### Tuesday, February 8, 2022 Medway Planning and Economic Development Board 155 Village Street - Medway, MA 02053

Members	Bob	Tom	Matt	Rich	Jessica	Sarah
	Tucker	Gay	Hayes	Di Iulio	Chabot	Raposa
Attendance	Remote	Remote	X	X	X	X

### **PRESENT:**

• Susy Affleck-Childs, Planning and Economic Development Coordinator

### **PUBLIC COMMENTS:**

• There were no public comments.

### MEDWAY DPW WATER QUALITY TREATMENT FACIITY SITE PLAN (19 POPULATIC STREET):

The Board is in receipt of the following: (See Attached)

- Notice dated January 12, 2022 to continue the public hearing to February 8, 2022
- Letter dated January 25, 2022 from Jim Cray, P.E. of Wright Pierce in response to Tetra
- Tech's first review letter and feedback from the January 11, 2022 hearing
- Revised Project Narrative dated January 25, 2022
- Revised Site Plan and architectural drawings January 2022
- Requests for Waivers from *Site Plan Rules and Regulations*
- Fire Truck Autoturn Analysis (new) undated
- Construction Management Plan (new) by Wright Pierce dated January 25, 2002
- Generator Enclosure Sound Data Sheet
- DRC review letter dated January 31, 2022
- Tetra Tech review letter dated February 2, 2022 on the revised submittal package
- SAC notes on waiver requests
- SAC notes on zoning compliance
- Letter from Jack Mee dated February 3, 2022 re: parking

Present via Zoom was Jim Cray from Wright Pierce, along with Pete Pelletier and Barry Smith from Medway DPW.

The Board was informed that the applicant has provided changes to the plan which addressed the previous comments from the Board's consultant.

Some of the changes include the following:

- A waiver list was included
- Inclusion of a neighborhood impact statement
- Construction management plan was included for sequencing of construction
- Additional earth removal calculations were provided; specifications of the earth removal can be included as condition to be discussed at the preconstruction meeting.

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- A Notice of Intent was filed with the Conservation Commission.
- The site context plan was included.
- There were more details added regarding the erosion and sediment controls.
- There are no site amenities such as bike racks so none are included on the plan.
- There will be signage, but it will need a separate permit.
- The lighting plan was updated and identified heights for wall mounted fixtures.
- A waiver from the sidewalks was submitted.
- There was also a waiver from curbing provided
- No charging stations are proposed. (The Board would like one included along with providing infrastructure for future stations)
- The auto turn analysis was shown in attachment provided. (The Board is in receipt of a letter from Chief Fasolino)
- The applicant requests waiver from dumpster screening.
- More landscaping has been added per discussions from abutter at previous meeting.
- Snow storage area was added.
- The sewer manhole detail was updated.
- The photometric plan was provided. (This will need further review by consultant)

The applicant next explained that there will be an outdoor storage canopy 60' by 24'. A visual of this was requested. The Board was also informed that the applicant would like to retain the big oak tree on Populatic Street. Some of the residents that the DPW met with would like this tree removed. A scenic road hearing would be needed if it is to be removed. The tree is in the right of way.

The hearing was open to discussion from the Board. The Board wanted clarity regarding the outdoor storage canopy. It was explained that this will be used as a roof for a mini excavator or the 1-ton dump truck. The canopy will not have walls. It will have a similar appearance to the one at the new DPW facility on Broad Street.

Resident and abutter Arthur Poulakis of 37 Populatic Street expressed his concern that the area will look like a dump.

There was a recommendation to relocate the storage shed further behind the building.

The waivers were next discussed:

#### Landscape Inventory:

The Board is fine granting this waiver.

#### Parking:

The Board is in receipt of a letter from Jack Mee regarding the parking. The 17 parking spaces are adequate.

#### Sidewalk Construction

The Board is fine granting this waiver.

#### **Dumpster/Enclosures:**

The DPW does not want the dumpster enclosed since it causes a challenge with snow plowing.

The Board is fine granting this waiver.

#### Vertical granite curbing:

The Board has not ever granted a waiver from the vertical granite curbing and did not agree to that waiver request.

#### **Electric Vehicle charging:**

The bylaw requires at least one charging station. The applicant will install infrastructure for the future. There are no plans for the DPW to turn their fleet into electrical.

#### **Bicycle Rack:**

The Bylaw indicates that there need to be one bike rack. The applicant will add this to the plan.

There was a question about outdoor storage. Sections of the Zoning Bylaw re: outdoor storage was read into the record.

The applicant will comply with the signage bylaw. The plan is to have a small sign 12" by 18". This will be written as a condition and not a waiver.

The Board would like a decision to be drafted for review at the next meeting. The Board will have an extra meeting on Wed. March 2, 2022 7:00 pm. to work on a decision.

#### **Continuation Hearing:**

On a motion made by Rich Di Iulio, seconded by Jessica Chabot, the Board voted by roll call to continue the hearing to March 2, 2022 at 7:00 pm.

Roll Call Vote:	
<b>Bob Tucker</b>	aye
Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye

### PHYTOPIA PUBLIC HEARING CONTINUATION:

The Board is in receipt of the following: (See Attached)

- Notice dated January 12, 2022 to continue the public hearing to February 8, 2022.
- Email dated February 2, 2022 from Attorney Ted Cannon requesting a continuation of the hearing to March 8, 2022.

#### **Continuation Hearing:**

On a motion made by Jessica Chabot, seconded by Rich Di Iulio, the Board voted by roll call to continue the hearing to March 8, 2022 at 7:30 pm.

#### **Roll Call Vote:**

Bob Tucker	aye
Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye

### **CONSTRUCTION REPORTS:**

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The Board is receipt of the following: (See Attached)

- January Monthly Report from Ron Tiberi for Evergreen Village
- January Monthly Report from Dan Merrikin for William Wallace Village

#### **Evergreen Village:**

The site contractor de-mobilized and construction controls have been established along with erosion controls measures.

#### William Wallace:

There continues to be site work. The perimeter erosion controls were inspected and found in good condition. The sediment basins are functioning well.

#### Salmon:

Consultant Bouley attended a management meeting with Salmon representatives. There has been some sediment issues which are being addressed. There has been an adjustment to the footprints.

### **CUTLER PLACE CONSTRUCTION SERVICES ESTIMATE:**

The Board is in receipt of the following: (See Attached)

• Construction services estimate from Tetra Tech dated February 2, 2022.

The Board was made aware that there was a construction services estimate provided for Cutler Place. The estimate had been forwarded to the applicant.

On a motion made by Jessica Chabot, seconded by Matt Hayes, the Board voted by roll call to approve the Tetra Tech construction services estimate for the Cutler Place project in the amount of \$13,515.00.

Roll Call Vote:	
Bob Tucker	aye
Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye
Sarah Raposa	aye

### **HOUSING CHOICE MULTI-FAMILY GUIDELINES:**

The Board is in receipt of the following: (See Attached)

• DRAFT joint letter from Select Board and PEDB to MA DHCD

The Board reviewed the letter which will be sent to the Executive Office of Housing and Economic Development and MA DHCD regarding the draft compliance guidelines for Multi-Family Districts in MBTA Communities under Section 3A of the Zoning Act. The letter has also been reviewed by the Select Board. The Board is in support of this letter.

On a motion made by Sarah Raposa, seconded by Jessica Chabot, the Board voted by roll call to endorse the letter to DHCD as written.

Roll Call Vote:Bob Tuckerabstained

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Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye
Sarah Raposa	aye

Member Tucker left the meeting at 8:35 pm.

### 20 Broad Street, Steve Brody:

Mr. Brody was present at the meeting and would like to attend the Planning and Economic Development Board meeting on March 8, 2022 to discuss the timeline for his project.

### **ZBA PETITION:**

The Board is in receipt of the following: (See Attached)

• Accessory Family Dwelling Unit Special Permit for 21 Hookset Circle

The application is for a 784 sq.ft. addition off the back side of the house. The public hearing will be February 16, 2022. The Board reviewed the application and does not want to provide comments to the Zoning Board of Appeals.

### **ZONING WORK:**

The Board continue discussing possible Spring town meeting warrant articles. There is an article presented about clarifying the language regarding demolition of historical properties in town. (See attached draft article.) Paul Russell from the Historical Commission participated by zoom. There is a concern that the community is losing historic buildings throughout town. The proposed amendments include a requirement for a building condition review study to be paid by the applicant. Some of the demolition time frames will be revisited by offering more incentives for preservation. The goal is to protect the oldest buildings in town. There are currently 31 houses on the list.

On a motion made by Jessica Chabot, seconded by Rich Di Iulio, the Board voted by roll call to support the proposed bylaw amendment.

Roll Call Vote:	
Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye
Sarah Raposa	aye

### MASTER PLAN UPDATE:

The Board was updated on the Master Plan Committee. There will be 4 focus group meetings. groups. The invitations have been sent out. The Committee is into Phase three which will include Committee members providing presentations and workshops to their respective board and committee. The CPC would like to have someone from Master Plan to cone to their public hearing on March 7, 2022. Susy Affleck-Childs will follow-up with CPC Chair Mark Cerel.

### APPROVAL OF MINUTES: January 25, 2022 & January 31, 2022:

On a motion made by Jessica Chabot, seconded by Rich Di Iulio, the Board voted by roll call to approve the minutes as revised.

Roll Call Vote:	
Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye
Sarah Raposa	aye

### **Willows Construction Estimate:**

The Board is in receipt of the following: (See Attached)

• Updated Construction Services Budget from Tetra Tech

On a motion made by Rich Di Iulio, seconded by Jessica Chabot, the Board voted by roll call to approve the Willows Construction estimate in the amount of \$17,197.00.

Roll Call Vote:	
Rich Di Iulio	aye
Jessica Chabot	aye
Matt Hayes	aye
Sarah Raposa	aye

### **OTHER BUSINESS:**

- There will be a meeting on BESS on March 16, 2022 at 7:00 pm.
- Walgreens is planning to use 1/3 of its facility for an Urgent Care service.

### **FUTURE MEETING:**

• February 22, 2022 – Cancelled

### **ADJOURN:**

### On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted to adjourn the meeting.

The meeting was adjourned at 9:26 pm.

Prepared by, Amy Sutherland Recording Secretary

Reviewed and edited by, Susan E. Affleck-Childs Planning and Economic Development Coordinator



### February 8, 2022 Medway Planning & Economic Development Board Meeting

### <u>Medway DPW Water Quality Treatment</u> <u>Facility Site Plan – 19 Populatic Street</u>

• Notice dated January 12, 2022 to continue the public hearing to February 8, 2022

### **REVISED SUBMITTAL DOCUMENTS**

- Letter dated January 25, 2022 from Jim Cray, P.E. of Wright Pierce in response to Tetra Tech's first review letter and feedback from the January 11, 2022 hearing
- Revised Project Narrative dated January 25, 2022
- Revised Site Plan and architectural drawings January 2022
- Requests for Waivers from *Site Plan Rules and Regulations*
- Fire Truck Autoturn Analysis (new) undated
- Construction Management Plan (new) by Wright Pierce dated January 25, 2002
- Generator Enclosure Sound Data Sheet

### **Other Documents**

- DRC review letter dated January 31, 2022
- Tetra Tech review letter dated February 2, 2022 on the revised submittal package
- SAC notes on waiver requests
- SAC notes on zoning compliance
- Letter from Jack Mee dated February 3, 2022 re: parking

#### **Board Members**

Matthew Hayes, P.E., Chair Robert Tucker, Vice Chair Richard Di Iulio, Clerk Jessica Chabot, Member Thomas Gay, Associate Member



### **TOWN OF MEDWAY**

**COMMONWEALTH OF MASSACHUSETTS** 

### PLANNING AND ECONOMIC DEVELOPMENT BOARD

Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

### RECEIVED TOWN CLERK JAN 12'22 PH4:11

### **MEMORANDUM**

January 12, 2022

TO: Stefany Ohannesian, Town Clerk Town of Medway Departments, Boards and Committees

FROM: Susy Affleck-Childs, Planning and Economic Development Coordinator

RE: Public Hearing Continuation for Medway DPW Water Quality Treatment Facility Site Plan (19 Populatic Street) Continuation Date – Tuesday, February 8, 2022 at 7:00 p.m.

At its January 11, 2022 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of the Town of Medway for approval of a major site plan for the proposed water quality treatment facility and associated garage and operations office to be constructed at 19 Populatic Street to the Board's meeting on Tuesday, January 25, 2022 at 7:30 p.m. at Medway Town Hall, 155 Village Street.

The Town plans to construct a 15,640 square foot facility with 4,800 sq. ft. of garage space, 3,240 sq. ft. of operations/office space for the Town's DPW water personnel, and 7,600 sq. ft. for the water treatment area. The facility will treat up to 2.12 million gallons of blended raw water per day from three Town well sites to remove minerals and to supplement the water to achieve improved disinfection, pH adjustment, corrosion control, and dental health. Site improvements include 17 parking spaces, landscaping, lighting, and stormwater management measures to comply with local and state policies. Access to the site will continue to be via the existing paved driveway off of Populatic Street commonly referred to as Water Street; a secondary limited access is planned from Populatic Street for deliveries and fire department access when needed.

The proposed building and site improvements are shown on a plan titled *Town of Medway*, *Populatic Water Treatment Plant*, dated October, 2021, prepared by Wright-Pierce of Andover, MA. The application, site plan, stormwater report, architectural drawings, and associated documents are on file at the offices of the Town Clerk and the Planning and Economic Development Board and are posted at the Board's web page at: <u>https://www.townofmedway.org/planning-economicdevelopment-board/pages/town-medway-water-guality-treatment-plant-and-facility.</u>

Based on the review by the Board's engineering consultant and the discussion at the 1-11-22 public hearing, the applicant will be revising the site plan. Upon receipt it will be posted to the Board's web page. We welcome your review and comments by February 3<sup>rd</sup>. Please don't hesitate to contact me if you have any questions. Thanks.



January 25, 2022

Ms. Susan E. Affleck-Childs Medway Planning and Economic Development Coordinator Medway Town Hall 155 Village Street Medway, MA 02053

### SUBJECT:Populatic Water Treatment Plant – Major Site Plan Review19 Populatic Street, Medway, Massachusetts

Dear Susan,

Wright-Pierce has received Tetra Tech's comments on the Major Site Plan Review submission for the Populatic Water Treatment Plant project. We have prepared the following letter and attachments in response to these comments.

#### Site Plan Review

1. The Applicant has not included a Neighborhood Impact Assessment in their Development Impact Statement. The Project Narrative discusses impacts on the neighborhood which should be summarized in this section of the document. (Ch. 200 §204-3.F.3)

### Response: The Development Impact Statement has been updated to include the Neighborhood Impact Assessment. Refer to Attachment A.

2. A Construction Management Plan (CMP) is not provided in the Plans or as a separate document. This may be necessary to understand how the construction will occur given the existing facility will remain operational during construction. (Ch. 200 §204-3.H)

#### Response: A Construction Management Plan (CMP) for the proposed project is included as Attachment B.

3. Earth removal calculations are not provided in the Plans. (Ch. 200 §204-3.I)

### Response: Earth removal calculations have been added to Sheet C-4 Revised drawings are included as Attachment C.

4. Earth fill estimates are not provided in the Plans. (Ch. 200 §204-3.J)

Response: Earth fill estimates have been added to Sheet C-4. Revised drawings are included as Attachment C.

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5. A copy of an Order of Resource Area Delineation (ORAD) from Medway Conservation is not provided. The site is located adjacent to the Charles River and Flood Zone, therefore, an ORAD may be relevant for the Project. (Ch. 200 §204-3.K)

### Response: A Notice of Intent (NOI) was filed with the Medway Conservation Commission on November 8, 2021. Comments have been received on the submission and we will be issuing our responses to the Commission under separate cover. A copy of the final Order of Conditions will be forwarded to the PEDB upon receipt.

6. All elevations in the Plans refer to the NGVD29 Datum. Elevations shall refer to North America Vertical Datum of 1988 (NAVD88) as specified in the rules and regulations (Ch. 200 §204-4.C)

Response: The reference to NGVD29 Datum on the plans is incorrect. The design elevations depicted on the plans are in the correct NAVD88 datum. Civil Site Layout Note 11 on drawing C-1 has been updated in the revised set of drawings to reflect the correct datum. Refer to Attachment C.

A locus map is included on the Cover Sheet and no formal Site Context Sheet has been provided. The scale
of the locus map is set to 1-inch equals 2,000-feet which does not meet the maximum required scale of 1inch equals 1,000-feet. A Site Context Sheet shall be provided per the applicable Regulation. (Ch. 200
§204-5.B)

### Response: A Site Context Sheet has been added to the revised plan set as drawing C-1A. Refer to Attachment C.

8. The Applicant has not included an inventory of existing trees at the site in the size required by the Regulations. Drip lines are also required for those trees. (Ch. 200 §204-5.C.3)

Response: The survey base plan utilized for the project was supplied by the Owner's Project manager. The project requires a clear cut to construct the proposed improvements. We have identified hardwood trees larger than 18" on the plans. The significant oak tree along Populatic Street has been identified to remain. None of the other larger hardwoods are located in the areas where clearing is proposed. We are requesting a waiver for the requirement of showing drip-lines for the existing trees. Refer to Waiver Requests included as Attachment D.

9. Front setback line is shown on the Layout Sheet, however, both side and rear setbacks are not represented and shall be included on the Plans. (Ch. 200 §204-5.D.1)

Response: Side and rear setback lines have been added to sheet C-3 in the revised drawing set. Refer to Attachment C.



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10. The Applicant has proposed 17 parking spaces, 1 space per anticipated employee with 3 additional spaces. The Medway Zoning Bylaw does not specify a requirement for this type of facility; therefore, the nearest comparable use may be applied. TT believes the Water Treatment Plant is best represented as a warehouse/distribution or manufacturing facility. In that case, the proposed number of spaces does not meet the minimum requirements (23 Spaces) outlined in Table 3 of the Medway Zoning Bylaws. Additionally, we recommend the Applicant confirm where employee parking will be sited as the spaces at the rear of the facility (12 spaces) would not meet the minimum number of employees using the facility as stated in the Project narrative. (Ch. 200 §204-5.D.3)

## Response: A waiver is being requested for this requirement. Parking has been discussed with the Medway Water Department and the spaces proposed were deemed adequate to accommodate the future number of employees and anticipated operations at the facility. Refer to Waiver Requests included as Attachment D.

11. The Applicant has not provided a separate Erosion and Sediment Control Plan which we anticipate will be required during the Applicant's Notice of Intent process with Medway Conservation Commission. (Ch. 200 §204-5.D.5)

### Response: Erosion and Sediment Controls are shown on sheets C-4, C-9 and C-10 in the revised drawing set. Refer to Attachment C.

12. The Applicant has not included any site amenities such as bike rack which may be applicable to this Project, particularly for the employees of the facility. (Ch. 200 §204-5.D.12)

### Response: Site amenities have been discussed with the Medway Water Department. No additional amenities are being proposed per the Water Department's request.

13. A Master Signage Plan is not included in the Plans. TT expects this to be submitted separately for signage approval. (Ch. 200 §204-5.D.14)

### Response: Master Signage Plan is shown on sheet C-3 in the revised drawing set. Refer to Attachment C.

14. The Applicant has provided a lighting plan showing 26 proposed light sources connected to the building with no proposed light trespass on abutting properties. Height of luminaires should be specified along with the hours of illumination. TT also recommends the lighting symbols be better represented on the lighting plan as it is hard to determine the location of each proposed lamp. (Ch. 200 §204-5.D.15)

Response: The lighting plan C-11 has been updated to include hours of illumination. Proposed lighting will be photocell controlled and illuminated from dusk until dawn. The height of luminaires are approximately 17' on the garage and treatment building areas and approximately 12' on the operations building area. They are also



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### shown on Sheet A-201. The photometric plan shows no light spillover onto Populatic Street or adjacent properties. Refer to revised drawings in Attachment C.

15. Horizontal site distances at the site driveways are not provided in the Plans. (Ch. 200 §204-5.D.16)

Response: Horizontal site distances of greater than 200-feet were confirmed in the field at the new driveway location and they exceed the minimum of 155 feet in both directions for a speed limit of 25 mph. The site distances have been included on sheet C-3 in the revised drawing set. Refer to Attachment C.

16. A table representing conformance with Zoning Bylaw requirements is provided on site Layout sheet. However, the table is missing minimum lot frontage and maximum building height. TT recommends proposed values be provided rather than "less than" or "greater than" symbols. (Ch. 200 §204-5.D.17)

### Response: The Site Layout Sheet (C-3) has been updated in the revised drawing set to include the missing lot frontage and maximum building height. Refer to Attachment C.

17. The Applicant has not proposed any sidewalks at the site, particularly to secondary entrances proposed around the buildings. Additionally, pursuant to Section 5.5.4. I, c. of the Zoning Bylaw, sidewalks shall be provided along the entire frontage of the subject property along existing public ways. (Ch. 200 §207-9.B)

Response: The site layout has been updated in the revised drawing set to include site sidewalks for access to the two proposed doorways on the southwest side of the facility. Refer to Attachment C. Populatic Street does not currently have sidewalks on either side of the road between Walker Street and the Franklin town line. Including sidewalks for this one property is not practicable and therefore a waiver is requested. Refer to Waiver Requests included as Attachment D.

18. It does not appear the Applicant is proposing curb on the Project. The Applicant appears to be utilizing Low Impact Development techniques where pavement sheet flows to swales which would negate the need for proposed curb along the entirety of the edge of pavement. However, site entrances and exits shall be clearly delineated by vertical granite curbing or other approved material along the entire radius of the opening, shall extend at least 12 feet beyond each side along the gutter line of the road and at least the first 25 feet of a driveway, and shall be sloped at the end to prevent a vertical obstruction to exit. (Ch. 200 §207-11.A.4)

Response: A waiver is being requested for this requirement. There currently isn't any curb in the vicinity of the new treatment facility. A small amount of granite would be expensive and bituminous curb could be easily damaged at the entrance. Refer to Waiver Requests included as Attachment D.



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19. An Autoturn (or equal) analysis of the site is recommended to ensure applicable emergency apparatus can actively respond to an emergency at the facility. This shall be coordinated with the Medway Fire Department. (Ch. 200 §207-11.B.8)

## Response: An Autoturn analysis was completed during the design phase and emergency access was discussed with the Medway Fire Department. Attachment E includes the Autoturn analysis assuming a WB-63 type vehicle.

20. The Applicant has not proposed any means for electric vehicle charging at the site. (Ch. 200 §207-12.I)

#### Response: Electric vehicle charging is not currently proposed for the site.

21. The Applicant has proposed a generator pad located to the rear of the site. The generator is required to be fully screened to mitigate noise and appearance. Additionally, the Plans do not detail how the generator will be fueled. If fuel storage will be proposed at the site it should be noted on the Plans and properly permitted. (Ch. 200 §207-16.B)

# Response: The proposed back-up generator is to be fueled via natural gas. A sound attenuation enclosure is proposed around the generator to mitigate noise. Refer to Attachment F for additional information on anticipated sound decibel levels. Additional screening for appearance is not currently proposed in order to provide adequate clearance for maintenance and as required by Code.

22. The Applicant has proposed a dumpster pad located to the rear of the site. The dumpster is required to be screened on all sides and to the full height of the container. (Ch. 200 §207-17.C)

# Response: The dumpster's proposed location is not visible from Populatic Street or abutting properties. The existing dumpster onsite is not currently screened. The Medway DPW has requested a waiver for this requirement in order to make maintenance and plowing easier for DPW staff. Refer to Waiver Requests included as Attachment D.

23. At least one deciduous shade or canopy tree shall be provided for every 6 parking spaces. Only trees providing shade to the parking area shall be counted as meeting this requirement. (Ch. 200 §207-19.C.1.d)

Response: The landscaping plan (C-6) has been updated in the revised drawing set to include additional shade trees in the parking area to meet this requirement. Refer to Attachment C.



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24. Minimal screening of the Project has been provided along the northern side of the project, particularly between the project site and the abutters to the north. We recommend the Applicant provide screening along the north side of Water Street. (Ch. 200 §207-19.D)

### Response: The Landscaping Plan (C-6 has been updated in the revised drawing set to include additional screening on the north side of Water Street. Refer to Attachment C.

