



September 29, 2021

Alan Fryer, Chair  
Zoning Board of Appeals  
Dover Town House  
P.O. Box 250  
Dover, MA 02030

**Re:** Tetra Tech Peer Review Letter 2  
**Red Robin Pastures**  
Dover, Massachusetts

Dear Mr. Chairman:

The Applicant has provided revised submission materials addressing comments in our April 25, 2021 letter. This letter provides an update to those comments based on review of the Applicant's response and collateral materials submitted on September 22, 2021.

Applicant's September 22, 2021 submittal included:

- Cover Page dated September 15, 2021 prepared by PG Construction Management, inc. summarizing recent changes.
- Set of drawings "Red Robin Pastures" dated June 14, 2021 (Latest Revision - No. 3 - September 21, 2021) under cover page of Signature Designs Architecture (SDA). Set includes civil plans and details, architectural plans and elevations and a landscape plan.
- Storm Water Report for "Red Robin Pastures" dated April 5, 2021 (Latest Revision – September 13, 2021) prepared by Ronald Tiberi, P.E.
- Letter from Vanasse & Associates, Inc. dated September 14, 2021 updating Sight Distance measurements and findings to reflect revised driveway location.

The Revised Plans and supporting information represent a significant improvement and address many of our prior noted concerns. There has clearly been more attention paid to the quality of technical information, but the plans remain a challenge to understand and review due to cluttered and confusing presentation. Similarly, the supporting written documentation shows a great deal more attention has been paid to technical basis but still includes numerous typographical and/or grammatical errors that ideally should be addressed so the documents can be referenced cleanly in a decision.

Please note, the Project now includes an additional land area (approximately ½ acre) extending along the north and east project boundaries which has been integral to addressing many of our prior concerns as the added area provides needed space to fit required program elements with manageable offsets from abutters. In general, recent changes to the building design and site layout combined with the added site area make the Project substantially more viable than the prior design. We still have several comments/questions that we would appreciate having addressed.

Updated comment status is provided below. Text shown in gray represents information taken directly from previous correspondence. Text shown in black is new or updated information. Comments ending with "**Comment Resolved**" will be removed from future correspondence and numbering will be maintained so each issue can be tracked to its conclusion.

#### Major Points Summary (September 20, 2021 Update)

**Plan Content and Organization** – The civil plans show modest improvement and appear to address many of the prior technical oversights but are still very difficult to understand and poorly organized. We request the

Infrastructure Northeast

project team revisit its sheet presentation and content to provide a more understandable plan set that can be reliably referenced in a decision.

*Applicant Response: The applicant has attempted to address the issues raised in the 10.28.2021 Plan Set.*

**Stormwater Design and Documentation** – The revised submittal includes additional analysis and subsurface testing, and both the design and technical documentation are noticeably improved. We have some comments on the design but most of the information provided appears to be in order and demonstrates the Project can comply with applicable standards. Detailed design must be approved by the Dover Conservation Commission pursuant to Massachusetts wetland regulations (310 CMR 10.00).

**Emergency Access** – Emergency access is improved and allows for a Town of Dover Fire Department ladder truck to enter and exit the site without requiring an awkward turning maneuver.

**Wastewater Disposal** – The Project has provided documentation supporting viability of a wastewater disposal system capable of discharging proposed facility design flow. Although the information suggests compliance, detailed design must be approved by the Dover Board of Health pursuant to Massachusetts wastewater disposal regulations (310 CMR 15.00).

**Water Supply** – The project has provided none of the information requested in our April 25, 2021 comment letter. We continue to recommend the Board require the applicant to provide basic information demonstrating the water system can adequately serve the Project given its location at the end of a long dead-end main and compounded by the general town-wide concern about the serving water company.

*Applicant Response: The Applicant has previously provided a letter from Colonial Water confirming supply providing some conditions are adhered to. Per 40B regulations, if Colonial water supplies ANY water to ANY new user; then the Water Company must accommodate the 40B development. 40B case law clearly indicates that the private water supplier is seen as the municipal water supplier where no municipal water system exists.*

## Plan Comments

### Existing Conditions Plan

The Existing Conditions Plan is very rough and lacks important information and professional endorsement. Given the nature of the Project and the extent to which it requests relief from local regulations and standards a clear understanding of existing conditions on the Project Site and the adjacent public way as well as the relative location of key features on abutting properties will be critical. We request of the Existing Conditions Plan be improved as noted below.

1. We recommend engineering plans NOT be submitted in color to avoid confusion when/if plans are copied.

Sept. 29, 2021 Update – Plans have been submitted in black and white but are virtually unreadable in many cases. Please review content shown on each plan and organize information so it can be readily understood by the Board, town departments and the public. These plans will eventually be referenced in a decision and must be clear and explicit.

*Applicant Response: The applicant has attempted to address the issues raised in the 10.28.2021 Plan Set.*

2. The Existing Conditions Plan is not endorsed by a licensed land surveyor and does not include labeled property line bearings. Given the proposed project density and extent of work it is critical that the boundary shown is accurately defined by a licensed surveyor and confirmed boundary shown on the plans. Please update the plan to include at a minimum, surveyor reconciled bearing and distances for all

property lines, vertical datum reference, scale bar, and endorsement by a Massachusetts licensed surveyor as to the source and reliability of information shown.

Sept. 29, 2021 Update – Plans have been updated to include boundary information and datum reference but have not been endorsed by a licensed surveyor. We request the applicant provide a stamp or similar certification of the information.

*Applicant Response: The applicant is proposing to provide all of the required endorsements on the cover page of the electronic presentation and to provide wet stamps as required on the final plan sets of record*

3. Plans show two lots (A and B) but no corresponding interior lot lines. If the subject parcel is comprised of multiple lots interior lot boundaries should be shown on the plans.

Sept. 29, 2021 Update – Parcel information shown. **Comment Resolved.**

4. Coverage should be expanded to include at a minimum the approximate location of structures on abutting properties (or any others within 100 feet of the subject parcel), extension of contour coverage at least 10 feet onto abutting property (inferred from MassGIS LIDAR information if necessary), existing tree line and location of specimen trees (or trees greater than 24" in diameter), all utility and roadway infrastructure and topographical information for the complete width of the public right of way including descriptions. In particular, random valves and features should be removed or otherwise clearly labeled and all linework should correspond to the legend provided. All information provide should be assigned to and endorsed by qualified professional.

**Sept. 29, 2021 Update** – Requested information has been added. **Comment Resolved.**

5. No information is provided regarding proposed demolition or anticipated methods for pre-construction erosion and sedimentation control. We recommend the applicant include this information on the existing conditions plan to prove that required perimeter controls and temporary basins fit within the available property and proposed construction footprint.

**Sept. 29, 2021 Update** – A plan appears to have been added in response (Sheet C11), but lacks basic information and organization and is apparently mis-titled "Drainage and Grading Plan" Please review content and organize so its readable and addresses the issues noted.

*Applicant Response: The applicant has attempted to address the issues raised in the 10.28.2021 Plan Set..*

6. The plans show an extensive program of subsurface investigation which is very helpful, but results are not provided on the plans and several test pits share the same Test Pit number. We request the Applicant include test pit logs in the plans and that logs include the performance date as well as the name and qualifications of the person reporting the results. Care should be taken to ensure all elevations reference the same vertical datum and that the datum be referenceable (not assumed for Project).

**Sept. 29, 2021 Update** – Plans do not provide requested information. Test pit results should be summarized on the plans to provide for Board and public review.

