



**LEBANON PLANNING BOARD
DECEMBER 17, 2024 - 7:00 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

1. Call to Order

- A. To participate in this meeting, please [join live via Microsoft Teams](#) or call 929-229-5356 (access code: 801 679 091#). If you have trouble accessing this meeting, please [email tim.corwin@lebanonnh.gov](mailto:tim.corwin@lebanonnh.gov).

2. Public Hearing Items

- A. **Brickyard One Nominee Trust, 174 Hanover Street (Tax Map 48, Lot 4), 0 Hanover Street (Tax Map 48, Lot 2), 0 Hanover Street (Tax Map 48, Lot 1), and 238 Hanover Street (Tax Map 63, Lot 1), zoned R-1, R-O-1, R-3 & RL-3:** Request for Site Plan Review and a Conditional Use Permit pursuant to Sections 308.2, 310.2, 311A.2, and 501.2 of the Zoning Ordinance for a proposed 474-unit multi-family Planned Unit Residential Development (PURD) totaling +/- 731,600 sq. ft. in size, consisting of 11 buildings together with parking, utilities, landscaping, access, and other related site improvements. Applicant also requests a Conditional Use Permit pursuant to Section 308.4 of the Zoning Ordinance to allow an increase in the maximum permitted building height from 45 ft. to 55 ft.
PB2024-22-CUPSPR - Continued from December 9, 2024 [Link to the minutes](#)

3. Study Items

- A. Review of Proposed Amendments to the Zoning Ordinance and Zoning Map - Discussion continued from the December 9, 2024 Planning Board Meeting

4. Approval of Minutes

- A. November 12, 2024
B. November 25, 2024

5. Other Business

6. Adjournment

The order of agenda items is subject to change.

Meetings are open for in-person and remote attendance. Members of the public that wish to attend remotely may do so by going to [LebanonNH.gov/Live](https://lebanonnh.gov/live) where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupts virtual or phone connection(s), the meeting will continue without remote access capabilities.

December 10, 2024

Ref: 52933.00

Mr. Nathan Reichert
Planning and Development Director
51 North Park Street
City Hall, 5th Floor
Lebanon, NH 03766

Re: The Brickyard Multi-family Planned Unit Residential Development (PURD)
174 Hanover Street Ext. & 238 Hanover Street (Map 48 Lots 1, 2, & 4 and Map 63 Lot 1)
Project Description and Impact Statement for Site Plan Review

Mr. Reichert,

In support of the site plan review application, this letter provides a project description and impact statements for the proposed multi-family Planned Unit Residential Development (PURD) project (the Project) located at 174 Hanover Street Extension & 238 Hanover Street (the Site). This letter has been updated from the original submission in May 2024 to incorporate changes made to the building program and site layout based on feedback from the City of Lebanon and the Planning Board.

Project Description

Summary

The Applicant, Brickyard One Nominee Trust, is proposing a new multi-family Planned Unit Residential Development (PURD) with associated parking, stormwater management, utilities, landscaping, and pedestrian/vehicular access, on Tax Map 48 Lots 1, 2, and 4 and Tax Map 63 Lot 1 located at 174 Hanover Street Extension and 238 Hanover Street. As currently proposed, the Project is comprised of five (5) residential apartment buildings over vehicular parking, totaling 422 units. Fifty-one (51) townhome units are proposed, and an additional building is proposed at the northeast corner of the Site, which is anticipated to contain the development's leasing office, maintenance shop, and one residential unit for the on-site property manager. The site program totals 474 units, which includes the 12% density bonus granted through the Use of Technique as a PURD.

The Site encompasses approximately 135.9 acres on four parcels of land primarily consisting of woodland, with areas previously developed as the former Densmore Brick Company's mining and manufacturing facility and a series of electric transmission lines. The overall property that the Project is situated within includes four local zoning districts, however all work is proposed within the R-1, R-3, and RO-1 districts.

Engineers | Scientists | Planners | Designers

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The RL3 district area that covers approximately 105 acres toward the rear of the property will not be developed as part of this application and has not been included in the PURD density or open space calculations (refer to attached PURD calculation figures). The RL3 property area may be developed as part of a separate future application, with access provided through the Project Site utilizing one of the proposed parking area driveways.

The Site topography consists of significant grade change, generally sloping down from west to east. Densmore Pond, associated streams and wetland resource areas are situated at the low point of the Site near Hanover Street.

The site improvements include a looped driveway accessed via Hanover Street at either end, additional surface parking throughout the site, and parking below the five apartment buildings. The Project was designed to minimize disturbances to the existing wetlands to the maximum extent possible. A trail system is present north and northwest of the Site. The Site is proximate to I-89 access, the Hanover Street School and Lebanon High School, and is within 2 miles of Dartmouth Hitchcock Medical Center. Additionally, Advance Transit's Heater Landing bus stop is currently only 0.2 miles from the Site, and following a meeting with Advance Transit, they do not intend for a new stop to be needed at the proposed site given the proximity to Heater Landing.

