GODDARD CONSULTING
Strategic Ecological Consulting

Franklin Conservation Commission
355 East Central Street
Franklin MA 02038

November 4, 2025

Re: Response to BETA & MassDEP Comments - Notice of Intent Peer Review #3
444 East Central Street, Franklin MA (DEP File No. 159-1320)

Dear Franklin Conservation Commission,

Goddard Consulting, LLC (Goddard) is pleased to submit this letter on behalf of the Applicant, AJ Alevizos of TAG Central LLC, providing updated project plans and responses to the review letter issued by BETA, dated October 29, 2025, and technical comments issued by MassDEP, in regard to the Notice of Intent (NOI) filed for 444 East Central Street, Franklin MA (Parcel ID: 284-66). A list of attached documents is as follows:

- WPA Form 3
- Notice of Intent Peer #3, 444 East Central Street, Franklin, MA, Allen & Major Associates, Inc., 11/3/2025
- Peer Review Comments Related to BLSF, 444 East Central Street, Franklin, MA, Beals Associates, Inc., 10/31/2025
- Regulatory Compliance Analysis, Goddard Consulting LLC, revised through 11/4/2025, inclusive of:
    - Existing Conditions in Riverfront Area, Goddard Consulting LLC, 10/30/2025
    - Proposed Conditions in Riverfront Area, Goddard Consulting LLC, 11/4/2025
    - Restoration/Mitigation in Riverfront Area, Goddard Consulting LLC, 11/4/2025
    - Existing South Flood Plain Volume Exhibit (4 sheets), Allen & Major Associates, Inc., 11/3/2025
    - Existing North Flood Plain Volume Exhibit (4 sheets), Allen & Major Associates, Inc., 11/3/2025
    - Proposed South Flood Plain Volume Exhibit (4 sheets), Allen & Major Associates, Inc., 11/3/2025
    - Proposed North Flood Plain Volume Exhibit (4 sheets), Allen & Major Associates, Inc., 11/3/2025
- Restoration, Replication and Mitigation Plan, Goddard Consulting LLC, revised 10/31/2025
- Drainage Report, Allen & Major Associates, Inc., revised through 10/29/2025
- Civil Site Plans For: 40B Multi-Family Site Development, 444 East Central Street, Franklin MA, Allen & Major Associates, Inc., revised through 10/29/2025

Sincerely,
Goddard Consulting, LLC

Chris Frattaroli, Lead Wetland Scientist

CC: AJ Alevizos, TAG Central LLC
Judith Schmitz, MassDEP CERO

BETA Comments & Responses

Goddard and the project team have reviewed the comments provided by BETA and offer the following responses. The most recent comments from BETA are indicated with "BETA3", and subsequent responses from Goddard are indicated with "GC3". Comments that have been sufficiently addressed are omitted for brevity.

Comment A1:
The Massachusetts Department of Environmental Protection (MassDEP) has not issued a DEP file number as of this writing.

Response:
Goddard has reached out to MassDEP Central Regional Office to confirm that they have received all necessary materials and to inquire about the status of the issuance of a file number.
BETA2:
MassDEP has not issued a DEP file number as of this writing.
GC2:
Goddard has continued to inquire with MassDEP CERO regarding the issuance of a file number, and MassDEP has confirmed a file number is forthcoming.
BETA3:
MassDEP has issued file number (No. 159-1320) with the following technical comments: *[MassDEP Comments omitted here for brevity]*
GC3:
MassDEP comments and responses are provided later in this document.

Comment A3:
Resource Area impacts (both permanent and temporary) should be clearly labeled on the Project plans.

Response:
A Resource Area Impacts plan sheet has been added to the plan set to illustrate impacts to resource areas proposed.
BETA2:
Proposed impacts to IVWs and some impacts to BLSF have been depicted on Sheet EXH-5; however, Riverfront Area impacts; all BLSF impacts; LUW, Bank, and BVW impacts associated with the dock; and impacts associated with invasive species removal have not been depicted or quantified. The Applicant should confirm if impacts associated with invasive species removal have been quantified and included on the WPA Form 3 and within any provided impact summary. With regard to BLSF impacts, the Applicant appears to show alteration to some areas that are not currently designated as BLSF. As noted later in this letter, the boundary of BLSF may change upon further analysis of the floodplain. Comment remains.
GC2:
The Resource Area Impacts plan sheet has been updated to include impacts to BLSF, incorporating the newly updated BLSF boundary, and LUW/Bank/BVW associated with the dock. Riverfront Area impacts are quantified in the Regulatory Compliance Analysis. Invasive species management impacts are quantified separately on the attached Landscape Plan sheet. All resource area impacts, both temporary and permanent, have been clearly labeled and depicted on updated project plans and materials as included in this submittal.

BETA3:
Impacts associated with the installation of the dock have been quantified for Bank, LUW, BVW, and BLSF. Impacts associated with the dock are not depicted on the RA impact figure; these impacts should be depicted on the plans and figures and the Applicant should confirm that the impacts are included in the currently proposed impact totals.
The Applicant should provide an updated WPA Form 3 with all proposed impacts to Resource Areas.
GC3:
Impacts associated with the dock that were not previously depicted on the Riverfront Area impact figures were omitted because this feature is raised and will not constitute degraded area. Nevertheless, this feature has been added to the Riverfront Area figures and impact totals for clarity and for the sake of being conservative. An updated WPA Form 3 is also provided as an attachment to this submittal.

Comment W1:
The Project, as currently depicted, will disturb more than one (1) acre of land; therefore, a Notice of Intent (NOI) must be submitted to the Environmental Protection Agency (EPA) under the Construction General Permit (CGP) and a Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The Commission could consider a Special Condition within the Order of Conditions that requires the submission of the SWPPP for review and approval prior to the commencement of work.

Response:
The Applicant is aware that the project, as proposed, will be subject to jurisdiction under the EPA CGP and a SWPPP must be prepared. As noted by BETA, there are specific federal regulations already in place that the Applicant must adhere to, so the Applicant does not think this special condition is necessary, but ultimately defers to the Commission.
BETA2:
BETA defers to the Commission on including a Special Condition within the Order of Conditions that requires the submission of the SWPPP for review and approval prior to the commencement of work. The Commission has historically required this on large development projects.
GC2:
Acknowledged, please see previous response to this comment. The SWPPP is under the jurisdiction of the United States Environmental Protection Agency and outside of the jurisdiction of the MA Wetlands Protection Act.
BETA3:
BETA defers to the Commission on the Special Condition recommended above.
GC3:
As agreed upon at the 10/9/2025 working session, the Applicant is amenable to providing a copy of the SWPPP to the Conservation Commission prior to the commencement of work; however, for the sake of clarity, a separate approval of the SWPPP by the Conservation Commission is not required/necessary given the Applicant must already follow state and federal regulations mandated for this process.

Comment W3:
The Applicant should provide further information on the proposed construction of the dock within the perennial stream including how the dock will be constructed and details on the structures proposed

within the stream/LUW; any permanent and temporary impacts to Resource Areas (Bank, LUW, and BVW) associated with the construction of the dock; and how the dock will be maintained. Sufficient information has not been provided to permit the construction of the dock.

Response:

Landscape Plans have been updated to provide all requested information as it relates to the design and construction of the dock including details illustrating the structures proposed within the stream/LUW and impacts to the Resource Areas (Bank, LUW and BVW). The dock and gangway are planned to be a prefabbed product similar or equal to the product line offered by the manufacturer, EZ-Dock (image included for illustrative purposes). The dock is low-maintenance, durable, and slip-resistant made of polyethylene. As such, maintenance is limited to sweeping the surface of the dock clean, and as it's a modular system, can be easily dissembled and stored as/if necessary during winter months.

Figure 1: Representative photo of proposed dock.

BETA2:

The Applicant provided sufficient information on the proposed dock. Proposed Resource Area impacts associated with the dock should be shown on Sheet EXH-5. Should the Commission approve the construction of the dock, it is recommended that a Special Condition requiring the removal and appropriate storage of the dock during winter months be included in the Order of Conditions. Although not directly under the Conservation Commission's purview, the onsite stream may qualify as a "navigable waterway" per the Massachusetts Public Waterfront Act (Chapter 91) and therefore require a Chapter 91 license. It is recommended that a Special Condition be included in the Order of Conditions that requires the Applicant to either provide the Commission with a copy of the Chapter 91 License prior to construction of the dock or to provide written confirmation from MassDEP that the waterway does not qualify as "navigable". MassDEP is the only entity that can make the determination of navigability under the Chapter 91 program.

GC2:

The proposed Resource Area impacts associated with the dock have been shown on Sheet EXH-5. The applicant is amenable to a Special Condition requiring the removal and appropriate storage of the dock during the winter months. The applicant must follow all State and Federal laws and regulations, including with respect to Chapter 91 licensing, if applicable. The Massachusetts Public Waterfront Act (Chapter 91) is outside the purview of the Conservation Commission as noted by BETA. The Applicant will conduct thorough due diligence to confirm the proper permits are obtained prior to the installation of the dock, as is done for every aspect of the project. As such, a special condition is unnecessary in the

Applicant's opinion. Regardless, the Applicant is happy to accept a Special Condition stating: "Should a Chapter 91 License be required for the dock, the Applicant shall submit a copy of the License to the Commission prior to construction of the dock."

BETA3:

Proposed impacts to RA associated with the dock should be depicted on the associated plans and figures and quantified, as it appears that a small area of the dock footprint is not depicted as degraded on the RA Proposed Conditions exhibit. BETA concurs with the Applicant's suggestion above for a Special Condition, subject to Commission concurrence.

GC3:

No response necessary.

Comment W5:

The proposed work does not appear constructable without some level of temporary and/or permanent impacts to facilitate access and sufficient space to work at the following locations:

- FES1;
- The retaining wall north of C50;
- FES4;
- The proposed dock;
- The grading north of flag A40;
- FES3;
- FES5; and
- The placement of riprap north of flag A90.

The proposed design should be revised to either avoid impacts at these locations, or the associated impacts should be disclosed and appropriately mitigated. Particular attention should be given to the proposed retaining wall, as over excavation is required to install the leveling pad and place impervious fill per the detail provided.

Response:

Locations of proposed features have been revised to limit impacts. The only unavoidable impacts are associated with the construction of the retaining wall north of flag A40. These impacts are now disclosed on the Resource Area Impacts plan sheet, which has been added to the plan set to illustrate permanent and temporary impacts proposed.

BETA2:

All previously mentioned locations where impacts would be required have been revised with the exception of the retaining wall north of flag C50 and the proposed dock. Impacts associated with the retaining wall are shown on the Resource Area Impact Plan sheet. Impacts associated with the proposed dock are not depicted on the Resource Area Impact Exhibit. The Applicant should depict all proposed impacts on the Resource Area Impact Exhibit and confirm all associated narratives and resubmit the WPA form to reflect proposed impacts.

BETA3:

No response has been provided; however, impacts associated with the proposed dock for Bank, LUW, and BVW have been provided on the Resource Area Impact Exhibit. Impacts associated with the dock are not currently depicted on the RA impact figure, and all impacts should be quantified and depicted on the plans and figures.

GC3:

See GC3 response to comment A3. No further comment.

Comment W11:
The Applicant has stated that invasive species including common reed (*Phragmites australis*), glossy buckthorn (*Frangula alnus*), Japanese knotweed (*Fallopia japonica*), and bittersweet (*Celastrus orbiculatus*) are present at the Site. During BETA's Site visit, these species and the following additional species were observed: purple loosestrife (*Lythrum salicaria)*, multiflora rose (*Rosa multiflora*), garlic mustard (*Alliaria petiolata)*, Norway maple (*Acer platanoides)*, autumn olive (*Elaeagnus umbellate),* winged euonymus (*Euonymus alatus)*, and bush honeysuckle (*Lonicera spp*.). These species were observed in areas proposed for development, but no formal invasive species removal plan has been provided for these species. The Applicant should provide information regarding the removal of all invasive species at the site to ensure further spread does not occur during construction.

Response:
The management methods proposed are applicable to all identified invasive species on site. The Restoration, Replication and Mitigation Plan has been updated to reflect this and to provide additional detail regarding preferred management techniques and access considerations. An Invasive Species Management Coordination Plan (sheet L0) has also been added to the Landscape Plans which depicts the areas in which invasive species management is proposed.

BETA2:
The Applicant should state if excavation is proposed within Resource Areas as a method to remove invasive species; if so, these impacts should be quantified. Within the ongoing management section, it is stated that mowing is a viable management option for continued maintenance. Japanese knotweed is a species that can vegetatively sprout by any fragment of the plant. This plant should not be mowed as it can cause the spread of the species. This should be detailed in any ongoing maintenance plans. With regard to the invasive species management plan as a whole, it does not appear that Site-specific recommendations for treatment are provided for specific areas of the Site. For example, there are general note about herbicide use, but it is anticipated that the Conservation Commission would want the Applicant to avoid herbicide use within wetlands to the extent feasible. In addition, it does not appear that the landscape plans capture all areas of the Site with invasive species populations (i.e., directly along the Bank of the onsite stream). The Commission could consider requiring the Applicant to prepare a more Site-specific invasive species management plan during the public hearing process. Alternatively, the Commission could consider including a Special Condition in the Order of Conditions that requires this to be prepared prior to construction for review and approval.

GC2:
The Restoration, Replication and Mitigation Plan has been updated to specify that (1) excavation of invasive species is not to occur within Bank, BVW or LUWW resource areas, (2) any cutting of Japanese knotweed must be done stalk-by-stalk, rather than by mowing, and all vegetative material must be removed from the site, and that (3) chemical treatment will not occur unless mechanical treatment has been demonstrated to be ineffective. The Applicant does **not** propose applying herbicide to open water, but because of the potential for application to occur close to water, herbicides that are approved for such use have been selected. Additionally, the specific landscape plan sheet in question has been revised to better depict the extents of existing invasive vegetation and those areas proposed for ongoing management and is attached to this submittal. A complete, final Landscape Plan Set including all sheets properly updated and coordinated will be submitted for review prior to the end of

the public hearing process. The areas proposed for management comprise 86,205 square feet, of which 59,672 square feet is located within proposed planting areas and 23,187 square feet is located outside of the proposed planting areas.

BETA3:

The invasive species management plan states that "mowing may be conducted with hand-operated power tools or a walk-behind brush mower in any locations where target vegetation is located". This should be revised to state that mowing may be conducted on species excluding Japanese knotweed.

Within the invasive species management plan, the Applicant stated that excavation is acceptable within RA, BLSF, and the 100-foot Buffer Zone. The Applicant should clarify if impacts associated with excavation have been included in the quantified impacts for these Resource Areas.

Areas where Japanese knotweed and common reed are present adjacent to the eastern side of Uncas Brook are not proposed for management and are only proposed for monitoring and treatment where practical. These species will most likely encroach into the adjacent areas proposed for restoration/management. The Commission could consider requiring the Applicant to provide a more long-term management plan for locations proposed for restoration/management given the anticipated invasive species pressure.

The Commission could consider including a Special Condition requiring the selected contractor to provide an invasive species management plan with specific information including who will be performing the work, a copy of the Massachusetts Pesticide License for any applicator, documentation of existing plant populations, selected removal methods for each species, representative photographs, and documentation of post-work conditions. See suggested monitoring requirements for invasive species management areas in Comment W12.

GC3:

The Restoration, Replication and Mitigation Plan has been revised to exclude mowing of Japanese knotweed and to clarify that excavation will only be employed within areas that will otherwise be graded for site work. As such, impacts resulting from this excavation work do not extend beyond impacts quantified for other site work as shown on the project plans. Goddard believes that the monitoring and maintenance requirements for the restoration areas sufficiently address the anticipated invasive species pressure from surrounding areas. Monitoring will note invasive species regrowth or spread and will recommend corrective actions if the restoration areas do not exhibit at least 75% cover by native vegetation. With regard to any potential herbicide applications, the applicant is amenable to a condition requiring the submittal of specific information including who will be performing the work and a copy of the Massachusetts Pesticide License for any applicator.

Comment W12:

The Applicant should provide the locations and areal extent of invasive species proposed for removal and provide additional details on the means and methods of removal in the submitted invasive species management plan. Dense stands of common reed are present along the Banks of the River and will require specific access and treatment considerations. Significant invasive species control efforts will be required along the River to ensure that the adjacent native plantings and restoration areas are not compromised. It is recommended that areas subject to invasive species management be monitored for at least three (3) growing seasons to document the efficacy of the control efforts.

Response:
Additional details regarding invasive species management methods, especially with regard to the Phragmites and Japanese knotweed along the Banks of the River, have been added to the Restoration, Replication and Mitigation Plan. An Invasive Species Management Coordination Plan (sheet L0) has also been added to the Landscape Plans. The applicant is amenable to monitoring for three (3) growing seasons.
BETA2:
See BETA2 response to Comment W11.
GC2:
See GC2 response to Comment W11.
BETA3:
Further details and a plan have been provided on the location of proposed invasive species management. See W11 BETA3 response and comment W12 for recommended Special Conditions related to monitoring.
GC3:
No further comment.

Comment W15:
It is recommended that areas subject to native plantings/restoration be mowed only once per year during late fall; this could be included as a Special Condition. If so, it is recommended that signage be required to demarcate these areas and this requirement in the field.

Response:
The Applicant is amenable to the inclusion of a Special Condition prohibiting the wholesale mowing of naturalized areas more than once per year in late fall; however, mechanical removal of invasive species in these areas, including mowing, may be implemented for invasive species management purposes in limited portions of these areas. Due to these areas not being contiguous, installing signage is not practical.
BETA2:
To ensure the success of native species and to support native fauna, mowing should not occur as a removal method for invasive species within naturalized areas. Invasive species found throughout naturalized areas should either be hand removed or treated with herbicide using a cut and treat method. Signage could still be installed to demarcate the extents of naturalized areas, even if fragmented. BETA defers this to the Commission.
GC2:
The Restoration, Replication and Mitigation Plan has been updated to stipulate that mowing of naturalized areas is not proposed. Rather, mechanical removal in these areas should be completed by targeted cutting performed by hand-operated tools or equipment. Signage indicating that mowing is only intended to occur once per year in late fall has been added to the landscape plan sheets.
BETA3:
Comment addressed. The Applicant has provided proposed signage for areas planted with native vegetation that will state "Native plantings. Mow only once per year in late fall". BETA defers to the Commission on the approval of this signage.
GC3:
No further comment.

Comment W20:
Invasive species proposed for removal including common reed and Japanese knotweed are present within the BVW and Bank associated with the onsite perennial stream. The Applicant should clarify if temporary impacts to Resource Areas will occur as a result of removing this vegetation. The Applicant should also clarify if supplemental plantings are proposed within Resource Areas where vegetation is removed.

Response:
Temporary impacts in the form of invasive species management are likely to occur with the management of invasive vegetation. The Restoration, Replication and Mitigation plan has been updated to specify that native potted plants and/or native seed mix shall be placed in these areas if invasive vegetation is sufficiently managed that areas become unvegetated; however, the likelihood of this being a problem is believed to be low.

BETA2:
Impacts related to the removal of invasive species should be quantified. The Applicant should determine if excavation of invasive species, specifically those that spread via rhizome, will occur within Resource Areas.

GC2:
Impacts related to invasive species management have been better quantified on the landscape plans; the singular sheet is provided as an attachment to this submittal. A final landscape plan set will be coordinated, compiled and submitted prior to the end of the public hearing process for the review and approval of BETA and the Commission. The Restoration, Replication and Mitigation plan has been updated to specify that excavation is acceptable within Riverfront Area, Bordering Land Subject to Flooding, and the 100-foot buffer zone, and that excavation shall not impact Bank, Bordering Vegetated Wetlands, or Land Under Water Bodies and Waterways.

BETA3:
The Applicant should clarify if the proposed excavation work within RA, BLSF, and the 100-foot Buffer Zone has been quantified as a part of the proposed Resource Areas impacts.

GC3:
See GC3 response to comment W11. Excavation is proposed only within areas already subject to site work, and therefore excavation impacts will not extend beyond areas already quantified as impacts.

Comment W22:
Impacts to BVW for the installation of the proposed dock should be quantified and details regarding how the Project complies with the Performance Standards set forth in Act should be provided. Construction of a dock is considered a Limited Project under 10.53(3)j if all applicable standards are met.

Response:
Proposed impacts to BVW for the installation of the dock amount to 32 sf. The impact consists primarily of the overhanging dock gangway, and a minor direct impact for the installation of piles. Nevertheless, this aspect of the project is eligible to be treated as a Limited Project under 10.53(3)j as described in our response to comment W21.

BETA2:
The Applicant states in the BVW Performance Standards narrative that 40 square feet of BVW impacts are proposed associated with improvements on the stream crossing; however, impacts

associated with the installation of the dock are not mentioned. All proposed impacts should be quantified and discussed within the Performance Standard narrative and shown on the Resource Area Impact Exhibit.

GC2:

Discussion of compliance with the Performance Standards at 310 CMR 10.55(4) has been added to Section 3.0 of the Regulatory Compliance Analysis, and a section has been added documenting compliance with the Limited Project provisions. The Resource Area Impact Exhibit (Sheet EXH-5) has been updated to depict this impact.

BETA3:

Comment addressed. Based on MassDEP comments and discussions with the Town, the Applicant may be required to provide an analysis of the unpermitted BVW impacts and provide mitigation for this work. BETA defers this issue to the Commission.

GC3:

As noted in our responses to MassDEP's comments, during the ANRAD process, the possibility of BVW fill resulting from compost/dump piles was raised in BETA's review letter(s). Goddard responded to this question specifically in a February 27, 2025, memorandum titled Peer Review Comment Response. This response provided an analysis of historic aerial imagery, soil sampling conducted on site and other indicators, which confirmed that BVW fill has not in fact occurred, as an ORAD was subsequently issued confirming the BVW boundary as shown. That said, these piles do appear to extend essentially immediately to the BVW boundary, and cleanup/restoration is proposed as part of this NOI, and the submitted Restoration, Replication and Mitigation Plan regardless. As a note, this topic was discussed with BETA and the Commission at the 10/9/2025 working session.

Comment W25:

The Applicant stated that no significant wildlife habitat is present in the area of proposed work within BLSF. However, according to 310 CMR 10.57(1)(a)3, areas of BLSF located within the 10-year floodplain or within 100 feet of a Bank or BVW (whichever is further away) are presumed to be significant to the protection of wildlife, unless they have been extensively altered by human activity as defined in the regulations. While some portions of the BLSF within 100 feet of the Bank and BVW appear to meet the definition of "altered", portions of BLSF where work is proposed do not. Therefore, the Applicant should depict the 10-year floodplain boundary and quantify impacts to BLSF as appropriate to determine if a wildlife habitat evaluation is warranted.

Response:

As is necessary for human safety and vehicular access, the existing southern stream crossing needs to be bolstered. This area is the only location where fill is proposed within BLSF. Figure 3 below, dated 3/7/2025, depicts the approximate location of fill within BLSF in yellow. Goddard believes that this work clearly is proposed in an extensively human-altered area. The majority of this work area is comprised of a hardpacked gravel access roadway. Vegetation is limited, but the dominant vegetation in this area is common reed (*Phragmites australis*) and Japanese knotweed (*Fallopia japonica),* both invasive species that provide little habitat value. *[Figure 3 is now rendered inaccurate and has been omitted from this document for brevity]*

BETA2:

As of July 8, 2025, FEMA has updated the map panel 25021C0309F showing a Zone A with no Base Flood Elevation (BFE) is present throughout the Site. The Applicant should provide

an updated regulatory review of work proposed within BLSF, which should reflect the floodplain analysis that is anticipated to be performed by the Applicant.

GC2:

The Regulatory Compliance Analysis has been updated to provide a regulatory review of work within BLSF based on the previously mentioned hydraulic analysis provided by Beals Associates, Inc. This analysis was submitted to the Commission previously and site plans have been updated accordingly.

BETA3:

Comment addressed. Based on MassDEP comments and discussions with the Town, further mitigation may be required for unpermitted BLSF impacts at the Site. BETA defers this issue to the Commission.

GC3:

As noted in our responses to MassDEP's comments, the Applicant's civil engineer, Allen and Major Associates, contemplated this and already included the additional compensatory flood storage in the design. Although it is impossible to verify the ground elevation below the compost/dumping piles without substantial material removal, Allen and Major has estimated the likely lost flood storage capacity caused by the presence of this material to be approximately 3,498.5 cubic feet. This calculation assumes that the dumping piles were not permitted, and that under existing conditions, the flood storage volume should include space currently occupied by these piles. This volume was added to the tabulation of existing flood storage capacity in the south half of the site (i.e. floodplain elevation 271'), resulting in an updated existing flood storage capacity of 27,780.5 cubic feet. Proposed flood storage capacity in this portion of the site is 37,035.5 cubic feet, an increase of 9,255 cubic feet. The increase in flood storage capacity already provided by the project sufficiently compensates for the loss caused by the presence of this pile.

Comment W27:

Areas of the RA that are not considered degraded are subject to the Performance Standards at 310 CMR 10.58(4). Details regarding how the Project complies with these Performance Standards set forth in the Act should be provided. As noted in the Superseding Order of Conditions referenced in Comment W26, a single Site can be evaluated under both 310 CMR 10.58(4) and (5) depending on the degraded status of different areas.

Response: *[previous response omitted for brevity]*

BETA2:

Comment remains. The Applicant states in their response that RA at the site "consists predominantly of junkyards, absence of topsoil and dumping grounds." However, the figure provided by the Applicant shows that 178,830 sf of RA is degraded and 191,000 sf of RA is vegetated and considered non-degraded. BETA conducted a Site visit to specifically review RA, and it was determined based on field observations that several areas delineated by the Applicant as degraded RA are vegetated, have topsoil, and do not consist of junkyards or impervious surfaces (See W26, BETA2). Further, several of the Applicant's submitted documents provide different values for RA areas and impacts at the Site and should be corrected to the accurate values.

