, design, and inspection services for the seven-pump station project. While we prioritize maintaining consistent leadership throughout a project, we do not rely solely on one or two individuals to provide the technical services required to complete tasks. Instead, we have a team of qualified and experienced professionals in each discipline, enabling us to meet the project's requirements. Our fully staffed offices in Shelton and Middletown are conveniently located nearby, allowing us to handle multiple projects concurrently. To ensure successful execution, our Project Manager will oversee staffing and project milestones, ensuring adherence to the required schedule.

At Tighe & Bond, we employ state-of-the-art project management software, Microsoft Access and engage in weekly resource planning to accurately predict our annual workload and determine team members' availability for specific assignments. We assure you that the personnel mentioned in this proposal will be accessible and designated to this project. We have full confidence in our capability to effectively manage our resources and meet the demands of both our current and future workloads for this undertaking.

Appendix A: Resumes





MILES MOFFATT, PE, BCEE

VICE PRESIDENT

Miles Moffatt is vice president and technical director with 35 years of experience working on water and wastewater projects. He is experienced in planning, design and construction phase engineering support. His specialty has been program and project management of raw water supply, drinking water treatment and wastewater system programs. He supports the firm's project management, standardization, and quality program delivery.

PROFESSIONAL EXPERIENCE

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY

As interim director of engineering, assist the RWA in planning several projects including: updating the Water Supply Plan; reservoir improvements including water and geotechnical studies and dam stability analyses; storage tank water quality upgrades; pump station upgrades; hydraulic modeling studies; treatment plant upgrades including filter and chemical systems. Assisted in developing short and long-term CIPs to address resiliency, redundancy and reliability goals of the RWA with its 32 surface water impoundment dams, numerous groundwater pumping stations, 1700 miles of piping and four water filtration plants.

PORTLAND WATER DISTRICT—PORTLAND, ME

Project Director for planning improvements to the District's East End Wastewater Treatment Facility influent screening facility. Work encompassed an analysis of the facility to achieve maximum loadings during storm conditions before activating a bypass facility, including:

- Hydraulic analysis of pipes, channels and screening units
- Constructability study of methods to pass flow through or around facility
- Life cycle cost analyses of alternatives identified
- Project director for improvements to secondary treatment facility, including 120 diameter clarifiers and return activated sludge conveyance system. Work included:
 - Physical inspection and analysis of condition of clarifiers and pumping system
 - Recommendations for improvements via analysis of various affordable improvements
 - Life cycle cost analysis of alternatives identified

MASSACHUSETTS WATER RESOURCES AUTHORITY

Design coordinator for new aeration system for the 1,300 MGD Deer Island WWTP. Work included layout and design of galleries and related piping and equipment. Scope included support during startup.

NARRAGANSETT BAY COMMISSION—PROVIDENCE, RI

Project manager for upgrades to 19 combined sewer structures sites to accommodate larger flows and minimizes CSO releases to receiving waters. Work included detailed design of improvements, including surveying, geotechnical studies, alternative analyses of cost savings options, permitting support and detailed estimates of probable construction costs.

EXPERIENCE

35 Years

SPECIALTIES

Water, Wastewater, and Stormwater
Conveyance
Treatment Facilities
Design and Construction Services
Comprehensive Wastewater Master
Planning based on Asset Management
Risk and Prioritization Assessment
Stormwater Management
Water Supply System Design

EDUCATION

Bachelor of Science
Mechanical Engineering
Rensselaer Polytechnic Institute
Master of Science
Mechanical Engineering
New York University

LICENSES & REGISTRATIONS

Professional Engineer
CT #34558
RI #13795
NY #063364
ME #16359
VA #0402041112
MD #32354

PROFESSIONAL AFFILIATIONS

American Academy of Environmental
Engineers and Scientists
Water Works Association
Water Environment Federation
American Water Works Association

DC WATER BLUE PLAINS WWTP—WASHINGTON DC

Project manager for design services for improvements, including:

- Improvements to the raw wastewater pumping station, including new pumps, controls and power supply
- Upgrades to the final filters influent pumping station, including piping, valves and actuators
- Retrofitting air scour systems
- Addition of primary clarifier enhanced coagulation system
- Remodeling historic structures on site, and managing lead paint and asbestos remediation

DC WATER SEWER PROGRAM MANAGER—WASHINGTON DC

Program Director for the planning and delivery of \$100M per year of capital improvement projects for the storm and sewer collection system. Role on the project included management of:

- Asset management inventory of and condition assessment of the District's 28 pumping stations
- GIS and record drawing upgrades for the 1,900 miles of sewer and stormwater collection pipes and related flow diversion and CSO structures
- MS4 Permit support; confirming, assessing and prioritizing improvements to 587 stormwater outfalls
- Permitting and design of upgrades to 12 wastewater pumping stations, including screening, washing and compaction of debris and SCADA control upgrades to the related flow control structures
- I/I Control Plan development; including qualification and impact assessment and recommendations for a long-term plan.
- Hydraulic modeling of gravity sewers, interceptors, and force mains to confirm capacity and flow characteristics through isolation structures and pumping stations
- Prioritizing capital and O&M expenditures based on risk scoring, ranking, and business case evaluations of identified water, sewer and stormwater improvement needs
- Electrical and SCADA improvements at bypass structures, pumping stations and metering and dosing facilities
- FEMA funding support and design for back-up generators at critical pumping facilities
- Inspection, heavy cleaning and condition assessment of large sanitary and combined sewers
- Design of pipe trenchless rehabilitation including cured-in-place, carbon fiber and shotcrete methods

BIRMINGHAM WATERWORKS AND SEWER BOARD (BWWSB)

Program manager and bond engineering services that include:

- Engineering studies for new water sources, watershed best management practices, water quality and treatability, and dam surveys to meet the Board's 100 MGD average demand, plans for franchise expansion, and water quality goals
- Planning, design and construction services for finished water storage and transmission in the Board's 9 service areas.
- Planning, design and construction for upgrades and expansions of the Board's four WTPs and one WWTP and booster pumping stations.
- Advising client on setting strategic goals, developing CIP program and engineering support necessary to manage program.



PRASHANTH EMMANUEL, PE

SENIOR PROJECT MANAGER

Prashanth Emmanuel specializes in the planning, evaluation, design, and construction management of wastewater projects. His wastewater experience includes facilities planning, design and construction management of pump stations, odor control systems & wastewater treatment facilities and inflow/infiltration studies.

WASTEWATER

EASTON TURNPIKE PUMP STATION—FAIRFIELD, CT

Designed various improvements related to the demolition of the existing can-style pump stations and installation of a new dry-wet well pump station along with architectural, HVAC, electrical, and site improvements.

WASTEWATER AND PUMP STATION FACILITIES PLAN STUDY—FAIRFIELD, CT

Evaluated various alternatives for providing improvements to the existing wastewater pollution control facility and pump stations to meet the long-term needs of the Town. The evaluation considered current regulatory requirements, the age and conditions of existing equipment, capacity of existing unit process to meet projected flows and loads, process reliability and life expectancy of equipment.

PUMP STATION RESILIENCY EVALUATION, — GROTON, CT

Managed efforts related to the preparation of resiliency measures for fifteen pump stations that face potential impacts from coastal flooding, sea level rise, and riverine flooding.

WASTEWATER ASSET RESILIENCY PLANNING—SMITHFIELD, RI

Managed efforts related to the preparation of a wastewater resiliency plan to adapt and protect Smithfield's WWTP and each of its twelve pump stations from natural hazards.

MATTABASSETT DISTRICT PRIMARY SCUM SKIMMER SYSTEM—CROMWELL, CT

Managed multi-discipline efforts for design, bidding, and construction to replace manual scum skimmers with automated scum skimmer systems.

MATTABASSETT DISTRICT SIDE STREAM REACTOR STUDY—CROMWELL, CT

Managed efforts related to the evaluation of process changes to the Side Stream Reactor to supply additional process air to meet the loading demands to the reactor. Evaluated electrical and instrumentation needs for installation of a new centrifugal blower to supply process air to the reactor.

MYSTIC/STONINGTON INTERCONNECTION UPGRADE—STONINGTON, CT

Managed multi-discipline efforts for design, bidding, and construction to replace existing diversion pumps that convey wastewater from the Mystic WWTF to Stonington WWTF, replacement of primary and secondary clarifier equipment, primary scum pumps, influent gate, process valves, and installation of a new chemical bioxide odor control system.

EXPERIENCE

18 Years

SPECIALTIES

WWTF Upgrades

Pumping Station Design

Odor Control

Hydraulic Evaluations

Nitrogen and Phosphorous Removal

EDUCATION

Bachelor of Science

Civil Engineering

Guru Nanak Dev Engineering
College, India

Master of Science

Environmental Engineering
University of New Haven, CT

LICENSES & REGISTRATIONS

Professional Engineer
CT #28710

PROFESSIONAL AFFILIATIONS

Water Environment Federation

PLYMOUTH NUTRIENT ENHANCEMENT STUDY, PLYMOUTH, CT

Managed efforts in the evaluation and recommendation of nutrient enhancement study to improve operation of the Plymouth WWTF 5-stage Bardenpho process for nitrogen and phosphorus removal, including evaluation of new RAS pump station. Additionally evaluated and designed short term measures to be implemented at the WWTF to comply with new phosphorous limits while long-term measures were implemented.

PRIMARY AND SECONDARY TREATMENT UPGRADE—STAMFORD, CT

Lead project engineer for the design and construction administration efforts for various improvements to the Stamford Water Pollution Control Facility, including aeration system modifications, aeration blowers, odor control system, influent raw sewage pump, and force main replacement.

WATER POLLUTION CONTROL FACILITY UPGRADE—TORRINGTON, CT

Designed various improvements to the treatment facility, including new bar screen, washer-compactor, primary sludge pumps, primary clarifiers equipment, conversion of biological treatment process from Modified Ludzack-Ettinger to 5-stage Bardenpho, final settling tanks, return sludge pumps, effluent flushing water system, odor control systems, and ultraviolet disinfection system. Oversaw bidding and construction administration efforts for the \$56 million upgrade.

WATER POLLUTION CONTROL FACILITY UPGRADE—FARMINGTON, CT

Designed various improvements to the treatment facility, which included construction of a new final settling tank, equipment replacement in existing final settling tanks, return sludge pumps, plant water system and installation of new ultraviolet disinfection system and new effluent pump station.

WATER POLLUTION CONTROL FACILITY UPGRADE—MANCHESTER, CT

Designed various improvements to the treatment facility, which included primary sludge pumps, gravity thickener, odor control systems, and gravity thickener sludge pumps.

MATTABASSETT DISTRICT WATER POLLUTION CONTROL FACILITY UPGRADE—CROMWELL, CT

Designed various improvements to the treatment facility, which included odor control systems, fluidized bed incinerator and associated equipment, underground fuel storage tanks, primary tank scum skimmer mechanisms, and upgrading the septage receiving station. Assisted in construction administration efforts for the \$110 million upgrade including preparation of operation and maintenance manual for the entire treatment plant.

MDC DIVIDEND BROOK DRAINAGE AREA MASTER SEWER PLAN—ROCKY HILL CT

Prepared engineering design report to eliminate five aging pump stations to reduce operation and maintenance costs to the district. The evaluation included identifying existing and future flows to each station by conducting flow monitoring study and hydraulic capacity of existing sewers to accommodate excess flow from the demolition of the five pump stations.

SLUDGE TANK ODOR CONTROL—CONCORD, NH

Evaluated various odor control technologies that can be implemented at the Concord, NH wastewater treatment facility to treat high odorous sources from sludge storage tanks.

WASTEWATER TREATMENT PLANT ODOR CONTROL EVALUATION—NAUGATUCK, CT

Conducted a facility-wide odor control site investigation and monitoring to identify odor sources from various process equipment and recommended measures and improvements that can be implemented to reduce offsite odor impacts from the facility.



LORI CARRIERO, PE, BCEE

SENIOR PROJECT MANAGER

Lori Carriero is a Senior Project Manager who has experience in extensions, repairs, and upgrading of public sewers and water systems. She has overseen the evaluation and installation of several trenchless technologies, including folded and formed, and cured-in-place pipelines. In addition, she has managed and provided design engineering on gravity, low-pressure, and vacuum sewer systems. The Academy of Environmental Engineers has recognized her as a Board-Certified Environmental Engineer (BCEE).

PUMP STATION DESIGNS/IMPROVEMENTS

EXPERIENCE

36 Years

SPECIALTIES

Sanitary Sewer Extensions
Sanitary Sewer Rehabilitation
Infiltration/Inflow Studies
Wastewater Facilities Planning
Pump Station Designs
Rehabilitation of Pump Stations

EDUCATION

Bachelor of Science
Civil and Environmental Engineering
University of New Hampshire
Master's in Business Administration
University of Connecticut

LICENSES & REGISTRATIONS

Professional Engineer
CT #17065
NY #095440
Board Certified Environmental Engineer
PACP/MACP/LACP Certified National
Association of Sewer Service
Contractors Pipeline Assessment and
Certification Program

PROFESSIONAL AFFILIATIONS

North American Society for Trenchless
Technology
New England Water Environment
Association

PUMP STATION NO. 2 FORCE MAIN REPLACEMENT/STATION UPGRADE—WESTPORT, CT

Served as Project Manager for the design of the replacement of Pump Station No. 2 in Westport, CT. This design will replace the existing 10" cast iron force main with a new 12" HDPE force main by directionally drilling underneath the Saugatuck River. Services were also provided for the design of upgrades to the station once the new force main had been constructed. Specific upgrades included new pumps/controls and a larger generator. The site was elevated to keep the generator above the 100-year flood elevation.

PUMP STATION NO. 11 FORCE MAIN REPLACEMENT PROJECT—WESTPORT, CT

Served as Project Manager for the design of the replacement of the force main from Pump Station No. 11 in Westport, CT.

WOODBIDGE LANE PUMP STATION UPGRADE—THOMASTON, CT

Managed the design and construction of upgrades to the Woodbridge Lane Pump Station within the Town of Thomaston, CT. The upgrades were performed to increase the station's capacity due to increased flows in the system. Improvements included new pumps/motors/controls, replacement of the existing emergency generator, and replacement/relocation of the existing valve vault. A new force main was also required due to the increase in pump station capacity.

PUMP STATION UPGRADES—STRATFORD, CT

Assisted in the Construction Management of an \$18 million contract for the upgrades to six wastewater pump stations in Stratford, CT. Specific tasks include submittal review and coordination, pay request reviews, preparation of RFI responses, Change Orders, Field Orders, and coordination between the Contractor, Owner and Construction Observation team.

WASTEWATER

CONTRACT 71 SEWER EXTENSION—WESTPORT, CT

Project Manager responsible for the design and construction of approximately 9,000 LF of new gravity sewers in Westport, CT.

KENNEDY DRIVE FORCE MAIN REPLACEMENT—THOMASTON, CT

Provided design and construction of a force main replacement project in Thomaston, CT. The project included the replacement of 900 LF of 6" force main through a series of bid alternates.

PERNA LANE SANITARY SEWER EXTENSIONS—STAMFORD, CT

Assisted with the final design of a sewer extension involving the installation of approximately 15,000 LF of new gravity and low-pressure sewers, as well as design of a new submersible pumping station for the City of Stamford, CT.

INFILTRATION/INFLOW STUDY—THOMPSON, CT

Provided infiltration/inflow study on a portion of the Town's trunk sewer system. Work included nighttime flow isolation measurements and manhole inspections, followed by smoke testing work to identify inflow sources. A report was then prepared recommending sewer rehabilitation work.

INFILTRATION/INFLOW STUDY AND SEWER REHABILITATION THOMASTON, CT

Assisted in evaluation of television inspection, smoke testing, and building inspection data to develop recommendations for sewer rehabilitation. Also performed cost effective analysis, prepared written report, and presented findings to client. Also served as Project Manager for design and construction phases of subsequent sewer rehabilitation work, which was completed in two separate contracts.

INFILTRATION/INFLOW REMOVAL—SALISBURY, CT

Served as Project Manager for the review of existing TV inspection information conducted in 2013, coordination of additional TV inspection where existing data was incomplete, and preparation of a report recommending rehabilitation based on the results of the TV inspection work.

GREENFIELDS INFILTRATION/INFLOW EVALUATION/SEWER REHABILITATION

Project Manager for infiltration/inflow evaluation in the Greenfields Sewer District. Work included nighttime flow isolation measurements, smoke testing, manhole inspections, and television inspection work to identify infiltration and inflow sources. A report was then prepared recommending sewer rehabilitation work. Also served as Project Manager for the design of improvements to the collection system based upon the study recommendations. Specific work includes sewer replacement, sewer lining, joint testing and sealing and manhole rehabilitation as part of two separate contracts

TOWN OF SOUTHTON INFILTRATION/INFLOW STUDY

Project Manager for a Phase I Infiltration/Inflow Study of the Town's existing collection system, and development of a hydraulic model to evaluate the capacity of the Town's trunk sewers. Also responsible for the preparation of an updated Sanitary Sewer Service Area Map and Water Pollution Control Plan as part of an overall Wastewater Facilities Plan.

TOWN OF STRATFORD INFILTRATION/INFLOW STUDY

Project Manager for project involving a Phase I Infiltration/Inflow Study of the Town's existing collection system, development of a hydraulic model to evaluate the capacity of the Town's trunk sewers and updating the collection system mapping into GIS format.

SSS PROGRAM—SOUTHTON, CT

Served as Project Manager for Sewer System Evaluation Survey project in the Town of Southton, CT. This project involved the TV inspection of over 120,000 LF of sewer mains, development of recommendations for sewer rehabilitation as well as a cost-effective analysis of all recommendations.



DAEMIAN FOSTER, PE

SENIOR ENGINEER

Daemian Foster is an experienced Design Engineer who has worked on a broad range of water, wastewater, and environmental projects for both municipal and industrial clients. His background in project management and water and wastewater treatment process design includes experience with various conventional treatment processes, as well as ultraviolet disinfection and membrane technologies. In addition to his treatment experience, he has participated in the design and construction of water and sewage transmission systems, including both pumped and gravity systems.

EXPERIENCE

30 Years

SPECIALTIES

Water and Wastewater Treatment Processes

Water System Upgrades

Water Distribution Systems

Wastewater Treatment Facility Upgrades

Water, Sewer and Storm Pumping Systems

EDUCATION

Bachelor of Science

Civil & Environmental Engineering
Cornell University

Master of Science

Environmental Engineering
Worcester Polytechnic Institute

LICENSES & REGISTRATIONS

Professional Engineer
MA #49163
NY #079914

WASTEWATER/STORMWATER

PUMP STATION AND DRAINAGE IMPROVEMENT STUDY—FAIRFIELD, CT

During major coastal storm surge events floodwaters overtop the coastal barrier beaches and become trapped behind the higher ground. This work included a stormwater pump station to transfer storm flows from the low-lying area, to help Fairfield, CT better deal with future events. Provided storm water pump station evaluation, preliminary sizing (56,400 GPM), conceptual layout with cost estimates and evaluated potential locations for the station.

STORMWATER PUMP STATION EVALUATION AND DESIGN—FAIRFIELD, CT

Provided storm water pump station evaluation, design, and assistance with cost estimates. Aided during construction. This work included the design of stormwater pump stations to protect the WPCF and other critical facilities within a proposed berm around the WPCF, Fairfield, CT, from future flood events.

SEWER PUMP STATION—TRUMBULL, CT

Assisted in all aspects of the design of a new sewer pump station and discharge force main. Design work incorporated siting of station and force main alignment, geotech boring program, station structures (wet well, valve vault and equipment building), submersible pumping equipment, controls, and backup power.

SEWER PUMP STATION REPLACEMENT—BEACON, NY

Assisted in all aspects of the design of a new sewer pump station to replace an existing aging station. Design work incorporated all aspects of a new pump station design including siting of station, geotech boring program, station structures (wet well, valve vault and equipment building), submersible pumping equipment, controls, and backup power.

GRAVITY SEWER AND PUMP STATION REPLACEMENT—SUTTON, MA

Assisted in all aspects of the preliminary design of sewer system upgrades to increase capacity of the existing sewer collection system to facilitate economic development. The work includes new and replacement gravity sewer a new sewer pump station to replace an existing station which is aging and under capacity. The final design work will incorporate siting of the new sewer pump station, gravity sewer and force main alignment, a new sewer flow meter, station structures (wet well, valve vault, meter vault), submersible pumping equipment, controls, and backup power.

SEWER PUMP STATION UPGRADES—SOUTHINGTON, CT

Assisted with the design and construction of equipment and process upgrades for three municipal pump stations in Southington, CT. Included replacement of the pumps with dry pit submersibles and the replacement of vulnerable electrical and control equipment, to provide storm hardening protections as well as modifications to piping to improve flow and provide pump station by-pass capability.

PUMP STATION UPGRADE—SOUTHWICK, MA

Designed and managed equipment and process upgrades for three municipal pump station in Southwick, MA. Included replacement of the suction lift pumps with non-clog submersible pumps, in conjunction with controls upgrades.

PUMP STATION UPGRADE—PEPPERELL, MA

Designed equipment and process upgrades for a municipal pump station in Pepperell, MA. Included replacement of the suction lift pumps in conjunction with controls upgrades, and modifications to piping to provide pump station by-pass capability.

PUMP STATION DESIGN—WORCESTER, MA

Participated in the preliminary engineering design and construction services for the pumps and wet well for the Whitla Street Pump Station. Provided layout and sizing for the initial pump station wet well. Participated in the review and evaluation of the final bid documents related to the dry-pit submersible pumps.

PUMP STATION IMPROVEMENTS—AYER, MA

Assisted with the design of equipment and process upgrades for a municipal pump station in Ayer, MA. Included replacement of the existing ejector style pump station with new dry pit submersible pumps, the modification of the structure, layout, and piping to increase capacity, accessibility and allow station bypass.

PUMP STATION IMPROVEMENTS—WORCESTER, MA

Assisted with the design of equipment and process upgrades for three municipal pump stations in Worcester, MA. Included replacement of the existing ejector style pump stations with new dry pit submersibles pumps, the modification of the structures, layout, and piping to increase capacity, accessibility and allow station bypass.

PUMP STATION IMPROVEMENTS—HOLDEN, MA

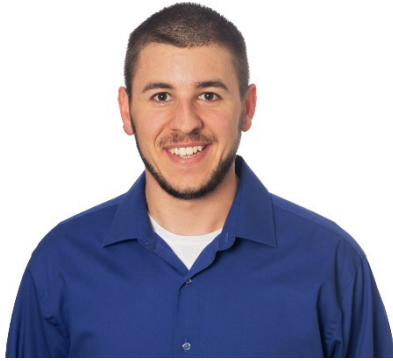
Assisted with the design of equipment and process upgrades for municipal pump stations in Holden, MA. Included replacement of the pumps with dry pit submersibles and modifications to piping to improve flow and provide pump station by-pass capability (four pump stations).

PUMP STATION IMPROVEMENTS—PORTLAND, ME

Evaluated pump option and provided design for upgrade of the pumps at a municipal pump station in Portland, ME. Upgrades provided improvements to the pump station reliability and controls.

STORM WATER PUMP STATION EVALUATION—QUINCY, MA

Provided preliminary storm water pump station evaluation and conceptual information. Prepared a preliminary evaluation of the feasibility of installing multiple storm water pump stations to bypass existing tide gates to reduce the potential for flooding in the future.



RYAN BENOIT, PE

PROJECT ENGINEER

Ryan Benoit is a project engineer with a focus on water and wastewater resources infrastructure. He completed his Bachelor of Science in civil engineering at Merrimack College and his Master of Science in civil engineering focused on environmental engineering at Norwich University. His experience includes design, data analysis, report preparation, and construction observation, administration, and management.

PROFESSIONAL EXPERIENCE

WASTEWATER PUMP STATIONS REHABILITATION PROJECT—STRATFORD, CT

Provided field engineering, construction observation services, construction administration, and construction management for the Town of Stratford, Connecticut. Coordinated with other on-site observers, contractors, testing laboratory services, Town personnel, project managers, and design staff. Organized progress meetings, safety PPE, submittals, RFIs, AIS tracking, daily field reports, and project photos. Work included on site observation and construction administration services for the \$24.6M Town of Stratford Wastewater Pump Stations Rehabilitation Project. The work consisted of the demolition and rehabilitation of process piping, structural, electrical, HVAC, plumbing, and architectural components for five major pump stations across the town.

AQUARION WATER STORAGE TANK REPLACEMENT PROJECTS—SHELTON/TRUMBULL, CT

Provided water storage tank design and project management services for Aquarion Water Company of Connecticut. Coordinated with tank vendors, other manufacturer representative, and other Tighe & Bond design staff. The project consists of replacing Aquarion Water Company's existing Nichols Water Storage Tank in Shelton, CT and Pine Street Water Storage Tank in Trumbull, CT. The project includes installing new elevated storage tanks, clearing and grubbing for construction laydown areas, regrading, and repaving driveways, new gravel access drive and maintenance areas to the tanks, bio-retention swale and landscaping, new water main, and associated HVAC and electrical work.

REGIONAL WATER AUTHORITY DERBY WELLFIELD CHEMICAL IMPROVEMENTS PROJECT—DERBY, CT

Provided design and project management services for South Central Connecticut Regional Water Authority. Coordinated with various manufacturer representatives and other Tighe & Bond design staff. The Derby Wellfield Chemical Improvements project consists of replacement of the existing fluoride, phosphate, sodium hydroxide, and sodium hypochlorite chemical feed systems at the Derby Wellfield located in Derby, CT, as well as roof replacement and other miscellaneous architectural and electrical upgrades.

SEWER SEPARATION PROJECTS—CHICOPEE, MA

Provided field engineering and construction observation services for the City of Chicopee, Massachusetts. Directed contractor and coordinated with residents, City engineers, and other City employees. Work included on site observation for the \$16.3M North Willimansett Sewer Separation Project, the

EXPERIENCE

8 Years

SPECIALTIES

Construction Observation
Construction Administration
Construction Management
Civil/Site
Wastewater
Water Resources

EDUCATION

Bachelor of Science
Civil Engineering
Merrimack College

Master of Science
Civil Engineering
Norwich University

LICENSES & REGISTRATIONS

Professional Engineer
MA #55378

Professional Engineer CT
#PEN.0034862

10-Hour OSHA Construction
Safety Training

PROFESSIONAL AFFILIATIONS

American Water Works Association
American Society of Civil Engineers
American Institute of Steel
Construction

\$7.0 million West Aldenville Sewer and Drain Improvement Project, the \$12.9M Hampden Street & Cochran Street Areas Sewer Separation Project, and the \$4.5M Bay State Rd & Clarendon Ave Areas Sewer Separation Project.

NORTH WILLIMANSETT SEWER SEPARATION—CHICOPEE, MA

Provided construction observation, construction administration, and construction observation oversight services for the North Willimansett Sewer Separation Project for the City of Chicopee, Massachusetts. Managed project closeout procedures and construction oversight at the end of the project. The project consisted of six miles of new sewer and storm drain mains. This project also included road reclamation and reconstruction and installation of new water mains.

PHASE 5 SEWER SEPARATION—CHICOPEE, MA

Provided design development for the Center/Front/Grape Sewer Separation in Chicopee, MA. Assisted in developing preliminary plans and profiles for the project area. Provided construction observation, construction administration, and construction observation oversight services during the construction phase of the project.

AQUARION 2018 WATER AUDITS

Performed data analysis and created Water Audits for Aquarion's 70 water systems throughout Connecticut.

BAY STATE ROAD AND CLARENDON AVENUE AREAS SEWER SEPARATION—CHICOPEE, MA

Provided design services and construction services for this project for the City of Chicopee, Massachusetts. Provided sewer and storm drainage design, cost estimating, utility investigation, construction oversight, construction administration, and coordination between the contractor and the client.

STRATFORD I/I STUDY AND SEWER MODELING—STRATFORD, CT

Performed data collection and data analysis of various I/I study components such as smoke testing and manhole inspections in various areas located in the City of Stratford, Connecticut. Performed data analysis, design recommendations, and report preparation using collected data in conjunction with sewer modeling software.

SEYMOUR WELLFIELD REPLACEMENT WELL NO. 4B—SEYMOUR, CT

Provided construction administration services for the Seymour Wellfield Replacement Well No. 4B Project in Seymour, CT. The project included the construction of a new 120-foot deep production well with new process piping and the abandonment and reuse of components from the existing well house. Construction administration services provided include submittal reviews, RFI reviews, PCO reviews, and complying DWSRF funding requirements.

MIDDLETOWN PUMP STATION—MIDDLETOWN, CT

Provided construction administration services for the Middletown Pump Station Project in Middletown, CT. The project included the construction of a new pump station to deactivate the sewage treatment plant. Construction administration services provided include submittal reviews, RFI reviews, PCO reviews, attending project meetings, drafting the operations & maintenance manual, and drafting the fiscal sustainability plan.

CULVERT DESIGN FOR THE HUDSON RIVER ESTUARY PROGRAM RESTORATION OF WATERSHED CONNECTIVITY—ESOPUS, NY

Designed 6 conceptual design culverts and 2 shovel-ready design culverts for the Town of Esopus, NY. Design included site/civil related work, coordinating with manufacturer vendors, and preparing an opinion of probable cost for each of the culverts.



JONATHAN BOSSI, PE

PROJECT ENGINEER

Jonathan Bossi serves as a Project Engineer on a variety of site/civil and transportation projects for both public and private clients. His broad experience includes roadway and pedestrian facility design, stormwater management and utility design, hydraulic and hydrologic modeling, construction observation and administration, and permitting. Jonathan has served as the technical lead on successful site/civil and transportation projects in Connecticut, assisting clients through design, permitting, and construction.

EXPERIENCE

7 Years

SPECIALTIES

Roadway Design and Rehabilitation

Site/Civil Design

Stormwater Management

Utility Planning and Design

Construction Services

EDUCATION

Bachelor of Science

Environmental Engineering

University of Connecticut

LICENSES & CERTIFICATIONS

Professional Engineer
CT #33931

OSHA 10-Hour Construction Safety
and Health

OSHA 40-Hour HAZWOPER

PROFESSIONAL AFFILIATIONS

National Society of Professional
Engineers

American Society of Civil Engineers

Connecticut Society of Civil Engineers

SITE/CIVIL

10 NORDEN PLACE DEVELOPMENT—NORWALK, CT

Project Engineer for the site modifications associated with the redevelopment of 10 Norden Place into a warehouse facility. The project included the design of new site parking and driveways to accommodate truck traffic to new loading docks. Responsibilities also included the relocation of utilities and a new stormwater management system.

60 DANBURY ROAD PARKING GARAGE EXPANSION AND SURGERY CENTER RENOVATION—WILTON, CT

Project Engineer for the expansion of a parking garage, renovation of an existing building to medical office, and various site and landscaping improvements at 60 Danbury Road in Wilton, CT. Provided site/civil engineering services during local approval and construction phases. Responsibilities included site layout, stormwater management, utility, soil erosion, and sedimentation control design.

EASTERN CONNECTICUT FIRE TRAINING SCHOOL—WILLIMANTIC, CT

Performed site/civil design services for the Design/Build of a new State of Connecticut fire training school campus located at 1 Fire School Road in Willimantic, CT. Campus included a new Administration Building, Maintenance Building, fire training props, burn building, and burn tower. Site design included site/civil and site utility design of the grading, drainage, site utilities, stormwater management, landscaping, parking, and driveway design. Incorporated low-impact development techniques in the stormwater management. Obtained CTDEEP Flood management Certification permit and General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

THE MARITIME AQUARIUM AT NORWALK—NORWALK, CT

Designed stormwater management system, utilities, and soil erosion and sedimentation control required for the construction of a new 4D Theater and Seal Tank exhibit at the Maritime Aquarium at Norwalk, CT. Served in a construction administration role throughout the project.

YALE NEW HAVEN HEALTH REGIONAL OPERATIONS CENTER WEST HAVEN, CT

Provided civil engineering design services for proposed drainage, utility, and sediment erosion control design plans for the development of a Regional Operations Center in West Haven, CT. Prepared state and local permitting documents, including the CT General Permit for the Discharge of Stormwater

from Construction Activities, and assisted with construction administration services.

YALE UNIVERSITY ATHLETIC MAINTENANCE BUILDING—WEST HAVEN, CT

Performed site/civil services for a new 9,800 square foot Athletic Maintenance Building on a 4.7-acre parcel. Services included full site plans, drainage, stormwater management, grading, utilities, soil erosion and sedimentation control, landscaping, and lighting. Worked with Yale University and the project land use attorney to obtain City of West Haven Inland Wetlands Commission and Planning and Zoning Commission Approvals.

YALE WEST CAMPUS LANDSCAPE IMPROVEMENTS—WEST HAVEN, CT

Served as Staff Engineer for a landscaping improvement project in a five-acre portion of Yale West Campus in West Haven, CT. Designed the stormwater management system to meet town requirements and relocate utilities to accommodate the improvements on the campus. Prepared the CT General Permit for the Discharge of Stormwater from Construction Activities and served in a construction administration and observation roll throughout the duration of construction.

AMERICOLD – APOLLO NORTH—PLAINVILLE CT

Served as project engineer supporting the site/civil team for a proposed cold storage facility located on a 24 acres site in Plainville, CT. The proposed development includes a 252,000 SF cold storage building, 125 employee parking spaces, 140 trailer spaces, and 28 tractor spaces. Prepared detailed site layout, grading, drainage and stormwater management, site utilities, soil erosion and sedimentation control plans.

**THE GUNNERY THOMAS S. PERAKOS ARTS AND COMMUNITY CENTER
WASHINGTON, CT**

Provided site/civil design for a new 31,000 SF Community and Arts Center building on The Gunnery School campus in Washington, CT. Design included site/civil and site/utility tasks including drainage, stormwater management, site utilities, soil erosion, and sedimentation control. Prepared drainage report for Town approvals and provided Town Planning and Zoning site plan approval support. Provided documentation for LEED rainwater management including low impact development techniques in the stormwater design and stormwater pollution prevention credits.

NOROTON HEIGHTS SHOPPING CENTER—DARIEN, CT

Performed civil design services for the construction of a mixed-use development on a five-acre parcel in Darien, CT. Prepared site development plans including stormwater management, grading, utilities, and soil erosion control from the local approval phase through construction documents.