*Applicant Response: There are a total of 19 Test Pit locations on the property, each with an individual detailed report. The Applicant has not included the test pit information directly in the plan set due to the volume of data and feasibility of inclusion, but the Applicant has submitted all of the test pit data in Word Format.*

### Site Layout and Utilities Plan

The Site Layout and Utilities Plan provides for a basic understanding of major project components. The Project appears to be generally well-suited for its location off Route 109 and near other similarly dense residential development. However, the plan provides only basic information and lacks design detail typically provided for review. Typically, utilities are shown on a separate plan and include all information needed to confirm infrastructure installed below grade is coordinated and constructible. We request future submittals include a specific Layout and Materials Plan showing proposed surface finishes and demonstrating that space allocated to those finishes is sufficient to accommodate the intended objective. At a minimum, we expect the Layout Plan will provide enough information to show how the site will be used and accessed by the residents and that surface improvements shown are coordinated with the construction and maintenance needs of underground infrastructure.

7. It would be helpful to have parking space dimensions and totals provided on the plan along with a comparison to the number of spaces required for the proposed use.

Sept. 29, 2021 Update – Plans include parking space dimension (Sheet C2) but no summary or comparison to required parking is provided. Please provide information requested and remove “Utilities” reference from sheet title since sheet does not show utility information.

*Applicant Response:* . The requested information is provided on Sheet C3 in the 10.28.2021 plan set.

8. Please label proposed setbacks and provide a summary comparing proposed setbacks to those that are required under current zoning.

Sept. 29, 2021 Update – Proposed building setbacks are provided without comparison or reference to zoning requirements. Zoning reference and comparison is not critical. **Comment Resolved.**

9. The plan shows a proposed fire system storage tank. Please provide documentation as to its intended use and operation parameters.

Sept. 29, 2021 Update – No documentation or response has been provided. At a minimum, please provide confirmation that size and location shown have been approved by the Dover Fire Department.

*Applicant Response* The applicant recently met with the Dover Fire Department to review the Fire System storage tank. The Fire Department official asked that the location of the storage tank be moved slightly closer to County St for ease of access. The relocation of the storage tank has been addressed in the most recent plan set. Sizing requirement of the storage tank was prepared previously by Wozny/Barbar and Associates, Consulting Engineer. This documentation has been presented to Dover Fire Department and has been resubmitted as part of the most recent submission.

10. The proposed access drive layout appears to provide adequate accommodation for fire trucks to navigate through the site but should be confirmed by providing a Fire Truck Access figure showing the proposed route and confirming no obstructions are placed in the anticipated path.

Sept. 29, 2021 Update – Requested information provided. **Comment Resolved.**

11. The Plans suggest that responding fire apparatus are expected to stage at two potential locations along the front of the building that will require the apparatus to back out onto Route 109. There appears to be enough space for the fire apparatus to enter the site via its driveway from Route 109 and navigate the parking lot, but the plan appears to show a dedicated staging area off the northeast corner of the building that seems difficult to access.

Sept. 29, 2021 Update – Fire trucks can reliably navigate through the site and are no longer required to back into Route 109. **Comment Resolved.**

12. Plans show a landscape wall along the access drive. It appears the wall is not required for grading purposes although it is labeled as a retaining wall. Please provide clarification on the purpose and intent for this wall.

Sept. 29, 2021 Update – Proposed walls are clear as to intent. **Comment Resolved.**

13. The plan does not show parking lot light fixtures. The lighting plan suggests light fixtures will be located at the end of stalls reducing the effective stall dimension. Please show all proposed surface features on the Layout Plan.

Sept. 29, 2021 Update – Plans show proposed light pole locations and appear to be coordinated with below grade structures. However, no fixtures are shown at the front of the site or along the access drive nor are lighting plans/details or a photometric plan demonstrating lighting levels provided. We request the applicant provide a lighting plan showing all intended exterior fixtures and corresponding photometric plan.

*Applicant Response:* The Applicant has prepared a lighting plan which is included in the 10.28.2021 Plan Set.. Please refer to Sheet L2.

14. We do not recommend a dedicated bus pull out as shown. It is our understanding that bus companies prefer to load from the travel lane directly to minimize the risk of bypassing vehicles. We also consider the bus turnout unnecessary given traffic is required to stop in both directions.

Sept. 29, 2021 Update – Bus pull-out eliminated. **Comment Resolved.**

### Standard Title V System Plan and Detail Sheet

The septic system design provided does not appear to meet basic standards. Correction will likely result in a much larger system footprint potentially impacting the layout of the proposed stormwater detention system.

15. No Reserve Area is shown on the plans. New septic system designs must include “a reserve area sufficient to replace the primary absorption system” and there does not appear to be adequate space for a reserve area on site. Please provide a design meeting standards.

Sept. 29, 2021 Update – Plans appear to provide adequate space to accommodate both a primary and reserve area. However, the subsurface disposal system appears to be very close to test pits where marginal soils have been noted. This issue can be addressed through the Board of Health’s review and approval under 310 CMR 15.00. **Comment Resolved.**

16. The system shown is not a pressure dose system as required for systems over 2,000 gallons per day. Please provide a design meeting standards.

Sept. 29, 2021 Update – The standard leaching facility design provided is still not a pressure dosed system as required. However, the design includes enough information to demonstrate system viability and incorporates effluent loading rates of a dosed system. **Comment Resolved.**

17. The Effluent Loading Rate noted (0.74 gpd/sf) is the incorrect loading rate for Class II soils with a percolation rate below 5 min/in. The Effluent Loading Rate for pressure dose systems in Class II soils is 0.63 gpd/sf. Please provide a design meeting standards.

Sept. 29, 2021 Update – Correct loading rate used. **Comment Resolved.**

18. Please provide a preliminary design for the proposed system only rather than multiple options.

Sept. 29, 2021 Update – Plans incorporate requested changes. **Comment Resolved.**

### Presby Sanitary System Plan

This plan appears to present an alternate subsurface soil absorption system. The Presby system is an approved Title 5 innovative/alternative technology and can be used provided all aspects of its DEP approval are met. Although an approved technology, it has far less performance history and as such less demonstrable reliability than traditional systems designed per the requirements of 310 CMR 15.00. In addition, the Presby system includes much more maintenance and proprietary components. We recommend the Board request the applicant to provide a traditional system meeting all requirements of 310 CMR 15.00 instead of proposing an innovative/alternative technology. If the Presby system is to be used comments 14 and 15 must be addressed.

*Applicant Response: The Applicant believes this comment is no longer applicable and that the required detail has been provided.*

### Drainage and Grading Plan

The Drainage and Grading Plan is difficult to read and understand but it does contain most of the information needed to understand intended management strategy. Given the number of technical issues that need to be addressed between the septic system and the stormwater design, we question if the adequate area exists on site to meet applicable standards and design requirements.

19. Please use consistent and clear labeling and take care to make sure line types match those noted in the

legend and that all acronyms and abbreviations are defined.

Sept. 29, 2021 Update – Plans are extremely difficult to read with multiple lines representing varying content with very similar appearance. Plans include irrelevant information such as pavement hatching and interior building room layout which could be removed to make drawing more readable. Please try and improve presentation quality.

*Applicant Response: The applicant has attempted to address the issues raised in the 10.28.2021 Plan Set.*

20. The entire parking lot drains to a single catch basin/water quality unit. This makes the system susceptible to flooding in the event the structure is compromised and can lead to system bypasses if the structure is blocked.



Sept. 29, 2021 Update – Plans now show parking lot draining to what looks like a vegetated swale but grading suggests direction to a low point and its unclear if the pavement edge is curbed. If vegetated swale please avoid consolidation of flow so runoff is more equally distributed over the swale length and clearly indicate edge of pavement treatment and terminus points.