The disagreement between BETA and the Applicant on the RA Performance Standards provision is based in application. While BETA has specifically been asked by MassDEP to

evaluate Sites under both sets of RA Performance Standards, the Applicant could elect to evaluate the Site under 310 CMR 10.58(5) if performed correctly. BETA's initial review recommended the use of both provisions at the Site due to several key issues identified with the Applicant's assessment of compliance under 310 CMR 10.58(5):

The Applicant will be required to re-delineate the extents of degraded RA at the Site and depict these areas on the Project plans, as the delineation currently shown is incorrect based on BETA's Site observations. The proposed work and supporting calculations should be overlaid onto this plan as previously requested to confirm that impacts are being quantified correctly.

According to the Applicant's documentation, the majority of the RA on the west side of the Site is non-degraded, while BETA found the entire area to be non-degraded. In either scenario, the Project plans depicts work within 100 feet of the MAHW of the River where no degraded areas are currently present, which is non-compliant with the provisions of 310 CMR 10.58(5)(c).

In reviewing the plans, it is clear that essentially the entirety of the outer 100-foot RA on the western side of the River (which BETA identified to be entirely non-degraded) will be subject to the proposed work. This would likely require far more restoration of RA than is currently proposed, and it is critical that the Applicant note that conducting restoration of RA in the interest of getting "credits" to alter non-degraded areas must consist of the restoration of currently degraded areas. Several areas of restoration are sited within non-degraded areas, and several areas of degraded RA are not proposed for restoration. The "Proposed Conditions in Riverfront Area" figure should be revised to include all areas of proposed work per 310 CMR 10.58(5)(d). Per this provision, the allowable area of proposed work does not only include proposed degraded areas.

It is recommended that the Applicant reevaluate compliance with RA Performance Standards, regardless of if one or both sets of Performance Standards are applied.; however, the reassessment of the delineation of degraded versus non-degraded areas should be completed first.

<u>GC2:</u>

The Applicant has re-delineated the extent of existing degraded Riverfront Area as mentioned in the response to comment W26 above. The Regulatory Compliance Analysis has been updated to further address compliance with the Riverfront Area performance standards, specifically, correcting the key issues BETA identified with the Applicant's assessment of compliance under 310 CMR 10.58(5), including re-delineating the extents of degraded Riverfront Area at the site and overlaying the proposed work onto the plans to confirm impacts are being quantified correctly. Work is proposed within 100 feet of the MAHW, which is non-compliant with 310 CMR 10.58(5)(c); however, this provision goes on to read "except in accordance with 310 CMR 10.58(5)(f-g)", with which the proposed work does comply.

<u>BETA3:</u>

The Applicant has re-delineated area of RA at the Site. See W26 BETA3 response for further details regarding the designation of developed/degraded RA.

The Applicant has provided a narrative describing how the Project complies with the Performance Standards set forth at 310 CMR 10.58(5). Specifically, they indicate that there will now be a net reduction in degraded areas at the Site which would indicate that sufficient mitigation is being provided in accordance with the RA Redevelopment Standards. However, MassDEP has provided a comment stating that "Areas that are not restored with topsoil, and

both woody and herbaceous vegetation do not qualify as areas eligible to help satisfy the redevelopment performance standards. Areas of proposed lawn/landscaping must be excluded from mitigation calculations." The Applicant should clarify if these areas are included within the calculations. It appears that, at a minimum, some grass islands within parking areas may have been included and should be subtracted from the mitigation total. In addition, the Applicant has depicted mitigation occurring up to the faces of buildings; this should be reevaluated to determine if it is feasible (i.e., if building code requires access around the entire building). If this is the case, RA mitigation calculations may require revisions.

The Applicant has also provided an alternatives analysis that generally complies with the requirements set forth in 310 CMR 10.58(4)c.

The Commission should include a Special Condition to comply with the Performance Standard set forth at 310 CMR 10.58(5)h that prohibits further alteration with the restoration or mitigation areas, except as may be required to maintain the area in its restored or mitigated condition. The Applicant shall also demonstrate that the restoration/mitigation has been successfully completed for at least two growing seasons prior to the issuance of the COC.

GC3:

Calculations pertaining to compliance with the Riverfront Area performance standards (i.e. restoration and mitigation totals) have been updated to exclude areas proposed as lawn/landscaping and now only include areas that will be seeded with a native seed mix and planted with native woody specimens. The Applicant is amenable to the condition to comply with the performance standard set forth by 310 CMR 10.58(5)h that prohibits further alteration with the restoration or mitigation areas, except as may be required to maintain the area in its restored or mitigated condition. However, the Applicant would like to ensure that, for the purposes of obtaining a Certificate of Occupancy, a Partial Certificate of Compliance can be requested and issued prior to the completion of restoration/mitigation monitoring.

MassDEP Comments & Responses

Goddard and the project's civil engineer (Allen & Major Associates, Inc.) have reviewed the comments issued by MassDEP with the entire project team and offer the following responses.

DEP Comment:

The applicant should update Section B of the NOI form to reflect the currently proposed impacts to wetland resource areas.

Applicant Response:

The Applicant has attached the updated Form 3 to reflect the current proposed impact to wetland resource areas.

DEP Comment:

Additional information is needed to demonstrate that the project meet the performance standards for work in Riverfront Area found in 310 CMR 10.58(4) and/or 310 CMR10.58(5).

Applicant Response:

The Regulatory Compliance Analysis has been updated to incorporate these comments and demonstrate compliance with 310 CMR 10.58(5) and other applicable regulations.

DEP Comment:
The applicant should confirm that the calculated area of existing degraded area reflects areas that were degraded prior to August 7, 1996 and excludes newer structures (ex. the building to the west of the river).

Applicant Response:
Goddard has reevaluated the condition of the site based on historic aerial imagery and has concluded that the site is presently in nearly the same condition as it was in 1996. However, upon further review, Goddard concurs with DEP that the shed/garage building to the west of the river, near the southerly crossing, does not appear to be present in 1996 based on historic aerial imagery. This structure, which totals +/-3,800sf has been removed from the calculation of existing degraded Riverfront Area, and the Regulatory Compliance Analysis has been updated accordingly. The project remains in compliance with the WPA.

DEP Comment:
Compost piles should not be quantified as degraded areas.

Applicant Response:
Certain areas were misidentified as "compost piles" on the initial Existing Conditions Plan due to surveyors' field notations which inaccurately represent the materials these piles consist of. The Existing Conditions Plan has been revised to accurately label the piles as abandoned dumping grounds. The dumping ground piles indeed consist of a mix of trash, debris, construction and demolition waste, coarse woody debris, and some yard waste. Examples of non-compostable materials identified within the dumping ground piles on site include brick, cinder block, concrete washout, large diameter logs, asphalt and gravel/fill.

The WPA identifies degraded riverfront area as "[…] areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds." Therefore, Goddard believes that these features which were previously misidentified on site plans as "compost piles" do indeed qualify as degraded riverfront areas by virtue of being abandoned dumping grounds, which have not been turned, moved or exported, and the labels on the plans have been corrected accordingly.

DEP Comment:
Additional information should be provided describing the characteristics of proposed "Non-Degraded" areas. Areas that are not restored with topsoil, and both woody and herbaceous vegetation do not qualify as areas eligible to help satisfy the redevelopment performance standards. Areas of proposed lawn/landscaping must be excluded from mitigation calculations.

Applicant Response:
Landscape plans have been revised to ensure that coverage by topsoil and planting with woody and herbaceous vegetation is proposed everywhere possible such that they can be considered areas that are eligible to help satisfy the redevelopment performance standards. Areas where this is not proposed have been excluded from the tabulation of proposed Riverfront Area restoration.

DEP Comment:
If elevations of the ground beneath any portion of the compost piles is similar to the adjacent floodplain, compensatory flood storage should be provided for the unpermitted filling of the BLSF.

It appears that the upper limit of BLSF does not follow the 271 contours between flags A94 and A100, and to the west of flag A20. Additional compensatory flood storage may be required if these areas have been filled.

Applicant Response:

The Applicant's civil engineer, Allen and Major Associates, contemplated this and already included the additional compensatory flood storage in the design. Although it is impossible to verify the ground elevation below the compost/dumping piles without substantial material removal, Allen and Major has estimated the likely lost flood storage capacity caused by the presence of this material to be approximately 3,498.5 cubic feet. This calculation assumes that the dumping piles were not permitted, and that under existing conditions, the flood storage volume should include space occupied by these piles. This volume was added to the tabulation of existing flood storage capacity in the south half of the site (i.e. floodplain elevation 271'), resulting in an updated existing flood storage capacity of 27,780.5 cubic feet. Proposed flood storage capacity in this portion of the site is 37,035.5 cubic feet, an increase of 9,255 cubic feet. The increase in flood storage capacity already provided by the project sufficiently compensates for the loss caused by the presence of this pile.

DEP Comment:

Does Riverfront Area extend north onto the site from Uncas Brook?

Applicant Response:

While the Riverfront Area does appear to extend ever so slightly into the bottom of the site, it remains outside of the proposed limit of work, reaching only the tree line. As a result, no development is proposed within this extension of Riverfront Area aside from the BVW replication area, which is inherently excluded from Riverfront Area impact calculations. As such, the inclusion of this portion of Riverfront Area does not impact the documentation of compliance with applicable performance standards in any way. (This was discussed and coordinated at the 10/9/2025 work session with BETA and the Commission). Because the river that casts this portion of Riverfront Area is offsite, it could not and was not confirmed as part of the approved ORAD.

DEP Comment:

In recent years, MassDEP has received complaints related to BVW filling on this property. All areas of recent unpermitted BVW filling must be mitigated as part of this NOI.

Applicant Response:

During the ANRAD process, the possibility of BVW fill resulting from compost/dump piles was raised in BETA's review letter(s). Goddard responded to this question specifically in a February 27, 2025, memorandum titled Peer Review Comment Response. This response provided an analysis of historic aerial imagery, soil sampling conducted on site and other indicators, which confirmed that BVW fill has not in fact occurred, as an ORAD was subsequently issued confirming the BVW boundary as shown. That said, these piles do appear to extend essentially immediately to the BVW boundary, and cleanup/restoration is proposed as part of this NOI, and the submitted Restoration, Replication and Mitigation Plan regardless. Although relating to BLSF filling rather than BVW filling, this NOI does propose to mitigate potential past unpermitted filling of BLSF onsite; please refer to previous response above.

DEP Comment:
The applicant should confirm that all infiltration structures/basins are set back at least 50' from wetlands and that soil testing was performed at all proposed infiltration locations.

Applicant Response:
Allen & Major has confirmed that all infiltration structures/basins are in fact set back at least 50' from wetlands and that soil testing was performed at all proposed infiltration locations.

DEP Comment:
TSS removal worksheets should be provided for all treatment trains.

Applicant Response:
Allen & Major has confirmed that TSS worksheets have been provided for all treatment trains.

DEP Comment:
Groundwater mounding shall not intrude into basins/structures.

Applicant Response:
The groundwater mounding analysis indicates that the basin/structure is fully dewatered within 72 hours as required.

DEP Comment:
Due to the location of the project within a Zone II, the applicant should confirm that the roofs will not be metal, or provide additional treatment for roof runoff.

Applicant Response:
No metal roofs are proposed.

DEP Comment:
New England Wetland Seed Mix is not recommended for upland (Buffer Zone, Riverfront Area) seeding.

Applicant Response:
The New England Wetland Seed Mix has been changed to the Conservation/Wildlife Mix or similar upland mix for all upland areas where it was previously proposed.

DEP Comment:
A longer period of treatment and monitoring, may be needed to control the invasive species on this site, particularly Japanese Knotweed.

Applicant Response:
As full eradication of Japanese Knotweed is not proposed, Goddard believes the proposed monitoring period is appropriate. BETA, the Commission's peer review consultant, has concurred with the recommended monitoring period as well.

Goddard and the project team believe that the responses and revised materials provided sufficiently address BETA's and MassDEP's comments and enable the Commission's complete review of the proposed work. If you have any questions, please feel free to contact us at (508) 393-3784.

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Bureau of Resource Protection - Wetlands

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Provided by MassDEP:

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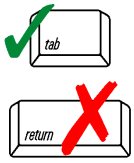
Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

444 East Central Street — a. Street Address
Franklin — b. City/Town
MA — c. Zip Code

Latitude and Longitude:
42.12837 — d. Latitude
71.44142 — e. Longitude

284 — f. Assessors Map/Plat Number
66 — g. Parcel /Lot Number

2. Applicant:

A.J. — a. First Name
Alevizos — b. Last Name
TAG Central LLC — c. Organization
275 Regatta Dr — d. Street Address
Jupiter — e. City/Town
FL — f. State
33477 — g. Zip Code
561-685-5336 — h. Phone Number
i. Fax Number
aj@tagdevco.com — j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

Wayne — a. First Name
Stobbart — b. Last Name
Stobbart Properties LLC — c. Organization
444 East Central Street — d. Street Address
Franklin — e. City/Town
MA — f. State
02038 — g. Zip Code
508-962-0080 — h. Phone Number
i. Fax Number
wayne@stobbartnurseries.com — j. Email address

4. Representative (if any):

Chris — a. First Name
Frattaroli — b. Last Name
Goddard Consulting, LLC — c. Company
291 Main Street, Suite 8 — d. Street Address
Northborough — e. City/Town
MA — f. State
01532 — g. Zip Code
617-620-2740 — h. Phone Number
i. Fax Number
chris@goddardconsultingllc.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$7875 — a. Total Fee Paid
$3925 — b. State Fee Paid
$3950 — c. City/Town Fee Paid

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A. General Information (continued)

6. General Project Description:

Construction of 40B multifamily development on historic nursery/landscape yard property totaling 264 units, including associated parking, stormwater management, habitat enhancement/invasive species management and wetland replication.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home
2. ■ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ■ Yes ☐ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

310 CMR 10.53(3)j - Construction of a dock
2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Norfolk	
a. County	b. Certificate # (if registered land)
37433	112
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ■ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ■ Bank	16.5 (1. linear feet)	16.5 (2. linear feet)
b. ■ Bordering Vegetated Wetland	63 (1. square feet)	7145 (2. square feet)
c. ■ Land Under Waterbodies and Waterways	162 (1. square feet) 0 (3. cubic yards dredged)	162 (2. square feet)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ■ Bordering Land Subject to Flooding	(1. square feet) 0 (3. cubic feet of flood storage lost)	(2. square feet) 13,651.4 (4. cubic feet replaced)
e. ☐ Isolated Land Subject to Flooding	(1. square feet) (2. cubic feet of flood storage lost)	(3. cubic feet replaced)
f. ■ Riverfront Area	Unnamed, inland (1. Name of Waterway (if available) - **specify coastal or inland**)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

■ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 370,970 square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
147,930	53,350	94,580

5. Has an alternatives analysis been done and is it attached to this NOI? ■ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ■ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

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C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. ☐ Yes ■ No

If yes, include proof of mailing or hand delivery of NOI to:

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

August 2021
b. Date of map

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____ percentage/acreage

(b) outside Resource Area _____ percentage/acreage

2. ☐ Assessor's Map or right-of-way plan of site

2. ■ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) ■ Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) ■ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review).
Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.
** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

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C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review).
Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ■ Not applicable – project is in inland resource area only b. ☐ Yes ■ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Bourne to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

North Shore - Plymouth to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

c. ☐ Is this an aquaculture project? d. ☐ Yes ■ No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).

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C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ■ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ■ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ■ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ■ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☐ A portion of the site constitutes redevelopment

      3. ■ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:

      1. ☐ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ■ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☐ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

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D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ■ List the titles and dates for all plans and other materials submitted with this NOI.

Civil Site Plans for: 40B Multifamily Development 444 East Central Street Franklin, MA
a. Plan Title

Allen & Major Associates
b. Prepared By

Carlton Quinn, PE and others
c. Signed and Stamped by

10/29/2025
d. Final Revision Date

various
e. Scale

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ■ Attach NOI Wetland Fee Transmittal Form

9. ■ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

1155
2. Municipal Check Number

4/16/25
3. Check date

1154
4. State Check Number

4/16/25
5. Check date

TAG Central LLC
6. Payor name on check: First Name

7. Payor name on check: Last Name

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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	2. Date: 4/16/25
3. Signature of Property Owner (if different): Wayne Stobbart	4. Date: 4/16/25
5. Signature of Representative (if any)	6. Date: 4/16/25

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

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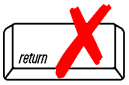
NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

a. Street Address	b. City/Town
444 East Central Street	Franklin
c. Check number	**d. Fee amount**
1154	$3925

2. Applicant Mailing Address:

a. First Name	b. Last Name
Alexander	Alevizos

c. Organization: TAG Central LLC

d. Mailing Address: 275 Regatta Dr

e. City/Town	f. State	g. Zip Code
Jupiter	FL	33477

h. Phone Number	i. Fax Number	j. Email Address
561-685-5336		aj@tagdevco.com

3. Property Owner (if different):

a. First Name	b. Last Name
Wayne	Stobbart

c. Organization: Stobbart Properties LLC

d. Mailing Address: 444 East Central Street

e. City/Town	f. State	g. Zip Code
Franklin	MA	01532

h. Phone Number	i. Fax Number	j. Email Address
617-620-2740		wayne@stobbartnurseries.com

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 3b	5	$1050*1.5	$7875

Step 5/Total Project Fee: $7875

Step 6/Fee Payments:

Total Project Fee: $7875
a. Total Fee from Step 5

State share of filing Fee: $3925
b. 1/2 Total Fee **less $**12.50

City/Town share of filling Fee: $3950
c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

100 Commerce Way, Suite 5, Woburn, MA 01801 | T (781) 935-6889 | F (781) 935-2896

www.allenmajor.com

ALLEN & MAJOR ASSOCIATES, INC.

November 3, 2025

Breeka Li Goodlander, PWS, CERPIT
Conservation Director
Town of Franklin Conservation Commission
355 East Central Street
Franklin, MA 02038

bgoodlander@franklinma.gov
508-520-4929

PROJECT #: Project #3317-01
RE: Notice of Intent Peer #3
444 East Central Street
Franklin, MA

Dear Ms. Goodlander,

On behalf of our client, TAG Central LLC, and in coordination with Beals Associates, Allen & Major Associates, Inc. (A&M) is providing the following responses to outstanding items noted in the letter dated October 29, 2025, from BETA Group regarding Notice of Intent Peer Review #3. A&M's responses to final comments are shown below in **bold.**

The original comment is noted with follow-up comments shown in *italics.*

STORMWATER MANAGEMENT REVIEW

Comment: SW10 - Provide details for trench drain.

AM: A detail for the gravel trench drain has been provided.

BETA2: Trench drain detail has been provided; however, BETA recommends that surface elevations be shown on sheet C-103A for the trench at the northeast property line. It is difficult to see if the trench works with the grades on the abutting parcel.

AM2: Surface elevations for the trench drain at the northeast property line have been added to Sheet C-103A, allowing verification that the trench aligns with existing grades and functions as intended.

BETA3: BETA has requested further design clarification as the existing grade along the property line varies from below elevation 273' to approximately 274', and it appears grading beyond the property line may be required to achieve the proposed top of trench top elevation of 272.90'. The designer has clarified that additional grading information will be provided in this area, and an ANR plan has been provided to show both the existing and proposed property line in this area. Based on the ANR plan, it appears that any required grading would be within the limits of the existing property line. BETA notes that both properties currently appear to be under the same ownership, and no access/rights are anticipated. Provided the designer provides the requested grading information, no further comment.

A&M Response: Spot grades will be provided at every 25' interval along the property line as requested.

POST-DEVELOPMENT PEAK DISCHARGE RATES (STANDARD NUMBER 2):

Comment: SW21. Provide ponding analysis at the 2nd culvert crossing, also to ensure that the wetlands are not providing any attenuation capability more than the existing conditions. In addition, flood levels associated with Uncas Brook should be considered in the hydraulic calculations associated with the culverts.

AM: The stream crossings have been added to the model and provide ponding elevations.

BETA2: The ponding analysis is not complete because it does not include any flow from the watershed on the north side of East Central Street, nor does the calculation account for the potential flood levels in Uncas Brook. The calculations assume free discharge on LP2 and the real issue is that there are 2-24" culverts at the first crossing and only 1 at the second. In addition, there is no data shown on the plans relative to any of the existing structures at either location, including the outfall from East Central Street.

BETA has queried the USGS StreamStats for this site. The peak flow rates from the hydro cad analysis when compared with the StreamStats results are:

Storm Frequency	2-year	10-year	100-year
Peak Flow Rates from Hydro Cad Analysis			
1st Crossing	0.83 cfs	2.24 cfs	6.88 cfs
2nd Crossing	0.78 cfs	2.08 cfs	7.42 cfs
Peak flow rate crossing East Central Street from StreamStats			
Inlet from East Central	11.7 cfs	26.9 cfs	54.8 cfs

Based on StreamStats, the watershed tributary to the East Central Street culvert is 109+ acres. Based upon the statistics, the contribution from the site to the peak flood flows through the site are not significant. However, the potential impact of the backwater effects of the flooding in the stream on the proposed stormwater improvements and/or the project itself must be reviewed. This is extremely important because the proposed grading at the 2 crossings has elevated the roadways sufficiently that they now have the capability of raising flood levels to Elevation 278.0. This would inundate the entire site above the second crossing, a few of the abutters, and East Central Street. A copy of the StreamStats report for the crossing at East Central Street is attached hereto.

AM2: A stream flow of 54.7 cfs has been added to HydroCAD model at the Northerly Culvert Crossing #1 (SP-1) node, to model the 100 year stream flow, which would create ponding at the crossing as noted. Six-36" RCP's have been added to this area to allow any flooding events to pass under both crossings

BETA3: The HydroCAD model has been updated. BETA notes that devices #1 and #2 for Pond SP-1 and device #1 for Pond SP-2 appear to reflect the existing culverts for each crossing location. Revise plans to clearly indicate that these culvert segments will be retained.

Revise plans to clearly indicate disposition of existing stream inflow at #B1/B19 flags.

BETA has reviewed the HY-8 culvert analysis provided with the 8/27/2025 BLSF Memorandum. BETA offers the following comments:

- *The outlet elevation utilized for the southern on-site culvert (266.37') is inconsistent with the base plan (266.85').*
- *The outlet elevation utilized for the two northern on-site culverts (267.48' & 267.72') are inconsistent with the base plan (267.93' & 267.48').*
- *The roadway top width for the northern on-site culvert is inconsistent with the plans. The crossing diagram should be revised to better reflect existing conditions.*

A&M Response: The existing conditions plan has been updated to illustrate existing culverts for each crossing location.

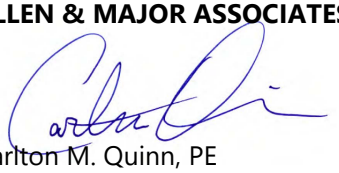
The plans have been revised to clearly indicate the disposition of the existing stream inflow at #B1/B19 flags.

See BLSF Technical Memorandum prepared by Beal Associates for updated HY-8 analysis.

A&M believes these responses will provide sufficient information for the continued review of this application. If you require additional information, please feel free to contact us.

Very Truly Yours,

ALLEN & MAJOR ASSOCIATES, INC.



Carlton M. Quinn, PE
Principal

Copy: TAG Central LLC - Alexander Alevizos -aj@tagdevco.com

Enclosure Civil Site Plans, dated October 29, 2025
Drainage Report, dated October 29, 2025

BEALS • ASSOCIATES INC.
2 PARK PLAZA, SUITE 200, BOSTON MA 02116
PHONE: 617-242-1120

TECHNICAL MEMORANDUM

TO: **A.J. Alevisos, The Alevizos Group**

FROM: **Todd P. Morey, P.E., Principal**

SUBJECT: **Peer Review Comments Related to BLSF**
444 East Central Street, Franklin, MA

DATE: **October 31, 2025**

In the October 29, 2025, NOI Peer Review Letter #3 from BETA, several comments relative to the BLSF study conducted by our office were presented. The comments were as follows:

Comment BLSF1 – BETA3: *For clarity, the outlet elevation should be updated to reflect surveyed conditions.*

Comment BLSF2 – BETA3: *BETA also does not anticipate a significant impact on the modeling; however, supporting information should be provided for the overtopping roadway elevation used in the model. BETA notes that contour information available via MassGIS appears to show an elevation no lower than 271 in this area.*

Comment BLSF3 – BETA3: *The additional survey data should be provided on a sketch/insert plan to demonstrate consistency with the model.*

Comment BLSF4 – BETA3: *BETA also does not anticipate a significant impact on modeling; however, this should be supported through demonstration in the model.*

Comments BLSF1, BLSF2 and BLSF4 have been addressed in the latest model run. The response to BLSF3 is contained on the sketch prepared by Allen & Major and is provided under separate cover to this memo. The data used in the area of the existing onsite culvert crossings was provided to our office by Carlton Quinn of Allen & Major via email on August 27, 2025. That spreadsheet data is attached. This data was further updated on October 31, 2025 with an adjustment to a single data point at the southerly culvert crossing. This change is also attached and was the main cause of the largest jump in the results.

Our office also received additional survey data at Northern Spy Road from the project team. This survey data shows elevations along the low point of the roadway and provides a more accurate representation of the overtopping condition.

The overall HY-8 model was updated to provide updates related to the requests in the other three BETA comments as well as the updated survey data obtained over the past two days.

a. Adjust the existing culverts to show negative slopes as indicated by the survey data (Comment BLSF1)
b. Include a. above and add an estimated 50% pipe embedment depth (Comment BLSF4)
c. Include a. and b. above and adjust the overtopping at Northern Spy Road to be 271.00 across the low spot. (Comment BLSF 2)

The overall results are presented below. The various culverts that were modeled overtop the crossings during the higher storms and generally result in a near still-water condition that results in little gradient.

Upon making all of these changes, our opinion of the elevation of the 100-year floodplain between the southerly culvert and East Central Street is 271.75.