DEERFIELD ACADEMY – HEALTH AND WELLNESS CENTER—DEERFIELD, MA

Performed site/civil design and permitting services in support of a new 23,000 SF Health Center located at Deerfield Academy. Facility includes 16 bed infirmary, classroom space, meeting rooms, counseling offices, student mailboxes, student laundry and shipping and receiving services. Design included site layout, material, grading, drainage, stormwater management, site utilities, soil erosion and sedimentation control, and site landscaping. Obtained Town Conservation Commission approval and provided construction administration services.



EXPERIENCE

25 Years

SPECIALTIES

Wetland Delineation,
Restoration and Permitting

NEPA Compliance

Water Quality

LICENSES/REGISTRATIONS

Professional Wetlands Scientist
PWS #2147 SWS

Registered Professional Soil Scientist
SSSSNE

40 HOUR HAZWOPER

Municipal Inland Wetland Agency
Training – Connecticut Department of
Energy/Environmental Protection

EDUCATION

Doctor of Philosophy
Biogeochemistry
Utrecht University

Master of Science
Soil Scientist
Cornell University

Bachelor of Science
Botany
Connecticut College

PROFESSIONAL AFFILIATIONS

Connecticut Federation of Lakes
Board of Directors

Last Green Valley, Board of Directors

Connecticut Association of Wetlands
Scientist

Association of Massachusetts
Wetlands Scientists

RICHARD CANAVAN, PhD, PWS

PRINCIPAL ENVIRONMENTAL SCIENTIST

Richard Canavan is a Principal Environmental Scientist with over 25 years of experience in environmental research, teaching and consulting. His research projects have examined nutrient and pollutant chemistry in lakes, agricultural soil and coastal sediment. As a consultant, he has directed environmental permitting for a range of clients including private developers, municipalities, public utilities and state agencies. This work has included wetland delineation and field assessment, design review, and coordination with regulatory staff, local commissions and stakeholders on permit applications. He has provided environmental planning services for the development of water quality monitoring programs, data analysis and watershed planning.

WETLAND DELINEATION, RESTORATION, AND PERMITTING

PUMP STATION UPGRADES—STRATFORD, CT

Directed the environmental documentation and permitting for the rehabilitation of six wastewater pump stations. Work included inland and coastal wetland delineation, floodplain assessment, design review for impact avoidance and minimization, local wetlands and floodplain permit application preparation.

BROWNFIELD REMEDIATION—PRESTON, CT

Permitting in support of a DECD brownfield remediation. Preparation of inland wetlands and coastal wetlands permits, flood management certification and stormwater construction permit. Coordination with NDDB in the field for mapping and avoidance of critical habitat area. Project mitigation included the construction of tidal wetlands at the Thames River.

1779-LINE ELECTRIC TRANSMISSION LINE REBUILD EAST HARTFORD & SOUTH WINDSOR, CT

Wetland delineation, wetlands functions and values assessment, preparation of 401 WQC and Dam Safety applications to DEEP and PCN application to USACE. Prepared an Environmental Assessment under NEPA associated with a Section 408 USACE approval. Supported the registration under the Construction Stormwater GP and conducted inspections and stormwater monitoring.

HORIZONTAL DIRECTIONAL DRILL SEWER MAIN—WESTPORT, CT

Prepared Coastal Site Plan, Tidal Wetlands, and Structures, Dredging and Fill applications for the installation of a sewer line under the Saugatuck River. Prepared a Categorical Exclusion under NEPA for work in non-access line of I-95, directed monitoring for NDDB species.

ASPETUCK RESERVOIR DAM REPAIRS—EASTON, CT

Prepared a 401 Water Quality Certification application and PCN application for dam repairs and the construction of fisheries enhancements for eel passage.

YALE NEW HAVEN HEALTH REGIONAL OPERATIONS CENTER—WEST HAVEN, CT

Directed a wetland delineation and assessments of wetlands functions and values, vernal pools, and wildlife habitat assessment. Work included meeting and coordination with USACE to resolve wetland mitigation requirements

from previous approvals at the site, site alternatives analysis, local wetlands application, and pre-construction turtle protection plans.

CORBIN BLOCK REDEVELOPMENT—DARIEN, CT

Led environmental services for local inland wetlands, Water Diversion Permit, 401 WQC and PCN approvals and supported a Water Diversion Permit application for the redevelopment of several parcels in downtown Darien including the extension of a culvert in a CTDOT drainage easement.

PATCH POND RESERVOIR DAM REPAIRS—WORCESTER, MA

Prepared permit applications under City, State, and Federal wetland protection regulations for dam repairs. Monitored work during construction which included temporary lake drawdown and construction of a wetland restoration area.

WETLAND DELINEATION & MIGRATION PLANS—WOODSTOCK, CT

Prepared a successful permit application to USACE and CTDEEP, including state and federal wetland delineation, functions and values assessment, and wetland mitigation plans. Directed mitigation work in the field, conducted post-construction wetland mitigation monitoring and reporting.

ON-CALL WETLANDS REVIEW SERVICES—WEBSTER, MA

On-call wetlands reviewing agent for Wetland Protection Act applications including site meetings, written comments and supporting the Conservation Commission at public hearings.

WATER AND WASTEWATER UTILITY PERMITTING—MASSACHUSETTS

Wetland delineation and permitting for water and wastewater utility projects in Charlton, Dudley, Grafton, Holden, Ipswich, Littleton, Southbridge, and Webster MA. Permitting under Wetlands Protection Act, Watershed Protection Act, MEPA, 401, Chapter 91 and USACE.

1470-LINE ELECTRIC TRANSMISSION LINE REBUILD

REDDING, WESTON & WILTON, CT

Wetland delineation, mapping, and permitting for a 5 mile rebuild of an electric transmission line. Registration under the Construction Stormwater GP including the preparation of the Stormwater Pollution Control Plan, construction inspections, and stormwater monitoring.

ROCKWOOD RESERVOIR DAM REPAIRS—GREENWICH, CT

Conducted post-construction wetland restoration monitoring and reporting for compliance with USACE permits. Developed strategies for invasive plant species control.

CONSERVATION COMMISSION—WEBSTER, MA*

On-call wetlands reviewing agent for Wetland Protection Act applications including site meetings, written comments and supporting the Conservation Commission at public hearings.

US EPA SUPERFUND REMEDIATION ACTION—WILLINGTON, CT*

Conducted a wetland delineation, designed a wetland restoration to meet regional USACE guidance, prepared bid specifications, directed mitigation construction on site.

XTRA MART—GUILFORD, CT*

Directed a wetland restoration planting and conducted post-construction vegetation monitoring for Xtra-mart in Guilford. Design included hydrology and vegetation elements to minimize the colonization of the non-native invasive plant *Phragmites australis*.

*Work with previous firm



EXPERIENCE

34 Years

SPECIALTIES

Structural Design

Water Treatment Facilities

Capital Improvements

Bridges & Culverts

Dams

EDUCATION

Bachelor of Science

Civil Engineering Technology

Wentworth Institute of Technology

LICENSES & REGISTRATIONS

Professional Engineer

MA #41817

CT #25302

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

JOHN FRAWLEY, PE

SENIOR STRUCTURAL ENGINEER

John Frawley is a design engineer with experience in design of a variety of building types and structures, conducting condition assessments for existing building and structures, and providing construction oversight for a wide range of building and infrastructure projects. John has analyzed and designed structures constructed of various building materials including reinforced concrete, reinforced masonry, structural steel, and wood. Over his career, John has been the structural engineer for projects that include the design or retrofit of water and waste-water structures including, building foundations, building superstructures, water retaining structures, equipment platforms and pads, retaining walls, dams, and spillways.

WASTEWATER

SLUDGE DRYER FACILITY—DETROIT, MI

Provided structural design for the design-build team for a \$140M sludge dryer facility for the City of Detroit. The sludge dryer facility, with a design capacity of 420 dry tons per day, is the largest facility of its kind in North America. The project included a 270-ft x 175-ft structural steel building with architectural precast concrete walls that enclosed the process equipment, chemical scrubbers for odor control, offices, chemical storage room, and maintenance and storage areas. Tighe & Bond won the American Council of Engineering Companies (ACEC) Gold Award for Engineering Excellence in 2017 for contributions to this project.

QUINCY SLUDGE PELLETIZATION FACILITY—QUINCY, MA

Oversaw construction of the \$77M sludge pelletization facility at the Fore River Staging Area in Quincy, MA for the Massachusetts Water Resources Authority. Inspected pile driving, formwork, reinforcing steel placement, concrete placement, HVAC work, plumbing, and miscellaneous metals installation. During plant startup, monitored the operation of various components to ensure compliance with contract performance requirements.

BRONX SLUDGE PELLETIZATION FACILITY—BRONX, NY

Oversaw the construction of the \$110M sludge pelletization facility at Hunts Point in the Bronx, NY. Inspected pile driving, concrete work, HVAC work, plumbing, and miscellaneous metals installation. Used engineering abilities to make changes as they arose in the field in order to keep project on fast-track schedule.

CHICOPEE WATER POLLUTION CONTROL FACILITY—CHICOPEE, MA

Provided structural design for a \$3M water pollution control facility project in Chicopee, MA. The project included the design of a reinforced concrete chlorine contact chamber, by-pass pump station, and the design of a reinforced masonry de-chlorination building.

JONES FERRY CSO TREATMENT FACILITY

Provided structural design for a \$15M combined sewer overflow water treatment facility project in Chicopee, MA. The treatment building included the design of a reinforced concrete screen channels for the removal of grit, an influent wet well chamber and a chlorine contact chamber. The building exterior was constructed of reinforced masonry walls. The building roof featured several different types of construction including precast concrete

columns, beams and double tee's with a membrane roof system over the chlorine contact chamber area, wood trusses and an asphalt shingle roof system above the screen room and garage area and bar joists, metal decking and a membrane roof system above the office area of the building.

WATER TREATMENT FACILITIES

METROPOLITAN DISTRICT'S RESERVOIR NO. 6 WATER TREATMENT FACILITY—BLOOMFIELD, CT

Provided structural design for concrete repairs to the flocculation basin tank deck at the Metropolitan District's Reservoir 6 Water Treatment Facility. The \$856,000.00 project included PCB abatement along an expansion joint. The abatement includes demolition, removal, and disposal of contaminated concrete surfaces on both sides of the expansion joint, spalled concrete surface repairs, concrete crack repairs, and the reconstruction of demolished concrete surfaces along both sides of the expansion joint. The project also included the demolition and reconstruction of a reinforced concrete stair up to the flash mixers, and a new reinforced concrete ramp between the driveway and the flocculation tank deck. A non-slip polyurea coating system will be applied to the concrete flocculation tank deck, stairs, and ramp upon completion of the concrete repairs.

METROPOLITAN DISTRICT'S RESERVOIR NO. 6 WATER TREATMENT FACILITY—BLOOMFIELD, CT

Provided structural design for a new building at the District's Reservoir No. 6 Water Treatment Facility to house the blowers that are used to back wash the filters. The project included a reinforced concrete frost wall foundation, a reinforced concrete slab-on-grade floor, reinforced masonry cavity walls which consisted of concrete masonry unit interior wythe and a brick exterior façade, and a precast concrete roof.

LAKE WHITNEY WATER TREATMENT FACILITY—HAMDEN, CT

Designed portions of the \$53M, 140,000 SF water treatment facility located in Hamden, CT. The majority of the building was located below grade in order to blend the facility into a residential setting. The project included cast-in-place concrete walls and floor systems, a precast concrete roof system and six rectangular underground water storage tanks.

METROPOLITAN DISTRICT'S RESERVOIR NO. 1 BUILDING RENOVATIONS—WEST HARTFORD, CT

Provided structural design for the renovations to the chemical building at the Metropolitan District's Reservoir No. 1 in West Hartford, CT. Included structural steel support framing for existing elevated concrete floor slabs, masonry wall repairs and demolition, and the addition of an 11' x 11' double leaf access hatch to the existing roof.

DEAN'S MILL WATER TREATMENT PLANT—STONINGTON, CT

Provided structural design for the chemical building at this water treatment plant in Stonington, CT. The structure consisted of a reinforced concrete, light gage metal-framed second story and a wood truss hip roof.

WATER RESOURCES

TRANSMISSION MAIN—SOUTHAMPTON & HOLYOKE, MA

Designed the \$5.25M transmission main between the Tighe-Carmody Reservoir in Southampton, MA and McLean Reservoir in Holyoke, MA. Responsibilities included the vertical and horizontal alignment of 33,500 LF of 42-inch diameter prestressed concrete cylinder pipe and thrust restraint design.



EXPERIENCE

21 Years

SPECIALTIES

Construction Management and
Project Design

Hazardous Building Materials
Assessments, Abatement Design, and
Construction Administration

Asbestos, Lead, PCB, Universal
Waste, and Mold Testing and Design

Demolition Design

Asbestos Air Monitoring and
Project Monitoring

Indoor Air Quality (IAQ) Assessments

PCB Assessment, Cleanup Design,
and PCB Remediation Oversight

EDUCATION

Bachelor of Science
Environmental Studies
Randolph-Macon College

40-Hour OSHA HAZWOPER & 10-
hour OSHA Construction Certifications

NIOSH 582 Equivalent Certified
Asbestos Analyst

24-Hour Mold Inspector Training
XRF-RMD (Lead) Training

LICENSES & REGISTRATIONS

Asbestos Project Designer - CT #315

Asbestos Inspector - CT #916

Asbestos Monitor - CT #781

Lead Risk Assessor – CT #2264

Registered Laboratory Director

PHILIP HUTTER

SENIOR COMPLIANCE SPECIALIST

Philip Hutter is a Project Manager / Environmental Compliance Specialist who has 21 years of hazardous building materials assessment and management/design experience for clients in a variety of industries. This includes government, education, healthcare, manufacturing, industrial, private facilities, and construction. He has asbestos inspector and asbestos project monitoring certifications in Connecticut. He is also a licensed asbestos project designer and lead risk assessor in Connecticut. He has experience in all facets of hazardous building material compliance including: asbestos inspection, asbestos abatement design, asbestos abatement monitoring, lead inspection, lead abatement monitoring, mold assessment, mold remediation design, mold remediation oversight, Indoor Air Quality (IAQ) assessment, PCB assessment, PCB remediation design, and PCB abatement oversight. He has developed comprehensive assessment reports, abatement specifications and work plans, and extensive PCB Cleanup Plans. He is also director of Tighe & Bond's State of Connecticut Department of Public Health Approved Environmental Laboratory.

CONSTRUCTION MANAGEMENT / PROJECT DESIGN

YALE-NEW HAVEN HEALTH (ON-CALL)

Manage asbestos, lead, and PCB-related issues for Yale-New Haven Health (YNHH). Tighe & Bond assesses and develops designs for all planned renovations and demolitions throughout the New Haven campuses and other facilities throughout the State of Connecticut. The New Haven campuses encompass six million square feet. Develop all-inclusive asbestos and hazardous building materials abatement specifications used to solicit competitive bids for completion of the required work. Provide abatement monitoring, final visual inspections, and onsite final air testing for projects.

UNIVERSITY OF CONNECTICUT (ON-CALL)

Performed comprehensive hazardous building materials assessments and abatement designs for multiple properties including several multi-million dollar renovation/demolition projects. Served as asbestos project designer, performing assessment, specifications, and contract documentation preparation for asbestos, lead, PCBs, and hazardous materials to facilitate extensive renovations. Provided project management services for asbestos testing and abatement projects at multiple campuses throughout the state associated with LED lighting upgrade projects.

Developed complex PCB Cleanup Plans and associated Plan Modifications for Environmental Protection Agency (EPA) review and approval for multi-phase projects. Extensive environmental-related correspondence with State and Federal regulators. Performed design and construction administration project management services during abatement of asbestos and PCB-contaminated building materials at multiple sites. Provided Opinion of Probable Costs (OPC) for abatement activities associated with the renovation projects.

CENTRAL CONNECTICUT STATE UNIVERSITY

Provided project management services related to comprehensive hazardous

building materials assessments for renovation and expansion of the Burritt Library. Served as asbestos project designer, performed assessments, specifications, and contract documentation preparation for asbestos, lead, PCBs, and hazardous materials to facilitate renovations.

STAMFORD CT PUBLIC SCHOOLS

Completed comprehensive hazardous building materials assessments for multiple school properties in Stamford, CT. Served as asbestos project designer, performed assessment, specifications, and contract documentation preparation for asbestos, lead, PCBs, and hazardous materials to facilitate renovations/demolitions.

TOWN OF SOUTHTON, CT

Performed construction administration project management services during abatement of asbestos, lead, and PCB-contaminated building materials at multiple sites that include pump stations and the Water Pollution Control Facility.

TOWN OF VERNON, CT

Provided hazardous building materials assessment, design, and construction administration project management services on multiple sites including the Water Pollution Control Facility and Citizen's Block facility. Developed cost estimates for abatement of hazardous building materials in conjunction with renovation activities. Prepared abatement design plans and technical specifications for bid documents.

CITY OF MIDDLETOWN, CT

Performed comprehensive hazardous building materials assessment, abatement design, and project management services for multiple sites. Served as project manager for demolition and renovation projects involving asbestos, lead, PCBs, and hazardous materials abatement.

ASBESTOS, LEAD, PCB, IAQ, AND MOLD ASSESSMENTS

PRE-DEMOLITION/RENOVATION PROJECTS

Performed numerous assessments at various sites throughout Connecticut, Virginia, Maryland, West Virginia, and the District of Columbia. Assessments included identification and quantification of asbestos, PCBs, lead, mold, and other hazardous wastes including universal waste. Created comprehensive assessment reports, specifications and cost estimates to facilitate abatement prior to demolition or renovation activities.

YALE-NEW HAVEN HEALTH

Assessed hazardous building materials, including lead, asbestos, and PCBs. Performed complete hazardous building materials assessment for asbestos, lead, PCBs and universal waste for multiple buildings on several campuses throughout Connecticut. Provided asbestos monitoring services for the buildings that have been abated and demolished. Performed IAQ assessments in several healthcare facilities.

UNIVERSITY OF CONNECTICUT

Provided hazardous building materials assessments including asbestos, lead and PCB testing and abatement oversight on several UConn Campuses. Developed cost estimates for abatement of hazardous building materials in conjunction with renovation/demolition activities. Prepared abatement design plans and technical specifications for bid documents.

NEW CANAAN CT PUBLIC SCHOOLS

Performed complete hazardous building materials assessment for asbestos, lead, PCBs and universal waste for multiple schools in New Canaan, CT. Provided asbestos/PCB monitoring services during renovation activities.



HARLEY LANGFORD, LEP

PROJECT MANAGER

Harley Langford is a project manager and Licensed Environmental Professional who has experience in environmental site assessment, remediation, Brownfields redevelopment, and hazardous materials abatement and demolition design. He is well versed in contractor management, health and safety compliance oversight, regulated waste management, environmental sampling, feasibility testing, and remediation system operation and maintenance.

SITE ASSESSMENT & REMEDIATION

FORMER CONTRACT PLATING FACILITY

Currently providing LEP services for the former Contract Plating Facility in Stratford. Responsibilities have included planning all aspects of abating and demolishing the site structures including properly managing many forms of hazardous plating wastes generated during the work. Currently conducting Phase II/III Environmental Site Assessment (ESA) activities and developing a Remedial Action Plan. Cleanup plans are being developed within the framework of multiple regulatory programs including the Property Transfer Program, CT Brownfields, RSRs, RCRA, and TSCA. The final site remedy will incorporate future site development including construction of a new roadway and likely a mix of light industrial and commercial land uses.

VON ROLL USA—NEW HAVEN CT

Conducted Phase III ESA activities and developed a Remedial Action Plan for an insulating film manufacturing facility located in a mixed commercial/residential area of New Haven. The Phase III was conducted to delineate soil, groundwater and soil vapor impacts identified at eight of the site's 23 Areas of Concern. The RAP was developed to best suit the client's potential redevelopment plans and to satisfy the cleanup requirements of the CTDEEP Property Transfer Program and RCRA Corrective Action Plan.

CAPITOL REGION EDUCATION COUNCIL SITE DEVELOPMENT—ENFIELD, CT

Conducted Phase II and Phase III ESAs and soil management planning at a former agricultural site in Enfield, CT in preparation for site development. Prepared and oversaw the execution of the site-specific soil management plan where an innovative approach was used to meet client needs.

BROWNFIELDS SITE ASSESSMENT AND REDEVELOPMENT—NEW HAVEN, CT

Developed and implemented environmental investigation and remedial designs for the redevelopment of a former industrial property in New Haven. Oversaw and managed extensive soil excavation and management activities to remediate the site and make it more attractive to potential developers. Also, prepared building abatement and demolition designs and cost estimates used for competitive bid procurement needs and to reduce cost.

INDUSTRIAL SITE ASSESSMENT AND REMEDIATION

Conducted site assessment and remediation at various industrial establishments. Responsibilities included environmental sampling, sub-slab vapor and indoor air assessment, remediation design and implementation.

EXPERIENCE

18 Years

SPECIALTIES

Site Assessment & Remediation

Hazardous Material Abatement

Demolition Design and Specification
Writing

Contractor Management

Health & Safety Compliance

EDUCATION

Bachelor of Science

Environmental Science

University of Massachusetts

Associates of Science

Environmental Science

Holyoke Community College, MA

OSHA 40 hour HAZWOPER

American Petroleum Institute
(API) Worksafe

Loss Prevention Systems

American Red Cross First Aid
and CPR

LICENSES & REGISTRATIONS

Licensed Environmental Professional
LEP #577

PROFESSIONAL AFFILIATIONS

Environmental Professionals of
Connecticut

Remedial approaches included sub-slab depressurization, bio remediation using nutrient enhancement, excavation and in-situ chemical injections.

PILOT TESTING AND REMEDIAL ACTION PLANNING

Developed site specific pilot testing programs and Remedial Action Plans for site cleanup using soil excavation, groundwater pump and treat, soil vapor extraction, air sparge, sub-slab depressurization, in-situ chemical injections, and institutional controls.

HAZARDOUS BUILDING MATERIALS ABATEMENT AND DEMOLITION DESIGN

FORMER CONTRACT PLATING FACILITY—STRATFORD, CT

Conducted Hazardous Building Materials Investigation (HBMI) and Demolition Design services for the abatement and demolition of a 30,000-SF dilapidated manufacturing building and several smaller plating buildings at the former Contract Plating site in Stratford, CT. Prepared a Performance-Based PCB Cleanup Plan in accordance with TSCA regulations for submittal to CTDEEP and EPA. Prepared a facility decontamination plan to characterize and dispose of residual waste chemicals. Also, prepared bidding documents and cost estimates that were used by the Owner during competitive bid procurement and contractor evaluation. Oversaw all aspects of hazardous waste cleanup, HBM abatement and building demolition which was completed in 2015/2016.

FORMER RECORD JOURNAL—11 CROWN STREET MERIDEN, CT

Provided brownfields assessment and engineering services to the City of Meriden as part of the demolition and remediation of the former Record Journal newspaper printing facility. The hazardous building materials assessment included a thorough inspection of the 33,000 SF building to identify, quantify, and document hazardous building materials such as asbestos, lead-based paint, polychlorinated biphenyls (PCB) containing building materials. Tighe & Bond developed detailed abatement specifications and cost estimates that were used by the City to competitively bid the abatement and demolition project. Due to the unique construction and site layout Tighe & Bond also provided site civil and structural engineering services to ready the site for re-development. Tighe & Bond provided on-site monitoring and inspection during the abatement and demolition work. We observed hazardous materials management, and demolition activities to make sure that the work was conducted in accordance with the contract documents

GUILFORD HIGH SCHOOL SITE ASSESSMENT AND DEMOLITION DESIGN

Conducted Phase I and Phase II Environmental Site Assessments to define environmental conditions and plan for the construction for a new high school in Guilford, CT. Completed pre-demolition services including hazardous materials assessment, hazardous materials abatement design, and demolition design. Prepared a comprehensive investigation of PCB containing building materials and Self-Implementing PCB Cleanup Plan (SIP) in accordance with State and Federal requirements. Served as project manager during HBM abatement and building demolition which was completed in 2015.

100 CONNECTICUT AVENUE—NORWALK CT

Completed environmental site assessment, pre-demolition hazardous building materials inspection, and abatement and demolition design. Prepared and managed implementation of a Performance-Based PCB Cleanup Plan to manage PCB impacted building materials and soils regulated by the Toxic Substances Control Act (TSCA). Observed and managed abatement and demolition activities conducted to support site redevelopment and construction of a new Lowe's Home Improvement Center.



JENS MEINIG, CPD

PROJECT MEP PROFESSIONAL

Jens Meinig is a mechanical engineer specializing in design for heating, ventilation, air conditioning and plumbing systems. He has experience in product and process design, start-up and troubleshooting of heat treatment equipment, glass manufacturing, and utility design for various manufacturing and food processing companies. He also has construction administration experience and is adept at ensuring that designs are constructed in accordance with drawings and specifications.

WATER / WASTEWATER

EXPERIENCE

18 Years

SPECIALTIES

Heating, Ventilation, and
Air Conditioning

Plumbing

Process Design and Startup

Industrial Services

Industrial Utility Design

EDUCATION

Master of Science
Mechanical Engineering
TU Bergakademie Freiberg

LICENSES & REGISTRATIONS

Certified Plumbing Designer
#902615

PROFESSIONAL AFFILIATIONS

American Society of Heating,
Refrigeration and Air Conditioning
Engineers (ASHRAE), member

American Society of Plumbing
Engineers (ASPE), member

WASTEWATER PUMP STATION UPGRADE—STRATFORD, CT

Provided spot design for plumbing edits, HVAC and plumbing construction support to achieve flood resiliency of five different pump stations.

WASTEWATER PUMP STATION UPGRADE—SOUTHINGTON, CT

Designed HVAC systems to achieve flood resiliency of three different pump stations. The design incorporates electric heating coils, energy recovery measures and local electric heaters while conforming to TR16 ventilation requirements.

GENERATOR REPLACEMENT—PALMER, MA

Designed HVAC system to support installation of standby generator in a pump station.

MOBILE PUMP ENCLOSURE—RAYNHAM, MA

Designed ventilation system for permanent enclosure of a mobile pump. Ventilation for this had to be functional during power outages and mobile pump exhaust had to be guided to the outside while allowing easy disconnection of the mobile pump system.

WASTEWATER FACILITY—HULL, MA

Designed HVAC system upgrades including ventilation, heating, and air conditioning. The facility had flooded during a storm and the complete installation including piping, boilers, heaters, and air handling units required removal and replacement. Efficiency and ventilation improvements were also designed in the process.

WATER TREATMENT PLANT—WEBSTER, MA

Designed HVAC system in Webster, MA, including dehumidification, hydronic and heat pumps systems.

WEST END MILLS INFRASTRUCTURE

Provided HVAC design for small pump station.

ROUTE 20 SEWER EXTENSION PROJECT—WORCESTER, MA

Provided HVAC design for large wastewater pump station in Worcester, MA. Included wet well, dry well and odor control measures. Sound attenuation measures were part of the design to mitigate noise effects to the surrounding residential neighborhood.

PUMP STATION ASSESSMENTS—JAFFREY, NH

Provided HVAC inspection and life expectancy analysis for Jaffrey, NH water and wastewater pump stations.

SUEZ WATER—WEST SPRINGFIELD, MA

Prepared Energy Reduction Analysis for pump refurbishment project. Provided application support for energy rebate from utility company. Report included the analysis of energy requirements for a four (4) pump before and after their rebuilding.

PUMP STATION IMPROVEMENT—WEST SPRINGFIELD, MA

HVAC design for multiple wastewater pump station to improve station performance and prepare for the next 20 years. Design of propane vaporizer system to allow the installation of a small propane tank for stand by generator operation at a flood pump station with tight space restrictions.

PUMP STATION REPLACEMENT—GRAFTON, MA

Plumbing and HVAC design for pumps station replacement. Designed gas supply system, drainage, and domestic water supply in the station as well as heating and ventilation for the pump station process area and chlorine storage room.

WATER SYSTEM PUMP STATION UPGRADE—SOUTHWICK, MA

Designed plumbing system for pump station including tight tank incorporation, gas and water piping, and safety shower system.

PUMP STATION IMPROVEMENT—CHICOPEE, MA

HVAC design for wastewater pump station to improve station performance and prepare for the next 20 years. Design of oil fired heating system due to lack of natural gas supply.

WATER TREATMENT PLANT DESIGN—SCITUATE, MA

HVAC design for new treatment plant. Design included dehumidification system, gas fired infrared heating and heat pump systems.

ASSET MANAGEMENT REVIEW—DRACUT, MA

Review of HVAC and plumbing components at multiple pump stations to include in asset management database to improve client's maintenance and capital planning process.

ASSET MANAGEMENT REVIEW—ASHLAND, MA

Review of HVAC and plumbing components at multiple pump stations to include in asset management database to improve client's maintenance and capital planning process.

ASSET MANAGEMENT REVIEW—NORTH ADAMS, MA

Review of HVAC and plumbing components at multiple pump stations to include in asset management database to improve client's maintenance and capital planning process.

WATER TREATMENT PLANT DESIGN—LITTLETON, MA

HVAC design for new treatment plant. Design included dehumidification system, chemical room ventilation, electric heating and heat pump systems.

WATER TREATMENT PLANT DESIGN—DRACUT, MA

HVAC design for new treatment plant. Design included a dehumidification system, gas fired heating units and a heat pump system.



EXPERIENCE

Over 20 Years

SPECIALTIES

Construction Administration

Photovoltaic Panel Foundation Design

Roadway Design

Ground Improvement Techniques

Geotechnical Instrumentation

EDUCATION

Bachelor of Science

Civil Engineering

University of New Haven, CT

Bachelor of Science

Environmental Resource Management

Pennsylvania State University

LICENSES & REGISTRATIONS

Professional Engineer

CT #25790

MA #52521

NY #087424

MD #37125

NJ #GE48435

RI #11765

PA #77123

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Connecticut Society of Civil Engineers

National Council of Examiners for
Engineering and Surveying

United States Coast Guard Auxiliary

BRIAN OPP, PE

PRINCIPAL ENGINEER

Brian is a geotechnical engineer with more than 20 years of experience in civil engineering and environmental science for a wide range of heavy construction, transportation and energy, government, private-sector, and commercial projects. He has worked throughout the Mid-Atlantic and New England states, and is licensed as a Professional Engineer in Maryland, Pennsylvania, New York, New Jersey, Connecticut, Rhode Island, Massachusetts, and Vermont. Project experience includes design and construction of foundations for transmission lines, low- and medium-rise buildings, bridges, communication towers, photovoltaic panels, as well as pavement design, slope stability analyses, removal of unsuitable material, analysis and observation of reinforced earth retaining structures, installation and monitoring of geo-instrumentation, and general construction administration.

GEOTECHNICAL

Responsibilities include project management, planning subsurface investigations, evaluating soil, rock, and groundwater conditions, preparing geotechnical engineering reports that include foundation and earthwork recommendations and construction considerations, preparing technical specifications, and review of construction activities.

SHUTTLE MEADOWN WASTEWATER TREATMENT FACILITY—PLAINVILLE, CT

Responsible for Geotechnical Engineering services including subsurface exploration program and preparation of specifications for a new water tank construction. Foundations will be supported on structural fill overlaying native sands. Temporary support of excavations and dewatering are anticipated to construct the new building and wet well. Results of the subsurface exploration were summarized in a geotechnical engineering report.

FAIRHAVEN WASTEWATER TREATMENT FACILITY—FAIRHAVEN, MA

Responsible for Geotechnical Engineering services including subsurface exploration program and preparation of specifications for new structures at the existing treatment facility. Foundations will be supported on either bedrock, glacial till, or structural fill overlaying either the glacial till or bedrock. Temporary support of excavations and dewatering are anticipated to construct the new structures. Results of the subsurface exploration were summarized in a geotechnical engineering report.

SHARED SEWER INFRASTRUCTURE, OLD COLONY BEACH CLUB ASSOCIATION—OLD LYME, CT

Geotechnical Engineer for a shared gravity wastewater collection system along a three-mile-long shorefront area. Geotechnical services included subsurface investigation, a deep foundation feasibility analysis, shallow and deep foundation designs, analysis of submerged structures with respect to the proposed foundations, and construction considerations. The subsurface investigation consisted of nine test borings to a maximum depth of 29 feet below existing grade. Soil samples were obtained at each test boring and select samples were sent to a laboratory for physical testing to aid in classification. The results of the field and laboratory testing as well as recommendations were summarized in a geotechnical memorandum.*

66 GALEN STREET—WATERTOWN, MA

Responsible for Geotechnical Engineering services including review of submittals, subgrade observation, geotechnical instrumentation observation, and global stability analysis of a “green roof” for a seven-story mixed use biomedical building.

COMMERCE ROAD—BARNSTABLE, MA

Responsible for Geotechnical Engineering services including subsurface exploration program for a stream crossing replacement. Site is underlain by thick fill and organic strata, resulting in recommendations for deep pile foundations and/or ground improvements for the culvert, roadway, and retaining walls. A site-specific seismic analysis will be performed because of the thickness of encountered organics beneath the culvert. Results of the subsurface exploration and laboratory tests are summarized in a geotechnical engineering report.

NICHOLS TANK REPLACEMENT—SHELTON, CT

Responsible for Geotechnical Engineering services including subsurface exploration program and preparation of specifications for a new water tank construction. Foundations will be supported on shallow bedrock. Results of the subsurface exploration were summarized in a geotechnical engineering report.

SALEM HOSPITAL NEW ENTRANCE—SALEM, MA

Provided a Geotechnical Engineering services including subsurface exploration program, review of submittals, subgrade observation, and geotechnical instrumentation observation for new entrance to existing Salem Hospital. Results of the subsurface exploration were summarized in a short report.

CARTER ROAD CULVERT—THOMASTON, CT

Provided a Geotechnical Engineering site assessment for the culvert located near 371 Carter Road that had been damaged by a recent storm surge. Based on the observations made in the field, recommendations for emergency remediation were made that included partial lane closure and repairs to the abutments and wingwalls. Additionally, a recommendation was made for the culvert to be inspected in accordance with the Connecticut Department of Transportation Bridge Inspection Manual.