25. The site appears to have minimal areas for snow storage (snow shall not be stored in stormwater best management practices [BMP's]). The snow storage area(s) shall be located and graded such that the runoff from melting snow shall not enter the public way, stormwater BMP's and wetland resource areas. (Ch. 200 §207-21)

# Response: The snow storage areas have been added to sheet C-4 in the revised drawing set. Refer to Attachment C. Due to the constraints on the site, space is limited for snow storage and snow may need to be hauled off site during certain storm events.

#### General Site Plan Comments

26. We recommend the Applicant consider widening Water Street to minimum 20 feet or to the satisfaction of the Medway Fire Department.

### Response: The proposed width of Water Street is currently adequate for emergency access and abutter access to their driveway. Refer to Attachment E for Auto-Turn analysis for additional details.

27. The proposed accessible parking space and adjacent access aisle do not appear to be adequately sized. The proposed space shall be a van space since there is only one proposed accessible space required. Additionally, per MA AAB, van spaces shall be minimum 8 feet wide with an adjacent 8-foot access aisle. Also, if parking at the rear of the facility is meant for employees, we recommend an additional accessible space at the rear of the site to accommodate employee parking. Signage shall also be proposed for all accessible parking.

### Response: The accessible parking space has been updated on the revised plans to reflect the minimum spacing required for a van. Refer to Attachment C.

28. The proposed cut-in for the finished water to the existing 8-inch water main in Populatic does not appear to be to town standard. The town typically requires three valves at the connection point, two on the existing main and one on the new. We recommend the Applicant continue to coordinate with the Town regarding this item. Additionally, we recommend the Applicant show the proposed raw water connection point from the off-site Oakland and Village Street wells to help the PEDB better understand the scope of that connection.



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### Response: Details on site piping connections will continue to be coordinated with the Medway Water Department.

29. It appears finish water piping is being connected to existing raw water piping in Water Street. We recommend the Applicant/engineer confirm with Medway DPW if this is the intended scope or if any of the existing water main in Water Street will be abandoned to limit co-mingling of raw and finish water.

### Response: Finished water and raw water are not proposed to be cross-connected per MassDEP requirements. The proposed finished piping is proposed to be connected to the existing finished piping on site.

30. We recommend the Applicant provide narrative related to proposed fence at the site and its intent. The proposed fences are open ended and may not provide security for pedestrians who may want to enter the rear portions of the facility.

Response: Site security has been discussed with the Medway Water Department and the proposed fencing shown on the site reflects the feedback provided by the Town. The primary purpose of the fencing is to prevent unauthorized vehicle access to the site, rather than pedestrian access. The proposed security system for the facility includes cameras mounted at each building corner which will provide 360-degree monitoring of the facility. Installation of a full perimeter fence around the entire property is not cost effective or necessary given the proposed security system for the facility.

31. 31. The Applicant should add details for proposed 2-foot mow strip, sewer and drain manhole (not a standard 4-foot manhole for both as they have different requirements), concrete equipment pads and any other site amenity proposed on the Project.

### Response: Details have been updated on the revised drawing set. Refer to Attachment C

If you have any questions or need any additional information, please don't hesitate to contact us.

Sincerely, WRIGHT-PIERCE

James Cray, PE Lead Project Engineer jim.cray@wright-pierce.com

cc: Peter Pelletier, Medway DPW Director Barry Smith, Medway Water and Sewer Superintendent



### **MAJOR SITE PLAN REVIEW**

### TOWN OF MEDWAY, DPW WATER AND SEWER DIVISION POPULATIC WATER TREATMENT PLANT MEDWAY, MA

SUBMITTED TO: Medway Planning and Economic Development Board 155 Village Street Medway, MA 02053

SUBMITTED ON BEHALF OF: Town of Medway, DPW Water & Sewer Division 45B Holliston Street Medway, MA 02053

PROJECT ENGINEER: Wright-Pierce 600 Federal Street; Suite 2151 Andover, MA 01810

PREPARED BY: Caron Environmental Consulting, LLC 247 Bragg Hill Road Westminster, MA 01473

Originally Submitted November 8, 2021 Revised: January 25, 2022

### **PROJECT NARRATIVE:**

#### Introduction:

This Major Site Plan Review application is for the proposed Water Treatment Plant (WTP) and associated vehicle garage and operations office to be located on Populatic Street in Medway, Massachusetts. The proposed WTP is located on land owned by the Town of Medway and is accessible via a paved drive known as Water Street which connects to Populatic Street. The site currently contains the Populatic Wells, a chemical feed building, an office building, a supply house and a garage.

The site for the proposed Populatic Water Treatment Plant (WTP) is located at 19 Populatic Street on a 9.80-acre parcel owned by the Town. The parcel identification number is 71-027 and it is zoned AR-2 (Agricultural Residential 2). The property is also within the Town's Floodplain District as it has areas mapped as Flood Zone AE. In addition to the main parcel there are two smaller separate parcels recently purchased by the Town. The parcels are zoned AR-2 and 0.34 and 0.49 acres in size and have Parcel Identification numbers of 71-025 and 71-026.

The site is bordered on the east by the Charles River, the south by an electric transmission line corridor, the west by Populatic Street and adjacent residential property and the north by residential property and fields. All properties directly abutting the site and across the Charles River are also zoned AR-2. Water Street, which serves as the driveway for the existing Water Department facilities runs along the north side of the site, it does not appear that Water Street is a public right-of- way. The existing residence at 15 Populatic Street has a driveway connection to Water Street.

A boundary and topographic survey of the site and surrounding areas was prepared by Merrill Associates in 2020 (subconsultant to Environmental Partners). This survey included the two parcels on the north side of Water Street. The property generally slopes from Populatic Street down to the Charles River and ranges in elevation from approximately 143 to 132 at the mean high-water line of the River. The site is partially developed on the eastern side with the existing Medway Water Department facilities consisting of office and garage space along with pumping, supply and chemical buildings. The undeveloped western portion of the site is a mix of upland areas with existing mature vegetation and low areas near the river with wetlands. The undeveloped area along Populatic Street consists of mature trees with a mix of coniferous and deciduous species and low shrubs.

The WTP will treat blended raw water from three well sites: the Populatic Street Wells, the Oakland Street Well and the Village Street Well. The Populatic Street Well site includes two wells and is the location of the new water treatment facility. The Oakland Street well site and the Village Street well site are remote sites and raw water will be piped to the new facility through dedicated raw water transmission mains.

The WTP will treat the raw water for iron and manganese removal using GreensandPlus<sup>™</sup> pressure filtration as the primary treatment process, with potassium permanganate used as the primary oxidant. Other chemical feed systems include sodium hypochlorite for disinfection, potassium hydroxide for pH adjustment, blended phosphate for corrosion control and sodium fluoride for dental health. The facility will also include an aeration tower which will be used to raise the pH and reduce chemical usage. While not currently required the WTP has been designed to accommodate future treatment equipment for PFAS removal and a baffled clearwell for log-4 viral inactivation to meet Groundwater Rule requirements.

As many of the current operations on the site will be consolidated into the new facility, the supply house and garage are proposed to be demolished.

### 1). Current and Proposed Uses:

The site is currently utilized by the Town of Medway as part of its public water supply operations. The site contains the Populatic Wells, a chemical feed building, an office building, a supply house, a garage, paved access driveways, lawn and wooded areas. The site is located adjacent to the Charles River.

The site will continue to be utilized for the town's public water supply operations, with the proposed WTP to be constructed on the front of the site. The proposed building will consolidate many of the site's current operations and will include operations space and a garage. The Populatic Street Wells will continue to be used for raw water supply. The existing chemical feed building will no longer be required once the new WTP is online.

### 2). Description of Site Improvements:

The proposed site improvements include construction of a 16,040 SF facility on the front of the site, comprised of 4,800 SF of garage, 3,640 SF of operations/office space and 7,600 SF of water treatment plant area. The proposed site design includes paved driveways, one leading to the buildings main entrance and the other wrapping around the building from Water Street to a new, additional entrance from Populatic Street. Seventeen parking spaces are proposed. On the back side of the building an aeration tower and dumpster pad are proposed. Also to the rear of the building a transformer and generator will be installed. The site grading will generally conform to the existing conditions and stormwater will flow away from the building. Stormwater will be captured by a series of swales/shallow ditches and conveyed to an extended dry detention basin located on the downgradient portion of the site.

Several site constraints guided the development of the site design including the following:

- 35 foot setback along Populatic Street
- Continued operation of the adjacent Water Department facilities during construction
- Visual/noise buffering considerations for adjacent residences
- AE Flood Zone on the east

- Wetland buffers/setbacks on the east
- Water Street to the north
- Narrow buildable land on the south side
- Existing drainage culvert and ditch on the south side

The above constraints formed the boundaries of what is deemed the "buildable area" within the site. Within this buildable area various arrangements of the buildings, parking and circulation were tested to determine a layout that maximized usability and minimized impervious area and encroachment into the site constraints.

The site layout was designed with consideration for the adjacent residential used on the west side of Populatic Street. Items such as the generator and aeration tower that may occasionally generate noise use the proposed building as a buffer. Similarly, the garage and associated roll-up doors were oriented in a manner not to be visible from Populatic Street. Site lighting has been minimized to the extent practical and the fixtures used are wall-mounted, downward facing lights with shields. Landscaping has been provided along Populatic and Water Streets with the intent of visually buffering the proposed building. Additional landscaping is proposed on the south side of the building for additional buffering.

To provide for connections to the existing wells on and off site, and to connect to the distribution water mains, various new water mains will be installed on the site.

As many of the current operations on the site will be consolidated into the new facility, the supply house and garage are proposed to be demolished, and those areas will be restored (loamed and seeded).

### 3.) Description of Proposed Building:

The proposed WTP is a 16,040 SF facility comprised of 4,800 SF of garage, 3,640 SF of operations/office space and 7,600 SF of water treatment plant area.

The process area will be approximately 77-feet wide, 105-feet long and approximately 22-feet tall with a flat roof. It will have four chemical storage rooms and a SCADA/lab room. These rooms will be capped off and enclosed with structural ceiling systems below the roof framing. The remaining area will be for pumps and filters and an open area for future installation of PFAS treatment vessels. The PFAS area will be depressed approximately 7-feet to accommodate the large PFAS vessels while keeping the roof the same height over the entire process area.

The vehicle storage garage will be approximately 60-feet wide, 84-feet long and approximately 22-feet tall with a flat roof. It will have four double deep vehicular storage bays for storing up to 8 vehicles. The space will also include two storage rooms of approximately 9-feet by 23-feet each with a storage mezzanine above.

The operations area will be approximately 52-feet wide, 66-feet long and approximately 14-feet tall with a flat roof. It will have 3 offices, a meeting/break room, women's and men's locker room, and support spaces such as an electrical room and a mechanical room.

### 4.) Project Water and Sewer Demand:

The WTP will treat blended raw water from three well sites: the Populatic Street Wells (01G), the Oakland Street Well (02G) and the Village Street Well (05G). The Populatic Street Well site includes two wells and associated pumps which have a total approved pumping volume of 0.87 MGD; the Oakland Street Well has an approved pumping volume of 0.59 MGD; and the Village Street Well has an approved pumping volume of 0.66 MGD. The WTP has been designed to treat a maximum of 2.12 million gallons per day (MGD), or 1,475 gallons per minute (GPM). The operational flow rate of the WTP will vary based upon season and demand, but is anticipated to operate at an average of 1.3 MGD, or 900 GPM.

The backwash water generated from the filtration process will be directed to recycle tanks where the solids will be allowed to settle. The resulting supernatant will be recycled to the head of the facility and the settled solids will be pumped to the sewer and treated at the Charles River Pollution Control District (CRPCD) Wastewater Treatment Facility (WWTF). Although the estimated settled solids produced will vary based on raw water quality and the volume of water treated at the facility, a conservative estimate is that settled solids will be pumped to the sewer approximately once a month. This would equate to a total volume of 15,000 gallons, or approximately 500 gallons per day (GPD) on average. The pumping rate and duration will be dictated by the CRPCD.

It is anticipated that domestic water usage by employees on the site will be 280 GPD, and that a similar volume will be discharged to the CRPCD sewer.

### 5.) Expected Number of Employees:

It is anticipated that 12 employees will be utilizing the site.

### 6.) Proposed Hours of Operation:

The main hours of operation on the site are 7:00 am to 5:00 pm, Monday to Friday. The water supply system, including the proposed WTP, operate continuously. Due to this, some activities will take place outside of regular hours to sustain operations, perform maintenance and to deal will emergencies.

### 7.) Existing and Proposed Means of Access and Egress:

Access to the site is currently via a paved driveway known as Water Street. This access will continue to be utilized for access to the WTP building and the other water supply operations on the site. This will

serve as the entrance for visitors. A new driveway will wrap around the rear of the building to a secondary access from Populatic Street proposed just to the south of the WTP. This secondary access is being provided to allow delivery vehicle circulation. The WTP will receive chemical and other supply deliveries, often via semi-trailer truck. The proposed layout will allow for efficient and safe delivery by allowing vehicles to circulate around the building without having to back up. In addition this layout provides for three-sided access for the Fire Department in the event of emergencies.

Site distances at the new intersection at Populatic Street are greater than 200-feet which exceed the required site distance for a 25 miles per hour zone of 150-feet.

Visitor parking and the associated pedestrian access to the building will be located at the northwest corner of the building. Visitors are expected to consist of vendors, consultants, etc. Additional parking for employees will be located to the east and south of the building, and there will be multiple pedestrian access points to be utilized by employees and for operations.

### 8.) Number of Parking Spaces:

The site design proposes seventeen new parking spaces. There are several other existing, informal parking spaces adjacent to the existing buildings on the site.

No specific number of parking spaces appears to be required by regulation. The number proposed is based on the anticipated 12 employees, plus an additional 4 spaces for visitors and one accessible van parking spot.

### 9.) Calculation of Proposed Lot Coverage and Impervious Surface:

Currently 6.2% of the 9.8-acre site is covered by the existing buildings and other impervious areas. Upon completion of the proposed construction there will be 13.4% lot coverage. These lot coverages are broken down as follows:

Existing Lot Coverage: Buildings: 0.9% (3970 s.f.) Other Impervious: 5.2% (22,370 s.f.) Total: 6.2% (26,340 s.f.)

Change in Lot Coverage:

Buildings: 3.2% (13,615 s.f.) (new building minus demolition) Other Impervious: 4.0% (17,050 s.f.) Total: 7.2% (30,665 s.f.)

Proposed Lot Coverage:

Buildings: 4.1% (17,585 s.f.) Other Impervious: 9.2% (39,420 s.f.) Total: 13.4% (57,005 s.f.)

### 10.) Timetable for Project Completion:

Construction is anticipated to begin in the summer of 2022 and be completed in the fall/winter of 2023.

### 11.) Proposed Mitigation Measures:

Stormwater flows are being controlled and mitigated by the stormwater management system, which will ensure that there is no increase in flow rate and that the stormwater is treated in compliance with the town's requirements and DEP's Stormwater Policy.

Grading on the site has been designed to prevent any loss in flood storage and will slightly increase flood storage on the site.

Two existing buildings on the site, which are located close to the Charles River, are being demolished and those locations will be restored with grass surfacing.

Landscaping is proposed around the building, particularly along Populatic Street to improve the aesthetics of the site and to provide visual buffering for the adjacent residential areas.

The proposed lighting has been located and shielded to minimize light impacts off-site. A photometric plan has been provided demonstrating that no off-site light spillover will occur.

Upon completion many of the current operations on the site will be consolidated at the WTP building, moving those operations much further away from the Charles River.

### 12.) List of Other Permits:

Federal:

• Stormwater Pollution Prevention Plan: To be submitted once the contractor is determined and prior to construction beginning.

State:

- Environmental Notification Form: To be submitted concurrent to this application or shortly thereafter.
- Massachusetts Historical Commission Project Notification: To be submitted concurrent to this application.

- Notice of Intent under the Massachusetts Wetlands Protection Act: To be submitted concurrent to this application.
- BRP WS-25D4 Approval of Treatment Facility Modifications, from MassDEP Central Region: To be submitted at 90% design completion which is scheduled for January 2022.

### Local:

- Notice of Intent under the Medway Wetland Bylaw: To be submitted concurrent to this application.
- Scenic Road: To be submitted concurrent to this application.
- Land Disturbance Permit: To be submitted concurrent to this application.
- Design Review Committee: Review to be performed concurrent with this application.

### 13.) Other Information:

The site is located within the Groundwater Protection District, and there had been some preliminary discussion that a Special Permit might be required. The Zoning Bylaw, however, specifies that the project is a permitted use per Section 5.6.3 E.1.h which lists the following permitted use: "Construction, maintenance, repair and enlargement of drinking water supply facilities...".

### DEVELOPMENT IMPACT STATEMENT:

#### Neighborhood Impact Assessment

The building is proposed as far as possible from the road while staying as far as possible from, or minimizing encroachment into, environmentally sensitive areas including the Riverfront Area, 100-year Flood Zone and the Wetlands Buffer Zone. The building and its associated infrastructure also need to be set back from and not interfere with the existing water supply infrastructure on the site. The landscape plan has been designed to visually buffer the building from the Populatic Street and nearby residences to the extent practical.

The project is consistent with the goals of the Medway Master Plan (MMP). One goal of the MMP is to increase the commercial/industrial tax base. A sufficient supply of high-quality water is necessary to meet that goal, which is the purpose of this project. A second goal of the MMP is to increase the quantity and quality of the public water supply. Again, that is the sole purpose of this project. A third goal of the MMP is to maintain and increase the amount of open space available to the public. By utilizing land that the public does not have access to for this project it enables the town to maintain other public land for open space. A fourth goal of the MMP is to protect water resources. This project will help achieve this goal by moving activities further from the Charles River.

A good supply of high-quality water is one a key requirement, if not the most important requirement, for a high quality of life. The only purpose of this project is to supply high quality water to the residents of the town. The project has been designed to avoid and minimize quality of life impacts to the nearby residences. The new building will be consolidating activities that already take place on the site so there will be no meaningful increase in traffic, noise or general activity. Accordingly, the only impact is a visual one, which is being mitigated to the extent possible with landscaping and the building design.

The project will place no additional demands on public services, and its purpose is to improve public services.

### Traffic Impact Assessment:

There should be little change to the volume and timing of traffic generated by the site as it is primarily consolidating operations already taking place at the site. Traffic is presently and will continue to be generated by 14 employees going to and from the site, water department vehicles going to and from various sites, occasional visitors/vendors, and intermittent deliveries of materials and supplies.

As the WTP will run continuously there will likely be two trips per day generated even on weekends and holidays. There will also be added deliveries needed to supply the WTP with treatment materials, but this is likely to be one or two added deliveries per month.

### Environmental Impact Assessment:

### 1.) Air and Water Quality:

The water treatment process does not generate any significant airborne pollutants or odors. Backwash from the processes will be directed to two backwash/recycling tanks. When solid levels in the tanks reach a certain level they will be pump discharged to the sewer operated by the Charles River Pollution Control District (CRPCD) and then treated at its Wastewater Treatment Facility (WWTF).

### 2.) Surface Water and Groundwater:

In order to protect both surface and groundwater quality stormwater flows are being controlled and mitigated by the stormwater management system, which will ensure that there is no increase in flow rate and that the stormwater is treated in compliance with the town's requirements and DEP's Stormwater Policy. Stormwater will be captured by a series of swales/shallow ditches and conveyed to an extended dry detention basin located on the downgradient portion of the site.

### 3.) Flooding Potential:

The 100-year flood plain borders the proposed development along the eastern and southern portions of the site. Based on the spatial site constraints, some of the site grading will impact the 100-year flood plain. The 100-year flood plain elevation is 137.5 NGVD. To ensure that the proposed development will not result in increased flooding in other areas, the incremental loss of flood plain volume has been compensated in other areas of the site. To quantify this volume, an analysis was completed for the proposed impacts and results are presented below showing that an additional 10,000 c.f. of volume was added below elevation 137.50.

Stage (ft.)	Fill Volume (c.f.)	Cut Volume (c.f.)	Change in Storage (c.f.)
132	0	0	0
133	223	5,620	+5,397
134	538	4,383	+3,845
135	1,007	2,987	+1,980
136	1,450	1,761	+311
137	1,737	1,061	-676
137.5	921	270	-651
		NET	+10,205

### 4.) Increases to Impervious Surfaces:

Currently 6.2% of the 9.8-acre site is covered by the existing buildings and other impervious areas. Upon completion of the proposed construction there will be 13.4% lot coverage. These lot coverages are broken down as follows:

Existing Lot Coverage: Buildings: 0.9% (3970 s.f.) Other Impervious: 5.2% (22,370 s.f.) Total: 6.2% (26,340 s.f.)
Change in Lot Coverage: Buildings: 3.2% (13,615 s.f.) (new building minus demolition) Other Impervious: 4.0% (17,050 s.f.) Total: 7.2% (30,665 s.f.)
Proposed Lot Coverage: Buildings: 4.1% (17,585 s.f.)

Buildings: 4.1% (17,585 s.f.) Other Impervious: 9.2% (39,420 s.f.) Total: 13.4% (57,005 s.f.)

Runoff from the impervious surfaces will be managed by the stormwater management system. . Stormwater will be captured by a series of swales/shallow ditches and conveyed to an extended dry detention basin located on the downgradient portion of the site. This system will provide for the treatment of water quality and will ensure that there is no increase in flow from the site.

### 5.) Potential for Erosion:

The topography on the site is generally gently sloping. As a result, the erosion potential in minimal. Erosion controls are proposed along the down-gradient sides of the project to provide for the capture of any sediment that is generated. These controls will be maintained and supplemented as necessary, and will be in conformance with the requirements of the Order of Conditions and the Stormwater Pollution Prevention Plan.

### 6.) Noise Levels:

Items such as the generator and aeration tower that may occasionally generate noise use the proposed building as a buffer. Similarly, the garage and associated roll-up doors were oriented in a manner to use the building as a buffer from noise from their operations. The generator will only be used in the event of a power failure, but will be needed to be run periodically to ensure it is functioning properly. The day to day noise generated from the facility will be quite low and intermittent, and similar to the current noise level.

### 7.) Harmful or Noxious Emissions:

The WTP facility will not generate any harmful or noxious emissions.

### 8.) Damage or Threat to Wetlands and Flood Plains:

The site abuts the Charles River and as a result there is Riverfront Area, Bordering Land Subject to Flooding (100-year flood plain), Bank, Bordering Vegetated Wetland and buffer zones on the site. The proposed facility is located as far from the river and its associated wetlands as possible and is not located in any of these resource areas or the buffer zone.

Based on the spatial site constraints, some site grading will be necessary within Bordering Land Subject to Flooding. The 100-year flood plain elevation is 137.5 NGVD. To ensure that the proposed development will not result in increased flooding in other areas, the incremental loss of flood plain volume has been compensated in other areas of the site, as noted above in Section 3 Flood Potential.

A small amount of work is proposed within the Riverfront Area. This work will include the demolition of the existing garage and the existing supply house. Both of these structures are located within the inner Riparian Zone and are as close as 10 feet to the river. These areas will be restored and seeded with grasses. This will result in removing 2,025 s.f. of impervious area from the Riverfront Area, and the operations associated with these structures will be consolidated at the new facility, well-away from the River.

The work proposed within the 100-foot buffer zone is limited to the demolition of the garage and supply house, and the restoration of those areas, as described above.

### 9.) Smoke:

The WTP facility will not produce any smoke.

### 10.) Odors:

The WTP facility will not produce any odors.

### 11.) Vibration:

The various pumps within the WTP facility may produce slight amounts of vibration. That vibration, however, should not be felt outside of the building itself. The emergency generator will also produce

minor vibration when it is in use, but will include a sound enclosure. A small blower motor on the aeration tower behind the WTP will produce minor vibrations but will be dampened with mounting equipment and won't be noticeable unless directly adjacent to the blower.

### 12.) Waste Disposal:

Waste generated from the facility's process is limited to solids produced during the filtration process. The backwash water generated from the filtration process will be directed to recycle tanks where the solids will be allowed to settle. The resulting supernatant will be recycled to the head of the facility and the settled solids will be pumped to the sewer and treated at the Charles River Pollution Control District (CRPCD) Wastewater Treatment Facility (WWTF). Although the estimated settled solids produced will vary based on raw water quality and the volume of water treated at the facility, a conservative estimate is that settled solids will be pumped to the sewer approximately once a month. This would equate to a total volume of 15,000 gallons, or approximately 500 gallons per day (GPD) on average. The pumping rate and duration will be dictated by the CRPCD.