	Headwater Elevation		
Storm Event	**Northern Spy Road**	**Southerly Culvert**	**Northerly Culvert**
2-Year	268.91	270.73	270.73
5-Year	270.74	271.53	271.53
10-Year	271.20	271.61	271.62
25-Year	271.36	271.70	271.71
50-Year	271.45	271.76	271.77
100-Year	271.54	271.82	271.83
200-Year	271.61	271.87	271.88
500-Year	271.72	271.95	271.96

Culvert Crossing Surface Data

Northerly Culvert #1

STA	Elevation
0	272
1.1	271
8.6	270.52
20.1	270.56
62.6	270.66
72.2	271
99.8	272

Southerly Culvert #2

STA	Elevation
0	272
29	271.8
47	270.34
48	271.41
53	271.48
64	271.23
98	271.34
98	272

Updated October 31, 2025

Northerly Culvert #1

STA	Elevation
0	272
1.1	271
8.6	270.52
20.1	270.56
62.6	270.66
72.2	271
99.8	272

Southerly Culvert #2

STA	Elevation
0	272
29	271.8
47	271.34
48	271.41
53	271.48
64	271.23
98	271.37
98	272

HY-8 Culvert Analysis Report 10.31.2025 Update

Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 1 - Summary of Culvert Flows at Crossing: Northern Spy Road

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	Culvert 1 Discharge (cfs)	Roadway Discharge (cfs)	Iterations
268.91	2 year	48.00	48.00	0.00	1
270.74	5 year	80.30	80.30	0.00	1
271.20	10 year	106.00	86.43	19.30	12
271.36	25 year	144.00	88.45	55.32	7
271.45	50 year	176.00	89.63	86.10	5
271.54	100 year	210.00	90.66	118.94	4
271.61	200 year	246.00	91.61	154.23	4
271.72	500 year	299.00	92.80	205.66	3
270.95	Overtopping	83.19	83.19	0.00	Overtopping

Culvert Data: Culvert 1

Table 1 - Culvert Summary Table: Culvert 1

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
2 year	48.00 cfs	48.00 cfs	268.91	2.37	1.776	6-FFc	1.14	1.44	1.44	0.67	6.60	6.30
5 year	80.30 cfs	80.30 cfs	270.74	4.20	3.627	6-FFc	1.72	1.80	1.80	0.91	8.98	7.51
10 year	106.00 cfs	86.43 cfs	271.20	4.66	3.990	6-FFc	2.00	1.84	1.84	1.06	9.52	8.23
25 year	144.00 cfs	88.45 cfs	271.36	4.82	4.114	6-FFc	2.00	1.85	1.85	1.27	9.70	9.08
50 year	176.00 cfs	89.63 cfs	271.45	4.91	4.188	6-FF	2.00	1.86	1.86	1.42	9.81	9.68

						c						
100 year	210.00 cfs	90.66 cfs	271.54	5.00	4.253	6-FFc	2.00	1.87	1.87	1.56	9.91	10.22
200 year	246.00 cfs	91.61 cfs	271.61	5.07	4.313	6-FFc	2.00	1.87	1.87	1.71	10.00	10.73
500 year	299.00 cfs	92.80 cfs	271.72	5.18	4.390	6-FFc	2.00	1.88	1.88	1.90	10.11	11.38

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

Inlet Elevation (invert): 266.54 ft,

Outlet Elevation (invert): 266.10 ft

Culvert Length: 40.00 ft,

Culvert Slope: 0.0110

Site Data - Culvert 1

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 266.54 ft

Outlet Station: 40.00 ft

Outlet Elevation: 266.10 ft

Number of Barrels: 3

Culvert Data Summary - Culvert 1

Barrel Shape: Circular

Barrel Diameter: 2.00 ft

Barrel Material: Concrete

Embedment: 0.00 in

Barrel Manning's n: 0.0120

Culvert Type: Straight

Inlet Configuration: Square Edge with Headwall (Ke=0.5)

Inlet Depression: None

Tailwater Data for Crossing: Northern Spy Road

Table 2 - Downstream Channel Rating Curve (Crossing: Northern Spy Road)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
48.00	266.67	0.67	6.30	1.88	1.43
80.30	266.91	0.91	7.51	2.54	1.49
106.00	267.06	1.06	8.23	2.98	1.53
144.00	267.27	1.27	9.08	3.55	1.56
176.00	267.42	1.42	9.68	3.98	1.58
210.00	267.56	1.56	10.22	4.39	1.60
246.00	267.71	1.71	10.73	4.80	1.62
299.00	267.90	1.90	11.38	5.35	1.64

Tailwater Channel Data - Northern Spy Road

Tailwater Channel Option: Trapezoidal Channel

Bottom Width: 10.00 ft

Side Slope (H:V): 2.00 (_:1)

Channel Slope: 0.0450

Channel Manning's n: 0.0350

Channel Invert Elevation: 266.00 ft

Roadway Data for Crossing: Northern Spy Road

Roadway Profile Shape: Irregular Roadway Shape (coordinates)

Irregular Roadway Cross-Section

Coord No.	Station (ft)	Elevation (ft)
0	0.00	272.00
1	16.00	271.76
2	39.00	271.41
3	80.00	271.10
4	104.00	271.04
5	132.00	270.95
6	156.00	271.02
7	221.00	272.00

Roadway Surface: Paved

Roadway Top Width: 40.00 ft

Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 3 - Summary of Culvert Flows at Crossing: Southern Site Culvert

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	Culvert 1 Discharge (cfs)	Roadway Discharge (cfs)	Iterations
270.03	2 year	12.80	12.80	0.00	1
271.53	5 year	21.90	7.89	13.91	10
271.61	10 year	29.30	5.72	23.45	5
271.70	25 year	40.30	5.16	34.95	4
271.76	50 year	49.60	4.94	44.59	4
271.82	100 year	59.60	4.68	54.89	4
271.87	200 year	70.60	4.56	65.94	3
271.95	500 year	86.60	4.23	82.36	3
271.23	Overtopping	14.99	14.99	0.00	Overtopping

Culvert Data: Culvert 1

Table 2 - Culvert Summary Table: Culvert 1

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
2 year	12.80 cfs	12.80 cfs	270.03	2.41	2.104	7-A2t	-1.00	0.91	0.91	3.91	6.24	0.00
5 year	21.90 cfs	7.89 cfs	271.53	1.38	3.909	4-FFf	-1.00	0.67	1.25	5.74	3.23	0.00
10 year	29.30 cfs	5.72 cfs	271.61	1.06	3.994	4-FFf	-1.00	0.55	1.25	6.20	2.34	0.00
25 year	40.30 cfs	5.16 cfs	271.70	0.99	4.078	4-FFf	-1.00	0.51	1.25	6.36	2.11	0.00
50 year	49.60 cfs	4.94 cfs	271.76	0.96	4.139	4-FFf	-1.00	0.49	1.25	6.45	2.02	0.00
100 year	59.60 cfs	4.68 cfs	271.82	0.93	4.197	4-FFf	-1.00	0.48	1.25	6.54	1.92	0.00
200 year	70.60 cfs	4.56 cfs	271.87	0.91	4.253	4-FF	-1.00	0.47	1.25	6.61	1.87	0.00

						f						
500 year	86.60 cfs	4.23 cfs	271.95	0.87	4.327	4-FFf	-1.00	0.45	1.25	6.72	1.73	0.00

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

Inlet Elevation (invert): 267.62 ft,

Outlet Elevation (invert): 268.10 ft

Culvert Length: 40.00 ft,

Culvert Slope: -0.0120

Site Data - Culvert 1

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 266.37 ft

Outlet Station: 40.00 ft

Outlet Elevation: 266.85 ft

Number of Barrels: 1

Culvert Data Summary - Culvert 1

Barrel Shape: Circular

Barrel Diameter: 2.50 ft

Barrel Material: Concrete

Embedment: 15.00 in

Barrel Manning's n: 0.0120 (top and sides)

Manning's n: 0.0350 (bottom)

Culvert Type: Straight

Inlet Configuration: Thin Edge Projecting (Ke=0.9)

Inlet Depression: None

Tailwater Data for Crossing: Southern Site Culvert

Table 4 - Downstream Channel Rating Curve (Crossing: Southern Site Culvert)

Flow (cfs)	Water Surface Elev (ft)	Depth (ft)	Velocity (ft/s)
12.80	268.91	3.91	0.00
21.90	270.74	5.74	0.00
29.30	271.20	6.20	0.00
40.30	271.36	6.36	0.00
49.60	271.45	6.45	0.00
59.60	271.54	6.54	0.00
70.60	271.61	6.61	0.00
86.60	271.72	6.72	0.00

Tailwater Channel Data - Southern Site Culvert

Tailwater Channel Option: Enter Rating Curve

Channel Invert Elevation: Enter Rating Curve

Roadway Data for Crossing: Southern Site Culvert

Roadway Profile Shape: Irregular Roadway Shape (coordinates)

Irregular Roadway Cross-Section

Coord No.	Station (ft)	Elevation (ft)
0	0.00	272.00
1	29.00	271.80
2	47.00	271.34
3	48.00	271.41
4	53.00	271.48
5	64.00	271.23
6	98.00	271.34
7	98.10	272.00

Roadway Surface: Gravel

Roadway Top Width: 35.00 ft

Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 5 - Summary of Culvert Flows at Crossing: North Site Culvert

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	Culvert 1 Discharge (cfs)	Roadway Discharge (cfs)	Iterations
270.73	2 year	11.70	4.66	6.99	12
271.53	5 year	20.10	0.38	19.72	23
271.62	10 year	26.90	0.43	26.47	8
271.71	25 year	37.00	0.49	36.51	8
271.77	50 year	45.50	0.53	44.97	7

271.83	100 year	54.70	0.57	54.21	7
271.88	200 year	64.90	0.61	64.29	6
271.96	500 year	79.60	0.66	78.99	3
270.52	Overtopping	3.91	3.91	0.00	Overtopping

Culvert Data: Culvert 1

Table 3 - Culvert Summary Table: Culvert 1

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
2 year	11.70 cfs	4.66 cfs	270.73	0.74	2.370	4-FFf	-1.00	0.38	0.88	8.03	1.95	0.00
5 year	20.10 cfs	0.38 cfs	271.53	0.12	3.180	4-FFf	-1.00	0.07	0.88	9.53	0.16	0.00
10 year	26.90 cfs	0.43 cfs	271.62	0.13	3.261	4-FFf	-1.00	0.08	0.88	9.61	0.18	0.00
25 year	37.00 cfs	0.49 cfs	271.71	0.14	3.353	4-FFf	-1.00	0.08	0.88	9.70	0.20	0.00
50 year	45.50 cfs	0.53 cfs	271.77	0.15	3.414	4-FFf	-1.00	0.09	0.88	9.76	0.22	0.00
100 year	54.70 cfs	0.57 cfs	271.83	0.16	3.475	4-FFf	-1.00	0.09	0.88	9.82	0.24	0.00
200 year	64.90 cfs	0.61 cfs	271.88	0.17	3.527	4-FFf	-1.00	0.10	0.88	9.87	0.25	0.00
500 year	79.60 cfs	0.66 cfs	271.96	0.18	3.609	4-FFf	-1.00	0.10	0.88	9.95	0.28	0.00

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

Inlet Elevation (invert): 268.36 ft,

Outlet Elevation (invert): 268.81 ft

Culvert Length: 60.00 ft,

Culvert Slope: -0.0075

Site Data - Culvert 1

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 267.48 ft

Outlet Station: 60.00 ft

Outlet Elevation: 267.93 ft

Number of Barrels: 2

Culvert Data Summary - Culvert 1

Barrel Shape: Circular

Barrel Diameter: 1.75 ft

Barrel Material: Concrete

Embedment: 10.50 in

Barrel Manning's n: 0.0120 (top and sides)

Manning's n: 0.0350 (bottom)

Culvert Type: Straight

Inlet Configuration: Thin Edge Projecting (Ke=0.9)

Inlet Depression: None

Tailwater Data for Crossing: North Site Culvert

Table 6 - Downstream Channel Rating Curve (Crossing: North Site Culvert)

Flow (cfs)	Water Surface Elev (ft)	Depth (ft)	Velocity (ft/s)
11.70	270.03	8.03	0.00
20.10	271.53	9.53	0.00
26.90	271.61	9.61	0.00
37.00	271.70	9.70	0.00
45.50	271.76	9.76	0.00
54.70	271.82	9.82	0.00
64.90	271.87	9.87	0.00
79.60	271.95	9.95	0.00

Tailwater Channel Data - North Site Culvert

Tailwater Channel Option: Enter Rating Curve

Channel Invert Elevation: Enter Rating Curve

Roadway Data for Crossing: North Site Culvert

Roadway Profile Shape: Irregular Roadway Shape (coordinates)

Irregular Roadway Cross-Section

Coord No.	Station (ft)	Elevation (ft)
0	0.00	272.00
1	1.10	271.00
2	8.60	270.52
3	20.10	270.56
4	62.60	270.66
5	72.20	271.00
6	99.80	272.00

Roadway Surface: Gravel

Roadway Top Width: 10.00 ft

REGULATORY COMPLIANCE ANALYSIS

444 East Central Street, Franklin MA
Prepared by: Goddard Consulting LLC
Prepared for: TAG Central LLC
Date: 4/16/2025, Revised 6/19/2025, 7/28/2025, 9/25/2025, 11/4/2025

1.0 INTRODUCTION

On behalf of TAG Central LLC (the Applicant), Goddard Consulting, LLC (Goddard) is pleased to submit this Regulatory Compliance Analysis as a supplement to the Notice of Intent. This analysis describes existing conditions, proposed conditions and project compliance with relevant performance standards contained within 310 CMR 10.00 et seq.

The project site is located at 444 East Central Street in Franklin (Map: 284, Lot: 66) and totals approximately 15 acres. The site is comprised of previously degraded and disturbed riverfront area consisting of the two existing buildings and outbuildings, variety of compost/brush piles, construction and landscaping supplies, abandoned vehicles and other anthropogenic impacts. One perennial stream is located centrally within the parcel with associated Bordering Vegetated Wetlands (BVW) and Bordering Land Subject to Flooding (BLSF).

According to Natural Heritage Endangered Species Program (NHESP) mapping, the Project Site is not within an area mapped as Priority Habitat of Rare Species, Estimated Habitat of Rare Wildlife, or an Area of Critical Environmental Concern. There are no mapped certified or potential vernal pools on the site. The site is not located within an Outstanding Resource Waters (ORW) area. A central portion of the site along the perennial stream is located within a FEMA Flood Zone A, which constitutes the resource area Bordering Land Subject to Flooding (BLSF).

Photo 1: View of existing degraded area onsite east of the stream.

2.0 RIVERFRONT AREA

The Mean Annual High-Water (MAHW) line of the perennial stream on site was delineated by Goddard and confirmed with an Order of Resource Area Delineation. Massachusetts WPA Regulations define the Riverfront Area as "the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 200 feet away." A total of 370,970 square feet of Riverfront Area is present on the locus site. The following table summarizes the cover types within the 200-foot and 100-foot Riverfront Areas on site under existing conditions. See also the included graphic titled *Existing Conditions in Riverfront Area*, Goddard Consulting LLC, 10/30/2025.

Riverfront Area Existing Conditions		
Degraded 0-100' RFA	103,425 sf	154,250 sf
Degraded 100-200' RFA	50,825 sf	
Non-Degraded 0-100' RFA	111,540 sf	215,980 sf
Non-Degraded 100-200' RFA	104,440 sf	

The applicant proposes to develop the site as a multifamily housing development. The project will reuse existing degraded Riverfront Area and will restore existing degraded Riverfront Area with native vegetation to the greatest extent practicable. The following table summarizes the cover types within the 200-foot Riverfront Areas on site under proposed conditions. See also the included graphic titled *Proposed Conditions in Riverfront Area*, Goddard Consulting LLC, 11/4/2025.

Riverfront Area Proposed Conditions		
Degraded 0-100' RFA	53,350 sf	147,930 sf
Degraded 100-200' RFA	94,580 sf	
Non-Degraded 0-100' RFA	161,695 sf	222,810 sf
Non-Degraded 100-200' RFA	61,115 sf	

Riverfront Area Net Change		
Degraded 0-100' RFA	- 50,075 sf	- 6,320 sf
Degraded 100-200' RFA	+43,755 sf	
Non-Degraded 0-100' RFA	+ 50,155 sf	+ 6,830 sf
Non-Degraded 100-200' RFA	- 43,325 sf	

The project has been designed to meet the Wetlands Protection Act's performance standards for work within the 200-foot Riverfront Area and to minimize impacts to the greatest extent practicable. This project constitutes Riverfront Area redevelopment because it consists of the replacement and expansion of existing structures in a previously developed Riverfront Area. The project also proposes removal and rehabilitation of areas that have historically been negatively impacted by the presence of surfaces from existing structures or pavement, absence of topsoil, junkyards, and abandoned dumping grounds. An explanation of how the project meets the applicable performance standards follows.

§ 10.58	**Riverfront Area:** **The area of land between a river's mean annual high-water line and a parallel line measured horizontally outward from the river and a parallel line located 200 feet away.**
Performance Standard	**Compliance**
10.58 (5)	*Notwithstanding the provisions of 310 CMR 10.58(4)(c) and (d), the issuing authority may allow work to redevelop a previously developed riverfront area, provided the proposed work improves existing conditions. Redevelopment means replacement, rehabilitation or expansion of existing structures, improvement of existing roads, or reuse of degraded or previously developed areas. A previously developed riverfront area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. Work to redevelop previously developed riverfront areas shall conform to the following criteria:*	The proposed project has been designed as a Riverfront Area (RFA) redevelopment project. The existing buildings on site have almost all been present within the RFA since the mid-1990s. The site has been in use as a nursery operation, including clearing, grading, cultivation and access roadways since at least the 1960s. Proposed work shall conform to the following criteria as outlined below. N.B.: MassGIS "1990s Black and White Aerial Imagery" data layer provides documentation of the site. The imagery tile for this site is dated 5/1/1996. This data source was used to ensure all areas documented as "existing degraded" were in fact present in mid-1996.
10.58 (5)(a)	*At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. When a lot is previously developed but no*	The proposed work will result in an improvement of the capacity of the RFA to protect the interests of the WPA. This will be achieved by removing impacted and developed areas from within feet of

	portion of the riverfront area is degraded, the requirements of 310 CMR 10.58(4) shall be met.	resource areas and replanting with appropriate vegetation, by providing stormwater management where there is currently none, and by managing invasive species. The project proposes "relocating" approximately 50,000 square feet of existing degraded RFA from the inner riparian zone to the outer riparian zone, along with over 66,000 square feet of restoration of existing degraded RFA as described below.
10.58 (5)(b)	*Stormwater management is provided according to standards established by the Department.*	Stormwater management has been designed to comply with the MassDEP Stormwater Standards.
10.58 (5)(c)	*Within 200 foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25 foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g).*	Proposed work is not situated any closer to the river than existing conditions. Presently, degraded areas and anthropogenic debris are located immediately along the resource area boundary, and in some locations, debris can be found within the resource areas on site. With the exception of the two reused/improved stream crossings, proposed work is located farther from the river than under existing conditions.
10.58 (5)(d)	*Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g).*	One of the five proposed buildings is located entirely outside of the RFA, one is located nearly entirely outside of the RFA, and one is located entirely outside of the inner riparian zone (100' RFA). The other two buildings are located almost entirely over existing degraded RFA. Proposed work has been sited to be outside of the RFA to the greatest extent practicable, but some proposed work is slightly closer to the river than existing conditions. Therefore, the project must comply with 310 CMR 10.58(f) and/or (g) as described below.
10.58 (5)(e)	*The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g).*	The total square footage of RFA onsite is 370,970 square feet, 10% of which is 37,097 square feet. Existing degraded RFA totals 154,250 square feet, which exceeds the 10% threshold (approx. 42%). Proposed degraded RFA amounts to 147,810 square feet, a reduction of 6,320 square feet as compared to existing conditions. To achieve this reduction, the project proposes restoration under 310 CMR 10.58(f) as described

		below. The project also proposes mitigation under 310 CMR 10.58(g) as described below.
10.58 (5)(f)	*When an applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Restoration shall include:* 1. *removal of all debris, but retaining any trees or other mature vegetation;* 2. *grading to a topography which reduces runoff and increases infiltration;* 3. *coverage by topsoil at a depth consistent with natural conditions at the site; and* 4. *seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site;*	Restoration of approximately 66,805 sf of existing degraded riverfront area is proposed. Existing degraded areas not to be reused for development will be revegetated with a native planting scheme everywhere possible. The proposed restoration will result in a net reduction of over 6,000 sf of degraded riverfront area, thereby exceeding a 1:1 ratio of restoration. Please refer to the landscape sheets of the plan set for details regarding the native planting scheme. See also the attached graphic *Restoration/Mitigation in Riverfront Area*, Goddard Consulting LLC, 11/4/2025.
10.58 (5)(g)	*When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), or (e) at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Mitigation may include off-site restoration of riverfront areas, conservation restrictions under M.G.L. c. 184, §§ 31 through 33 to preserve undisturbed riverfront areas that could be otherwise altered under 310 CMR 10.00, the purchase of development rights within the riverfront area, the restoration of bordering vegetated wetland, projects to remedy an existing adverse impact on the interests identified in M.G.L. c. 131, § 40 for which the applicant is not legally responsible, or similar activities undertaken voluntarily by the applicant which will support a determination by the issuing authority of no significant adverse impact. Preference shall be given to potential mitigation projects, if any, identified in a River Basin Plan approved by the Secretary of the Executive Office of Energy and Environmental Affairs.*	Mitigation proposed as part of the project amounts to 15,155 square feet. Invasive species management within the RFA totals approximately 7,040 square feet. This invasive species management is an additional environmental benefit intended to allow the areas proposed for revegetation to thrive with reduced invasive species pressure, and to reduce invasive pressure in adjoining portions of the land. Conversion of 8,115 square feet of existing lawn/landscaped areas is also proposed to be converted to native vegetation with appropriate native seed mixes and planting of woody vegetation. See also the attached graphic *Restoration/Mitigation in Riverfront Area*, Goddard Consulting LLC, 11/4/2025. Additionally, the Applicant proposes preserving a portion of the locus site's wetlands and buffer zones by conveying over 1.5 acres of land to the Town of Franklin as conservation land. This conveyance contributes to the protection of the interests of the Act. Please refer to previously submitted plan entitled *Preservation Land Exhibit*, Allen & Major Associates, Inc., 6/9/2025.

10.58 (5)(h)	*The issuing authority shall include a continuing condition in the Certificate of Compliance for projects under 310 CMR 10.58(5)(f) or (g) prohibiting further alteration within the restoration or mitigation area, except as may be required to maintain the area in its restored or mitigated condition. Prior to requesting the issuance of the Certificate of Compliance, the applicant shall demonstrate the restoration or mitigation has been successfully completed for at least two growing seasons.*	The Applicant is amenable to such a condition. The Restoration, Replication and Mitigation Plan also outlines monitoring protocols to ensure success of the restoration areas for at least three growing seasons. This monitoring program consists of documenting a variety of items to demonstrate the health of the restoration and mitigation areas including assessment of invasive species growth, survival and establishment of native vegetation, stabilization of soils and more.

Alternatives Analysis

The alternatives analysis below has been provided to demonstrate that the Applicant has evaluated options to avoid and minimize impacts to wetland resource areas per Section 310 CMR 10.55(4)(b). The alternatives presented include the 1) No-Build Alternative, 2) Five Story Building Alternative, and 3) Parking Alternative.

No-Build Alternative
The site would not be developed under the No-Build Alternative. The proposed buildings could not be built. The No-Build Alternative's effects make it impossible to build sizable upland areas and disregards the necessity for mixed-income housing development on a local and regional level. A no-build alternative also would preclude cleanup of the site, installation of stormwater management, control of invasive species, and native plantings as proposed.

Five Story Building Alternative
This alternative proposes increasing the building heights to five stories to achieve a similar unit density and parking count, which would in turn yield less impact to the 100-foot Riverfront Area and the 200-foot Riverfront Area. This alternative would not be feasible due to conflicts with previously granted approvals based on lower maximum building heights. The proposed project as designed currently requires a zoning waiver due to the 4-story height. Increasing the maximum height of the buildings to five stories would make the project even more zoning-nonconforming and would be inconsistent with local neighborhood character, aesthetics and prior project approvals.

Parking Alternative
This alternative proposes placing parking at the ground floor of the proposed buildings and elevating the buildings by one story to achieve the same required density. This alternative would allow for less impervious surface on-site as well as less impact to the Riverfront Area. As mentioned above, the additional height required in this alternative would conflict with Franklin's Zoning Bylaw and impact the neighborhood aesthetics. Locating the parking below grade underneath the buildings is similarly not feasible due to shallow depth to estimated seasonal high groundwater.

3.0 BORDERING VEGETATED WETLAND

A small amount of fill (+/- 31 square feet) is proposed within the delineated Bordering Vegetated Wetland (BVW) along the proposed improved southern stream crossing. Impacts to BVW associated with the installation of the dock totals 32 square feet. Other than a *de minimis* impact for the installation of pilings, this impact otherwise consists only of shading caused by the overhanging dock gangway, not a direct impact. ECB will be installed around the limit of work in accordance with approved site plans prior to any earth disturbance to limit the potential for any erosion or sedimentation to leave the work area and travel offsite or towards resource areas on site.