THE BLACKSTONE RIVER BIKEWAY—PROVIDENCE, RI

Geotechnical Engineer for a portion of The Blackstone River Bikeway project in Central Falls, Rhode Island. Services included preparation of project plans and specifications, subgrade reviews, and design of Support of Excavation for temporary shoring.*

STILLWATER HOUSING DEVELOPMENT—STAMFORD, CT

Geotechnical Engineer for two 5-story mixed-use commercial and residential buildings northeast of the intersection of Stillwater Avenue and Merrell Avenue. Geotechnical services included subsurface investigation, shallow foundation designs, and construction considerations. The subsurface investigation consisted of 12 test borings to a maximum depth of about 26 feet below existing grade. Site subsurface conditions consisted of fill over residual soil underlain by bedrock. Soil samples were obtained at each test boring and select samples were sent to a laboratory for physical testing to aid in classification. The results of the field and laboratory testing as well as recommendations were summarized in a geotechnical engineering report.*

*with previous firms



RYAN PALZERE, EIT

STAFF ENGINEER

Ryan Palzere is a Staff Engineer in Tighe & Bond's Water Business Line. He graduated from the University of Connecticut in May 2021 with a Bachelor of Science in Environmental Engineering. His experience includes over one year of wastewater and water resources design and engineering, as well as construction administration and observation.

WASTEWATER

PUMP STATION EVALUATION & CONCEPTUAL DESIGN—PLAINVILLE, CT

Provided design phase services for the assessment and preliminary design of a wastewater pump station in Plainville, CT. Existing pump performance was evaluated by analyzing water consumption data, determining the facility's sewer service area, performing drawdown testing, and examining flow meter data. Assisted with writing and preparing the technical memorandum as well as the Opinion of Probable Construction Costs (OPCC).

THREE PUMP STATION REHABILITATIONS—SOUTHINGTON, CT

Provided design, bidding, and construction phase services for three wastewater pump station improvements in Southington, CT. Took an inventory of each station's piping and pumping components, in addition to approximating the lengths and elevations of their respective force mains. Performed drawdown testing at each station to evaluate the current performance and capacity of each pump. Assisted with preparing the OPCC, drawings, and specifications. Supported project bid advertisement and the pre-bid conference. Managed and reviewed Submittals, RFIs, Field Orders, Pay Applications, and Change Orders. Prepared progress meeting agendas and minutes.

PUMP STATION REHABILITATIONS—SOUTHINGTON, CT

Provided construction administration and observation services for two wastewater pump station upgrades in Southington, CT. The projects involved demolition of the existing can-type dry pit/wet pit pump stations and installation of new submersible type pump stations. Electrical, structural, and site work were also part of the project. Managed and reviewed Submittals, RFIs, Field Orders, Pay Applications, and Change Orders. Prepared progress meeting agendas and minutes.

ODOR CONTROL STUDY—SOUTH WINDSOR, CT

Authored the technical memorandum for an odor control study at the South Windsor Water Pollution Control Facility (WPCF). Data that was collected by Tighe & Bond personnel as well as Odor Science & Engineering staff was presented in a technical memorandum that evaluated the WPCF's current odor control system's performance. Community odor surveys were also conducted as part of the study to determine the extent of the WPCF's odors in the surrounding areas.

WATER RESOURCES

CAPITAL IMPROVEMENTS PLAN—AQUARION WATER COMPANY

Assisted in preparing a Capital Improvements Plan (CIP) for Aquarion Water Company's Stamford Water Treatment Plant (WTP) in Stamford, CT.

EXPERIENCE

1.5 Years

SPECIALTIES

Water Resources Engineering

Wastewater Engineering

Construction Observation

Construction Administration

EDUCATION

Bachelor of Science

Environmental Engineering

University of Connecticut

LICENSES & REGISTRATIONS

Engineer-in-Training

CT #EIT.0012998

PROFESSIONAL AFFILIATIONS

American Water Works Association
(Connecticut Section)

New England Water Environment
Association

Performed a site visit that focused on assessing the WTP's site/civil and process systems, including pumps, chemical feed systems, instrumentation, DAF units, valves, piping, and supports. Categorized and ranked findings from low to top priority, presented the results in a prioritization workshop, and compiled everything into a final report.

WATER MAIN RELOCATION—AQUARION WATER COMPANY

Provided construction observation services for the installation of 846 LF of 8-inch diameter DI water main in Fairfield, CT. The nearby Fairfield WWTP Hardening Project involved raising the height of the road to mitigate flooding, and as a result, the underlying water main needed to be raised along with it. 88 LF of 6-inch diameter DI and 96.5 LF of 4-inch diameter DI service lines as well as a new hydrant assembly were also installed. The existing water main was cut and capped, and the newly installed water main was successfully tied into the system. Proper handling of PCB-contaminated soil was also performed during the project.

WATER SUPPLY PLANS—CONNECTICUT WATER COMPANY

Assisted in preparing the 2021 Water Supply Plan (WSP), which included 32 volumes and 51 public water systems. Each volume included a discussion of the respective systems' sources of supply, treatment, storage, and pumping facilities, operations, water quality, land use activities, source protection measures, supply and demand, and potential system improvements. Each volume consisted of 10 appendices that included additional data that was applicable to the system, such as interconnection agreements, safe yield analyses, and distribution system maps. This WSP provided an update to previously submitted WSPs and consolidated CWC's systems into one, restructured report.

CHEMICAL FEED SYSTEM IMPROVEMENTS

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY

Concurrently provided construction observation services for two projects at the Lake Gaillard WTP in North Branford, CT. The first project involved the replacement of the existing potassium permanganate feed system with new mix tanks, metering pumps, piping, and instrumentation. The project also included electrical and HVAC upgrades (lights, ventilation, heat, wire and conduit, devices, and outlets) as well as building modifications (containment curb, floor coatings, doors, emergency eye wash station). The second project involved the replacement of two filter aid polymer blending units and two backwash polymer blending units, replacement of two polymer aging tanks, piping, instrumentation, structural, and electrical work.

FINISHED WATER RESERVOIR IMPROVEMENTS

SOUTH CENTRAL CONNECTICUT REGIONAL WATER AUTHORITY

Provided construction observation services for a tank improvement project at both the West River and Lake Gaillard WTPs. The project involved cleaning and repainting four finished water tanks split between the two WTPs. Concrete patching and crack repair were also included in the project. All four tanks were equipped with new metal stairways with concrete pads to provide safer and easier access for WTP personnel.



PETER PAPINEAU, AIA

SENIOR ARCHITECT

Peter has experience in public, municipal, and private sector work and oversees the architectural design of new construction and renovation projects. His areas of expertise include space planning, building restoration, and building systems and component upgrades. Peter's portfolio includes a wide range of projects including office and school buildings, housing, and industrial buildings including water treatment plants and pump stations. He has worked on numerous restoration projects involving both exterior envelope and interior finish repairs and restoration involving Period detailing and construction methods necessary to maintain the historical character of the building or structure being restored.

EXPERIENCE

33 Years

SPECIALTIES

Municipal & Public Projects

Private Sector Projects

Building System Upgrades

EDUCATION

Bachelor of Arts

Architecture

Syracuse University

LICENSES & REGISTRATIONS

Registered Architect

MA #8859

PROFESSIONAL AFFILIATIONS

American Institute of Architects

International Code Council

RELEVANT EXPERIENCE

NEW PUMP STATION—WESTPORT, CT

Provided design for new 2,300 SF pump station located in the community in Westport, CT. The new building houses new pumping equipment and an emergency generator. The design was influenced by Westport's classic colonial architecture and detailed to respectfully fit the community.

WATER POLLUTION CONTROL FACILITY UPGRADE—PLAINVILLE, CT

Provided architectural support relative to the new phosphorus removal building and existing facility upgrades. Provided on site punch list review of all new building systems for compliance with the construction documents and identified installation work requiring repair or completion. Provided architectural support for construction administration phase, including review of submittals, and assisted with field questions and architectural detailing.

WATER POLLUTION CONTROL FACILITY UPGRADE—VERNON, CT

Provided architectural support for this \$70M wastewater treatment plant upgrade to address EPA-mandated nitrate and phosphorus removal in conjunction with the facilities wastewater processes. Provided design and technical specification support for building related component upgrades including exterior masonry repairs, windows, doors, and roofing replacements, as well as interior repairs and new finishes for several buildings on the water treatment campus.

WATER POLLUTION CONTROL FACILITY UPGRADE SOUTHINGTON, CT

Provided architectural support for this \$57M wastewater treatment plant upgrade project to address phosphorus removal and capital improvements to the overall water treatment campus. Provided design and technical specification support for building component upgrades relative to the roofing replacement of various structures. Provided architectural support for construction administration phase, including review of submittals, assisted with field questions, and architectural detail modifications.

WATER TREATMENT PLANT—WEBSTER, MA

Provided design for new 5,000 SF \$10M water treatment plant. The facility consolidated two existing water treatment plants into one process facility to meet the town's needs. The building, which is located along a public beach and is highly visible, warranted a simple classic design to fit the vernacular of its surroundings.

BUILDING ASSESSMENT—SOUTHWICK, MA

Provided building assessment services for five town municipal buildings in the Town of Southwick, MA. Assessed each building's physical condition comprising the building envelope, structural, mechanical, fire protection, plumbing, and electrical systems. Assessed code compliance relative to accessibility and building code deficiencies. Provided an evaluation of those systems relative to service life and expected maintenance and or replacement schedule. Identified code deficiencies where present and recommended corrective action. Prepared a building assessment spread sheet to catalog each building component, system, related equipment, and its life expectancy and cost of replacement. We identified items requiring immediate repair or code compliance modifications. We incorporated time phasing to address extended periods of maintenance or repairs for 1-5, 6-10, 11-15, and 20 or more years, for purposes of establishing a Capital Improvement Plan to aid in the acquisition and allotment of capital improvement funding.

MASONRY CONDITIONS ASSESSMENT SENIOR CENTER-WINCENDON, MA

Performed field inspection for the evaluation of the Winchendon Senior Center. The project included the evaluation of the existing historic masonry building and clock tower to determine the extent of deterioration in the exterior brick masonry façade. In conjunction with the masonry façade evaluation, we provided an evaluation of related building envelope components including doors, windows, and slate roof. Evaluated the conditions of the interior architectural finishes for damage associated with areas observed during the field inspection

OFFICE RENOVATION—WESTFIELD, MA

Provided design for an existing four-story office building renovation/ restoration project for the Westfield Gas & Electric Company. Involved the interior renovation of 3,000 SF of a first-floor business office, and exterior masonry restoration of the entire building façade. The interior renovations included accessibility upgrades to accommodate the physically challenged and facilitate access to a new customer service center.

DISTRICT COURT WINDOW RESTORATION—GREAT BARRINGTON, MA

Provided design for the removal and replacement-in-kind of existing wood double-hung window sash with new to match. The new openings were configured as new single hung sash incorporating an upper fixed sash and operable lower sash with traditional sash cord, pulley, and weight operation. The new sash was fabricated with true divided lights equipped with insulating glass and spring bronze weather stripping.

MDC CUSTOMER SERVICE RENOVATION AND EXPANSION—HARTFORD, CT

Provided design for this project that involved the construction of a new addition and total interior renovation and reconfiguration of the Metropolitan District Commission office and customer service facility at 60 Murphy Road in Hartford, CT. A new public service counter, accessible restrooms, offices, systems and office furniture, were incorporated into the new design.

BUILDING SYSTEMS AND COMPONENT UPGRADES—MASSACHUSETTS

Provided design for numerous projects that include door and window replacement or restoration, roofing system replacement (both modern and traditional roofing systems). Provide interior alterations and repairs for sprinkler and fire alarm upgrades, and accessibility upgrades associated with kitchens, bathrooms, and code required accessible routes. Experience includes traditional millwork, and other interior finishes as well as the restoration of exterior finishes such as brick and stone masonry, siding, and trim.

(*with previous firm)



JONATHAN RICHER, PE

SENIOR PROJECT MANAGER

Jonathan Richer is a Senior Project Manager with a broad range of civil engineering experience for both private and municipal clients. His design work includes roadway design, site layout, storm and sanitary sewer system design, utility design, coastal resiliency, and permitting. Jon has led projects through all phases, from planning, design and permitting through construction. His hands-on construction administration experience has provided him with a solid understanding of scheduling and cost estimating.

CIVIL/SITE

EXPERIENCE

22 Years

SPECIALTIES

Civil/Site Design

Roadway Design and Rehabilitation

Storm & Sanitary Sewer Design

Utility Design

Coastal Engineering and Resiliency

EDUCATION

Bachelor of Science

Civil Engineering

Bucknell University

LICENSES & REGISTRATIONS

Professional Engineer

CT #26570

NY #100385-1

PROFESSIONAL AFFILIATIONS

Connecticut Building Congress

American Society of Civil Engineers

Connecticut Society of Civil Engineers

NOROTON HEIGHTS SHOPPING CENTER

Provided project management and civil design services for the construction of a mixed-use, transit-oriented development project in Darien, CT. The project included site engineering and land use permitting services for more than 33,000 SF of retail space, 59 residential units, two underground parking garages, and more than 400 surface parking spaces on a five-acre parcel. Prepared site development plans including stormwater management, grading, utilities, and soil erosion control plans. Secured local permits and approvals, including approval from the Darien Planning & Zoning Commission.

METRO NORTH OLD GREENWICH RR STATION PARKING LOT

Provided project management and civil design services to the Connecticut Department of Transportation (CTDOT) for construction of a commuter parking lot at the Old Greenwich Railroad Station in Greenwich, CT. The project included expansion of the existing parking lot and reconstruction of the adjacent town lot, totaling 400 parking spaces. Prepared site development plans including layout, grading, stormwater management, site lighting, and soil erosion control plans.

20 WESTPORT ROAD

Provided project management, civil design, and permitting services for construction of a 1,250 KW generator and pit within an Aquifer Protection Zone in Wilton, CT. Prepared the Special Permit Application and secured approval of the Special Permit from Wilton Planning & Zoning within an expedited timeframe to maintain the project schedule.

2 HOWE STREET (LOT E)

Provided civil design and construction administration services for the 2 Howe Street (Lot E) mixed use project in New Haven, CT. The project included site engineering for an 845-space parking garage, 24 residential units, 13,000 SF of retail space, and 38,000 SF of office space on a 2.4-Acre parcel. Prepared site development plans including grading, utilities, and soil erosion control plans. Secured local permits and approvals, including approval from the New Haven City Plan Commission. Prepared LEED credit applications for stormwater management and site design.

SOUTH NORWALK INFRASTRUCTURE STUDY – NORWALK, CT

Provided project management and civil engineering services to the City of Norwalk to assist in the preparation of submission application documentation for Federal funding under the FY 2012 Disaster Relief Opportunity. Identified the recommended infrastructure requirements in the Washington Village

redevelopment project. Met with representatives from utility companies and developed schematic plans for recommended improvements involving roadway construction, relocation of existing overhead utilities, and new utilities and upgrades for new development.

COASTAL

FAIRFIELD PINE CREEK DIKE AND CULVERT REPLACEMENT

Provided project management and civil design services for flood mitigation projects at the Pine Creek Dike in Fairfield, CT. Projects included design of new headwalls, tide gates and culvert upgrades as well as a study of a potential dike elevation increase. Prepared applications to FEMA for potential project funding. Performed all environmental permitting for the culvert upgrade project, including CTDEEP OLISP and USACOE approvals as well as CTDEEP Flood Management Certification. Prepared the Environmental Review Record for the project as a condition of obtaining funding from the HUD Community Development Block Grant Disaster Recovery program, which included completion of a NEPA Environmental Assessment Checklist and development of the 8 Step Process documents for work in the floodplain.

FAIRFIELD WWTP HARDENING PROJECT

Provided project management, civil design and environmental permitting services for resiliency improvements at the Fairfield WWTP. The project included the construction of a sheet pile wall to protect the plant from coastal storm surge. The project also included two large stormwater pump stations designed to evacuate extreme rainfall flooding events from within the flood barrier. Prepared applications to FEMA for potential project funding. Prepared the Environmental Review Record, which included completion of a NEPA Environmental Assessment Checklist and development of the 8 Step Process documents for work in the floodplain. Completed all environmental permitting including CTDEEP Dam Safety & 401 WQ permits, USACOE approvals and local Inland Wetlands and Coastal Site Plan approvals.

FAIRFIELD TURNEY CREEK CULVERT REPLACEMENT

Provided project management and civil design services for the replacement of the Turney Creek culverts and the Riverside Drive bridge and tide gate structure in Fairfield, CT. This critical structure functions as the main outlet for a 1,500-Acre watershed and protects the Riverside Drive neighborhood from coastal flooding. Designed new culvert and headwall structure to convey the 100-Year storm event and improve tidal flushing in the upstream salt marsh. Performed all environmental permitting for the project, including CTDEEP SDF/401 WQ permits and USACOE approvals.

FAIRFIELD SOUTH BENSON PUMP STATION STUDY

Provided project management and civil design services for the South Benson Storm Water Pump Station and Drainage Improvement Study. During coastal storm surge events, such as Hurricane Sandy, floodwaters overtop Fairfield's barrier beaches and become trapped behind the higher ground. The only outfall from the area. The project included preliminary sizing and conceptual layout for an 80 Million Gallon Per Day (MGD) storm water pump station, as well as design of improvements to more than two miles of the stormwater collection system contributing to the pump station and design of a new outfall.

HARBOR POINT

Provided construction observation and construction administration services for several coastal projects associated with the Harbor Point development. Projects included removal and reconstruction of a deteriorated sheet pile bulkhead, improvements to portions of the Stamford Hurricane Barrier, construction of public and private docks and marinas, and removal of derelict structures. Coordinated with USACOE for issuance of Section 408 Permit and review and approval of completed construction.



MATTHEW ROMANO, PE

SENIOR ELECTRICAL ENGINEER

Matthew Romano's 17 years of experience and background in electrical engineering and computers equips him to design and specify power, lighting, HVAC, fire and intrusion detection, instrumentation and control, public address, and telephone systems. He has worked on a broad array of projects focused on water resources, wastewater treatment, industrial waste, solid waste, and electrical demolition.

WASTEWATER TREATMENT

NEW PUMP STATION DESIGN—MIDDLETOWN, CT

Designed the electrical distribution and controls systems for a new pump station in Middletown, CT.

WATER POLLUTION CONTROL FACILITY—VERNON, CT

Serving as lead senior electrical engineer for a \$70M upgrades project at a water pollution control facility in Vernon, CT. Design work included 15kV and 480V power distribution, normal and backup power systems, electrical safety enhancements, instrumentation and controls, lighting and fire detection. Other electrical engineering work includes arc flash analyses, coordination study, and electrical harmonics review.

NEW COMBINED SEWER OVERFLOW (CSO) DESIGN—CHICOPEE, MA

Designed the electrical systems for a new combined sewer overflow facility in Chicopee, MA. Tasks included design and coordination of the electrical distribution and backup power generation systems as well as the fire detection, security, and various other controls and communications systems.

WATER POLLUTION CONTROL FACILITY—SOUTHINGTON, CT

Served as lead electrical engineer for a \$45M water pollution control facility upgrades project in Southington, CT. Design work included normal and backup power capacity analyses, arc flash study and design of power distribution systems, electrical safety enhancements, controls, lighting, fire detection, security, telephone, public address, and lightning protection.

WATER POLLUTION CONTROL FACILITY UPGRADES—REDDING, CT

Designed the electrical and HVAC systems for a major upgrades project at a water pollution control facility in Redding, CT. The design included the integration of a backup power generation system as well as an odor control system.

WASTEWATER TREATMENT PLANT UPGRADES—SOUTH HADLEY, MA

Served as electrical design engineer and assisted with construction coordination for upgrades to a wastewater treatment plant and pump station in South Hadley, MA.

BIOSOLIDS DRYER FACILITY UPGRADE—DETROIT, MI

Served as lead electrical engineer for a \$132M sludge dryer facility for the City of Detroit, MI, which is the largest facility of its kind in North America. Design work included power distribution, controls, lighting, fire detection, security, telephone, public address, and lightning protection systems. Other electrical engineering work included arc flash analyses, coordination studies, harmonics analyses, and electrical construction administration

EXPERIENCE

17 Years

SPECIALTIES

Power Systems

Lighting Design

Fire, Intrusion, CCTV, and Public
Address Systems

Arc Flash and Electrical
Coordination Studies

Process Control and Instrumentation

Electrical Condition Analyses

EDUCATION

Bachelor of Science
Electrical and Computer Engineering
Worcester Polytechnic Institute

Master of Science
Electrical Power Engineering
Arizona State University

LICENSES & REGISTRATIONS

Professional Engineer
MA #48169
CT #27315
NH #14059
RI #11893
ME #17088
MI #6201060081

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics
Engineers

National Fire Protection Agency

Tau Beta Pi
(National Engineering
Honors Society)

Eta Kappa Nu
(National Electrical Engineering
Honors Society)

BUILDING

ELECTRICAL CODE INSPECTION—WEST SPRINGFIELD, MA

Performed an electrical code inspection and analysis for a manufacturing facility in West Springfield, MA.

ELECTRICAL AND STRUCTURAL DESIGN—MASSACHUSETTS

Served as Project Manager and electrical design engineer for the design of electrical and structural portions of a senior center upgrade project.

ELECTRICAL AND STRUCTURAL DESIGN—DEERFIELD, MA

Assisted in the electrical design for a new squash court facility at this college preparatory school in Deerfield, MA.

ELECTRICAL, FIRE, AND INTRUSION SYSTEMS—HARTFORD, CT

Designed the electrical, fire, and intrusion systems for a customer service facility in Hartford, CT.

ELECTRICAL, FIRE, AND INTRUSION SYSTEMS—HOLYOKE, MA

Designed the electrical, fire, and intrusion systems for a maintenance facility in Holyoke, MA.

ELECTRICAL DESIGN—DEERFIELD, MA

Participated in the electrical design team for renovations to the Deerfield Academy Main Administration Building at a college preparatory school in Deerfield, MA.

WATER RESOURCES

WATER TREATMENT FACILITIES & PUMP STATIONS—CONNECTICUT

Performed numerous arc flash analyses and overcurrent protective device coordination studies for CT treatment facilities and pump stations.

ELECTRICAL, HVAC, AND CONTROL SYSTEMS—HARTFORD, CT

Designed the electrical, HVAC, and control systems for booster pump station located in Hartford and East Hartford, CT.

ELECTRICAL, HVAC, FIRE AND INTRUSION DETECTION SYSTEMS BLANDFORD, MA

Designed the electrical, HVAC, and fire and intrusion detection systems for a water treatment facility in Blandford, MA. Also assisted in the design of the facility's instrumentation and control system.

ELECTRICAL SYSTEM FOR PUMPING STATION—SOUTH HADLEY, MA

Designed the new electrical system for a dry well pumping station in South Hadley, MA.

WATER TREATMENT PLANT UPGRADES—STONINGTON, CT

Served as electrical design engineer for major upgrades to a water treatment plant in Stonington, CT. Included planning and organization of electrical demolition and renovations to an existing building as well as the design of new electrical, HVAC, and fire detection systems for a new chemical building.

ELECTRICAL MODIFICATIONS AND DEMOLITION PLANS—BARNSTABLE, MA

Assisted in the design of electrical modifications and demolition plans for a pumping station in Barnstable, MA.

Appendix B: Project Experience



Puimp Station Upgrades, Southington, CTT

INFRASTRUCTURE CLIMATE RESILIENCY CONSULTING SERVICES

BRANFORD, CT

OWNER

Town of Branford



SERVICES

Assessment of Climate Change
Impacts

GIS Assessment Tools

Site Surveying

The Town of Branford hired Tighe & Bond to provide a resiliency assessment of the Town's wastewater infrastructure to determine the vulnerabilities associated with the rising flood levels over time. While the relatively flat, 28 square mile Town serves most of its 28,000 residents and commercial properties with sanitary sewers, due to the way the Town developed, dense development pockets were built which required an extensive network of pumping stations and sewers to convey the flows to the wastewater treatment plant. This has resulted in fifty-one pump stations to operate and maintain. Given the heightened awareness and concern regarding the impact of climate change and the resulting actual and projected rise in sea levels of time, the Town has requested that a report be prepared to help it assess this risk to its wastewater infrastructure.

With so many areas of relative flat land, rising flood waters can overwhelm the collection system and cause bottlenecks within the sewerage system. To compound the issue, access to the stations and wastewater treatment plant can become limited during periods of heavy flooding. Operation of the Town's wastewater infrastructure is a critical service that must always remain functional.

This report will review the inundation of wastewater infrastructure including structures, equipment, and critical components against current storms as well as projections for 2050 and 2080. This proactive approach will identify risks at each location and provide recommendations and priorities to protect the community.

WASTEWATER TREATMENT PLANT HARDENING

FAIRFIELD, CT

OWNER

Town of Fairfield



SERVICES

Field Survey

Wetland Delineation

Permitting

Design Services

Resiliency Improvements

In the aftermath of Superstorm Sandy, portions of the Town of Fairfield's Wastewater Treatment Plant (WWTP) and surrounding facilities were submerged in approximately two feet of water due to the coastal storm surge from Long Island Sound. Following these events, the Town was awarded a grant from the U.S. Department of Housing and Development (HUD) and the Department of Health (DOH) under the Community Development Block Grant – Disaster Recovery (CDBG-DR) program for the WWTP Hardening Project.

The proposed project, designed by Tighe & Bond, included the construction of an earthen berm and stormwater pump station to protect the WWTP and other critical facilities in the area from future flood events. The project also included raising portions of Richard White Way to intersect with the WWTP hardening berm and provide access into the WWTP while maintaining a continuous flood control structure.

Tighe & Bond provided environmental permitting services for the resiliency improvements and prepared applications to the Federal Emergency Management Agency (FEMA) for potential project funding. Also included in the project scope was the preparation of an Environmental Review Record for the hardening project as well as a microgrid installation project, which included completion of a National Environmental Policy Act (NEPA) Environmental Assessment Checklist and development of the Eight-Step Process documents for work in the floodplain.

SOUTH BENSON PUMP STATION AND DRAINAGE IMPROVEMENT STUDY

FAIRFIELD, CT

OWNER

Town of Fairfield



SERVICES

Drainage Improvements

Hydrologic and Hydraulic Modeling

Pump Station Design

In order to improve the resiliency of the flood prone Fairfield Beach areas, the Town of Fairfield engaged Tighe & Bond to provide professional services for the South Benson Storm Water Pump Station and Drainage Improvement Study.

During major coastal storm surge events such as Superstorm Sandy, floodwaters would overtop the coastal barrier beaches and become trapped behind the higher ground. The one storm water outfall from this area, a 48-inch-diameter pipe that drains to South Benson Marina, did not have sufficient capacity to evacuate major flooding events from this 175-acre area.

Tighe & Bond gathered and reviewed available information on the South Benson drainage area and existing storm water system and used it to delineate the tributary drainage area and create a model of the existing storm drainage system. Using this information, a hydrologic and hydraulic analysis was performed to estimate peak runoff rates and evaluate the capacity of the existing storm drainage system.

Tighe & Bond completed a preliminary sizing and concept layout and evaluated potential locations for a stormwater pump station. Once a location was selected, Tighe & Bond began conceptual design for the pump station, including geotechnical investigation and layout of the proposed pump station building, wet well configuration, pumping equipment, mechanical equipment, generator, preliminary piping, and electrical systems.

The project finished with the preparation of a final report documenting the study findings and recommendations for future design phases.

PUMP STATION NO. 2 UPGRADE

WESTPORT, CT

OWNER

Town of Westport



SERVICES

Pump Station Upgrade

Force Main Replacement

Horizontal Directional Drilling

River Crossing

Environmental Permitting

Tighe & Bond worked with the Town of Westport to design upgrades to an existing submersible pump station that provided additional capacity to allow the Town to accommodate additional proposed developments within the pump station service area, as well as replace an aging force main.

Specific services provided include:

- Replacement of an existing 10-inch diameter force main that conveyed wastewater flow from the Town of Westport's existing Pump Station No. 2 across the Saugatuck River to the wastewater treatment plant site. The new force main was installed via horizontal directional drilling. Due to concerns with drill fluid escaping into the river if drilling took place in fractured rock, the decision was made to install the new pipeline entirely within bedrock at a maximum depth of 90 feet below the riverbed.
- The proposed force main required work adjacent to and below the river and near to Interstate 95. Therefore, a significant number of permits/approvals were required from various agencies including CTDEEP, the US Army Corps of Engineers, CTDOT, and the Town of Westport.
- Tighe & Bond also assisted the Town on the design of upgrades to the pump station including replacement of the existing submersible pumps with new submersible pumps capable of pumping 1,800 GPM, pump controls, building improvements, a new emergency generator, and rehabilitation of the existing wet well.

Tighe & Bond provided evaluation, design, bidding and construction phase services for the force main replacement work. The pump station upgrade was performed as a design-build contract. Tighe & Bond performed all design work and construction was coordinated by the Town.

PUMP STATION EVALUATIONS AND UPGRADES

STRATFORD, CT

OWNER Town of Stratford



SERVICES

Pump Station Evaluations
Capital Improvement Plan
Pump Station Upgrade Design
Hardening and Resiliency
Hazardous Building Materials
Assessment
Construction Phase Services

Tighe & Bond has assisted the Town of Stratford in the evaluation of its six largest wastewater pump stations, followed by the design and construction of improvements to five of the stations. All six pump stations ranged from 36 to 45 years old, with pumping capacities ranging from 1,100 to 3,250 GPM.

All six pump stations are field constructed wet pit/dry pit type stations with bar racks for screenings removal. The pump stations were originally constructed with drive shaft pumps and motors on the upper level, and some were converted to dry pit-submersible pumps as part of prior upgrades. Some stations also include odor control systems.

Tighe & Bond's initial scope of work included the preparation of a capital improvement plan encompassing site/civil, architectural/structural, process, mechanical heating, ventilation, electrical, instrumentation and controls, and diesel fueled standby power.

Tighe & Bond evaluated each of the six stations and developed phased recommendations for phased (immediate, short-term, and long-term) capital improvements. Recommendations were developed for site improvements such as paving and drainage, roof, door, and window replacements, concrete repairs and improvements, upgrades to process equipment and piping, including pumps and bypass piping connections, new heating, ventilation, and electrical systems, new odor control systems where necessary, and new remote monitoring/telemetry systems.

Tighe & Bond focused on recommending code compliant upgrades that would improve resiliency/hardening, as well as odor control and ventilation upgrades that would not impact operating costs. The results of the evaluations were presented in a report submitted to the Town of Stratford for review and approval.

Design of the pump station upgrades was initiated in 2017. At the start of the design effort, Tighe & Bond worked with the Town's Planning and Zoning Department to identify areas of potential future development. This information was used to confirm the recommended pump capacity at each of the stations.

An overview of the existing and upgraded pumping capacity at each station is as follows:

Ryders Lane: 1,100 GPM dry pit pumps upgraded to 1,750 GPM dry pit submersible pumps.

PUMP STATION EVALUATIONS AND UPGRADES (CONTINUED)

STRATFORD, CT



Pecks Mill Pond: 3,250 GPM dry pit pumps upgraded with new dry pit submersible pumps at the same pump rate.

Benton Street: 1,825 GPM dry pit pumps upgraded to 2,900 GPM dry pit submersible pumps.

Oak Bluff: 1,200 GPM dry pit pumps upgraded with 1,100 GPM dry pit submersible pumps.

Short Beach: 1,330 GPM dry pit pumps upgraded with 2,000 GPM dry pit submersible pumps.

Ryans Lane: 1,200 GPM dry pit pumps. This station was not included in the pump station construction contract due to a potential station relocation associated with a nearby development.

Because the Town of Stratford is located on Long Island Sound, these flood prone stations required significant measures to bring them into compliance with updated TR-16 regulations that require stations to be operational during a flood event equivalent to three feet above the 100-year flood elevation.

Design elements across the five stations included site improvements, roof, door and window replacements, concrete repairs, process equipment and piping replacements, new pumps and bypass piping connections, new electrical systems and generators, new ventilation, heating systems, and odor control systems. Tighe & Bond was tasked with the challenge of designing code-compliant resiliency upgrades and improving ventilation while still keeping operating costs low and satisfying code requirements.

Also included in the pump station upgrades was a new remote pump station monitoring/telemetry system that was installed in all ten of the Town's wastewater pump stations.

Due to the original construction date, each pump station had to be evaluated for a variety of hazardous building materials, including asbestos containing materials, lead-based paints, PCB suspect materials, and "Universal Wastes" such as lighting ballasts, halogen bulbs, used electronics, and mercury-containing items such as thermostats and fluorescent light tubes.

Tighe & Bond completed a Hazardous Building Materials Assessment (HBMA) at each of the pump stations and summarized the findings in an HBMA Report. The final pump station construction documents included drawings and specifications as appropriate for the removal and appropriate disposal of all hazardous materials.

Tighe & Bond assisted the Town in persuading the CTDEEP to eliminate what was a \$4M per year per community cap receiving a 2% interest loan from the State's Clean Water Fund to allow the Town to fund upgrades to all stations as part of one contract.

BLATCHLEY PUMP STATION DEMOLITION

SOUTHINGTON, CT

OWNER

Town of Southington



SERVICES

Pump Station Demolition Services

Bidding Assistance

Construction Administration

Construction Observation

The Blatchley pump station was originally constructed in 1973. The pumping system was designed as an ejector station with two 50-gallon ejector pots. The dry pit was a factory fabricated metal “can” station by Davco.

Facilities planning conducted in 2014 concluded that this station was at the end of its useful life. Rather than replace the pump station, the Town concluded that a new gravity could be installed to provide service to homes within the station's service area and the station could be eliminated.

The existing davit crane, generator, automatic transfer switch, and associated wiring were in good condition and salvaged by the Town for use elsewhere.

All equipment and piping was removed from inside the can station. Once the removal work was completed, the access tube was demolished to an elevation equal to three feet below existing grade and the remainder of the below grade station was filled with controlled density flowable fill. The pump station building was demolished, along with all electrical components.