These components of the development are discussed in greater detail in the following sections. Please also refer to the attached site plans for a graphical depiction of the Project as well as technical details.

Site Layout

The site layout was developed in a way that accommodates the existing site characteristics, including topography, wetlands, Densmore Pond, and surrounding roadways, and respects the nearby existing mountain biking trail system. Proposed buildings are oriented to balance earthwork, minimize the overall disturbed area. Additionally, the Project intends to activate the area along the banks of Densmore Pond and overlooking the brick kilns as resident amenities and a tribute to the Site's legacy.

Vehicular circulation is provided via a looped driveway accessed via two full-service curb cuts along Hanover Street. Two access points provides continuous fire access and disburses daily traffic, and is offset by the removal of two existing driveway curb cuts. Parking is available along both sides of the site driveway and each apartment building will be constructed using podium style construction, offering vehicular access to a covered parking area below the building. The proposed townhomes will be self-parked, with at least 2 spaces provided at each within the garage or within their own driveway. The proposed maintenance building has parking located at the rear of the structure and spaces within the structure's garage. An additional parking area at the north end of the site has been provided to permit public access to the open space on the site and the trails up the hill.

Addressing the natural topography and reducing the Project's overall disturbance, below-building parking will be built into the hillside at Building 5. For Building 5, the garage will be located at the ground-level facing in towards the development, but the rear side of the building will have the first level of residential units at ground level. In the opposite fashion, due to the structure being above the existing ground level, Building 2 will have residential at the ground-level floor facing the inside of the site, but the parking garage will be below and not visible from within the site. The parking levels are at least partially open-air



on the remaining three sides. Buildings 1, 3, and 4 are true podium style buildings in that the parking area below the building is open-air on all four sides. It should also be noted that parking spaces below buildings are reduced to 8'x18' to allow more covered parking and reduce site impervious area. Site parking spaces regulated by the Zoning Ordinance meet the required 9'x18' dimensions.

Townhomes will be integrated into the existing slopes similar to the apartment buildings, where buildings located on the western slope using parking at the site ground-level and the first residential space being located one floor up at grade on the high side. On the eastern side of the road, townhomes are anticipated to have a walkout living space to a lawn one level lower than the roadway and garage entrances.

Amenity spaces in the forms of a dog park, kiln overlook area, overlook patio space, a playground and two amenity spaces with outdoor seating, tables and potentially fire pits leverage site features and topography to offer tenants welcoming outdoor spaces and viewpoints.

Transportation

Access to the Site will be provided via a looped driveway accessed via two full-service curb cuts along Hanover Street. As described previously, parking spaces exceeding the quantity required by the local zoning ordinance is proposed throughout the Site comprised of a combination of covered and typical surface parking. The layout has been designed to accommodate circulation of emergency vehicles. The Applicant is providing bike storage on-site in excess of the quantity required by the local zoning ordinance. A sidewalk exists on the east side of Hanover Street, accessed from the Site via crosswalk at its southern driveway entrance, and the northern driveway is providing a sidewalk extension to potentially set up a future crosswalk down Old Etna Road. The Site is proximate to I-89 access and less than one quarter mile from Advance Transit's Heater Landing bus stop. A Traffic Impact Study has been provided as part of this application, and discusses existing and proposed traffic conditions in detail.

Wetlands

Existing wetlands exist on-site and were field delineated by Goddard Consulting. As such the Project falls within the Wetlands Conservation District. Based on the wetland inventory, as depicted on the Lebanon Wetland Overlay District Map, none of the wetlands on the site are listed as High or Very High Value wetland inventory, and therefore there are no associated buffers zones.

Wetlands have been respected in the design of the Project to the maximum extent practicable, with priority given to minimizing wetland impacts. Due to the location of the wetlands on-site, access to the development area requires that both proposed site driveways include one stream and associated bordering wetland crossing. To minimize wetland impacts by locating driveway crossings at the narrowest suitable areas, the Applicant acquired parcel 63-1 and realigned the original driveway layouts. The resultant cumulative proposed wetland impacts are less than 3,000 SF and as such the Project is expected to require an impact permit from the NHDES Wetlands Bureau. Accordingly, the Project is exempt from a special exception requirement at the local level.



Stormwater Management

The Project will provide a stormwater management system pursuant to City of Lebanon and New Hampshire Department of Environmental Services (NHDES) regulations. To provide adequate water quality and water quantity control, improvements to the stormwater management system will include new catch basins and pipe network infrastructure that will direct the stormwater runoff to a series of surface and subsurface treatment/detention systems to achieve water quality and quantity control. A comprehensive Stormwater Management Report has been completed and is included with this site plan review application. Please refer to that document for detailed stormwater management information.

Utilities

Connections to existing municipal and private utilities located in Hanover Street are proposed as follows.

Water

The Project will connect to the existing 10" water main within Hanover Street at both proposed driveway locations to create a looped water main providing domestic and fire protection services throughout the Site. Existing fire hydrants are located along Hanover Street and not intended to be modified by the Project. Additionally, the Project proposes hydrants along the site driveway intended to provide appropriate building coverage and easy access for apparatus. Hydrant locations and apparatus accommodations shall be reviewed by the Lebanon Fire Department. Hydrant flow testing will be conducted to confirm the existing pressures and flow rates near the Site and support the buildings' fire protection design by others.