§10.55	Bordering Vegetated Wetlands (BVW)	
	Performance Standard	**Compliance**
	(a) Where the presumption set forth in 310 CMR 10.55(3) is not overcome, any proposed work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of said area.	An improved wetland crossing is required to safely allow the travel of people and vehicles to the western portion of the site. Retaining walls will be constructed to limit the impact to the greatest extent possible. The proposed work around the southern improved stream crossing results in the direct impact of +/- 31 square feet of BVW; the proposed work for the dock amounts to 32 square feet of shading impact to BVW and a *de minimis* impact associated with the installation of support pilings. A 7,145 square foot wetland replication area is proposed in the southeast corner of the site.
10.55 (4)	*(b) Notwithstanding the provisions of 310 CMR 10.55(4)(a), the issuing authority may issue an Order of Conditions permitting work which results in the loss of up to 5000 square feet of Bordering Vegetated Wetland when said area is replaced in accordance with the following general conditions and any additional, specific conditions the issuing authority deems necessary to ensure that the replacement area will function in a manner similar to the area that will be lost* *1. the surface of the replacement area to be created ("the replacement area") shall be equal to that of the area that will be lost ("the lost area");* *2. the ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;* *3. The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area;* *4. the replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;* *5. the replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area;* *6. at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard U.S. Soil Conservation Service methods;*	The proposed work around the southern improved stream crossing results in the direct impact of 31 square feet of BVW, far below the allowable 5,000 square foot threshold. Similarly, the shading impact from the dock of 32 square feet is far below the 5,000 square foot threshold (the dock is eligible to be considered as a limited project; see section 8.0 below). The replacement area is far greater than the area that will be lost, resulting in an increase of BVW on site of over 7,000 square feet. The surface and groundwater elevations have been designed to approximate that of the adjacent BVW and is situated at a similar location with respect to the bank. The replication area will have an unrestricted hydraulic connection to the same BVW within the same reach of the wetland. As outlined in the Replication, Restoration and Mitigation Plan, the replication area will be reestablished with at least 75% cover by native vegetation and the establishment of wetland hydrology/soil conditions. If this standard is not reached, the Applicant shall prepare a plan that will meet these goals. The replication area does not interfere with compliance with other performance standards for other resource areas.

	and 7. the replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in Part III of 310 CMR 10.00.	
	(c) Notwithstanding the provisions of 310 CMR 10.55(4)(a), the issuing authority may issue an Order of Conditions permitting work which results in the loss of a portion of Bordering Vegetated Wetland when; *1. said portion has a surface area less than 500 square feet;* *2. said portion extends in a distinct linear configuration ("finger-like") into adjacent uplands; and* *3. in the judgment of the issuing authority it is not reasonable to scale down, redesign or otherwise change the proposed work so that it could be completed without loss of said wetland.*	Not applicable.
	(d) Notwithstanding the provisions of 310 CMR 10.55(4)(a),(b) and (c), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.	This site contains no Estimated or Priority Habitat, nor any mapped potential or certified vernal pools. Generally, much of the site is disturbed or degraded, with limited natural vegetation.
	(e) Any proposed work shall not destroy or otherwise impair any portion of a Bordering Vegetated Wetland that is within an Area of Critical Environmental Concern […]	There are no mapped Areas of Critical Environmental Concern (ACECs) according to MassGIS data layers.

4.0 BORDERING LAND SUBJECT TO FLOODING

Bordering Land Subject to Flooding (BLSF) is present on site as depicted on the site plans. Massachusetts WPA Regulations define BLSF as "an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds, or lakes."

In sum, the existing flood storage capacity of the Bordering Land Subject to Flooding (BLSF) on site totals 50,560.9 cubic feet. The proposed capacity of BLSF to contain floodwater will be 64,213.3 cubic feet. Therefore, the project proposes an increase in flood storage capacity of 13,652.4 cubic feet. An increase is provided at each contour interval. This means that the site will be capable of storing a greater volume of floodwater than under existing conditions. This calculation assumes that the dumping piles are not permitted, and that under existing conditions, the flood storage volume includes space occupied by these piles. As a result, the piles have been excluded from existing calculations. Please refer to attached engineering drawings entitled as follows:

- *Existing South Flood Plain Volume Exhibit* (4 sheets), Allen & Major Associates, Inc., 11/3/2025
- *Existing North Flood Plain Volume Exhibit* (4 sheets), Allen & Major Associates, Inc., 11/3/2025
- *Proposed South Flood Plain Volume Exhibit* (4 sheets), Allen & Major Associates, Inc., 11/3/2025
- *Proposed North Flood Plain Volume Exhibit* (4 sheets), Allen & Major Associates, Inc., 11/3/2025

A summary of existing and proposed flood storage capacities is provided in the tables below:

North Portion of Site (BLSF Elevation 271.75')			
Contour Interval	**Existing Volume**	**Proposed Volume**	**Net Change**
268'-269'	107 cf	107 cf	0 cf
269'-270'	1,013.5 cf	1,281 cf	+267.5 cf
270'-271'	7,250.5 cf	11,347 cf	+4,096.5 cf
271'-271.75'	14,409.4 cf	14,442.8 cf	+33.4 cf
Total:	**22,780.4 cf**	**27,177.8 cf**	**+4,396.4 cf**

South Portion of Site (BLSF Elevation 271')			
Contour Interval	**Existing Volume**	**Proposed Volume**	**Net Change**
267'-268'	25.5 cf	25.5 cf	0 cf
268'-269'	640 cf	2,922.5 cf	+2,282.5 cf
269'-270'	5,757 cf	10,970.5 cf	+5,213.5 cf
270'-271'	21,358 cf	23,117 cf	+1,759 cf
Total:	**27,780.5 cf**	**37,035.5 cf**	**+9,255 cf**

An analysis of the BLSF performance standards is provided below.

§ 10.57	**Bordering Land Subject to Flooding:** **An area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds, or lakes.**	
	Performance Standard	**Compliance**
10.57 (4)(a)(1)	*Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows. (1) Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.*	Some fill of BLSF is proposed, primarily around the existing crossing to be improved at the center of the site, as well as along the site entrance driveway. The project's engineer, Allen & Major Associates, Inc. has incorporated compensatory flood storage in the grading plan design. Please refer to attached engineering drawings, which graphically and numerically depict the existing and proposed flood storage capacity at each 1-foot contour interval. In all, the project will result in an increase of 13,652.4 cubic feet of flood storage capacity. This calculation also assumes that the dumping piles are not permitted, and that under existing conditions, the flood storage volume includes space occupied by these piles. Compensatory flood storage will have an unrestricted hydraulic connection to the perennial stream on site. Compensatory storage is provided immediately adjacent to areas where flood storage is lost.
10.57 (4)(a)(2)	*(2) Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.*	No work within BLSF will restrict flows to increase flood stage or velocity. Under proposed conditions, floodwater will be able to fill a slightly larger space, serving to reduce flood stage and velocity.
10.57 (4)(a)(3)	*(3) Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.*	In the area of proposed work within BLSF, no significant wildlife habitat is present. No vernal pools or NHESP mapped habitats exist therein. Furthermore, the areas of BLSF to be impacted are comprised primarily of degraded riverfront area (i.e. lacking topsoil and vegetation), turfgrass, or a near monoculture of invasive species in areas that do contain vegetation.

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5.0 BANK

§ 10.54	**Bank:** A Bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland. A Bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel or stone.	
Performance Standard		**Compliance**
10.54(a)	*Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:*	The presumption set forth in 310 CMR 10.54(3) is not overcome; therefore, proposed work will adhere to the following:
10.54(a)(1)	*the physical stability of the Bank;*	The proposed stream crossing work will consist of an engineered retaining wall to ensure stability. After the installation of the walls, the bank will be rebuilt in kind at the foot of the walls. The proposed floating dock's impact to the bank consists only of shading and will not alter the stability of the bank.
10.54(a)(2)	*the water carrying capacity of the existing channel within the Bank;*	The proposed work will not alter the bankfull width.
10.54(a)(3)	*ground water and surface water quality;*	The impact to bank caused by the proposed stream crossing improvements will not impair ground or surface water quality by providing management and treatment of runoff and recreating a vegetated bank in kind. The impact to bank caused by the dock will not alter the existing form of the bank and therefore will not alter the existing interface between the landform and groundwater or surface water.
10.54(a)(4)	*the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;*	The improved stream crossing work will recreate the impacted bank in kind and not alter the capacity of the landform to provide these functions. Similarly, the impact to bank associated with the dock will not alter the existing bank except by overhanging it.
10.54(a)(5)	*the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat, shall not be*	Total impacts to the bank associated with the stream crossing is approximately 12.5lf. This impact is temporary and the bank will be reconstructed in kind at the foot of the new wall.

	deemed to impair its capacity to provide important wildlife habitat functions. In the case of a bank of a river or an intermittent stream, the impact shall be measured on each side of the stream or river. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.	Impact to the bank associated with the dock is approximately 4lf and is comprised only of shading. These two areas combine for a total of approximately 16.5 linear feet of bank impacts, less than the 10% or 50 feet allowable per this provision.
10.54(a)(6)	*Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.54(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width. This presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirement of 310 CMR 10.54(4)(a)5., the impact on bank caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures contained in 310 CMR 10.60.*	While a portion of the work is on a stream crossing, the actual stream crossing itself is proposed to remain. The work proposed on this stream crossing is to improve the roadway, not to alter the stream crossing itself. Not applicable.
10.54(b)	*Notwithstanding the provisions of 310 CMR 10.54(4)(a), structures may be permitted in or on a Bank when required to prevent flood damage to facilities, buildings and roads […]*	Not applicable.
10.54(b)(1)	*The proposed protective structure, renovation or reconstruction is designed and constructed using best practical measures so as to minimize adverse effects on the characteristics and functions of the resource area*	Not applicable.
10.54(b)(2)	*The applicant demonstrates that there is no reasonable method of protecting, renovating or rebuilding the facility in question other than the one proposed.*	Not applicable.
10.54(c)	*Notwithstanding the provisions of 310 CMR 10.54(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59.*	The proposed work is not within specified habitat sites of Rare Species.

6.0 LAND UNDER WATER BODIES AND WATERWAYS

§ 10.56	**Land Under Water Bodies and Waterways:** Land under Water Bodies and Waterways is the land beneath any creek, river, stream, pond or lake. Said land may be composed of organic muck or peat, fine sediments, rocks or bedrock.	
Performance Standard		**Compliance**
10.56(4)(a)	*Where the presumption set forth in 310 CMR 10.56(3) is not overcome, any proposed work within Land under Water Bodies and Waterways shall not impair the following:*	The presumption set forth in 310 CMR 10.56(3) is not overcome; therefore, work impacting LUWW (i.e. shading caused by the proposed seasonal floating dock) shall adhere to the following:
10.56(4)(a)(1)	*The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;*	The proposed floating dock will not alter the water carrying capacity of the channel as it floats on the water's surface
10.56(4)(a)(2)	*Ground and surface water quality;*	The proposed floating dock will not create any pollutants or alter any drainage patterns and therefore will not impact ground or surface water quality.
10.56(4)(a)(3)	*The capacity of said land to provide breeding habitat, escape cover and food for fisheries; and*	The proposed floating dock will not impair breeding habitat or escape cover and food for fisheries. In fact, the addition of the dock may represent a small increase in the availability of escape cover for aquatic organisms.
10.56(4)(a)(4)	*The capacity of said land to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures established under 310 CMR 10.60.*	The total impact to LUWW from the proposed floating dock is comprised only of shading impacts and measures approximately 162 square feet, far below the 10% or 5000 square foot threshold. No permanent physical disturbance to LUWW is proposed. Further, this impact is only seasonal as the dock can be removed in the winter.
10.56(4)(a)(5)	*Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.56(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards […]*	The proposed work is not a stream crossing. Not applicable.
10.56(4)(b)	*Notwithstanding the provisions of 310 CMR 10.56(4)(a), the issuing authority may issue an Order in accordance with M.G.L. c. 131, § 40 to maintain or improve boat channels within Land under Water Bodies and Waterways […]*	The proposed work is not for the purpose of maintaining or improving boat channels. Not applicable.

10.56(4)(c)	*Notwithstanding the provisions of 310 CMR 10.56(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.*	The proposed work is not within specified habitat sites of Rare Species. Not applicable.

7.0 BUFFER ZONE (100-FOOT)

Work in the buffer zone is proposed. The WPA Regulations do not contain performance standards for Buffer Zone alteration (310 CMR 10.02(2)(b)). All reasonable efforts to avoid, minimize and mitigate adverse impacts on the Buffer Zone have been considered. Work within the 0-25' buffer zone consists primarily of grading, revegetation, and stormwater management as well as pedestrian and vehicle paths required for access. None of the five buildings on site are located within 25' of the BVW boundary. Only small portions of two buildings are located within 50' of the BVW boundary, and most of these portions are located over existing degraded areas. Work has been limited to the outer extents of the buffer zone to the greatest extent possible. The majority of work in the inner portions of the buffer zone have been laid out to reuse existing degraded areas.

8.0 LIMITED PROJECTS

The proposed dock is eligible to be treated as a limited project pursuant to 310 CMR 10.53(3)j. The text of the WPA reads:

> "Notwithstanding the provisions of 310 CMR 10.54 through 10.58 and 10.60 [the regulations for Bank, BVW, LUWW, BLSF, ILSF and RFA], the Issuing Authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40 permitting the following limited projects (although no such project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59). In determining whether to exercise its discretion to approve the limited projects listed in 310 CMR 10.53(3), the Issuing Authority shall consider the following factors: the magnitude of the alteration and the significance of the project site to the interests identified in M.G.L. c. 131, § 40, the availability of reasonable alternatives to the proposed activity, the extent to which adverse impacts are minimized, and the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40…"

The specific limited project type under which the proposed dock may be allowed reads:

> "(j) The construction and maintenance of catwalks, footbridges, wharves, docks, piers, boathouses, boat shelters, duck blinds, skeet and trap shooting decks and observation decks; provided, however, that such structures are constructed on pilings or posts so as to permit the reasonably unobstructed flowage of water and adequate light to maintain vegetation."

The proposed dock has been designed to meet these requirements, and compliance with applicable performance standards to the maximum extent practicable has been outlined above. Specifically, the dock has been kept to a minimal size (only a 4-foot-wide walkway) in order to limit shading to the maximum extent practicable. Vegetation in this area consists almost entirely of invasive Phragmites reeds, and thus any limited impact to the existing vegetation does not significantly impact the value of the area or its ability to contribute to the interests of the WPA. Additionally, only two pilings are proposed to limit direct impacts to resource areas to the maximum extent practicable. These pilings are proposed as helical piles, which can be driven into the ground like a screw, eliminating the need for

excavation and consequent erosion potential. Similarly, the fact that the dock is supported on pilings will allow nearly unobstructed flowage of water. The dock can also be easily removed by hand in winter.

9.0 FUNCTIONS AND VALUES ASSESSMENT

An assessment of the impact of the project on the functions and values protected by the Wetlands Protection Act is provided below:

1. **Protection of Public and Private Water Supplies** – The nearest domestic well is located at 409 East Central Street. No septic system or wells are proposed as part of the project, and it is proposed that sewer and water will be tied into existing infrastructure. The project will result in substantial improvements over existing conditions with regard to stormwater management, which directly affects groundwater infiltration and ultimately water quality. Existing stormwater runoff conditions exhibit unmitigated, direct, sheet-flowing surface runoff towards wetland resources, whereas the proposed project will provide a modern stormwater management and infiltration system in compliance with MassDEP Stormwater Management Standards.

2. **Protection of Groundwater Supply** – No discharges are proposed to the groundwater supply other than infiltration of stormwater. This is an improvement over existing conditions on site. As mentioned above and described in the Drainage Report, the project satisfies all of the Massachusetts Stormwater Management Standards.

3. **Flood Control** –Work proposed in FEMA Flood Zones is limited to areas that are presently disturbed or degraded. Compensatory storage is provided for fill proposed in the Flood Zone/BLSF, resulting in no loss in flood storage capacity.

4. **Storm Damage Prevention** – As mentioned above and described in the Drainage Report, the project satisfies all of the Massachusetts Stormwater Management Standards. Infiltrating stormwater in this way serves to reduce runoff from the site, reducing the potential for flooding of downstream properties and infrastructure. Similarly, ensuring no loss of flood storage capacity also makes certain that potential floodwaters are not redirected elsewhere or offsite. The project will therefore not have a negative impact in terms of storm damage prevention.

5. **Pollution Prevention** – As mentioned above and described in the Stormwater Report, the project satisfies the Stormwater Management Standards. The proposed stormwater treatment train includes components designed to remove potential pollutants such as oil from treated stormwater. The project will therefore not have a negative impact on the on-site resource areas in terms of pollution protection.

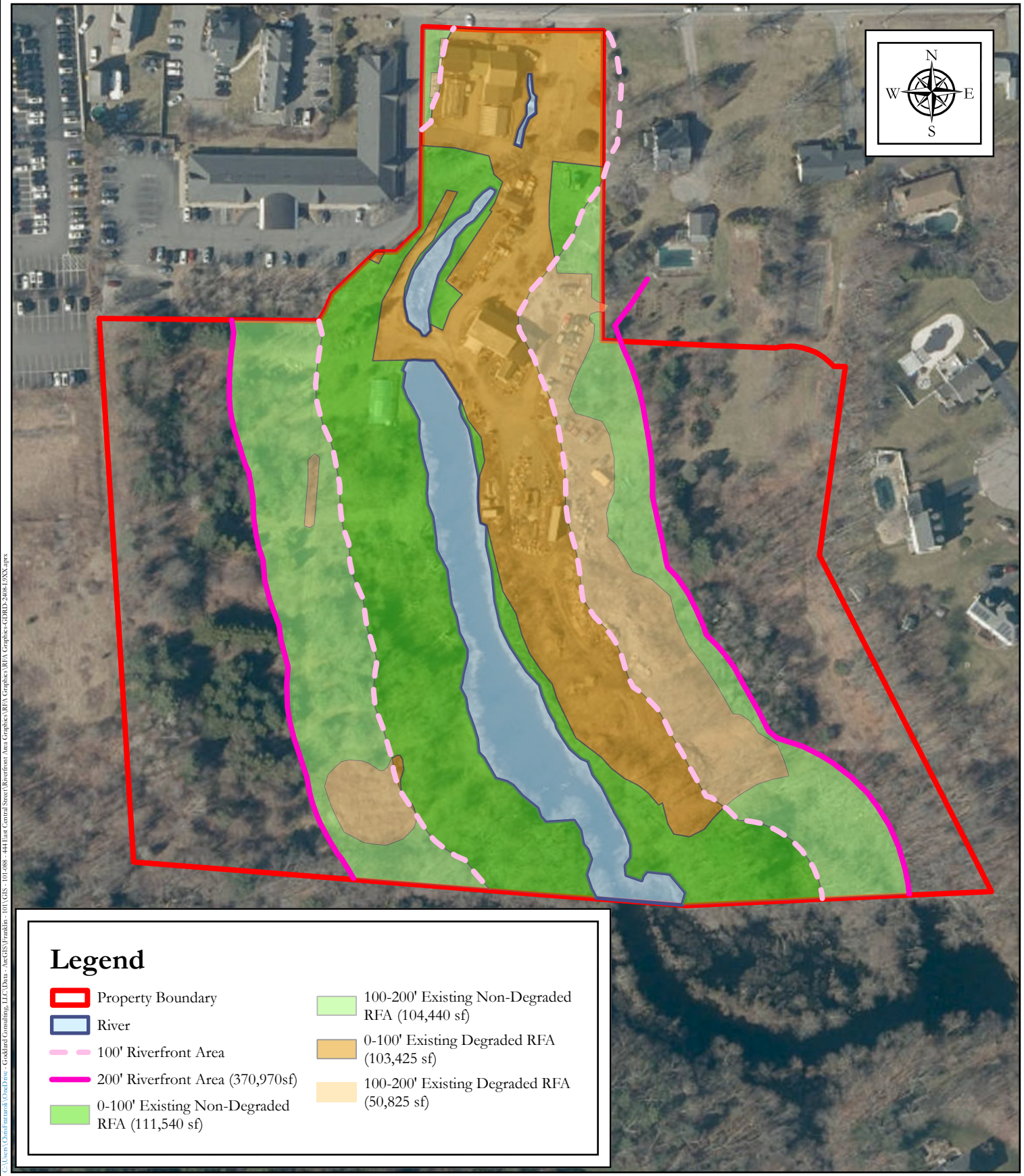
6. **Fisheries** – The water bodies in proximity to the site are not fisheries. No alteration to Land Under Waterbodies and Water Ways that could impact potential fishery habitat is proposed.

7. **Shellfish** - Not applicable in Franklin.

8. **Wildlife Habitat** – According to MassWildlife's BioMap, the work area is not considered either Core Habitat (areas that are critical for the long-term persistence of rare species, exemplary natural communities, and resilient ecosystems) or Critical Natural Landscape (large landscape blocks that are minimally impacted by development and buffers to core habitats and coastal areas). No NHESP habitat areas are mapped onsite, nor are any potential or certified vernal pools. In general, the site is comprised largely of invasive or nonnative species that provide minimal wildlife habitat value.

10.0 CONCLUSION

The project has been designed with sensitivity to the resource areas on site. Proposed construction has been located as far from wetland resources as possible and new stormwater management is provided, along with rehabilitation of degraded and otherwise low-quality buffer zones and riverfront area. The Applicant will also be conveying over 1.5 acres of land to the Town to be preserved in perpetuity. In summary, Goddard Consulting believes that the proposed project meets all applicable regulatory performance standards and will not have any adverse impacts on the interests identified in the Wetlands Protection Act as outlined herein.



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GODDARD CONSULTING
Strategic Ecological Consulting

Existing Conditions in Riverfront Area

444 East Central Street
Franklin, MA 02038

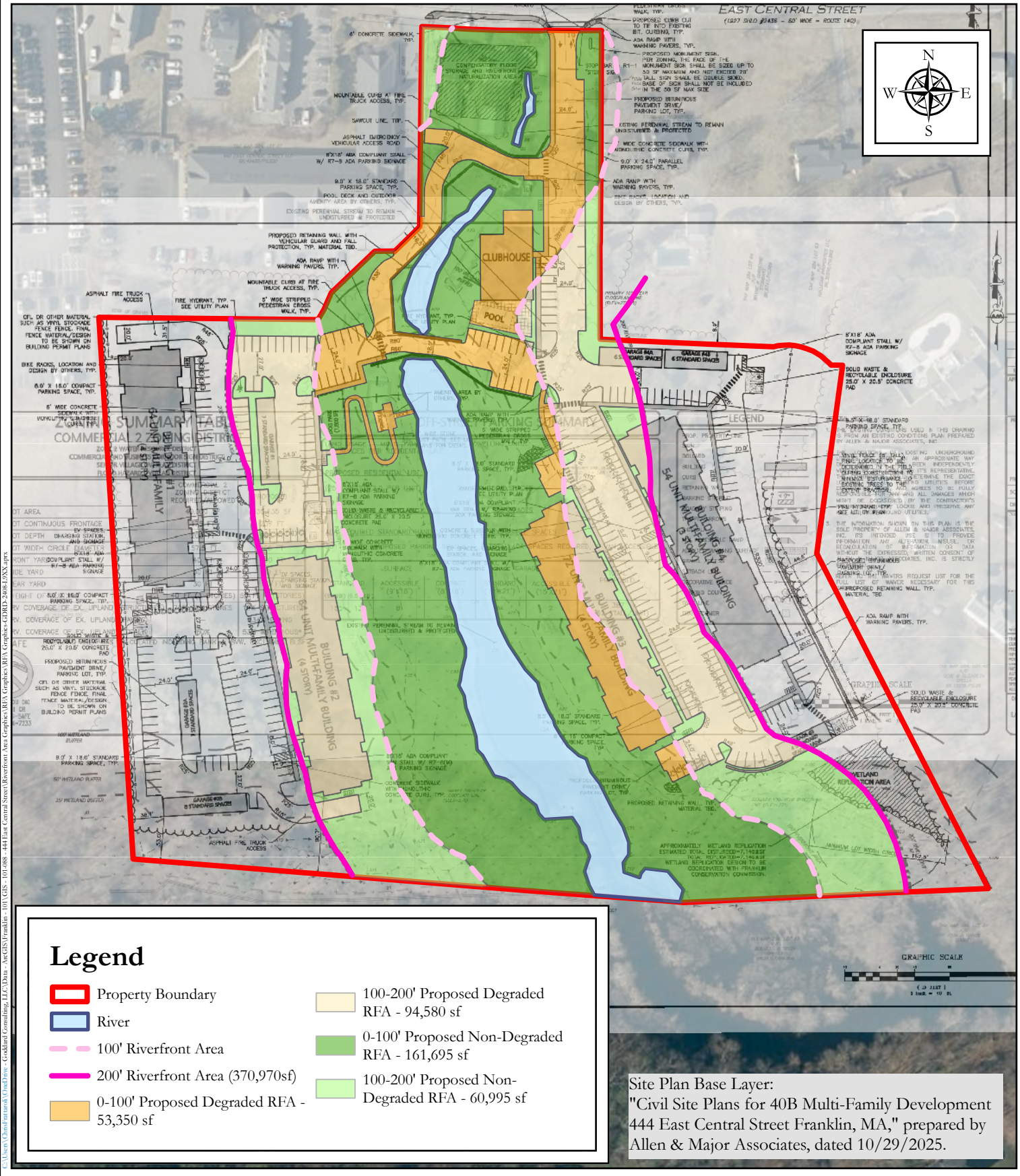
0 100 200 Feet

1" = 200'

71.3771102°W, 42.0778722°N

Date: 10/30/2025

Parcel ID: 284-66



Legend

- Property Boundary
- River
- 100' Riverfront Area
- 200' Riverfront Area (370,970sf)
- 0-100' Proposed Degraded RFA - 53,350 sf
- 100-200' Proposed Degraded RFA - 94,580 sf
- 0-100' Proposed Non-Degraded RFA - 161,695 sf
- 100-200' Proposed Non-Degraded RFA - 60,995 sf

Site Plan Base Layer:
"Civil Site Plans for 40B Multi-Family Development 444 East Central Street Franklin, MA," prepared by Allen & Major Associates, dated 10/29/2025.