*Applicant Response: The applicant has addressed this item in the 10.28.2021 Plan Set. Please refer to Sheet C4 for updated grading and swale detail.*

21. The grading plan suggests underground infiltration systems will be constructed in areas of fill supported by retaining walls. The design will need to address how proposed retaining walls will manage hydrostatic loads from infiltrating stormwater without allowing breakout or excessive loading of the wall.

Sept. 29, 2021 Update – Plans indicate an impervious barrier will be installed to limit potential short-circuiting through the wall, but barrier only extends to the bottom of recharge system. Barrier should extend to the top of the infiltration system, be shown on infiltration system detail and included in required mounding analysis.

*Applicant Response: The applicant has addressed this item in the 10.28.2021 Plan Set. A copy of the mounding analysis has been submitted for the record. Please refer to Sheet C10*

22. The applicant's response to town comments indicates a site-specific wall design has been provided. We were unable to find the design. Please provide a copy for review and confirm that the wall will have no weep holes or similar controls that will allow infiltration bypass.

Sept. 29, 2021 Update – Detailed wall designs have been provided in prior responses that show a viable wall system and the revised plans propose a significantly smaller wall. Please update wall design documentation to reflect current wall layout and include reference to wall system on drawings.

*Applicant Response: The applicant has addressed this item in the 10.28.2021 Plan Set. Please refer to Sheets C13 and C14.*

23. A trench drain and drywell are proposed at the entry to the site but no calculations or test pit information has been provided documenting its performance and no pretreatment is shown prior to infiltration. Please address in subsequent designs.

Sept. 29, 2021 Update – Drywell has been eliminated but plans indicate a catch basin will be added to collect runoff from the drop off area however the catchbasin accepts flow from a yard drain and roof drains and bypasses downstream water quality measures. Please revise the plans to maintain separation of pavement drainage from clean roof and yard runoff and provide required treatment prior to discharge.

*Applicant Response: All pavement drainage and clean roof/yard runoff has been combined into the same drainage network. All run-off will pass through Stormwater Treatment Units as is required prior to discharge. All piping, treatment, etc. has been designed/sized accordingly.*

24. Stormwater infiltration systems must be at least 50 feet from the wastewater subsurface disposal system and ideally the reserve area as well so that the infiltration system does not need to be relocated if the reserve area is to be used.

Sept. 29, 2021 Update – Plans indicate the infiltration system is approx. 50 feet from the standard soil absorption system and project will need to demonstrate compliance with wastewater guidelines as part of board of health review under 310 CMR 15.00. **Comment Resolved.**

25. The proposed method of underground storage seems poorly suited to installations in fill. We have experience with similar systems repeatedly failing during backfilling due to lateral loading. We recommend the Board ask the applicant to consider more proven storage solutions.

Sept. 29, 2021 Update – Concern is mitigated by the placement of the facility in a remote area of the site. Applicant has expressed confidence in the proposed system. We defer to the engineer of record but request the applicant provide at least one example of a similar sized system installed locally. **Comment Resolved.**

26. The level spreader threshold elevation is 10 feet below the infiltration pond outlet. This suggests water will drop 10 feet into the stilling basin below with what appears to be less than 10 feet between the outlet and the discharge. Please provide the basis for the designs shown addressing how the energy of the falling water will be dissipated before encountering the spillway.

Sept. 29, 2021 Update – Plans indicate water will drop inside the outlet control structure and flow to the stilling basin through a pipe with a relatively shallow slope reducing potential scour at the outlet. We recommend the outlet be relocated to direct its discharge along the long stilling basin dimension instead of the short dimension proposed. **Comment Resolved.**

27. Please specify the “Stormwater Treatment Unit” proposed for this application and be sure model can treat volume anticipated.

Sept. 29, 2021 Update – Units are specified and appear to be appropriately sized for anticipated flow and final selection is subject to confirmation during the Project’s review by the Dover Conservation Commission under 310 CMR 10.00. **Comment Resolved.**

### Landscape Plan

The Landscape Plan appeared to be well thought and appropriate to the application and suggests a robust assortment and density of site landscaping. Tree sizes are specified at 3-inch caliper which is also appropriate.

28. Plans should show at least 10 feet of abutting property to ensure that as plantings installed along the project boundary grow, they will not impact abutting property.

Sept. 29, 2021 Update – Requested information provided. **Comment Resolved.**

29. Please coordinate proposed planting with underground infrastructure. In particular, it appears trees are proposed above the fire water storage tank. Landscape will also need to change as the design of subsurface disposal systems changes.

Sept. 29, 2021 Update – Revised plan has been coordinated with civil drawings and no conflicts have been identified. **Comment Resolved.**

30. Please show the location and design of the proposed facility sign

Sept. 29, 2021 Update – No information has been provided related to the proposed facility sign. Recommend the Board not grant relief from local sign regulations unless detail of sign is provided.

*Applicant Response: The Applicant has not yet prepared proposed signage. The Applicant will adhere to all local signage requirements or file a minor modification request with the ZBA post permitting for approval on the exterior signage once designed....*

31. Please describe landscape treatment for parking aisle islands, if any.

Sept. 29, 2021 Update – Plans provide requested detail on parking island planting. **Comment Resolved.**

32. Site distance triangles should be added to the landscape plan to ensure proposed plantings will not interfere with required sight lines for traffic entering onto Route 109.

Sept. 29, 2021 Update – Updated sight distance calculations have been provided but triangles are not shown on the plans. Request the applicant provide a plan or figure depicting required sight distance triangles to confirm required lines of sight are met and maintained.

*Applicant Response: The Applicant has since provided a memo and plan inclusive of sight distance triangles prepared by Vanasse and Associates and dated October 13<sup>th</sup> 2021. Site distance information has also been included on Sheet C9 in the 10.28.2021 Plan Set.*

33. Please provide a detail of the “reinforced grass”.

Sept. 29, 2021 Update – Reference removed. **Comment Resolved.**

#### Lighting Plan

34. Parking lot light fixtures are proposed at the end of a parking stall. Please coordinate placement so that the fixtures are adequately protected from damage and placement does not reduce effective parking stall dimension.

Sept. 29, 2021 Update – Requested changes made. **Comment Resolved.**

35. The Lighting Plan suggests no lighting will be provided at the main entrance, along the driveway (except for building wall packs), in the landscaped area between the buildings or for the Dog Park or Community Garden. Please confirm that all proposed exterior lighting is shown on the plan or otherwise describe what is excluded from the analysis.

Sept. 29, 2021 Update – A Lighting Plan was not found despite Cover Sheet indicating one was included in the submittal. Please provide lighting plan showing information requested.

*Applicant Response: The Applicant has submitted a lighting plan in the 10.28.2021 Plan Set. Please refer to Sheet L2.*

**Storm Water Report**

It is our understanding that the Stormwater Report has been submitted for initial informational purposes and should be considered draft despite its inclusion of a stamped endorsement on the cover. We appreciate having the information but expect a more accurate and thorough report will be submitted later since the draft version contains multiple typographical and grammatical errors as well as substantive errors in design that must be addressed to allow for a more thorough review. What has been submitted does not demonstrate compliance with applicable standards. Some of our concerns are noted below for the purposes of defining expectations on future submittals.

36. Please address typographical, grammatical and unit tracking errors so the documents can be more easily reviewed and understood.

Sept. 29, 2021 Update – Supporting documentation does a better job of presenting the information but is relatively difficult to understand as written and presented. Highly recommend the document be revised to address grammatical errors and clarity prior to submitting to conservation commission. Document was understandable enough to support our technical review of the Preliminary Plan. **Comment Resolved.**

37. The report references use of an 8.27 in/hour infiltration rate however none of the test pits provided were conducted in the infiltration area. Based on our review of the available information we do not believe an 8.27 inches per hour exfiltration rate is supportable and application of more reasonable rates will result in a larger storage and infiltration volume being needed. Values and conclusions related to pre- and post-development discharge rates should not be considered accurate.