Sewer

The Project will connect to the existing 12" PVC sewer main in Hanover Street at both proposed driveway locations. Connections are anticipated to consist of new precast concrete manhole structures installed along the existing sewer main with masonry troughs to properly introduce sanitary sewage flow generated by the development to the flow in the existing main.

Other Utilities

Electric, phone, cable/data, and fire alarm service to the Site is anticipated to be provided by new connections to the existing infrastructure in Hanover Street.

Landscape

Landscaping will include a mix of native and acclimated/hardy deciduous and evergreen trees, shrubs, perennial groundcover and spring bulbs. The proposed plant palette will provide year-round interest through seasonal changing of foliage, blooms, bark color and texture, winter berries and a variety of evergreen species. Plant material will be used to frame and enhance views as well as screen at grade different elements of the site like transformer pads, parking areas, and dumpster enclosures.

The Project has included detailed layouts for amenity spaces for residents, and utilizes the changing topography to create inviting spaces for the future residents of the development.

A detailed Landscape Plan is included in the Site Plans accompanying this letter.



Construction Schedule

Construction is anticipated to begin in February 2025, beginning with tree cutting, building demolition, and debris cleanup. Once the necessary permits are obtained, site grubbing and earthwork operations will commence. Construction of roadways, utilities, building pads, and the maintenance building itself will also be part of Phase 1. Construction of the maintenance building is estimated to begin in February 2026. Construction of the apartment buildings is expected to begin in March 2026, with construction of a new building beginning each year. Construction of the townhouse buildings is expected to begin in March 2027, with construction of a new building beginning every 6 months. Occupancy of each building is anticipated upon its individual completion. Refer to the Phasing Plans included in the Site Plans accompanying this letter for more information related to the construction phasing intent.

Project Impact Statement

Pursuant to Section 5.1.G.4. of the Lebanon Site Plan Review Regulations, the following statements of impact are offered as outlined in 6.9.B. of the Site Plan Regulations.

1. Natural resources and environmental quality including, but not limited to, water quality, air quality, wetlands, soil erosion and agricultural soils and a statement of pollution control and environmental impact mitigation measures.

In support of the site plan review application which this letter is part of, as well as the upcoming NHDES wetland permit and Alteration of Terrain Permit applications, a Stormwater Management Report and supporting Erosion Control Plans outline the impacts and mitigation measures for the Project.

2. Capacity of the school system; effect on school bus transportation and distance of the proposed subdivision from the nearest elementary school.

These items are addressed in the report attached hereto prepared by Fougere Planning and Development dated December 10, 2024 entitled "Fiscal Impact Analysis". Please refer to that document for detailed analysis and findings.

3. Adequacy of streets and/or sidewalks in the general area of the subdivision including major intersections providing access, and such other areas as requested by the Board.

The Applicant and VHB attended a scoping meeting with the City Staff and NHDOT to identify intersections to be analyzed as part of the Site Plan Application. As such, a comprehensive Traffic Impact Study was prepared which analyzed the traffic generated by the Project at the proposed driveways and nearby intersections relative to existing conditions and various future conditions. The Traffic Impact Study is included with the site plan review application this letter is part of. Please refer to that document for detailed analysis and findings.



4. Sufficiency, availability, and capacity of utility services to provide water, fire protection, and sewer, and further, the impact of the subdivision on the municipal solid waste disposal facilities.

Public and private utilities are available in Hanover Street. The Applicant will be submitting for a Sewer Allocation from the City for sewer capacity. A hydrant flow test will be performed to understand the flow rate and pressure available to the Site for domestic and fire protection services. Lebanon DPW will review the municipal utilities sufficiency and capacity as part of the Site Plan review process and the design refined as required. The Applicant will contract with a solid waste disposal company to remove the residential solid waste collected in dumpsters on-site.

5. (If applicable) The impact of on-site subsurface sewage disposal systems as to adjacent wells, water supply systems, and any known aquifers so designated by the United States Geological Survey.

Not applicable. Sanitary sewage generated by the Project will be collected on-site and discharged to the existing public sewer infrastructure in Hanover Street.

6. Any special fire, police and public safety problems due to location and/or special conditions relative to the type of use.

Portions of these items are addressed in the report attached hereto prepared by Fougere Planning and Development dated December 10, 2024 entitled "Fiscal Impact Analysis". Past meetings with City Staff did not identify any specific conditions or problems with the Site, however the Applicant will continue to coordinate with City Staff and the appropriate departments to address concerns that may arise during permitting.

7. Impact of drainage from the subdivision on abutting properties and potential drainage problems both on the site of the subdivision and downstream from the subdivision.