All painted piping, the ejector pots, and the painted concrete support pad for the building were removed from the site and disposed of as CTDEEP regulated PCB waste (< 50 ppm). The painted items were also assumed to contain lead based paint.

Once all work was completed, the inlet sewer from the main line sewer to the pump station was flushed and plugged at both ends of the pipe. The pump station site was then graded, and parking spaces were added for public access to a walking trail along the new gravity line.

Tighe & Bond assisted the Town in the development of contract documents for the removal of the station and provided bidding and construction administration and construction observation services.

PLANTSVILLE PUMP STATION REHABILITATION

SOUTHINGTON, CT

OWNER Town of Southington



SERVICES

Wastewater Pump Station Design
Site/Civil Engineering
Electrical Engineering
Structural Engineering
Geotechnical Engineering
Wetlands Permitting
Stormwater Management

Tighe & Bond conducted a comprehensive evaluation of an existing metal-can type dry pit wastewater pump station for the Town of Southington, Connecticut. This station was built in 1973 and services approximately 204 customers with the potential for servicing an additional 29 customers. The station is housed on a private parcel where the Town has a permanent easement. The evaluation included environmental screening and subsurface investigations, floodplain and stormwater management, hydraulic analyses, structural, HVAC, and electrical design considerations, and permitting.

Based on the outcome of the evaluation, Tighe & Bond provided design, bidding, and construction phase services to rehabilitate the dry pit pump station to a prepackaged concrete submersible style pump station. Services included process, geotechnical, electrical, mechanical, environmental, hazardous building material coordination, and general site/civil engineering.

The project included the demolition of the above-grade building, interior generator, and wet well, hazardous materials abatement, installation and startup of the prepackaged pump station including an integral valve vault, installation of a submersible pump station, including high-efficiency submersible pumps and controls, air powered wet well mixer, new exterior generator, electrical enclosures, sanitary sewer manhole, gravity line, and permanent pump station bypass. The design was a challenge due to the small site, and stormwater measures were implemented to help treat stormwater that runs through the site to the adjacent river.

Tighe & Bond overcame many challenges relating to the project site, including management of polluted soils from the site, which was adjacent to a gas station, and increased accessibility to the site. In a cost savings measure, the Town elected to have exterior electrical panels housed in thermostatically controlled, vented enclosures in lieu of a new building.

The new submersible wastewater pump station provides the Town with a modern, resilient station, meets the Town's zero increase in runoff requirements, and prepares the station to service future flows.

SOUTH END ROAD PUMP STATION UPGRADE

SOUTHINGTON, CT

OWNER

Town of Southington



SERVICES

Corrosion Investigation

Structural Evaluation

Design of Upgrades

Construction-Phase Services

Tighe & Bond provided design and construction phase services to rehabilitate and upgrade an existing pump station in Southington, CT.

Upgrades to the station included replacement of the existing pumps with two new 8.7 HP dry pit submersible pumps capable of pumping 360 GPM. New pumps and controls are located within the existing building and below grade “can” structure. A new emergency generator was also provided outside the rehabilitated building as a replacement for the existing interior generator.

A corrosion analysis was completed as part of the design phase in an effort to retain the “can” structure. The final design ultimately provided several architectural improvements to the existing building, including a replacement door, lighting, heating and ventilation improvements and a new shingle roof, gutters, and downspout to allow the station to meet code requirements. In addition, a cathodic protection system was provided to continue to protect the station for future years.

Rehabilitating the existing structure versus providing a replacement structure provided significant cost savings to the Town.

Construction of this project was completed in the fall of 2019.

THREE PUMP STATION UPGRADES

SOUTHINGTON, CT

OWNER Town of Southington



Tighe & Bond is providing design and construction phase services to rehabilitate and upgrade three pump stations in Southington, Connecticut.

The Town has been proactively upgrading pump stations within its collection system since the completion of a Wastewater Facilities Plan in 2014. Due to the availability of Federal Stimulus Funding, the Town elected to move forward with upgrades to the Judd Brook, Patton Brook and Old Turnpike pump stations as one construction contract. This also allowed the Town to take advantage of economies of scale by having one contractor complete the three upgrades simultaneously.

The Judd Brook pump station is a three-level dry pit pump station with a precast concrete wet well originally constructed in 1997. The existing 560 GPM pumps are being replaced with new dry pit submersible pumps having the same capacity. A new emergency generator is also being provided inside the building.

The Patton Brook Pump station is a three-level dry pit pump station with a precast concrete wet well originally constructed in 1997. The existing 310 GPM pumps are being replaced with new dry pit submersible pumps having the same capacity. A new exterior emergency generator is also being provided.

The Old Turnpike pump station is a dry pit pump station with a concrete wet well and pumps accessible via an access tube located in an existing building. The existing 200 GPM pumps are being replaced with new dry pit submersible pumps having a capacity of 231 GPM. A new emergency generator within the existing building was also provided, along with new ventilation within the pump chamber.

All pump station upgrades include across the board HVAC and electrical improvements. Selective demolition is being performed at each site, but the initial structural inspections showed that the dry pits are all structurally sound. All pumps are being provided with VFDs.

Each of the three stations is located adjacent to or near an existing stream and within the 100-year plus 3-foot flood elevation. Provisions were included as part of each design to confirm that the station would remain operational under flood conditions. Specific provisions included watertight doors, raising the wet well slab tops as well as equipment pads to bring exterior equipment above the flood elevations as appropriate.

SERVICES

Design Services

Construction Phase Services

HVAC and Electrical Improvements

Selective Demolition

Structural Inspections

WEST QUEEN STREET PUMP STATION UPGRADE

SOUTHINGTON, CT

OWNER

Town of Southington



SERVICES

Design Services

Construction Phase Services

Tighe & Bond provided design and construction phase services to rehabilitate and upgrade an existing pump station in Southington, Connecticut. The existing station was constructed in 1978 and consisted of a 6-foot-diameter wet well and metal can dry pit station manufactured by Can-Tex Industries, both of which were 26 feet deep. An investigation completed as part of the 2014 concluded that the station had reached the end of its useful design life and should be replaced.

Upgrades to the station included replacement of the existing pumps with two new 3.8 HP dry pit submersible pumps capable of pumping 260 GPM. A new emergency generator was also provided.

The existing building was demolished, and all equipment and piping was removed from inside the can station. Once the removal work was completed, the access tube was demolished to an elevation equal to five feet below existing grade and the remainder of the below grade station was filled with controlled density flowable fill. Testing during the design phase revealed lead impacted soils which were removed and disposed of as part of the demolition work.

The new pump station consists of a precast package pump station containing a wet well, valve vault, and submersible pumps. New electrical equipment was mounted on new pad mounted weatherproof exterior enclosures. A new force main bypass was also provided.

The site is located adjacent to a tributary of the Quinnipiac River, therefore, approval was obtained from the Southington Inland Wetland Commission as part of the station design.

FRANCIS T. PATNAUDE INTERMUNICIPAL PUMPING STATION

MIDDLETOWN, CT

OWNER

City of Middletown



SERVICES

Pump Station Design

Odor Control

SCADA

HVAC Design

Electrical Design

Construction Administration

As part of the Mattabassett Regionalization Project, Tighe & Bond worked with CDR Maguire, Inc., to provide design and construction services for a new sewage pump station and force main to transmit the City of Middletown's wastewater flows to the Mattabassett District Water Pollution Control Facility for treatment.

The new 26 MGD pump station and force main are part of Middletown's plan to regionalize its wastewater collection and treatment system, and allow the City to decommission an aging treatment plant and reclaim the property for riverfront development. The facility also serves as the center of operations for the City's ten other pump stations.

The pump station includes two parallel "head works" type treatment trains, a dry well with six dry pit submersible raw sewage pumps, odor control system, chemical injection system for controlling the development of odors and corrosion in the force main, a magnetic flow meter, SCADA system, HVAC design for process equipment as well as office areas, and electrical distribution, grounding systems, lighting, and security.

PERNA LANE SANITARY SEWERS STAMFORD, CT

OWNER

City of Stamford Water Pollution
Control Authority



SERVICES

15,500 LF Sewer System
Expansion

Pumping Station

CTDOT Coordination on Major
Arterial Roadway

Environmental Permitting

Pavement Inventory

Tighe & Bond worked with the Stamford Water Pollution Control Authority (WPCA) to plan and design the City's first expansion of its collection system north of Merritt Parkway. Numerous failing septic systems in a dense residential neighborhood prompted the sewershed expansion. Tighe & Bond analyzed available U.S. Census Tract data to project flows from the sewershed, which were then used as the basis for the design.

The project involved approximately 15,500 LF of gravity sewer, 2,000 LF of force main, and a pump station. A large portion of the work was conducted at High Ridge Road, which is a major arterial roadway with limited utility clearances. As a result, Tighe & Bond needed to coordinate closely with the Connecticut Department of Transportation and utility companies to develop traffic management plans for this work.

As part of the project, Tighe & Bond performed a pavement inventory and roadway assessment to determine if improvements were required to the geometry, surfacing, or drainage of the affected local streets.

The force main crosses beneath the Merritt Parkway overpass for High Ridge Road, as well as crossing the Rippowam River.

Tighe & Bond also provided wetland environmental services for this project.

WEST MAIN STREET PUMP STATION UPGRADE

BEACON, NY

OWNER City of Beacon



SERVICES

Facilities Assessment

Design Services

The West Main Street pump station in Beacon, NY is a dry pit pump station located on a small site adjacent to the Beacon Metro North Train Station. The original construction date is unknown, as the City took over responsibility of its operation in 1999. The brick building houses an influent channel and three dry pit pumps on the lower level, with the pump motors and electrical equipment installed on the upper level.

Tighe & Bond conducted a facilities assessment of this station in 2014 as part of a Tri-Municipal Facilities Evaluation Report. The final report recommended several pump station upgrades and improvements including new pumps/control panels, lighting, ventilation and building improvements, and provisions for emergency power. A Hazardous Building Materials Assessment was not conducted as part of the initial assessment.

The overall construction project is being managed by Lanc & Tully, who is responsible for the design of the new force main. Tighe & Bond was retained by Lanc & Tully to provide engineering services related to the design of the new pump station. As part of this design, the peak capacity of the upgraded station was increased from 2 MGD to 3 MGD to allow for construction of a new development within the pump station's service area. The design rate of the pumps was increased from 700 to 900 GPM. In addition, VFDs were included in the pump design to allow the station to handle the wide range of expected influent flows.

Because little room for expansion exists within the existing building footprint, the City opted to construct a new pump station adjacent to the existing building on an easement obtained from Metro North. This approach provides much more room for the layout of the new facilities. It also avoids any potential costs associated with the evaluation and/or abatement of hazardous building materials.

Final design has been completed for this pump station, and it has been approved by NYSDEC and Dutchess County Department of Health. While construction is anticipated to commence in 2023, the final construction schedule will be dependent on the length of time needed to obtain all necessary construction approvals.

OFFICES ACROSS THE NORTHEAST

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Tighe&Bond

150439-078
October 24, 2023

Adam Tulin, Director of Purchasing
Town of Fairfield
Sullivan Independence Hall
725 Old Post Road
Fairfield, CT 06824

Re: **Town of Fairfield, CT – Fee Proposal for Engineering Services:
Survey and Preliminary Investigation of Toll House, Mill River,
Eastfield & Willow Street Pump Stations**

Dear Adam:

Tighe & Bond is pleased you have selected our firm to provide the services noted below relative to engineering services for preliminary investigation & field survey for four pump stations as listed below:

- Toll House Pump Station
- Mill River Pump Station
- Eastfield Drive Pump Station
- Willow Street Pump Station

Based on meetings between the Town of Fairfield and Tighe & Bond staff on August 1st, and August 31st, 2023, our understanding of the scope is as follows:

- Site investigations to assess the existing structural condition of the Toll House and Mill River pump stations and assess if structural modifications are needed to floodproof stations impacted from flooding.
- Field survey of each pump station site; including the identification of existing easements.
- Investigation of each pump station site for the presence of hazardous building materials including asbestos, lead paint, and PCBs.
- Hydraulic analysis of each pump station to confirm the existing pump discharge rates.
- Confirmation of expected future flows to each pump station and associated pump rates required under future flow conditions.
- Confirmation of the required pump station force main sizes based upon the future pump rates at each location.
- Structural inspection of existing force mains if required based upon the results of the hydraulic and force main sizing analysis.
- Field survey of all force mains that require replacement.
- Development of a design approach for the upgrade of each pump station, along with an updated Engineer's Opinion of Probable Construction Cost.



1. **Information Gathering and Kickoff Meeting:** Collect from the Town and review available background information and past reports including:
 - a. Original construction drawings for each pump station & force main.
 - b. Site utility mapping including electrical service and feeder conduits.
 - c. Existing property boundary or easement mapping.
 - d. Pump station run times for the last 12 months for all pump stations.
 - e. Available flow metering/flow data upstream of each pump station.
 - f. Estimates of future anticipated growth for sewer sheds serviced by each pump station, if applicable.
 - g. Past Boring Reports, if available.
 - h. Conduct kickoff meeting with Town staff prior to project startup.

2. **Hydraulic Analysis:** Based on the information obtained from Town, Tighe & Bond will conduct the following hydraulic analysis for each pump station:
 - a. Review existing flows at each station based upon the information presented in the Wright Pierce Report and historical flows over the past 12 months.
 - b. Conduct drawdown testing at each pump station to confirm the current pump rate of all pumps. Due to wet well access issues, drawdown testing at Willow street will not be conducted.
 - c. Estimate future flows based on information on anticipated future growth from sewer sheds serviced by pump stations as provided by the Town.
 - d. Estimate future peak sanitary sewer flows.
 - e. Compare the future average daily flows and future peak hourly flows with drawdown data of the existing pumps to confirm the pump capacity increases required (if any).
 - f. Based on the expected future flows, confirm the force main size required, flow velocity, and force main residence time.
 - g. Prepare and submit a draft memo to Town indicating force mains that are adequately sized to handle future flows and force mains that are under sized and in need of replacement with a larger diameter pipe.

3. **Force Main Analysis:** The Town is interested in structurally evaluating the condition of the existing force mains that are adequately sized to handle future flows. The force mains length, age-range and pipe material for the four stations are listed below.

Pump Station	Year Constructed	Size	Age	Length	Material
Toll House	1986	6	37	910	Ductile Iron
Mill River	1980	14	43	1,070	Ductile Iron
Eastfield Drive	1994	4	29	660	Polyvinyl Chloride
Willow Street	1980	4	43	580	Ductile Iron

- a. Based on discussion with pipeline structural integrity testing firms, force mains four inches or less cannot be tested as the size of the minimum acoustic sensors are greater than four inches. Due to these factors Eastfield Drive and Willow Street force mains will not be evaluated as part of this task.

- b. The structural analysis of the Toll House and Mill River pump station force mains will consist of an internal inspection including leak and air pocket detection for each force main. The Mill River pump station has two dual 14 inch force mains and we anticipate inspecting both force mains. Tighe & Bond assumes that the Town will provide assistance with opening fittings at pump each station for insertion of the acoustic sensors.
- c. Tighe & Bond will coordinate the force main inspection/testing, review the results, and prepare a draft memo summarizing the results of the force main evaluations and provide recommendations to either replace or reuse the force main.
- d. Based on Town approval of the memo, Tighe & Bond will move forward with field survey services as described below.

4. Survey

- a. **Pump Stations:** Tighe & Bond will coordinate with a Licensed subconsultant to conduct site topographic (T-2) and property (A-2) surveys of each pump station site to document existing conditions. Survey services will include the location of all pump station components (wet wells, structures, manholes, electric panels, generators/concrete pads), as well as adjacent roads, curbs, wetland flags (if applicable), fencing, significant trees, and visible utilities. The survey data shall be based upon the 1988 NAVD/NAD 83 Datum. Information on MHW, MLW, MLLW, CJL will be included if applicable at each site. Easement plans will be developed for the Eastfield Drive pump station as requested.
- b. **Force mains:**
 - The survey for both Willow street and Eastfield Drive pump station will be completed if a larger pipe is required based on the results of the hydraulic analysis.
 - The survey for Toll House and Mill River pump station will be conducted if a larger pipe is required or the force main is found to be in poor condition based on the results of the hydraulic & force main structural analysis.
 - The survey will include site topographic T-2 and property A-2 survey to develop site plan of the force main route. Survey services will include location of roadways, curbs, wetlands flagging, 100-year floodplain elevation, manholes, electrical poles, and visible utilities. Survey work will be limited to the existing road right of way along the path of each force main.
 - Survey services will also include the identification of existing property and easement boundaries.
- c. Survey work will be conducted by Martinez Couch & Associates, Inc. (SLBE Subcontractor) of Rocky Hill, CT.
- d. It should be noted that fee indicated in this proposal assumes that force mains for all 4 pump stations are located on Town streets and do not require clearing for access. Detailed mapping of the force main routes is currently not available. It appears that the existing Mill Hill Terrace pump station force main runs under the Mill River and the force main for the Toll House pump station runs under Route 15. Our price does not include any survey work in these two locations. A separate fee will be provided for this work at a later date if it is found that a full survey is necessary.

- e. Once the field survey work has been completed, Tighe & Bond will develop an existing conditions site plan for each station, as well as plan/profile sheets of each force main route, as applicable.

5. Wetland Delineation

- a. Tighe & Bond will conduct inland wetland delineation at Mill Hill, Toll House, and Eastfield Drive pump stations. Wetland delineation for the force mains will be only conducted for those that are intended to be replaced based on the results of the hydraulic and force main structural analysis. A fee for flagging along the force main routes will be provided once force main routing has been confirmed.
- b. A wetlands delineation letter reports suitable for filing with local and State regulatory agencies will also be prepared.

6. Permitting

- a. Tighe & Bond will work with a subconsultant to conduct a review of potential local, state, and federal permits that will be required for the pump station upgrade/force main replacement work.
- b. We currently anticipate the following permits will be required, and this will be further evaluated during the initial study phase:
 - State and Federal Permits
 - Town of Fairfield Coastal Site Plan
 - Town of Fairfield Building & Fire Department Permit
 - Inland Wetlands Certificate
- c. For this task, we will utilize JKB Consulting, LLC (WBE Subcontractor) of Old Say brook, CT.

7. Preliminary Structural Analysis of Pump Stations

- a. During the meeting on August 01, 2023, it was agreed that structural evaluations at the Willow Street station will not be conducted as this station is very small. Therefore, Tighe & Bond will work with a subconsultant to assess the conditions of the three remaining stations. Specific issues as identified in the 2018 and 2022 report that will be evaluated include the following:
 - Flood structural evaluation for the Mill River, and Toll House Pump Stations will be evaluated based upon the 100-year flood elevation plus 3-feet. Specifically:
 1. Determine Flood Design Class for each of the 2 stations (ASCE 24)
 2. Determine flood protection level based on the most restrictive of base flood elevation, ASCE 24, and local regulation.
 3. Determine flood loads, wave loads, wind loads and all other loadings as required by the local building code for the above 2 stations (ASCE 7).
 4. Perform condition assessment of portions of structure that will be relied on to resist flood loads.
 5. Check whether existing structural elements have adequate strength and stiffness to resist flood loads.
 6. Check that the structure has adequate resistance to buoyancy.
 - Evaluation of existing grates, hatches, and access ladders damaged from corrosion at multiple pump stations as described in the 2018 and 2022 report.

- Replacement of doors/windows/roofs and overhead doors at multiple pump stations as described in the 2018 and 2022 report.
- Monorail replacement and repair building cracks at Mill River pump station.
- Repair of building cracks at Toll House Road pump station.
- Evaluation for replacement of existing can style station at Willow Street with a packaged submersible style station.

8. Hazardous Building Materials Assessment (HBMA) - Tighe & Bond understands that an HBMA will be conducted at each pump station for components that may be impacted by potential future upgrades. We expect that all stations will need to be evaluated for Hazardous Building Materials, as follows:

- a. **Asbestos-Containing Materials (ACM)** - A Tighe & Bond State of Connecticut-licensed asbestos inspector will conduct an asbestos assessment of the existing pump station structures. We will conduct an assessment of suspect ACM observed at the site in accordance with EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations (Title 40, CFR Part 61, Subpart M) and Connecticut Department of Public Health (CTDPH) regulations. This process includes locating and sampling suspect materials in all areas to be impacted by the project. The assessment will include interior visible and accessible materials, while inaccessible materials may be assumed to exist, quantified, and included in the assessment.

Additionally, materials that require destructive testing, such as roofing and façade waterproofing will not be tested but rather assumed to contain asbestos, quantified, and included in the assessment.

Samples of suspect ACM materials will be collected for analysis by Polarized Light Microscopy (PLM) using EPA-approved protocol in accordance with accreditation of the National Institute of Standards and Technology (NIST). This sampling will be performed in accordance with the EPA requirements for asbestos identification.

Samples of suspect ACM will be sent to EMSL Analytical, Inc. (EMSL), a State of Connecticut-approved laboratory, for analyses on a one-week laboratory turnaround. If no asbestos is observed during analyses of the set of samples, the suspect material will be determined to be negative for asbestos content. A total of 40 PLM samples have been included in this proposal for all four pump stations.

- b. **Lead-Based Paint Sampling (LBP)** - Tighe & Bond's State of Connecticut-certified Lead Inspector will collect suspect LBP chip samples from representative paint systems throughout the targeted areas to identify coated building components anticipated to be impacted by the project. The inspector will submit the samples to EMSL's Cinnaminson, New Jersey laboratory, for analysis using the SW846 3050B/7000B method via Flame Atomic Absorption (FAA).

The results of the lead sampling are intended to provide guidance to contractors for occupational lead exposure controls. It is the responsibility of the contractor to ensure the safety of their employees. Building components coated with lead levels may cause exposures to lead above OSHA standards during proposed renovation activities.



This work will be conducted in consultation with the Occupational Safety and Health Administration (OSHA) Lead in Construction regulation and the EPA Resource Conservation and Recovery Act Hazardous Waste regulations (Title 40 CFR, Parts 261 – 266).

A total of 12 paint chips have been included in this proposal for all four pump stations.

- c. Universal Wastes and Other Regulated Building Wastes Inventory - Tighe & Bond will conduct a visual assessment for the presence of lighting ballasts, wet transformers, electrical switches, and small electrical motor capacitors. If present, components will be evaluated to determine their potential for containing PCBs or di-ethyl-hexyl-phthalate (DEHP). We will record the locations and estimated quantities of the listed equipment throughout the building. No sampling will be conducted of electrical components suspected of containing PCBs and/or DEHP.

A visual assessment for the presence of mercury-containing vapor lamps and other devices known to contain mercury will be conducted at the site. We will provide the location, size, and estimated quantity of fluorescent lamps and Mercury containing components throughout the building. No sampling will be conducted of bulbs or devices.

- d. Other building wastes such as equipment and/or containers with heavy metals, refrigerants, paints, oils, and other chemicals will also be noted.
- e. Hazardous Building Material Assessment Report - A report that documents the HBMA conducted for the pump stations will be developed at the completion of the sampling work. The report will provide an inventory of the identified hazardous building materials and quantities as well as a site plan depicting the location of each type of material. It will also include all sample logs, laboratory chain of custodies, as well as accreditations and licenses.

9. Development of Design Approach

- a. Based on the results of the above evaluation Tighe & Bond will prepare a design approach recommending the most suitable alternative to upgrade each pump station and additionally make recommendations to Town to bundle stations with similar design for construction.
- b. Summarize description of proposed approach and updated pump station site plan.

10. Development of Updated OPCCs

- a. Tighe & Bond will update costs from the 2022 Pump Stations evaluation report using the ENR index. Additionally, structural and architectural costs in the 2022 pump station evaluation will be updated based on the above recommended design approach.
- b. Costs for the replacement of pump station force mains will also be included for those recommended for replacement.

11. Engineering Report

- a. Tighe & Bond will provide a draft report to Town summarizing our recommendations of updated flows, pump and force main sizing for each station, the results of force main structural assessment, potential permits for the project, field survey information, findings and recommendations from the

structural analysis, design approach, OPCC and a summary of the HBMA investigations.

- b. Revise the Draft Engineering Report in response to the Town's comments, as appropriate, and furnish the Final Preliminary Design Report to Town.

12. Progress Meetings

- a. Tighe & Bond staff will participate in biweekly update meeting to provide project updates to Town and attend up to 3 WPCA Commission meetings/Town Board meetings for this phase.

Project Schedule

The proposed schedule for this project is discussed in Table below.

Project Schedule	Timeline
Task 1 – All Pump Stations	
Submit Fee Proposal to Town	September 2023
Site Visits	November 2023
HMBA Analysis	December 2023
Hydraulic Analysis of PS & FM	November 2023
Structural Analysis	December 2023
Force Main Inspection (Initiate Based on Results from Hydraulic Analysis)	January 2024
Survey - Pump Stations (weather dependent)	January 2023
Survey – Force mains (If required) (weather dependent)	January 2024
Draft Engineering Report	May 2024

Towns Responsibilities

The Town shall assist Consultant in executing the services outlined herein, including:

1. **Document Review** - The Town shall provide timely review of project submittals. A typical review period of 3 weeks shall be allocated for each Design Deliverable.
2. **Provide Record Drawings** - The Town shall provide record drawings of the pump station and force mains referenced in this fee letter as necessary for the completion of this project.
3. **Provide Existing Sewer Easements Documentation** - The Town shall provide all existing sewer easement documentation referenced, but not readily obtained at the local municipal offices, in this fee letter as necessary for the completion of this project.
4. **Force Main Structural Evaluation** - The Town staff will assist the Force main structural evaluation firm with opening segments of force main pipe to insert acoustic balls during the structural evaluation. Documentation referenced, but not readily obtained at the local municipal offices, in this fee letter as necessary for the completion of this project.
5. **Force Main Survey** - The fee from the Survey consultant assumes that the force mains run on Town roads and does not require additional clearing to survey the force

main route. During the study phase if additional effort is needed to accomplish the survey work, this work will be completed at an additional fee to be agreed upon by the Town and Engineer before the work commences.

FEE

Tighe & Bond will perform the scope of work noted above for a not to exceed fee of \$235,000. We will undertake this work on an hourly plus expense basis, and you will be billed in accordance with the attached rate schedule. In the event that the scope of work is increased for any reason, the limiting fee to complete the work shall be mutually revised by written amendment. The attached Terms and Conditions are part of this letter agreement.

For information purposes, the below summary provides the anticipated break out of the project. The summary is presented to give the Town a better understanding of how the project budget was developed.

Description	Proposed Fee
Task 1 – Preliminary Investigation & Field Survey	
Pump Station Study (Preliminary Investigation & Survey)	\$157,000
FM Structural Integrity Analysis	\$50,000
FM Survey (Toll House)	\$8,000
FM Survey (Mill River)	\$9,500
FM Survey (Eastfield)	\$5,500
FM Survey (Willow Street)	\$5,000
Total Fee	\$235,000

We look forward to working with the Town on this project. Please contact Miles 413-572-3208 or Emmanuel at 203-712-1135 if you have any questions. If this agreement is acceptable, please sign below and provide an executed copy for our records.

Very truly yours,

TIGHE & BOND, INC.


Miles H. Moffatt
Vice President


Prashanth Emmanuel
Senior Project Manager

Copy: Christine Pacelli – WPCA Project Manager
Bill Hurley - Engineering Manager

Enclosure: Town of Fairfield, CT Terms and Conditions – NON-SRF REV. 10/2023
2023 Fixed Rate Schedule

ACCEPTANCE:

On behalf of **TOWN OF FAIRFIELD CT** the scope, fee, and the attached terms and conditions are hereby accepted.

Authorized Representative

Date

2023 FIXED HOURLY RATE SCHEDULE



TECHNICAL PROFESSIONALS

Senior Vice President	\$300.00
Vice President	\$265.00
Safety & Health Director	\$230.00
Senior Consultant	\$240.00
Principal Landscape Architect	\$205.00
Principal Engineer	\$230.00
Senior Project Manager	\$230.00
Project Manager 2	\$200.00
Project Manager 1	\$165.00
Senior Landscape Architect 2	\$170.00
Senior Landscape Architect 1	\$160.00
Senior Engineer 2	\$195.00
Senior Engineer 1	\$175.00
Senior MEP Professional 2	\$195.00
Senior MEP Professional 1	\$175.00
Project Engineer 2	\$155.00
Project Engineer 1	\$140.00
Project MEP Professional 2	\$155.00
Project MEP Professional 1	\$140.00
Project Landscape Architect 2	\$155.00
Project Landscape Architect 1	\$145.00
Staff Engineer 3	\$135.00
Staff Engineer 2	\$125.00
Staff Engineer 1	\$115.00
Landscape Designer 2	\$135.00
Landscape Designer 1	\$120.00
Senior Architect	\$185.00
Project Architect 2	\$145.00
Project Architect 1	\$130.00
Staff Architect 2	\$120.00
Staff Architect 1	\$110.00
Principal Planner	\$175.00
Project Planner	\$135.00
Planner 2	\$125.00
Planner 1	\$110.00
Resident Engineer	\$175.00
Construction Observer 3	\$150.00
Construction Observer 2	\$135.00
Construction Observer 1	\$110.00

TECHNICAL PROFESSIONALS

Principal Compliance Specialist	\$210.00
Senior Compliance Specialist 2	\$165.00
Senior Compliance Specialist 1	\$150.00
Project Compliance Specialist 2	\$135.00
Project Compliance Specialist 1	\$125.00
Compliance Specialist 2	\$110.00
Compliance Specialist 1	\$95.00
Senior Environmental Professional	\$260.00
Principal Environmental Scientist	\$200.00
Senior Environmental Scientist 2	\$175.00
Senior Environmental Scientist 1	\$155.00
Senior Data Management Specialist 1	\$155.00
Project Environmental Scientist 2	\$135.00
Project Environmental Scientist 1	\$125.00
Environmental Scientist 2	\$110.00
Environmental Scientist 1	\$100.00

GIS PROFESSIONALS

GIS Technical Director	\$230.00
GIS Project Manager 2	\$185.00
GIS Project Manager 1	\$145.00
Senior Development Engineer	\$195.00
Senior GIS Analyst 2	\$170.00
Senior GIS Analyst 1	\$145.00
GIS Analyst 2	\$135.00
GIS Analyst 1	\$115.00
GIS Technician 2	\$95.00
GIS Technician 1	\$85.00

SUPPORT

Remediation Technician 2*	\$105.00
Remediation Technician 1*	\$95.00
BIM Manager	\$170.00
CAD Manager	\$170.00
Senior Designer	\$155.00
Senior Drafter/Designer*	\$135.00
Drafter/Designer *	\$120.00
Graphics Support Specialist	\$110.00
Intern*	\$75.00
Administrative Support*	\$90.00

EXPENSES

1. Automobile transportation expenses for employee travel directly related to the project shall be invoiced at the prevailing Federal rate per vehicle mile.
2. Outside reimbursable expenses and services, which are rendered to Tighe & Bond by other than direct employees, and any permitting fees paid by Tighe & Bond on behalf of the Client, shall be invoiced at Tighe & Bond's direct cost plus 10% administrative fee.
3. Reimbursable expenses such as in-house field supplies and equipment rental, tolls and parking, overnight mailings and bulk notification mailings, and in-house printing shall be invoiced at cost or unit costs as applicable.
4. Costs for items such as regular mailings of project documents, telephone or fax communications, computer usage charges, and miscellaneous in-house printing are included in the hourly rates shown above.

PROVISIONS

1. Rates are effective until December 31, 2023, at which time rates will be increased based on annual salary review.
- * For non-salaried personnel (noted above by an "**"), time worked in excess of eight hours in any day or forty hours per calendar week shall be invoiced at 150 percent of the above rate.

"CLIENT" is defined in the acceptance line of the accompanying proposal letter or the name the proposal is issued to; Tighe & Bond, Inc. is hereby referenced as "CONSULTANT"; "PROJECT" is defined in the accompanying proposal

1. SCHEDULE OF PAYMENTS

1.1 Invoices will generally be submitted once a month for services performed during the previous month. Payment will be due within 30 days of invoice date. Monthly payments to CONSULTANT shall be made on the basis of invoices submitted by CONSULTANT and approved by CLIENT. If requested by CLIENT, monthly invoices may be supplemented with such supporting data as reasonably requested to substantiate them.

1.2 In the event of a disagreement as to billing, the CLIENT shall pay the agreed portion.

1.3 Interest will be added to accounts in arrears at the rate of one and one-half (1.5) percent per month (18 percent per annum) or the maximum rate allowed by law, whichever is less, of the outstanding balance. In the event counsel is retained to obtain payment of an outstanding balance, CLIENT will reimburse CONSULTANT for all reasonable attorney's fees and court costs.

1.4 If CLIENT fails to make payment in full within 30 days of the date due for any undisputed billing, CONSULTANT may, after giving seven days' written notice to CLIENT, suspend services and retain work product until paid in full, including interest. In the event of suspension of services, CONSULTANT will have no liability to CLIENT for delays or damages caused by such suspension.

2. SUCCESSORS AND ASSIGNS

2.1 CLIENT and CONSULTANT each binds itself, its partners, successors, assigns and legal representatives to the other parties to this Agreement and to the partners, successors, assigns and legal representatives of such other parties with respect to all covenants of this Agreement. CONSULTANT shall not assign, sublet or transfer its interest in this Agreement without the written consent of CLIENT, which consent shall not be unreasonably withheld.

2.2 This Agreement represents the entire and integrated Agreement between CLIENT and CONSULTANT and supersedes all prior negotiations, representations or Agreements, whether written or oral. This Agreement may be amended only by written instrument signed by both CLIENT and CONSULTANT. References to this agreement include these Terms & Conditions, any accompanying proposal or description of services, as well as any other documents referenced or incorporated therein. In the event one or more provisions of any of the foregoing documents conflict with the provisions of these Terms & Conditions, the provisions of these Terms & Conditions shall control.

2.3 Nothing contained in this Agreement shall create a contractual relationship or cause of action in favor of a third party against CLIENT or against CONSULTANT.

3. STANDARD OF CARE

3.1 In providing services, CONSULTANT will use that degree of care and skill ordinarily exercised under similar circumstances by individuals providing such services in the same or similar locality for similar projects.