Other common waste generated by the operation of the WTP facility and associated Water Department operations will be recycled to the extent practical. Waste that can't be recycled will be disposed of in the dumpster which is to be located to the rear of the building.

### 13.) Off-site Environmental Drainage Impacts:

In order to avoid any off-site drainage impact runoff from the project will be mitigated by a stormwater management system, which will ensure that there is no increase in flow rate and that the stormwater is treated in compliance with the town's Stormwater Bylaws and DEP's Stormwater Policy. Stormwater will be captured by a series of swales/shallow ditches and conveyed to an extended dry detention basin located on the downgradient portion of the site. This system discharges toward the Charles River, over 100 feet from the Bordering Vegetated Wetlands along the river.

# TOWN OF MEDWAY, MASSACHUSETTS CONTRACT DRAWINGS FOR POPULATIC WATER TREATMENT PLANT



# JANUARY 2022 PERMIT SUBMITTAL

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### **APPENDIX - RENDERINGS**

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LOCATION PLAN SCALE: 1"=2,000'

- **GENERAL NOTES** THE OWNER WILL BE RESPONSIBLE FOR OBTAINING THE PERMITS LISTED IN THE SUPPLEMENTARY OR SPECIAL CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH PERMIT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. COPIES OF ALL OBTAINED PERMITS ARE AVAILABLE FOR REVIEW FROM THE OWNER. ALL OTHER PERMITS ARE THE **RESPONSIBILITY OF THE CONTRACTOR.** THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS IN ACCORDANCE WITH THE MUTCD AND ALL STATE AND LOCAL REGULATIONS. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER PRIOR TO COMMENCING CONSTRUCTION. THE POLICE DEPARTMENT AND FIRE DEPARTMENT ARE TO BE NOTIFIED AT LEAST 24-HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR. REFER TO SPECIFICATION SECTION 01570. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH 3. ADMINISTRATION (OSHA). CONTRACTOR SHALL COMPLY WITH THE COORDINATION REQUIREMENTS AND RELATED COSTS, IF ANY, AS SPECIFIED IN SPECIFICATION SECTION 01050. AND ENGINEER. CONTRACTOR SHALL NOTE THAT, IN GENERAL, ALL EXISTING CONDITION INFORMATION ON THE DRAWINGS ARE SHOWN WITH A LIGHTER LINE WEIGHT AND WITH A SLANTED TYPE TEXT. COORDINATE FINE GRADING WITH THE ENGINEER. 6. REFER TO THE EROSION CONTROL PLAN AND NOTES PRIOR TO ANY LAND DISTRUBING ACTIVITY. 7. FERTILIZER USE IS PROHIBITED ON THE SITE DUE TO THE ZONE 1 WELLHEAD PROTECTION AREA. **EXISTING SITE CONDITIONS** THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES. AS SHOWN ON THE DRAWINGS. ARE APPROXIMATE AND SEED. MAY NOT BE COMPLETE. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE BASED ON PREVIOUS CONSTRUCTION DESIGN PLANS, RECORD DRAWINGS AND SURVEY DATA, WHICH ARE AVAILABLE FOR INSPECTION AT THE ENGINEER'S 15. OFFICE. NO GUARANTEE IS MADE THAT UTILITIES OR STRUCTURES WILL BE ENCOUNTERED WHERE SHOWN, OR THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. ALL LOCATIONS AND SIZES OF EXISTING UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD WITH TEST PITS AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION OF NEW FACILITIES OR PIPING THAT MAY BE AFFECTED. THE CONTRACTOR WILL REALIGN NEW PIPE LOCATIONS AS REQUIRED TO CONFORM TO EXISTING LINES AND AS APPROVED BY THE ENGINEER. BELOW GRADE UTILITY INFORMATION IS BASED ON INFORMATION PROVIDED BY EACH UTILITY. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE PRIOR TO COMMENCING WORK. REFER TO SPECIFICATION SECTION 01050. ADDITIONAL TEST PITS, BEYOND THOSE SHOWN, MAY BE REQUIRED. UTILITY CONTACTS ARE AS FOLLOWS: THERE ARE NO KNOWN HAZARDOUS ENVIRONMENTAL CONDITIONS WITHIN THE AREA OF WORK. REFER TO SPECIFICATION SECTION 00800-SC-5.06. IF THE PRESENCE OF HAZARDOUS ENVIRONMENTAL CONDITIONS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER IMMEDIATELY. ALL ACTIVITIES, HANDLING AND DISPOSAL OF HAZARDOUS ENVIRONMENTAL CONDITIONS AND MATERIALS SHALL BE IN ACCORDANCE WITH OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. SITE DEMOLITION REFER TO THE EXISTING SITE PLAN, FOR ADDITIONAL INFORMATION REGARDING EXISTING FACILITIES. REFER TO THE LAYOUT DRAWING FOR LIMITS OF WORK. REFER TO ARCHITECTURAL, STRUCTURAL, PROCESS, MECHANICAL, PLUMBING, INSTRUMENTATION AND ELECTRICAL DRAWINGS FOR SPECIFIC INFORMATION REGARDING DEMOLITION AND REMOVAL. REFER TO SPECIFICATION SECTION 01010A, WHICH CONTAINS INFORMATION ON CONSTRAINTS OF CONSTRUCTION SEQUENCING. DEMOLISH/REMOVE EXISTING PIPING AS REQUIRED FOR CONSTRUCTION OF NEW FACILITIES. ALL PIPING, EQUIPMENT AND MATERIALS TO BE DEMOLISHED AND/OR REMOVED FROM SERVICE SHALL BE COORDINATED WITH THE OWNER AND ENGINEER BEFORE COMMENCING THAT WORK. EXISTING PIPING THAT NEEDS TO BE REMOVED TO CONSTRUCT THE NEW FACILITIES, BUT IS TO REMAIN, SHALL BE REINSTALLED/REPLACED AS NEEDED. ALL EXISTING PIPING AND UTILITIES WHICH ARE BENEATH PROPOSED STRUCTURES, AND ARE TO BE ABANDONED, SHALL BE REMOVED TO A MINIMUM OF 5-FEET OUTSIDE OF THE STRUCTURE. PIPE AND UTILITIES BENEATH PROPOSED STRUCTURES THAT ARE TO REMAIN SHALL BE CONCRETE ENCASED, UNLESS OTHERWISE INDICATED. REFER TO THE STRUCTURAL DRAWINGS FOR DETAILS. CONTRACTOR SHALL COORDINATE WITH OWNER PRIOR TO ABANDONING OR REMOVING ANY EXISTING UTILITIES. SEVERING OF EXISTING UTILITIES FOR ABANDONMENT, OR REMOVAL OF A SEGMENT FROM SERVICE, SHALL BE PERFORMED IN SUCH A MANNER AS TO ALLOW THE REMAINING ACTIVE SEGMENT TO CONTINUE IN ITS INTENDED SERVICE. CAP ACTIVE SEGMENTS WITH APPROPRIATE FITTINGS, JOINT RESTRAINT, ETC. TO ENSURE THEIR INTEGRITY. PLUG ENDS OF ABANDONED PIPE SEGMENTS WITH CONCRETE UNLESS SPECIAL CIRCUMSTANCES DICTATE PLUGGING ABANDONED PIPES WITH BLIND FLANGES. RESTRAINED MECHANICAL JOINT PLUGS. ETC. AS APPROPRIATE. ASSOCIATES.. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. THE OWNER RESERVES THE RIGHT TO RETAIN ANY SUCH PIPING, EQUIPMENT AND MATERIALS DESIGNATED FOR DEMOLITION, SUCH MATERIALS TO BE RETAINED SHALL BE PROPERLY STORED IN AN ON-SITE LOCATION. COORDINATE LOCATION AND MATERIALS TO BE SALVAGED WITH THE OWNER/ENGINEER. REFER TO SPECIFICATION SECTION 02050A. THE CONTRACTOR SHALL KEEP A RECORD OF DEMOLITION AS PART OF THE PROJECT RECORD DOCUMENTS IN ACCORDANCE WITH SPECIFICATION SECTION 01720. THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO ENSURE THAT ALL PROCESS FLOWS ARE MAINTAINED DURING CONSTRUCTION. GRAVITY OR PUMPED BYPASSES AND OTHER MEANS OF MAINTAINING FLOW SHALL BE SUBJECT TO THE REVIEW AND ACCEPTANCE OF THE ENGINEER. THE CONTRACTOR SHALL COORDINATE ANY TEMPORARY STOPPAGES OR BYPASSES WITH THE OWNER AND ENGINEER. FEDERAL AND STATE REGULATIONS REQUIRE THAT THE TREATMENT FACILITY REMAIN IN OPERATION (ALL TREATMENT, DISINFECTION, SLUDGE HANDLING AND DISPOSAL PROCESSES) THROUGHOUT CONSTRUCTION, AND THAT DISCHARGE PERMITS ARE MET. REFER TO SPECIFICATION SECTION 01010A 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROPRIATE DISPOSAL OF FLOWS RESULTING FROM PRECIPITATION AND GROUNDWATER DEWATERING OPERATIONS. REFER TO SPECIFICATIONS SECTION 02240 FOR REQUIREMENTS RELATED TO CONSTRUCTION DEWATERING. SITE CLEARING, GRUBBING AND GRADING STRIPPING OF TOPSOIL (LOAM) SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02115. REFER TO THE LAYOUT 4. AND GRADING DRAWINGS FOR LIMIT OF WORK AND STRIPPING. CONTRACTOR SHALL MINIMIZE CLEARING OPERATIONS. CLEARING AND GRUBBING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02110. CLEARING LIMITS SHALL BE AS INDICATED ON THE DRAWINGS, BUT AT ALL TIMES WITHIN EXISTING ROAD RIGHTS-OF-WAY AND PROPERTY LINES ON STATE OR COUNTY-OWNED PROPERTY OR EASEMENTS. ALL CLEARING AND GRUBBING MATERIAL SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT A SITE PROVIDED BY THE CONTRACTOR IN COMPLIANCE WITH ALL STATE AND LOCAL LAWS. THE CONTRACTOR SHALL FOLLOW ALL ENDANGERED SPECIES ACT 4(D) RULES REGARDING THE NORTHERN LONG EARED BAT. THIS INCLUDES AVOIDANCE OF TREE REMOVAL DURING THE MONTHS OF JUNE AND JULY. CONTRACTOR SHALL PLAN ACCORDINGLY. CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL AND DRAINAGE MEASURES IN ALL AREAS OF WORK, AND CONFINE SOIL SEDIMENT TO WITHIN THE LIMITS OF EXCAVATION AND GRADING. PRIOR TO BEGINNING EXCAVATION WORK, EROSION CONTROL FENCE SHALL BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE ACTUAL LIMITS OF GRUBBING AND/OR GRADING, AND AS SHOWN ON THE DRAWINGS. EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE A MINIMUM, CONTRACTOR SHALL TAKE ALL OTHER NECESSARY MEASURES. EROSION CONTROL FENCE SHALL ALSO BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE TOPSOIL STOCKPILES. ALL DISTURBED EARTH SURFACES SHALL BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF
- CONTROL FACILITIES SHALL BE REMOVED AT THE END OF THE PROJECT. REFER TO SPECIFICATION SECTION 02270. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY HAY BALE FILTERS TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL COLLECTED SEDIMENT, AND THAT WHICH COLLECTS IN THE STORM DRAIN SYSTEM. REFER TO THE CIVIL DETAIL DRAWINGS.

EXCAVATED MATERIAL SHALL BE STABILIZED IN A MANNER THAT WILL MINIMIZE EROSION. ALL INSTALLED EROSION

TEST PIT AND/OR BORING LOGS FOR THE PROJECT SITE ARE INCLUDED IN APPENDIX A OF THE SPECIFICATIONS. THESE ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. PLEASE NOTE THAT THE SOIL DESCRIPTIONS PROVIDED ON THE TEST PIT BORING LOGS DO NOT REPRESENT FIELD CONDITIONS OTHER THAN AT THE SPECIFIC SUBSURFACE EXPLORATION LOCATIONS. THE CONDITIONS BETWEEN SUBSURFACE EXPLORATION LOCATIONS MAY VARY FROM THOSE SHOWN ON THE **TEST BORING LOGS.** 

- AFTER APRIL 15.

**CIVIL SITE LAYOUT** 

- **CIVIL DETAIL DRAWINGS.**

- **IMMEDIATELY TO THE ENGINEER.**
- CIVIL DETAIL DRAWINGS.
- CONSTRUCTION.

### **CIVIL SITE PIPING**

- **TO SPECIFICATION SECTION 15088.**
- THE TRENCH INSULATION DETAIL.

7. CONTRACTOR SHALL CONTROL DUST ON THE CONSTRUCTION SITE TO A REASONABLE LIMIT, AS DETERMINED BY THE ENGINEER, AND AS OUTLINED IN SPECIFICATION SECTION 01562.

CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS AND PLANT DRIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE ASSOCIATED CLEAN UP.

9. ALL CATCH BASINS, MANHOLES, VALVE PITS, VALVE BOXES AND OTHER BURIED FACILITIES WITH SURFACE ACCESS SHALL BE ADJUSTED TO MATCH FINAL GRADES, UNLESS OTHERWISE INDICATED.

10. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT, WITH EXCESS MATERIAL DISPOSED OF AT A LOCATION PROVIDED BY THE CONTRACTOR. THESE PROVISIONS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF OBLIGATIONS TO PROPERLY DISPOSE OF AND REPLACE ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH THE **APPLICABLE SECTIONS OF THE CONTRACT DOCUMENTS.** 

11. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, TO THE SATISFACTION OF THE OWNER

12. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE.

13. ALL ROAD AND DRIVE CROSS SLOPES SHALL PITCH 1/4-INCH PER FOOT MINIMUM. ALL PAVED SURFACES SHALL PITCH MIN. 2% UNLESS OTHERWISE NOTED. REFER TO THE CIVIL DETAIL DRAWINGS.

14. ALL NON-ROADWAY AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED, UNLESS OTHERWISE NOTED. THE TOP 6-INCHES OF SOIL SHALL BE LOAM FROM A TOWN APPROVED SUPPLIER. REFER TO SPECIFICATION SECTION 02485, LANDSCAPING/LOAM AND 20.

THE BASE COURSE PAVING SHALL BE INSTALLED PRIOR TO NOVEMBER 15 AND THE FINAL PAVING SHALL BE INSTALLED

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PROVIDED LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

2. REFER TO THE PIPING AND GRADING PLANS FOR ADDITIONAL LAYOUT INFORMATION.

3. CONTRACTOR SHALL EXCAVATE TEST PITS, WHERE NECESSARY, PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO THE ENGINEER FOR REVIEW FOR CONFORMANCE TO THE PLANS. TEST PITS ARE REQUIRED WHERE SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

4. IN GENERAL, THE GIVEN STRUCTURE LOCATIONS ARE TO THE OUTSIDE FACE OF THE STRUCTURE FOUNDATION WALL, NOT FOOTINGS. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING AND STRUCTURE DIMENSIONS. RADII SHOWN FOR ROADS ARE TO EDGE OF PAVEMENT.

5. PLACE CRUSHED STONE MOWING STRIP AROUND THOSE STRUCTURES AS INDICATED ON THE DRAWINGS. REFER TO THE

THE LOCATIONS AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER. THE CONTRACTOR SHALL LIMIT ACTIVITIES TO THESE AREAS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR THE LOCATIONS OF CONSTRUCTION TRAILER(S).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING AND RESETTING ALL EXISTING PROPERTY MONUMENTATION DISTURBED BY CONSTRUCTION. THIS WORK SHALL BE DONE BY A LAND SURVEYOR REGISTERED IN THE STATE OF MASSACHUSETTS, AT NO ADDITIONAL COST TO THE OWNER.

8. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS. REPORT ANY DISCREPANCIES

BOLLARD LOCATIONS SHOWN ARE APPROXIMATE. COORDINATE BOLLARD LOCATIONS WITH THE ENGINEER. REFER TO THE

10. PARKING SPACES SHALL BE 9' WIDE X 18' LONG, UNLESS SHOWN OTHERWISE.

11. UNLESS OTHERWISE NOTED, ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ORIENTATION IS GRID NORTH ON THE NAD 83 MASSACHUSETTS STATE PLAN, U.S. FOOT COORDINATE SYSTEM. PROJEC BENCH MARK IS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VERIFY BENCHMARK ELEVATIONS PRIOR TO USING IN

12. EXISTING CONDITIONS SITE PLAN DEVELOPED FROM 2020 SURVEY DRAWING PREPARED BY MERRILL ASSOCIATES (SUBCONTRACTED TO ENVIRONMENTAL PARTNERS) AND EXISTING RECORD DRAWING INFORMATION.

13. WETLAND BOUNDARIES DELINEATED BY PINEBROOK CONSULTING IN JUNE 2020. WETLANDS FLAGS SURVEYED BY MERRILL

PROCESS FLOW DIAGRAM AND PIPING LEGEND ARE ON THE PROCESS DRAWINGS. THE PROCESS PIPING SCHEDULE AND ADDITIONAL PIPING NOTES ARE LOCATED IN SPECIFICATION SECTION 15050.

2. ALL PIPE LINES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS IN PIPING WILL BE PERMITTED. CONCRETE THRUST BLOCKS OR OTHER ACCEPTABLE RESTRAINT SYSTEM IS REQUIRED ON ALL FITTINGS ON PRESSURE PIPE. WHERE A RESTRAINED JOINT SYSTEM IS USED, THE NUMBER OF PIPES WITH RESTRAINED JOINTS ON EITHER SIDE OF THE FITTING SHALL BE DESIGNED TO REFLECT THE PROJECT SOIL CONDITIONS AND PEAK SURGE PRESSURE IN THE PIPING SYSTEM. SEE THE CIVIL DETAIL DRAWINGS FOR THRUST BLOCK DETAILS. PROVIDE ALL BENDS (HORIZONTAL AND VERTICAL) AS REQUIRED TO MEET THE GRADES AND ALIGNMENT INDICATED ON THE DRAWINGS.

THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING PIPING AND UTILITIES IN THE FIELD BY TEST PIT EXCAVATION PRIOR TO COMMENCING INSTALLATION OF ANY OF THE NEW PIPING AFFECTED. WHERE NEW PIPE CONNECTS TO EXISTING PIPING OR STRUCTURAL PENETRATION, CONTRACTOR SHALL VERIFY ELEVATION BY TEST PIT, AS REQUIRED, PRIOR TO INSTALLATION OF ANY OF THE ASSOCIATED/AFFECTED NEW PIPING. IDENTIFIED CONFLICTS WITH EXISTING PIPING AND UTILITIES WILL BE REVIEWED WITH THE ENGINEER PRIOR TO COMMENCING INSTALLATION. THE HORIZONTAL ALIGNMENT OF NEW PIPING MAY BE ADJUSTED IN THE FIELD SUBJECT TO PRIOR REVIEW AND ACCEPTANCE OF THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF ALL PROPOSED WORK AS SHOWN ON THE DRAWINGS AND REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

ALL PRESSURIZED PIPES (I.E. PLANT WATER, TOWN WATER, SOLUTION LINES, HEAT, ETC.) INSTALLED BENEATH STRUCTURES SHALL BE ENCASED IN CONCRETE. SEE STRUCTURAL DRAWING FOR DETAILS.

5. ALL BURIED CONNECTIONS TO STRUCTURES SHALL HAVE SLEEVE TYPE FLEXIBLE CONNECTIONS APPROXIMATELY 4-FEET FROM THE STRUCTURES. ALL SLEEVE TYPE COUPLINGS ON PRESSURE LINES SHALL BE RESTRAINED (SOLID SLEEVE). REFER

PROVIDE CAST OR DUCTILE IRON WALL CASTINGS, OR GALVANIZED STEEL PIPE SLEEVES, FOR ALL PIPE PENETRATIONS MADE THROUGH CONCRETE FOUNDATIONS, WALLS AND SLABS. ALL WALL SLEEVES AND WALL CASTINGS SHALL HAVE WATERSTOPS. SEE PROCESS, MECHANICAL AND STRUCTURAL DRAWINGS FOR LOCATIONS OF PENETRATIONS. NEW PENETRATIONS THROUGH EXISTING STRUCTURE WALLS SHALL BE BY CORING MACHINE AND LINK-TYPE SEALS, UNLESS OTHERWISE INDICATED. OPENINGS TO BE COMPATIBLE WITH REQUIRED PIPING AND STANDARD LINK SEAL SIZES. SEE PROCESS DETAIL DRAWINGS. REFER TO SPECIFICATION SECTION 15092.

TRENCH INSULATION SHALL BE USED WHERE DEPTH OF COVER IS LESS THAN 5-FEET. INSULATION TO BE CLOSED CELL EPDM ENCASED IN PVC PIPE AND PROPERLY SEALED TO PREVENT WATER INTRUSION. REFER TO THE CIVIL DETAIL DRAWINGS FOR

TRENCH INSULATION SHALL BE USED WHEN THERE IS LESS THAN 2-FEET BETWEEN THE FORCE MAIN AND A CULVERT. INSULATION TO BE CLOSED CELL EPDM ENCASED IN PVC PIPE AND PROPERLY SEALED TO PREVENT WATER INTRUSION. **REFER TO THE CIVIL DETAIL DRAWINGS FOR THE TRENCH INSULATION DETAIL.** 

MANHOLES ARE 4-FEET IN DIAMETER UNLESS OTHERWISE NOTED. THE TOP OF MANHOLE FRAMES SHALL BE SET FLUSH WITH FINISH GRADE, UNLESS OTHERWISE NOTED ON DRAWINGS. MANHOLES TO HAVE 26-INCH DIAMETER COVERS.

10. PIPES WITHIN VALVE PITS (MANHOLES) SHALL BE SUPPORTED 12-INCHES ABOVE BOTTOM OF MANHOLE ON ADJUSTABLE PIPE SADDLE SUPPORTS, IN ACCORDANCE WITH SPECIFICATION SECTION 15094, UNLESS OTHERWISE INDICATED.

11. CONTRACTOR SHALL RE-SHAPE INVERTS AS REQUIRED WHEN CONNECTING INTO EXISTING MANHOLES.

12. REFER TO SPECIFICATION SECTION 02200 FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.

- 13. COMPACTION TESTS WILL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200. ANY SETTLEMENT OCCURRING WITHIN ONE-YEAR OF FINAL COMPLETION OF THE WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- OPEN TRENCHES IN THE ROADWAY MUST BE BACKFILLED AT THE END OF THE WORKDAY. OPEN TRENCHES OUTSIDE OF THE RIGHT OF WAY AND AT THE END OF PIPE RUNS MAY BE LEFT OPEN IF THE CONTRACTOR PROVIDES ADEQUATELY SAFE PLATING. BARRICADING AND LIGHTS.
- 15. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTICE TO THE RESPECTIVE UTILITY POLE OWNER. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR **TEMPORARY BRACING OF UTILITIES.**
- 16. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.
- 17. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE CIVIL EXISTING CONDITIONS AND DEMOLITION PLAN. ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 18. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION MATERIALS IN ACCORDANCE WITH SPECIFICATION SECTION 02050.
- 19. WHERE POSSIBLE, WATER LINES SHOULD BE INSTALLED OVER WASTEWATER OR SLUDGE LINES. A MINIMUM SEPARATION OF 18-INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE WASTEWATER OR SLUDGE LINE SHALL BE MAINTAINED, IF POSSIBLE. WHERE A WATER LINE CROSSES UNDER A WASTEWATER OR SLUDGE LINE, A FULL LENGTH OF PIPE SHALL BE CENTERED ABOVE THE WATER LINE SO THAT BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE.
- ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO ANY TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. DAMAGE TO ANY SUCH STRUCTURES CAUSED BY OR RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE OWNER.
- 21. PIPING ON THE PIPING PLAN HAS BEEN SHOWN BROKEN FOR CLARITY ONLY. PIPE BREAKS DO NOT INDICATE RELATIVE **ELEVATIONS OF PIPING.**
- 22. ELECTRICAL CONDUIT RUNS ARE INDICATED ON THE ELECTRICAL DRAWINGS [AND ARE SHOWN IN DASHED/PHANTOM LINEWEIGHT ON THE CIVIL DRAWINGS FOR CONVENIENCE]. CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION, EXCAVATION AND BACKFILLING REQUIRED FOR THE ELECTRICAL CONDUITS, AND SHALL FURNISH AND INSTALL ELECTRICAL MANHOLES AND HANDHOLES. COORDINATE THE LOCATION OF THE ELECTRICAL MANHOLES AND HANDHOLES, AND THE **REQUIRED OPENING SIZES, WITH THE ELECTRICAL CONTRACTOR.**
- WHENEVER PROPOSED STRUCTURES ARE LOCATED PARTLY WITHIN A PAVED AREA AND PARTLY IN A NON-PAVED AREA, A BITUMINOUS CONCRETE PAVED APRON 2-FEET WIDE SHALL BE SUPPLIED AROUND THE PROPOSED COVER. PAVEMENT SHALL SLOPE AWAY FROM THE COVER.