A stormwater management plan has been prepared in accordance with the City of Lebanon regulations and NHDES Alteration of Terrain regulations and is included in this application package. Peak rate mitigation and stormwater quality treatment standards have been met or exceeded. The stormwater management design has been reviewed Peer Review Engineer as part of the site plan review process, with no major comments to date. The Applicant will continue to work with the City of Lebanon engineering staff and the Peer Review Engineer to satisfy their comments for site plan approval. Additionally, the Project will be submitting the stormwater management design to the NHDES Alteration of Terrain Bureau following the site plan process, as part of the upcoming Alteration of Terrain Permit. A copy of those documents will be shared with the City at the time of the NHDES submission.

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8. Fiscal impact statement analyzing the impact of the subdivision on municipal, school and county revenues and expenditures, including estimated potential tax revenue and estimated number of school children.

These items are addressed in the report attached hereto prepared by Fougere Planning and Development dated December 10, 2024 entitled "Fiscal Impact Analysis". Please refer to that document for detailed analysis and findings.

On behalf of the Applicant, we hope this information is satisfactory in describing the Project, its approach, and its impacts to the community. Please feel free to contact me with any questions you may have.

Thank you,

A handwritten signature in blue ink, appearing to read "D Fenstermacher".

Dave Fenstermacher, PE
Managing Director



December 16, 2024

Ref: 52933.00

Mr. Nathan Reichert
Planning and Development Director
51 North Park Street
City Hall, 5th Floor
Lebanon, NH 03766

Re: Proposed Multi-Family Development ("The Brickyard").
Site Plan Review Application
PUD/PURD Narrative Pieces

The following narrative has been provided as a supplement to the initial submission of the multi-family Planned Unit Residential Development (PURD) project, referred to as "The Brickyard". The pieces below intend to address both the design procedure documentation and the criteria for an Impact Statement for both a PUD and PURD outlined in Section 501.1 and 501.2 of the City of Lebanon Zoning Ordinance.

PUD Site Plan Preparation Requirements (Section 501.1.E.1.a. through d.)

- a. *Delineation of Site Resources and Required Open Space:*
 - i. *Show the location of all environmentally sensitive areas of high resource value which shall include:*
 - a. *floodplains as defined in Section 402.1;*
 - b. *wetlands and buffers as defined in Section 401.2;*
 - c. *perennial stream courses and adjacent buffers as defined in Section 410.3;*
 - d. *slopes in excess of 25%;*
 - e. *Significant Ecological Areas (SEAs) and Co-Occurrence areas as identified in Natural Lebanon the 2010 natural resources inventory prepared for the City of Lebanon, available on the City of Lebanon website;*
 - f. *vernal pools;*
 - g. *wildlife corridors; and*
 - h. *species or habitat of significance known or found to occur on or in close proximity to the subject property.*
 - ii. *Indicate areas of moderate resource value which shall include:*
 - a. *areas with agricultural soils of national and statewide significance as defined by the Grafton County Natural Resources and Conservation Service;*
 - b. *aquifers; intermittent streams; and*
 - c. *historic and cultural structures or features including stonewalls and cellar holes.*
 - iii. *Propose a prioritization of the Site Resources in terms of their highest to least suitability for inclusion in the Open Space for the proposed development. The proposed prioritization should reflect the value of each Site Resource relative to one another. This determination may be refined in consultation with the Planning Board during conceptual review and/or as part of the Board's review of the CUP application.*

- iv. *Identify and delineate between proposed Open Space area(s) as defined in Section 501.1.F below and the area(s) suitable for development taking into account:*
- the location of the Site Resources;*
 - the tract's context in relation to natural, historic, and cultural areas on adjoining and nearby properties;*
 - the minimum percentage and acreage of required Open Space areas; and*
 - the Open Space public benefit criteria set forth in Section 501.1.J.1.a.ii below.*

Response: Natural resources were verified and delineated on the Project Site prior to development of a concept. Refer to the existing conditions plans for locations of the floodplains, wetlands, and stream courses. Vernal pools were not found within the development area for the Project. Slopes in excess of 25% were mapped by the City of Lebanon GIS and used for the Project's open space calculations.

Based on the mapping as part of Natural Lebanon, found on the City of Lebanon website, the Site does not contain any Significant Ecological Areas (SEAs), but there appears to be a small area further up the mountain northwest of the Project Site. The Project will continue to coordinate with Town Staff to identify and minimize any impacts to the SEA.

The Project has submitted to the NH Natural Heritage Bureau and the site was found to have two wildlife species of concern in the area; an area of Rich red oak rocky woods, located west of the Project Site at the higher elevations of the mountain, and crested sedge found further west up the mountain in wetland areas. Based on the location of the development, the Project Team does not anticipate impacts to either species and will be coordinating with the state agency on mitigating any potential impacts.

Based on a cursory review of the Grafton County Natural Resources and Conservation Service website, the subject site does not contain areas with agricultural soils of national or statewide significance.

Though the Project Site has been a part of Lebanon history as the Densmore Brick Company, the Project Team has not found records that indicate there are historic or cultural structures or features on the site. There are old brick kilns that were used when the Densmore Brickyard operated, and the Project is currently intending to keep the kilns that are still standing in place (where safe to do so).