4. TERMINATION

4.1 This Agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. In addition, CLIENT may terminate this Agreement for its convenience at any time by giving written notice to CONSULTANT. In the event of any termination, CLIENT will pay CONSULTANT for all services rendered and reimbursable expenses incurred under the Agreement to the date of termination and all services and expenses related to the orderly termination of this Agreement.

5. RECORD RETENTION

5.1 CONSULTANT will retain pertinent records relating to the services performed for the time required by law, during which period the records will be made available upon reasonable request and upon reimbursement for any applicable retrieval/copying charges.

5.2 Samples - All soil, rock and water samples will be discarded 30 days after submission of CONSULTANT's report, unless mutually agreed otherwise or unless CONSULTANT's customary practice is to retain for a longer period of time for the specific type of services which CONSULTANT has agreed to perform. Upon request and mutual agreement regarding applicable charges, CONSULTANT will ship, deliver and/or store samples for CLIENT.

6. OWNERSHIP OF DOCUMENTS

6.1 All reports, drawings, specifications, computer files, field data, notes, and other documents, whether in paper or electronic format or otherwise ("documents"), are instruments of service and shall remain the property of CONSULTANT, which shall retain all common law, statutory and other reserved rights including, without limitation, the copyright thereto. CLIENT acknowledges CONSULTANT's documents, including electronic files, as the work papers of CONSULTANT and CONSULTANT's instruments of professional services. Nevertheless, the final documents prepared under this Agreement shall become the property of CLIENT upon completion of the services and payment in full of all monies due to CONSULTANT. Under no circumstances shall the transfer of ownership of CONSULTANT's documents, electronic files or other instruments of services be deemed a sale by CONSULTANT and CONSULTANT makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no case shall ownership of documents include CONSULTANT's logo, signature, professional stamps, templates, base plans, specifications or design details. CLIENT's payment to CONSULTANT of the compensation set forth in the Agreement shall be a condition precedent to the CLIENT's right to use documents prepared by CONSULTANT. It is understood that CLIENT may be required to make copies of documents available to the public under the Freedom of Information Act or the Connecticut Freedom of Informations Law prior to receipt of payment by CONSULTANT.

6.2 Documents provided by CONSULTANT are not intended or represented to be suitable for reuse by CLIENT or others on any extension or modification of this PROJECT or for any other projects or sites. Reuse of documents by CLIENT or others on extensions or modifications of this project or on other sites or use by others on this PROJECT, without CONSULTANT's written permission and mutual agreement as to scope of use and as to compensation, if applicable, shall be at the user's sole risk, without liability on CONSULTANT's part.

6.3 Electronic Documents - CONSULTANT cannot guarantee the authenticity, integrity or completeness of data files supplied in electronic writeable format. If CONSULTANT provides documents in writeable electronic format for CLIENT's convenience, CLIENT agrees to waive any and all claims against CONSULTANT resulting in any way from the unauthorized use, alteration, misuse or reuse of the electronic documents.

6.4 Electronic Data Bases - In the event that CONSULTANT prepares electronic data bases, geographical information system (GIS) deliverables, or similar electronic documents, it is acknowledged by CLIENT and CONSULTANT that such PROJECT deliverables will be used and perhaps modified by CLIENT and that CONSULTANT's obligations are limited to the deliverables and not to any subsequent modifications thereof. Once CLIENT accepts the delivery of maps, databases, or similar documents developed by CONSULTANT, ownership is passed to CLIENT. CONSULTANT will retain the right to use the developed data and will archive the data for a period of three years from the date of PROJECT completion.

7. INSURANCE

7.1 CONSULTANT will retain Workmen's Compensation Insurance, Professional Liability Insurance with respect to liabilities arising from negligent errors and omissions, Commercial General Liability Insurance, Excess Liability, Unmanned Aircraft, Cyber Liability, and Automobile Liability during this PROJECT. CONSULTANT will furnish certificates at CLIENT's request.

7.2 Risk Allocation - To the fullest extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of the CONSULTANT to the CLIENT and anyone claiming by or through the CLIENT, for any and all claims, losses, costs or damage, of any nature whatsoever, the liability of CONSULTANT to all claimants with respect to this PROJECT will be limited to an aggregate sum not to exceed \$1,000,000 or CONSULTANT's compensation for consulting services, whichever is greater, but in no case greater than CONSULTANT's insurance limits. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law, provided, however, that this limitation of liability shall not apply to any loss or damage arising out of CONSULTANT's gross negligence, fraud, willful misconduct or illegal or unlawful acts.

7.3 Damages - Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither CLIENT nor CONSULTANT, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the PROJECT or to this Agreement. This mutual waiver of certain damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that may be incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both CLIENT and CONSULTANT shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this PROJECT.

7.4 CLIENT agrees that any and all limitations of CONSULTANT's liability or waivers of damages by CLIENT to CONSULTANT shall include and extend to those individuals and entities CONSULTANT retains for performance of the services

under this Agreement, including but not limited to CONSULTANT's officers, partners, and employees and their heirs and assigns, as well as CONSULTANT's subconsultants and their officers, employees, and heirs and assigns.

8. DISPUTE RESOLUTION

8.1 In the event of a disagreement arising out of or relating to this Agreement or the services provided hereunder, CLIENT and CONSULTANT agree to attempt to resolve any such disagreement through direct negotiations between senior, authorized representatives of each party. If any disagreement is not resolved by such direct negotiations, CLIENT and CONSULTANT further agree to consider using mutually acceptable non-binding mediation service in order to resolve any disagreement prior to proceeding to litigation.

9. SITE ACCESS

9.1 Right of Entry - Unless otherwise agreed, CLIENT will furnish right-of-entry on the land for CONSULTANT to make any surveys, borings, explorations, tests or similar field investigations. CONSULTANT will take reasonable precautions to limit damage to the land from use of equipment, but the cost for restoration of any damage that may result from such field investigations is not included in the agreed compensation for CONSULTANT. If restoration of the land is required greater than those included in the scope of work, upon mutual agreement this may be accomplished as a reimbursable additional service at cost plus ten percent.

9.2 Damage to Underground Structures - Reasonable care will be exercised in locating underground structures in the vicinity of proposed subsurface explorations. This may include contact with the local agency coordinating subsurface utility information and/or a review of plans provided by CLIENT or CLIENT representatives for the site to be investigated. CONSULTANT shall be entitled to rely upon any information or plans prepared or made available by others. In the absence of physically confirmed underground structure locations, CLIENT agrees to accept the risk of damage and costs associated with repair and restoration of damage resulting from the exploration work.

10. OIL AND HAZARDOUS MATERIALS

10.1 If, at any time, evidence of the existence or possible existence of asbestos, oil, or other hazardous materials or substances is discovered, outside of any agreed scope of work or greater than those anticipated in any agreed scope of work, CONSULTANT reserves the right to renegotiate the fees for CONSULTANT's services and CONSULTANT's continued involvement in the PROJECT. CONSULTANT will notify CLIENT as soon as practical if evidence of the existence or possible existence of such hazardous materials or substances is discovered.

10.2 The discovery of the existence or possible existence of hazardous materials or substances, outside or greater than any proposed in the agreed scope of work, may make it necessary for CONSULTANT to take accelerated action to protect human health and safety, and/or the environment. CLIENT agrees to compensate CONSULTANT for the cost of any and all measures that in its professional opinion are appropriate to preserve and/or protect the health and safety of the public, the environment, and/or CONSULTANT's personnel. To the full extent permitted by law, CLIENT waives any claims against CONSULTANT arising out of or in any way connected with the existence or possible existence of such hazardous materials substances at the site.

11. SITE INVESTIGATIONS

11.1 In soils, groundwater, soil gas, indoor air, or other investigations, conditions may vary between successive test points and sample intervals and for locations at or between where observations, exploration, and investigations have been made. Because of the variability of conditions and the inherent uncertainties in such evaluations, explorations, or investigations, changed or unanticipated conditions may occur that may affect overall PROJECT costs and/or execution. These variable conditions and related impacts on cost and PROJECT execution are not the responsibility of CONSULTANT.

11.2 CLIENT recognizes that special risks occur whenever engineering or related disciplines are applied to provide information regarding subsurface conditions. Even an agreed sampling and testing program, implemented with appropriate equipment and personnel with the assistance of a trained professional performing in accordance with the applicable professional standard of care, may provide data or information which differs significantly from that discovered or encountered subsequently. Environmental, geological, and geotechnical conditions, that CONSULTANT may infer to exist between sampling points may differ significantly from those discovered or encountered subsequently. The passage of time also should be considered, and CLIENT recognizes that due to natural occurrences or direct, or indirect human intervention at or near the site, actual conditions may quickly change. CONSULTANT shall not be responsible for the identification of emerging contaminants for which no current regulatory provisions exist nor shall CONSULTANT be held liable for not identifying or discussing these compounds even if those compounds are detected at a later date. CLIENT realizes that these risks cannot be eliminated. The services included in this agreement are those agreed to, or selected, consistent with CLIENT's risk preferences and other considerations including cost and schedule.

11.3 By authorizing CONSULTANT to proceed with the site investigation services, CLIENT confirms that CONSULTANT has not created nor contributed to the presence of any existing hazardous substances or conditions at or near the site. CLIENT recognizes that there is an inherent risk in drilling, borings, punching or driving probes, excavating trenches or implementing other methods of subsurface exploration at or near a site contaminated by hazardous materials. Further, CLIENT recognizes that these are inherent even through the exercise of the Standard of Care. CLIENT accepts the risk and hold CONSULTANT and each of CONSULTANT's subcontractors, consultants, officers, directors, and employees harmless against and all claims for damages, costs, or expenses direct or consequential, in connection with a release of hazardous substances, except to the extent that such claims, damages, or losses are adjudicated to have resulted from CONSULTANT's gross negligence or willful misconduct in the performance of the services.

12. FEDERAL AND STATE REGULATORY AGENCY AUDITS

12.1 For certain services rendered by CONSULTANT, documents filed with federal and state regulatory agencies may be audited after the date of filing. In the event that CLIENT's PROJECT is selected for an audit, CLIENT agrees to compensate CONSULTANT for time spent preparing for and complying with an agency request for information or

interviews in conjunction with such audit. CLIENT will be notified at the time of any such request by an agency, and CONSULTANT will invoice CLIENT based on its standard billing rates in effect at the time of the audit.

13. CLIENT's RESPONSIBILITIES

13.1 Unless otherwise stated in the Agreement, CLIENT will obtain, arrange, and pay for all notices, permits, and licenses required by local, state, or federal authorities; and CLIENT will make available the land, easements, rights-of-way, and access necessary for CONSULTANT's services or PROJECT implementation.

13.2 CLIENT will examine CONSULTANT's studies, reports, sketches, drawings, specifications, proposals, and other documents and communicate promptly to CONSULTANT in the event of disagreement regarding the contents of any of the foregoing. CLIENT, at its own cost, will obtain advice of an attorney, insurance counselor, accountant, auditor, bond and financial advisors, and other consultants as CLIENT deems appropriate; and render in writing decisions required by CLIENT in a timely manner.

14. OPINIONS OF COST, FINANCIAL ANALYSES, ECONOMIC FEASIBILITY PROJECTIONS, AND SCHEDULES

14.1 CONSULTANT has no control over cost or price of labor and materials required to implement CLIENT's PROJECT, unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs, competitive bidding procedures and market conditions, time or quality of performance by operating personnel or third parties, and other economic and operational factors that may materially affect the ultimate PROJECT cost or schedule. Therefore, CONSULTANT makes no warranty, expressed or implied, that CLIENT's actual PROJECT costs, financial aspects, economic feasibility, or schedules will not vary from any opinions, analyses, projections, or estimates which may be provided by CONSULTANT. If CLIENT wishes additional information as to any element of PROJECT cost, feasibility, or schedule, CLIENT at its own cost will employ an independent cost estimator, contractor, or other appropriate advisor.

15. CONSTRUCTION PHASE PROVISIONS

The following provisions shall be applicable should the CONSULTANT be retained to provide Construction Phase Services in connection with the PROJECT:

15.1 CLIENT and Contractor - The presence of CONSULTANT's personnel at a construction site, whether as onsite representatives or otherwise, does not make CONSULTANT or CONSULTANT's personnel in any way responsible for the obligations, duties, and responsibilities of the CLIENT and/or the construction contractors or other entities, and does not relieve the construction contractors or any other entity of their respective obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction contract documents and for providing and/or enforcing all health and safety precautions required for such construction work.

15.2 Contractor Control - CONSULTANT and CONSULTANT's personnel have no authority or obligation to monitor, to inspect, to supervise, or to exercise any control over any construction contractor or other entity or their employees in connection with their work or the health and safety precautions for the construction work and have no duty for inspecting, noting, observing, correcting, or reporting on

health or safety deficiencies of the construction contractor(s) or other entity or any other persons at the site except CONSULTANT's own personnel.

15.3 On-site Responsibility - The presence of CONSULTANT's personnel at a construction site is for the purpose of providing to CLIENT an increased degree of confidence that the completed construction work will conform generally to the construction documents and that the design concept as reflected in the construction documents generally has been implemented and preserved by the construction contractor(s). CONSULTANT neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.

15.4 Payment Recommendations - Recommendations by CONSULTANT to CLIENT for periodic construction progress payments to the construction contractor(s) are based on CONSULTANT's knowledge, information, and belief from selective observation that the work has progressed to the point indicated. Such recommendations do not represent that continuous or detailed examinations have been made by CONSULTANT to ascertain that the construction contractor(s) have completed the work in exact accordance with the construction documents; that the final work will be acceptable in all respects; that CONSULTANT has made an examination to ascertain how or for what purpose the construction contractor(s) have used the moneys paid; that title to any of the work, materials, or equipment has passed to CLIENT free and clear of liens, claims, security interests, or encumbrances; or that there are no other matters at issue between CLIENT and the construction contractors that affect the amount that should be paid.

15.5 Record Drawings - Record drawings, if required as part of CONSULTANT's agreed scope of work, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the PROJECT was finally constructed. CONSULTANT is not responsible for any errors or omissions in the information from others that are incorporated into the record drawings.

16. DESIGN WITHOUT CONSTRUCTION PHASE SERVICES

The following provisions shall be applicable should the CONSULTANT be retained to provide design services but not be retained to provide Construction Phase Services in connection with the PROJECT:

16.1 It is understood and agreed that the CONSULTANT's Scope of Services under this proposal does not include project observation or review of the Contractor's performance or any other construction phase services, and that such services will be provided by the CLIENT or others. The CLIENT assumes all responsibility for interpretation of the Contract Documents and for construction observation, and the CLIENT waives any claims against the CONSULTANT that may be in any way connected thereto from modifications, clarifications, interpretations, adjustments or changes made to the Contract Documents to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct of the CONSULTANT.

17. SCHEDULE

17.1 The CLIENT agrees that the CONSULTANT is not responsible for damages arising directly or indirectly from any delays for causes beyond the CONSULTANT's reasonable control. For purposes of this Agreement, such causes

include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters, pandemics, or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in timely manner; failure of performance by the CLIENT or the CLIENT's contractors or consultants.

17.2 The CONSULTANT's schedule includes reasonable allowances for review and approval times required by the CLIENT, performance of services by the CLIENT's consultants, and review and approval times required by public authorities having jurisdiction over the PROJECT. This schedule shall be equitably adjusted as the PROJECT progresses, allowing for changes in scope, character or size of the PROJECT requested by the Client, or for delays or other causes beyond the Consultant's reasonable control.

18. MISCELLANEOUS TERMS

18.1 GOVERNING LAW - The CLIENT and the CONSULTANT agree that this Agreement and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the jurisdiction where the PROJECT is located, without regard to any conflict of laws provisions, which may apply the laws of other jurisdictions.

18.2 CORPORATE PROTECTION - Notwithstanding anything to the contrary contained herein, the CLIENT agrees that as the CLIENT's sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against the CONSULTANT, a Massachusetts corporation, and not against any of the CONSULTANT's individual employees, officers or directors.

18.3 TITLES - The section headings used in this Agreement are intended principally for convenience and shall not be used in interpreting this Agreement or in determining any of the rights or obligations of the parties to this Agreement.

18.4 Upon execution, these terms as incorporated into the accompanying proposal represent the final intent of the parties. Any modification, rescission, or waivers of these terms shall only be effective and binding if agreed to in writing by the parties.

15 YEAR

A RESOLUTION AMENDING AND RESTATING A RESOLUTION ENTITLED “A RESOLUTION APPROPRIATING \$2,377,000 FOR THE PURCHASE OF VEHICLES AND EQUIPMENT FOR THE DEPARTMENT OF PUBLIC WORKS AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION,” TO ADD EQUIPMENT TO THE EXHIBIT A.

WHEREAS, on June 26, 2023, the Representative Town meeting (“RTM”) of the Town of Fairfield, Connecticut (the “Town”) approved a resolution entitled: “A RESOLUTION APPROPRIATING \$2,377,000 FOR THE PURCHASE OF VEHICLES AND EQUIPMENT FOR THE DEPARTMENT OF PUBLIC WORKS AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION” (the “Resolution”); and

WHEREAS, the Resolution included an authorization to appropriate and issue bonds in the amount of \$2,377,000 (the “Authorization”) for costs related to purchasing certain vehicles and equipment for the Town’s Department of Public Works; and

WHEREAS, the vehicles and equipment that the Town was seeking to purchase were listed on the Exhibit A attached to the Resolution (the “Equipment List”); and

WHEREAS, the Town seeks to add a John Deer 5105M Series 4WD Tractor with Tiger Model BB-18 boom mower (the “Added Item”) to the Equipment List, but does not need to increase the Authorization since some of the equipment on the Equipment List cost less than initially anticipated; and

WHEREAS, it is necessary for the Town to amend and restate the Resolution to reflect the Added Item on the Exhibit A; and

NOW THEREFORE, BE IT RESOLVED, that the Resolution is hereby amended and restated to provide as follows:

RESOLVED:

1. As recommended by the Board of Finance and the Board of Selectmen, the Town of Fairfield (the “Town”) hereby appropriates the sum of Two Million Three Hundred Seventy-Seven Thousand and 00/100 Dollars (\$2,377,000) for costs related to purchasing vehicles and equipment for the Department of Public Works, as listed on the Exhibit A attached hereto, as well as, all related administrative, financing, legal, contingency and other soft costs (the “Project”).
2. To finance such appropriation and in lieu of a tax therefor, and as recommended by the Board of Finance and the Board of Selectmen, the Town may borrow a sum not to exceed Two Million Three Hundred Seventy-Seven Thousand and 00/100 Dollars (\$2,377,000) and issue its general obligation bonds/bond anticipation notes for such indebtedness under its corporate name and seal and upon the full faith and credit of the Town in an amount not to exceed said sum for the purpose of financing the appropriation for the Project.

3. The Board of Selectmen, the Treasurer and the Fiscal Officer of the Town are hereby appointed a committee (the "Committee") with full power and authority to cause said bonds to be sold, issued and delivered; to determine their form and terms, including provision for redemption prior to maturity; to determine the aggregate principal amount thereof within the amount hereby authorized and the denominations and maturities thereof; to fix the time of issue of each series thereof and the rate or rates of interest thereon as herein provided; to determine whether the interest rate on any series will be fixed or variable and to determine the method by which the variable rate will be determined, the terms of conversion, if any, from one mode to another or from fixed to variable; to set whatever other terms of the bonds they deem necessary, desirable or appropriate; to designate the bank or trust company to certify the issuance thereof and to act as transfer agent, paying agent and as registrar for the bonds, and to designate bond counsel. The Committee shall have all appropriate powers under the Connecticut General Statutes, including Chapter 748 (Registered Public Obligations Act) and Chapter 109 (Municipal Bond Issues) to issue, sell and deliver the bonds and, further, shall have full power and authority to do all that is required under the Internal Revenue Code of 1986, as amended, and under rules of the Securities and Exchange Commission, and other applicable laws and regulations of the United States, to provide for issuance of the bonds in tax exempt form and to meet all requirements which are or may become necessary in and subsequent to the issuance and delivery of the bonds in order that the interest on the bonds be and remain exempt from Federal income taxes, including, without limitation, to covenant and agree to restriction on investment yield of bond proceeds, rebate of arbitrage earnings, expenditure of proceeds within required time limitations, the filing of information reports as and when required, and the execution of Continuing Disclosure Agreements for the benefit of the holders of the bonds and notes.
4. The First Selectwoman and Treasurer or Fiscal Officer, on behalf of the Town, shall execute and deliver such bond purchase agreements, reimbursement agreements, line of credit agreement, credit facilities, remarketing, standby marketing agreements, standby bond purchase agreements, and any other commercially necessary or appropriate agreements which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the sale and issuance of bonds, and if the Committee determines that it is necessary, appropriate, or desirable, the obligations under such agreements shall be secured by the Town's full faith and credit.
5. The First Selectwoman and Treasurer or Fiscal Officer shall execute on the Town's behalf such interest rate swap agreements or similar agreements related to the bonds for the purpose of managing interest rate risk which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the carrying or selling and issuance of the bonds, and if the Committee determines that it is necessary, appropriate or desirable, the obligations under such interest rate swap agreements shall be secured by the Town's full faith and credit.
6. The bonds may be designated "Public Improvement Bonds of the Town of Fairfield", series of the year of their issuance and may be issued in one or more series, and may be consolidated as part of the same issue with other bonds of the Town; shall be in serial form

maturing in not more than fifteen (15) annual installments of principal, the first installment to mature not later than three years from the date of issue and the last installment to mature not later than fifteen (15) years from the date of issuance or as otherwise provided by statute. The bonds may be sold at an aggregate sales price of not less than par and accrued interest at public sale upon invitation for bids to the responsible bidder submitting the bid resulting in the lowest true interest cost to the Town, provided that nothing herein shall prevent the Town from rejecting all bids submitted in response to any one invitation for bids and the right to so reject all bids is hereby reserved, and further provided that the Committee may sell the bonds on a negotiated basis, as provided by statute. Interest on the bonds shall be payable semi-annually or annually. The bonds shall be signed on behalf of the Town by at least a majority of the Board of Selectmen and the Treasurer, and shall bear the seal of the Town. The signing, sealing and certification of the bonds may be by facsimile as provided by statute.

7. The Committee is further authorized to make temporary borrowings as authorized by the General Statutes and to issue temporary notes of the Town in anticipation of the receipt of proceeds from the sale of the bonds to be issued pursuant to this resolution. Such notes shall be issued and renewed at such time and with such maturities, requirements and limitations as provided by the Connecticut General Statutes. Notes evidencing such borrowings shall be signed by the First Selectwoman and Treasurer or Fiscal Officer, have the seal of the Town affixed, which signing and sealing may be by facsimile as provided by statute, be certified by and payable at a bank or trust company incorporated under the laws of this or any other state, or of the United States, be approved as to their legality by bond counsel, and may be consolidated with the issuance of other Town bond anticipation notes. The Committee shall determine the date, maturity, interest rates, form and manner of sale, including negotiated sale, and other details of said notes consistent with the provisions of this resolution and the Connecticut General Statutes and shall have all powers and authority as set forth above in connection with the issuance of bonds and especially with respect to compliance with the requirements of the Internal Revenue Code of 1986, as amended, and regulations thereunder in order to obtain and maintain issuance of the notes in tax exempt form.
8. Pursuant to Section 1.150-2, as amended, of the Federal Income Tax Regulations the Town hereby declares its official intent to reimburse expenditures (if any) paid for the Project from its General or Capital Funds, such reimbursement to be made from the proceeds of the sale of bonds and notes authorized herein and in accordance with the time limitations and other requirements of said regulations.
9. The First Selectwoman, Fiscal Officer and Town Treasurer are hereby authorized, on behalf of the Town, to enter into agreements or otherwise covenant for the benefit of bondholders to provide information on an annual or other periodic basis to the Municipal Securities Rulemaking Board (the "MSRB") and to provide notices to the MSRB of material events as enumerated in Securities and Exchange Commission Exchange Act Rule 15c2-12, as amended, as may be necessary, appropriate or desirable to effect the sale of the bonds and notes authorized by this resolution.

10. The Committee is hereby authorized to take all action necessary and proper for the sale, issuance and delivery of the bonds and notes in accordance with the provisions of the Connecticut General Statutes and the laws of the United States. The First Selectwoman is authorized to negotiate and enter into grant agreements on behalf of the Town to fund the Project and to accept on behalf of the Town any grant to fund the Project. The First Selectwoman and other Town officials are authorized to seek grants and other contributions for the costs of the Project and take all such actions necessary or appropriate to obtain such grants and other contributions including execution and delivery of contracts related to such grants. Any such grants or contribution received prior to the issuance of the Bonds authorized herein shall be applied to the costs of the Project or to pay at maturity the principal of any outstanding bond anticipation notes issued pursuant this resolution and shall reduce the amount of the Bonds that can be issued pursuant to this resolution. If such grants and contributions are received after the issuance of the Bonds, they shall be applied to pay the principal on the Bonds or as otherwise authorized by the Board of Selectmen, Board of Finance and Representative Town Meeting provided such application does not adversely affect the tax exempt status of the Bonds or the Town's receipt of such grant or contribution.

EXHIBIT A

Three Year Replacement Plan	
<u>Equipment</u>	<u>Equipment Detail</u>
6-Wheel Dump Truck w/All Season Body & Snow Plow	Replacement Beyond Useful Life Unit #161
Ten Wheel Dump Truck w/ Sander & Snow Plow	Replacement Beyond Useful Life Unit #39
Flat Bed w/ Lift Gate	Replacement Frame & Bed Rotted Unit #211
Backhoe w/ Front and Rear Clam Buckets	Replacement Beyond Useful Life Unit #49
Excavator	New Addition Will be used when backhoes are too cumbersome.
Six Wheel Dump Truck w/ All Season Body & Snow Plow	Replacement Beyond Useful Life Unit #164
Bucket Lift Truck	Replacement Beyond Useful Life Unit #54
Refuse Truck	Replacement Beyond Useful Life Unit #260
6-Wheel Dump Truck w/All Season Body & Snow Plow	Replacement Beyond Useful Life Unit #166
Wheel Loader	Replacement Beyond Useful Life Unit #250
Brush Chipper	Replacement Beyond Useful Life Unit #300
John Deer 5105M Series 4WD Tractor with Tiger Model BB-18 boom mower.	New Addition

20 YEAR

A RESOLUTION APPROPRIATING \$973,090 FOR THE COSTS OF PRE-CONSTRUCTION SERVICES FOR PHASES II THROUGH V OF THE AIR CONDITIONING UPGRADE PROJECT AT VARIOUS SCHOOLS AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION.

Resolved:

1. As recommended by the Board of Selectmen and the Board of Finance, the Town of Fairfield appropriates Nine Hundred Seventy-three Thousand Ninety and 00/100 (\$973,090) Dollars to fund costs of pre-construction services for Phases II through V of the Air Conditioning Upgrade Project at Tomlinson Middle School, Fairfield Ludlowe High School, Fairfield Warde High School and Walter Fitzgerald High School, such costs to include, but not be limited to, planning, cost estimating, scheduling, design and engineering, as well as, all administrative, financing, legal, contingency and other soft costs related thereto (the "Project").
2. To finance such appropriation and in lieu of a tax thereof, and as recommended by the Board of Finance and the Board of Selectmen, the Town shall borrow a sum not to exceed Nine Hundred Seventy-three Thousand Ninety and 00/100 (\$973,090) Dollars and issue bonds for such indebtedness under its corporate name and seal and upon the full faith and credit of the Town in an amount not to exceed said sum for the purpose of financing the portion of the appropriation for the Project not paid for by the Grants.
3. The Board of Selectmen, the Treasurer and the Chief Fiscal Officer of the Town are hereby appointed a committee (the "Committee") with full power and authority to cause said bonds to be sold, issued and delivered; to determine their form and terms, including provisions for redemption prior to maturity; to determine the aggregate principal amount thereof within the amount hereby authorized and the denominations and maturities thereof; to fix the time of issue of each series thereof and the rate or rates of interest thereon as herein provided; to determine whether the interest rate on any series will be fixed or variable and to determine the method by which the variable rate will be determined, the terms of conversion, if any, from one interest rate mode to another or from fixed to variable; to set whatever other terms of the bonds they deem necessary, desirable or appropriate; to designate the bank or trust company to certify the issuance thereof and to act as transfer agent, paying agent and as registrar for the bonds, and to designate bond counsel. The Committee shall have all appropriate powers under the Connecticut General Statutes, as amended (the "Statutes") including Chapter 748 (Registered Public Obligations Act), and Chapter 109 (Municipal Bond Issues) to issue, sell and deliver the bonds and, further, shall have full power and authority to do all that is required under the Internal Revenue Code of 1986, as amended, and under rules of the Securities and Exchange Commission, and other applicable laws and regulations of the United States, to provide for issuance of the bonds in tax exempt form and to meet all requirements which are or may become necessary in and subsequent to the issuance and

delivery of the bonds in order that the interest on the bonds be and remain exempt from Federal income taxes, including, without limitation, to covenant and agree to restriction on investment yield of bond proceeds, rebate of arbitrage earnings, expenditure of proceeds within required time limitations, the filing of information reports as and when required, and the execution of Continuing Disclosure Agreements for the benefit of the holders of the bonds and notes.

4. The First Selectwoman and Treasurer or Chief Fiscal Officer, on behalf of the Town, shall execute and deliver such bond purchase agreements, reimbursement agreements, line of credit agreement, credit facilities, remarketing agreement, standby marketing agreements, bond purchase agreement, standby bond purchase agreements, and any other commercially necessary or appropriate agreements which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the sale and issuance of bonds, and if the Committee determines that it is necessary, appropriate, or desirable, the obligations under such agreements shall be secured by the Town's full faith and credit.
5. The First Selectwoman and Treasurer or Chief Fiscal Officer shall execute on the Town's behalf such interest rate swap agreements or similar agreements related to the bonds for the purpose of managing interest rate risk which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the carrying or selling and issuance of the bonds, and if the Committee determines that it is necessary, appropriate or desirable, the obligations under such interest rate swap agreements shall be secured by the Town's full faith and credit.
6. The bonds may be designated "Public Improvement Bonds of the Town of Fairfield," series of the year of their issuance and may be issued in one or more series, and may be consolidated as part of the same issue with other bonds of the Town; shall be in serial form maturing in not more than twenty (20) annual installments of principal, the first installment to mature not later than three (3) years from the date of issue and the last installment to mature not later than twenty (20) years from the date of issuance or as otherwise provided by statute. The bonds may be sold at an aggregate sales price of not less than par and accrued interest at public sale upon invitation for bids to the responsible bidder submitting the bid resulting in the lowest true interest cost to the Town, provided that nothing herein shall prevent the Town from rejecting all bids submitted in response to any one invitation for bids and the right to so reject all bids is hereby reserved, and further provided that the Committee may sell the bonds on a negotiated basis, as provided by statute. Interest on the bonds shall be payable semi-annually or annually. The bonds shall be signed on behalf of the Town by at least a majority of the Board of Selectmen and the Treasurer, and shall bear the seal of the Town. The signing, sealing and certification of the bonds may be by facsimile as provided by statute.
7. The Committee is further authorized to make temporary borrowings as authorized by the Statutes and to issue temporary notes of the Town in anticipation of the receipt of

proceeds from the sale of the bonds to be issued pursuant to this resolution or in anticipation of the receipt of the Grants. Such notes shall be issued and renewed at such time and with such maturities, requirements and limitations as provided by the Statutes. Notes evidencing such borrowings shall be signed by the First Selectwoman and Treasurer or the Chief Fiscal Officer, have the seal of the Town affixed, which signing and sealing may be by facsimile as provided by statute, be certified by and payable at a bank or trust company incorporated under the laws of this or any other state, or of the United States, be approved as to their legality by bond counsel, and may be consolidated with the issuance of other Town bond anticipation notes. The Committee shall determine the date, maturity, interest rates, form and manner of sale, including negotiated sale, and other details of said notes consistent with the provisions of this resolution and the Statutes and shall have all powers and authority as set forth above in connection with the issuance of bonds and especially with respect to compliance with the requirements of the Internal Revenue Code of 1986, as amended, and regulations thereunder in order to obtain and maintain issuance of the notes in tax exempt form.

8. Pursuant to Section 1.150-2, as amended, of the Federal Income Tax Regulations the Town hereby declares its official intent to reimburse expenditures (if any) paid for the Project from its General or Capital Funds, such reimbursement to be made from the proceeds of the sale of bonds and notes authorized herein and in accordance with the time limitations and other requirements of said regulations.
9. The First Selectwoman, the Chief Fiscal Officer and Town Treasurer are hereby authorized, on behalf of the Town, to enter into agreements or otherwise covenant for the benefit of bondholders to provide information on an annual or other periodic basis to the Municipal Securities Rulemaking Board (the "MSRB") and to provide notices to the MSRB of material events as enumerated in Securities and Exchange Commission Exchange Act Rule 15c2-12, as amended, as may be necessary, appropriate or desirable to effect the sale of the bonds and notes authorized by this resolution.
10. The Committee is hereby authorized to take all action necessary and proper for the sale, issuance and delivery of the bonds and notes in accordance with the provisions of the Statutes and the laws of the United States.
11. The First Selectwoman or other proper Town official is authorized to apply for and accept any available State or Federal grant in aid of the financing of the Project, and to take all action necessary and proper in connection therewith. Any such grants or contribution received prior to the issuance of the Bonds authorized herein shall be applied to the costs of the Project or to pay at maturity the principal of any outstanding bond anticipation notes issued pursuant this resolution and shall reduce the amount of the Bonds that can be issued pursuant to this resolution. If such grants and contributions are received after the issuance of the Bonds, they shall be applied to pay the principal on the Bonds or as otherwise authorized by the Board of Selectmen, Board of Finance and Representative Town Meeting provided such application does not adversely affect the tax-exempt status of the Bonds or the Town's receipt of such grant or contribution.

Fairfield Board of Education

Proposed Capital & Non-Recurring Projects

2024-2025



September 22, 2023
Updated: October 4, 2023
BOE Approved: October 10, 2023



FAIRFIELD PUBLIC SCHOOLS

October 4, 2023

Dear Board of Education Members:

This booklet provides an overview of the 2024-2025 Proposed Capital Project Requests and projects being reassigned to the Building Committee, pending BOS approval.