### **CIVIL ABBREVIATIONS**

	AND	MIN
DIA	DIAMETER	MW
NO	NUMBER	N
P'D	APPROVED	NGVD
DG	BUILDING	N/A
6	CATCH BASIN	NTS
N	CENTER	OD
S	CUBIC FEET PER SECOND	PC
	CAST IRON	PSF
	CENTERLINE	PSI
ΛP	CORRUGATED METAL PIPE	PS
)	CLEANOUT	РТ
ONC	CONCRETE	PVC
)R	CORNER	RCP
,	CUBIC YARD	RD
MO	DEMOLITION	REQ'D
ин	DRAIN MANHOLE	RW
	DUCTILE IRON	S
R	DRAIN	SD
VG	DRAWING	SF
	ELEVATION	SMH
ИН	ELECTRIC MANHOLE	SQ
E	FINISHED FLOOR ELEVATION	STA
1	FORCE MAIN	T, XFMR
	FEET	ТВМ
V	FINISH WATER	ТНК
	GAS	TOS
′D	HYDRANT	ТҮР
AN	HOT MIX ASPHALT	UD
	INCH	UG
F	INFLUENT	UGE
V	INVERT	VC
S	POUNDS	W/
AX	MAXIMUM	W
н	MANHOLE	

	LEGEND	
EXISTING		PROPOSED
	PROPERTY/ROW LINE	
· ·	SETBACK LINE	· ·
	CENTERLINE	
	EDGE OF PAVEMENT	
	CURBING	
	EDGE OF GRAVEL	
122	CONTOUR	<u>123</u>
///////////////////////////////////////	BUILDING	
	STONEWALL	
• • • • • • • •	I REELINE CHAIN LINK FENCE	
OO	STOCKADE FENCE	OO
— X — X —	BARB WIRE FENCE	— × ×
-^^	RETAINING WALL	
<u>8"</u> s	SEWER	<u> </u>
4″FMFM	SEWER FORCE MAIN	4 <u>"FM</u>
GG	GAS	<u>4"G</u>
w		15"SD
<u></u>	UNDERDRAIN	6 <u>"UD</u>
	CULVERT	=_ <u>12" CMP</u>
UGE UGE	UNDERGROUND ELECTRIC	UGE
OHE OHE		OHEOHE
UGT UGT CATV CATV	UNDERGROUND TELEPHONE	-
O	IRON PIPE/REBAR	•
۲	DRILLHOLE	۲
		•
2• <u>&gt;</u> 124.6	SURVEY CONTROL POINT	
× SMH	SEWER MANHOLE	× ●SMH
O	DRAINAGE MANHOLE	● DMH
T I E E		●СВ ■СВ
TMH		
$\bowtie$	SHUTOFF VALVE	
$\otimes$	WATER SERVICE SHUTOFF	θ
Ø	YARD HYDRANT	¥
-0- @	HYDRANT GAS SERVICE SHUTOFE	•
G	GAS GATE VALVE	
Ø	UTILITY POLE	ø
o-L	UTILITY POLE W/ GUY	× ×
¢ ¢		*
0	BOLLARD	•
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FLAGPOLE	~~ *
The	CONIFEROUS TREE	The
	DECIDUOUS TREE	
	WETLAND FLAG	Ç
	EDGE OF WATER	
	STREAM	
	EDGE OF WETLANDS	
<u>مالد</u>	WETLANDS	
$\Rightarrow$	DRAINAGE FLOW	$\Rightarrow$
	DRAINAGE SWALE	
	PAVEMENT MARKINGS SIGN	
₀ □ <sup>MB</sup>	MAILBOX	
$\bullet$	TEMPORARY BENCH MARK	$\sim$
TP B	TEST PIT	
$\mathbf{\Phi}^{P}$	TEST BORING	
↔ ● MW	MONITORING WELL	
	LIMIT OF WORK	
RAMARAN	SILT FENCE	
<u>x y yyzy yyzy</u>	RAILROAD	KAKTA-CTALCT
	MATCHLINE	
	ROCK OUTCROP	
	RESTORE PAVEMENT	



### MONITORING WELL NATIONAL GEODETIC VERTICAL DATUM NOT AVAILABLE/APPLICABLE NOT TO SCALE **OUTSIDE DIAMETER** PERFORATED CLAY POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PRIMARY SLUDGE POINT OF TANGENCY POLYVINYL CHLORIDE **REINFORCED CONCRETE PIPE** ROOF DRAIN REQUIRED RAW WATER **SLOPE, SEWER** STORM DRAIN SQUARE FEET SANITARY SEWER MANHOLE SQUARE STATION TRANSFORMER **TEMPORARY BENCH MARK** THICKNESS TOP OF STRUCTURE TYPICAL UNDERDRAIN UNDERGROUND UNDERGROUND ELECTRIC VITRIFIED CLAY WITH

MINIMUM

POTABLE WATER



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**AST SAVED BY: DANIEL.METZ 1/25/2022 12:45** 



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# FINISHED GRADE VARIES 6"MIN. 12" MAX. 6" BELOW ROOTBALL **GUY TYPE "A"** TREES UP TO 3.5 CAL

SITE LANDSCAPE WORK-LAWNS

### PLANTING NOTES:

- CONDITION. ALL OTHERS WILL BE REJECTED.

### PLANT LIST

COM	SYMBOL
NORTHI	
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FLOWERI	Service and a
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THUJA S PLICATA	
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MA\MEDWAY\20600-WTP\_DESIGN\DRAWINGS\CIV\20600-CS-DETAILSI.DWG | 20600-CS-DetailsI | 1:2.5849 | ---- | 1/25/2022 2:57:21 PM | DA









## **EROSION AND SEDIMENTATION CONTROL NOTES**

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN URBAN AND SUBURBAN AREAS AS CONTAINED IN THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS". FRANKLIN, HAMPDEN, HAMPSHIRE CONSERVATION DISTRICTS. DATED MARCH, 1997; REPRINT MAY, 2003.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES REQUIRED FOR THE PROJECT ARE SHOWN ON SHEET C-2. PROVIDE SILT FENCE, STONE CHECK DAMS AND OTHER EROSION CONTROL MEASURES AS REQUIRED TO ADEQUATELY PREVENT SEDIMENT TRANSPORT AS NOTED IN THE BMP.

- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS", FRANKLIN, HAMPDEN, HAMPSHIRE CONSERVATION DISTRICTS, DATED MARCH, 1997.
- 2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE MAINTAINED IN AN UNTREATED OR UNVEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL, AREAS TO BE VEGETATED SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
- 3. SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF UPGRADIENT DRAINAGE AREAS.
- 4. INSTALL SILT FENCE AT TOE OF SLOPES TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTE #5.
- 5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSURE. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.
- 6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 TO 1) UNLESS STABILIZED WITH PERMANENT EROSION CONTROL MEASURES.
- 7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT TO BE COMPLETED 30 DAYS PRIOR TO THE ANTICIPATED DATE OF THE FIRST KILLING FROST, USE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY PERMANENT SEEDING, UNTIL UPGRADIENT AREAS ARE STABILIZED.
- 8. WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISH GRADED SHALL BE COMPLETED 30 DAYS PRIOR TO THE FIRST KILLING FROST.
- 9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
- 10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE **GRADED, SMOOTHED, AND REVEGETATED AS FOLLOWS:**
- A. A MINIMUM OF FOUR (4) INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
- B. APPLY LIMESTONE ACCORDING TO SOIL TEST. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SQ. FT.).
- C. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED WITH A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED WITH A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYE GRASS: SEEDING RATE IS 3.0 LBS PER 1000 SQ. FT. LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED.
- D. HAY MULCH AT THE RATE OF 70-90 LBS PER 1000 SQUARE FEET OR A HYDRO-APPLICATION OF CELLULOSE FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER WILL BE USED ON HAY MULCH FOR WIND CONTROL.
- E. \*\*\*USE OF FERTILIZER PROHIBITED ON THIS SITE DUE TO THE ZONE 1 WELLHEAD PROTECTION AREA.\*\*\*
- 11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE WORK AREA IS STABILIZED.
- 12. WETLANDS (EXCEPTING THOSE WHICH ARE TO BE FILLED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS) WILL BE PROTECTED WITH SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- 13. IN GENERAL, AREAS WITHIN 100 FEET OF DELINEATED WETLANDS OR STREAMS SHALL HAVE A MAXIMUM PERIOD OF EXPOSURE OF NOT MORE THAN 15 DAYS.
- 14. FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IN ALL AREAS WITHIN 100 FEET OF DELINEATED WETLANDS OR STREAMS.

## TOWN SPECIFIC EROSION AND SEDIMENTATION CONTROL NOTES

- a. OWNER: PETER PELLETIER DIRECTOR OF DEPARTMENT OF PUBLIC WORKS (508) 533-3275 ENGINEER: WRIGHT PIERCE - 600 FEDERAL STREET, SUITE 2151, ANDOVER, MA - (978) 416-8000
- TITLE SEE TITLE BLOCK, DATE SEE TITLE BLOCK, NORTH ARROW (ALL PLAN SHEETS), NAMES OF ABUTTERS (C-1A), SCALE (ALL SHEETS), LEGEND (C-1) AND LOCUS MAP (COVER SHEET).
- c. LOCATION AND DESCRIPTION OF NATURAL FEATURES INCLUDING THE FOLLOWING: WATER BODIES, WETLAND RESOURCE AREAS AND FLOOD PLAIN INFORMATION (C-2) EXISTING VEGETATION (C-2)
- HABITATS MAPPED MASSACHUSETTS NATURAL HERITAGE & ENDANGERED SPECIES PROGRAM (C-2)
- d. LINES OF EXISTING ABUTTING STREETS SHOWING DRAINAGE AND DRIVEWAY LOCATIONS
- (C-1A)
- EXISTING SOILS, VOLUME AND NATURE OF IMPORTED SOIL MATERIALS (C-4) TOPOGRAPHICAL FEATURES INCLUDING EXISTING AND PROPOSED CONTOURS (C-4)
- SURVEYED PROPERTY LINES (C-1A, C-2)
- DRAINAGE PATTERNS (C-4)
- LIMIT OF WORK (C-2)
- LOCATION (C-4) AND DETAILS OF EROSION AND SEDIMENT CONTROL MEASURES (C-10)
- k. PATH AND MECHANISM TO DIVERT UNCONTAMINATED WATER (C-4) LOCATION (C-4) AND DESCRIPTION OF INDUSTRIAL DISCHARGES: THE OVERFLOW DISCHARGES ARE FROM THE EQUALIZATION TANK, BACKWASH TANKS AND CLEARWELL TANK. ALL OF THE OVERFLOWS ARE REQUIRED PER MASS DEP RULES. m. STORMWATER RUNOFF CALCULATIONS (REFER TO THE PROJECT SPECIFIC STORMWATER
- MANAGEMENT PLAN) DESCRIPTION OF CONSTRUCTION WASTE MATERIALS: CONSTRUCTION WASTE SHALL BE
- STORED IN DUMPSTER AND DISPOSED OF OFF SITE IN ACCORDANCE WITH STATE AND FEDERAL LAWS o. DESCRIPTION OF PROVISION FOR PROJECT PHASING WHEN GREATER THAN ONE ACRE IS TO BE
- ALTERED OR DISTURBED: CONTRACTOR SHALL NOT DISTURB MORE THAN ONE ACRE AT A TIME WITHOUT STABILIZATION. TIMING, SCHEDULES AND SEQUENCE OF DEVELOPMENT: GENERAL GUIDELINES FOR
- IMPORTANT STEPS IN THE SEQUENCE OF DEVELOPMENT ARE PRESENTED ON SHEET C-10.
- q. MAINTENANCE SCHEDULE FOR THE CONSTRUCTION PERIOD (C-10)

## **EROSION CONTROL DURING WINTER CONSTRUCTION**

- 1. WINTER CONSTRUCTION PERIOD DEFINED: NOVEMBER 1 THROUGH APRIL 15.
- ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- TO ANY PRECIPITATION EVENT.
- STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.

B) MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3%, FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER **SLOPES GREATER THAN 8%.** 

- 8%.
- ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- SEEDING AND MULCHING PRIOR TO PLACEMENT.

### **MULCH ANCHORING**

ANCHOR MULCH WITH: MULCH NETTING (AS PER MANUFACTURER); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); OR BE WOOD CELLULOSE FIBER (2000 LBS/ACRE). WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

		<u> </u>
DATES	SEED	RATE
4/1 - 7/1 8/15 - 9/15	OATS	80 LBS/ACRE
4/1 - 6/1 (8/15 - 9/15)	ANNUAL RYE GRASS	40 LBS/ACRE
(8/15 - 10/15)	WINTER RYE	120 LBS/ACRE
(11/1 - 4/1)	MULCH W/ DORMANT SEED	80 LBS/ACRE*
(5/1 - 6/30)	FOXTAIL MILLET	<b>30 LBS/ACRE</b>
*SEED RATE ONLY		
MULCH AND MULO	CH ANCHORING	
MULCH		
LOCATION	MULCH	<u>RATE (1000 S.F.)</u>
PROTECTED AREA	STRAW OR HAY *	100 POUNDS
WINDY AREAS	STRAW OR HAY (ANCHORED) *	100 POUNDS
MODERATE TO HI	GH JUTE MESH,	AS REQUIRED
STEEP SLOPES	EXCELSIOR MAT OR EQUIV.	AS REQUIRED
* A HYDRO-APP SEEDING. A SU CONTROL.	LICATION OF CELLULOSE FIBER MAY BE APPLIED FO UITABLE BINDER SHALL BE USED ON HAY MULCH FO	DLLOWING OR WIND
EXTEND 10' BEYOND PIPE OUTLET UNLESS NOTED		,



**RIPRAP WIDTH SHALL BE EQUAL TO THE** PIPE OUTSIDE Ø PLUS 4 FEET CENTERED ON PIPE



2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1

3. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR

4. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 100 POUNDS PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED, AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.

5. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1. LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE-FREEZING TEMPERATURES. THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED, AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE 200%-300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT EXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS PERMIT, ALL DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR

6. A) BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE EITHER WOOD CELLULOSE FIBER OR BE ANCHORED WITH MULCH NETTING OR CHEMICAL TACK.

C) MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES **GREATER THAN 15%. AFTER OCTOBER 1, THE SAME APPLIES FOR ALL SLOPES GREATER THAN** 

7. AFTER NOVEMBER 1, THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND

8. DURING WINTER CONSTRUCTION PERIODS, ALL SNOW SHALL BE REMOVED FROM AREAS OF

#### ADDITIONAL TEMPORARY SEED MIXTURE (OR PERIODS LESS THAN 12 MONTHS)



- REQUIREMENTS
- **REQUIRE LARGER SOCKS PER THE ENGINEER**





**2" LAYER OF COURSE AGGREGATE GEOTEXTILE FILTER FABRIC** 





**EROSION CONTROL MATTING - SLOPES** 



# WDGE2 LED Architectural Wall Sconce





# Specifications

Depth (D1):	7″
Depth (D2):	1.5″
Height:	9″
Width:	11.5″
Weight: (without options)	13.5 lbs

ł	w
1	
1	



STATISCTICS						
DESCRIPTION	SYMBOL	AVG.	MAX	MIN.	MAX / MIN	AVG / MIN
CALC ZONE: SITE	+	0.70 FC	9.5 FC	0.00 FC	N/A	N/A

SCHEDULE				
SYMBOL	QUANTITY	MANUFACTURER	CATALOG NUMBER	DES
	26	LITHONIA LIGHTING	WDGE2 LED P3SW 30K 80CRI VW	WDGE2 LED WITH P3SW - PERFO COMFORT WIDE OPTIC



# **ABBREVIATIONS:**

&	AND
@	AT
AAH	ATTIC ACCESS HATCH
ACP	ACOUSTICAL CEILING PANEL
ACM	ASBESTOS CONTAINING MATERIAL
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALUM(AL)	ALUMINUM
BIT	BITUMINOUS
BLDG	BUILDING
BOT	BOTTOM
BS	BRICK SHELF
С	CAULK
CAB	CABINET
CARP	CARPET
¢	CENTER LINE
CBB	CONTINUOUS BOND BEAM
CDM	CAVITY DRAINAGE MATERIAL
CJ	CONTROL JOINT
CJV	CONTROL JOINT (VENEER ONLY)
CMU	CONCRETE MASONRY UNIT
COORD	COORDINATE
CONC	CONCRETE
CONT	CONTINUOUS
СРТ	CARPET TILES
СТ	CERAMIC TILES
CTR	CENTER
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DWG	DRAWING
EL	ELEVATION (HEIGHT)
ELEV	ELEVATION (PICTORAL)
EP	EPOXY PAINT
EQ	EQUAL
ES	EACH SIDE
EXIST	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FFE	FINISH FLOOR ELEVATION
FIN	FINISH
FR	
FKP	
GALV	
GWB	GTPSUIVI WALL BUAKD

# MATERIALS LEGEND

CONCRETE MASONRY UNIT (CMU)
CMU WITH 1-HR FIRE RATING
CMU WITH 2-HR FIRE RATING

BRICK

CONCRETE

A A A A

EARTH DIMENSIONAL LUMBER **OR WOOD BLOCKING** 



HOSE BIB

HARDWARE

HORIZONTAL

**HIGH POINT** 

INSULATION

LAVATORY

MAXIMUM

MINIMUM

MOUNTED

NUMBER

PLYWOOD

**ROOF DRAIN** 

REINFORCING

**ROUGH OPENING** 

SOAP DISPENSER

**TOP OF CONCRETE** 

TOP OF MASONRY

TOILET TISSUE DISPENSER

SQUARE FEET (FOOT)

REQUIRED

SEALANT

SCHEDULE

SIMILAR

TREAD

TYPICAL

WITH

VERTICAL

SHAFT LINER SPECIFICATIONS

TOP OF STEEL

**MECHANICAL** 

MANUFACTURER

MASONRY JOINT

MASONRY OPENING

NOT IN CONTRACT

PLUMBING (PAINT)

**PRESSURE TREATED** 

POUNDS PER SQUARE INCH

NOT TO SCALE

LIGHT SWITCH

HOUR

ANGLE

HOLLOW METAL

HDWE

HORIZ

INSUL

LAV

MAX

MECH

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PWD

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NO (#)

MJ

нм

WATER	CLOSET
$\sum$	BATT INSULATION
	<b>RIGID INSULATION</b>

SPRAY FOAM INSULATION

FINISH WOOD

PLYWOOD

METAL

# **ARCHITECTURAL NOTES**

- INFORMATION.
- INDICATED ON THE STRUCTURAL DRAWINGS.
- ALL INTERIOR WALLS SHALL BE PINNED AT TOP AND BOTTOM. SEE DETAILS.
- 4. ALL INTERIOR EXPOSED EDGES OF CMU WALLS SHALL BE BULL NOSE (ROUNDED) BLOCK.
- SPAN AND LOAD CONDITION.
- MECHANICAL DRAWINGS AND COORDINATE WITH THE OTHER DISCIPLINES. 8. COORDINATE WITH ALL OTHER DRAWINGS, DISCIPLINES AND TRADES FOR THE LOCATION OF PIPE
- SLEEVES AND ITEMS BUILT INTO OR ANCHORED TO THE CMU WALLS. GROUT THE CMU SOLID AT AREAS WHERE ANCHORS ARE TO BE INSTALLED. CHECK ALL DRAWINGS AND 9.
- COORDINATE WITH ALL DISCIPLINES FOR ITEMS ANCHORED TO THE CMU WALLS. 10. EXPANSION ANCHORS ARE TO HAVE A MINIMUM OF 4 3/4" EMBEDMENT UNLESS INDICATED OTHERWISE.
- 11. CONTROL JOINTS IN THE MASONRY WALLS ARE NOT TO EXTEND THROUGH THE BOND BEAM LOCATED AT THE TOP OF THE WALL. RAKE AND CAULK A JOINT AT THE TOP BOND BEAM.

# WALLS LEGEND:

	EXISTING WALL/PARTITION
	CMU BACKUP BLOCK WITH AIR INSULATION, AIR SPACE AND SI
	CMU INTERIOR PARTITION, FUL BELOW TO UNDERSIDE OF STRU
	1-HOUR RATED CMU INTERIOR FROM SLAB BELOW TO UNDERS ABOVE; UL DESIGN U906.
4 4 4 1	CIP CONCRETE WALL WITH 2" INTERIOR SIDE AND GWB OR FF
	CIP CONCRETE WALL
	1-HR RATED CIP CONCRETE WA ITEM #4-1.1.
	2-HR RATED CIP CONCRETE WA ITEM #4-1.1.
	METAL STUD PARTITION WITH GWB EACH SIDE.
	1-HR RATED METAL STUD PART 5/8" TYPE 'X' GWB EACH SIDE.

# EGRESS LEGEND

FE	FIRE EXTINGU
•>	COMMON PA
$\bullet \longrightarrow$	MAXIMUM PA
100SF/PERSON 1	OCCUPANTS P OCCUPANT LC
1	CUMULATIVE OCCUPANT LC

# SYMBOLS LEGEND

•	DRAWING NUMBER	
1 SIM A101	– SECTION	101
	SHEET NUMBER	Â
	DRAWING NUMBER	
A101	— DETAIL	C
	SHEET NUMBER	S
NAME ELEVATION	DATUM	RC
ROOM NAM	E ROOM TAG	RS
		<li>(1)—</li>
A ELE	EVATION LABEL	v
A101	INTERIOR ELEVATION	1
SH	EET NUMBER	-

CAULKING (FIRE RATED
WHERE APPLICABLE)
SEALANT
RAKE THE JOINT AND CAUL
RAKE THE IOINT AND SEAL

PARTITION TAG

DOOR TAG

WINDOW TAG

PHOTO TAG

# LINTEL NOTES

- 1. SEE THE STRUCTURAL DRAWINGS FOR THE MINIMUM BEARING REQUIRED AT MASONRY LINTELS.
- 2. REFER TO THE STRUCTURAL DRAWINGS FOR THE BEARING CONDITIONS OF THE STEEL BEAM LINTELS IN THE WOOD STUD AND CONCRETE MASONRY (CMU) WALLS.
- 4. INFILL STEEL "W" SHAPE LINTELS WITH CMU WHEN IN A MASONRY WALL. USE CORRUGATED TIES FASTENED TO THE WEB OF THE BEAM AT 16" ON CENTER TO
- SECURE THE MASONRY INFILL. 5. HEADED SHEAR STUDS SHALL BE  $3/8" \emptyset$ , 6" LONG WELDED TO THE STEEL LINTELS AT 1'-4" ON CENTER.
- 6. ALL WELDS SHOWN SHALL BE 3 INCHES LONG AT 1'-0" ON CENTER WITH A CONTINUOUS SEAL WELD.
- PROVIDE A LINTEL FOR ALL MASONRY OPENINGS OVER 8". FOR LINTELS NOT SHOWN, 7. THE MINIMUM SHALL BE A BOND BEAM LINTEL WITH 2 - #5 REBARS WITH A BRICK ANGLE AT VENEER WALLS. FOR LARGER OPENINGS NOT SHOWN, OR FOR OPENINGS IN EXISTING WALLS, UTILIZE A LINTEL FROM THE SCHEDULE THAT IS COMPARABLE FOR THE SPAN AND LOAD CONDITION.