The Project prioritized the following Site Resources in the stated order:

- Wetlands, Vernal Pools and Streams;
- Floodplains;
- Wildlife corridors/species or habitats of significance;
- Significant Ecological Areas (SEAs)
- Slopes in excess of 25%

Given the nature of the existing site, avoiding impacts to slopes of 25% would be the most difficult due to the existing terrain. Prioritizing wetlands and streams was an achievable goal that the Project was able to take steps to address, such as the acquisition of additional land to preserve wetlands area adjacent to Densmore Pond, minimizing impacts associated with accessing the interior of the Site. The Project does

not anticipate impacting floodplain or species/habitats of significance, and therefore is prioritizing those Site Resources quite highly.

Based on the calculation required in Section 501.2 for PURD projects, the subject Project will require 12.02 acres of open space dedicated for public benefit. Please refer to the Open Space Plan (sheet C1.2 of the Site Plans) and exhibits submitted as part of this application. The Open Space is proposed on the north and south sides of the Site where streams and wetland areas can transect providing ecological value to the Open Space. Densmore Pond has not been included as part of the Open Space.

- b. *Location of Building Sites: Potential building sites (e.g. building footprints or building envelopes) shall be tentatively located, using the proposed Open Space/development areas as a base map. Accessory buildings and building setback lines shall also be indicated. Building sites shall be located with careful consideration given to:*
- a. *Relevant property data such as topography and soils;*
 - b. *Potential impacts, both positive and negative on the Site Resources. Measures to mitigate adverse impacts on the Site Resources shall be provided;*
 - c. *Providing attractive views and visual settings for residences to the maximum extent practicable; and*
 - d. *Providing adequate solar orientation to the maximum extent practicable*

Response: Refer to the Project Plans for locations of the proposed apartment buildings and ancillary structures and amenities. The proposed apartment buildings were generally located on the west side of Densmore Pond in order to provide distance from Hanover Street and the abutters located along the road. Additionally, the locations of the buildings were placed to avoid impacting the Site Resources like wetlands, steep slopes and streams.

The buildings face desirable sight lines towards either Densmore Pond or up the mountain to the west. Higher floors along Densmore Pond will likely have views of the valley due to the elevation of the site. Trees and forested areas are being maintained to the maximum extent possible in order to preserve natural views and screen both tenants and abutters from undesirable views of other buildings.

- c. *Alignment of Roads, Driveways and Trails: The plans shall be designed to provide vehicular access to each building, complying with the applicable standards in the Site Plan Review Regulations and/or the Subdivision Regulations, as applicable, and bearing a logical relationship to topographic conditions. Impacts of the vehicular access design on proposed Open Space areas and the Site Resources shall be minimized, particularly with respect to crossing environmentally sensitive areas such as wetlands and traversing slopes exceeding 15%. Road connections shall be required to the maximum extent practicable in order to minimize the number of new cul-de-sacs and to facilitate access to and from homes in different parts of the tract and adjoining lots.*

Response: The Project driveway loops through the development and connects to Hanover Street at two locations. The driveway locations were selected in order to minimize impacts to the wetlands on

the site. To do so, the Project Owner purchased an additional parcel along the north side of the Project to ensure that the wetland crossing would be at as minimal a width as possible. Additionally, the wetland crossing will not be causing a dam, as the driveway will span the wetland with a box culvert providing connectivity on both sides. This design is used at both ends of the driveway where the driveway crosses wetlands.

The driveway was carefully placed and graded so that it mimicked the majority of existing grades, and walls and reinforced slopes were used to tie proposed grades into existing, and minimize the overall limits of disturbance compared to using more gradual, un-reinforced slopes. The majority of parking for the Project has been located under the proposed apartment buildings at the ground floor, which reduces the amount of impervious space needed throughout the Site to support the development.

- d. *Drawing in the Lot Lines: When Steps a through c are completed, lines shall be drawn to delineate the lots for development and the Open Space lot(s), if individual lots are proposed.*

Response: New lot lines were not needed for this Project, but the four (4) parcels that are part of it will be merged as the Project progresses through permitting.

PUD Impact Statement / PUD Criteria (Section 501.1.E.2.a. through k.)

- a. *Statement of impact of the proposed development on natural resources and environmental quality including but not limited to water quality, air quality, wetlands, soil erosion and agricultural lands and a statement of pollution control and environmental impact mitigation measures.*

Response: Proposed site work minimizes wetland impacts to the maximum extent practicable and is not expected to impact floodplain. It should be noted that the majority of the wetland impacts will actually be spanned by the driveway and replaced with a box culvert to maintain connectivity. The proposed wetlands impacts are necessary to access the developable portion of the property and were minimized by acquiring an additional parcel to allow crossing at the narrowest points of the resource area. The Project has been designed to work with the natural topography to minimize ground disturbance, and to utilize natural features, such as Densmore Pond, as a resident amenity, providing a walking path overlooking the pond along its length. Erosion and pollution control is discussed further in the Project's Drainage Report submitted as part of this application, and additionally the Project will be subject to a US EPA National Pollutant Discharge Elimination System (NPDES) Construction General Permit that establishes requirements for erosion and sedimentation control, inspection, and reporting throughout the construction phase. As a residential use proposed on a previously developed and wooded site, the Project is not expected to impact air quality or agricultural lands.