Capital Projects:

1. Districtwide Air Conditioning Upgrade Pre-Construction Project – Phase II-V
2. Holland Hill Elementary School Partial Roof Replacement
3. No. Stratfield Elementary School Roof Replacement Project
4. Roger Sherman Elementary School Boiler Burner Replacement (2) Project
5. Fairfield Ludlowe High School Bathroom Renovations (Cost Adjustment)

Projects being reassigned to the Building Committee pending BOS approval:

1. North Stratfield Elementary School Vestibule Project (Cost Adjustment)
2. Osborn Hill Elementary School Vestibule Project (Cost Adjustment)
3. Fairfield Woods Middle School Vestibule Project (Cost Adjustment)
4. Districtwide Air Conditioning Upgrade Project – Phase I (Cost Adjustment)

Information for each project is provided using the 12-point format devised by the Town of Fairfield and includes:

- Justification and background information;
- A cost estimate that includes previous project information, verbal quotations, and/or written proposals; and
- Photographs of projects in existing conditions

We hope you find this information helpful, and we are confident it will answer many of your questions as we begin the budget discussions. Thank you for your continued support.

Sincerely,



Michael J. Testani
Superintendent of Schools

Fairfield Public Schools 2024-2025 Capital & Non-Recurring Projects

Table of Contents

<u>Location</u>	<u>Project</u>	<u>Estimated Cost</u>	<u>Page</u>
Capital Projects			
Districtwide	Air Conditioning Upgrade Pre-Construction (Phase II-V)	\$ 973,090	1
Holland Hill Elementary School	Partial Roof Replacement	\$ 1,863,680	7
No. Stratfield Elementary School	Roof Replacement Project	\$ 4,422,800	13
Roger Sherman Elementary School	Boiler Burner Replacement (2) Project	\$ 1,048,706	19
Fairfield Ludlowe High School	Student Bathroom Renovation	\$ 1,061,000	25
Fairfield Ludlowe High School	Student Bathroom Renovation (2021-2022 Approved Bdgt.)	\$ 2,111,000	
Projects being reassigned to the Building Committee pending BOS approval:			
No. Stratfield Elementary School	Vestibule Project	\$ 189,100	31
No. Stratfield Elementary School	Vestibule Project (2023-2024 Approved Bdgt.)	\$ 652,500	
Osborn Hill Elementary School	Vestibule Project	\$ 201,400	37
Osborn Hill Elementary School	Vestibule Project (2023-2024 Approved Bdgt.)	\$ 597,500	
Fairfield Woods Middle School	Vestibule Project	\$ 240,000	43
Fairfield Woods Middle School	Vestibule Project (2023-2024 Approved Bdgt.)	\$ 769,500	
Districtwide	Air Conditioning Upgrade Project – Phase I	\$ 15,489,500	49
Districtwide	Air Conditioning Upgrade Project – Phase I (2022-2023 Approved Bdgt.)	\$ 22,701,443	
Total		\$ 25,489,276	

Capital Projects

Districtwide

Districtwide Air Conditioning Upgrade Pre-construction Project - Phase II -V \$973,090

Background: The Fairfield Board of Education has been working towards adding air-conditioning to all seventeen school buildings in the district. Burr, Holland Hill, McKinley, Mill Hill, Riverfield, Roger Sherman, Stratfield Elementary schools, and Roger Ludlowe Middle school have complete air-conditioning systems. Jennings, Dwight, North Stratfield, Osborn Hill, Elementary schools, Fairfield Woods and Tomlinson Middle schools, Fairfield Warde, Fairfield Ludlowe, and Walter Fitzgerald High schools have had portions of the buildings air-conditioned using integrated systems or split units. This funding request would allow the district to bring the remaining phases of the districtwide air conditioning from conceptual design to bid documents. This would help to ensure that further shortfalls in funding the remaining projects would not happen.

Purpose & Justification: The purpose of this project would be to bring the districtwide air conditioning projects phase II – V to bid documents aligning the district for eligibility for any additional funding that may become available from the state or federal level. This project is justified as it would begin to create equality among all district buildings in air-conditioned spaces. In addition, the lack of air-conditioning and the ability to bring fresh air into the building was found to be a significant deficiency during the current pandemic. This project would assist in improving the indoor air quality at non-air-conditioned buildings by reducing areas that can become conducive for mold growth during hot and humid days. Additionally, increasing air-conditioning and air movement in the buildings would increase the air that moves through our air filtration system.

Detailed Description: This expenditure would cover the cost to bring phase II – V from the current conceptual design to bid documents. Having bid documents would help us identify unforeseen details missed in phase I of this project and allow for a more detailed estimation to take place—making each of the remaining phases ready to bid for build-out.

Estimated Cost: The cost of this funding request is \$973,090. This number is based on the response from the town-issued RFP for architectural/engineering services for the project.

Long Range Costs: This design project would not carry any long range cost.

Security, Safety, and Loss Control: This design project would not carry Security, Safety, and Loss Control.

Environmental Considerations: The project would work to ensure that all new equipment will meet all regulatory standards.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. No State or Federal regulations are required for this project at this time. However, by

moving forward with this project would allow the district to align with any further funding opportunities that may become available.

Other Considerations: The Town Purchasing Department has bid out this work, which will be performed by an outside professionally licensed contractor. This project will be assigned to a building committee to oversee to ensure any future state reimbursement requirements are met.

Alternates to The Request: The alternative to this request would be to continue moving forward with the additional air conditioning phases independently. However, this may mean missing additional funding that becomes available and continuing to work with conceptual design project costs on the waterfall for the subsequent four project phases.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: DIST-015
 Project Name: AC Upgrade Preconstruction Phase 2-5

Non-Reoccurring Status

Project Description: 9/23 added preconstruction fees for BL & Gilbane

Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$0
Construction Escalation:	\$0
Total Construction Budget:	\$0
Escalation Date:	7/1/2021
Estimated Construction Start:	7/1/2024
Miscellaneous Fees and Expense	
- State Permits (.0026%)	\$0
- Testing & Inspections	
- Advertising	
Construction Admin	\$0
Commissioning	\$0
Hazardous Materials	\$0
Other	\$0
Subtotal Fees & Expenses:	\$0
Project Subtotal	\$0
Project Contingency 10%	\$0
Total Budget	\$973,090

OSCGR Eligible?

OSCGR Reimbursement

Action Items

1.00

Project Priority Ranking

- Security	0
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0

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Holland Hill Elementary School

Holland Hill Elementary School Partial Roof Replacement

\$1,863,680

Background: Holland Hill Elementary School was built in 1956, with additions and alterations in 1978, 2001 & 2018. The six built-up roof areas originally installed in 1991 and 1996 are now out of warranty and are approaching the end of life. The roof systems are showing signs of failure, and our roof preventative maintenance contractor has reported that it is time to replace these roofs before further damage increases rapidly. This request is for the funding of the replacement of these roofs.

Purpose & Justification: This project is intended to replace the parts of the roof at Holland Hill Elementary School, showing multiple areas of fatigue. The district has identified the roof as needing replacement on the roofing waterfall chart. The areas to be replaced were not part of the latest building alteration and addition project.

Detailed Description: This expenditure would cover the total costs for removing the five roof areas down to the existing roof deck and installing a new roofing system. These funds would also cover the bidding and construction administration costs and a contingency for unforeseen conditions that might be uncovered during construction activities. The replacement of a new roofing system will carry a minimum twenty-year warranty.

Estimated Cost: The cost of this funding request is \$1,863,680. This cost represents current industry standards based on design documents.

Long Range Costs: Roof replacements will reduce the maintenance costs on old roofs and produce energy savings through a better insulated roof system. This roof replacement project is part of the Fairfield Public Schools waterfall schedule, and the anticipated life of this upgrade is 20+ years with our current roof preventative maintenance program.

Demand on Existing Facilities: This project would reduce the maintenance costs for roof repairs and increase energy efficiency in the building.

Security, Safety, and Loss Control: The new roofing system will provide a dry and safe environment for optimum working and learning.

Environmental Considerations: The new roofing system would meet all new current codes and be consistent with the industry standard. It would also reduce greenhouse gases through increased energy efficiency.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. This project does qualify for reimbursement through the OSCG&R program.

Schedule, Phasing & Timing: The schedule for this project would be a bid in early 2024. This early bidding will facilitate the best pricing for the 2024 & 2025 summer recess project. All work would be performed and completed during the 2024 and 2025 summer recesses.

Other Considerations: The Town Purchasing Department will bid out this work, which will be awarded to a licensed professional contractor. The Town's attorney will review all contracts and advise the Board of Selectmen on executing contracts with the winning bidder. This project does require the formation of a Town of Fairfield Roof Building Committee to qualify for CT OSCG&R reimbursement.

Alternates to The Request: The alternate would be to keep performing regular maintenance and repairs to a failing infrastructure at a higher cost. Additionally, by not performing this work, we risk the ability to provide a dry and secure building. Not performing this work can potentially compromise the indoor air quality of the building.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: HH-001
 Project Name: Partial Roof Replacement

Non-Reoccurring Status

Project Description: 1/20/21added to waterfall
 Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$1,863,680
Construction Escalation:	\$0
Total Construction Budget:	\$1,863,680
Escalation Date:	7/1/2021
Estimated Construction Start:	7/1/2024
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$0
- Testing & Inspections	\$0
- Advertising	\$0
Construction Admin	\$0
Commissioning	\$0
Hazardous Materials	\$0
Other	\$0
Subtotal Fees & Expenses:	\$0
Project Subtotal	\$1,863,680
Project Contingency 10%	\$0
Total Budget	\$1,863,680

OSCGR Eligible? Yes
 OSCGR Reimbursement \$437,812

Action Items

1.00

Project Priority Ranking

- Security	0
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0

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Holland Hill Elementary School Partial Roof Replacement Project

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North Stratfield Elementary School

North Stratfield Elementary School Roof Replacement

\$4,422,800

Background: Fourteen roof areas are at the end of their useful lives and are in need of replacement. Ten roofs were installed in 1991, three roofs were installed in 1996, and one other was installed in 2000. These roofs are out of warranty as of 2016 and 2020, respectively. The roof systems are showing signs of failure, and our roof preventative maintenance contractor has reported that it is time to replace these roofs before further damage increases rapidly. This request is for the funding of the replacement of these roofs.

Purpose & Justification: The conditions of these fourteen roofs are declining, and leaks are increasing in frequency and severity. Replacing these roofs now will prevent the need to replace them in an emergency, thus preventing disruption to the school's learning environment.

Detailed Description: This expenditure would cover the total costs for removing the fourteen roof areas down to the existing roof deck and installing a new roofing system. These funds would also cover the bidding and construction administration costs and a contingency for unforeseen conditions that might be uncovered during construction activities. The replacement of a new roofing system will carry a minimum twenty-year warranty.

Estimated Cost: The cost of this funding request is \$ 4,422,800. This number was based on the estimate provided by Gilbane Construction Company, the construction management firm hired for this roof replacement project.

Long Range Costs: Roof replacements will reduce the maintenance costs on old roofs and produce energy savings through a better insulated roof system. This roof replacement project is part of the Fairfield Public Schools waterfall schedule, and the anticipated life of this upgrade is 20+ years with our current roof preventative maintenance program.

Demand on Existing Facilities: This project would reduce the maintenance costs for roof repairs and increase energy efficiency in the building.

Security, Safety, and Loss Control: The new roofing system will provide a dry and safe environment for optimum working and learning.

Environmental Considerations: The new roofing system would meet all new current codes and be consistent with the industry standard. It would also reduce greenhouse gases through increased energy efficiency.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. This project does qualify for reimbursement through the OSCG&R program.

Schedule, Phasing & Timing: The schedule for this project would be a bid in early 2024. This early bidding will facilitate the best pricing for the 2024 & 2025 summer recess project. All work would be performed and completed during the 2024 and 2025 summer recesses.

Other Considerations: The Town Purchasing Department will bid out this work, which will be awarded to a licensed professional contractor. The Town's attorney will review all contracts and advise the Board of Selectmen on executing contracts with the winning bidder. This project does require the formation of a Town of Fairfield Roof Building Committee to qualify for CT OSCG&R reimbursement.

Alternates to The Request: The alternate would be to keep performing regular maintenance and repairs to a failing infrastructure at a higher cost. Additionally, by not performing this work, we risk the ability to provide a dry and secure building. Not performing this work can potentially compromise the indoor air quality of the building.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: NS-002
 Project Name: Roof Replacement Project

Non-Reoccurring Status

Project Description: 1/20/21 increase amount 49,290
 9/23 revised per AC project budget

Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$0
Construction Escalation:	\$0
Total Construction Budget:	\$0
Escalation Date:	7/1/2021
Estimated Construction Start:	7/1/2024
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$0
- Testing & Inspections	\$0
- Advertising	\$0
Construction Admin	\$3,900
Commissioning	\$0
Hazardous Materials	\$0
Other	\$0
Subtotal Fees & Expenses:	\$3,900
Project Subtotal	\$3,900
Project Contingency 10%	\$390
Total Budget	\$4,422,800

OSCGR Eligible? Yes

OSCGR Reimbursement \$1,038,995

Action Items

1.00

Project Priority Ranking

- Security	
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0

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No. Stratfield Elementary School Roof Replacement Project

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Roger Sherman Elementary School

Boiler Burner Replacement (2) Project

\$1,048,706

Background: Roger Sherman Elementary School was constructed in 1963. In 2001, two nine-section Smith boilers were installed. At the time of installation, the dual-fuel sectional boilers were considered the standard for school buildings.

Purpose & Justification: The Roger Sherman Elementary School sectional boilers (2) show signs of failing. During the spring of 2023, our post-heating season inspection and cleaning were performed. The boilers were evaluated, and it was determined that they were failing and leaking in the boiler room.

Detailed Description: This expenditure would cover the total architectural design, permits, and construction cost. This expenditure includes removing the old equipment and moving the new equipment into place.

Estimated Cost: The cost of this funding request is \$972,461. This number was arrived at by using industry standards for construction pricing and working with some local boiler companies to find the best approach to handle this project, taking into account pricing from last year's Burr boiler project.

Long Range Costs: The only long-range cost would be routine maintenance of the boiler equipment handled in-house and by our town-bid PM contractor.

Demand on Existing Facilities: This project would consider two options. The first would be an in-kind equipment replacement while meeting newer efficiency codes. The second option would be to look at replacing the equipment with new high-efficiency equipment. The best option will be chosen when the project is bid out and space requirements are evaluated.

Security, Safety, and Loss Control: The new boilers would help reduce the possibility of lost school time and school equipment due to heat loss in the building during extremely cold winter days.

Environmental Considerations: New equipment would meet new energy efficiency requirements. This project also carries the potential for installing a single-fuel high-efficiency boiler system.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. No State or Federal regulations require this project to be undertaken, and this project is not eligible for reimbursement through OSCG&R.

Schedule, Phasing & Timing: The schedule for this project would be to have all the work completed during the summer recess of 2024, allowing for occupancy for the 2024-2025 school year with fully functioning boilers.

Other Considerations: The town Purchasing Department will bid out this work, and a licensed professional contractor will perform the job.

Alternates to The Request: This request would keep us performing regular maintenance and repairs to a failing infrastructure at a higher cost. By not performing this work, we risk the ability to heat the building. The leaking boilers also cause wet conditions in the boiler room.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: SHERM-002
 Project Name: Boiler/Burner Replacement

Non-Reoccurring Status Yes

Project Description: 1/20/21 added to waterfall
 9/22 moved from 23/24
 9/23 moved to FY24/25

Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$762,445
Construction Escalation:	\$95,294
Total Construction Budget:	\$857,739
Escalation Date:	7/1/2021
Estimated Construction Start:	7/1/2024
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$2,230
- Testing & Inspections	\$0
- Advertising	\$0
Construction Admin	\$8,577
Commissioning	\$8,577
Hazardous Materials	\$0
Other	\$0
Subtotal Fees & Expenses:	\$19,385
Project Subtotal	\$877,124
Project Contingency 10%	\$87,712
Total Budget	\$1,048,706

OSCGR Eligible?

OSCGR Reimbursement

Action Items

1.00

Project Priority Ranking

- Security	
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0
	0

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Roger Sherman Elementary School Boiler Burner Replacement Project

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Fairfield Ludlowe High School

Fairfield Ludlowe High School Student Bathroom Renovations **\$2,111,000**

Fairfield Ludlowe High School Student Bathroom Renovations Cost Adjustment **\$1061,000**

Fairfield Ludlowe High School Student Bathroom Renovations Total Project Cost **\$3,172,000**

Background: Fairfield Ludlowe High School was initially constructed in 1950 and underwent renovations and additions in 1963, 1972, 1995, 2005, and 2015. Over the years, the bathrooms have received cosmetic makeovers but have not received complete renovations in over seventy years. The bathrooms are becoming more challenging and cost-prohibitive to keep up and running.

Purpose & Justification: The Fairfield Ludlowe High School bathrooms have a failing infrastructure. The piping in the bathrooms has become older and brittle, causing leaks and increasing the cost of keeping them open and running safely for students. Also, many of the bathrooms do not meet the newer code requirements for ADA compliance. Many of the fixtures show signs of age and chipping, making them dangerous for students (along with the chipping of the paint on the tiles) and the paint chipping off the tiles.

Detailed Description: This expenditure would cover the total cost of the architectural design, permits, construction and renovation, and Certificate of Occupancy.

Estimated Cost: The cost of this funding request is **\$1,061,000**. This number was arrived at by going out to bid for this project.

Long Range Costs: The only long-range cost would be routine maintenance of student bathrooms.

Demand on Existing Facilities: This project would decrease the demand on facilities by having all new lower maintenance equipment, including, but not limited to, fixtures and behind-the-wall piping.

Security, Safety, and Loss Control: The newly renovated bathrooms would increase safety by offering new piping and fixtures, decreasing water leaks and possible injuries from old, broken, cracked fixtures. Security would also be incorporated in the design safe for locks down and student activities, providing new piping and fixtures to decrease water leaks and possible injuries from broken and cracked fixtures. The new designs incorporate enhanced safety features during lockdowns and student activities.

Environmental Considerations: This project will include a look at all environmental impacts and the ability to make the bathrooms energy efficient while keeping them operational for the constant daily use they receive.

Funding, Financing & Office of School Construction Grants Review (OSCG&R): This project would not proceed without funding approval. No State or Federal regulations require this project to be undertaken. This project is not eligible for reimbursement through OSCG&R.

Schedule, Phasing & Timing: This project's schedule would be to have all the work completed during the summer recess of 2021, allowing for occupancy for the 21-22 school year with fully functioning bathrooms.

Other Considerations: This work will be bid out by the Town Purchasing Department and performed by a licensed professional contractor.

Alternates to The Request: The alternative to this request would be to keep performing regular maintenance and repairs to failing infrastructure at a higher cost to the Board of Education's operating maintenance budget.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: FLHS-003
 Project Name: Renovate Student Bathrooms NR

Non-Reoccurring Status

Project Description: 9/22 prior to fy22/23
 9/23 Add'l funding due to bid fy21/22 \$2,111,000
 combined cost

Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$3,172,000
Construction Escalation:	\$0
Total Construction Budget:	\$3,172,000
Escalation Date:	7/1/2021
Estimated Construction Start:	7/1/2022
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$0
- Testing & Inspections	\$0
- Advertising	\$0
Construction Admin	\$0
Commissioning	\$0
Hazardous Materials	\$0
Other	\$0
Subtotal Fees & Expenses:	\$0
Project Subtotal	\$3,172,000
Project Contingency 10%	\$0
Total Budget	\$3,172,000

OSCGR Eligible? No

OSCGR Reimbursement

Action Items

1.00

Project Priority Ranking

- Security	
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0
	0

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Fairfield Ludlowe High School Student Bathroom Renovation Project

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Projects being reassigned to
Building Committee

Pending BOS approval

North Stratfield Elementary School

North Stratfield Elementary School Security Vestibule Project **\$652,500**

North Stratfield Elementary School Security Vestibule Project Cost Adjustment **\$189,100**

North Stratfield Elementary School Security Vestibule Total Project Cost **\$841,600**

Background: North Stratfield Elementary School was built in 1961, with renovations in 1996 and 2000. Beginning with the Riverfield addition/alteration project, the district has improved the building's main entrance security through the construction of a security vestibule. Consistent with the last three addition/alteration projects (Riverfield, Holland Hill, and Mill Hill), the district seeks to upgrade the main entrance security at North Stratfield concurrent with the Districtwide Air Conditioning Project – Phase I work at that facility.

Purpose & Justification: This project is intended to improve the main security of the building through the construction of a security vestibule.

Detailed Description: This expenditure would cover the cost of an architect and design plans along with permits and construction - further details of the project would require a private executive session meeting.

Estimated Cost: The cost of this funding request is **\$189,100**. This number adjustment was calculated based on industry standards and new industry pricing.

Long Range Costs: No significant long-range cost is associated with this project. Minor repairs and routine upkeep will be performed as needed.

Demand on Existing Facilities: This project would create a minimum impact on the district's current infrastructure.

Security, Safety, and Loss Control: The project would increase the safety of North Stratfield Elementary School to the same level as other comparable district buildings.

Environmental Considerations: This project would have no environmental impact.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. This project does qualify for reimbursement through the OSCG&R program.

Schedule, Phasing & Timing: The schedule for this project would coincide with Districtwide Air Conditioning Project – Phase I work at that facility.

Other Considerations: The Town Purchasing Department will bid out this work, which will be awarded to a licensed professional contractor. The Town's attorney will review all contracts and

advise the Board of Selectmen on executing contracts with the winning bidder. This project does require the formation of a Town of Fairfield Building Committee to qualify for CT OSCG&R reimbursement.

Alternates to The Request: If this request is not approved, we will continue to operate a building that does not meet the standard of other district buildings.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information	
Origination Date:	7/1/21
Project No:	NS-003
Project Name:	Entrance Vestibule Project
Non-Reoccurring Status	Yes
Project Description:	1/20/21 added to waterfall 9/22 moved from 25/26 9/8/22 combined design and construction monies into one year 9/22 plugged SPA estimate into worksheet. 9/23 add'l funding per AC project budget
Status:	

Project Budget	
Design Budget:	\$0
Construction Budget:	\$0
Construction Escalation:	\$0
Total Construction Budget:	\$0
Escalation Date:	9/20/2022
Estimated Construction Start:	7/1/2023
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$0
- Testing & Inspections	\$0
- Advertising	\$500
Construction Admin	\$7,500
Commissioning	\$0
Hazardous Materials	\$4,500
Other	\$0
Subtotal Fees & Expenses:	\$12,500
Project Subtotal	\$12,500
Project Contingency 10%	\$55,000
Total Budget	\$841,600
OSCGR Eligible?	Yes
OSCGR Reimbursement	\$197,707

Action Items	1.00
Project Priority Ranking	
- Security	
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0
	0

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No. Stratfield Elementary School Vestibule Project

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Osborn Hill Elementary School

<u>Osborn Hill Elementary School Security Vestibule Project</u>	<u>\$597,500</u>
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<u>Osborn Hill Elementary School Security Vestibule Project Cost Adjustment</u>	<u>\$201,400</u>
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<u>Osborn Hill Elementary School Security Vestibule Project Total Project Cost</u>	<u>\$798,900</u>
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Background: Osborn Hill Elementary School was built in 1958, with renovations in 1969, 1981, 1997, 2000, and 2009. Beginning with the Riverfield addition/alteration project, the district has improved the building's main entrance security through the construction of a security vestibule. Consistent with the last three addition/alteration projects (Riverfield, Holland Hill, and Mill Hill), the district seeks to upgrade the main entrance security at Osborn Hill concurrent with the Districtwide Air Conditioning Project – Phase I work at that facility.

Purpose & Justification: This project is intended to improve the main security of the building through the construction of a security vestibule.

Detailed Description: This expenditure would cover the cost of an architect, design plans, permits, and construction. Further details of the project would require a private executive session meeting.

Estimated Cost: The cost of this funding request is **\$201,400**. This number adjustment was calculated based on industry standards and new industry pricing.

Long Range Costs: No significant long-range cost is associated with this project. Minor repairs and routine upkeep will be performed as needed.

Demand on Existing Facilities: This project would create a minimum impact on the district's current infrastructure.

Security, Safety, and Loss Control: The project would increase the safety of Osborn Hill Elementary School to the same level as other comparable district buildings.

Environmental Considerations: This project would have no environmental impact.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. This project does qualify for reimbursement through the OSCG&R program.

Schedule, Phasing & Timing: The schedule for this project would coincide with the Districtwide Air Conditioning Project – Phase I work at that facility.

Other Considerations: The Town Purchasing Department will bid out this work, which will be awarded to a licensed professional contractor. The Town's attorney will review all contracts and advise the Board of Selectmen on executing contracts with the winning bidder.

This project does require the formation of a Town of Fairfield Building Committee to qualify for CT OSCG&R reimbursement.

Alternates to The Request: If this request is not approved, we will continue to operate a building that does not meet the standard of other district buildings.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: OH-005
 Project Name: Entrance Vestibule Project

Non-Reoccurring Status Yes

Project Description: 1/20/21 added to waterfall
 9/8/22 combined design and construction monies into one year
 9/22 plugged spa estimate in
 9/23 budget per AC project budget

Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$0
Construction Escalation:	\$0
Total Construction Budget:	\$0
Escalation Date:	9/20/2022
Estimated Construction Start:	7/1/2023
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$0
- Testing & Inspections	\$7,500
- Advertising	\$500
Construction Admin	\$0
Commissioning	\$0
Hazardous Materials	\$4,500
Other	\$0
Subtotal Fees & Expenses:	\$12,500
Project Subtotal	\$12,500
Project Contingency 10%	\$55,000
Total Budget	\$798,900

OSCGR Eligible?	Yes
OSCGR Reimbursement	\$187,676

Action Items

1.00

Project Priority Ranking

- Security	
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0
	0

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Osborn Hill Elementary School Vestibule Project

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Fairfield Woods Middle School

<u>Fairfield Woods Middle School Security Vestibule Project</u>	<u>\$769,500</u>
<u>Fairfield Woods Middle School Security Vestibule Project Cost Adjustment</u>	<u>\$240,000</u>
<u>Fairfield Woods Middle School Security Vestibule Total Project Cost</u>	<u>\$1,009,500</u>

Background: Fairfield Woods Middle School was built in 1954, with renovations in 1961, 1972, 1995, and 2011. Beginning with the Riverfield addition/alteration project, the district has improved the building's main entrance security through the construction of a security vestibule. Consistent with the last three addition/alteration projects (Riverfield, Holland Hill, and Mill Hill), the district seeks to upgrade the main entrance security at Fairfield Woods concurrent with the Districtwide Air Conditioning Project – Phase I work at that facility.

Purpose & Justification: This project is intended to improve the main security of the building through the construction of a security vestibule.

Detailed Description: This expenditure would cover the cost of an architect and design plans along with permits and construction - further details of the project would require a private executive session meeting.

Estimated Cost: The cost of this funding request is **\$240,000**. This number adjustment was calculated based on industry standards and new industry pricing.

Long Range Costs: No significant long-range cost is associated with this project. Minor repairs and routine upkeep will be performed as needed.

Demand on Existing Facilities: This project would create a minimum impact on the district's current infrastructure.

Security, Safety, and Loss Control: The project would increase the safety of Fairfield Woods Middle School to the same level as other comparable district buildings.

Environmental Considerations: This project would have no environmental impact.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. This project does qualify for reimbursement through the OSCG&R program.

Schedule, Phasing & Timing: The schedule for this project would coincide with Districtwide Air Conditioning Project – Phase I work at that facility.

Other Considerations: The Town Purchasing Department will bid out this work, which will be awarded to a licensed professional contractor. The Town's attorney will review all contracts and

advise the Board of Selectmen on executing contracts with the winning bidder. This project does require the formation of a Town of Fairfield Building Committee to qualify for CT OSCG&R reimbursement.

Alternates to The Request: If this request is not approved, we will continue to operate a building that does not meet the standard of other district buildings.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information	
Origination Date:	7/1/21
Project No:	FWMS-006
Project Name:	Entrance Vestibule Project
Non-Reoccurring Status	Yes
Project Description:	1/20/21 added to waterfall 9/22 moved from 29/30 9/22 plugged SPA estimate in 9/23 plugged add'l funds from AC project budget

Status:

Project Budget	
Design Budget:	\$0
Construction Budget:	\$650,000
Construction Escalation:	\$0
Total Construction Budget:	\$650,000
Escalation Date:	9/20/2022
Estimated Construction Start:	7/1/2023
Miscellaneous Fees and Expenses:	
- State Permits (.0026%)	\$0
- Testing & Inspections	\$0
- Advertising	\$0
Construction Admin	\$500
Commissioning	\$8,500
Hazardous Materials	\$5,500
Other	\$0
Subtotal Fees & Expenses:	\$14,500
Project Subtotal	\$664,500
Project Contingency 10%	\$65,000
Total Budget	\$1,009,500
OSGR Eligible?	Yes
OSGR Reimbursement	\$237,150

Action Items

1.00

Project Priority Ranking

- Security		
- Severity of Condition		0
- Code/Statutory		0
- Programmatic Need		0
- Constructability/Sequencing		0
		0

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Fairfield Woods Middle School Vestibule Project

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Districtwide Air-Conditioning Upgrade Project – Phase I

<u>Districtwide Air Conditioning Upgrade Project - Phase I</u>	<u>\$ 22,701,443</u>
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<u>Districtwide Air Conditioning Upgrade Project - Phase I Cost Adjustment</u>	<u>\$ 15,489,500</u>
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<u>Districtwide Air Conditioning Upgrade Project- Phase I Cost</u>	<u>\$ 38,190,943</u>
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Background: The Fairfield Board of Education has been working towards adding air-conditioning to all seventeen school buildings in the district. Burr, Holland Hill, McKinley, Mill Hill, Riverfield, Roger Sherman, Stratfield Elementary schools, and Roger Ludlowe Middle school have complete air-conditioning systems. Jennings, Dwight, North Stratfield, Osborn Hill, Elementary schools, Fairfield Woods and Tomlinson Middle schools, Fairfield Warde, Fairfield Ludlowe, and Walter Fitzgerald High schools have had portions of the buildings air-conditioned using integrated systems or split units. This phase I project would complete the air-conditioning at North Stratfield Elementary School, Osborn Hill Elementary School, and Fairfield Woods Middle School.

Purpose & Justification: The purpose of this project would be to add air-conditioning to North Stratfield Elementary School, Osborn Hill Elementary School, and Fairfield Woods Middle School. Currently, these buildings do not have a large project on the BOE waterfall chart. This project is justified as it would begin to create equality among all district buildings in air-conditioned spaces. In addition, the lack of air-conditioning and the ability to bring fresh air into the building was found to be a significant deficiency during the current pandemic. This project would assist in improving the indoor air quality at non-air-conditioned buildings by reducing areas that can become conducive for mold growth during hot and humid days. Additionally, increasing air-conditioning and air movement in the buildings would increase the air that moves through our air filtration system.

Detailed Description: This expenditure would cover the total cost of this project, and the cash flow distribution would occur over the next three years. (See attached Appendix 2) This funding request would cover all aspects of this project, from planning schematics to equipment installation. Additionally, this funding would cover necessary repairs/replacement/alterations required for the installation of AC - such as acoustic ceilings, LED lights, fire protection system alterations, and the addition of a fire suppression system where deficient. Lastly, this project funding would include commissioning and balancing the new AC system and updating the automated building controls systems where required.

Estimated Cost: The cost of this funding request is \$15,489,500. This number was adjusted based on the project being brought up to design document. The primary drivers for this increase were because of additional sq footage misses on the original scope, new electrical room addition at Fairfield Woods Middle School, Additional steel roof supported specified in the design along with additional Fire suppression system updates and modifications. This

number also considers a \$1,000,000 grant from the Town and a \$116,320 grant to the BOE. Along with an additional \$1,644,141 allocated to this project from the town.

Long Range Costs: This project would bring additional costs to the district operating budget to provide supplemental equipment needed to perform preventative maintenance. However, new equipment, and filter changes on existing equipment, will allow both to run more efficiently and will positively impact the electrical draw at each building.

Security, Safety, and Loss Control: This project will play a significant role in improving indoor air quality along with improvements in building conditions. This project will enable us to control building moisture and alleviate the safety hazards, unsafe buildings, and material loss created by mold.

Environmental Considerations: All new equipment will meet all regulatory standards.

Funding, Financing & OSCG&R: This project would not proceed without funding approval. There are no State or Federal regulations required for this project at this time. We will continue to look at possible state or federal grants that may help offset the cost of this project. In addition, the project will apply for reimbursement from OSCG&R. Additionally, the Town has committed \$1,000,000 to this project through their ARPA grant application, and the Board of Education has committed \$116,320 to this project through their ESSER II grant.

Other Considerations: The Town Purchasing Department will bid out this work performed by outside professionally licensed contractors. This project will be assigned to a building committee to oversee and meet the state reimbursement requirements.

Alternates to The Request: The alternative to this request would be to divide this project by building and add them to the Board of Education's waterfall over a period of time.