Sept. 29, 2021 Update – Test pits were performed, and documentation provided demonstrating use of 8.27 in/hour exfiltration rate is supportable. **Comment Resolved.**

38. Discharge from a point source should not be considered the same as sheet flow over a larger area. Runoff to the rear of the site is predominantly by sheet flow across the complete length of project boundary whereas under proposed conditions the discharge is concentrated over a much smaller area. Documentation should address this change and substantiate how off locus property is not impacted by the proposed changes in discharge.

Sept. 29, 2021 Update – Revised design includes a long stilling basin and spillway addressing our comment. **Comment Resolved.**

39. When performing hydrocad analysis, modeling should follow the specific guidance for modeling infiltration included in the Stormwater Handbook. In particular, infiltration should only be calculated over system

bottom area and use static infiltration rates. It appears the analysis model uses “wetted area” and an infiltration rate that varies with water depth. Required changes are likely to increase system size.

Sept. 29, 2021 Update – Model incorporates required changes. **Comment Resolved.**

40. Report should demonstrate clearly how required pre-treatment of pavement runoff prior to infiltration is provided.

Sept. 29, 2021 Update – Pre-treatment is provided through grass swale and water quality units. However, flow routing to/from catchbasin at front must be revised to eliminate contribution from roof and lawn and to direct to pretreatment. **Comment Resolved.**

41. The required water quality volume was not calculated properly. Please address and describe how the required volume is provided.

Sept. 29, 2021 Update – Required water quality volume was calculated properly. However, the amount of water quality volume provided is overstated (includes storage area above discharge). Our independent calculations show design meets minimum standards. Recommend future versions of the report address calculation error. **Comment Resolved**

42. The site is not a redevelopment site and LID measures are not accurately referenced. Most notably the project will not “minimize disturbance to existing trees and shrubs” as the site will be nearly completely cleared of vegetative cover.

Sept. 29, 2021 Update – Checklist has been updated to more accurately reflect proposed conditions however several errors remain including but not limited to (1) project is not a redevelopment project, (2) infiltration is used to mitigate post development runoff and there is less than 4 feet separation from groundwater and as such a mounding analysis is required, (3) the construction period erosion and sedimentation control plan and the stormwater pollution prevention plan do not meet minimum standards. However, these are not critical to project review under the comprehensive permit but should be addressed prior to submission to conservation commission. **Comment Resolved.**

43. Please provide a plan demonstrating how construction period erosion and sedimentation controls will be installed and maintained.

Sept. 29, 2021 Update – Plan that we suspect was provided in response to this comment is not labeled properly and does not include information requested. Please revisit the request and provide a clear plan showing all erosion and sedimentation control measures.

*Applicant Response: Please refer to Sheet C2 on the 10.28.2021 Plan Set.*

44. Checklist noting proposed LID measures is inaccurate. The project (1) can't possibly be considered to minimize disturbance of trees and shrubs since 100% of the will be disturbed and (2)) does not reduce impervious coverage. Please review and address in future submittals.

Sept. 29, 2021 Update – Comment addressed. **Comment Resolved.**

### Traffic Report

The Traffic Report was professionally prepared, well organized and addressed traffic related project impacts in a manner consistent with applicable guidance and expectations. We concur with the report's fundamental conclusion that the project will result in a negligible impact on nearby intersection function and that the Project driveway is at a location providing adequate site distance in each direction. We offer the following comments

and recommendations



45. Figure 5 – Trip Distribution appears shows “222” passing the site entrance heading east which we believe is a typographical error and can be ignored. The Figure is understandable as shown and edits are not required.

Sept. 29, 2021 Update – No edits needed. **Comment Resolved.**

46. The Traffic Report includes an offer to prepare a Traffic Signal Warrants Analysis for the Route 109/Walpole Street intersection. We recommend the ZBA accept the offer and ask that the applicant perform the analysis and provide a summary report. The report will provide additional information in support of its eventual decision and can be valuable information available for general use by the Town

Sept. 29, 2021 Update – Signal Warrant Analysis has not been provided.

*Applicant Response: A signal warrant analysis can be conditioned as a condition to the Comprehensive Permit. Existing incremental traffic flow generated by the proposed development does not come close to meeting the warrant for the project entrance.*

47. We request that sight distance triangles be shown on at least the Project Site Layout Plan along with a note specifying that it must be maintained as necessary to ensure minimum required sight distances are met.

Sept. 29, 2021 Update – Plans do not show sight distance triangles. We recommend they be added to the plans prior to any approval.

*Applicant Response: The Applicant has since provided a memo and plan inclusive of sight distance triangles prepared by Vanasse and Associates and dated October 13<sup>th</sup> 2021. Sight distance information is provided on Sheet C9 in the 10.28.2021 Plan Set.*

48. We recommend the ZBA include a condition requiring implementation of the Transportation Demand Management (TDM) measures listed in the Traffic Report in any Comprehensive Permit approval.

Sept. 29, 2021 Update – No response required. **Comment Resolved.**

### Conservation Commission Comments

As part of our review, a Tetra Tech wetland scientist conducted a site visit to review the location of the wetland line noted on the plans and to perform a reconnaissance of the potential vernal pool located to the rear of the property. Neither of these actions are considered delineations as that responsibility should remain with the applicant and should be documented through processes included in the Massachusetts Wetland Regulations 310 CMR 10.00. Based on our field visit, the wetland line noted on the plan appears to be accurate. The wetland is fairly well-defined by topography and is not likely to vary significantly from that shown on the plans. Its actual boundary must be approved by the Dover Conservation Commission per Massachusetts Wetland Regulations. Our scientist also inspected the area identified as a “potential vernal pool” and determined it would meet MassWildlife’s Natural Heritage & Endangered Species Program (NHESP) vernal pool certification requirements.

Sept. 29, 2021 Update – Revised plans include an “A series” wetland line which we understand corresponds to the edge of wetland as determined by methodology prescribed under the local bylaw. The plans also include a “VP series” line which corresponds to the limit of potential vernal pool and edge of Bordering Vegetated Wetland (BVW) as regulated under the state wetlands regulations (310 CMR 10.00). Our wetland scientist has inspected the VP series line and has confirmed that it is a reasonable approximation of both the edge of vernal pool and the limit of BVW.

*Applicant Response: The Applicant believes no additional explanation is necessary....*

#### Construction Management Plan

49. The documentation submitted does not include any information on construction staging or temporary controls to manage runoff during construction. We recommend the ZBA request the Applicant to provide a Construction Management Plan clearly describing how construction on such a limited site will be accomplished without risk to abutters or the use of the Route 109 right of way. At a minimum, the CMP

should show the proposed building footprint and limit of excavation, construction trailers, contractor parking, construction dumpsters, emergency access, material/soil stockpile areas, delivery/turnaround area, crane staging area (if applicable) and construction period erosion and sedimentation controls meeting requirements of the USEPA NPDES Construction General Permit.

Sept. 29, 2021 Update – The added site area reduces potential for impacts to abutting properties, but the Project still occupies nearly the entire site. We recommend the Board require the Applicant to provide a basic plan addressing expected schedule and sequencing and designating areas where critical construction functions will be performed.