#### 1. ALL DIMENSIONS INDICATED ON THE PLANS ARE NOMINAL, REFER TO THE DETAILS FOR MORE SPECIFIC

2. ALL INTERIOR AND EXTERIOR MASONRY WALLS SHALL HAVE HORIZONTAL JOINT REINFORCING AS

5. ALL MASONRY OPENINGS (MO'S) AND ROUGH OPENINGS (RO) ARE NOMINAL. COORDINATE ALL MASONRY OPENINGS AND ROUGH OPENINGS WITH THE ITEMS AND EQUIPMENT TO BE INSTALLED. 6. PROVIDE A LINTEL FOR ALL MASONRY OPENINGS OVER 8". FOR LINTELS NOT SHOWN, THE MINIMUM SHALL BE A BOND BEAM LINTEL WITH 2 - #5 REBARS WITH A BRICK ANGLE AT VENEER WALLS. FOR LARGER OPENINGS NOT SHOWN, UTILIZE A LINTEL FROM THE SCHEDULE THAT IS COMPARABLE FOR THE

7. PROVIDE MASONRY OPENINGS FOR THE DUCTWORK PENETRATING THE CMU WALLS. REFER TO THE

R BARRIER, 2" RIGID PLIT FACED CMU VENEER.

LL HEIGHT FROM SLAB UCTURE ABOVE, UNO.

**PARTITION, FULL HEIGHT** SIDE OF STRUCTURE

" **RIGID INSULATION ON RP PLYWOOD PANELS.** 

ALL; IBC TABLE 720.1(2)

ALL; IBC TABLE 720.1(2)

(1) LAYER OF 5/8" TYPE 'X'

TITION WITH (1) LAYER OF

JISHER

ATH OF TRAVEL

ATH OF TRAVEL

PER SF OAD

OAD

3. ALL STEEL LINTELS AND BOLTS SHALL BE HOT DIPPED GALVANIZED .

# **CODE NOTES**

#### **APPLICABLE CODES**

9TH EDITION MASSACHUSETTS STATE BUILDING CODE CMR 780:

2015 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY 780 CMR 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) AS AMENDED BY 780 CMR 13.00

ACCESSIBILITY

**521 CMR ARCHITECTURAL ACCESS BOARD REGULATIONS** 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

UNIFORM STATE PLUMBING CODE 248 CMR 10.00

527 CMR MASSACHUSETTS COMPREHENSIVE FIRE SAFETY CODE

NFPA 1 - FIRE PREVENTION CODE, 2015 EDITION AS AMENDED

#### **DESCRIPTION OF BUILDING AND WORK**

THE MEDWAY WATER TREATMENT PLANT WILL BE A NEW 1-STORY BUILDING AND HOUSE A TRUCK STORAGE GARAGE (GARAGE AREA), OFFICE/EMPLOYEE AREAS (OPERATIONS AREA) AND WATER TREATMENT EQUIPMENT AREAS (PROCESS AREA).

#### ACCESSIBILITY

THE OPERATIONS AREA WILL BE FULLY ACCESSIBLE. EQUIPMENT AND STORAGE AREAS DO NOT MEET THE DEFINITION OF PUBLIC USE PER 521 CMR AND ARE NOT REQUIRED TO BE ACCESSIBLE HOWEVER MUCH OF THESE AREAS WILL BE ACCESSIBLE.

USE GROUP/OCCUPANCY CLASSIFICATION (IBC CHAPTER 3)

- THE BUILDING IS A NON-SEPARATED MIXED USE OF THE FOLLOWING USES:
- **BUSINESS GROUP B OPERATIONS AREA** MODERATE-HAZARD STORGE GROUP S-1 - GARAGE AREA
- MODERATE-HAZARD FACTORY INDUSTRIAL GROUP F-1 PROCESS AREA
- **HIGH-HAZARD GROUP H-4 CHEMICAL STORAGE ROOMS**

(THE HIGH HAZARD AREAS WILL BE SEPARATED FROM THE REMAINING USES)

CLASSIFICATION OF OCCUPANCY (NFPA 101 CHAPTER 6)

THE BUILDING IS A SPECIAL USE INDUSTRIAL OCCUPANCY (NFPA 101 40.1.4.1.2) WITH INCIDENTAL BUSINESS AND STORAGE AREAS. BUSINESS AND STORAGE AREAS WHERE INCIDENTAL TO ANOTHER OCCUPANCY SHALL BE CONSIDERED PART OF THE PREDOMINATE OCCUPANCY AND SUBJECT TO THE PROVISIONS OF THE CODE FOR THE PREDOMINATE OCCUPANCY (NFPA 101 6.1.14.3)

TYPE OF CONSTRUCTION

AUTOMATIC SPRINKLER SYSTEMS

TYPE II-B (IBC 602.2), BUILDING ELEMENTS LISTED IN TABLE 601 ARE OF NONCOMBUSTIBLE MATERIALS

AUTOMATIC SPRINKLER SYSTEMS REQUIRED IN BUILDINGS OVER 7500 SF AND BUILDINGS WITH H-OCCUPANCIES (780 CMR TABLE 903.2)

HEIGHTS AND AREAS (IBC TABLES 504.3, 504.4 & 506.2) 75', 3-STORIES AND 62,000 SF ALLOWED <25', 1-STORY AND <16,000 SF ACTUAL

(SOLID) KMnO4

HAZARDOUS STORAGE (IBC SECTION 307) STORAGE OF MATERIALS IN QUANTITIES OVER THE EXEMPTED AMOUNTS ARE CLASSIFIED AS A HAZARDOUS USE

GROUP. ROOM CHEMICAL HAZARD TYPE MAX ALLOWED/CA\* STORED AMOUNT USE/CA\* H104 POTASSIUM HYDROXIDE CORROSIVE 1000 GALLONS 1910 GALLONS H-4 (45%) KOH WATER REACTIVE 1 SODIUM HYPOCHLORITE CORROSIVE 1000 GALLONS 435 GALLONS H-4\*\*\* H103 (12.5%) NaOCI

H101	BLENDED ORTHO/ POLYPHOSPHATE	N/A	N/A	N/A	H-3**
H101	SODIUM FLUORIDE (SOLID) NaF	ΤΟΧΙϹ	1000 POUNDS	2000 POUNDS	H-3
H102	POTASSIUM PERMANGANATE	OXIDIZER 2	500 POUNDS	660 POUNDS	H-3

\* EXEMPTED QUANTITIES SHALL BE INCREASED 100% IF THE BUILDING IS PROTECTED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM.

CORROSIVE

\*\* THOUGH NOT CLASSIFIED AS HAZZARDOUS PER THE BUILDING CODE, THE BLENDED ORTHO/PHOSPAHTE WILL BE STORED IN THE SAME ROOM AS THE CLASSIFED SODIUM FLUORIDE SO ROOM H101 WILL BE CLASSIED AS AN H-3 USE.

\*\*\* THOUGH THE VOLUME OF SODIUM HYPOCHLORITE STORED IS WITHIN THE ALLOWANCE FOR STORAGE IN A CONTROL ROOM H103 WILL BE DESIGNED TO THE REQUIREMENTS OF AN H-4 USE.

FIRE RESISTANCE REQUIREMENTS OF BUILDING ELEMENTS (IBC TABLE 601)

BUILDING ELEMENT	<u> TYPE I</u>
STRUCTURAL FRAME	0-HOL
EXTERIOR BEARING WALLS	0-HOL
INTERIOR BEARING WALLS	0-HOL
INTERIOR NON-BEARING WALLS	0-HOL
FLOOR CONSTRUCTION	0-HOL
ROOF CONSTRUCTION	0-HOL

FIRE RATED ASSEMBLIES REQUIRED 1-HR REQUIRED BETWEEN H-3/H-4 AND B, F-1 & F-1 USES (IBC TABLE 508.4).

FIRE RATED ASSEMBLY DESIGNS

1-HR RATED CMU WALLS (UL DESIGN NO. U906)

1-HR RATED FLOOR CEILING ASSEMBLIES (UL DESIGN NO. U502)

3 1/2" CONC/MTL DECK, 12" STL BAR JOISTS, 7/8" MTL FURRING CHANNELS AND 5/8" TYPE X GWB

**OPENINGS IN FIRE RATED ASSEMBLIES** (IBC TABLE 716.5) DOORS IN 1-HR RATED, NON-EXIT FIRE BARRIERS SHALL HAVE A 3/4-HR RATING.

HEADROOM

CEILING HEIGHT IN A MEANS OF EGRESS SHALL BE 7'-6" MINIMUM (IBC 1003.2). PROTRUDING OBJECTS ARE ALLOWED TO PROTRUDE BELOW THE MINIMUM CEILING HEIGHT TO 80" UP TO 50% OF THE AREA OF THE MEANS OF EGRESS (1003.3.1).

<u>ONE STEP</u> (IBC 1003.5)

IN F, S AND H OCCUPANCIES, A SINGLE STEP OF 7" IS ALLOWED AT DOORS. ALL PERSONNEL DOORS WILL BE FLUSH.

ENERGY CONSERVATION CLIMATE ZONE: CLIMATE ZONE 5A (IECC C301.1)

ROOFTOP SOLAR READINESS: 50% OF FLAT ROOFS SHALL BE SOLAR READY (780 CMR 13.00 402.3). THE SOLAR READY AREA IS INDICATED ON THE ROOF PLAN.

#### ADDITIONAL EFFICIENCY PACKAGE OPTIONS (780 CMR C406.1)

MORE EFFICIENT HVAC PERFORMANCE IN ACCORDANCE WITH C406.2 (EXCEED MIN EFFICIENCY ≥10%) REDUCED LIGHTING POWER DENSITY IN ACCORDANCE WITH CMR 780 C406.3 (DENSITY ≤90% OF ALLOWED) ENHANCED ENVELOP PERFORMANCE IN ACCORDANCE WITH C406.8 (EXCEED MIN PERFORMANCE ≥15%)

ASSEMBLY COMPONENT	INSULATION TYPE	TABULAR R-VALUE	PROJECT R-VALUE	ENHANCED PERF. %	ENVELOP AREA (SF)	EQUIVALENT PERF. %	
INSULATION ENTIRELY ABOVE ROOF DECK	AVE. R-30ci POLYISO ROOFING INSULATION	R-30ci	R-30ci	0.0%	15,506	0.00%	
WALLS, ABOVE GRADE, MASS	2.5" RIGID POLYISOCYANURATE	R-11.4ci	R-16ci	40.35%	12,340	17.12%	
SLABS-ON-GRADE, UNHEATED SLABS	2.5" POLYSTYRENE	R-10*	R-12.5*	25.0%	1,234	1.06%	
TOTAL ENHANCED PERFORMANCE> 1							

\* R-10 FOR 24" BELOW REQUIRED, R-10 FOR 48" BELOW PROVIDED

FENESTRATION REQUIREMENTS: (IECC TABLE C402.4)

FIXED FENESTRATION, U-0.38 REQUIRED, U-0.38 MINIMUM PROVIDED OPERABLE FENESTRATION, U-0.45 REQUIRED, U-0.45 MINIMUM PROVIDED ENTRANCE DOORS, U-0.77 REQUIRED, U-0.77 MINIMUM PROVIDED SHGC, 0.38 REQUIRED, 0.38 MINIMUM PROVIDED

			- MANAN	PROJECT NO: 20600	NO	APP'D DATE
	MEDWAY, MASSACHUSETTS		WENTH OF MASS.	DESIGNED: R.WILLIAMS CAD COORD: B.JONES		1/2022
	POPULATIC WATER TREATMENT PLANT	VKIGHI-LIEKCE	AMASE. CRAY	CAD: J.BLACKMAN		
)01		978.416.8000   www.wright-pierce.com	No. 48069	снескер: с.міснаор DATE:	F	
		600 FEDERAL STREET, SUITE 2151, ANDOVER, MA 01810	TO SEPARATE AND	APPROVED: DATE:		
	GENERAL NOTES, LEGENDS, ABBREVIATIONS AND CODE NOTES		Annex	SUBMISSION: 90% DESIGN REVIEW	<u>s</u>	



60://MA-Medway-20600-WaterTreatmentPlant/20600-AM-WTP.rv









M 360://MA-Medway-20600-WaterTreatmentPlant/20600-AM-WTP.rvt

5/2022 2:22:54









![](_page_46_Figure_4.jpeg)

![](_page_47_Figure_0.jpeg)

![](_page_47_Figure_1.jpeg)

![](_page_48_Picture_1.jpeg)

![](_page_49_Picture_1.jpeg)

![](_page_50_Picture_1.jpeg)

360://MA-Medway-20600-WaterTreatmentPlant/20600-AM-WTP.rvt

![](_page_51_Picture_1.jpeg)

IM 360://MA-Medway-20600-WaterTreatmentPlant/20600-AM-WTP.rv

Project Name:	Medway Water Treatment Plant
Property Location:	19 Populatic Street
Type of Project/Permit:	Major Site Plan Review
<i>Identify the number and title of the relevant Section of the Site Plan Rules and Regulations from which a waiver is sought.</i>	Chapter 200, §204-5.D.1
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Driplines are required to be shown for existing trees onsite as part of the required tree inventory.
What aspect of the Regulation do you propose be waived?	Showing the driplines of existing trees scheduled to remain.
What do you propose instead?	Identification of hardwood trees larger than 18" on the plans.
Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	With the exception of the significant Oak tree scheduled to remain along Populatic Street, none of the other larger hardwoods are located in the areas where clearing is proposed.
What is the estimated value/cost savings to the applicant if the waiver is granted?	N/A
How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	Granting of this waiver would not have a negative impact on the design as the drip lines of existing hardwood trees scheduled to remain are inconsequential to the overall landscaping design.
What is the impact on the development if this waiver is denied?	No negative impact is anticipated.
What are the design alternatives to granting this waiver?	N/A
Why is granting this waiver in the Town's best interest?	Negative impacts to the project are not anticipated as a result of granting this waiver.
<i>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</i>	N/A
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	No additional mitigation measures are proposed.
What is the estimated value of the proposed mitigation measures?	N/A
Other Information?	
Waiver Request Prepared By:	Medway DPW / Wright-Pierce
Date:	1/25/2022

Project Name:	Medway Water Treatment Plant					
Property Location:	19 Populatic Street					
Type of Project/Permit:	Major Site Plan Review					
<i>Identify the number and title of the relevant Section of the Site Plan Rules and Regulations from which a waiver is sought.</i>	Parking Plan: Ch. 200, §204-5.D.5. and Table 3 of the Medway Zoning By- Laws.					
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Classification of the water treatment plant as a "warehouse/distribution or manufacturering facility" with respect to the minimum number of parking spaces.					
What aspect of the Regulation do you propose be waived?	The minimum of 23 parking spaces required per Table 3 of the Zoning By- Laws.					
What do you propose instead?	17 parking spaces as proposed.					
Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	The number of proposed parking spaces has been discussed with the Medway Water Department and deemed adequate to accommodate the future number of employees (12) and treatment plant operations. The Medway Zoning By-Laws do not specify a requirement for this type of facility and the nearest comparable use being assigned does not appear applicable.					
What is the estimated value/cost savings to the applicant if the waiver is granted?	Approximately \$5,000					
How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	Reducing the amount of impervious surfaces will have a positive impact on stormwater treatment by reducing run-off. Given that this site is a public water supply and within a Zone 1 Protection Area, it is in the Town's best interest to limit impervious surfaces as practical.					
What is the impact on the development if this waiver is denied?	More pavement and disturbance so the site.					
What are the design alternatives to granting this waiver?	Utilize existing paved areas onsite for overflow parking if ever required.					
Why is granting this waiver in the Town's best interest?	See previous comment regarding impervious surfaces.					
<i>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</i>	Approximately \$5,000					
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	Utilize existing paved areas onsite for overflow parking if ever required.					
What is the estimated value of the proposed mitigation measures?	See previous cost savings estimates.					
Other Information?						
Waiver Request Prepared By:	Medway DPW / Wright-Pierce					
Date:	1/25/2022					

Project Name:	Medway Water Treatment Plant
Property Location:	19 Populatic Street
Type of Project/Permit:	Major Site Plan Review
<i>Identify the number and title of the relevant Section of the Site Plan Rules and Regulations from which a waiver is sought.</i>	Section 5.5.4. I, c. of the Zoning Bylaw, sidewalks shall be provided along the entire frontage of the subject property along existing public ways. (Ch. 200 §207-9.B)
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	See above.
What aspect of the Regulation do you propose be waived?	The sidewalk requirement for the entire frontage of the property.
What do you propose instead?	Match existing conditions.
Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	Populatic Street between Walker Street and the Franklin town line does not have a sidewalk on either side of the road. Including one for this project does not seem practical and provides little benefit to the public as the rest of the street does not have any sidewalks.
What is the estimated value/cost savings to the applicant if the waiver is granted?	Approximately \$90,0000
How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	Approval of this waiver would reduce the proposed work within Populatic Street and maintain the overall aesthetics of the street.
What is the impact on the development if this waiver is denied?	Additional cost and traffic disruptions during construction.
What are the design alternatives to granting this waiver?	The design alternative is to bring the existing shoulder / right-of-way back to existing conditions (no sidewalk).
Why is granting this waiver in the Town's best interest?	As this is a public project, the additional cost to add a new sidewalk does not appear to provide any significant value to the public or Town.
<i>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</i>	Approximately \$90,000
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	None are proposed.
What is the estimated value of the proposed mitigation measures?	N/A
Other Information?	
Waiver Request Prepared By:	Medway DPW / Wright-Pierce
Date:	1/25/2022

Project Name:	Medway Water Treatment Plant
Property Location:	19 Populatic Street
Type of Project/Permit:	Major Site Plan Review
<i>Identify the number and title of the relevant Section of the Site Plan Rules and Regulations from which a waiver is sought.</i>	Chapter 200, §207-16.B
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Dumpsters are required to be screened on all sides to the full height of the container.
What aspect of the Regulation do you propose be waived?	The screening requirement.
What do you propose instead?	No screening and the ability to relocate the dumpster temporarily if required for maintenance or plowing.
Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	The proposed dumpster location is essentially screened the by the building from Populatic and Water Street. Screening of the dumpster would make maintenance and plowing more difficult for the staff as they would not be able to relocate the dumpster easily if required.
What is the estimated value/cost savings to the applicant if the waiver is granted?	If the waiver is granted, it would reduce O&M time related to the dumpster and plowing operations.
How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	It would improve operations and provide flexiblity for the staff of the new facility.
What is the impact on the development if this waiver is denied?	Additional O&M time.
What are the design alternatives to granting this waiver?	N/A
Why is granting this waiver in the Town's best interest?	It will make plowing the site and maitenance of surrounding equipment easier.
<i>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</i>	N/A
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	No mitigation measures are proposed.
What is the estimated value of the proposed mitigation measures? Other Information?	N/A
Waiver Request Prepared By:	Medway DPW / Wright-Pierce

Project Name:	Medway Water Treatment Plant
Property Location:	19 Populatic Street
Type of Project/Permit:	Major Site Plan Review
Identify the number and title of the relevant Section of the Site Plan Rules and Regulations from which a waiver is sought.	Chapter 200, §207-11.A.4
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Site entrances and exits shall be clearly delineated by vertical granite curbing or other approved material along the entire radius of the opening, shall extend at least 12 feet beyond each side along the gutter line of the road and at least the first 25 feet of a driveway, and shall be sloped at the end to prevent a vertical obstruction to exit.
What aspect of the Regulation do you propose be waived?	The curbing requirement at the entrances.
What do you propose instead?	No curbing which matches existing conditions on Populatic Street and at the site.
Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	There currently isn't any curb in the vicinity of the new treatment facility. A small amount of granite would be expensive and bituminous curb could be easily damaged at the entrance.
What is the estimated value/cost savings to the applicant if the waiver is granted?	Approximately \$5,000.
How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	No, however approval would not have a negative impact on design.
What is the impact on the development if this waiver is denied?	Additional cost and disturbance on Populatic Street and potential increase in maintenance cost if curbs are damaged.
What are the design alternatives to granting this waiver?	Keeping the entrances as proposed without curbing.
Why is granting this waiver in the Town's best interest?	Yes
<i>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</i>	Approximately \$5,000.
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	No additional mitigation measures are proposed.
What is the estimated value of the proposed mitigation measures?	N/A
Other Information?	
Waiver Request Prepared By:	Medway DPW / Wright-Pierce

![](_page_57_Figure_0.jpeg)

![](_page_58_Figure_0.jpeg)

![](_page_59_Picture_0.jpeg)

Date:	1/25/2022
Project No.:	20600B
То:	Medway Planning and Economic Development Board
From:	Wright-Pierce
Subject:	Attachment B – Construction Management Plan – Major Site Plan Review

The following memorandum presents the proposed Construction Management Plan (CMP) for the Populatic Water Treatment Plant project as required per Ch. 200 §204-3.H of the Medway By-Laws.

#### Maintain Existing Works

#### **Existing Operations**

- 1. The Populatic Street Wells, Village Street Well, and Oakland Street Well shall remain operational during construction until the Populatic Water Treatment Plant is complete and ready for final testing. Any shutdowns of existing facilities will require approval from the Owner (Town of Medway).
- 2. Staggered shutdowns of the existing well stations are anticipated to minimize disruptions and downtime while the well station upgrades are being completed. Refer to proposed Construction Sequence for additional details.

#### Minimize Interference

- 1. The Contractor shall at all times conduct their operations so as to interfere as little as possible with existing works. The Contractor shall develop a program, in cooperation with the Owner, Engineer, and interested officials, which shall provide for the construction and putting into service of the new works in the most orderly manner possible. This program shall be adhered to except as deviations therefrom are expressly permitted.
- 2. Work of connecting with, cutting into, and reconstructing existing pipes or structures shall be planned to interfere with the operation of the existing facilities for the shortest possible time and when the demands on the facilities best permit such interference. It may be necessary to work outside of normal working hours to minimize interference. Before starting work, which will interfere with the operation of existing facilities, the Contractor shall do all possible preparatory work and shall see that all tools, materials, and equipment are made ready and at hand.
- 3. The Contractor's operations shall not hinder the Owner's operations including the delivery, storage and use of materials and supplies, nor hinder staff duties, nor disrupt utility service.
- 4. The Owner must have access to the existing well sites and equipment at all times unless a specific exception is granted by the Owner.
- 5. The Contractor shall limit their personnel to the proposed work areas and limits of work.

#### **Construction Sequence – General**

Construction of the proposed treatment facilities will disrupt the existing well stations and operations. To
maintain treatment and to minimize disruption, the construction must be divided into phases or sequenced
appropriately. The construction sequence phases and dates must allow the Populatic Street Wells, Village
Street Well and Oakland Street Well stations to maintain operational as described in previous section.

- 2. The intent of the proposed construction sequence is to allow for start-up, testing, and MassDEP approval of the new treatment facility utilizing the Populatic Well sources for supply, while keeping Village Street and Oakland Street wells operational and supplying water to the system. Once the new treatment facility is approved by MassDEP to begin pumping to the distribution system, the Village Street well can be shut-down and the required upgrades performed. Once Village Street well is approved to be pumping to the new water treatment facility, the final connections at Oakland Street can performed. The staggered start-up will allow the Town to maintain redundancy and limit offline well sources during final testing.
- 3. The Contractor shall submit to the Engineer for review and acceptance a complete schedule of his proposed sequence of construction operations prior to commencing any work. This schedule shall include the Contractor's plans for doing the work. The intent is to maintain existing operations at the existing well stations to the greatest extent possible during construction.
- 4. The Contractor must submit to the Engineer a written request to deviate from the proposed sequence described in the next section, provided he can demonstrate to the Engineer that the continuity and degree of treatment will not be adversely affected.
- 5. The Contractor shall include the cost of any temporary facilities required to maintain treatment during the construction period in his lump-sum bid price. The cost shall include the cost for all labor, tools, equipment and materials necessary.
- 6. It shall be recognized that certain interruptions of, and disruptions to, the treatment processes and present plant operations will be required to complete the work of this Contract. Scheduled interruptions requiring interruption of operations at well facilities shall be kept to a minimum frequency and duration. Such interruptions shall be coordinated by the Contractor with the Owner using the Contractor's proposed work schedule but shall not affect the facilities ability to maintain treatment as described above.
- 7. The Contractor shall notify the Owner a minimum of seven (7) days in advance of any work which may affect or disrupt the operation of the existing facilities and two (2) calendar weeks in advance of removing any wells from service. Once the interruption occurs the Contractor must maintain a workforce on-site to complete the work in the agreed upon time.
- 8. The Contractor shall have all materials and equipment on-site, and shall receive the Owner's approval, prior to initiating work which requires any part of the existing well facilities to be off-line.
- 9. Contractor shall coordinate equipment lead times to minimize well shut down periods for the well sites.
- 10. New equipment and/or treatment units may not be used until specified testing and acceptance procedures are completed and written authorization for their use is given by the Engineer and MassDEP. MassDEP approval is required for the Contractor to achieve Substantial Completion.