- b. *Statement of impact of the proposed development on abutters.*

Response: The Project has been designed to minimize impacts on abutters and enhance the community by providing much needed housing. Mainly tucked away from the public road, the buildings' scale will be less noticeable and is also consistent with similar developments along the nearby Route 120 corridor. Landscaping will be provided in accordance with all applicable City requirements and is intended to screen the development from abutting properties and the public right of way, in addition to aesthetically enhancing the proposed site entrances and its interior. The Project will not be impacting the existing trail system that exists at the higher elevations of the property. Site access is provided via two proposed driveway connections to Hanover Street so traffic entering and exiting the Site is dispersed across the surrounding roadway network.

c. *Statement of sufficiency of proposed parking for the use intended.*

Response: The proposed development's parking supply is provided through a mix of covered parking under podium construction buildings and surface parking across the Site. Aligned with anticipated market demands, the proposed parking quantity exceeds the quantity required by the City's Zoning Ordinance, which is based on 1.5 parking spaces per apartment unit. To help offset the additional impervious area resulting from the increase in parking, parking spaces below buildings are 8'x18' to allow more parking under buildings. VHB understands the 8' wide parking spaces can be approved by the engineer reviewing the site plans on the City's behalf.

The townhome units are self-parking, including at least 1 garage space and 1 driveway space for each townhome, totaling 2 spaces per townhome. The maintenance building/leasing office provides adequate parking for the uses included, with a total of six (6) spaces outside the building and two (2) garage spaces within.

Accessible stalls are provided in accordance to ADA requirements, and electric vehicle (EV) charging spaces are provided with additional EV-capable or EV-ready spaces available for future charging kiosk installation per the City of Lebanon Site Plan Regulations.

It is also noted that six (6) public spaces have been provided near the northern driveway in order to provide parking spaces for users of the provided open space as part of the Project.

d. *Statement of adequacy of streets and/or sidewalks in the general area of development including major intersections providing access, and such other areas as requested by the Board.*

Response: As discussed in the Traffic Study submitted as part of this application, the proposed development is not expected to result in noticeable impacts to the area roadway system beyond the southern site driveway, where a traffic impact may be experienced at peak times. All-way stop control (AWSC) at the proposed four-way intersection of Hanover Street, Evans Drive, and the southern site driveway may be beneficial in mitigating that impact. That measure is discussed further in the Traffic Study and is intentionally not shown on the site plans because the recommended first step would be to implement the AWSC using temporary means to confirm its effectiveness. A permanent implementation could be considered thereafter. An existing, continuous sidewalk spans the Project

frontage along the east side of Hanover Street from south of I-89 to Old Etna Road, leaving a relatively short section of Hanover Street with no separated sidewalk. The geometry of the Old Etna Road/Hanover Street intersection, existing private land uses, and wetland areas make continuing the sidewalk prohibitive and a safety concern.

Additionally, parts of the Project Team are coordinating with the active NHDOT Corridor Improvement Project in the area, and that Project is aiming to address some of the deficiencies that have been identified in the area.

- e. *Statement of sufficiency, availability and capacity of utility services to provide water, fire protection and sewer and storm drainage, and further, the impact of the development on the municipal solid waste disposal facilities.*

Response: Municipal sewer and water are available in Hanover Street, and stormwater treatment is being provided via infiltration and detention systems in various areas across the Site. The Project does not intend to connect to municipal drainage infrastructure in Hanover Street. Electric and other telecommunication services are available in Hanover Street. A hydrant flow test will be performed to inform the fire protection system design for each building requiring sprinklers. The Applicant will work with solid waste disposal companies to determine the appropriate way to remove solid waste from the Site, including an emphasis on recycling to reduce impacts on municipal solid waste disposal facilities. The Project team will coordinate with the City of Lebanon DPW on the sewer modeling to confirm capacity of the existing system.

- f. *(If applicable) Statement of impact of on-site subsurface sewage disposal systems as to adjacent wells, water supply systems, and any known aquifers so designated by the United States Geological Survey.*

Response: Not applicable - The Project's proposed sanitary sewer collection system intends to discharge to the existing municipal sewer infrastructure in Hanover Street.

- g. *Statement of impact of storm drainage from the development on abutting properties and potential storm drainage problems both on the site of the development and downstream from the development.*

Response: The Project will provide a stormwater management system pursuant to City of Lebanon and New Hampshire Department of Environmental Services (NHDES) regulations and as such does not anticipate off-site stormwater impacts. To provide adequate water quality and water quantity control, improvements to the stormwater management system will include new catch basins and pipe network infrastructure that will direct the stormwater runoff to a series of surface and subsurface treatment/detention systems to achieve water quality and quantity control. A comprehensive Stormwater Management Report was submitted as part of this application. Please refer to that document for detailed stormwater management information.