*Applicant Response: The Applicant would expect as a condition to the Comprehensive Permit that a construction management plan will be required to be submitted to the ZBA for its review and approval as a prerequisite to receiving a building permit.....*

#### New Comments (Sept. 20, 2021 Update)

50. Request the drawings be organized so that plans are presented sequentially with details at the back to make review and references in decision easier. Please restrict plan content to information that is relevant to the sheet title and subject. Suggest the following sheets be used (in order): Existing Conditions Plan, Demolition and Erosion Control Plan, Layout Plan, Grading and Drainage Plan, Utility Plan (showing outline of Presby System disposal area), Landscape and Lighting Plan, Fire Truck Access Plan. (example from sample project attached for reference)

*Applicant Response: The applicant has attempted to address the issues raised in the 10.28.2021 Plan Set.*

51. Sheet A1.1 and Sheet C2 are redundant. Consider consolidating information on a single sheet, ideally a Site Layout and Materials Plan.

*Applicant Response: The applicant has attempted to address the issues raised in the 10.28.2021 Plan Set.*

52. Plans should clearly distinguish “State” wetland resource area boundaries and buffer zones from “Local” wetland resource areas and buffer zones. If the Project intends to seek a waiver of the local wetlands bylaw, we recommend removing reference to waived local resource area boundaries.

*Applicant Response: Reference to the “Local” resource area boundaries have been removed on the 10.28.2021 Plan Set.*

53. Main entry turnaround face of curb appears to be within several inches of the proposed vestibule column creating an almost certain that it will be hit by circulating traffic or damaged during snow removal. Recommend resolution of conflict including consideration of an alternate access geometry. The proposed front entry and circle, although workable, is a bit awkward and inefficient. We recommend the applicant consider a “u-shaped” front access that provides a secondary means of access and better circulation. See attached sketch.

54. *Applicant Response: The Applicant has redesigned the front entrance of the development to be more consistent with the Peer Reviewer request.*

55. Show stop bar at exit and provide sight distance triangles as requested in prior comments. Please note, grading shown suggests sight lines facing east may be blocked by earth mound.

*Applicant Response: The Applicant has since provided a memo and plan inclusive of sight distance triangles prepared by Vanasse and Associates and dated October 13<sup>th</sup> 2021. The plans have been updated to show stop bar at exit. Earth mound or any other item blocking sight lines will be removed/modified as required.*

56. Concrete walkway and bench at front should extend to the edge of road and include an area for wheelchair maneuvering.

*Applicant Response: Revised design incorporates a concrete walkway and landing area suitable for wheelchair maneuvering. Please refer to Sheet C3 on the 10.28.2021 Plan Set*

57. Please modify parking island layout to eliminate outward facing 90-degree curb transitions. Pointed transitions will damage tires and are a danger to snow removal. Please confirm if the grass pavers noted on the landscape plan and the fire access plan are required emergency access. If so, please provide a detail of the proposed installation so Fire Department can confirm suitability for application and provide a more direct means of access from the parking area.

*Applicant Response: All 90-degree curb transitions have been eliminated in most recent Plan Set.*

58. Show proposed limit of clearing on the plans and indicate where tree protection, as shown in detail on Sheet C8 will be used.

*Applicant Response: Erosion Control and limit of clearing are shown on Sheet C2 in the 10.28.2021 Plan Set. Tree protection detail (now shown on Sheet C11) will be used on any tree to remain that has the potential to be impacted construction operations.*

59. Review proposed contours and confirm contours tie out properly in all locations. For example, contours at main entry do not appear to close properly and indicate an extremely step grade change along the west curb face.

*Applicant Response: The applicant has addressed this issue in the 10.28.2021 Plan Set.*

60. Note storage and surrounding stone dimension on R-Tank Chamber Detail (Sheet C7) as well as proposed connections (size and elevation) so dimensions can be confirmed with modeling analysis. Please also show the location and elevations of proposed impermeable barrier on the detail.

*Applicant Response: The applicant has addressed this issue in the 10.28.2021 Plan Set. Please refer to Sheet C10*

61. Provide call out for specific stormwater treatment unit on the drainage plan. Model shown in detail on sheet C7 does not appear to accommodate a double grate arrangement shown on the plan. Please also provide information demonstrating the unit selected is sized appropriately for the application. *Applicant*

*Response: The applicant has addressed this issue in the 10.28.2021 Plan Set. Please refer to Sheet C10*

62. Applicant has indicated they intend to use a “commercial” loading rate when designing the “Presby System” rather than the “residential” loading rate. The proposed use is, without question, a residential application and should incorporate residential loading rates and/or design requirements. *Applicant*

*Response: The applicant has addressed this issue in the 10.28.2021 Plan Set. Please refer to Sheet C6*

63. Please show any private wells within 200 feet of the current project boundary and a note indicating such on any plans showing the wastewater disposal system and note location of any proposed vent.

*Applicant Response: The applicant is not aware of any private wells within 200ft of the current project boundary.*

64. Please show where fence will be located and indicate material type and height. The only fence noted is on the landscape plans and shown only in the vicinity of the community garden. *Applicant Response:*

*The applicant has addressed this issue in the 10.28.2021 Plan Set. Please refer to Sheet L1*

65. Remove “Registry Use” note included on the cover sheet is unless required.

66. Sheet C2 includes an “RT” in the revision no. box, please address in future submittals

67. Show model information and dimensions for vehicle used on the Fire Access Plan (Sheet C10). *Applicant Response: The applicant has addressed this issue in the 10.28.2021 Plan Set. Please refer to Sheet C9*

68. Please eliminate any extraneous details. For example, Sheet C8 includes a detail for permeable pavement but none is shown on the plans and same for pole lamp detail. Same applies for duplicate trench detail on Sheet C9. *Applicant Response: The applicant has addressed these issues in the 10.28.2021 Plan Set.*

In closing, we appreciate the work done by the project team to address our comments and find most of the documentation to be responsive to our technical comments. However, the submittal appears to suffer noticeably from a lack of attention to detail hampering our ability to review and provide more focused comments. We would greatly appreciate if submittals were better organized and proofed prior to future submissions. As always, please feel free to contact me at (508) 786-2230 with any questions.