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GODDARD CONSULTING
Strategic Ecological Consulting

Proposed Conditions in Riverfront Area

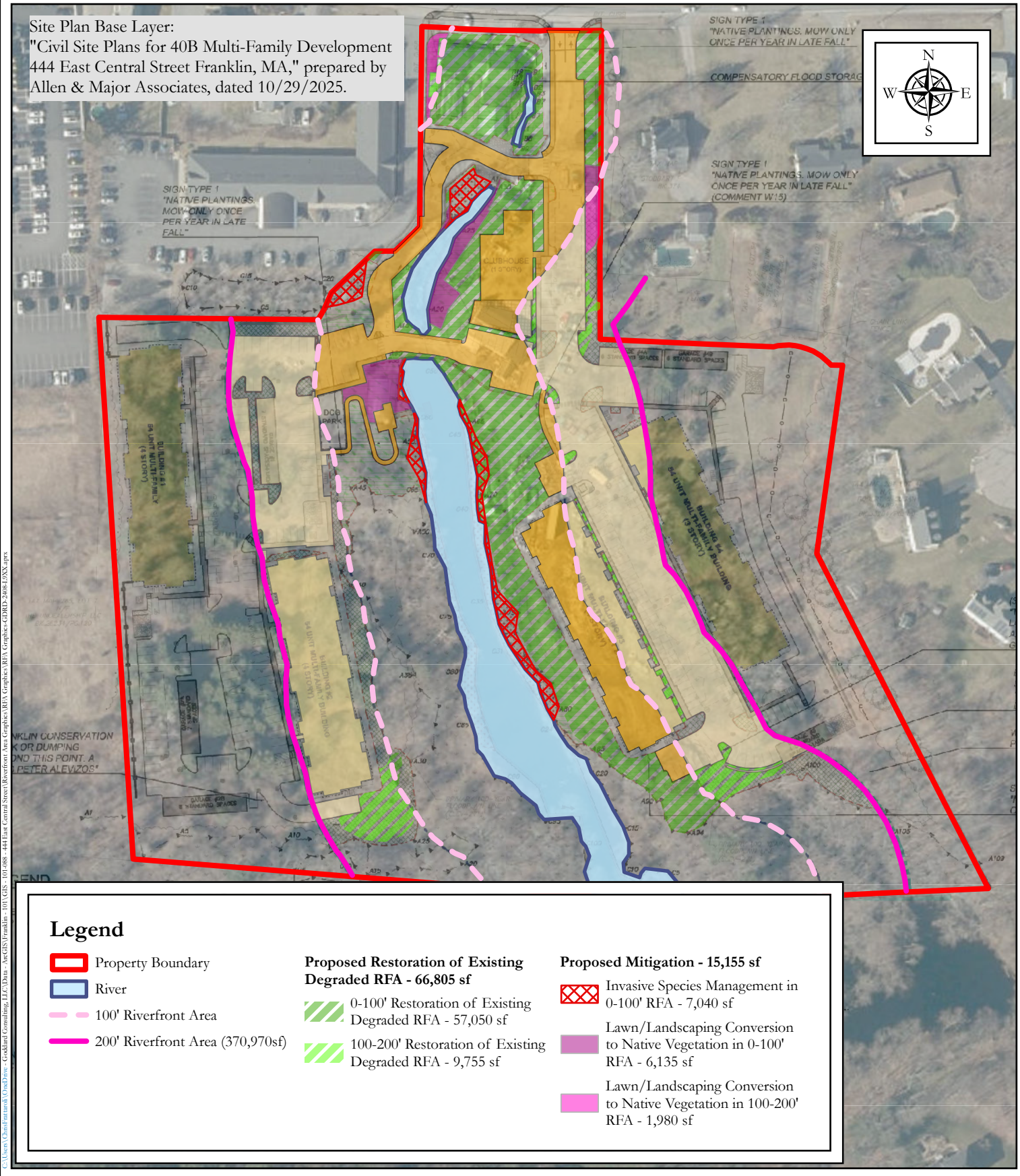
444 East Central Street
Franklin, MA 02038

0 100 200 Feet
1" = 200'

71.3771102°W, 42.0778722°N

Date: 11/04/2025

Parcel ID: 284-66



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GODDARD CONSULTING
Strategic Ecological Consulting

Restoration/Mitigation in Riverfront Area

0 100 200 Feet

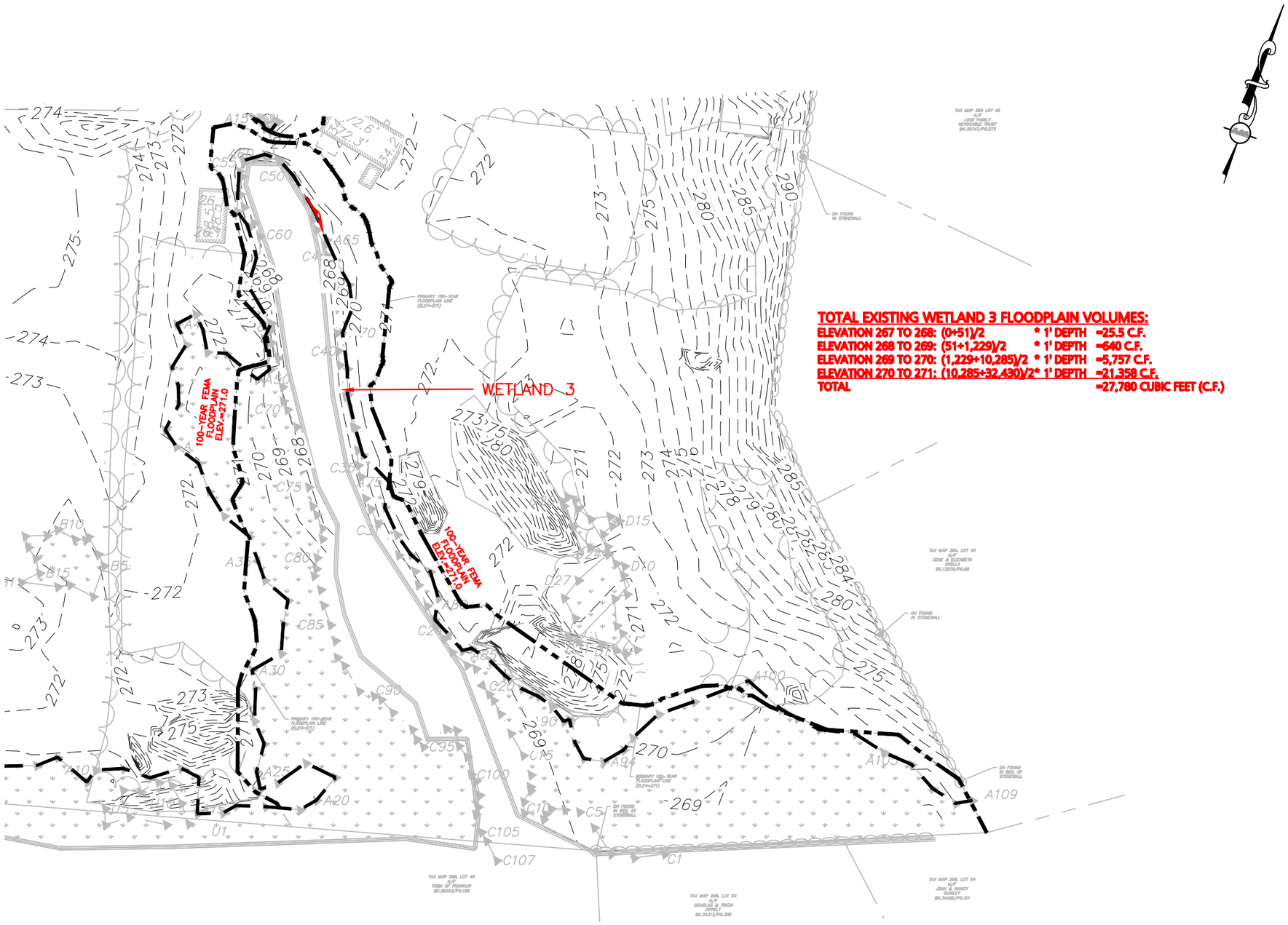
1" = 200'

71.3771102°W, 42.0778722°N

Date: 11/04/2025

444 East Central Street
Franklin, MA 02038

Parcel ID: 284-66



TOTAL EXISTING WETLAND 3 FLOODPLAIN VOLUMES:

ELEVATION 267 TO 268:	(0+51)/2	* 1' DEPTH	=25.5 C.F.
ELEVATION 268 TO 269:	(51+1,229)/2	* 1' DEPTH	=640 C.F.
ELEVATION 269 TO 270:	(1,229+10,285)/2	* 1' DEPTH	=5,757 C.F.
ELEVATION 270 TO 271:	(10,285+32,430)/2*	1' DEPTH	=21,358 C.F.
TOTAL			=27,780 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - EXISTING - NO COMPOST PILE.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	10/09/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

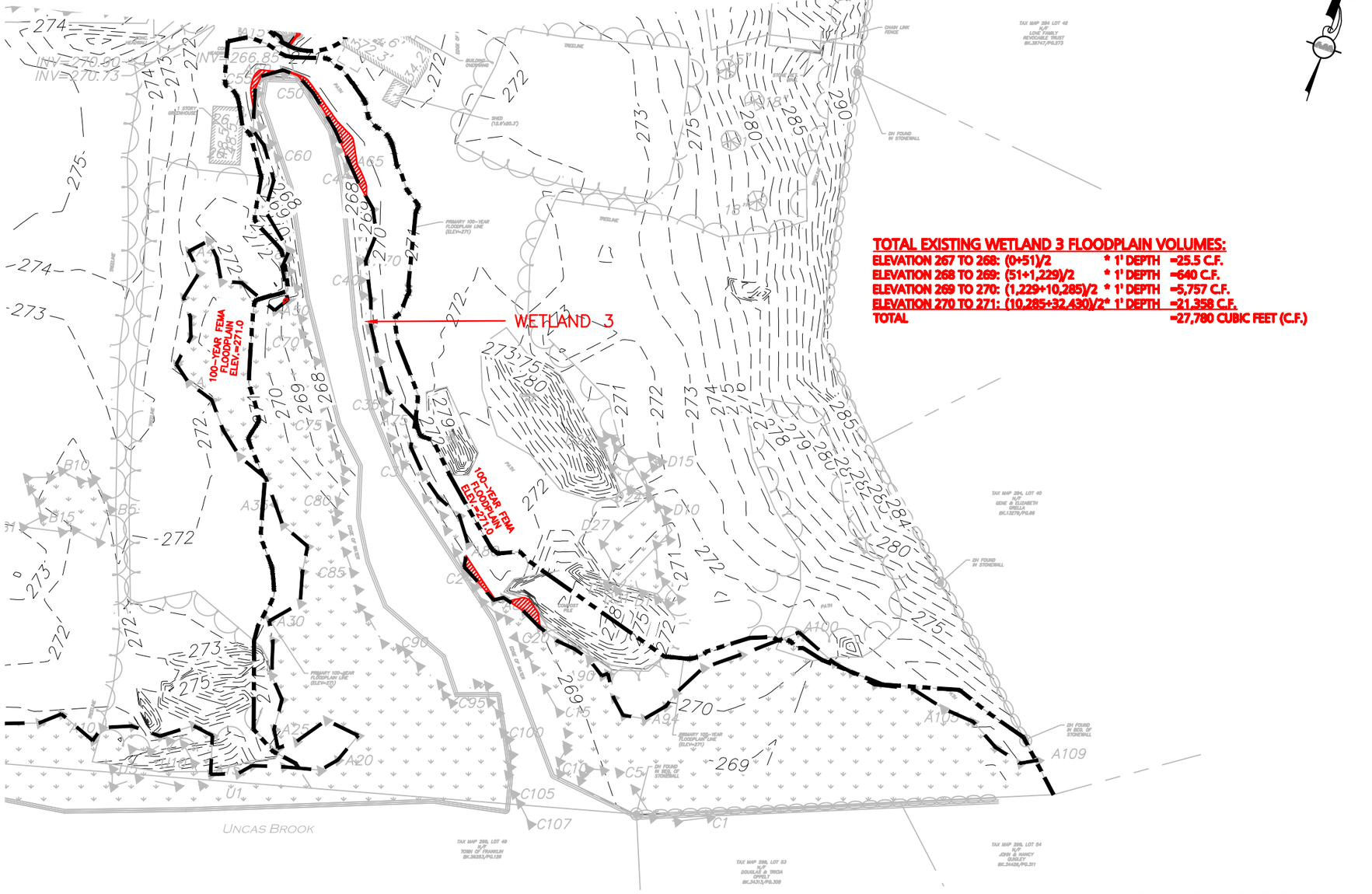
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

EXISTING SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 268



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ELEVATION 269 TO 270:	(1,229+10,285)/2	* 1' DEPTH	=5,757 C.F.
ELEVATION 270 TO 271:	(10,285+32,430)/2	* 1' DEPTH	=21,358 C.F.
TOTAL			=27,780 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

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APPLICANT/OWNER:

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RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	10/09/2025
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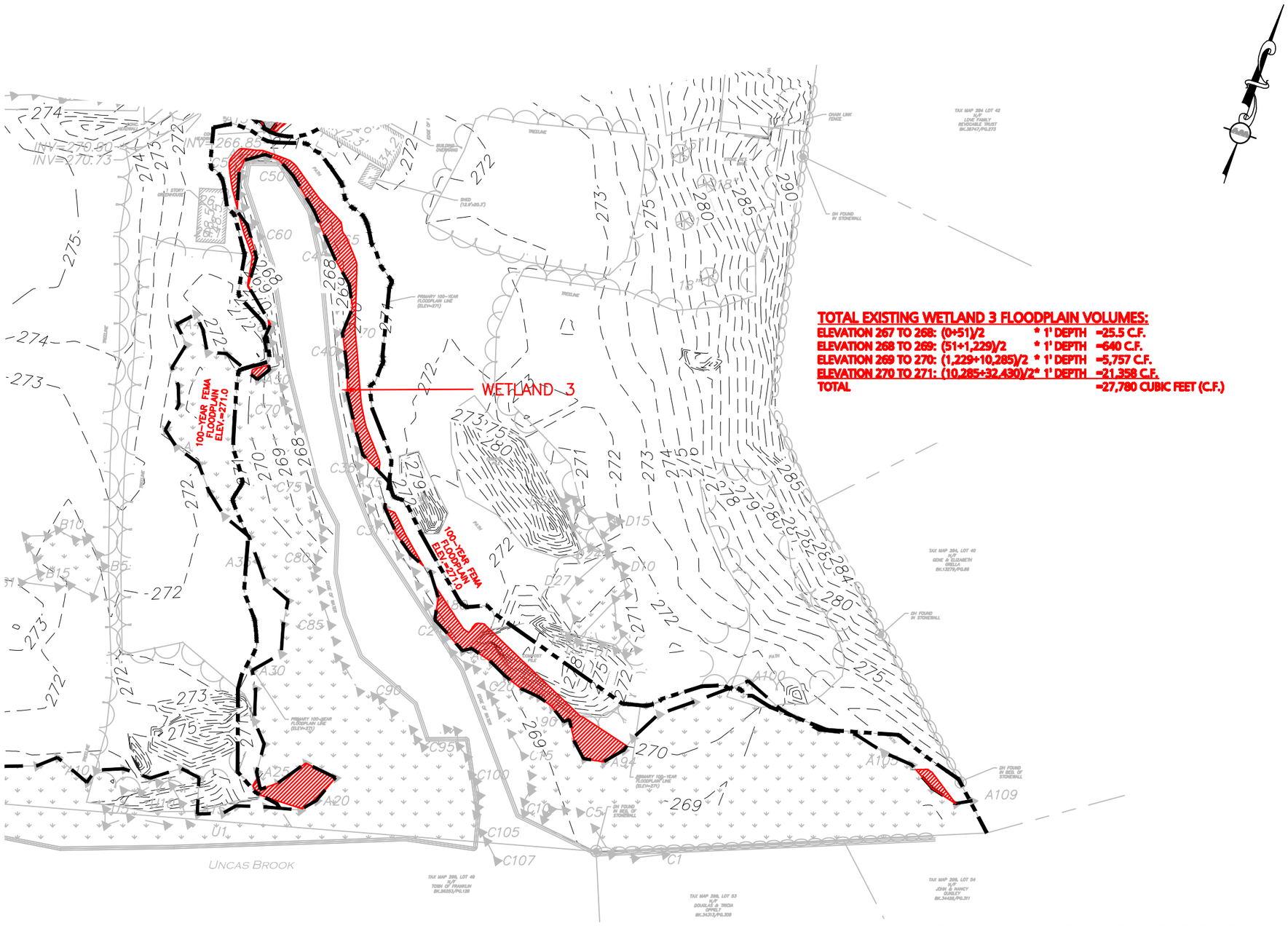
DRAWING TITLE:

EXISTING SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 269



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TOTAL			=27,780 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

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N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - EXISTING - NO COMPOST PILE.DWG

APPLICANT/OWNER:

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275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	10/09/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

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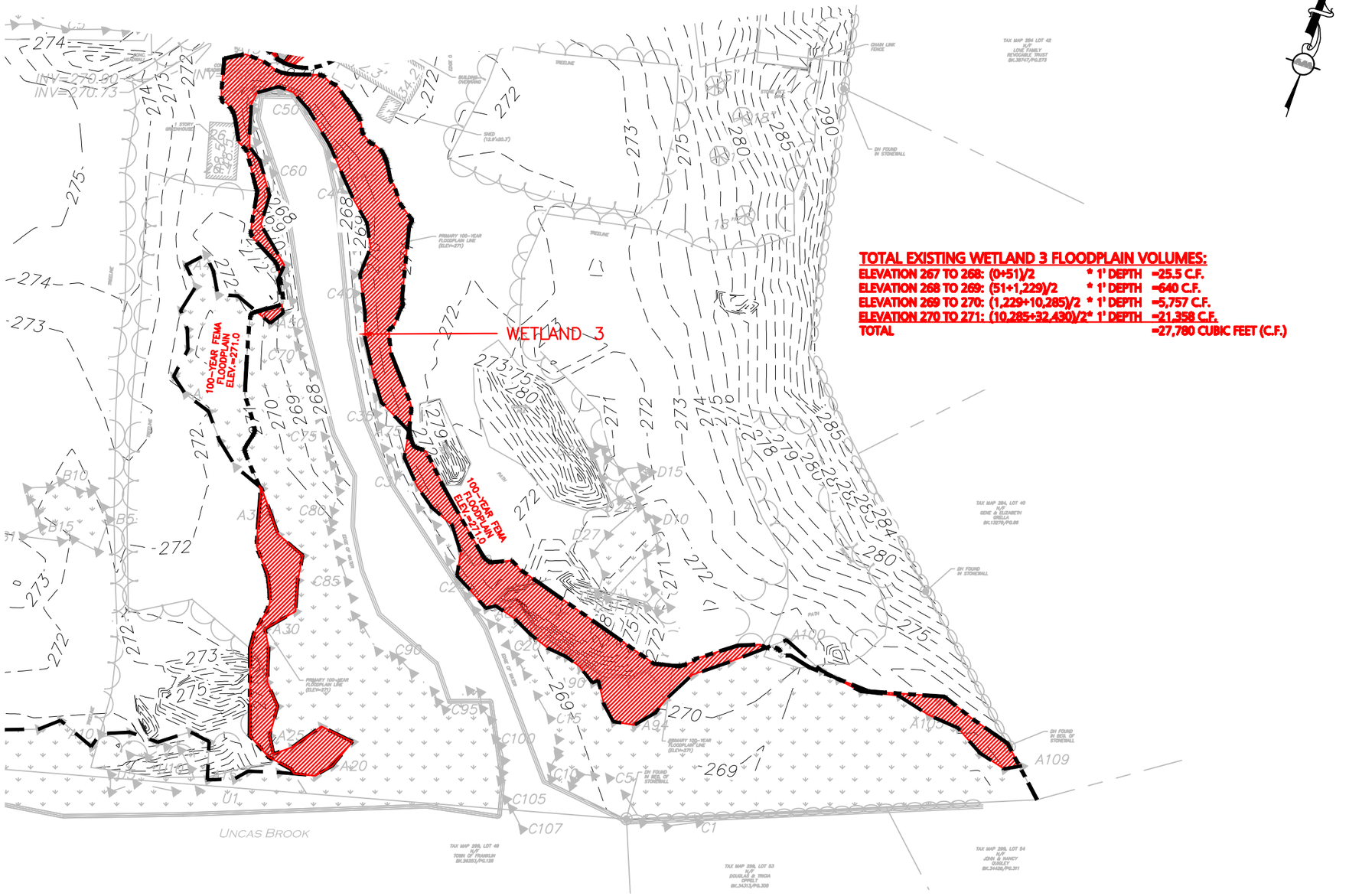
DRAWING TITLE:

EXISTING SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 270



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ELEVATION 268 TO 269:	(51+1,229)/2	* 1' DEPTH	=640 C.F.
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ELEVATION 270 TO 271:	(10,285+32,430)/2	* 1' DEPTH	=21,358 C.F.
TOTAL			=27,780 CUBIC FEET (C.F.)

GRAPHIC SCALE

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(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

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APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	10/09/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

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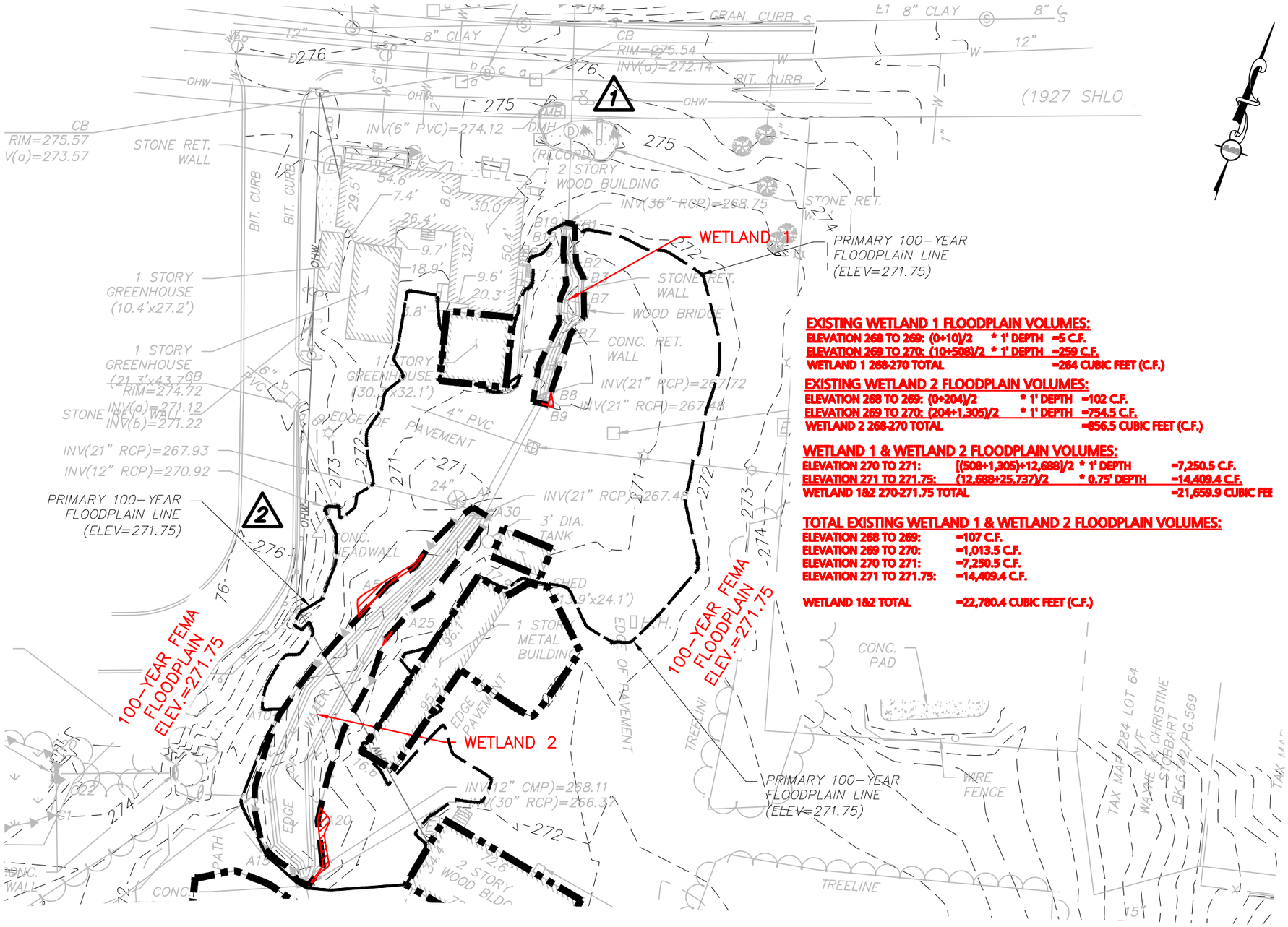
DRAWING TITLE:

EXISTING SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 271



EXISTING WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+508)/2	* 1' DEPTH	=259 C.F.
WETLAND 1 268-270 TOTAL			=264 CUBIC FEET (C.F.)

EXISTING WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,305)/2	* 1' DEPTH	=754.5 C.F.
WETLAND 2 268-270 TOTAL			=856.5 CUBIC FEET (C.F.)

WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(508+1,305)+12,688]/2	* 1' DEPTH	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	(12,688+25,737)/2	* 0.75' DEPTH	=14,409.4 C.F.
WETLAND 1&2 270-271.75 TOTAL			=21,659.9 CUBIC FEE

TOTAL EXISTING WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,013.5 C.F.
ELEVATION 270 TO 271:	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	=14,409.4 C.F.
WETLAND 1&2 TOTAL	=22,780.4 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

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APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
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www.allenmajor.com
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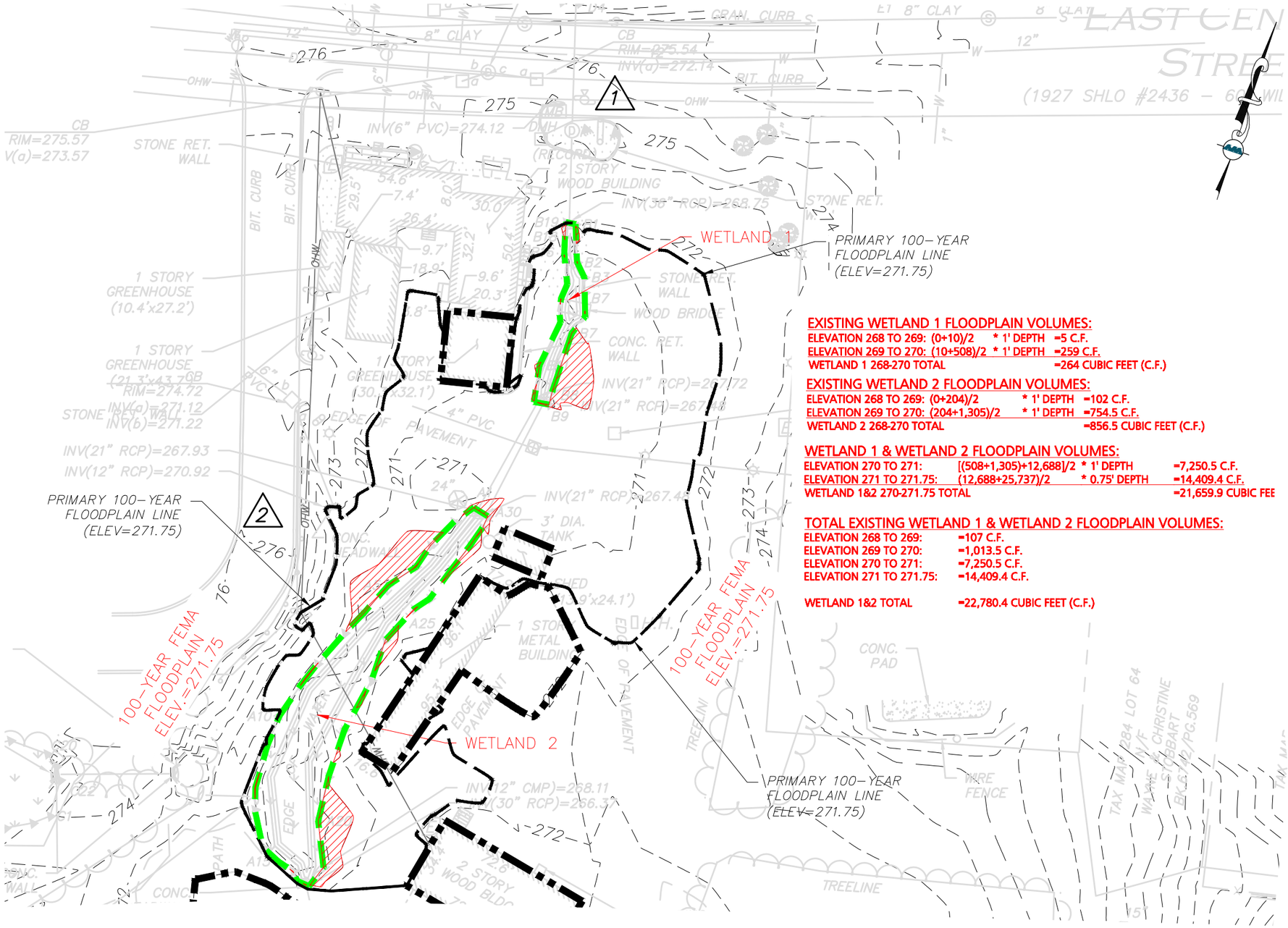
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

EXISTING NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 269



EXISTING WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+508)/2	* 1' DEPTH	=259 C.F.
WETLAND 1 268-270 TOTAL			=264 CUBIC FEET (C.F.)

EXISTING WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,305)/2	* 1' DEPTH	=754.5 C.F.
WETLAND 2 268-270 TOTAL			=856.5 CUBIC FEET (C.F.)

WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(508+1,305)+12,688]/2	* 1' DEPTH	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	(12,688+25,737)/2	* 0.75' DEPTH	=14,409.4 C.F.
WETLAND 1&2 270-271.75 TOTAL			=21,659.9 CUBIC FEE

TOTAL EXISTING WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,013.5 C.F.
ELEVATION 270 TO 271:	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	=14,409.4 C.F.
WETLAND 1&2 TOTAL	=22,780.4 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 – FLOODPLAIN CALCULATIONS – EXISTING – 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

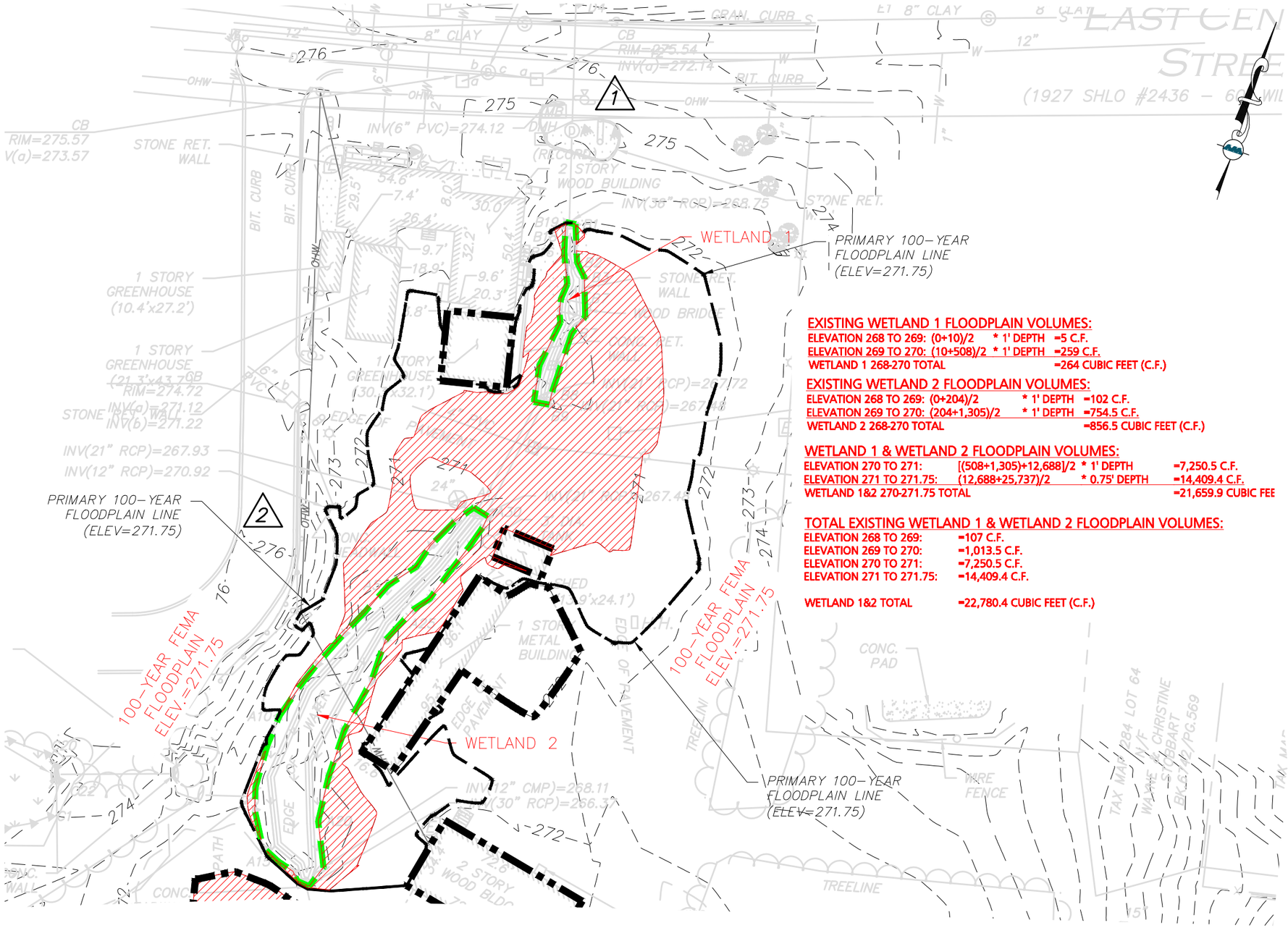
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

EXISTING NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 270



EXISTING WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+508)/2	* 1' DEPTH	=259 C.F.
WETLAND 1 268-270 TOTAL			=264 CUBIC FEET (C.F.)

EXISTING WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,305)/2	* 1' DEPTH	=754.5 C.F.
WETLAND 2 268-270 TOTAL			=856.5 CUBIC FEET (C.F.)

WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(508+1,305)+12,688]/2	* 1' DEPTH	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	(12,688+25,737)/2	* 0.75' DEPTH	=14,409.4 C.F.
WETLAND 1&2 270-271.75 TOTAL			=21,659.9 CUBIC FEE

TOTAL EXISTING WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,013.5 C.F.
ELEVATION 270 TO 271:	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	=14,409.4 C.F.
WETLAND 1&2 TOTAL	=22,780.4 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - EXISTING - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

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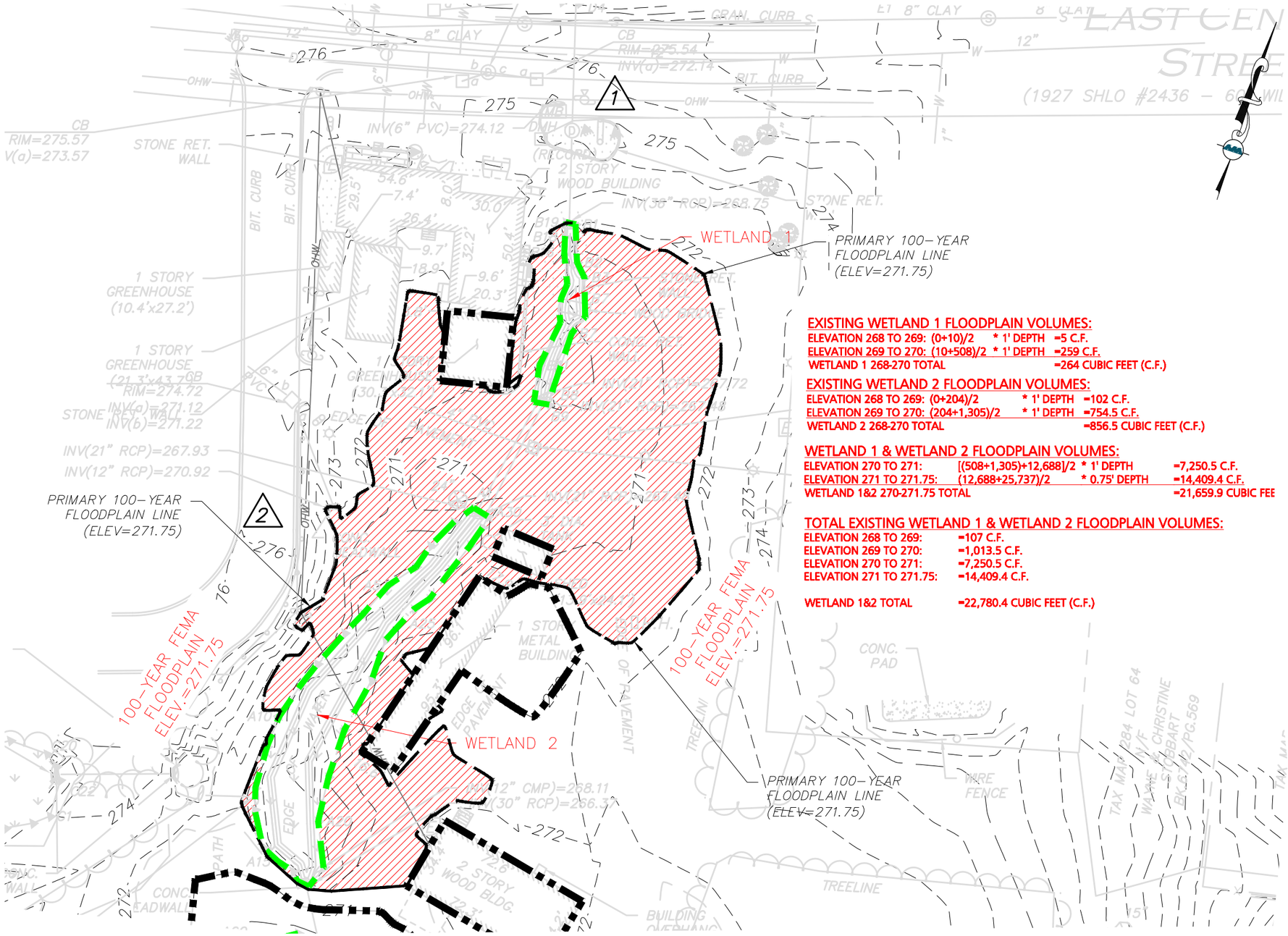
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

EXISTING NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 271



EXISTING WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+508)/2	* 1' DEPTH	=259 C.F.
WETLAND 1 268-270 TOTAL			=264 CUBIC FEET (C.F.)

EXISTING WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,305)/2	* 1' DEPTH	=754.5 C.F.
WETLAND 2 268-270 TOTAL			=856.5 CUBIC FEET (C.F.)

WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(508+1,305)+12,688]/2	* 1' DEPTH	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	(12,688+25,737)/2	* 0.75' DEPTH	=14,409.4 C.F.
WETLAND 1&2 270-271.75 TOTAL			=21,659.9 CUBIC FEE

TOTAL EXISTING WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,013.5 C.F.
ELEVATION 270 TO 271:	=7,250.5 C.F.
ELEVATION 271 TO 271.75:	=14,409.4 C.F.
WETLAND 1&2 TOTAL	=22,780.4 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - EXISTING - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

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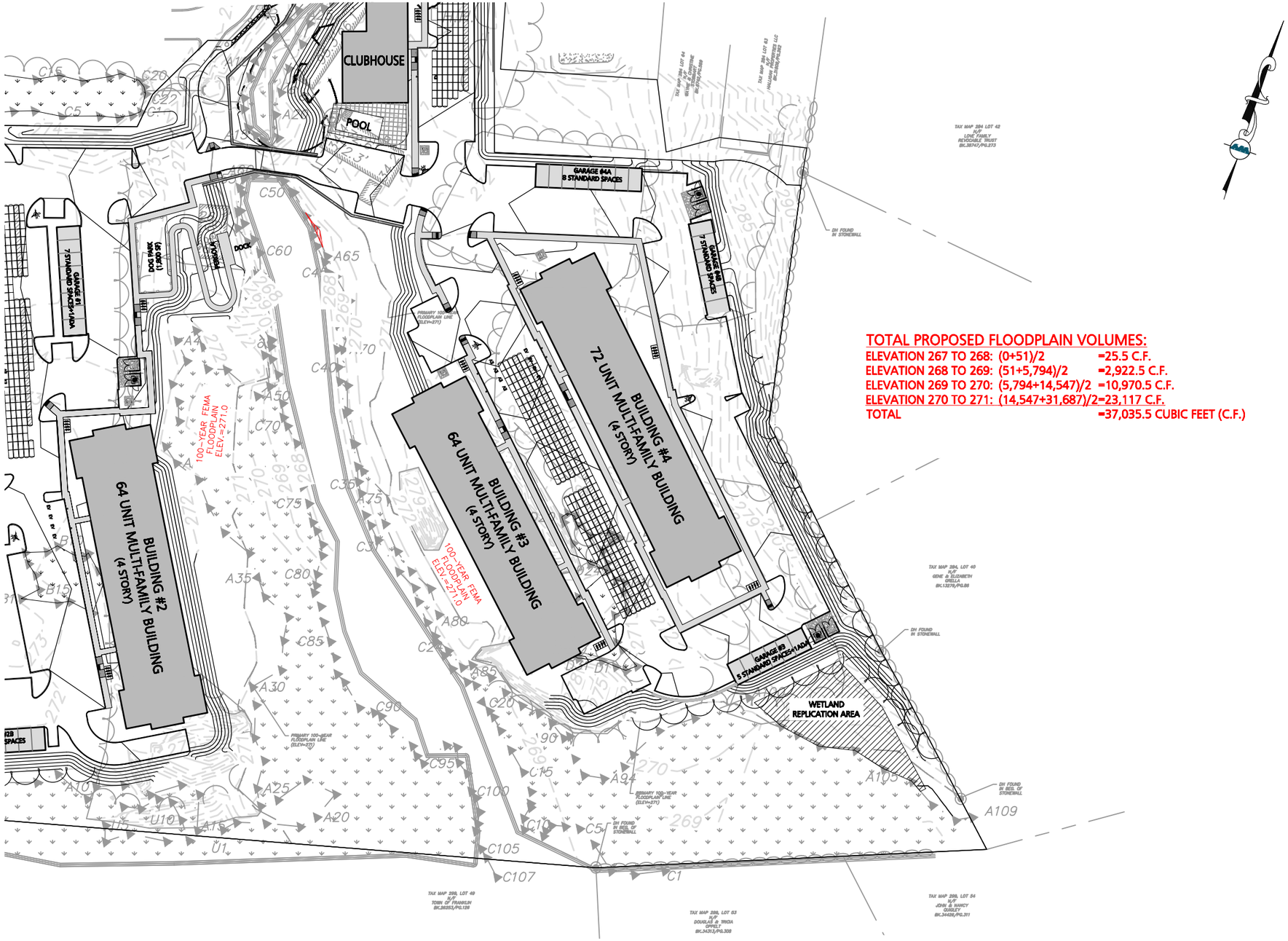
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

EXISTING NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 271.75



TOTAL PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 267 TO 268: (0+51)/2	=25.5 C.F.
ELEVATION 268 TO 269: (51+5,794)/2	=2,922.5 C.F.
ELEVATION 269 TO 270: (5,794+14,547)/2	=10,970.5 C.F.
ELEVATION 270 TO 271: (14,547+31,687)/2	=23,117 C.F.
TOTAL	=37,035.5 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	9/16/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

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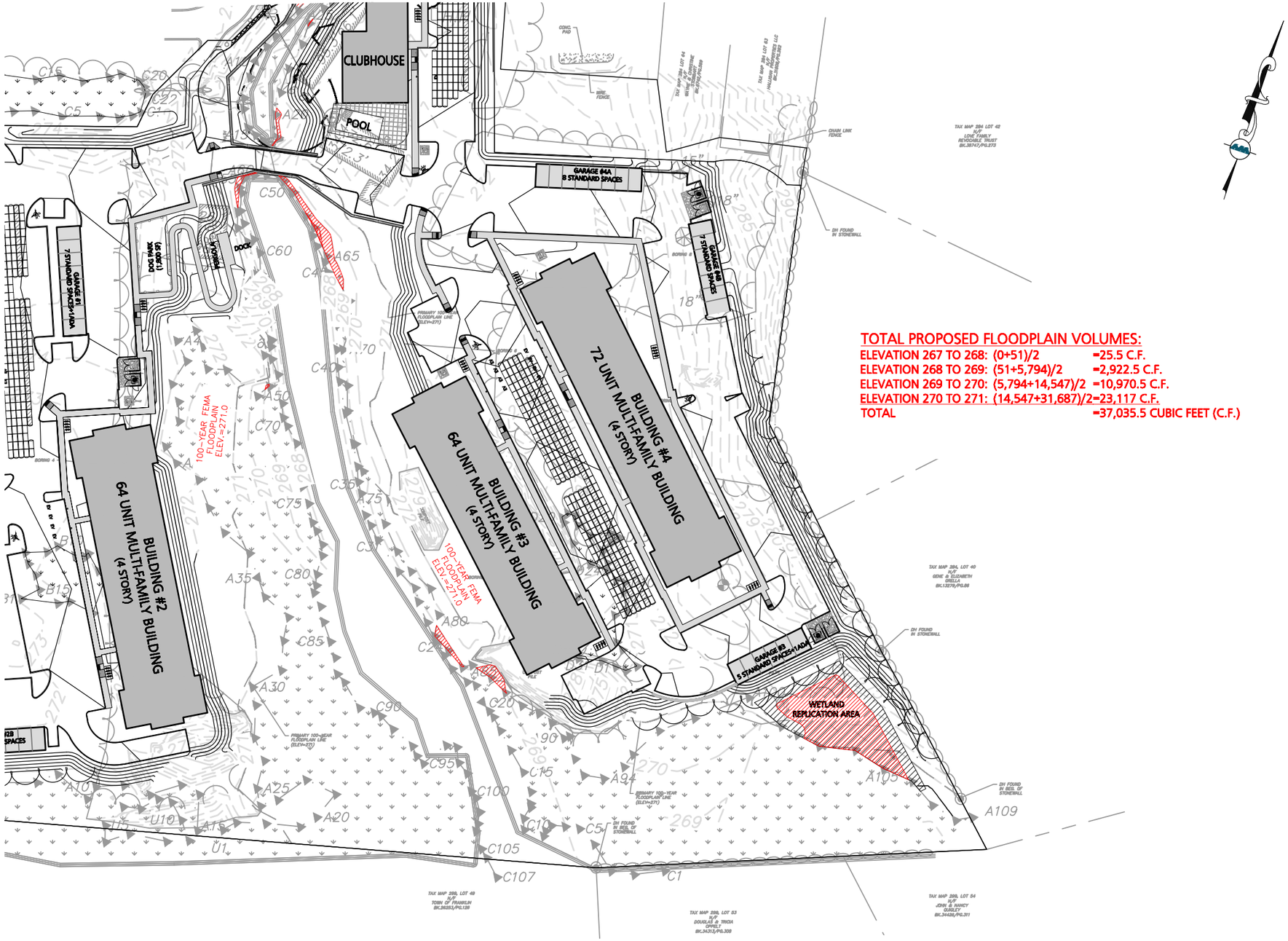
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE:

PROPOSED SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 268



TOTAL PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 267 TO 268: (0+51)/2	=25.5 C.F.
ELEVATION 268 TO 269: (51+5,794)/2	=2,922.5 C.F.
ELEVATION 269 TO 270: (5,794+14,547)/2	=10,970.5 C.F.
ELEVATION 270 TO 271: (14,547+31,687)/2	=23,117 C.F.
TOTAL	=37,035.5 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	9/16/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

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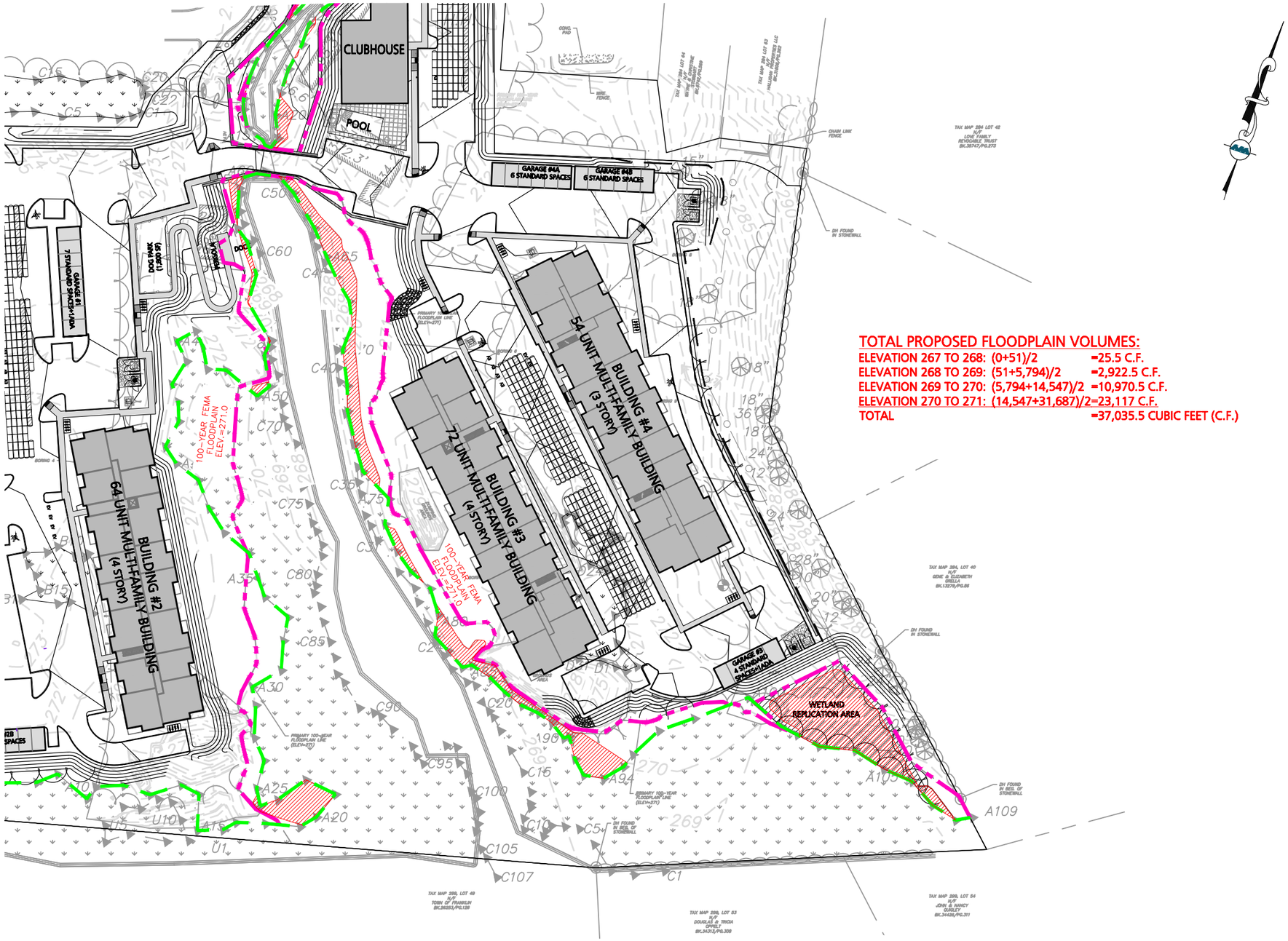
DRAWING TITLE:

PROPOSED SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 269



TOTAL PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 267 TO 268: (0+51)/2	=25.5 C.F.
ELEVATION 268 TO 269: (51+5,794)/2	=2,922.5 C.F.
ELEVATION 269 TO 270: (5,794+14,547)/2	=10,970.5 C.F.
ELEVATION 270 TO 271: (14,547+31,687)/2	=23,117 C.F.
TOTAL	=37,035.5 CUBIC FEET (C.F.)