- h. *Statement of noise control methods and procedures.*

Response: Because the Project's proposed use is residential, a noticeable increase in noise levels over the existing condition is not anticipated following construction. During construction, the Contractor will be responsible for complying with applicable local and state requirements for noise, hours of operation, etc. that are specifically geared toward regulating temporary construction activities.

- i. *Statement on the capacity of the school system; effect on school bus transportation and distance of the proposed development from, the nearest elementary school.*

Response: As discussed in the Fiscal Impact Analysis prepared by Fougere Planning & Development, Inc., the school system superintendent does not expect that the increase in student population will impact class sizes and did not express any capacity concerns. The Project Site is located across Hanover Street from both the Hanover Street School (elementary) and Lebanon High School and no bussing impacts are anticipated.

- j. *Fiscal impact statement analyzing the impact of the development on municipal, school and county revenues and expenditures, including estimated potential tax revenue and estimated number of school children.*

Response: Please see the Fiscal Impact Analysis prepared by Fougere Planning & Development, Inc., submitted as part of this application (attached to the Project Narrative).

- k. *Statement on any special fire, police and public safety problems due to location and/or special conditions related to the site's proposed type of use.*

Response: Special fire, police, and public safety conditions or concerns are not anticipated based on the proposed site improvements and use, both of which exist at very similar residential developments that are currently occupied along the Route 120 corridor.

Ownership and Protection of Open Space (Section 501.1.F.5 through 501.1.F.7.b)

As required by Section 501.1F, the Applicant intends to hold, manage and maintain the Open Space in order to meet the requirements in this section. During the period of construction and development, the Applicant, itself, will hold the open space making it available for use as construction conditions permit. Upon completion of construction, the open space will be made available for the residents and the public. At such time as the applicant proceeds to establish the anticipated condominium form of ownership for any or all of the development property, the open space will be dedicated or conveyed to an association to be formed by the condominium.

Under a condominium form of ownership, the control and maintenance of the Open Space will be held by an owner's association established by the Applicant for the benefit and enjoyment of the residents and/or users of the development.

The protection of the open space will be assured by the Planning Board's conditions of approval for the development so that the space remains undeveloped and any environmentally sensitive conditions are protected and preserved. Additionally, vesting the management and control of the open space in an owners' association will assure that it is maintained as intended.

The description and boundaries of the open space are indicated on the Open Space Plan C1.2.

Design Guidelines (Section 501.1.G)

1. The PUD shall be integrated into the surrounding neighborhood in such a way that the overall visual qualities between existing land use and the PUD is complementary.

Response: The Project was laid out to accentuate and feature Densmore Pond as the center of the development to pay homage to the existing site and neighborhood that has developed around it. The existing land use and topography lends itself to the view corridors created by the placement and orientation of the proposed residential buildings and townhomes.

2. The scale and size of buildings shall be related to and shall harmonize with existing buildings in the immediate vicinity of the PUD property.

Response: The proposed buildings comply with the allowable heights in each district, except for Buildings 4 and 5, which have requested Conditional Use Permits for increased heights to accommodate the podium garage parking on the ground level. The amount of multifamily apartment buildings have been reduced since the initial application in order to accommodate public comment regarding the scale and size of the development.

3. The design of the PUD shall be directed toward establishing a sense of place, such as providing inward oriented placement of buildings, streets, and recreational facilities.

Response: The Project has laid out the arrangement of buildings in order to highlight Densmore Pond as an aesthetic center of the site, to aid in establishing a sense of place that is desirable to many residents of the Upper Valley. Additionally, recreational facilities have been provided with additional details, following public and Planning Board comment, which will aid in creating overlooks and outdoor gathering spaces that are desirable to residents of the Project.

4. Adverse visual impact to ridgelines shall be minimized.

Response: The Project is not impacting ridgelines and has been placed near the bottom of the slope of the hill. The Project will not adversely impact views to the existing ridgeline.

5. A convenient system of paths designed to provide access to and between all buildings, parking areas, recreation facilities, Open Space and adjacent streets.

Response: The Project has laid out the internal sidewalk network so that residents of either the townhomes or apartment buildings can safely walk from one end of the development to the other, and can access any of the proposed structures or recreational spaces. The sidewalk network can also bring

users to either driveway end that terminates at Hanover Street. Access to Open Space areas can be found along the north end of the driveway or along the Project boundaries at the south driveway along Hanover Street.

6. Each dwelling unit shall have reasonable access to the Open Space provided, but need not front directly on such land.

Response: The Project has laid out the internal sidewalk network so that residents of either the townhomes or apartment buildings can safely walk and access the Open Space provided.

7. Bicycle use shall be accommodated on all streets within the development. Covered bicycle storage shall be provided for all multi-family structures.

Response: Bicycles can utilize the driveways provided within the site, as a cyclist on any roadway without a dedicated bike lane may. Additionally, there are outdoor short-term bicycle parking spaces at each multifamily building, as well as indoor long-term covered spaces that are secured for residents to store bicycles.