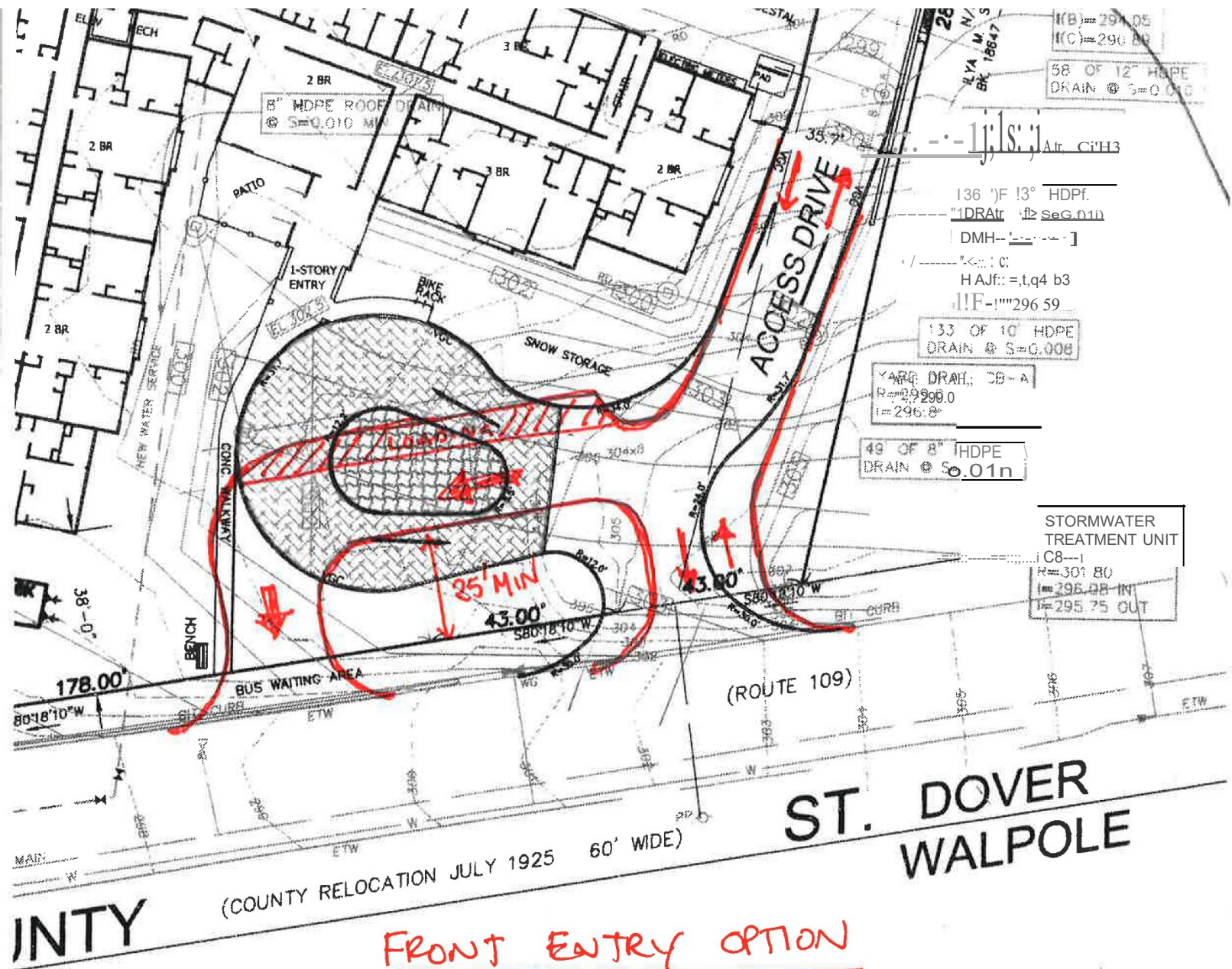
Very truly yours,



Sean P. Reardon, P.E.  
Vice President







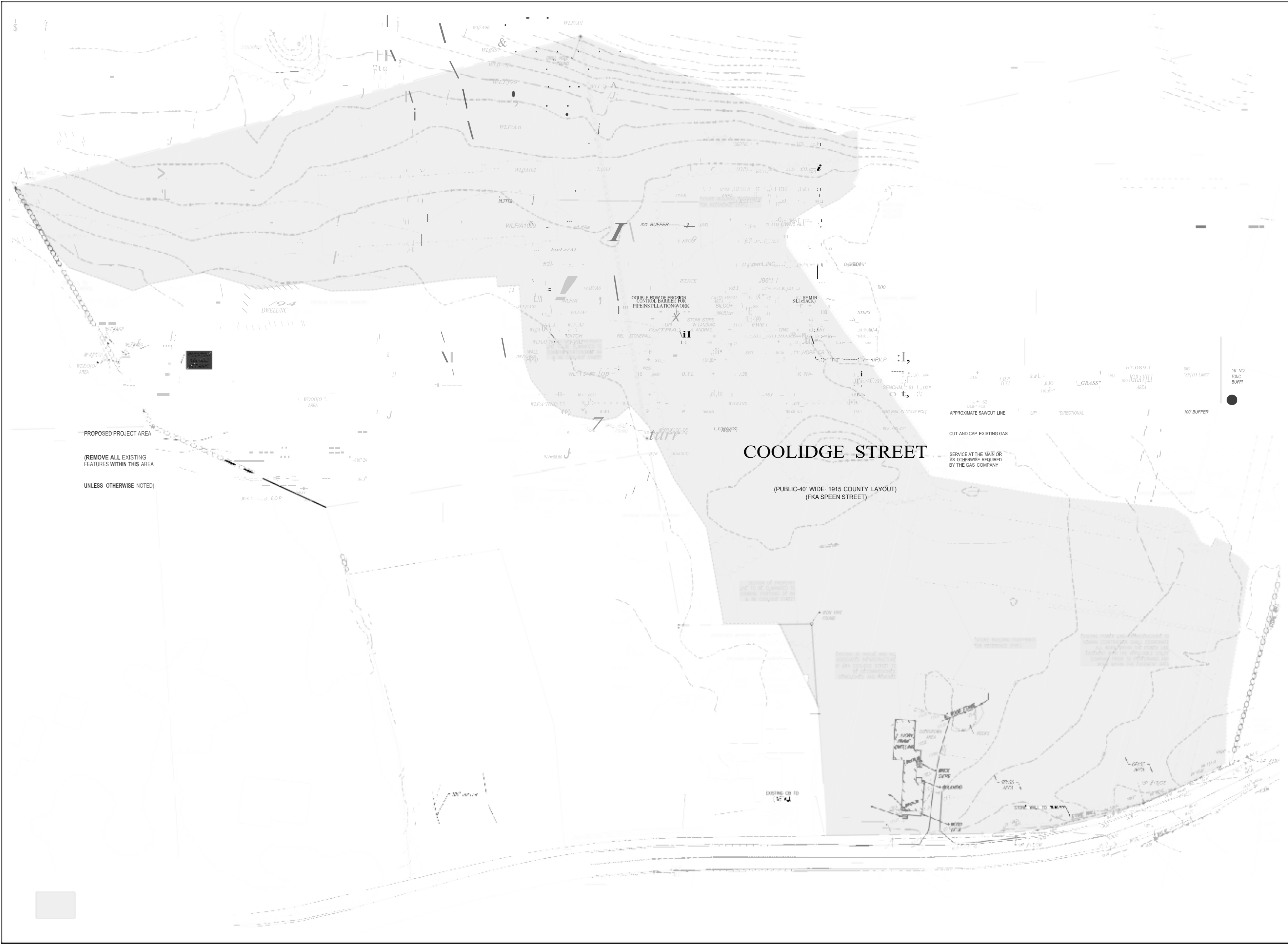
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REVISIONS:

REV	DATE	COMMENT
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ZONING BOARD OF APPEALS

SEAL:

MATTHEW A. EDNER, P.E.

PREPARED BY:

CIVIL DESIGN GROUP, LLC

DATE: 04/25/2011

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www.baystonedevelopment.com

PROJECT:

**COOLIDGE CROSSING**

84 & 86 COOLIDGE STREET  
SHERBORN, MASSACHUSETTS

SCALE:

GRAPHIC SCALE IN FEET

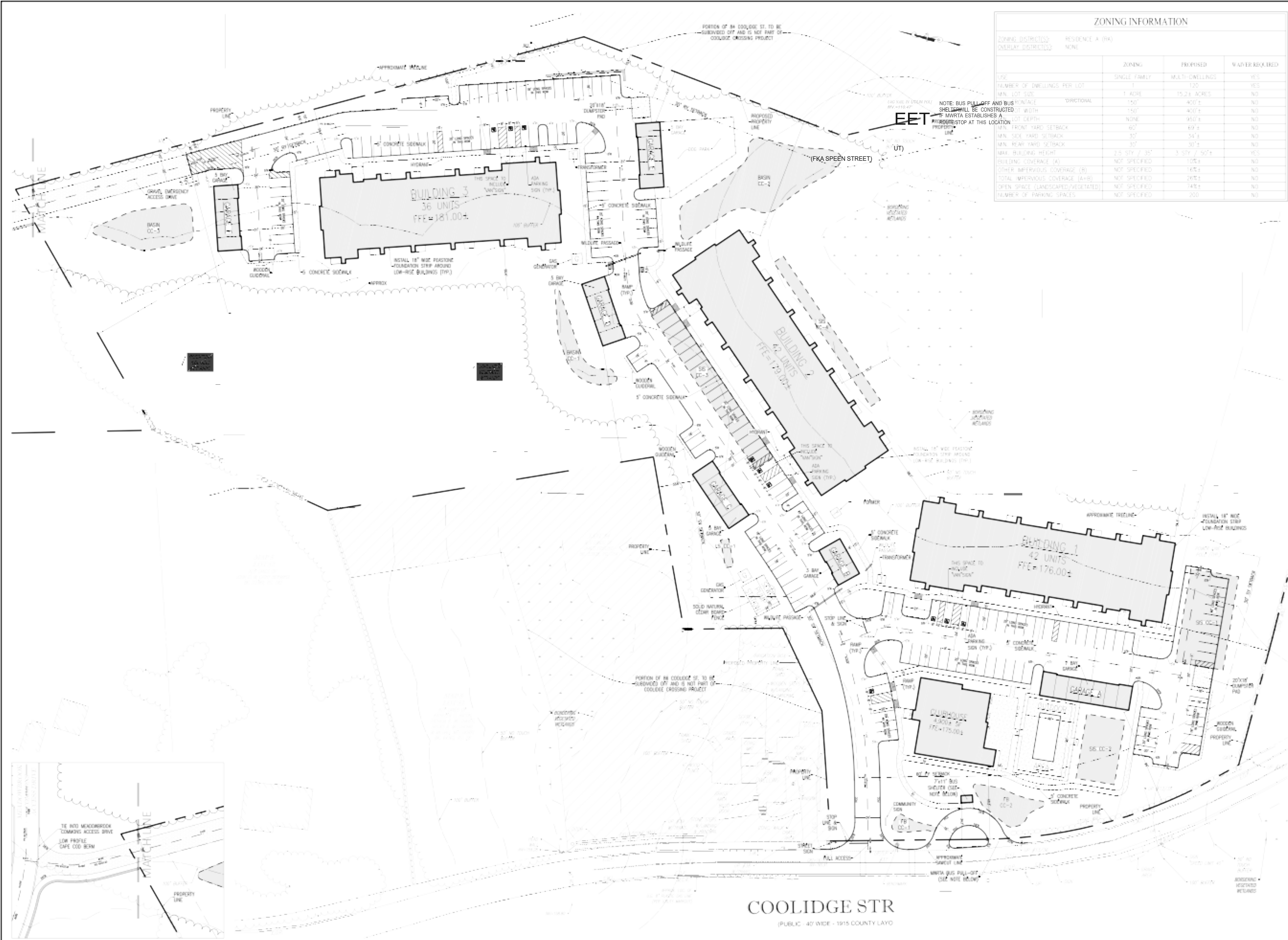
SHEET:

**DEMOLITION & EROSION CONTROL PLAN**

3







ZONING INFORMATION			
ZONING DISTRICT	RESIDENCE A (RA)		
OVERLAY DISTRICTS	NONE		
USE	SINGLE FAMILY	MULTI-DWELLINGS	WATER REQUIRED
NUMBER OF DWELLINGS PER LOT	1	125	YES
MIN. LOT SIZE	1 ACRE	15.24 ACRES	NO
MIN. LOT WIDTH	150'	450'±	NO
MIN. LOT DEPTH	NONE	950'±	NO
MIN. FRONT YARD SETBACK	60'	60'±	NO
MIN. SIDE YARD SETBACK	30'	30'±	NO
MIN. REAR YARD SETBACK	30'	30'±	NO
MAX. BUILDING HEIGHT	2.5 STY / 35'	3 STY / 50'±	YES
BUILDING COVERAGE (A)	NOT SPECIFIED	10%±	NO
OTHER IMPERVIOUS COVERAGE (B)	NOT SPECIFIED	14%±	NO
TOTAL IMPERVIOUS COVERAGE (A+B)	NOT SPECIFIED	24%±	NO
OPEN SPACE (LANDSCAPED/VEGETATED)	NOT SPECIFIED	74%±	NO
NUMBER OF PARKING SPACES	NOT SPECIFIED	200	NO

REVISIONS		
REV	DATE	COMMENT
1	04/23/21	UPDATED PLAN SET PER TBA COMP. PERMIT REVIEW PROCESS
2		
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DATE: 01/22/2021		
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ZONING BOARD OF APPEALS

SEAL  
  
MATTHEW A. LEIDNER, P.E.

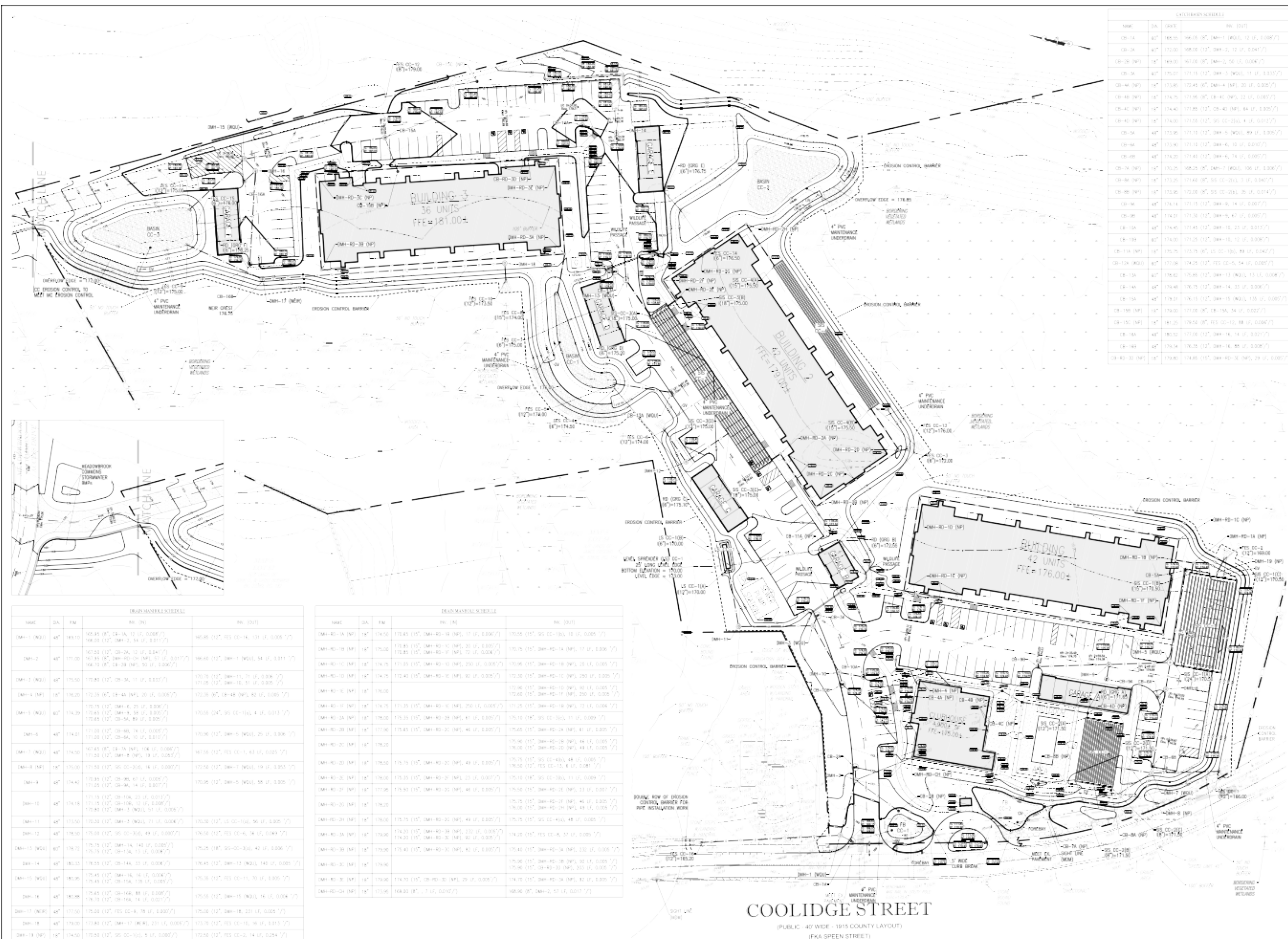
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PROJECT:  
**COOLIDGE CROSSING**  
84 & 86 COOLIDGE STREET  
SHERBORN, MASSACHUSETTS  
SCALE: 40' 0' 20' 40' 80'  
GRAPHIC SCALE IN FEET