GRAPHIC SCALE

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100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

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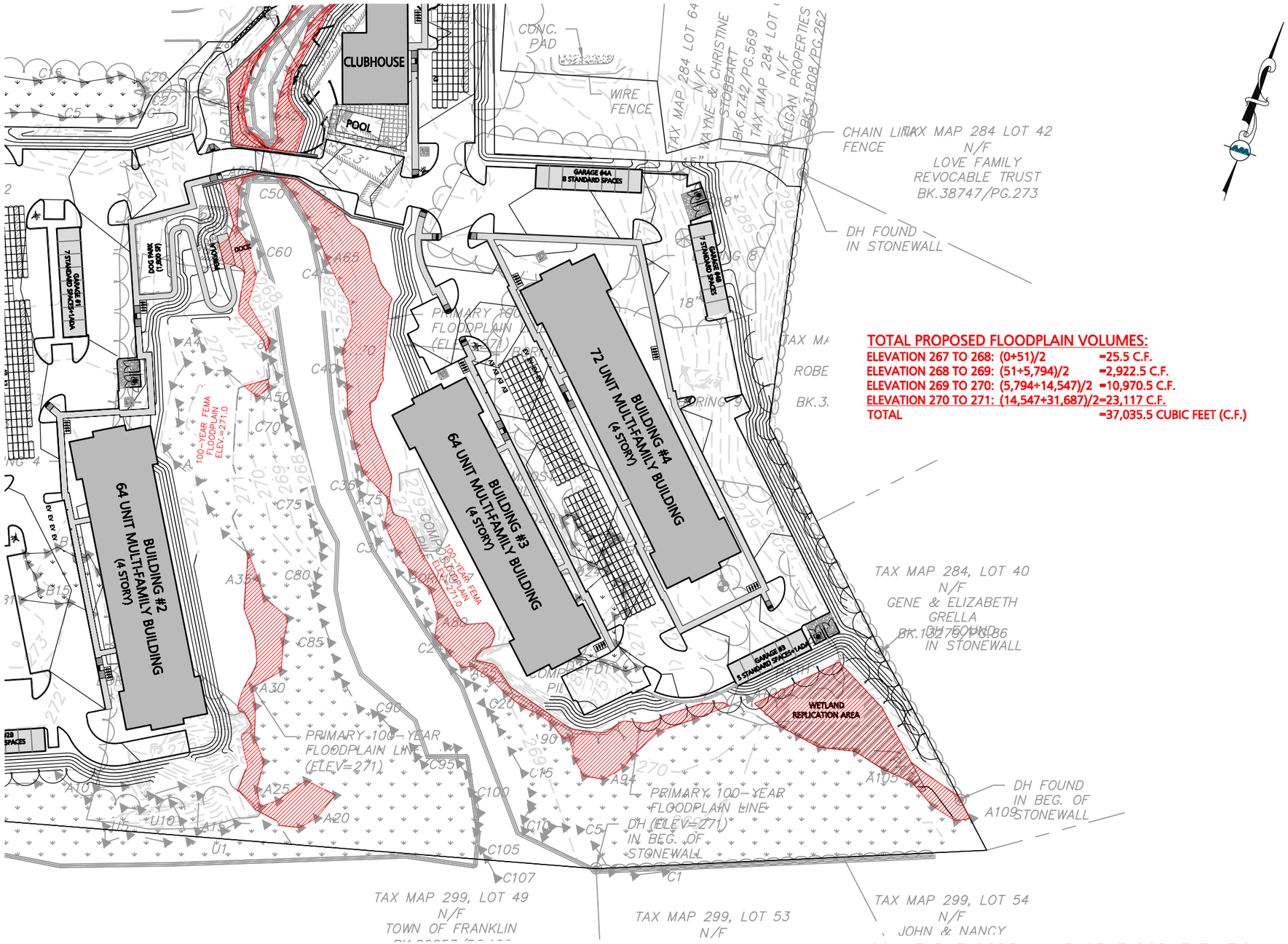
WOBURN, MA◆LAKEVILLE, MA◆MANCHESTER, NH

DRAWING TITLE:

PROPOSED SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 270



TOTAL PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 267 TO 268: (0+51)/2	=25.5 C.F.
ELEVATION 268 TO 269: (51+5,794)/2	=2,922.5 C.F.
ELEVATION 269 TO 270: (5,794+14,547)/2	=10,970.5 C.F.
ELEVATION 270 TO 271: (14,547+31,687)/2	=23,117 C.F.
TOTAL	=37,035.5 CUBIC FEET (C.F.)

GRAPHIC SCALE

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(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

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APPLICANT/OWNER:

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275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	9/16/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

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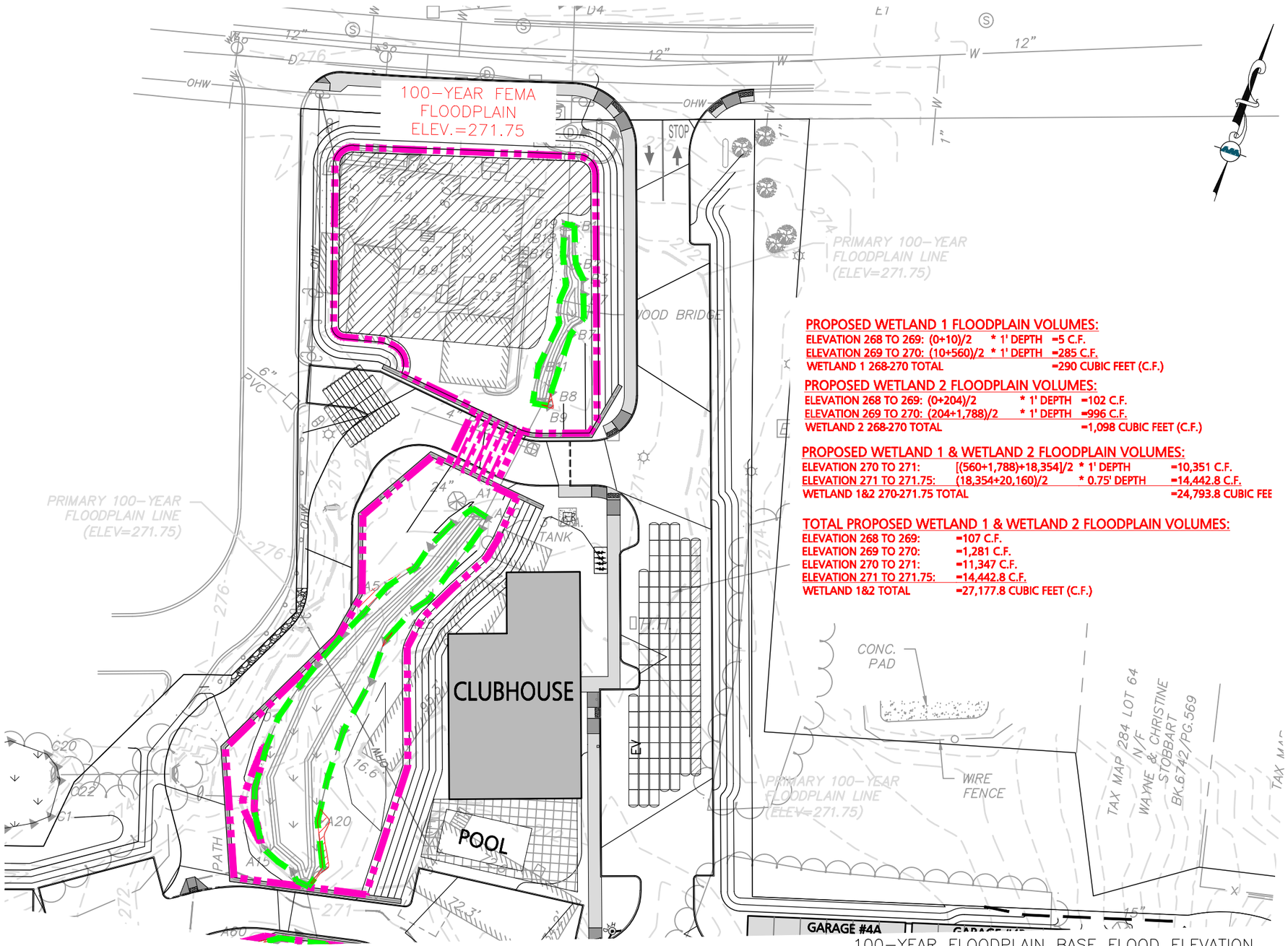
DRAWING TITLE:

PROPOSED SOUTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 271



PROPOSED WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+560)/2	* 1' DEPTH	=285 C.F.
WETLAND 1 268-270 TOTAL			=290 CUBIC FEET (C.F.)

PROPOSED WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,788)/2	* 1' DEPTH	=996 C.F.
WETLAND 2 268-270 TOTAL			=1,098 CUBIC FEET (C.F.)

PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(560+1,788)+18,354]/2	* 1' DEPTH	=10,351 C.F.
ELEVATION 271 TO 271.75:	(18,354+20,160)/2	* 0.75' DEPTH	=14,442.8 C.F.
WETLAND 1&2 270-271.75 TOTAL			=24,793.8 CUBIC FEE

TOTAL PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,281 C.F.
ELEVATION 270 TO 271:	=11,347 C.F.
ELEVATION 271 TO 271.75:	=14,442.8 C.F.
WETLAND 1&2 TOTAL	=27,177.8 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

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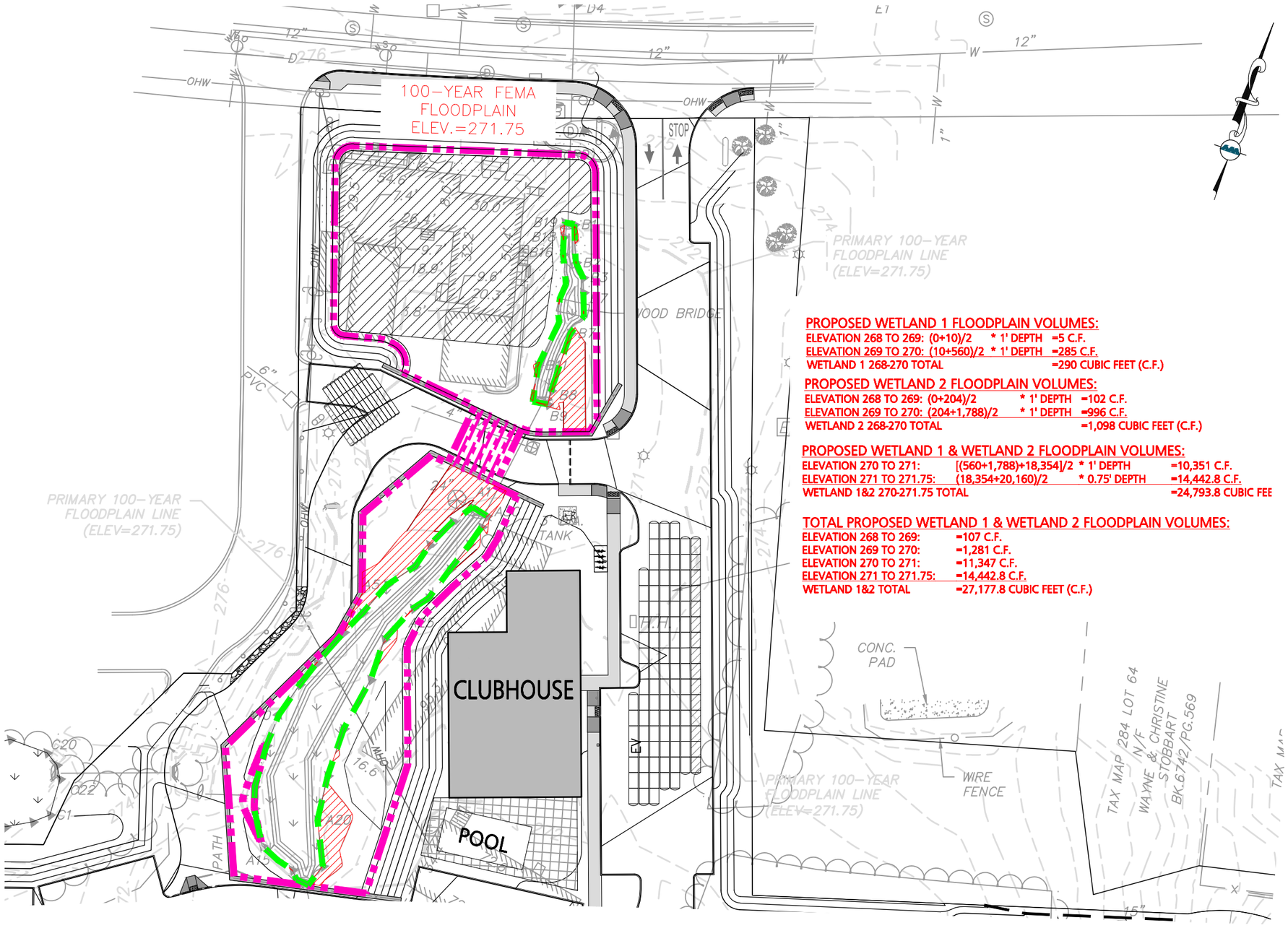
DRAWING TITLE:

PROPOSED NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 269



PROPOSED WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+560)/2	* 1' DEPTH	=285 C.F.
WETLAND 1 268-270 TOTAL			=290 CUBIC FEET (C.F.)

PROPOSED WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,788)/2	* 1' DEPTH	=996 C.F.
WETLAND 2 268-270 TOTAL			=1,098 CUBIC FEET (C.F.)

PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(560+1,788)+18,354]/2	* 1' DEPTH	=10,351 C.F.
ELEVATION 271 TO 271.75:	(18,354+20,160)/2	* 0.75' DEPTH	=14,442.8 C.F.
WETLAND 1&2 270-271.75 TOTAL			=24,793.8 CUBIC FEE

TOTAL PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,281 C.F.
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ELEVATION 271 TO 271.75:	=14,442.8 C.F.
WETLAND 1&2 TOTAL	=27,177.8 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

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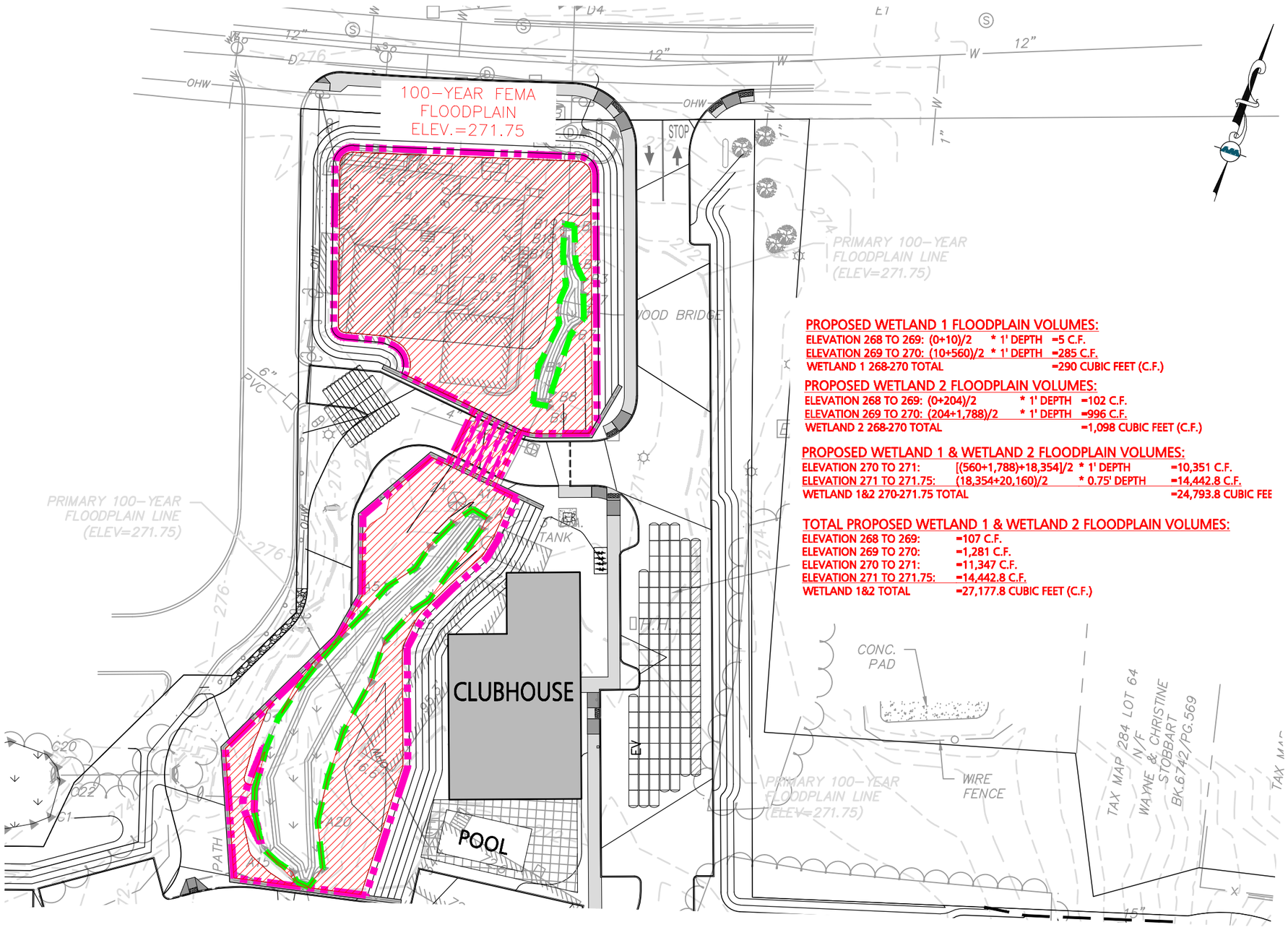
DRAWING TITLE:

PROPOSED NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 270



PROPOSED WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+560)/2	* 1' DEPTH	=285 C.F.
WETLAND 1 268-270 TOTAL			=290 CUBIC FEET (C.F.)

PROPOSED WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,788)/2	* 1' DEPTH	=996 C.F.
WETLAND 2 268-270 TOTAL			=1,098 CUBIC FEET (C.F.)

PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(560+1,788)+18,354]/2	* 1' DEPTH	=10,351 C.F.
ELEVATION 271 TO 271.75:	(18,354+20,160)/2	* 0.75' DEPTH	=14,442.8 C.F.
WETLAND 1&2 270-271.75 TOTAL			=24,793.8 CUBIC FEE

TOTAL PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
ELEVATION 269 TO 270:	=1,281 C.F.
ELEVATION 270 TO 271:	=11,347 C.F.
ELEVATION 271 TO 271.75:	=14,442.8 C.F.
WETLAND 1&2 TOTAL	=27,177.8 CUBIC FEET (C.F.)

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
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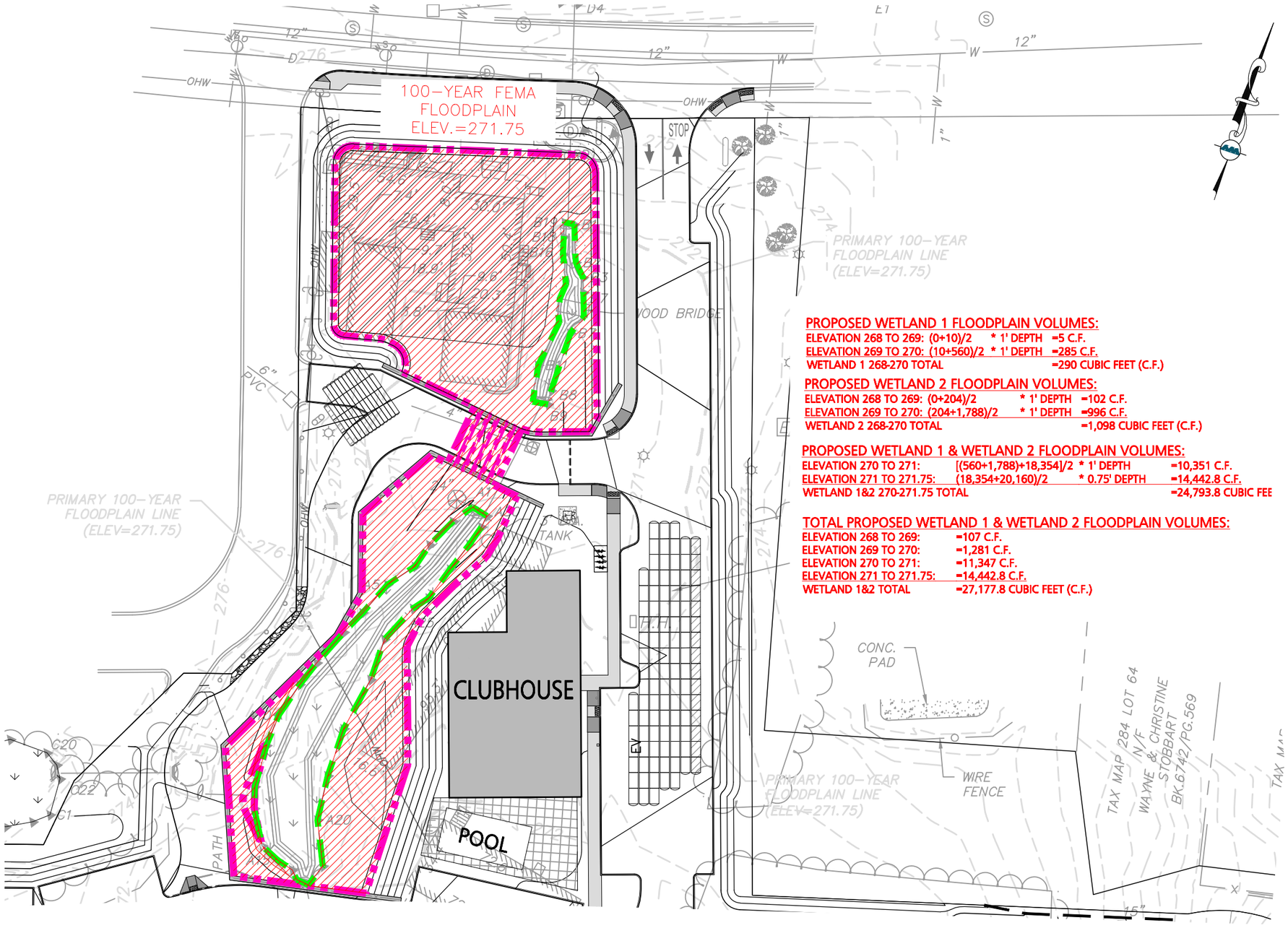
WOBURN, MA◆LAKEVILLE, MA◆MANCHESTER, NH

DRAWING TITLE:

PROPOSED NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 271



PROPOSED WETLAND 1 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+10)/2	* 1' DEPTH	=5 C.F.
ELEVATION 269 TO 270:	(10+560)/2	* 1' DEPTH	=285 C.F.
WETLAND 1 268-270 TOTAL			=290 CUBIC FEET (C.F.)

PROPOSED WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	(0+204)/2	* 1' DEPTH	=102 C.F.
ELEVATION 269 TO 270:	(204+1,788)/2	* 1' DEPTH	=996 C.F.
WETLAND 2 268-270 TOTAL			=1,098 CUBIC FEET (C.F.)

PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 270 TO 271:	[(560+1,788)+18,354]/2	* 1' DEPTH	=10,351 C.F.
ELEVATION 271 TO 271.75:	(18,354+20,160)/2	* 0.75' DEPTH	=14,442.8 C.F.
WETLAND 1&2 270-271.75 TOTAL			=24,793.8 CUBIC FEE

TOTAL PROPOSED WETLAND 1 & WETLAND 2 FLOODPLAIN VOLUMES:

ELEVATION 268 TO 269:	=107 C.F.
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GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

100-YEAR FLOODPLAIN BASE FLOOD ELEVATION (BFE) BASED UPON MassDOT ORAD # 159-1306 AND BLSF STUDY BY BEALS ASSOCIATES, DATED AUGUST 27, 2025. REFERENCE FEMA FLOOD INSURANCE STUDY, NORFOLK COUNTY, MASSACHUSETTS, FEMA PLAN MAP NUMBER 25021C0309fE, EFFECTIVE JULY 8, 2025.

N:\PROJECTS\3317-01\CIVIL\DRAWINGS\FLOODPLAIN CALCULATIONS\3317-01 - FLOODPLAIN CALCULATIONS - PROPOSED - 272.DWG

APPLICANT/OWNER:

TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:

RESIDENCES AT 444 CENTRAL
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO.	3317-01	DATE:	11/3/2025
SCALE:	1" = 100'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	CMQ	CHECKED BY:	CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
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WOBURN, MA◆LAKEVILLE, MA◆MANCHESTER, NH

DRAWING TITLE:

PROPOSED NORTH FLOOD PLAIN VOLUME EXHIBIT

SHEET No.

EL. 271.75

GODDARD CONSULTING
Strategic Ecological Consulting

Restoration, Replication and Mitigation Plan

for
444 East Central Street
Franklin, MA
(Assessor's Map 284, Parcel 66)

DATE:
April 17, 2025
Revised July 28, 2025
Revised September 25, 2025
Revised October 31, 2025

ADDRESSED TO:
Franklin Conservation Commission
355 East Central Street
Franklin, MA 02038

PREPARED BY:
Goddard Consulting LLC
291 Main Street, Suite 8
Northborough, MA 01532

PREPARED FOR:
TAG Central LLC
275 Regatta Drive
Jupiter, FL 33477

A. Site History

The locus site, 444 East Central Street in Franklin, is presently in use as a nursery and landscape facility known as Stobbart's Nursery. The site has been used as such for several decades. The Franklin Assessor's records indicate that the main building on the site was built in 1950, and historic aerial imagery corroborates that the site has been used for farming, nursery, and/or landscape operations since at least the mid-1960s. The site has been used, cultivated and altered repeatedly over the last 75 or more years.

The land had historically been used primarily as a nursery grow operation, cultivating plants for sale. Over time, as nursery cultivation and sale operations dwindled, portions of the site went unmaintained. This has resulted in the presence of large stands of nonnative species that were never harvested for sale. In addition to the nonnative landscape plants that have been allowed to grow to maturity, the site contains a significant contingent of both invasive species, and nonnative species that have escaped from cultivation.

While the storefront remains active, the nursery no longer cultivates plants for sale on the site. However, portions of the site do continue to be used sporadically as a construction and landscape yard, primarily on the eastern half of the property. Large brush, compost and fill piles are present variously throughout the site, along with laydown areas for construction materials, equipment and abandoned vehicles.

Photo 1: View of contractor yard area in eastern portion of the site.