#### Proposed Construction Sequence

The following general sequence of construction is recommended. The intent of this sequence of construction is to outline in general the anticipated progression of work on the project. Deviations to this sequence of construction will be evaluated upon review of the Contractor's submitted schedule:

- 1. Bid and Award of Contract.
- 2. Notice to Proceed.
- 3. Contractor to identify limits of the clearing and install all required erosion controls in accordance with the contract requirements and any special conditions established by the Town of Medway Conservation Commission.

![](_page_60_Picture_15.jpeg)

- 4. Inspection and approval by the Medway Conservation Commission is required prior to commencing construction activities onsite.
- 5. Contractor will commence with construction of the Populatic Water Treatment Plant building while keeping existing well sources online and without impacting existing Water Department Operations onsite.
- 6. Construct all underground utilities that will not affect the existing operation of the Populatic Well Stations and Corrosion Control Facility.
- 7. Upgrades to the Populatic well sources including pump replacement, power relocation, electrical modifications, and all other activities which require shutdown of the well station or sources will take place as late in schedule as possible, prior to final startup, to minimize the time the well will be offline.
- 8. Construction of the new Populatic Water Treatment Plant shall be brought to a completion point at which most of the remaining work is associated with the well station upgrades. At this point, the Contractor can request shutdown of the Populatic well sources.
- 9. All new process treatment equipment and required ancillary systems shall be installed and ready for final testing prior to shut down of the Populatic well sources.
- 10. Following Engineer and Owner approval for the Populatic well shutdown, construction activities which have the potential to disrupt supply or quality of the water being supplied by the existing Populatic wells can commence. The time that Populatic wells are offline is to be minimized. Perform start-up and testing of equipment and prepare the new treatment facility for final demonstration testing.
- 11. Commence final demonstration testing of the Populatic Water Treatment Plant (pumping to waste) using the Populatic well sources only and provide proof acceptable to Engineer, Owner, and MassDEP that the facility is operating as designed and reliably producing water of the quantity and quality specified here in and as required by MassDEP. A minimum of 2 weeks of demonstration testing is anticipated to be performed without issue before reliability is proven.
- 12. Upon MassDEP approval to pump into the distribution system (substantial completion), the Contractor can request shutdown of Village well station and complete the required upgrades.
- 13. Once the upgrades are complete and the station is ready for final testing, the final connection to the new raw water transmission piping will be coordinated with the Owner, Engineer, and the water main Contractor. Work associated with the new raw water transmission mains is being completed outside of this contract.
- 14. Perform final testing of the Village Well station pumping under the new control strategy pumping though the Populatic Water Treatment Plant for substantial completion of this station.
- 15. MassDEP may require a second inspection at Village well and this will be coordinated by the Engineer and Owner prior to substantial completion being granted for Village well.
- 16. Once Village well is approved to be pumping through the new treatment facility, the final raw water connection at Oakland well can be coordinated with the Engineer, Owner, and the water main Contractor. Work associated with the new raw water transmission mains is being completed outside of this contract.
- 17. Perform final testing of the Village Well station pumping under the new control strategy pumping though the Populatic Water Treatment Plant.
- 18. Bring the Populatic Water Treatment Plant to final completion including final landscaping, paving and site work.
- 19. Demolition of the existing garage and storage facilities cannot be completed until the Town has all required occupancy permits for the new facility and has relocated all equipment being stored in these existing buildings to the new facility. Final sitework and landscaping at these locations to be completed following demolition.

![](_page_61_Picture_17.jpeg)

![](_page_62_Picture_0.jpeg)

## A-weighted sound pressure levels (SPLs) @ 7 meters in dB(A)

Position\* Configuration 1 2 3 4 5 6 7 8 84.6 90.8 92.1 92.8 89.9 92.9 90.9 86.7 Standard unhoused with infinite exhaust 90.6 Weather-protective enclosure with muffler 84.8 90 91.7 86.9 88.9 90.1 84.3

80

77.2

77.7

74.7

82

77.5

80.8

78.8

The reference sound pressure is 20 µPa.

\*Position 1 faces the GenSet front. The positions proceed around the GenSet in a counterclockwise direction in 45° increments. All positions are approximately 7 m (23 ft.) from the surface of the GenSet and approximately 1.2 m (48 in) from floor level.

82.1

79.0

83.7

78.7

78.3

76.0

82

80.7

# A-weighted sound power levels (SPWLs) @ 1 meter in dB(A)

The reference sound power is 1 pW ( $10^{-12}$  W).

Configuration		Octave band center frequency (Hz)							Total
	63	125	250	500	1000	2000	4000	8000	SPWL
Standard unhoused with infinite exhaust	92.2	103.0	107.5	114.2	115.6	113.4	108.8	103.4	120.1
Weather-protective enclosure with muffler	92.8	104.6	107.3	112.9	115.3	108.7	107.1	100.2	118.8
Sound-attenuated enclosure Level I with muffler	89.8	103.9	102.7	108.5	109.1	105.8	96.2	92.6	113.8
Sound-attenuated enclosure Level II with muffler	91.4	103.2	101.9	104.2	102.8	101.4	92.8	89.8	110.0

Data is based on a 100% rated load with a standard radiator cooling package.

Sound levels are subject to instrumentation, measurement, installation, and manufacturing variability.

The sound data for a GenSet with infinite exhaust does not include the exhaust noise contribution.

Sound power levels are calculated according to ISO 3744 and ISO 8528-10 requirements.

Sound-attenuated enclosure Level I with muffler

Sound-attenuated enclosure Level II with muffler

8 position

average

SPL

90.8

88.4

80.8

78.2

![](_page_63_Picture_0.jpeg)

Town of Medway DESIGN REVIEW COMMITTEE 155 Village Street Medway MA 02053 508-533-3291 <u>drc@townofmedway.org</u>

January 31, 2022

TO: Medway Planning and Economic Development Board

FROM: Matthew Buckley, Chair

RE: DRC Comments - Medway DPW Water Quality Treatment Facility, 19 Populatic Street

Dear Members of the Medway Planning and Economic Development Board

The Medway Design Review Committee [DRC] is pleased to provide a comment letter for the site plan for the proposed Medway DPW Water Quality Treatment Facility at 19 Populatic Street. The DRC met with representatives of this project on January 19<sup>th</sup>, 2022 and reviewed an updated plan set with architectural renderings for the site.

The DRC is pleased with the initial site plan and agrees that the styles and architectural format are appropriate and align with the Medway *Design Review Guidelines*. Minor discussions occurred regarding the exploration of small façade changes and landscape design, but the Committee is satisfied that the applicant has achieved a successful design. However, some aspects of the design have not been completed at this time and the DRC has requested the opportunity to review these aspects when available.

The DRC provides several recommendations as follows.

- The DRC would like to see the design of the proposed storage shed along the north west property line.
- The DRC recommends that the end of this proposed shed be screened from the abutters with a vegetative barrier.
- Fencing materials are not included on the current plans. The DRC recommends if chain link fence is used that it be black vinyl coated. The fence and gate at the right front of the building, close to Populatic Street, should be of a vertical pool style.
- The DRC recommends a more developed and robust landscaping plan along the front of the building and edge property along Populatic Street.

The DRC remains available to review any of these elements or subsequent changes and will gladly provide feedback in the most effective manner that will assist these proceedings.

Sincerely,

Matcher ABuchkey

Matthew Buckley Chair

![](_page_64_Picture_0.jpeg)

January 11, 2022 (revised February 2, 2022)

Ms. Susan E. Affleck-Childs Medway Planning and Economic Development Coordinator Medway Town Hall 155 Village Street Medway, MA 02053

Re: Populatic Water Treatment Plant Major Site Plan Review 19 Populatic Street Medway, Massachusetts

Dear Ms. Affleck-Childs:

Tetra Tech (TT) has performed a review of the proposed Site Plan for the above-mentioned Project at the request of the Town of Medway Planning and Economic Development Board (PEDB). The proposed Project is located at 19 Populatic Street in Medway, Massachusetts. The Project consists of constructing a new water treatment plant on a 9.8-acre plot which is owned by the Town of Medway. Facilities currently located on the site consist of Populatic Wells, a chemical feed building, an office building, a supply house, and a garage. Operations will continue throughout the construction process and eventually consolidated into the new facility once online. The supply house and garage will be demolished. Additionally, 17 proposed parking spaces are included in the design along with onsite stormwater treatment, an additional entrance to Populatic Street, dumpster pad, and transformer and generator.

TT is in receipt of the following materials:

- A Plan (Plans) set titled "Town of Medway, Massachusetts, Contract Drawing For, Populatic Water Treatment Plant" dated October 2021, prepared by Wright-Pierce (WP).
- Project Architecturals including Floor Plans, Elevations and Renderings, prepared by WP.
- An Application for Major Site Plan Approval, dated November 9, 2021, prepared by WP.
- A Certified List (List) of Abutters, dated September 27, 2021, prepared by The Medway Board of Assessors.
- A Project Narrative (Narrative) titled "Major Site Plan Review, Town of Medway, DPW Water and Sewer Division, Populatic Water Treatment Plant, Medway, MA" dated November 8, 2021, prepared by Caron Environmental Consulting, LLC

The Plans and accompanying materials were reviewed for conformance with the following Regulations and Bylaws:

 Town of Medway Planning & Economic Development Board Rules and Regulations, Chapter 200 – Site Plans, Rules & Regulations for Submission, Review and Approval of Site Plans. (Amended October 8, 2019)

The Project was also reviewed for good engineering practice and overall site plan efficiency. Review of the Project for zoning related matters is being conducted by Town personnel and is excluded from this review.

#### TT 2/2/22 Update

The Applicant has supplied TT with a revised submission addressing comments provided in our previous letter including the following documents:

• A Plan (Plans) set titled "Town of Medway, Massachusetts, Contract Drawings for Populatic Water Treatment Plant" dated January 2022, prepared by Wright-Pierce (WP).

• A Response to Comments letter with attachments dated January 25, 2022, prepared by WP.

The revised Plans and supporting information were reviewed against our previous comment letter (January 11, 2022) and comments have been tracked accordingly. Text shown in <u>gray</u> represents information contained in previous correspondence while new information is shown in <u>black</u> text.

#### SITE PLAN REVIEW

Site Plan Rules and Regulations (Chapter 200)

- 1. The Applicant has not included a Neighborhood Impact Assessment in their Development Impact Statement. The Project Narrative discusses impacts on the neighborhood which should be summarized in this section of the document. (Ch. 200 §204-3.F.3)
  - WP 1/25/21 Response: The Development Impact statement has been updated to include the Neighborhood Impact Assessment. Refer to Attachment A.
    - TT 2/2/22 Update: The Applicant has included a neighborhood impact assessment in their Development Impact Statement. We recommend the PEDB review and comment if necessary during the public hearing process. In our opinion, this item is resolved.
- 2. A Construction Management Plan (CMP) is not provided in the Plans or as a separate document. This may be necessary to understand how the construction will occur given the existing facility will remain operational during construction. (Ch. 200 §204-3.H)
  - WP 1/25/21 Response: A Construction management Plan (CMP) for the proposed project is included as Attachment B.
    - TT 2/2/22 Update: The Applicant has included a CMP in the submission. We recommend the PEDB review and comment if necessary during the public hearing process. In our opinion, this item is resolved.
- 3. Earth removal calculations are not provided in the Plans. (Ch. 200 §204-3.I)
  - WP 1/25/21 Response: Earth removal calculations have been added to Sheet C-4. Revised drawings are included as Attachment C.
    - TT 2/2/22 Update: The Project will result in approximately 2,600 cubic yards of export material. We recommend the Applicant add material export to the CMP to include a description of the export process and items such as truck routes and export duration to help the PEDB and abutting residents understand the magnitude of potential impacts during the work.
- 4. Earth fill estimates are not provided in the Plans. (Ch. 200 §204-3.J)
  - WP 1/25/21 Response: Earth fill estimates have been added to Sheet C-4. Revised drawings are included as Attachment C.
    - TT 2/2/22 Update: The site is a net cut and will require material export. In our opinion, this item is resolved.
- 5. A copy of an Order of Resource Area Delineation (ORAD) from Medway Conservation is not provided. The site is located adjacent to the Charles River and Flood Zone, therefore, an ORAD may be relevant for the Project. (Ch. 200 §204-3.K)
  - WP 1/25/21 Response: A Notice of Intent (NOI) was filed with the Medway Conservation Commission on November 8, 2021. Comments have been received on the submission and we will be issuing our responses to the Commission under separate cover. A copy of the final Order of Conditions will be forwarded to the PEDB upon receipt.
    - TT 2/2/22 Update: In our opinion, this item is resolved.

- 6. All elevations in the Plans refer to the NGVD29 Datum. Elevations shall refer to North America Vertical Datum of 1988 (NAVD88) as specified in the rules and regulations (Ch. 200 §204-4.C)
  - WP 1/25/21 Response: The reference to NGVD29 Datum on the plans is incorrect. The design elevations depicted on the plans are in the correct NADV88 datum. Civil Site Layout Note 11 on drawing C-1 has been updated in the revised set of drawings to reflect the correct datum. Refer to Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 7. A locus map is included on the Cover Sheet and no formal Site Context Sheet has been provided. The scale of the locus map is set to 1-inch equals 2,000-feet which does not meet the maximum required scale of 1-inch equals 1,000-feet. A Site Context Sheet shall be provided per the applicable Regulation. (Ch. 200 §204-5.B)
  - WP 1/25/21 Response: A Site Context Sheet has been added to the revised plan set as drawing C-1A. Refer to attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 8. The Applicant has not included an inventory of existing trees at the site in the size required by the Regulations. Drip lines are also required for those trees. (Ch. 200 §204-5.C.3)
  - WP 1/25/21 Response: The survey base plan utilized for the project was supplied by the Owner's project manager. The project requires a clear cut to construct the proposed improvements. We have identified hardwood trees larger than 18" on the plans. The significant oak tree along Populatic Street has been identified to remain. None of the other larger hardwoods are located in the areas where clearing is proposed. We are requesting a waiver for the requirement of showing drip-lines for the existing trees. Refer to Waiver Requests included as Attachment D.
    - TT 2/2/22 Update: No action necessary until PEDB decision on Waiver Requests.
- 9. Front setback line is shown on the Layout Sheet, however, both side and rear setbacks are not represented and shall be included on the Plans. (Ch. 200 §204-5.D.1)
  - WP 1/25/21 Response: Side and rear setback lines have been added to Sheet C-3 in the revised drawing set. Refer to Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 10. The Applicant has proposed 17 parking spaces, 1 space per anticipated employee with 3 additional spaces. The Medway Zoning Bylaw does not specify a requirement for this type of facility; therefore, the nearest comparable use may be applied. TT believes the Water Treatment Plant is best represented as a warehouse/distribution or manufacturing facility. In that case, the proposed number of spaces does not meet the minimum requirements (23 Spaces) outlined in Table 3 of the Medway Zoning Bylaws. Additionally, we recommend the Applicant confirm where employee parking will be sited as the spaces at the rear of the facility (12 spaces) would not meet the minimum number of employees using the facility as stated in the Project narrative. (Ch. 200 §204-5.D.3)
  - WP 1/25/21 Response: A waiver is being requested for this requirement. Parking has been discussed with the Medway Water Department and the spaces proposed were deemed adequate to accommodate the future number of employees and anticipated operations at the facility. Refer to Waiver Requests included as Attachment D.
    - TT 2/2/22 Update: No action necessary until PEDB decision on Waiver Requests.
- 11. The Applicant has not provided a separate Erosion and Sediment Control Plan which we anticipate will be required during the Applicant's Notice of Intent process with Medway Conservation Commission. (Ch. 200 §204-5.D.5)
  - WP 1/25/21 Response: Erosion and Sediment Controls are shown on Sheet C-4, C-9 and C-10 in the revised drawing set. Refer to Attachment C.
    - TT 2/2/22 Update: Although erosion controls have been shown on the current version of the Plans, Article 26 of the Medway General Bylaws requires an Erosion and Sediment Control Plan be provided.

- 12. The Applicant has not included any site amenities such as bike rack which may be applicable to this Project, particularly for the employees of the facility. (Ch. 200 §204-5.D.12)
  - WP 1/25/21 Response: Site amenities have been discussed with the Medway Water Department. No additional amenities are being proposed per the Water Department's request.
    - TT 2/2/22 Update: We recommend this item be discussed during the next public hearing as items such as bike racks have been required by the PEDB during review of prior Projects.
- 13. A Master Signage Plan is not included in the Plans. TT expects this to be submitted separately for signage approval. (Ch. 200 §204-5.D.14)
  - WP 1/25/21 Response: Master Signage Plan is shown on Sheet C-3 in the revised drawing set. Refer to Attachment C.
    - TT 2/2/22 Update: We believe the intent of the Regulation is to show the PEDB where the proposed site monument sign will be located, if one is being proposed. Additionally, signage has not been provided adjacent to the proposed stormwater basin identifying the basin and including language prohibiting dumping in the basin.
- 14. The Applicant has provided a lighting plan showing 26 proposed light sources connected to the building with no proposed light trespass on abutting properties. Height of luminaires should be specified along with the hours of illumination. TT also recommends the lighting symbols be better represented on the lighting plan as it is hard to determine the location of each proposed lamp. (Ch. 200 §204-5.D.15)
  - WP 1/25/21 Response: The lighting plan C-11 has been updated to include hours of illumination. Proposed lighting will be photocell controlled and illuminated from dusk until dawn. The height of luminaires are approximately 17' on the garage and treatment building areas and approximately 12' on the operations building area. They are also shown on Sheet A-201. The photometric plan shows no light spillover onto Populatic Street or adjacent properties. Refer to revised drawings in Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 15. Horizontal site distances at the site driveways are not provided in the Plans. (Ch. 200 §204-5.D.16)
  - WP 1/25/21 Response: Horizontal site distances of greater than 200 feet were confirmed in the field at the new driveway location and they exceed the minimum of 155 feet in both directions for a speed limit of 25 mph. the site distances have been included on Sheet C-3 in the revised drawing set. Refer to Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 16. A table representing conformance with Zoning Bylaw requirements is provided on site Layout sheet. However, the table is missing minimum lot frontage and maximum building height. TT recommends proposed values be provided rather than "less than" or "greater than" symbols. (Ch. 200 §204-5.D.17)
  - WP 1/25/21 Response: The Site Layout Sheet (C-3) has been updated in the revised drawing set to include the missing lot frontage and maximum building height. Refer to Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 17. The Applicant has not proposed any sidewalks at the site, particularly to secondary entrances proposed around the buildings. Additionally, pursuant to Section 5.5.4. I, c. of the Zoning Bylaw, sidewalks shall be provided along the entire frontage of the subject property along existing public ways. (Ch. 200 §207-9.B)
  - WP 1/25/21 Response: The site layout has been updated in the revised drawing set to include site sidewalks for access to the two proposed doorways on the southwest side of the facility. Refer to Attachment C. Populatic Street does not currently have sidewalks on either side of the road between Walker Street and the Franklin town line. Including sidewalks for this one property is not practicable and therefore a waiver is requested. Refer to Waiver Requests included as Attachment D.
    - TT 2/2/22 Update: Access has been provided to the two proposed egress doors on the southwest side of the site. However, sidewalk has not been included along the site frontage. We recommend this item be discussed during the next public hearing as prior Projects have been required to provide funding in lieu of construction where sidewalks are not feasible along the site frontage.

- 18. It does not appear the Applicant is proposing curb on the Project. The Applicant appears to be utilizing Low Impact Development techniques where pavement sheet flows to swales which would negate the need for proposed curb along the entirety of the edge of pavement. However, site entrances and exits shall be clearly delineated by vertical granite curbing or other approved material along the entire radius of the opening, shall extend at least 12 feet beyond each side along the gutter line of the road and at least the first 25 feet of a driveway, and shall be sloped at the end to prevent a vertical obstruction to exit. (Ch. 200 §207-11.A.4)
  - WP 1/25/21 Response: A waiver is being requested for this requirement. There currently isn't any curb in the vicinity of the new treatment facility. A small amount of granite would be expensive and bituminous curb could be easily damaged at the entrance. Refer to Waiver Requests included as Attachment D.
    - TT 2/2/22 Update: No action necessary until PEDB decision on Waiver Requests.
- 19. An Autoturn (or equal) analysis of the site is recommended to ensure applicable emergency apparatus can actively respond to an emergency at the facility. This shall be coordinated with the Medway Fire Department. (Ch. 200 §207-11.B.8)
  - WP 1/25/21 Response: An Autoturn analysis was completed during the design phase and emergency access was discussed with the Medway Fire Department. Attachment E includes the Autoturn analysis assuming a WB-63 type vehicle.
    - TT 2/2/22 Update: We recommend the Applicant provide written correspondence from the Medway Fire Department regarding emergency access through the site.
- 20. The Applicant has not proposed any means for electric vehicle charging at the site. (Ch. 200 §207-12.I)
  - WP 1/25/21 Response: Electric vehicle charging is not currently proposed for the site.
    - TT 2/2/22 Update: We anticipate a Waiver Request will be required from this Regulation if it is the intention of the Applicant not to install any EV charging in the Project. We recommend this item be discussed during the next public hearing to determine if a Waiver Request is necessary.
- 21. The Applicant has proposed a generator pad located to the rear of the site. The generator is required to be fully screened to mitigate noise and appearance. Additionally, the Plans do not detail how the generator will be fueled. If fuel storage will be proposed at the site it should be noted on the Plans and properly permitted. (Ch. 200 §207-16.B)
  - WP 1/25/21 Response: The proposed back-up generator is to be fueled via natural gas. A sound attenuation enclosure is proposed around the generator to mitigate noise. Refer to Attachment F for additional information on anticipated sound decibel levels. Additional screening for appearance is not currently proposed in order to provide adequate clearance for maintenance and as required by code.
    - TT 2/2/22 Update: We anticipate a Waiver Request will be required from this Regulation if it is the intention of the Applicant not to install any additional screening outside of the proposed sound mitigation. We recommend this item be discussed during the next public hearing to determine if a Waiver Request is necessary.
- 22. The Applicant has proposed a dumpster pad located to the rear of the site. The dumpster is required to be screened on all sides and to the full height of the container. (Ch. 200 §207-17.C)
  - WP 1/25/21 Response: The dumpster's proposed location is not visible from Populatic Street or abutting properties. The existing dumpster onsite is not currently screened. The Medway DPW has requested a waiver for this requirement in order to make maintenance and plowing easier for DPW staff. Refer to Waiver Requests included as Attachment D.
    - TT 2/2/22 Update: No action necessary until PEDB decision on Waiver Requests.