Fairfield Public Schools Long Term Facilities Plan

Project Summary Sheet

General Information

Origination Date: 7/1/21
 Project No: DIST-010
 Project Name: AC Upgrade Phase 1 (Woods/Osborn/North Stratfield)

Non-Reoccurring Status

Project Description: Woods 6,277,700
 Osborn 4,823,000 + 265,329 = 5,088,329
 North Stratfield 7,774,000 + 265,329 = 8,039,329

Status:

Project Budget

Design Budget:	\$0
Construction Budget:	\$19,405,358
Construction Escalation:	\$776,214
Total Construction Budget:	\$20,181,572
Escalation Date:	7/1/2021
Estimated Construction Start:	7/1/2022
Miscellaneous Fees and Expense	
- State Permits (.0026%)	\$52,472
- Testing & Inspections	\$0
- Advertising	\$0
Construction Admin	\$201,816
Commissioning	\$201,816
Hazardous Materials	\$0
Other	\$0
Subtotal Fees & Expenses:	\$456,103
Project Subtotal	\$20,637,675
Project Contingency 10%	\$2,063,768
Total Budget	\$38,190,943

OSCR Eligible? Yes

OSCR Reimbursement \$8,971,740

Action Items

1.00

Project Priority Ranking

- Security	0
- Severity of Condition	0
- Code/Statutory	0
- Programmatic Need	0
- Constructability/Sequencing	0
	0

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Districtwide Air Conditioning Upgrade Project – Phase I

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Fairfield Public Schools 10-year Waterfall

Working Document

ROW	Project #	Non-Recurring																October 5, 2023
				2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034 - 2039	Project Total	OSCGR Reimbursement	Estimated District Share
1				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	District Wide Total			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	District Wide Projects																	
7	DIST-001	Yes	IT Switch Replacement - Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	DIST-002	Yes	IT Server Network - HVAC Controls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	DIST-003	Yes	Security Infrastructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	DIST-004	Yes	Underground Oil Tank Removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	DIST-005	Yes	PV System Replacements &/or Upgrades	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$514,631	\$514,631	\$0	\$514,631
12	DIST-006		Tunnel Asbestos Abatement and Reinsulation Project	\$0	\$0	\$0	\$0	\$0	\$115,000	\$1,782,247	\$0	\$0	\$0	\$0	\$0	\$1,897,247	\$0	\$1,897,247
13	DIST-007	Yes	Elementary School Playground Replacements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	DIST-008	Yes	Aboveground Storage Tank (AST) Replacements	\$0	\$0	\$0	\$0	\$0	\$20,000	\$309,956	\$0	\$0	\$0	\$0	\$0	\$329,956	\$0	\$329,956
15	DIST-009	Yes	Retro-Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	DIST-010		AC Upgrade Phase 1 (Woods/Osborn/North Stratfield)	\$0	\$15,489,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,190,943	\$9,387,296	\$28,803,648
17	DIST-011		AC Upgrade Phase 2 (Tomlinson)	\$0	\$0	\$2,512,440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,512,440	\$617,555	\$1,894,885
18	DIST-012		AC Upgrade Phase 3 (Ludlow)	\$0	\$0	\$0	\$24,436,355	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,436,355	\$6,006,432	\$18,429,924
19	DIST-013		AC Upgrade Phase 4 (Walter Fitzgerald)	\$0	\$0	\$2,650,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,650,337	\$651,450	\$1,998,887
20	DIST-014		AC Upgrade Phase 5 (Warde)	\$0	\$0	\$0	\$0	\$0	\$29,425,444	\$0	\$0	\$0	\$0	\$0	\$0	\$29,425,444	\$7,232,745	\$22,192,699
21	DIST-015		AC Upgrade Preconstruction Phase 2-5	\$0	\$973,090	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$973,090	\$0	\$973,090
22	DIST-016		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	District Wide Projects			\$0	\$16,462,590	\$5,162,777	\$24,436,355	\$0	\$29,560,444	\$2,092,203	\$0	\$0	\$0	\$0	\$514,631	\$100,930,444	\$23,895,478	\$77,034,967
	Burr Elementary School																	
38	BUR-001		Roof Replacement Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39	BUR-002	Yes	Boiler/Burner Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$996,370	\$0	\$996,370
40	BUR-003	Yes	Entrance Vestibule Project	\$0	\$0	\$0	\$0	\$0	\$0	\$39,325	\$633,673	\$0	\$0	\$0	\$0	\$672,998	\$165,422	\$507,576
41	BUR-004	Yes	Elevator Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$687,115	\$0	\$0	\$0	\$687,115	\$0	\$687,115
42	BUR-005		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43	BUR-006		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
68	Burr Elementary School			\$0	\$0	\$0	\$0	\$0	\$0	\$39,325	\$633,673	\$687,115	\$0	\$0	\$0	\$2,356,483	\$165,422	\$2,191,060
	Dwight Elementary																	
69	DW-001	Yes	HVAC BMS Controls Upgrades (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
70	DW-002		Renovation Project or New	\$0	\$0	\$0	\$0	\$58,783,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,783,700	\$8,982,091	\$49,801,609
71	DW-003		Renovation Project or New - Planning	\$0	\$0	\$1,935,493	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,935,493	\$0	\$1,935,493
72	DW-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
99	Dwight Elementary			\$0	\$0	\$1,935,493	\$0	\$58,783,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,719,193	\$8,982,091	\$51,737,102

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ROW	Project #	Non-Recurring																October 5, 2023
				2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034 - 2039	Project Total	OSCGR Reimbursement	Estimated District Share
	Holland Hill Elementary																	
100	HH-001		Partial Roof Replacement	\$0	\$1,863,680	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,863,680	\$458,091	\$1,405,589
101	HH-002		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
102	HH-003		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
103	HH-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
130	Holland Hill Elementary			\$0	\$1,863,680	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,863,680	\$458,091	\$1,405,589
	Jennings Elementary																	
131	JEN-001		Additions and alterations (Scope To Be Determined)	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200,000	\$35,450,154	\$0	\$0	\$0	\$0	\$37,650,154	\$9,254,370	\$28,395,784
132	JEN-002		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
133	JEN-003		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
134	JEN-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
161	Jennings Elementary			\$0	\$0	\$0	\$0	\$0	\$0	\$2,200,000	\$35,450,154	\$0	\$0	\$0	\$0	\$37,650,154	\$9,254,370	\$28,395,784
	McKinley Elementary																	
162	MCK-001		Roofing Project	\$0	\$0	\$1,755,819	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,755,819	\$431,579	\$1,324,240
163	MCK-002	Yes	Entrance Vestibule Project	\$0	\$0	\$0	\$35,425	\$507,803	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$543,228	\$133,525	\$409,703
164	MCK-003		Boiler/Burner Replacement	\$0	\$0	\$0	\$0	\$0	\$89,554	\$1,387,887	\$0	\$0	\$0	\$0	\$0	\$1,477,441	\$0	\$1,477,441
165	MCK-004	0	HVAC Controls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
166	MCK-005		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
167	MCK-006		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
192	McKinley Elementary			\$0	\$0	\$1,755,819	\$35,425	\$507,803	\$89,554	\$1,387,887	\$0	\$0	\$0	\$0	\$0	\$3,776,488	\$565,103	\$3,211,385
	Mill Hill Elementary																	
193	MH-001		Mill Hill Addition Alteration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
194	MH-002		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
195	MH-003		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
196	MH-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
223	Mill Hill Elementary			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	North Stratfield																	
224	NS-001	0	AC Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
225	NS-002		Roof Replacement Project	\$0	\$4,422,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,422,800	\$1,087,120	\$3,335,680
226	NS-003	Yes	Entrance Vestibule Project	\$652,500	\$189,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$841,600	\$206,864	\$634,736
227	NS-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
228	NS-005		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
254	North Stratfield			\$652,500	\$4,611,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,264,400	\$1,293,984	\$3,970,416
	Osborn Hill ES																	
255	OH-001		Roof Replacement Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
256	OH-002	0	AC Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
257	OH-003	Yes	Renovate Student Bathrooms NR	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
258	OH-004		Additions and Renovations	\$0	\$0	\$0	\$0	\$0	\$398,854	\$6,181,359	\$0	\$0	\$0	\$0	\$0	\$6,580,213	\$1,617,410	\$4,962,804
259	OH-005	Yes	Entrance Vestibule Project	\$597,500	\$201,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$798,900	\$196,369	\$602,531
260	OH-006		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
261	OH-007		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
262	OH-008		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
286	Osborn Hill ES			\$597,500	\$201,400	\$0	\$0	\$0	\$398,854	\$6,181,359	\$0	\$0	\$0	\$0	\$0	\$7,379,113	\$1,813,779	\$5,565,335

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ROW	Project #	Non-Recurring																October 5, 2023
				2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034 - 2039	Project Total	OSCGR Reimbursement	Estimated District Share
288	Riverfield ES																	
289	RIV-001		Partial Roof Replacement	\$1,565,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,565,110	\$384,702	\$1,180,408
290	RIV-002		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
291	RIV-003			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
292	RIV-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
320	Riverfield ES			\$1,565,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,565,110	\$384,702	\$1,180,408
322	Roger Sherman ES																	
323	SHERM-001		Roof Replacement	\$1,916,647	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,916,647	\$471,110	\$1,445,537
324	SHERM-002	Yes	Boiler/Burner Replacement	\$0	\$1,048,706	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,048,706	\$0	\$1,048,706
325	SHERM-003	Yes	Entrance Vestibule Upgrades	\$0	\$0	\$0	\$35,425	\$507,803	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$543,228	\$133,525	\$409,703
326	SHERM-004	0	Controls Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
327	SHERM-005		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
328	SHERM-006		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
353	Roger Sherman ES			\$1,916,647	\$1,048,706	\$0	\$35,425	\$507,803	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,508,581	\$604,635	\$2,903,946
	Stratfield ES																	
354	STRAT-001		Roof Replacement Project	\$0	\$0	\$42,447	\$1,275,219	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,317,666	\$323,881	\$993,785
355	STRAT-002	Yes	Front Façade and Cornice Wall Painting NR	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,178	\$612,872	\$0	\$0	\$648,050	\$0	\$648,050
356	STRAT-003	Yes	HVAC BMS Controls Upgrade	\$0	\$0	\$0	\$25,000	\$358,365	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$383,365	\$0	\$383,365
357	STRAT-004	Yes	Elevator Replacement (1)	\$0	\$0	\$0	\$37,500	\$537,548	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$575,048	\$0	\$575,048
358	STRAT-005	Yes	Entrance Vestibule Project	\$0	\$0	\$0	\$0	\$0	\$0	\$38,350	\$617,960	\$0	\$0	\$0	\$0	\$656,310	\$161,320	\$494,990
359	STRAT-006		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
360	STRAT-007		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
361	STRAT-008		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
384	Stratfield ES			\$0	\$0	\$42,447	\$1,337,719	\$895,913	\$0	\$38,350	\$617,960	\$35,178	\$612,872	\$0	\$0	\$3,580,440	\$485,201	\$3,095,238
	Early Childhood Center																	
385	ECC-001	Yes	ECC Location 1 (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	\$418,857	\$0	\$0	\$0	\$443,857	\$0	\$443,857
386	ECC-002	Yes	ECC Location 2 (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	\$418,857	\$0	\$0	\$0	\$443,857	\$0	\$443,857
387	ECC-003		Redistricting Hold	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
388	ECC-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
415	Early Childhood Center			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$837,714	\$0	\$0	\$0	\$887,714	\$0	\$887,714
	Fairfield Woods Middle School																	
416	FWMS-001	Yes	Elevator Replacement (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
417	FWMS-002	0	Full AC Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
418	FWMS-003		Window & Siding Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82,500	\$1,382,226	\$0	\$0	\$0	\$1,464,726	\$0	\$1,464,726
419	FWMS-004		Renovate Student Bathrooms	\$0	\$0	\$0	\$0	\$1,510,412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,510,412	\$0	\$1,510,412
420	FWMS-005	Yes	Boiler/Burner Replacement	\$0	\$0	\$78,679	\$1,084,761	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,163,440	\$0	\$1,163,440
421	FWMS-006	Yes	Entrance Vestibule Project	\$769,500	\$240,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,009,500	\$248,134	\$761,366
422	FWMS-007		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
423	FWMS-008		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
446	Fairfield Woods Middle School			\$769,500	\$240,000	\$78,679	\$1,084,761	\$1,510,412	\$0	\$0	\$82,500	\$1,382,226	\$0	\$0	\$0	\$5,148,078	\$248,134	\$4,899,944

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ROW	Project #	Non-Recurring																October 5, 2023
				2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034 - 2039	Project Total	OSCGR Reimbursement	Estimated District Share
	Roger Ludlowe MS																	
447	RLMS-001	Yes	Cooling Tower Replacement (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
448	RLMS-002	0	Roof Replacement Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,969,972	\$730,016	\$2,239,956
449	RLMS-003	Yes	Fire Alarm Replacement	\$0	\$0	\$27,375	\$377,423	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$404,798	\$0	\$404,798
450	RLMS-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
451	RLMS-005		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
452	RLMS-006		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
477	Roger Ludlowe MS			\$0	\$0	\$27,375	\$377,423	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,374,770	\$730,016	\$2,644,754
	Tomlison MS																	
478	TMS-001	Yes	Flooring Replacement (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
479	TMS-002	0	New Windows	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
480	TMS-003	Yes	New Acoustical ceiling and lights	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
481	TMS-004	Yes	Boiler/Burner Replacements	\$0	\$0	\$0	\$0	\$0	\$85,731	\$1,381,441	\$0	\$0	\$0	\$0	\$0	\$1,467,172	\$0	\$1,467,172
482	TMS-005		Partial Roof Replacement	\$0	\$0	\$0	\$0	\$0	\$38,282	\$1,292,799	\$0	\$0	\$0	\$0	\$0	\$1,331,081	\$327,178	\$1,003,903
483	TMS-006	Yes	Elevator Replacement (2)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$749,347	\$0	\$0	\$0	\$749,347	\$0	\$749,347
484	TMS-007	0	Full AC Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
485	TMS-008		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
486	TMS-009		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
487	TMS-010		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
508	Tomlison MS			\$0	\$0	\$0	\$0	\$0	\$38,282	\$1,378,530	\$1,381,441	\$749,347	\$0	\$0	\$0	\$3,547,599	\$327,178	\$3,220,421
	Fairfield Ludlowe HS																	
509	FLHS-001	Yes	Tennis Court Replacement (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
510	FLHS-002	Yes	Emergency Generator Replacement (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
511	FLHS-003		Renovate Student Bathrooms NR	\$0	\$1,061,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,172,000	\$0	\$3,172,000
512	FLHS-004	0	AC Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
513	FLHS-005		Artificial Turf Replacement	\$0	\$0	\$0	\$0	\$0	\$100,000	\$1,549,779	\$0	\$0	\$0	\$0	\$0	\$1,649,779	\$0	\$1,649,779
514	FLHS-006		BMS Control Upgrades	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
515	FLHS-007		Partial Roof Replacement	\$0	\$0	\$7,194	\$216,139	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,332	\$54,895	\$168,437
516	FLHS-008	Yes	Elevator Modernization	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265,329	\$0	\$265,329
517	FLHS-009		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
518	FLHS-010		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
539	Fairfield Ludlowe HS			\$0	\$1,061,000	\$7,194	\$216,139	\$0	\$100,000	\$1,549,779	\$0	\$0	\$0	\$0	\$0	\$5,310,440	\$54,895	\$5,255,545
	Fairfield Warde HS																	
540	FWHS-001	Yes	Fitts House HVAC RTU#1 Replacement (NR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
541	FWHS-002		New A/C for Cafeteria	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
542	FWHS-003		Fitts House HVAC RTU#2&3 Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,094,485	\$0	\$1,094,485
543	FWHS-004		Renovate Bathrooms	\$0	\$0	\$0	\$0	\$144,703	\$2,156,882	\$0	\$0	\$0	\$0	\$0	\$0	\$2,301,585	\$0	\$2,301,585
544	FWHS-005		New Windows Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,248,272	\$6,248,272	\$1,535,819	\$4,712,453
545	FWHS-006	Yes	Replace Boiler/ Burner NR	\$0	\$0	\$356,517	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$356,517	\$0	\$356,517
546	FWHS-007		Knapps Hwy Tennis Courts & Basketball Courts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
547	FWHS-008	0	HVAC BMS Controls Upgrades	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
548	FWHS-009		Artificial Turf Replacement	\$0	\$0	\$0	\$0	\$0	\$100,000	\$1,549,779	\$0	\$0	\$0	\$0	\$0	\$1,649,779	\$0	\$1,649,779
549	FWHS-010		Partial Roof Replacement	\$0	\$0	\$7,194	\$216,139	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,332	\$54,895	\$168,437
550	FWHS-011	0	AC Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
551	FWHS-012		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
570	Fairfield Warde HS			\$0	\$0	\$363,711	\$216,139	\$144,703	\$2,256,882	\$1,549,779	\$0	\$0	\$0	\$0	\$6,248,272	\$11,873,971	\$1,590,714	\$10,283,257

Fairfield Public Schools 10-year Waterfall

Working Document

ROW	Project #	Non-Recurring																October 5, 2023
				2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034 - 2039	Project Total	OSCGR Reimbursement	Estimated District Share
	Walter Fitzgerald Campus																	
570	WFC-001		Purchase of Walter Fitzgerald Campus Building - 108 Biro	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
571	WFC-002	0	BMS Controls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
572	WFC-003		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
573	WFC-004		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
600	Walter Fitzgerald Campus			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
601	Waterfall Total			\$5,501,257	\$25,489,276	\$9,373,494	\$27,739,385	\$62,350,334	\$32,444,016	\$16,417,213	\$38,215,727	\$3,691,579	\$612,872	\$0	\$6,762,904	\$258,736,657	\$50,853,793	\$207,882,864
	YEAR			2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034 - 2039			
602	Capital Projects			\$3,481,757	\$23,810,070	\$8,910,923	\$26,143,851	\$60,438,815	\$32,424,016	\$15,943,851	\$35,532,654	\$1,382,226	\$0	\$0	\$6,248,272	\$243,193,336		
603	Non-Reoccurring Projects			\$2,019,500	\$1,679,206	\$462,571	\$1,595,534	\$1,911,519	\$20,000	\$473,362	\$2,683,074	\$2,309,353	\$612,872	\$0	\$514,631	\$15,543,321		
	OSCG&R Reimbursement - TOTAL			\$1,507,180	\$1,545,210	\$1,700,584	\$6,440,102	\$9,249,140	\$7,232,745	\$1,944,588	\$9,581,113	\$0	\$0	\$0	\$1,535,819	\$50,853,793		
	OSCG&R Reimbursement - CAPITAL			\$855,812	\$1,545,210	\$1,700,584	\$6,440,102	\$8,982,091	\$7,232,745	\$1,944,588	\$9,254,370	\$0	\$0	\$0	\$1,535,819	\$49,608,634		
	OSCG&R Reimbursement - NON-RECURRING			\$651,367	\$0	\$0	\$0	\$267,050	\$0	\$0	\$326,743	\$0	\$0	\$0	\$0	\$1,245,160		

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

Projects		FY 2024 - CURRENT YEAR			FY 2025			FY 2026			FY 2027		
NON-RECURRING (Under \$1 million)		Total Cost	Other Sources	Town Bonding	Total Cost	Other Sources	Town Bonding	Total Cost	Other Sources	Town Bonding	Total Cost	Other Sources	Town Bonding
Districtwide	Aboveground Storage Tank (AST) Replacements (Design)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Burr	Entrance Vestibule Project			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Burr	Elevator			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
McKinley	Entrance Vestibule Project			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,425	\$ -	\$ 35,425
North	Entrance Vestibule Project	\$ 652,500	\$ (153,284)	\$ 499,216	\$ 189,100	\$ (53,580)	\$ 135,520	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stratfield	Entrance Vestibule Project	\$ 597,500	\$ (140,364)	\$ 457,136	\$ 201,400	\$ (56,005)	\$ 145,395	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Osborn Hill	Entrance Vestibule Project			\$ -			\$ -	\$ -	\$ -	\$ -	\$ 35,425	\$ -	\$ 35,425
Roger	Entrance Vestibule Project			\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sherman	Front façade and Cornice Wall Painting			\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stratfield	HVAC BMS Controls Upgrade			\$ -			\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ 25,000
Stratfield	Elevator Replacement (1)			\$ -			\$ -	\$ -	\$ -	\$ -	\$ 37,500	\$ -	\$ 37,500
Stratfield	Entrance Vestibule Project			\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ECC	Location 1			\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ECC	Location 2			\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FWMS	Entrance Vestibule Project	\$ 769,500	\$ (180,769)	\$ 588,731	\$ 240,000	\$ (67,365)	\$ 172,635	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RLMS	Fire Alarm Replacement			\$ -			\$ -	\$ 27,375	\$ -	\$ 27,375	\$ 377,423	\$ -	\$ 377,423
TMS	Elevator Replacement (#2)			\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FLHS	Partial Roof Replacement			\$ -			\$ -	\$ 7,194	\$ -	\$ 7,194	\$ 216,138	\$ (54,895)	\$ 161,243
FWHS	Replace Boiler/Burner			\$ -			\$ -	\$ 356,517	\$ -	\$ 356,517	\$ -	\$ -	\$ -
FWHS	Partial Roof Replacement			\$ -			\$ -	\$ 7,194	\$ -	\$ 7,194	\$ 216,138	\$ (54,895)	\$ 161,243

TOTAL NON-RECURRING

\$2,019,500

\$ (474,417)

\$ 1,545,083

\$ 630,500

\$ (176,950)

\$ 453,550

\$ 398,280

\$ -

\$ 398,280

\$ 943,049

\$ (109,790)

\$ 833,259

TOTAL CAPITAL & NON-RECURRING (BOE Waterfall dated October 5, 2023)

\$ 14,171,028

\$ 17,515,003

\$ 13,963,969

\$ 9,960,108

*\$3,797,859 revenue from ARPA and 2023 end of year town funding

**Total project cost \$3,172,000

AC Phase I - Total Project Cost	\$ 38,190,900	
23 Town Account	\$ (3,797,859)	
24 Town Account	\$ (10,000,000)	
	\$ 24,393,041	\$ 12,196,521
Revenue in account		
ARPA - Town 2022	\$ 1,000,000	
Bonded 2023	\$ 1,153,717	
Transferred from Town EOY	\$ 1,644,142	
Total	\$ 3,797,859	
Grant	\$ 5,918,266	\$ 2,959,133

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

October 25, 2023

PROJECTS		FY 2028			FY 2029			FY 2030					
CAPITAL (Over \$1 million)		Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding
Dist.	Phase I A/C project (N. Stratfield, Osborn Hill, Fairfield Woods	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Dist.	AC Project Preconstruction Phases II-V	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Tom.	A/C Phase Two (Tomlinson Middle School)	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
FLHS	A/C Phase Three (Fairfield Ludlowe High School)	\$ 8,145,452	\$ (2,002,144)	\$ 6,143,308		\$ 8,145,452	\$ (2,002,144)	\$ 6,143,308		\$ -	\$ -	\$ -	
WFC	A/C Phase Four (Walter Fitzgerald)	\$ -	\$ -	\$ -		\$ 2,650,337	\$ (651,450.00)	\$ 1,998,887		\$ -	\$ -	\$ -	
FWHS	A/C Phase Five (Fairfield Warde High School)	\$ -	\$ -	\$ -		\$ 9,808,481	\$ (2,410,915)	\$ 7,397,566		\$ 9,808,481	\$ (2,410,915)	\$ 7,397,566	
Districtwide	PV System Replacements &/or Upgrades	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Districtwide	Tunnel Asbestos Abatement and Reinsulation Project (seed money)	\$ -	\$ -	\$ -		\$ 115,000	\$ -	\$ 115,000		\$ 1,782,247	\$ -	\$ 1,782,247	
Dwight	Renovation Project or New	\$ 19,594,567	\$ (2,994,030)	\$ 16,600,537		\$ 19,594,567	\$ (2,994,030)	\$ 16,600,537		\$ 19,594,566	\$ (2,994,030)	\$ 16,600,536	
Holland Hill	Partial Roof Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Jennings	Additions and alterations (Scope To Be Determined)	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ 2,200,000	\$ -	\$ 2,200,000	
McKinley	Roof Project	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
McKinley North	Boiler/Burner Replacement	\$ -	\$ -	\$ -		\$ 89,554	\$ -	\$ 89,554		\$ 1,387,887	\$ -	\$ 1,387,887	
Stratfield	Roof Replacement Project	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Osborn Hill	Additions and Renovations enclose walkway between bldg and annex	\$ -	\$ -	\$ -		\$ 398,854	\$ -	\$ 398,854		\$ 6,181,360	\$ (1,617,410)	\$ 4,563,950	
Riverfield	Partial Roof Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Roger Sherman	Partial Roof Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Roger Sherman	Boiler/Burner Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Stratfield	Roof Replacement Project	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
FWMS	Window & Siding Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
FWMS	Renovate Student Bathrooms	\$ 1,510,412	\$ -	\$ 1,510,412		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
FWMS	Boiler/Burner Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Tomlinson	Partial Roof Replacement	\$ -	\$ -	\$ -		\$ 38,282	\$ -	\$ 38,282		\$ 1,292,799	\$ (327,178)	\$ 965,621	
Tomlinson	Boiler/Burner Replacement	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ 85,731	\$ -	\$ 85,731	
FLHS	Renovate Student Bathrooms	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
FLHS	Artificial Turf Replacement	\$ -	\$ -	\$ -		\$ 100,000	\$ -	\$ 100,000		\$ 1,549,779	\$ -	\$ 1,549,779	
FWHS	Renovate Bathrooms	\$ 144,703	\$ -	\$ 144,703		\$ 2,156,882	\$ -	\$ 2,156,882		\$ -	\$ -	\$ -	
FWHS	New Window Project	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
FWHS	Artificial Turf Replacement	\$ -	\$ -	\$ -		\$ 100,000	\$ -	\$ 100,000		\$ 1,549,779	\$ -	\$ 1,549,779	
TOTAL CAPITAL		\$ 29,395,134	\$ (4,996,174)	\$ 24,398,960		\$ 43,197,409	\$ (8,058,539)	\$ 35,138,870		\$ 45,432,629	\$ (7,349,533)	\$ 38,083,096	

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

Projects		FY 2028				FY 2029				FY 2030			
NON-RECURRING (Under \$1 million)		Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding
Districtwide	Aboveground Storage Tank (AST) Replacements (Design)	\$ -		\$ -	\$ -	\$ 20,000		\$ -	\$ 20,000	\$ 309,956		\$ -	\$ 309,956
Burr	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ 39,325		\$ -	\$ 39,325
Burr	Elevator	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
McKinley	Entrance Vestibule Project	\$ 507,803		\$ (133,525)	\$ 374,278	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
North													
Stratfield	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Osborn Hill	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Roger													
Sherman	Entrance Vestibule Project	\$ 507,803		\$ (133,525)	\$ 374,278	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Stratfield	Front façade and Cornice Wall Painting	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Stratfield	HVAC BMS Controls Upgrade	\$ 358,365		\$ -	\$ 358,365	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Stratfield	Elevator Replacement (1)	\$ 537,548		\$ -	\$ 537,548	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Stratfield	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ 38,350		\$ -	\$ 38,350
ECC	Location 1	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
ECC	Location 2	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWMS	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
RLMS	Fire Alarm Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
TMS	Elevator Replacement (#2)	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FLHS	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWHS	Replace Boiler/Burner	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWHS	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -

TOTAL NON-RECURRING

\$ 1,911,519

\$ (267,050)

\$ 1,644,469

\$ 20,000

\$ -

\$ 20,000

\$ 387,631

\$ -

\$ 387,631

TOTAL CAPITAL & NON-RECURRING (BOE Waterfall dated October 5, 2023)

\$ 26,043,429

\$ 35,158,870

\$ 38,470,727

*\$3,797,859 revenue from ARPA and 2023 end of year town funding

**Total project cost \$3,172,000

AC Phase I - Total Project Cost

23 Town Account

24 Town Account

Revenue in account

ARPA - Town 2022

Bonded 2023

Transferred from Town EOY

Total

Grant

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

October 25, 2023

PROJECTS		FY 2031			FY 2032			FY 2033					
CAPITAL (Over \$1 million)		Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding
Dist.	Phase I A/C project (N. Stratfield, Osborn Hill, Fairfield Woods	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Dist.	AC Project Preconstruction Phases II-V	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Tom.	A/C Phase Two (Tomlinson Middle School)	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FLHS	A/C Phase Three (Fairfield Ludlowe High School)	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
WFC	A/C Phase Four (Walter Fitzgerald)	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWHS	A/C Phase Five (Fairfield Warde High School)	\$ 9,808,482		\$ (2,410,915)	\$ 7,397,567	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Districtwide	PV System Replacements &/or Upgrades	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Districtwide	Tunnel Asbestos Abatement and Reinsulation Project (seed money)	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Dwight	Renovation Project or New	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Holland Hill	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Jennings	Additions and alterations (Scope To Be Determined)	\$ 17,725,077		\$ (4,627,185)	\$ 13,097,892	\$ 17,725,077		\$ (4,627,185)	\$ 13,097,892	\$ -		\$ -	\$ -
McKinley	Roof Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
McKinley North	Boiler/Burner Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Stratfield	Roof Replacement Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Osborn Hill	Additions and Renovations enclose walkway between bldg and annex	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Riverfield	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Roger Sherman	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Roger Sherman	Boiler/Burner Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Stratfield	Roof Replacement Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWMS	Window & Siding Replacement	\$ 82,500		\$ -	\$ 82,500	\$ 1,382,226		\$ -	\$ 1,382,226	\$ -		\$ -	\$ -
FWMS	Renovate Student Bathrooms	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWMS	Boiler/Burner Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Tomlinson	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
Tomlinson	Boiler/Burner Replacement	\$ 1,381,441		\$ -	\$ 1,381,441	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FLHS	Renovate Student Bathrooms	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FLHS	Artificial Turf Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWHS	Renovate Bathrooms	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWHS	New Window Project	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
FWHS	Artificial Turf Replacement	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -
TOTAL CAPITAL		\$ 28,997,500		\$ (7,038,100)	\$ 21,959,399	\$ 19,107,303		\$ (4,627,185)	\$ 14,480,118	\$ -		\$ -	\$ -

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

Projects		FY 2031				FY 2032				FY 2033			
NON-RECURRING (Under \$1 million)		Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding	Total Cost		Other Sources	Town Bonding
Districtwide	Aboveground Storage Tank (AST) Replacements (Design)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Burr	Entrance Vestibule Project	\$ 633,673	\$ (165,422)	\$ 468,251	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Burr	Elevator	\$ -	\$ -	\$ -	\$ 687,115	\$ -	\$ -	\$ 687,115	\$ -	\$ -	\$ -	\$ -	\$ -
McKinley	Entrance Vestibule Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
North													
Stratfield	Entrance Vestibule Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Osborn Hill	Entrance Vestibule Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roger													
Sherman	Entrance Vestibule Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stratfield	Front façade and Cornice Wall Painting	\$ -	\$ -	\$ -	\$ 35,178	\$ -	\$ -	\$ 35,178	\$ 612,872	\$ -	\$ -	\$ 612,872	\$ -
Stratfield	HVAC BMS Controls Upgrade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stratfield	Elevator Replacement (1)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stratfield	Entrance Vestibule Project	\$ 617,960	\$ (161,320)	\$ 456,640	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ECC	Location 1	\$ 25,000	\$ -	\$ 25,000	\$ 418,857	\$ -	\$ -	\$ 418,857	\$ -	\$ -	\$ -	\$ -	\$ -
ECC	Location 2	\$ 25,000	\$ -	\$ 25,000	\$ 418,857	\$ -	\$ -	\$ 418,857	\$ -	\$ -	\$ -	\$ -	\$ -
FWMS	Entrance Vestibule Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RLMS	Fire Alarm Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TMS	Elevator Replacement (#2)	\$ -	\$ -	\$ -	\$ 749,347	\$ -	\$ -	\$ 749,347	\$ -	\$ -	\$ -	\$ -	\$ -
FLHS	Partial Roof Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FWHS	Replace Boiler/Burner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FWHS	Partial Roof Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

TOTAL NON-RECURRING \$ 1,301,633 \$ (326,742) \$ 974,891 \$ 2,309,354 \$ - \$ 2,309,354 \$ 612,872 \$ - \$ 612,872

TOTAL CAPITAL & NON-RECURRING (BOE Waterfall dated October 5, 2023)

\$ 22,934,290

\$ 16,789,472

\$ 612,872

*\$3,797,859 revenue from ARPA and 2023 end of year town funding

**Total project cost \$3,172,000

AC Phase I - Total Project Cost

- 23 Town Account
- 24 Town Account

- Revenue in account
 - ARPA - Town 2022
 - Bonded 2023
- Transferred from Town EOY
- Total