B. Proposed Development

As part of the construction of a residential development on the site as a "friendly 40B," consisting of multiple residential buildings and one clubhouse building with associated interior and exterior amenities, parking, and open areas, this document has been prepared to outline proposed restoration, replication and mitigation efforts. Because much of the site is encompassed by wetland resource areas and their buffer zones, extensive restoration of the site is proposed as part of the project.

C. Restoration Programs

Based on Goddard's detailed observation of the site on multiple occasions, there are four components of proposed restoration, replication and mitigation activities. These programs are as follows:

- Brush, Fill and Dumping Pile Removal
    - This program consists of the removal of several large piles consisting of C&D waste, brush, compost and fill materials, which have accumulated over years of activities on the site. These piles are located primarily in the southeastern quadrant of the site.
- Contractor Laydown Yard Cleanup
    - This program consists of the removal of the abandoned vehicles, construction materials and various equipment that are present scattered throughout the site. This work will be focused on the north-central portion of the site and will continue southerly along the eastern side of the river.
- Invasive Species Management
    - This program consists of the management of large stands of invasive species by mechanical, chemical and cultural practices.
- Wetland Replication
    - This program consists of the replication of impacted isolated vegetated wetlands (IVWs) as a Bordering Vegetated Wetland in the southeast corner of the site, with associated grading and planting.

Large portions of the above restoration programs will be addressed through site preparation, grading, and demolition required for the proposed development. However, additional restoration activities will be undertaken to ensure that the site is satisfactorily restored and, in fact, improved over existing conditions. Restored areas that are intended to naturalize will be planted and seeded with appropriate native species to aid in the protection of the interests of the Wetlands Protection Act.

D. General Procedures

Supervision:
Work specific to carrying out the Restoration Programs outlined in Sections E through H shall be supervised by a qualified wetland scientist with experience in ecological restoration and invasive species management. The supervisor shall submit monitoring reports to the Conservation Commission as described below. Reports shall contain written details of all work performed and photographs of completed work.

Timing:
Removal of brush, fill and compost piles may be accomplished at any time of year but should be coordinated such that the area can be stabilized, if necessary, either temporarily or permanently, shortly after the

completion of removal. Similarly, wetland replication should also be executed such that the replication area can be stabilized with vegetation shortly after completion of grading.

The timing of invasive species management activities will be dependent on the target species and means of management as outlined in section G.

Seeding and installation of plantings should ideally be accomplished during the spring or fall growing seasons (i.e approximately between April 16 and May 31 or between September 16 and October 30). Work outside of these windows is acceptable, but plant mortality may be greater.

E. Brush, Fill and Compost Removal

Brush, fill and compost piles are present sporadically throughout the site. Materials in these piles will be removed with machinery. This work can be accomplished before and/or simultaneously with site preparation and grading. Access will be obtained via upland routes to the greatest extent practicable. Any debris or intact brush will be exported from all wetland resource areas.

Some of these piles are present in very close proximity to wetland resource areas. Care shall be taken to ensure that erosion control barriers remain intact and functional throughout this work. In areas to be revegetated, loam will be spread to provide a suitable medium for planting and seeding.

F. Contractor Laydown Yard Cleanup

Similarly to the brush, fill and compost pile removal, the majority of the cleanup of the existing contractor yard will be done before and/or in tandem with site preparation and grading. This effort will consist of the removal of all abandoned and dilapidated vehicles and machinery, construction materials such as masonry stone and pallets, and other scattered anthropogenic debris. All of these items shall be disposed of offsite in accordance with any applicable local, state and federal laws. In areas to be revegetated, loam will be spread to provide a suitable medium for planting and seeding.

G. Invasive Species Management

Invasive species management is proposed as part of restoration and mitigation activities for the project. Invasive species present on site consist primarily of common reed (*Phragmites australis),* Japanese knotweed (*Reynoutria japonica*), buckthorn (*Rhamnus cathartica*) and Asiatic bittersweet (*Celastrus orbiculatus*). These four species will be the primary targets of the invasive species management program. Additional invasive species present on site also include purple loosestrife (*Lythrum salicaria)*, multiflora rose (*Rosa multiflora*), garlic mustard (*Alliaria petiolata)*, Norway maple (*Acer platanoides)*, autumn olive (*Elaeagnus umbellate),* winged euonymus (*Euonymus alatus)*, and honeysuckle (*Lonicera spp.*). These seven additional species will also be targets of the invasive species management program.

<u>MANAGEMENT GOALS:</u>

The invasive plant species onsite have varying densities, distributions, and effects on the natural ecosystem. As a result, we will have different management goals for each species and area. Due to the massive extent of invasive species pressure on site and on neighboring sites, total eradication of invasive species is likely not feasible. Therefore, the goal of this management plan is to control invasive species on site. Control consists

of the reduction of a species' density and abundance to a level that does not compromise the integrity of the ecosystem and allows native species to repopulate and thrive. For invasive plant populations which are large and pervasive, eradication is not feasible. In this situation, the more realistic management goal is to control the invasive species, primarily to deter the spread into new areas and reduce invasive species pressure in existing areas.

INVASIVE SPECIES DESCRIPTIONS:

Common Reed (*Phragmites australis*):
Common reed is a tall (up to 15 ft.), densely growing, perennial grass with purple or golden flowers in bushy panicles. It was likely introduced to North America from Europe by accident in ballast material in the late 1700s or early 1800s. It is similar to a native North American subspecies, *Phragmites australis* ssp. *americanus*. Common reed is a vigorous growing plant that forms dense stands that push out other plants including the native subspecies. It also alters wetland hydrology and degrades wetland wildlife habitat due in part to its very dense growth habit.

Glossy Buckthorn (*Rhamnus frangula*, aka *Frangula alnus*):
Glossy buckthorn is a perennial understory shrub or a small tree that can reach heights of 20 ft. It has oval, smooth, glossy, toothless, leaves that stay green late into the fall. Its berries transition from green to red before finally ripening to a dark purple in August and September. This species was introduced to North America as an ornamental shrub and used for living fence rows and wildlife habitat. It has spread aggressively and become a threat to the degradation of native forest habitats where it out-competes native plant species.

Japanese Knotweed (*Fallopia japonica*, aka *Polygonum cuspidatum* & *Reynoutria japonica*):
Japanese knotweed is a shrubby, herbaceous perennial which grows 4-10 ft. tall. It is often compared to bamboo, with smooth hollow stems, and stem leaf junctures with a membranous sheath. Its leaves are approximately 6 in by 4 in and range from oval to triangular with a tapered tip. In the summer it produces clusters of small white flowers. It was introduced to North America from East Asia in the 1800s as an ornamental plant and is now invasive throughout the northeastern and northwestern United States. It forms dense monotypic thickets which displace native vegetation. In addition to reproducing by seed, it also spreads through long rhizomes that can be challenging to remove completely.

Oriental Bittersweet (*Celastrus orbiculatus*):
Oriental bittersweet is a deciduous, woody vine, sometimes occurring as a trailing shrub, with alternate, rounded, finely toothed leaves. It has globular, green to yellow fruits which split open at maturity to reveal fleshy red-orange arils that cover the seeds. Originally from east Asia, it was introduced into the United States in the 1860s as an ornamental plant and has been widely dispersed by the many bird species who consume its fruit. Oriental bittersweet is a vigorous growing plant that threatens native vegetation from the ground to the canopy. Thick masses of vines sprawl over shrubs, small trees, and other plants, producing dense shade that weakens and kills them. Oriental bittersweet also appears to be displacing the native American bittersweet (*Celastrus scandens*).

DESCRIPTIONS OF TREATMENT METHODS:

When treating invasive vegetation on site, mechanical removal methods will be prioritized over herbicidal treatment whenever it can be practicable and effective. However, due to the aggressive and pervasive nature of invasive plants, herbicide treatment may be necessary. Herbicide treatment will selectively target invasive

vegetation, taking care to avoid impact to surrounding native vegetation. More detailed information on the appropriate removal methods that may be utilized as part of the proposed work are as follows:

Mechanical Treatment Methods

- *Cutting*: Cutting entails the gross removal of above ground plant material, either by manual cutting, mechanical cutting, or mowing. This method only removes the surface vegetation, and, in most circumstances, invasive plants regrow from the rootstock or latent seeds. Treatments using only this method will usually require repeated follow-up treatments. The timing of cutting should occur and be species specific to avoid inadvertent spread of any mature seed (i.e. cutting shall not occur when viable seeds are present on target species). It is anticipated that mechanical cutting will comprise the majority of post-construction invasive management activities, particularly in addressing Phragmites. Cutting of Japanese knotweed shall only be done by hand, in a stalk-by-stalk manner, and all cut material must be exported from the site, as this species is capable of resprouting from small amounts of vegetative material.

  Mowing may be conducted with hand-operated power tools or a walk-behind brush mower in any locations where target vegetation is located, provided however that mowing of Japanese knotweed is not acceptable. Alternatively, target vegetation may be mowed with a brush-cutting attachment on a machine such as an excavator or bobcat; however, such machinery shall not drive into or otherwise track through or across any BVW, Bank, or LUW in any manner which would compact or destabilize soils.

- *Weed Wrench*: The weed wrench is a tool which is used to uproot saplings of woody plants. The weed wrench grasps the base of the plant and uses a lever to uproot the entire plant including the roots. Using the weed wrench results in minimal disturbance to the surrounding soil and plants and is usually successful at removing the majority of the target plant's roots. Invasive plants to be targeted using this method include any woody species. This method will be used on scattered woody individuals of relatively small size.

- *Deadheading*: Deadheading is the removal of a plant's seed head before it goes to seed. This will not kill the plant but can prevent it from reproducing and spreading. It is also useful in depleting the plant's energy reserves for future herbicide applications. This method is useful primarily for herbaceous plants. At the moment this plan does not include deadheading, but it may be recommended during post-management monitoring.

- *Excavation*: In cases where the invasive species are particularly dense, the most efficient way to remove the bulk of the invasive plant species will be to remove the topsoil and root mass. Further, site work that is otherwise required for development can additionally serve this purpose. Removal of soil containing invasive species also removes the latent seed stock, thereby reducing the need for follow-up treatments of newly sprouting invasive plants. Any topsoil removed will be replaced with an equal amount of topsoil imported from off-site and inspected for evidence of invasive species prior to use.

  Excavation will be employed heavily during construction-phase activities. Within the limit of work, dense stands of invasive species will be excavated along with their root masses and associated

topsoil. These excavated materials will be exported offsite and disposed of in accordance with any applicable regulations.

Excavation shall be employed only within the limits of work as shown on the approved plans. As such, impacts caused by excavation do not extend beyond areas that are otherwise approved for excavation associated with site work. Excavation shall not impact Bank, Bordering Vegetated Wetlands, or Land Under Water Bodies and Waterways.

Chemical Treatment Methods

Herbicide application is the most effective way to ensure the long-term removal of target species. All use of this method would be conducted by a licensed herbicide applicator with specific herbicide and concentrations as outlined on the herbicide's label. Deviation from the stipulations of the herbicide's label is a violation of federal law. The herbicides recommended for the target species in this management plan include Glyphosate (RoundUp Custom or equivalent) and Triclopyr (Garlon 4 or equivalent). Glyphosate is recommended for most cut-stem applications and as a foliar application for phragmites, knotweed, and oriental bittersweet. Triclopyr is preferred for foliar applications of most invasive trees and shrubs because it primarily affects broadleaf plants and not grasses or conifers. These herbicides are effective and have a short half-life. Both are registered by the US EPA and MA Department of Agricultural Resources for aquatic use and are proposed for use here for this reason. Appropriate use by a licensed herbicide applicator will have a limited impact on surrounding non-target vegetation. Herbicide treatment will not be employed until it has been demonstrated that mechanical treatment methods have not been sufficient. It is not anticipated that chemical treatment will occur often or regularly.

- *Cutting and Dabbing with Herbicide*: Cutting & dabbing involves removing most of the above-ground plant material as described above, and then immediately treating the remaining cut surface with herbicide. This is the easiest and most efficient method to remove invasive trees and shrubs with woody stems. It is also effective against Phragmites reeds. It is a very controlled treatment method, leaving the surrounding non-target native vegetation unaffected. This method also decreases the likelihood of regrowth and the need for repeated treatments.

- *Bundle, Cut, & Treat*: This method is similar to the Cut & Dab treatment method, but is used exclusively on densely clustered vegetation with tall, narrow stems/canes. In this management plan, it will be used to target Phragmites. Treatment involves bundling large groups of phragmites canes and tying them together with twine at approximately waist height. Then the canes are cut just above the twine. Finally, an appropriate herbicide is painted directly onto the cut surfaces of the canes. Applying herbicide directly to the cut surface of the stems is a very controlled treatment method and limits potential herbicide exposure to non-target vegetation. Bundling the canes prior to treatment allows for greater efficiency.

- *Stem Injection Herbicide Application*: Stem injection involves the use of an injector gun with a hollow needle to inject herbicide directly into the inside of plants with hollow stems. Examples of these injector guns include JK Injector Systems. Injecting herbicide directly inside the plant stem is a very controlled method of herbicide application and significantly limits risk of herbicide exposure to non-target plants. This treatment method may be used on Japanese Knotweed.

- *Foliar Herbicide Application (Spray)*: Foliar herbicide application is a method of control which involves a tank-mixed solution of herbicide diluted with water to a concentration specified by the herbicide's label. This treatment method will be used as a last resort only, after all other treatments are considered and eliminated as viable options. A non-ionic surfactant is added to improve coverage and penetration of the herbicide. A non-toxic forestry dye is also added to allow for visibility of treated areas. This solution is sprayed from a backpack tank sprayer to thoroughly wet the majority of the target plants' leaves. Application will be carefully targeted to invasive vegetation and will cease before herbicide drips from leaves. The herbicide is absorbed through the leaves and transported into the plant's tissues. This treatment method will be conducted by an herbicide applicator trained to use foliar spray appropriately and will have limited impact on surrounding non-target vegetation. All invasive plant species in this management plan will likely by targeted using foliar spray, primarily for repeat or follow-up treatments.

ONGOING MANAGEMENT:

All areas within the limit of work will be subject to ongoing invasive species management activities while native vegetation becomes established. All management techniques described above may continue to be used after the completion of construction to manage any regrowth of invasive species. Monitoring, as outlined below in Section I, will evaluate the effectiveness of invasive management activities and make recommendations for continued management. Repeated mechanical removal/cutting of invasive species is an acceptable method of control. However, it should be noted that naturalized areas should not be mowed in a wholesale fashion. If mechanical management is to be employed in these areas, it should be done by targeted cutting with hand-operated tools or equipment. Targeted herbicide application is also acceptable if mechanical removal is exhausted as a viable option. Again, any mechanical removal of Japanese knotweed shall only be done by hand, in a stalk-by-stalk manner, and all cut material must be exported from the site

If necessary, additional native seed mix shall be spread, and/or potted specimens planted, within areas cleared of invasive species that are not otherwise specified to be planted as part of landscaping plans. Only native species (no cultivars) with an appropriate wetland indicator status for the area shall be planted in areas where invasive species have been thoroughly removed.

H. Wetland Replication

The Isolated Vegetated Wetlands (IVWs) proposed to be impacted will be replicated contiguous with the BVW system onsite in the southeastern corner of the property. Grading of the replication area shall be overseen by a qualified wetland scientist with authority to make field decisions in order to ensure sufficient wetland hydrology and a successful replication area. Wetland replication protocols shall adhere to the following sequence.

Step 1: Stake Limits of Work, confirm wetland flags in place & install ECB
Stake out limits of work for replication areas and confirm wetland flags are in place on site. Erosion control barriers shall then be installed in the form of straw wattles (or similar invasive-free barrier) placed at the limit of work for the replication area. These will remain in place and be maintained until the areas are completely stabilized and then may be removed after approval of the Conservation Commission or its Agent.

Step 2: Remove trees and vegetation
Save woody debris specimens and stockpile for reuse. Clear and remove all remaining vegetation as necessary within the replication areas and the IVW alteration areas in preparation for excavation and grading. If native vegetation can be retained, it shall. Access to the replication area will be obtained via an existing cart path, which will avoid the destruction of vegetation to the greatest extent possible.

Step 3: Excavation of IVW Alteration Areas
Pull all invasive plants and shrubs prior to transporting soils. Excavate IVW alteration areas and transport organic-rich topsoils to the wetland replication area for reuse if possible. Topsoil originating from areas known to contain invasive species shall not be reused.

Step 4: Excavation of new BVW Replication Area
An excavator or backhoe shall remove existing soils up to the edge of the staked BVW replication area boundary. Excavation will continue until redoximorphic features are reached in the soil profile. Once redoximorphic features are reached, excavation will cease. Subsoil of the C-horizon shall be loosened prior to Step 5 to ensure soils are not compacted prior to topsoil placement. Care will be taken to remove any invasive roots and plants within the area to ensure soils used in the replication area are uncontaminated.

Step 5: Final Grading of Replication Area
The target finished elevation of the replication area is anticipated to be approximately 270', subject to final grading plans and observed field conditions. Upon removal of existing soils down to the proper depth (as determined by the wetland scientist based on the presence of redoximorphic features in the soil profile), 6-12" of organic rich topsoil will be spread throughout the replication area. Soil excavated from the IVW impact areas may be reused for this purpose. If necessary, supplemental material to be added to the replication area shall consist of a 50:50 mix of loam and organic material with an organic content between 12 and 20%. This material shall be placed within the replication area to a total depth 6-12" and even with the surrounding proposed elevation on design plan, to be determined by the supervising wetland scientist. Final grade shall be confirmed to be proper by the wetland scientist prior to plantings. Placement of soil shall be such that no equipment drives over, or compacts placed soils. Final grading will result in microtopographic relief of pits and mounds. Topography will create areas that pool and flood during heavy rain events and see water near the surface during the wet seasons. Slopes around the replication area shall be graded to less than 2H:1V where practical and shall have erosion control mats installed as necessary. The wetland scientist onsite has authority to adjust grade based on field observations during construction in order to ensure sufficient wetland hydrology within the replication area.

Step 6: Call for inspection
After grading activities are complete, the supervising wetland scientist shall contact the Commission for an inspection and approval of final grades and proposed planting stock prior to planting.

Step 7: Place woody debris and boulders
Woody debris and boulders, if available, shall be randomly placed throughout the replication area to provide cover for wildlife.

Step 8: Planting
Precise siting of plants may be determined by the wetland scientist in the field prior to installation. All plantings shall be distributed throughout the area according to the attached planting plan; trees spaced at 10-15' on center; shrubs spaced at 6-10' on center. All plantings will be removed from burlap sacks, wire cages and plastic containers prior to planting. Each plant will have it roots loosened prior to planting to encourage root

growth away from the planting bulb. After woody plantings are installed, seed will be spread evenly throughout the planting and lightly raked in to ensure sufficient seed-to-soil contact. Seed will be applied at the manufacturer's recommended application rate. Leaf litter shall be spread throughout area if available. The erosion control barrier shall remain in place until the disturbed soils have been stabilized.

Step 9: Erosion Controls Removal

Once the replication area is stable, a request shall be submitted to the Conservation Commission's Agent to remove the erosion controls around wetland replication area. Upon approval of stabilization, erosion controls shall be removed promptly and any significant disturbance seeded with a wetland seed mix as specified above.

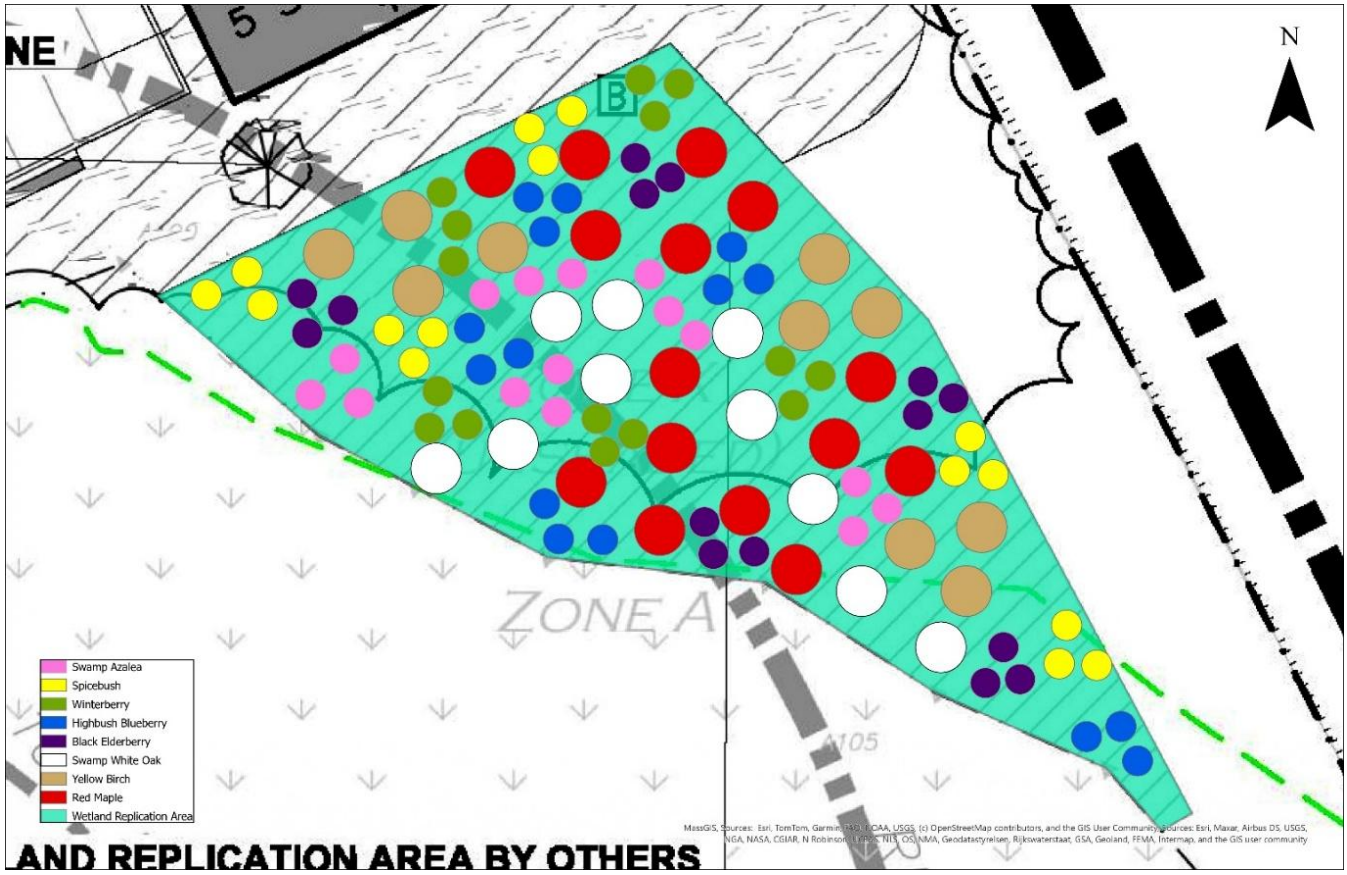

Figure 1: Wetland replication area planting plan.

Proposed Plantings for Replication Area (+/- 7,145 s.f.)

Common Name	Scientific Name	Number	Minimum Size
Trees (n= 35)*			
Red Maple (FAC)	*Acer rubrum*	15	3'
Yellow Birch (FAC)	*Betula allegheniensis*	10	3'
Swamp White Oak (FACW)	*Quercus bicolor*	10	3'
Shrubs (n=75)*			
Black Elderberry (FACW)	*Sambucus nigra*	15	1-2 gal. pot
Highbush Blueberry (FACW)	*Vaccinium corymbosum*	15	1-2 gal. pot
Winterberry (FACW)	*Ilex verticillata*	15	1-2 gal. pot
Spicebush (FACW)	*Lindera benzoin*	15	1-2 gal. pot
Swamp Azalea (FACW)	*Rhododendron viscosum*	15	1-2 gal. pot
Seed Mix- New England Wetland Plants WetMix			6 lbs.

*Planting species and seed mixes may be substituted with similar native species with the same wetland indicator status if certain species are unavailable at the discretion of the supervising wetland scientist.

I. Monitoring

Annual monitoring reports will be prepared by a qualified wetland scientist for a period of 3 growing seasons after completion of restoration activities for the areas that will be left to naturalize. This monitoring program will consist of early summer and early fall inspections and will include photographs and details about the vitality of the mitigation and restoration areas. Monitoring reports shall describe, using narratives, plans, and color photographs, the physical characteristics of the areas with respect to stability, survival of vegetation and plant mortality, areal extent and distribution, species diversity and vertical stratification (i.e. herb, shrub and tree layers). The monitoring program may utilize sampling plots or transects representative of the site to document species diversity, cover, etc. for snapshots of site conditions and/or for documenting change over time.

All areas will be monitored for invasive species to ensure the success of native plantings. Reports shall be submitted to the Commission by the end of each calendar year. Specifically, monitoring reports shall document the status of the following:

- Invasive species management success
    - Upon completion of the initial implementation of the project, three monitoring plots shall be established in areas representative of the site; a data sheet (comparable to the DEP Bordering Vegetated Wetland Determination Data Form) shall be completed at each monitoring plot during each monitoring event
- Regrowth and/or spread of invasive species
    - To include specific locations of focus identified with photos and/or graphics
- Establishment of native vegetation (plantings, seeded areas, and volunteers) in all planted areas
- Development of hydrology and hydric soils within the replication area
    - To include documentation of a soil profile within the replication area
- Overall soil stability and any observed erosion control concerns
    - To include an attestation that the entire limit of work has been inspected

Monitoring reports shall also recommend corrective actions to be taken if:

- Invasive species regrowth and/or spread appears problematic
    - (i.e. if invasive vegetation has spread to new areas or if control methods have been ineffective)
- Establishment of plantings or seed appears insufficient
    - (i.e. if significant die-off of plantings or areas devoid of herbaceous cover are noted)
- Soil stabilization is poor or if erosion issues are noted
    - (i.e. if erosion or sedimentation is observed)
- The replication area does not exhibit sufficient hydrology
    - (i.e. the replication area does not exhibit indicators of wetland hydrology)

The revegetation and naturalization proposed as part of this project will be deemed a success if all areas that were planted and/or seeded exhibit at least 75% cover by native vegetation.