- 23. At least one deciduous shade or canopy tree shall be provided for every 6 parking spaces. Only trees providing shade to the parking area shall be counted as meeting this requirement. (Ch. 200 §207-19.C.1.d)
  - WP 1/25/21 Response: The landscaping plan (C-6) has been updated in the revised drawing set to include additional shade trees in the parking area to meet this requirement. Refer to Attachment C.
    - TT 2/2/22 Update: The Applicant has proposed a Northern Red Oak adjacent to the front parking area as well as Red Maple's adjacent to the parking stalls on the south side of the site. The parking stalls on the east side have no proposed shade trees but this area is flanked by the proposed electric transformer, the generator and the swale meant for stormwater mitigation. In our opinion, this item is resolved.
- 24. Minimal screening of the Project has been provided along the northern side of the project, particularly between the project site and the abutters to the north. We recommend the Applicant provide screening along the north side of Water Street. (Ch. 200 §207-19.D)
  - WP 1/25/21 Response: The Landscaping Plan (C-6) has been updated in the revised drawing set to include additional screening on the north side of water street. Refer to Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 25. The site appears to have minimal areas for snow storage (snow shall not be stored in stormwater best management practices [BMP's]). The snow storage area(s) shall be located and graded such that the runoff from melting snow shall not enter the public way, stormwater BMP's and wetland resource areas. (Ch. 200 §207-21)
  - WP 1/25/21 Response: The snow storage areas have been added to Sheet C-4 in the revised drawing set. Refer to Attachment C. Due to constraints on the site, space is limited for snow storage and snow may need to be hauled off site during certain storm events.
    - TT 2/2/22 Update: Snow storage areas have been provided on the Plans. However, several areas are shown within or directly upgradient of proposed stormwater BMP's. All plowed snow shall be properly placed to allow pre-treatment to occur prior to entering the water quality swale and extended dry detention basin. We recommend a Condition requiring the Applicant modify the proposed snow storage areas based on the final stormwater design which is currently being reviewed by the Medway Conservation Commission.

#### **General Site Plan Comments**

- 26. We recommend the Applicant consider widening Water Street to minimum 20 feet or to the satisfaction of the Medway Fire Department.
  - WP 1/25/21 Response: The proposed width of Water Street is currently adequate for emergency access and abutter access to their driveway. Refer to Attachment E for Autoturn analysis for additional details.
    - TT 2/2/22 Update: We recommend the Applicant provide written correspondence from the Medway Fire Department regarding emergency access to the site.
- 27. The proposed accessible parking space and adjacent access aisle do not appear to be adequately sized. The proposed space shall be a van space since there is only one proposed accessible space required. Additionally, per MA AAB, van spaces shall be minimum 8 feet wide with an adjacent 8-foot access aisle. Also, if parking at the rear of the facility is meant for employees, we recommend an additional accessible space at the rear of the site to accommodate employee parking. Signage shall also be proposed for all accessible parking.
  - WP 1/25/21 Response: The accessible parking space has been updated on the revised plans to reflect the minimum spacing required for a van. Refer to Attachment C.
    - TT 2/2/22 Update: In our opinion, this item is resolved.

- 28. The proposed cut-in for the finished water to the existing 8-inch water main in Populatic does not appear to be to town standard. The town typically requires three valves at the connection point, two on the existing main and one on the new. We recommend the Applicant continue to coordinate with the Town regarding this item. Additionally, we recommend the Applicant show the proposed raw water connection point from the off-site Oakland and Village Street wells to help the PEDB better understand the scope of that connection.
  - WP 1/25/21 Response: Details on site piping connections will continue to be coordinated with the Medway Water Department.
    - TT 2/2/22 Update: We have no further comment as the Applicant is actively coordinating with the design engineers for the system. In our opinion, this item is resolved.
- 29. It appears finish water piping is being connected to existing raw water piping in Water Street. We recommend the Applicant/engineer confirm with Medway DPW if this is the intended scope or if any of the existing water main in Water Street will be abandoned to limit co-mingling of raw and finish water.
  - WP 1/25/21 Response: Finished water and raw water are not proposed to be cross-connected per MassDEP requirements. The proposed finish piping is proposed to be connected to the existing finished piping on site.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 30. We recommend the Applicant provide narrative related to proposed fence at the site and its intent. The proposed fences are open ended and may not provide security for pedestrians who may want to enter the rear portions of the facility.
  - WP 1/25/21 Response: Site security has been discussed with the Medway Water Department and the proposed fencing shown on the site reflects the feedback provided by the town. The primary purpose of the fencing is to prevent unauthorized vehicle access to the site, rather than pedestrian access. The proposed security system for the facility includes cameras mounted at each building corner which will provide 360-degree monitoring of the facility. Installation of a full perimeter fence around the entire property is not cost effective or necessary given the proposed security system for the facility.
    - TT 2/2/22 Update: In our opinion, this item is resolved.
- 31. The Applicant should add details for proposed 2-foot mow strip, sewer and drain manhole (not a standard 4-foot manhole for both as they have different requirements), concrete equipment pads and any other site amenity proposed on the Project.
  - WP 1/25/21 Response: Details have been updated on the revised drawing set. Refer to Attachment C.
     TT 2/2/22 Update: In our opinion, this item is resolved.

These comments are offered as guides for use during the Town's review and additional comments may be generated during the course of review. The Applicant shall be advised that any absence of comment shall not relieve them of the responsibility to comply with all applicable local, state and federal regulations for the Project. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

Very truly yours,

Steven boules

Steven M. Bouley, PE Project Manager

TL PL

Tucker D. Paradee, EIT Civil Engineer

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### Medway DPW Water Quality Treatment Facility, 19 Populatic Street Requests for Waivers from the Site Plan Rules and Regulations NOTES for discussion at 2-8-22 PEDB meeting

Section 204-5. D. 1. *NOTE – I believe the reference should be to Section 204-5 C. 3) re: Existing Landscape Inventory.* That regulation specifies that the Existing Condition sheet(s) shall show all existing trees with a diameter of fifteen inches or more at four feet above grade and any tree that will be beneficial for screening purposes. Tree drip lines shall also be shown.

The Applicant seeks a waiver to allow for showing only hardwood trees larger than 18" diameter on the plan (this was my suggestion to them) and to not show the driplines of trees that are scheduled to remain.

Board Discussion -

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Section 204-5 D. 5 – The site plan shall show the location and dimensions of proposed parking, including lot line setbacks, loading and unloading areas with traffic patterns, access lanes and curb radii. The Parking plan shall be in conformance with the provisions of the Zoning Bylaw, Section 7.1.1 Off-Street Parking and Loading.

#### NOTES

- The 19 Populatic Street site plan shows 17 parking spaces (12 in the back and side and 5 near the front door).
- Section 7.1.1 of the ZBL does not include a parking category for the proposed mixed uses at 19
   Populatic Street (office, garage, and water quality treatment facility). As directed by the ZBL
   language, Tetra Tech has indicated that the proposed DPW use is best represented in the ZBL
   Parking Table by the warehouse/distribution or manufacturing facility category. When that
   standard is applied, a total of 23 parking spaces is required (1 space per 2 employees and 1 space
   per 1,000 sq. ft. of non-office space).

The Applicant seeks a waiver to allow the site plan (with its 17 parking spaces) to not conform with the Zoning Bylaw's parking standards. Medway DPW feels that 17 spaces are adequate to park the number of current and future employees and to park vehicles related to facility operations (DPW trucks, vans, etc.)

Building Commissioner and Zoning Enforcement Officer Jack Mee has provided a letter dated 2-3-22 regarding parking on the subject site. In light of that letter, the waiver request may not be needed. The letter should be referenced in the Findings section of the Decision.

Board Discussion -
### Section 207 – 9 B) 3) Pursuant to Section 5.5.4.1.e of the Zoning Bylaw, sidewalks shall be provided along the entire frontage of the subject property along existing public ways.

The Applicant seeks a waiver from this requirement citing that there are no sidewalks presently on Populatic Street between Walker Street and the Franklin town line and installing such a sidewalk would not really be beneficial or practical. The applicable Zoning Bylaw language requires sidewalk construction along the subject site's frontage, or sidewalk construction elsewhere in the community, or a providing a payment in lieu of sidewalk construction to the Town. The frontage length on Populatic Street is approximately 973 feet.

Board Discussion -

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# Section 207-16 B. *NOTE – I believe the reference should be to Section 207-17. C.* Dumpsters and recycling and trash containers shall be fully screened on all sides and to the full height of the dumpster or container by suitable fencing or enclosure and/or evergreen plantings.

The Applicant seeks a waiver from this requirement, not wishing to have an enclosure around the dumpster. The Applicant notes that the dumpster is located at the back of the site, out of public view, and is essentially screened by the building itself. Also noted is the challenge of snow plowing and the desire to easily relocate temporarily when needed for maintenance.

#### **Board Discussion**

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Section 207-11 A. 4. Site entrances and exits shall be clearly delineated by vertical granite curbing or other approved materials along the entire radius of the opening, shall extend at least 12 feet beyond each side along the gutter line of the road and at least the first 25 feet of a driveway, and shall be sloped at the end to prevent a vertical obstruction to exist.

The applicant has requested waiving of the curbing requirement and to not have any curbing., noting that there are no curbs along Populatic Street and at the site. The expense of granite curbing is also noted. Use of bituminous curb instead is not desired as it can be easily damaged.

#### **Board Discussion**

#### OTHER WAIVERS THAT MAY BE NEEDED

Section 204-5-D. 14 Master Signage Plan with preliminary proposed designs, locations, materials, dimensions and lighting for proposed development sign and all business identification signage, both freestanding and attached; and signage to identify surface stormwater infiltration basins with messages to prohibit the disposing of trash and debris in such basins.

The Applicant has not provided a master signage plan nor has a waiver been requested.

**Board Discussion** 

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Section 207-12 Parking I. Electric Vehicle Parking – Industrial, commercial and multi-family housing developments with 15 or more parking spaces shall include parking spaces with electric vehicle charging stations for employee, customer and resident uses. (1 space required for this building.

The Applicant has not proposed an EV charging station nor has a waiver been requested.

**Board Discussion** 

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Section 207-16 B. Utilities. Permanently installed generators shall be positioned on cement pads, be located to the rear of the site, and shall be fully screened or bermed to mitigate noise and appearance.

The Applicant has proposed a sound attenuation enclosure around the generator, but no additional screening (landscaping) for appearance is proposed. What is the appearance of the sound attenuation enclosure?

**Board Discussion** 

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#### Zoning Compliance Issues identified by Tetra Tech

7.1.1 Off- Street Parking and Loading

E. 4. Electric Vehicle Parking – Industrial, commercial and multi-family housing developments with 15 or more parking spaces shall include parking spaces with electric vehicle charging stations for employee, customer and resident uses. (1 space required for this building.

The Applicant has not proposed an EV charging station.

**Board Discussion** 

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I. 1. Bicycle Parking facilities shall be provided for any new building. The minimum required number of bicycle spaces shall be one per twenty motor vehicles unless waived during Site Plan Review.

The Applicant has not proposed a bike rack.

**Board Discussion** 



TOWN OF MEDWAY BUILDING DEPARTMENT 155 Village Street Medway, Massachusetts 02053 508.533.3253

Jack Mee Building Commissioner & Zoning Enforcement jmee@townofmedway.org

February 3, 2022

Matt Hayes, Chairman Planning & Economic Development Town of Medway

Dear Mr. Hayes,

I have reviewed the proposed site plan for the Water Treatment Plant at 19 Populatic Street most specifically for the parking. Barry Smith, Water and Sewer Superintendent has determined that the expected employees for this complex will not exceed 12. Section 7, table 3 of the Medway Zoning Bylaws has a table for calculating the minimum spaces required. This is a unique building consisting of 3 separate areas: Operations Area, Garage, and Water Treatment Plant. It is not expected that these areas will all have employees. In my opinion the Garage building is designed for the parking of the department's vehicles and equipment, thus not typically occupied. The Treatment Plant will be monitored by employees that are expected to be working out of the Operations Area, thus not adding any additional personal or parking demand.

In my review I find it reasonable to apply the calculation from the table for "Business, professional and governmental office, bank" which requires 1 space per 300 sq. ft. to the Operations Area only which is 3,240 SF. Using this analysis this would result in a minimum of 11 required spaces.

Respectfully submitted,

Inch Mee

Jack Mee



### February 8, 2022 Medway Planning & Economic Development Board Meeting

## **Phytopia Public Hearing Continuation**

### Major Site Plan, Groundwater Protection Special Permit and Reduced Parking Special Permit

- Notice dated January 12, 2022 to continue the public hearing to February 8, 2022
- Email dated February 2, 2022 from attorney Ted Cannon, on behalf of the applicant, requesting a continuation of the hearing to March 8, 2022

#### **Board Members**

Matthew J. Hayes, P.E., Chair Robert Tucker, Vice Chair Richard Di Iulio, Clerk Jessica Chabot, Member Thomas Gay, Associate Member



TOWN OF MEDWAY

COMMONWEALTH OF MASSACHUSETTS

### PLANNING AND ECONOMIC DEVELOPMENT BOARD

Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

> RECEIVED TOWN CLERK JAN 12'22 PH4:11

### **MEMORANDUM**

January 12, 2022

 TO: Stefany Ohannesian, Town Clerk Town of Medway Departments, Boards and Committees
 FROM: Susy Affleck-Childs, Planning and Economic Development Coordinato RE: Public Hearing Continuation for Phytopia, Inc Major Site Plan, Groundwater Protection Special Permit, and Reduced Parking Special Permit Continuation Date – Tuesday, February 8, 2022 at 8:00 p.m.

At its January 12, 2022 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of Phytopia, Inc. of Peabody, MA for approval of a major site plan, a groundwater protection district special permit, and a reduced parking special permit for its proposed development at 6 Industrial Park Road to the Board's meeting on Tuesday, February 8, 2022 at 8:00 p.m. at Medway Town Hall, 155 Village Street.

On November 30, 2021, the Board approved special permits to use the existing 53,128 sq. ft. industrial manufacturing building at 6 Industrial Park Road and construct a 66,238 sq. ft., 2-story addition to the existing building for the cultivation, manufacturing, processing, and packaging of marijuana for medical use and adult recreational use and the delivery of such products off site to retail marijuana establishments in other communities.

The planned scope of work for site plan approval and for the groundwater protection and reduced parking special permits includes interior renovations to the existing building, construction of the addition, improvements to the access/egress driveways, installation of curbing, parking area improvements, landscaping, lighting, and installation of and improvements to stormwater drainage facilities. The planned work is shown on a plan titled *Industrial Park Road*, dated April 1, 2021, last revised October 12, 2021 prepared by Williams & Sparages Engineers, Planners and Surveyors of Middleton, MA. The architectural drawings dated April 6, 2021, last revised June 2, 2021 were prepared by Anderson Porter Design of Cambridge, MA. Noise and odor mitigation plans have also been provided. The project is also before the Conservation Commission for an order of conditions and a land disturbance permit.

The application, site plan and supporting documentation were filed with the Town on May 12, 2021 and are on file with the Medway Town Clerk and the Community and Economic Development Department at Medway Town Hall, 155 Village Street, Medway, MA. Project information including the revised site plan has been posted to the Planning and Economic Development Board's page at the Town's web site at: <u>https://www.townofmedway.org/planning-economic-development-board/pages/phytopia-inc-</u> <u>6-industrial-park-road-marijuana-facility.</u>

NOTE -- We expect the applicant will submit a revised site plan shortly. Upon receipt, it will be posted to the Board's web page and we welcome your review and comments by February 3, 2022.

Please do not hesitate to contact me if you have any questions.



124 Grove Street Suite 220 Franklin, MA 02038 TEL. NO. (508) 541-3000 FAX NO. (508) 541-3008

Edward V. Cannon, Jr. evc@ddcrwlaw.com

February 2, 2022

Planning & Economic Development Board Town of Medway 155 Village Street Medway, MA 02053

#### RE: 6 Industrial Park Road, Medway, MA Medway Flower LLC Site Plan & Special Permit Applications

Dear Susy:

The applicant respectfully requests that the Board continue the meeting currently scheduled for February 8, 2022 to March 8, 2022. This will enable the applicant to submit the necessary materials to the Board and the Board's consultant well in advance of the March 8<sup>th</sup> meeting date.

As for the Con Comm process, Tetra Tech is reviewing the Phase II portion of the 21E work. We just received the LSP Review fee for the scope of work, that is in the process of being paid and we hope we'll have the Town's LSP's comments by the March Con Comm meeting date.

Thank you for your time and attention to this matter, and please contact me with any questions or if you need any additional information.

Respectfully, Edward V. Cannon. Ir

Enclosures

cc: Angelo Frangoulidis Dale Buckman, MD Alex Athanas Peter D'Agostino Chris Sparages Brian Anderson

F19-039



### February 8, 2022 Medway Planning & Economic Development Board Meeting <u>Construction Reports</u>

- January Monthly Report from Ron Tiberi for Evergreen Village
- January Monthly Report from Dan Merrikin for William Wallace Village

## **Progress Report**

### **Project Details**

Project name	Evergreen	
Location	22 Evergreen Road	Medway MA
Owner	Broken Tree LLC	Medway MA
Reporting period	1-1-2022 thru 1-31-2022	
Report compiled by	Ron Tiberi P.E.	9 Mass Ave Natick MA
Date inspected/ submitted	1/31/22	

### Summary

Site contractor de-Mobilized; construction controls established. Erosion controls installed & maintained. Road set to binder level & site rough graded to subgrade. Phase 2 Structure foundation installed. Water services installed. Drainage system 90% installed.

### Activities

#### **Activity 1 Construction Controls**

Status	Achieved
Objective	Layout & Construction controls set and provided by Cheney Engineering
Activity dates	
Progress	Asbuilt information surveyed
Comments	Sanitary Facilities on-site, No construction trailers

#### **Activity 2 Erosion Controls**

Status	Achieved
Objective	Erosion controls implemented and approved on site Temporary sedimentation basins installed & maintained
Activity dates	During Month
Progress	Completed & maintained
Comments	

#### Activity 3 Access Road

Status	In progress
Objective	Paved to binder coarse
Activity dates	
Progress	Partially completed 85%,
Comments	Infiltration system installed

#### Activity 4 Water & Sewer Utilities

Status	Achieved
Objective	Sewer line and water lines being connected to units, Water lines charged. GAS Services Installed; Underground electric stubbed to property
Activity dates	
Progress	Completed
Comments	

#### Activity 5 Building

Status	In Progress
Objective	Building 2 Foundation installed, and backfilled, water & sewer connections completed
Activity dates	Current
Progress	
Comments	

#### Activity 6 Site Features

Status	In Progress
Objective	Segmented retaining wall being constructed behind building 1 approved and backfilled
Activity dates	
Progress	100%
Comments	

Photographs



Infiltration drainage system area

#2



Roadway & Drives

#1



<u>dan@legacy-ce.com</u> 508-376-8883(o) 508-868-8353(c) 730 Main Street Suite 2C Millis, MA 02054

#### **CONSTRUCTION INSPECTION REPORT**

Date of Inspection Snow	: 2/7/2022	Time On-Site:	8:45 am	Weather:	25F,	Light
Location: William	Wallace Village, 274	Village Street, Me	dway, MA			
Inspection By: Dar	niel J. Merrikin, P.E.					
Date of Report:	2/7/2022					
Observation Reque	ested by: DTRT LLC	2				

Medway Planning & Economic Development Board

#### **Activity Summary:**

At the time of inspection work on the following structures was ongoing:

- Unit 2/4 is substantially complete and occupied.
- > Unit 18 (old house) is substantially complete and occupied.
- ➤ Unit 20/22/24 construction continues.
- > Unit 6/8 is framed and is in the process of being trimmed and sided.
- ➢ Unit 10/12 foundation utility installation is underway.
- ▶ Unit 14/16 building foundations is partially excavated.
- > The mail kiosk is under construction.

Note the following site construction activities since our last inspection.

Site work on the site is minimal as the primary focus is currently building construction and due to the onset of snowy winter conditions. Site Inspection Report February 7, 2022 Page 2 of 4



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#### **Erosion Controls:**

Note the following:

- > Perimeter erosion controls were inspected and found to be in good condition.
- Temporary sediment basins appear to be functioning well and newly installed stormwater systems are protected with erosion controls. The partially excavated foundation for unit 14/16 is acting as a temporary sediment basin. Once the foundation is installed, the area will be re-evaluated to determine if additional erosion controls are needed.
- > The driveway was swept during January.
- Additional erosion controls were installed around the catch basin at the entrance during January.
- > Note that the site is frozen given the cold temperatures over the past month.

#### **Recommended Improvements:**

1. None

Site Inspection Report February 7, 2022 Page 3 of 4



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Site Inspection Report February 7, 2022 Page 4 of 4



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### February 8, 2022 Medway Planning & Economic Development Board Meeting

## Construction Services Estimate Cutler Place

 Construction Services estimate from Tetra Tech dated 2-2-22 for the Cutler Place multi-family development. The estimate has been forwarded to applicant Anthony Varrichione.



#### 6 Cutler St (Cutler Place) PEDB Construction Administration Budget February 2. 2022

Item No. <sup>1</sup>	Inspection	Visits	Hrs/Inspection <sup>2</sup>	Rate	Total
1	Pre-Construction Meeting	1	4	\$167	\$668
2	Erosion Control/SWPPP Inspections	12	2	\$104	\$2,496
3	Subgrade/Staking/Rough Grading	1	4	\$104	\$416
4	Stormwater: Rain Garden	3	4	\$120	\$1,440
5	Site Subbase Gravel/Fine Grading	1	4	\$104	\$416
6	Binder Course Paving	1	6	\$104	\$624
7	Curb/Berm	1	4	\$104	\$416
8	Top Course Paving	1	6	\$104	\$624
9	Landscape/Plantings	1	6	\$116	\$696
10	Punch List/Bond Estimate <sup>3</sup>	2	8	\$116	\$1,856
11	As-Built Review <sup>4</sup>	1	4	\$167	\$668
12	Field Changes/Change Orders	1	8	\$167	\$1,336
13	Meetings	6	1	\$167	\$1,002
14	Admin	1	3	\$71	\$213
	Subtotal				\$12,871
	Expenses			5.0%	\$644
	TOTAL				\$13,515

Notes:

<sup>1</sup> Each item includes site visit, inspection and written report and is based on current TT/Medway negotiated rates through June 2022.

<sup>2</sup> If installation schedule is longer than that assumed by engineer for any item above, or if additional inspections are required due to issues with the contract work, additional compensation will be required.

<sup>3</sup> This item includes a substantial completion inspection, punch list memo and bond estimate provided to the town. It also includes one final inspection to verify that comments from the list have been addressed and one revision to the list/estimate if required.

<sup>4</sup> This item includes review of as-built plans and review letter.

#### Date Approved by Medway PEDB\_\_\_\_\_

Certified by: \_

Susan E. Affleck-Childs Medway PEDB Coordinator Date



### February 8, 2022 Medway Planning & Economic Development Board Meeting

## **Housing Choice Multi-family Guidelines**

 DRAFT joint letter from Select Board and PEDB to MA DHCD

NOTE – The draft letter is being reviewed at the 2-7-22 Select Board Meeting.

DRAFT Letter to DHCD on Multi-Family Housing Guidelines sac comments – 2-2-22

#### LETTERHEAD

The Hon. Michael Kennealy, Secretary Executive Office of Housing and Economic Development 1 Ashburton Place, Room 2101 Boston, MA 02108

Dear Secretary Kennealy;

On behalf of the Town of Medway, the Medway Select Board and the Medway Planning and Economic Development Board submit these comments with respect to DHCD's "DRAFT Compliance Guidelines for Multi-family Districts Under Section 3A of the Zoning Act", intended to implement Chapter 40A, §3A. Medway has a number of concerns respecting the Draft Guidelines. In summary, the main areas of concern are:

- The definition of "reasonable size" as requiring a minimum of 50 acres of land and 25 contiguous acres is inflexible and not appropriate to Medway and similarly situated small, "adjacent" MBTA communities. This size would serve to promote large multi-family developments which may not be suitable to all communities.
- The requirements for determining the amount of developable land in the district are unduly onerous and beyond the requirements of the statute.
- Impacts on infrastructure, including public water and sewer capacity and facilities; public ways; stormwater management; emergency services; groundwater and wetlands; and other public facilities are not adequately considered.
- Requirements regulating the location of the multi-family zoning districts for adjacent communities, which is not regulated by the statute.
- The Guidelines should provide for advance review of proposed zoning amendments by <u>DHCD</u> to ensure compliance before the amendments are enacted.
- The statement that DHCD may, in its discretion, take noncompliance into account for other discretionary grant awards is beyond the authority of the statute.
- Whether the requirements of chapter 40A, §3 constitute an unfunded mandate in violation of Proposition 2 <sup>1</sup>/<sub>2</sub>.
- The conflict with other state public policy to preserve agricultural land

The Town's comments and recommendations on each of these items is detailed below.