Grant

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

October 25, 2023

PROJECTS		FY 2034							Net Proof		
CAPITAL (Over \$1 million)		Total Cost		Other Sources	Town Bonding		Total Project Proof	Other Sources	Total Net Project Proof (Town Bonding)		
Dist.	Phase I A/C project (N. Stratfield, Osborn Hill, Fairfield Woods	\$ -		\$ -	\$ -	*	\$ 34,393,042	\$ (5,918,266)	\$ 28,474,776	\$	28,474,776
Dist.	AC Project Preconstruction Phases II-V	\$ -		\$ -	\$ -		\$ 973,090	\$ -	\$ 973,090	\$	973,090
Tom.	A/C Phase Two (Tomlinson Middle School)	\$ -		\$ -	\$ -		\$ 2,512,440	\$ (617,556)	\$ 1,894,884	\$	1,894,884
FLHS	A/C Phase Three (Fairfield Ludlowe High School)	\$ -		\$ -	\$ -		\$ 24,436,356	\$ (6,006,432)	\$ 18,429,924	\$	18,429,924
WFC	A/C Phase Four (Walter Fitzgerald)	\$ -		\$ -	\$ -		\$ 2,650,337	\$ (651,450)	\$ 1,998,887	\$	1,998,887
FWHS	A/C Phase Five (Fairfield Warde High School)	\$ -		\$ -	\$ -		\$ 29,425,444	\$ (7,232,745)	\$ 22,192,699	\$	22,192,699
Districtwide	PV System Replacements &/or Upgrades	\$ 514,631		\$ -	\$ 514,631		\$ 514,631	\$ -	\$ 514,631	\$	514,631
Districtwide	Tunnel Asbestos Abatement and Reinsulation Project (seed money)	\$ -		\$ -	\$ -		\$ 1,897,247	\$ -	\$ 1,897,247	\$	1,897,247
Dwight	Renovation Project or New	\$ -		\$ -	\$ -		\$ 60,719,193	\$ (8,982,090)	\$ 51,737,103	\$	51,737,103
Holland Hill	Partial Roof Replacement	\$ -		\$ -	\$ -		\$ 1,863,680	\$ (458,091)	\$ 1,405,589	\$	1,405,589
Jennings	Additions and alterations (Scope To Be Determined)	\$ -		\$ -	\$ -		\$ 37,650,154	\$ (9,254,370)	\$ 28,395,784	\$	28,395,784
McKinley	Roof Project	\$ -		\$ -	\$ -		\$ 1,755,819	\$ (431,579)	\$ 1,324,240	\$	1,324,240
McKinley North	Boiler/Burner Replacement	\$ -		\$ -	\$ -		\$ 1,477,441	\$ -	\$ 1,477,441	\$	1,477,441
Stratfield	Roof Replacement Project	\$ -		\$ -	\$ -		\$ 4,422,800	\$ (1,087,120)	\$ 3,335,680	\$	3,335,680
Osborn Hill	Additions and Renovations enclose walkway between bldg and annex	\$ -		\$ -	\$ -		\$ 6,580,214	\$ (1,617,410)	\$ 4,962,804	\$	4,962,804
Riverfield	Partial Roof Replacement	\$ -		\$ -	\$ -		\$ 1,565,110	\$ (384,702)	\$ 1,180,408	\$	1,180,408
Roger Sherman	Partial Roof Replacement	\$ -		\$ -	\$ -		\$ 1,916,647	\$ (471,110)	\$ 1,445,537	\$	1,445,537
Roger Sherman	Boiler/Burner Replacement	\$ -		\$ -	\$ -		\$ 1,048,706	\$ -	\$ 1,048,706	\$	1,048,706
Stratfield	Roof Replacement Project	\$ -		\$ -	\$ -		\$ 1,317,666	\$ (323,881)	\$ 993,785	\$	993,785
FWMS	Window & Siding Replacement	\$ -		\$ -	\$ -		\$ 1,464,726	\$ -	\$ 1,464,726	\$	1,464,726
FWMS	Renovate Student Bathrooms	\$ -		\$ -	\$ -		\$ 1,510,412	\$ -	\$ 1,510,412	\$	1,510,412
FWMS	Boiler/Burner Replacement	\$ -		\$ -	\$ -		\$ 1,163,440	\$ -	\$ 1,163,440	\$	1,163,440
Tomlinson	Partial Roof Replacement	\$ -		\$ -	\$ -		\$ 1,331,081	\$ (327,178)	\$ 1,003,903	\$	1,003,903
Tomlinson	Boiler/Burner Replacement	\$ -		\$ -	\$ -		\$ 1,467,172	\$ -	\$ 1,467,172	\$	1,467,172
FLHS	Renovate Student Bathrooms	\$ -		\$ -	\$ -	**	\$ 1,061,000	\$ -	\$ 1,061,000	\$	1,061,000
FLHS	Artificial Turf Replacement	\$ -		\$ -	\$ -		\$ 1,649,779	\$ -	\$ 1,649,779	\$	1,649,779
FWHS	Renovate Bathrooms	\$ -		\$ -	\$ -		\$ 2,301,585	\$ -	\$ 2,301,585	\$	2,301,585
FWHS	New Window Project	\$ 6,248,272		\$ (1,535,819)	\$ 4,712,453		\$ 6,248,272	\$ (1,535,819)	\$ 4,712,453	\$	4,712,453
FWHS	Artificial Turf Replacement	\$ -		\$ -	\$ -		\$ 1,649,779	\$ -	\$ 1,649,779	\$	1,649,779
TOTAL CAPITAL		\$ 6,762,903		\$ (1,535,819)	\$ 5,227,084		\$ 236,967,263	\$ (45,299,799)	\$ 191,667,463	\$	191,667,463

BOE - ANTICIPATED COST OF PROJECT SCHEDULE OF CASH FLOW FY24 TO FY34

Projects		FY 2034								
NON-RECURRING (Under \$1 million)		Total Cost		Other Sources	Town Bonding	Total Project Proof	Other Sources	Total Net Project Proof		
Districtwide	Aboveground Storage Tank (AST) Replacements (Design)	\$ -		\$ -	\$ -	\$ 329,956	\$ -	\$ 329,956	\$	329,956
Burr	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 672,998	\$ (165,422)	\$ 507,576	\$	507,576
Burr	Elevator	\$ -		\$ -	\$ -	\$ 687,115	\$ -	\$ 687,115	\$	687,115
McKinley North	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 543,228	\$ (133,525)	\$ 409,703	\$	409,703
Stratfield	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 841,600	\$ (206,864)	\$ 634,736	\$	634,736
Osborn Hill	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 798,900	\$ (196,369)	\$ 602,531	\$	602,531
Roger Sherman	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 543,228	\$ (133,525)	\$ 409,703	\$	409,703
Stratfield	Front façade and Cornice Wall Painting	\$ -		\$ -	\$ -	\$ 648,050	\$ -	\$ 648,050	\$	648,050
Stratfield	HVAC BMS Controls Upgrade	\$ -		\$ -	\$ -	\$ 383,365	\$ -	\$ 383,365	\$	383,365
Stratfield	Elevator Replacement (1)	\$ -		\$ -	\$ -	\$ 575,048	\$ -	\$ 575,048	\$	575,048
Stratfield	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 656,310	\$ (161,320)	\$ 494,990	\$	494,990
ECC	Location 1	\$ -		\$ -	\$ -	\$ 443,857	\$ -	\$ 443,857	\$	443,857
ECC	Location 2	\$ -		\$ -	\$ -	\$ 443,857	\$ -	\$ 443,857	\$	443,857
FWMS	Entrance Vestibule Project	\$ -		\$ -	\$ -	\$ 1,009,500	\$ (248,134)	\$ 761,366	\$	761,366
RLMS	Fire Alarm Replacement	\$ -		\$ -	\$ -	\$ 404,798	\$ -	\$ 404,798	\$	404,798
TMS	Elevator Replacement (#2)	\$ -		\$ -	\$ -	\$ 749,347	\$ -	\$ 749,347	\$	749,347
FLHS	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ 223,332	\$ (54,895)	\$ 168,437	\$	168,437
FWHS	Replace Boiler/Burner	\$ -		\$ -	\$ -	\$ 356,517	\$ -	\$ 356,517	\$	356,517
FWHS	Partial Roof Replacement	\$ -		\$ -	\$ -	\$ 223,332	\$ (54,895)	\$ 168,437	\$	168,437

TOTAL NON-RECURRING

\$ -

\$ -

\$ -

\$ -

\$ 10,534,338

\$ (1,354,949)

\$ 9,179,389

\$ 9,179,389

TOTAL CAPITAL & NON-RECURRING (BOE Waterfall dated October 5, 2023)

\$ 5,227,084

\$ 247,501,601

\$ (46,654,748)

\$ 200,846,852

\$ 200,846,852

*\$3,797,859 revenue from ARPA and 2023 end of year town funding

\$ 200,846,852

Total project cost \$3,172,000		AC Phase I upgrade revenue from ARPA Grant & EOY T:*	\$	3,797,859	\$	(3,469,030)	\$	328,873
		FLHS Bathrooms Funded in 2023	\$	2,111,000			\$	2,111,000
		Burr Roof Replacement funded in 2022	\$	996,370			\$	996,370
AC Phase I - Total Project Cost		RLMS Roof Replacement funded in 2023	\$	2,969,972	\$	(730,016)	\$	2,239,956
23 Town Account		FLHS Elevator Modernization funded in 2023	\$	265,329			\$	265,329
24 Town Account		Fitts House RTU#s 1, 2 \$ 3 funded in 2023	\$	1,094,485			\$	1,094,485
			\$	258,736,657	\$	(50,853,793)	\$	207,882,864

***Other Source amount different on waterfall

Revenue in account
ARPA - Town 2022
Bonded 2023
Transferred from Town EOY
Total

Grant

A RESOLUTION APPROPRIATING \$1,048,706 FOR THE COST OF THE ROGER SHERMAN ELEMENTARY SCHOOL BOILER BURNER REPLACEMENT PROJECT AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION

RESOLVED:

1. As recommended by the Board of Finance and the Board of Selectmen, the Town of Fairfield (the "Town") hereby appropriates the sum of One Million Forty-Eight Thousand Seven Hundred Six and 00/100 Dollars (\$1,048,706) for costs associated with the Roger Sherman Elementary School boiler burner project, which costs include, but are not limited to, design, construction, permitting, disposal of the existing equipment, and installation of the new equipment, and all administrative, financing, legal, contingency and other soft costs related to the Project (collectively the "Project").
2. To finance such appropriation and in lieu of a tax therefor, and as recommended by the Board of Finance and the Board of Selectmen, the Town may borrow a sum not to exceed One Million Forty-Eight Thousand Seven Hundred Six and 00/100 Dollars (\$1,048,706) and issue its general obligation bonds/bond anticipation notes for such indebtedness under its corporate name and seal and upon the full faith and credit of the Town in an amount not to exceed said sum for the purpose of financing the appropriation for the Project.
3. The Board of Selectmen, the Treasurer and the Chief Fiscal Officer of the Town are hereby appointed a committee (the "Committee") with full power and authority to cause said bonds to be sold, issued and delivered; to determine their form and terms, including provision for redemption prior to maturity; to determine the aggregate principal amount thereof within the amount hereby authorized and the denominations and maturities thereof; to fix the time of issue of each series thereof and the rate or rates of interest thereon as herein provided; to determine whether the interest rate on any series will be fixed or variable and to determine the method by which the variable rate will be determined, the terms of conversion, if any, from one mode to another or from fixed to variable; to set whatever other terms of the bonds they deem necessary, desirable or appropriate; to designate the bank or trust company to certify the issuance thereof and to act as transfer agent, paying agent and as registrar for the bonds, and to designate bond counsel. The Committee shall have all appropriate powers under the Connecticut General Statutes, as amended (the "Statutes") including Chapter 748 (Registered Public Obligations Act) and Chapter 109 (Municipal Bond Issues) to issue, sell and deliver the bonds and, further, shall have full power and authority to do all that is required under the Internal Revenue Code of 1986, as amended, and under rules of the Securities and Exchange Commission, and other applicable laws and regulations of the United States, to provide for issuance of the bonds in tax exempt form and to meet all requirements which are or may become necessary in and subsequent to the issuance and delivery of the bonds in order that the interest on the bonds be and remain exempt from Federal income taxes, including, without limitation, to

covenant and agree to restriction on investment yield of bond proceeds, rebate of arbitrage earnings, expenditure of proceeds within required time limitations, the filing of information reports as and when required, and the execution of Continuing Disclosure Agreements for the benefit of the holders of the bonds and notes.

4. The First Selectwoman and Treasurer or Chief Fiscal Officer, on behalf of the Town, shall execute and deliver such bond purchase agreements, reimbursement agreements, line of credit agreement, credit facilities, remarketing, standby marketing agreements, standby bond purchase agreements, and any other commercially necessary or appropriate agreements which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the sale and issuance of bonds, and if the Committee determines that it is necessary, appropriate, or desirable, the obligations under such agreements shall be secured by the Town's full faith and credit.
5. The First Selectwoman and Treasurer or Chief Fiscal Officer shall execute on the Town's behalf such interest rate swap agreements or similar agreements related to the bonds for the purpose of managing interest rate risk which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the carrying or selling and issuance of the bonds, and if the Committee determines that it is necessary, appropriate or desirable, the obligations under such interest rate swap agreements shall be secured by the Town's full faith and credit.
6. The bonds may be designated "Public Improvement Bonds of the Town of Fairfield", series of the year of their issuance and may be issued in one or more series, and may be consolidated as part of the same issue with other bonds of the Town; shall be in serial form maturing in not more than twenty (20) annual installments of principal, the first installment to mature not later than three years from the date of issue and the last installment to mature not later than twenty (20) years from the date of issuance or as otherwise provided by statute. The bonds may be sold at an aggregate sales price of not less than par and accrued interest at public sale upon invitation for bids to the responsible bidder submitting the bid resulting in the lowest true interest cost to the Town, provided that nothing herein shall prevent the Town from rejecting all bids submitted in response to any one invitation for bids and the right to so reject all bids is hereby reserved, and further provided that the Committee may sell the bonds on a negotiated basis, as provided by statute. Interest on the bonds shall be payable semi-annually or annually. The bonds shall be signed on behalf of the Town by at least a majority of the Board of Selectmen and the Treasurer, and shall bear the seal of the Town. The signing, sealing and certification of the bonds may be by facsimile as provided by statute.
7. The Committee is further authorized to make temporary borrowings as authorized by the Statutes and to issue temporary notes of the Town in anticipation of the receipt of proceeds from the sale of the bonds to be issued pursuant to this resolution. Such notes shall be issued and renewed at such time and with such maturities, requirements and limitations as provided by the Statutes. Notes evidencing such borrowings shall be signed by the First Selectwoman and Treasurer or Chief Fiscal Officer, have the seal of the Town affixed, which signing and sealing may be by facsimile as provided by statute, be certified by and

payable at a bank or trust company incorporated under the laws of this or any other state, or of the United States, be approved as to their legality by bond counsel and may be consolidated with the issuance of other Town bond anticipation notes. The Committee shall determine the date, maturity, interest rates, form and manner of sale, including negotiated sale, and other details of said notes consistent with the provisions of this resolution and the Statutes and shall have all powers and authority as set forth above in connection with the issuance of bonds and especially with respect to compliance with the requirements of the Internal Revenue Code of 1986, as amended, and regulations thereunder in order to obtain and maintain issuance of the notes in tax exempt form.

8. Pursuant to Section 1.150-2, as amended, of the Federal Income Tax Regulations the Town hereby declares its official intent to reimburse expenditures (if any) paid for the Project from its General or Capital Funds, such reimbursement to be made from the proceeds of the sale of bonds and notes authorized herein and in accordance with the time limitations and other requirements of said regulations.
9. The First Selectwoman, Chief Fiscal Officer and Town Treasurer are hereby authorized, on behalf of the Town, to enter into agreements or otherwise covenant for the benefit of bondholders to provide information on an annual or other periodic basis to the Municipal Securities Rulemaking Board (the "MSRB") and to provide notices to the MSRB of material events as enumerated in Securities and Exchange Commission Exchange Act Rule 15c2-12, as amended, as may be necessary, appropriate or desirable to effect the sale of the bonds and notes authorized by this resolution.
10. The Committee is hereby authorized to take all action necessary and proper for the sale, issuance and delivery of the bonds and notes in accordance with the provisions of the Statutes and the laws of the United States.
11. The First Selectwoman or other proper Town official, including the Board of Education, is authorized to apply for and accept any available State or Federal grant in aid of the financing of the Project, and to take all action necessary and proper in connection therewith. Any such grants or contribution received prior to the issuance of the bonds authorized herein shall be applied to the costs of the Project or to pay at maturity the principal of any outstanding bond anticipation notes issued pursuant this resolution and shall reduce the amount of the bonds that can be issued pursuant to this resolution. If such grants and contributions are received after the issuance of the bonds, they shall be applied to pay the principal on the bonds or as otherwise authorized by the Board of Selectmen, Board of Finance and Representative Town Meeting provided such application does not adversely affect the tax-exempt status of the bonds or the Town's receipt of such grant or contribution.

20 YEAR

A RESOLUTION AMENDING AND RESTATING A RESOLUTION ENTITLED “A RESOLUTION APPROPRIATING \$3,653,150 FOR THE COSTS OF VARIOUS BOARD OF EDUCATION CAPITAL PROJECTS AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION” TO INCREASE THE APPROPRIATION AND BOND AUTHORIZATION BY \$1,061,000 TO A TOTAL OF \$4,714,150.

WHEREAS, on March 22, 2021, the Representative Town Meeting (“RTM”) of the Town of Fairfield, Connecticut (the “Town”) approved a resolution entitled: “A RESOLUTION APPROPRIATING \$3,653,150 FOR THE COSTS OF VARIOUS BOARD OF EDUCATION CAPITAL PROJECTS AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION” (the “Resolution”); and

WHEREAS, the Resolution included an authorization to appropriate and issue bonds in the amount of \$2,111,000 for the Fairfield Ludlowe High School Bathroom Renovations Project (the “Ludlowe Project”); and

WHEREAS, the cost of the Ludlowe Project will be \$1,061,000 more than originally anticipated for a total cost of \$3,172,000; and

WHEREAS, the Town seeks to increase the appropriation and bond authorization for the Ludlowe Project from \$2,111,000 to \$3,172,000 and the total appropriation and bond authorization in the Resolution from \$3,653,150 to \$4,714,150 (the “Amended Appropriation and Bond Authorization”); and

WHEREAS, it is necessary for the Town to amend and restate the Resolution to reflect the Amended Appropriation and Bond Authorization; and

NOW THEREFORE, BE IT RESOLVED, that the Resolution is hereby amended and restated to provide as follows:

Resolved:

1. As recommended by the Board of Finance and the Board of Selectmen, the Town of Fairfield hereby appropriates the sum of Four Million Seven Hundred Fourteen Thousand One Hundred-Fifty and 00/100 Dollars (\$4,714,150.00) to fund all costs associated with various Board of Education capital projects described on **Exhibit A** attached hereto, inclusive of planning, design and engineering fees, other professional fees, demolition, construction and oversight costs and temporary and permanent financing costs (collectively, the “Projects”), in the amount of such appropriation allocated to each Project as set forth in **Exhibit A**. Any reallocation of unused bond proceeds from one project category listed as items 1-2 on **Exhibit A** to a different project category listed on

Exhibit A that would cause the cost of such project to exceed the cost listed on **Exhibit A** shall require approval by the Board of Selectmen, Board of Finance, and the Representative Town Meeting.

2. To finance such appropriation, and as recommended by the Board of Finance and the Board of Selectmen, the Town of Fairfield shall borrow a sum not to exceed Four Million Seven Hundred Fourteen Thousand One Hundred-Fifty and 00/100 Dollars (\$4,714,150.00) and issue bonds/bond anticipation notes for such indebtedness under its corporate name and seal and upon the full faith and credit of the Town in an amount not to exceed said sum for the purpose of financing the appropriation for the Projects.
3. The Board of Selectmen, the Treasurer and the Chief Fiscal Officer of the Town are hereby appointed a committee (the "Committee") with full power and authority to cause said bonds to be sold, issued and delivered; to determine their form and terms, including provision for redemption prior to maturity; to determine the aggregate principal amount thereof within the amount hereby authorized and the denominations and maturities thereof; to fix the time of issue of each series thereof and the rate or rates of interest thereon as herein provided; to determine whether the interest rate on any series will be fixed or variable and to determine the method by which the variable rate will be determined, the terms of conversion, if any, from one interest rate mode to another or from fixed to variable; to set whatever other terms of the bonds they deem necessary, desirable or appropriate; to designate the bank or trust company to certify the issuance thereof and to act as transfer agent, paying agent and as registrar for the bonds, and to designate bond counsel. The Committee shall have all appropriate powers under the Connecticut General Statutes, including Chapter 748 (Registered Public Obligations Act), Chapter 173 (School Building Projects) and Chapter 109 (Municipal Bond Issues) to issue, sell and deliver the bonds and, further, shall have full power and authority to do all that is required under the Internal Revenue Code of 1986, as amended, and under rules of the Securities and Exchange Commission, and other applicable laws and regulations of the United States, to provide for issuance of the bonds in tax exempt form and to meet all requirements which are or may become necessary in and subsequent to the issuance and delivery of the bonds in order that the interest on the bonds be and remain exempt from Federal income taxes, including, without limitation, to covenant and agree to restriction on investment yield of bond proceeds, rebate of arbitrage earnings, expenditure of proceeds within required time limitations, the filing of information reports as and when required, and the execution of Continuing Disclosure Agreements for the benefit of the holders of the bonds and notes.
4. The First Selectman and Treasurer or Chief Fiscal Officer, on behalf of the Town, shall execute and deliver such bond purchase agreements, reimbursement agreements, line of credit agreement, credit facilities, remarketing agreement, standby marketing agreements, bond purchase agreement, standby bond purchase agreements, and any other commercially necessary or appropriate agreements which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the sale and issuance of bonds, and if the Committee determines that it is necessary, appropriate, or

desirable, the obligations under such agreements shall be secured by the Town's full faith and credit.

5. The First Selectwoman and Treasurer or Chief Fiscal Officer shall execute on the Town's behalf such interest rate swap agreements or similar agreements related to the bonds for the purpose of managing interest rate risk which the Committee determines are necessary, appropriate or desirable in connection with or incidental to the carrying or selling and issuance of the bonds, and if the Committee determines that it is necessary, appropriate or desirable, the obligations under such interest rate swap agreements shall be secured by the Town's full faith and credit.
6. The bonds may be designated "Public Improvement Bonds," series of the year of their issuance and may be issued in one or more series, and may be consolidated as part of the same issue with other bonds of the Town; shall be in serial form maturing in not more than twenty (20) annual installments of principal, the first installment to mature not later than three (3) years from the date of issue and the last installment to mature not later than twenty (20) years from the date of issue. The bonds may be sold at an aggregate sales price of not less than par and accrued interest at public sale upon invitation for bids to the responsible bidder submitting the bid resulting in the lowest true interest cost to the Town, provided that nothing herein shall prevent the Town from rejecting all bids submitted in response to any one invitation for bids and the right to so reject all bids is hereby reserved, and further provided that the Committee may sell the bonds on a negotiated basis, as provided by statute. Interest on the bonds shall be payable semi-annually or annually. The bonds shall be signed on behalf of the Town by at least a majority of the Board of Selectmen and the Treasurer, and shall bear the seal of the Town. The signing, sealing and certification of the bonds may be by facsimile as provided by statute.
7. The Committee is further authorized to make temporary borrowings as authorized by the General Statutes and to issue temporary notes of the Town in anticipation of the receipt of proceeds from the sale of the bonds to be issued pursuant to this resolution. Such notes shall be issued and renewed at such time and with such maturities, requirements and limitations as provided by the Connecticut General Statutes. Notes evidencing such borrowings shall be signed by the First Selectman and Treasurer or Chief Fiscal Officer, have the seal of the Town affixed, which signing and sealing may be by facsimile as provided by statute, be certified by and payable at a bank or trust company incorporated under the laws of this or any other state, or of the United States, be approved as to their legality by bond counsel, and may be consolidated with the issuance of other Town bond anticipation notes. The Committee shall determine the date, maturity, interest rates, form and manner of sale, including negotiated sale, and other details of said notes consistent with the provisions of this resolution and the General Statutes and shall have all powers and authority as set forth above in connection with the issuance of bonds and especially with respect to compliance with the requirements of the Internal Revenue Code of 1986, as amended, and regulations thereunder in order to obtain and maintain issuance of the notes in tax exempt form.

8. Pursuant to Section 1.150-2 of the Federal Income Tax Regulations, as amended, the Town hereby declares its official intent to reimburse expenditures (if any) paid for the Projects from its General or Capital Funds, such reimbursement to be made from the proceeds of the sale of bonds and notes authorized herein and in accordance with the time limitations and other requirements of said regulations.
9. The First Selectman, Chief Fiscal Officer and Town Treasurer are hereby authorized, on behalf of the Town, to enter into agreements or otherwise covenant for the benefit of bondholders to provide information on an annual or other periodic basis to the Municipal Securities Rulemaking Board (the "MSRB") and to provide notices to the MSRB of material events as enumerated in Securities and Exchange Commission Exchange Act Rule 15c2-12, as amended, as may be necessary, appropriate or desirable to effect the sale of the bonds and notes authorized by this resolution.
10. The Committee is hereby authorized to take all action necessary and proper for the sale, issuance and delivery of the bonds and notes in accordance with the provisions of the Connecticut General Statutes and the laws of the United States.
11. The First Selectman or other proper Town official is hereby authorized to apply for and accept any available State or Federal grant in aid of the financing of any Project, and to take all action necessary and proper in connection therewith. Any such grants or contribution received prior to the issuance of the bonds authorized herein shall be applied to the costs of the Project or to pay at maturity the principal of any outstanding bond anticipation notes issued pursuant this resolution and shall reduce the amount of the bonds that can be issued pursuant to this resolution. If such grants and contributions are received after the issuance of the bonds, they shall be applied to pay the principal on the bonds or as otherwise authorized by the Board of Selectmen, Board of Finance and Representative Town Meeting provided such application does not adversely affect the tax-exempt status of the bonds or the Town's receipt of such grant or contribution.

EXHIBIT A
TO

A RESOLUTION AMENDING AND RESTATING A RESOLUTION ENTITLED “A RESOLUTION APPROPRIATING \$3,653,150 FOR THE COSTS OF VARIOUS BOARD OF EDUCATION CAPITAL PROJECTS AND AUTHORIZING THE ISSUANCE OF BONDS TO FINANCE SUCH APPROPRIATION” TO INCREASE THE APPROPRIATION AND BOND AUTHORIZATION BY \$1,061,000 TO A TOTAL OF \$4,714,150

TOWN OF FAIRFIELD			
	<u>BOARD OF EDUCATION</u>		
	<u>School</u>	<u>Project</u>	<u>Project Amount</u>
1	Burr Elementary School	Full Roof Replacement	\$1,542,150
2	Fairfield Ludlowe High School	Student Bathroom	\$3,172,000
	GRAND TOTAL CAPITAL COSTS:		\$4,714,150

CHIEF FISCAL OFFICER

To hear, consider and act upon a resolution approving the transfer of Fiscal Year 2022-2023 Revenue Surplus:

WHEREAS, the Town of Fairfield (“the Town”) is ending the 2022-2023 Fiscal Year with an approximate \$9,800,000 operating fund surplus (“the Surplus”); and

WHEREAS, \$4,000,000 million of the Surplus amount is related to actual expenditures that were less than the amount of expenditures budgeted (“Spending Surplus”); and

WHEREAS, 5,800,000 of the Surplus amount is related to actual revenue receipts that exceeded the amount of budgeted revenue (“Revenue Surplus”); and

WHEREAS, the Town is committed to completing an additional \$2 million in “catch-up” paving projects during FY 24, consistent with the Town’s paving plan; and

WHEREAS, the Town is also committed to maintaining a Fund Balance level approximately equal to 11.75% of General Fund spending; and

WHEREAS, the Town desires to preserve a portion of the spending surplus for purposes to be determined in the future; therefore

RESOLVED, that, the Town hereby authorizes, approves and directs the transfer of the Fiscal Year 2022-2023 Revenue Surplus to the Paving Capital Account and the Debt Service Reserve Account as follows:

Additional Appropriation Request for FY23-General Fund

Increase: Dividends/Interest	\$ 3,074,000	01084-44001
Increase: Municipal Revenue Share-Add'l	\$ 1,225,000	01006-41151
Increase: Fire Marshall Fees	\$ 195,000	01004-42368
Increase: Burr Mansion Rental	\$ 190,000	01007-42507
Increase: Town Dump-Scale Weighing	\$ 165,000	01006-42338
Increase: Smith Rich- Golf Fees	\$ 166,000	01007-42471
Increase: Federal Revenue	\$ 118,000	01001-49998
Increase: Park Dept- Beach Stickers	\$ 113,000	01005-42351
Increase: Misc- Finance	\$ 110,000	01003-42363
Increase: Rec-Programs	\$ 76,000	01007-42403
Increase: Human Services-Member/Class	\$ 69,000	01006-42386
Increase: Par 3- Fees	\$ 68,000	01007-42466
Increase: Building- Plumbing	\$ 62,000	01005-42114
Increase: Park Dept- Daily Parking	\$ 58,000	01005-42352
Increase: Rec-Penfield-J Durrell	\$ 53,000	01007-42508
Increase: Police Parking Violations	\$ 51,000	01004-42201
Increase: Rec-Penfield Pav	\$ 7,000	01007-42510
	\$ 5,800,000	
Increase: Transfers Out-Capital (Paving)	\$ 2,000,000	01011010-58950
Increase: Transfers Out-Debt Service	\$ 3,800,000	01010030-58950

REFUNDS SUBMITTED FOR APPROVAL

11/13/2023

<u>Name</u>	<u>List No.</u>	<u>Tax</u>	<u>Interest</u>	<u>DMV</u>	<u>Bill</u>	<u>Reason</u>
<u>2022 REAL ESTATE</u>						
VERRENGIA ROBERT && MELANIE	2022 01 15258	\$4,198.51				PAID IN ERROR-ESCROWS
TOTAL		<u>\$4,198.51</u>				
<u>2022 MOTOR VEHICLE</u>						
ACAR LEASING LTD	2022 03 50232	\$624.24				OVERPAID DUE TO ADJUSTMENT
BENSEY GLENN A	2022 03 53115	\$42.45				OVERPAID DUE TO ADJUSTMENT
CCAP AUTO LEASE LTD	2022 03 56666	\$444.90				OVERPAID DUE TO ADJUSTMENT
CHOCKEY CHERYL A	2022 03 57238	\$87.35				OVERPAID DUE TO ADJUSTMENT
DAIMLER TRUST	2022 03 59275	\$566.42				OVERPAID DUE TO ADJUSTMENT
DAIMLER TRUST	2022 03 59363	\$62.12				OVERPAID DUE TO ADJUSTMENT
DAIMLER TRUST	2022 03 59364	\$412.68				OVERPAID DUE TO ADJUSTMENT
DAIMLER TRUST	2022 03 59387	\$121.44				OVERPAID DUE TO ADJUSTMENT
DAIMLER TRUST	2022 3 59398	\$54.94				OVERPAID DUE TO ADJUSTMENT
DAIMLER TRUST	2022 03 59406	\$249.28				OVERPAID DUE TO ADJUSTMENT
HONDA LEASE TRUST	2022 03 69303	\$287.88				OVERPAID DUE TO ADJUSTMENT
HURSH JOHN D	2022 03 70315	\$4.68				OVERPAID DUE TO ADJUSTMENT
HURSH JOHN D	2022 03 70316	\$12.08				OVERPAID DUE TO ADJUSTMENT
JP MORGAN CHASE BANK NA	2022 03 71735	\$743.16				OVERPAID DUE TO ADJUSTMENT
JP MORGAN CHASE BANK NA	2022 03 72009	\$162.04				OVERPAID DUE TO ADJUSTMENT
LANE PATRICIA L	2022 03 74568	\$192.65				OVERPAID DUE TO ADJUSTMENT
NORTH AMERICA DRYWALL LLC	2022 03 81543	\$153.24				OVERPAID DUE TO ADJUSTMENT
USB LEASING LT	2022 03 93471	\$594.22				OVERPAID DUE TO ADJUSTMENT
USB LEASING LT	2022 03 93499	\$159.62				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94024	\$351.86				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94030	\$281.84				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94038	\$487.37				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94045	\$309.88				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94046	\$272.20				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94052	\$144.56				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94053	\$442.75				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94055	\$378.98				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94059	\$587.34				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94061	\$375.78				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94063	\$194.64				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94064	\$151.18				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94068	\$177.78				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94073	\$198.36				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94226	\$130.60				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94246	\$448.66				OVERPAID DUE TO ADJUSTMENT
VAULT TRUST	2022 03 94249	\$187.14				OVERPAID DUE TO ADJUSTMENT
VCFS AUTO LEASING CO	2022 3 94501	\$64.40				OVERPAID DUE TO ADJUSTMENT
VW CREDIT INC	2022 03 95099	\$801.71				OVERPAID DUE TO ADJUSTMENT
VW CREDIT INC	2022 03 95284	\$174.68				OVERPAID DUE TO ADJUSTMENT
VW CREDIT INC	2022 03 95340	\$193.32				OVERPAID DUE TO ADJUSTMENT
TOTAL		<u>\$11,330.42</u>				
<u>2022 SEWER USE</u>						
FURNISS SHIRLEY A & MATTHEW J	2022 08 02338	\$239.40				PAID IN ERROR
MACKNO JOHN M FAMILY TR	2022 08 11128	\$2,161.74				OVERPAID DUE TO ADJUSTMENT
MARSHALL JAMES F & MARGARET	2022 08 11452	\$139.90				OVERPAID DUE TO ADJUSTMENT
ADLER ANTHONY W & JESSICA C	2022 08 11566	\$270.90				PAID IN ERROR
TOTAL		<u>\$2,811.94</u>				

FLANAGAN ALICE	2021 01 05933	\$326.88
EARLS SUSAN B & VIK LEIF E	2021 01 17497	\$3,165.77
BERWICK DEVELOPMENT LLC	2021 01 17715	\$2,382.54
TOTAL		\$5,875.19

OVERPAID DUE TO ADJUSTMENT
PAID IN ERROR
OVERPAID IN ERROR

HONDA LEASE TRUST	2021 03 69032	\$36.36
NISSAN INFINITI LT LLC	2021 03 80560	\$86.50
NISSAN INFINITI LT LLC	2021 03 80744	\$698.65
NISSAN INFINITI LT LLC	2021 03 80777	\$196.60
NISSAN INFINITI LT LLC	2021 03 80784	\$191.84
NISSAN INFINITI LT LLC	2021 03 80802	\$451.10
NISSAN INFINITI LT LLC	2021 03 80923	\$280.02
NISSAN INFINITI LT LLC	2021 03 80952	\$127.24
NISSAN INFINITI LT LLC	2021 03 81018	\$155.92
NISSAN INFINITI LT LLC	2021 03 81028	\$486.59
NORTH AMERICA DRYWALL LLC	2021 03 81241	\$131.02
VW CREDIT LEASING LTD	2021 03 94405	\$132.96
VW CREDIT LEASING LTD	2021 03 94488	\$52.50
VW CREDIT LEASING LTD	2021 03 94704	\$66.10
SMITH KIMBERLY S	2021 03 97388	\$265.72
HONDA LEASE TRUST	2021 04 83380	\$146.14
NISSAN INFINITI LT LLC	2021 04 85343	\$574.76
VW CREDIT LEASING LTD	2021 04 88118	\$32.77
VW CREDIT LEASING LTD	2021 04 88130	\$32.77
TOTAL		\$4,145.56

[illegible]

FLANAGAN ALICE	2020 01 05933	\$323.76
TOTAL		\$323.76

OVERPAID DUE TO ADJUSTMENT

SMITH KIMBERLY S	2020 03 96585	\$339.60
TOTAL		\$339.60

OVERPAID IN ERROR

FLANAGAN ALICE	2019 01 05933	\$321.48
TOTAL		\$321.48

OVERPAID DUE TO ADJUSTMENT

FLANAGAN ALICE	2018 01 05933	\$321.48
TOTAL		\$321.48

OVERPAID DUE TO ADJUSTMENT

FLANAGAN ALICE	2017 01 05933	\$316.32
TOTAL		\$316.32

OVERPAID DUE TO ADJUSTMENT

TOTAL TAX	\$29,984.26
TOTAL INTEREST	0
GRAND TOTAL	<u>\$29,984.26</u>