SHEET:  
**SITE LAYOUT PLAN**  
5





NOT FOR CONSTRUCTION

CDC PROJECT # 20012

REVISIONS

REV	DATE	COMMENT
1	04/23/21	UPDATED PLAN SET FOR 2BA COMP. PERMIT REVIEW PROCESS
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ZONING BOARD OF APPEALS

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WESTON, MA 02493  
www.baystonedevelopment.com

PROJECT

COOLIDGE CROSSING

84 & 86 COOLIDGE STREET  
SHERBORN, MASSACHUSETTS

SCALE

0 20 40 80

GRAPHIC SCALE IN FEET

SHEET

GRADING & DRAINAGE PLAN

6

DATE

01/22/2021



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S52C q

TM

BUFFER

50' NO TOUCH  
BUFFER

t

WLF/C6  
WLF/C21  
WLF/C1V1

WLF/C

WLF/C26

WLF/C23

DRILL HOLE

50' NO TOUCH  
BUFFER

3/4

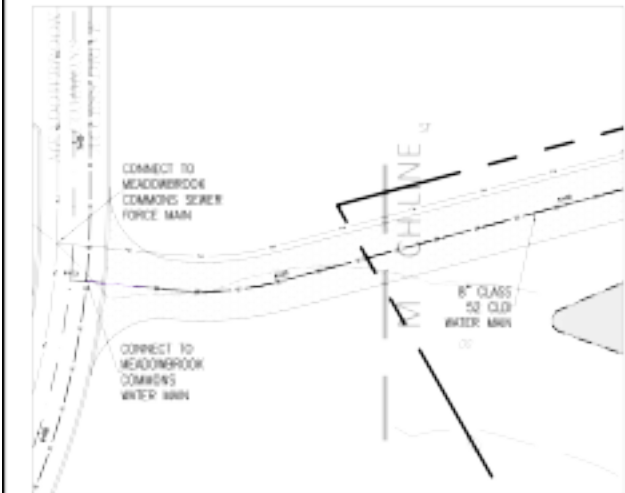
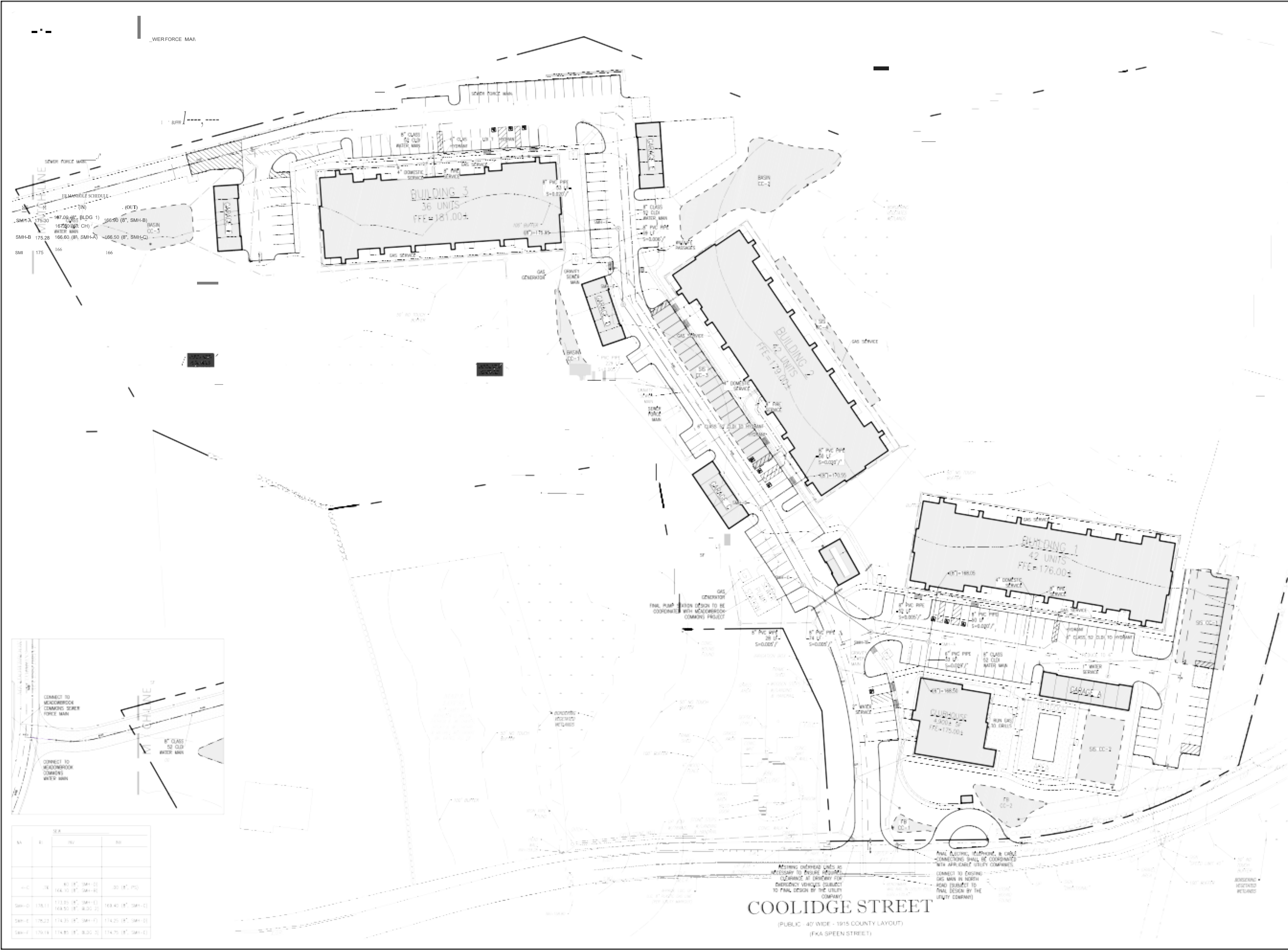
BUFFER

PVC PIPE  
0.5033" CCV

WER CE

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SEA			
NA	SI	IV	NO
4-C	1K	60 (18" SMH-E) 164.30 (18" SMH-E)	30 (18" PS)
SMH-D	175.11	113.95 (18" SMH-E) 168.50 (18" R-30.2)	168.40 (18" SMH-E)
SMH-E	175.22	114.35 (18" SMH-E)	174.25 (18" SMH-E)
SMH-F	175.18	114.85 (18" R-30.2)	174.75 (18" SMH-E)

NOT

CDG	200	
REVISIONS:		
REV	TE	COMMENT
1	04/23/21	UPDATED PLAN SET PER IBA COMP. PERMIT REVIEW PROCESS
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ZONING BOARD OF APPEALS

TE: 01/22/2021

AL

MATTHEW A. LEIDNER, P.E.

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PROJECT:

**COOLIDGE CROSSING**

84 & 86 COOLIDGE STREET  
SHERBORN, MASSACHUSETTS

SCALE:

40 0 20 40 80

GRAPHIC SCALE IN FEET

SHEET:

**UTILITY PLAN**

7

DA