**A. "Reasonable Size":** Specific <u>recommendation comment</u>: In Section 2, Definitions, change the definition of "reasonable size" to read: "Reasonable size" means not less than 50 contiguous acres of land, **or land** with a unit capacity equal to or greater than the unit capacity specified in section 5 below". With this change, "reasonable size" can be met either based on the minimum unit capacity, <u>or</u> with a minimum of 50 acres.

The definition of "reasonable size" does not provide sufficient flexibility to the 175 MBTA communities, which have diverse and unique housing and infrastructure needs, and is particularly ill-suited in adjacent communities that are not within one-half mile of a transit or bus station. The requirement of 50 acres for all MBTA communities, coupled with the required density of 15 units per acre, results in an unrealistic minimum unit capacity of 750 multi-family units within the required multi-family zoning district for all communities. It fails to take into account the actual housing needs of each community, infrastructure burdens, level of transit service, existing multi-family housing that may or may not fit the requirements of the statute and Draft Guidelines, and the unique location, topography, development patterns, and constraints of each community. The requirement that at least one area of the multi-family housing district include a minimum of 25 contiguous acres only exacerbates this by discouraging smaller developments that would have less impact while still providing a multi-family housing option.

Medway is an "adjacent community", which has no transit or bus service from the MBTA. Under the formula for determining the minimum multi-family unit capacity, as an adjacent community, the minimum unit capacity would be 10% of its total housing stock. With 4,826 total housing units in town according the census, that would equal 483 multi-family units. Instead, because of the unyielding definition of "reasonable area", Medway is required to have the capacity for 750 multi-family units in the district.

The determination that 50 acres is a "reasonable area" is based on the finding that 50 acres is approximately one-tenth of the land area within .5 miles of a transit station. It is not clear why this particular measure was deemed to be "reasonable" for all MBTA communities, including "adjacent communities" with no transit (or even bus) station. Whether or not basing a "reasonable area" on a percentage of the land area within .5 miles of a transit station makes sense for communities that have a transit station, it is not a logical measure for "adjacent communities." As you pointed out in the January 12<sup>th</sup> webinar, the focus of this new law is to encourage increased development of multi-family housing within walking distance of transit stations. See, e.g., slide 4 of the PpowerPpoint presentation. As an "adjacent community", Medway is not within walking distance of a transit station and 3.9 miles away from the downtown Franklin MBTA station and the goals of the statute will not be achieved by requiring the Town to allow an unrealistic number of multi-family units. The 50 acre requirement, and the 25 acre contiguous requirement, are not well suited to adjacent communities.

**B.** Determination of Developable land: Specific <u>recommendation comment</u>: Definition of "developable land", delete everything after the first sentence. Under Section 5, Determining Reasonable Size, subsection a, delete the last sentence in the first paragraph, and the second sentence in the second paragraph; in subsection b, delete the third and fourth paragraphs.

In addition to requiring a minimum of 50 acres in the multi-family district, the Draft Guidelines also require each community to estimate how many units of multi-family housing could be constructed on each parcel of developable land in the district. This requirement (1) imposes a significant burden on each community, and (2) seems contrary to and not required by the legislation. Nowhere in G.L. c. 40A, §3A is there a mention of such a requirement.

First, the requirements for providing the estimate are onerous and contradictory. It requires that the Town estimate the amount of multi-family units that can be constructed on each parcel of developable land. This estimate must take into account height limitations, lot coverage, FAR, set back and parking requirements, as well as any limitations in other applicable by-laws. Then it has to take into account limitations on development from inadequate water or wastewater infrastructure, Title 5 limitations in areas not served by municipal sewer, known title restrictions, and any other "physical restrictions" such as wetlands. This essentially requires the town to undertake expensive, time-consuming, and unnecessary design for each parcel in the district. This contradicts the statement in the Draft Guidelines that there is no requirement nor expectation that a multi-family district will be built out to its full unit capacity. All land, in every zoning district in every municipality, has limitations based on dimensional provisions, topography, and other factors. Expecting the town to ensure that each individual parcel can be developed at 15 units per acre is unreasonable and unduly burdensome.

Further, this additional mandate is beyond the authority of DHCD to include in guidelines under Section 3A because it is inconsistent with the language of the statute, which defines only two requirements <u>for an area</u> to be considered a district of reasonable size: (1) a "minimum gross density of 15 units per acre, subject to any further limitations imposed by [c. 131 §40] and title 5 of the state environmental code"; and (2) located within "0.5 miles of a commuter rail station, subway station, ferry terminal or bus station, if applicable". There is no requirement that the actual density, based on a very involved estimation process, must be a minimum of 15 units per acre. There is also no requirement to make a calculation for development of each parcel in the district. The statute only requires a gross density of 15 units per acre, while actual developments might be less than that density due to limitations imposed by wetlands and Title 5 constraints.

Finally, the Draft Guidelines fail to elucidate the requirement of the statute regarding limitations imposed by G.L. c. 131, §40, and Title 5. The Draft Guidelines simply repeat the language of the statute. The Draft Guidelines should provide clear guidance on the meaning of this provision and how to comply with it.

**C. Infrastructure Impacts:** The Draft Guidelines do not take into account the lack of infrastructure in many communities to support such significant and concentrated multi-family units. In particular, municipal water and sewer in Medway and other towns have limited capacity; for example, the state sets limits on the amount of water each community can withdraw for its public water supply. The requirement to provide municipal water to 750 potential multi-family units will outstrip the Town's water withdrawal permit. In addition, the Town is part of the Charles River Regional Pollution Control District for its municipal sewage disposal system, and is subject to limitations on its sewer sewage treatment capacity.

Other municipal infrastructure will be impacted, including public ways and stormwater management facilities in the multi-family housing area. Emergency services such as fire, police, and ambulance will all have additional workloads. Groundwater and wetlands located near new developments will potentially be impacted by additional impervious surfaces, construction impacts, and related matters. Although any development will be reviewed for compliance with the Wetlands Protection Act, and other federal, state and local environmental requirements, these

protections are not absolute, and any large developments have impacts on the environment and wildlife habitat.

Medway is also somewhat unique in that most of its undeveloped land is agricultural land devoted to active horticulture and agriculture. Preserving farm land is an important state priority, and sacrificing farm land for multi-family housing that is not near a transit station seems contrary to state policy.

#### **D. Location of Districts:** Specific recommendation comment: delete Section 8.c.

As noted above, the statute is quite clear as to the requirements for the multi-family housing district. The only requirement as to location is that it be located within "0.5 miles of a commuter rail station, subway station, ferry terminal or bus station, if applicable". For towns like Medway, that are not within .5 miles of any of the above, the statute does not impose any limitations on where the multi-family housing district should be located. This is another example of the DHCD imposing additional requirements beyond what the legislature enacted. The legislation does not grant DHCD license to impose, under the guise of guidelines, its own set of requirements.

**E.** Advance Review of Zoning Amendments: Specific comment: Allow communities to submit proposed zoning amendments to DHCD for review prior to enactment, similar to the provision on page 10 for informal review during an action plan.

As written, the Draft Guidelines require DHCD to review zoning amendments for compliance with chapter 40A, §3A, but such review is available only after the amendments are enacted. Given the significant effort that preparing such zoning amendments will entail, as well as potential difficulties in obtaining local support from residents at town meeting, it would be beneficial to have an informal review by DHCD prior to the town meeting vote. It would not advance the need for housing for a community to spend the time, money, and effort to draft new zoning, comply with all the requirements of chapter 40A for enactment, obtain a favorable vote, and then be told that the zoning does not comply with the requirements despite the town's best efforts. Prior, informal review would help identify any problem areas before it is too late.

**F. Effect of Noncompliance:** Specific <u>recommendation comment</u>: Delete the last sentence in the Draft Guidelines.

The statement that DHCD may, in its discretion, take noncompliance into account for other discretionary grant awards should be deleted as this statement is inconsistent with the legislation and unduly punitive. The legislature listed three specific grant programs that would be affected by a municipality's inability to comply with the requirements, and limited the scope of DHCD's authority to "guidelines to determine if an MBTA community is in compliance with this section"; there was no grant of authority for DHCD to countermand the legislature's determination as to the penalty for noncompliance by adding more penalties. Leaving it up to DHCD's "discretion" as to whether to deny funding for additional grant programs does not solve the problem. This is even more troubling, because it leaves it up to DHCD's unfettered discretion, with no guidelines for municipalities. The legislature in Section 3A provided MBTA

communities a clear statement as to the consequences for failure to comply, which each community should be able to rely upon when making decisions regarding this mandate and not have to consider the what if prospects of other grant programs being withheld. -

**G.** Unfunded Local Mandate: There is a serious question as to whether G.L. c. 40A, §3A and the Draft Guidelines constitute an unfunded state mandate under G.L. c. 29, §27C. The law and the Draft Guidelines impose direct service and cost obligations on MBTA communities without state legislative appropriation of funding for these costs. The costs of determining "developable land", preparing zoning amendments and zoning map changes, and additional infrastructure costs for water, sewer, stormwater, public way maintenance, and other costs will be significant for many MBTA communities.

**H. Determination of Compliance:** Specific <u>comment recommendation</u>: Section 9.a, delete subsection iii under "General district information"; subsection v. under "Location of districts"; subsection vii under "Reasonable size metrics". Under Section 10, delete subsection a.

The items listed under Section 9.a should be deleted for the reasons explained above; these subsections require information that is not required by the statute.

Section 10.a should be deleted because there is no provision <u>in the legislation</u> for a "term" of compliance, or that DHCD require a report on production of new housing units within the multi-family district. This last requirement, in fact, is contrary to DHCD's own assertion that the statute does not require any specific production targets.

In summary, the laudable goal of encouraging multi-family housing near public transit has morphed into an ungainly attempt to create vast swaths of multi-family housing districts simply for the sake of creating them, without input from the communities involved or taking into account the significant challenges that this will bring to smaller communities with no MBTA services. We trust that you will consider these comments carefully and would appreciate your earliest response.

Signatures



### February 8, 2022 Medway Planning & Economic Development Board Meeting

## ZBA Petition

 Accessory Family Dwelling Unit special permit application for 21 Hookset Circle to construct a 784 sq. ft. addition off the back and side of the house. The ZBA public hearing is February 16, 2022.



#### TOWN OF MEDWAY

ZONING BOARD OF APPEALS

155 Village Street Medway MA 02053 Phone: 508-321-4915 |zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

#### NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS.

#### TO BE COMPLETED BY THE APPLICANT

Applicant/Petitioner(s):	Application Request(s):		
Property Owner(s):	Appeal		
	Special Permit		
Site Address(es):	Variance		
	Determination/Finding		
	Extension		
	Modification		
Parcel ID(s):	Comprehensive Permit		
	ļ		
Zoning District(s):			
Registry of Deeds Book & Page No. and Date or Land C	ourt Certificate No. and Date of Current Title	:	

TOWN CLERK STAMP

TO BE COMPLETED BY STAFF:

Check No.: Date of Complete Submittal: Comments:

#### APPLICANT/PETITIONER INFORMATION

The owner(s) of the land must be included as an applicant, even if not the proponent. Persons or entities other than the owner may also serve as coapplicants in addition to the owner(s), however, in each instance, such person shall provide sufficient written evidence of authority to act on behalf of the owner(s). For legal entities such as corporations, LLCs, etc., list the type and legal status of ownership, the name of the trustees/officer members, their affiliation, and contact information. Please provide attachment for information if necessary.

Applicant/Petitioner(s):	Phone:
	Email:
Address:	<u></u>
Attorney/Engineer/Representative(s):	Phone:
	Email:
Address:	<u> </u>
Owner(s):	Phone:
	Email:
Mailing Address:	

Please list name and address of other parties with financial interest in this property (use attachment if necessary):

Please disclose any relationship, past or present, interested parties may have with members of the ZBA:

I hereby certify that the information on this application and plans submitted herewith are correct, and that the application complies with all applicable provisions of Statutes, Regulations, and Bylaws to the best of my knowledge, and that all testimony to be given by me during the Zoning Board of Appeals public hearing associated with this application are true to the best of my knowledge and belief.

Signature of Applicant/Petitioner or Representative

Date

Date

Signature Property Owner (if different than Applicant/Petitioner)

ate

#### **GENERAL APPLICATION FORM**

#### APPLICATION INFORMATION

		YES	NO
Applicable Section(s) of the Zoning Bylaw:	Requesting Waivers?	Y	Ν
	Does the proposed use conform to the current Zoning Bylaw?	Y	N
Present Use of Property:	Has the applicant applied for and/or been refused a building permit?	Y	Ν
	Is the property or are the buildings/ structures pre-existing nonconforming?	Y	Ν
Proposed Use of Property:	Is the proposal subject to approval by the BOH or BOS?	Y	N
	Is the proposal subject to approval by the Conservation Commission?	Y	Ν
Date Lot was created:	Is the property located in the Floodplain District?	Y	N
Date Building was erected:	Is the property located in the Groundwater Protection District?	Y	N
Does the property meet the intent of the Design Review Guidelines?	Is the property located in a designated Historic District or is it designated as a Historic Landmark?	Y	N

#### **Describe Application Request:**

#### FILL IN THE APPLICABLE DATA BELOW

Required Data	Bylaw Requirement	Existing	Proposed
A. Use			
B. Dwelling Units			
C. Lot Size			
D. Lot Frontage			
E. Front Setback			
F. Side Setback			
G. Side Setback			
H. Rear Setback			
I. Lot Coverage			
J. Height			
K. Parking Spaces			
L. Other - Impervious Coverage	35%	less than 13%	13.1%

#### FOR TOWN HALL USE ONLY

To be filled out by the Building Commissioner:

Date Reviewed

Medway Building Commissioner

Comments:

After completing this form, please submit an electronic copy to <u>zoning@townofmedway.org</u> and 4 paper copies to the Community & Economic Development Department.



### TOWN OF MEDWAY

ZONING BOARD OF APPEALS

155 Village Street Medway, MA 02053 Phone: 508-321-4915 |zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

#### NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS. A GENERAL SPECIAL PERMIT APPLICATION IS REQUIRED IN ADDITION TO THIS FORM FOR AFDU'S.

#### TO BE COMPLETED BY THE APPLICANT

Please provide evidence regarding how the Special Permit Decision Criteria, outlined below, is met. Please write "N/A" if you believe any of the Criteria is Not Applicable. Provide attachments if necessary.

1. An accessory family dwelling unit shall be located within:			
a. a detached single-family dwelling (principal dwelling unit); or b. an addition to a detached single-family dwelling principal dwelling unit); or			
2. There shall be no more than one accessory family dwelling unit associated with a detached single- family dwelling (principal dwelling unit).			
3. No accessory family dwelling unit shall have more than one bedroom, unless a second bedroom is authorized by the Board of Appeals pursuant to 8.2.C. 8.			
<ul> <li>4. An accessory family dwelling unit shall not exceed 800 sq. ft. of gross floor area unless: <ul> <li>a. there is an existing detached accessory structure larger than 800 sq. ft. located on the same lot</li> <li>as a detached single-family dwelling (principal dwelling unit) and the Board of Appeals determines</li> <li>its use as an accessory family dwelling unit is in character with the neighborhood; or</li> <li>b. authorized by the Board of Appeals pursuant to 8.2.C.8.</li> </ul> </li> </ul>			
The proposed accessory family dwelling unit living space is 784sf.			
5. There shall be at least one designated off-street parking space for the accessory family dwelling			
unit in addition to parking for the occupants of the detached single-family (principal dwelling unit).			
The off-street parking space shall be located in a garage or in the driveway, and shall have			
vehicular access to the driveway. The location, quantity and adequacy of parking for the accessory			

family dwelling unit shall be reviewed by the Board of Appeals to ensure its location and appearance are in keeping with the residential character of the neighborhood.

6. Occupancy of the single-family dwelling (principal dwelling unit) and accessory family dwelling unit shall be restricted as follows:

a. The owners of the property shall reside in one of the units as their primary residence, except for bona fide temporary absences due to employment, hospitalization, medical care, vacation, military service, or other comparable absences which would not negate the primary residency standard. For purposes of this Section, "owners" shall mean one or more individuals who hold legal or beneficial title to the premises.

b. The accessory dwelling unit and the detached single-family dwelling (principal dwelling unit) shall be occupied by any one or more of the following:

i. the owner(s) of the property;

ii. the owner's family by blood, marriage, adoption, foster care or guardianship;

iii. an unrelated caregiver for an occupant of the detached single-family dwelling or the accessory family dwelling unit, who is an elder, a person with a disability, handicap or chronic disease/medical condition, or a child.

7. An accessory family dwelling unit shall be designed so as to preserve the appearance of the singlefamily dwelling (principal dwelling unit) and be compatible with the residential character of the neighborhood. Any new separate outside entrance serving an accessory family dwelling unit shall be located on the side or in the rear of the building.

In order to encourage the development of housing units for disabled and handicapped individuals and persons with limited mobility or a chronic medical condition, the Board of Appeals may allow reasonable deviations from the Basic Requirements where necessary to install features in the accessory family dwelling unit to facilitate the care of, and access and mobility for, disabled and handicapped individuals and persons with limited mobility or a chronic medical condition. This may include, but is not limited to, authorizing a second bedroom in the accessory family dwelling unit.

If you are seeking relief under this provision, please specify the relief sought and the reasons supporting your request.

Signature of Applicant/Petitioner or Representative

Received by:

1/13/2022



Date











21 Hookset Circle




### February 8, 2022 Medway Planning & Economic Development Board Meeting

# **Town Meeting**

 Draft article dated 12-27-202 from the Historical Commission to amend the Medway General Bylaws, Article XVII, re: Building Demolition. Barbara Saint Andre has asked that the PEDB review and provide comments.

## May 2022 ATM Draft Article to Amend Building Demolition By-law Draft 12.27.2021

<u>Article</u> To see if the Town will vote to amend the General By-laws, Article XVII, Building Demolition, as follows (language to be deleted shown in strikethrough, language to be added is <u>underlined</u>:

Amend Section 17.3.4:

3.4 Within forty-five days after the Commission's receipt of a complete application, the Commission shall make an initial determination on whether the building is historically significant. The applicant for the permit may make a presentation to the Commission at that time. The Commission may require that the applicant provide a report from an engineer licensed to practice in Massachusetts with respect to any claims by the applicant as to the structural condition of the building. The Commission may also, at the applicant's expense, hire its own consultant to review any such reports and any claims by the applicant as to the structural condition of the house.

#### Amend Section 17.3.6:

- 3.6 The Commission shall make a determination of whether or not the historically-significant building is preferably preserved within thirty-one days following the close of the public hearing.
  - (i) If after a public hearing the Commission determines that the building should not be preferably preserved, the Commission shall notify the Building Commissioner and the applicant, in writing within seven business days after the close of the public hearing and the Building Commissioner may issue a demolition permit upon receipt of the written decision.
  - (ii) If after a public hearing the Commission determines that the building should be preferably preserved, the Commission shall so notify the Building Commissioner and the applicant in writing within seven business days after the close of the public hearing, and no demolition permit may be issued until: twelve months after the date of the determination by the Commission.
    - a. at least twenty-four months after the date of determination by the Commission, for buildings that are 200 or more years old; or
      b. at least eighteen months after the date of the determination by the Commission, for buildings that are at least 150 years old, but less than 200 years old;

c. at least twelve months after the date of the determination by the
 Commission, for buildings that are at least 75 years old, but less than
 150 years old

Amend Section 17.4:

### Section 17.4 Responsibility of Owners

- During the twelve month demolition delay period, the applicant shall make continuing, 4.1 bona fide and reasonable a good faith efforts to find an alternative use for the building that will result in its preservation, including seeking a new owner willing to purchase and preserve, restore or rehabilitate the building. Other Aalternatives to demolition include, but are not limited to, incorporation of the building into the future development of the site; adaptive reuse of the building; utilization of financial incentives to rehabilitate the building; seeking a new owner willing to purchase and preserve, restore or rehabilitate the building; or moving or relocating the building. For the purposes of this paragraph, "continuing, bona fide and reasonable efforts" to seek a new owner shall mean retaining a licensed broker to market the property in the usual manner over substantially all of the demolition delay period, obtaining an appraisal from a reputable appraiser and providing evidence of good faith negotiations with potential buyers of the property. These efforts to sell the property shall be deemed unsuccessful only upon a finding that either there were no offers to purchase the property, that no offer from a willing and reasonably able buyer was for at least the appraised value of the property, or that no agreement to sell the property pursuant to an offer of at least the reasonable appraised value for the property could be reached despite good faith efforts to do so.
- 4.2 Upon determination by the Commission that a building is a preferably preserved historically significant building, the owner shall be responsible for properly securing the building, if vacant, to the satisfaction of the Building Commissioner. Should the owner fail to so secure the building, the subsequent destruction of such building through any cause, which destruction could have been prevented by the required security measures, shall be considered a demolition in violation of this bylaw.
- 4.3 If requested by the Commission, it shall be the responsibility of the owner to assist in the facilitation of the implementation of the requirements of this Bylaw by providing information and any architectural plans readily available to the owner, allowing access to the property, participating in the investigation of preservation options, and actively cooperating in seeking alternatives with the Commission and any persons designated by the Commission.

Add a new Section 17.8

The Commission may enact rules and regulations to carry out the provisions and purposes of this <u>By-law.</u>

Or act in any manner related thereto.

The Willows Construction Administration Budget February 8, 2022				
Inspection	Site Visits	Hrs/Inspection <sup>2</sup>	Rate	Total
Periodic Erosion Control/O&M Inspections	12	2	\$104	\$2,496
Drainage: 16 Subsurface Roof Systems	16	4	\$120	\$7,680
Top Course Paving	2	8	\$104	\$1,664
Substantial Completion Inspections <sup>3</sup>	2	6	\$120	\$1,440
As-Built Plans⁴	1	4	\$167	\$668
Meetings (PEDB/Misc. Site)	6	2	\$167	\$2,004
Admin	1	6	\$71	\$426
Subtotal				\$16,378
Expenses			5.0%	\$819
ΤΟΤΑΙ				¢47.407
	Inspection         Periodic Erosion Control/O&M Inspections         Drainage: 16 Subsurface Roof Systems         Top Course Paving         Substantial Completion Inspections <sup>3</sup> As-Built Plans <sup>4</sup> Meetings (PEDB/Misc. Site)         Admin         Subtotal         Expenses	The Willows         Construction Administration I         February 8, 2022         Inspection         Inspection       Site         Visits       Visits         Periodic Erosion Control/O&M Inspections       12         Drainage: 16 Subsurface Roof Systems       16         Top Course Paving       2         Substantial Completion Inspections <sup>3</sup> 2         As-Built Plans <sup>4</sup> 1         Meetings (PEDB/Misc. Site)       6         Admin       1         Subtotal       Expenses         TOTAL       Inspection	The Willows         Construction Administration Budget February 8, 2022         Inspection       Site Visits       Hrs/Inspection <sup>2</sup> Periodic Erosion Control/O&M Inspections       12       2         Drainage: 16 Subsurface Roof Systems       16       4         Top Course Paving       2       8         Substantial Completion Inspections <sup>3</sup> 2       6         As-Built Plans <sup>4</sup> 1       4         Meetings (PEDB/Misc. Site)       6       2         Admin       1       6         Subtotal       Expenses       5         TOTAL       TOTAL       5	The WillowsConstruction Administration Budget February 8, 2022InspectionSite VisitsHrs/Inspection2RatePeriodic Erosion Control/O&M Inspections122\$104Drainage: 16 Subsurface Roof Systems164\$120Top Course Paving28\$104Substantial Completion Inspections <sup>3</sup> 26\$120As-Built Plans <sup>4</sup> 14\$167Meetings (PEDB/Misc. Site)62\$167Admin16\$71SubtotalExpenses5.0%

Notes:

<sup>1</sup> Each item includes site visit, inspection and written report and is based on current TT/Medway 2022 rates.

<sup>2</sup> If installation schedule is longer than that assumed by engineer for any item above, or if additional inspections are required due to issues with the contract work, additional compensation will be required.

<sup>3</sup> This item includes a substantial completion inspection and Punch List memo provided to the town. It also includes one (1) final inspection to verify that comments from the list have been addressed.

<sup>4</sup> This item includes one review of as-built plans and review email correspondence.

Date Approved by Medway PEDB\_\_\_\_\_

Certified by:

Susan E. Affleck-Childs Planning and Economic Development Coordinator Date