8. Multi-family buildings are unusual in rural landscapes. For this reason, the design of multi-family buildings visible from existing streets must be one which is harmoniously integrated with the surrounding landscape.

Response: The revised layout since the initial application has intended to maintain more of the existing treeline around Densmore Pond in order to screen more of the multifamily developed from Hanover Street.

9. Streets shall be designed for consistency with overall City plans for vehicular circulation improvements, if such plans exist.

Response: The driveway that is proposed was designed to comply with most of the City standards for roadways in mind, even though the driveway is not a roadway in nature. Coordination with the City has been ongoing to provide the desirable second driveway entrance to alleviate traffic and provide easier vehicular circulation for both residents and emergency vehicles.

Approval of CUP Application (Section 501.1.J)

1. *A conditional use permit shall be issued only if the Planning Board determines that:*
 - a. *The subdivision and/or site plan prepared pursuant to Section 501.1.E.1 above meets the purpose statement set forth in Section 501.1.A above and the following standards:*
 - i. *The Planning Board must find that, in consideration of the Site Resources, the portions of the property most suitable for Open Space preservation and those portions most appropriate for development have been designated on the plans for those purposes.*

ii. *Public Benefit of Open Space (Section 501.1.J.1.a.ii.)*

The Planning Board must determine that the layout of the designated Open Space area provides the greatest feasible public benefit which is compatible with the applicant's permissible development goals. The Board shall not approve such layout if it finds that there is a feasible alternative layout which would yield a significantly improved Open Space public benefit while still fulfilling the applicant's otherwise permissible development objectives. "Public benefit" means that the Open Space fulfills as many of the following criteria as are feasible:

- the Open Space is larger and contiguous, rather than smaller and fragmented. In achieving characteristics of larger and contiguous, the location of the Open Space will factor in off-site, adjacent open space natural areas;*
- the Open Space conserves Site Resources located on the property;*
- the Open Space is realistically capable of management for economically viable agriculture or forestry activities;*
- the Open Space conserves natural habitat for animals or plants, especially those which are locally rare or unusual;*
- the Open Space contributes to the ecological viability of natural systems, or natural areas, or of nearby recreation areas;*
- the Open Space conserves historical and archeological resources;*
- the Open Space provides opportunities for passive and/or active public indoor or outdoor recreation;*
- the Open Space provides scenic enjoyment by the public from the vantage point of public lands, highways, or waters; and/or*
- the Open Space provides some other open space public benefit explicitly identified by the Planning Board in its decision.*

Response: The Open Space areas meet the public benefit criteria in several ways, including, but not limited to:

- The Open Space is large and contiguous, with limited breaks.
- The Open Space conserves several wetland and stream areas, as well as slopes in excess of 25%.
- The Open Space contains wooded areas that could realistically be used for forestry activities.
- The Open Space conserves wooded and wetland areas that various species of plants and animals may utilize.
- The Open Space provides opportunities for outdoor recreation, as portions of the mountain that is west/northwest of the development area connects to existing trail networks for hiking or biking.

- The Open Space provides scenic enjoyment for the public and those who live there, by providing scenic viewpoints at elevations higher than the adjacent valley. There are also scenic views of the wetlands and Densmore Pond in several portions of the Site.
- The Open Space is accessible on both sides of the Project to the public. On the north side of the site, six (6) parking spaces are provided as public parking, with a pedestrian route to access a proposed trail into the proposed Open Space. The route intends to connect to the existing mountain bike trails on the adjacent property owned by Dartmouth College, and coordination is ongoing. Additionally, the southern Open Space is accessible via Hanover Street where the existing site access is provided. The existing gate at the south end of the Site along the west side of Hanover Street will be signed and indicated as an access point to the tract of Open Space.

iii. *To the maximum extent practicable, the plan adheres to the design guidelines set forth in Section 501.1.G above.*

Response: Responses to each of the design guidelines have been responded to above.

b. *All applicable requirements of Section 501.1.E, Section 501.1.F, Section 501.1.H, Section 501.2, Section 501.3, and Section 501.4 have been met.*

Response: The Applicant is of the opinion that the applicable requirements have been met and explained throughout this narrative.

c. *The types of housing units and/or other buildings and/or other buildings proposed within the PUD shall not adversely impact the character of the area.*

Response: The proposed housing is not inconsistent with other multifamily developments in the area and nearby along Mt. Support Road and Heater Road. The development aims to provide housing for adults and families in a desirable location near Route 120, I-89, and easy access to Dartmouth Hitchcock Medical Center, the adjacent schools, and downtown Lebanon.

d. *The PUD will not have any substantial or undue impact on the environment or on transportation systems, community facilities, utilities and services and/or the applicant will contribute impact fees, in amounts acceptable to the Planning Board, in order to mitigate the impact of the PUD on transportation systems, public facilities, utilities and services.*

Response: The Project does not intend to have an adverse impact on the listed items. The Project has been designed to City and State standards regarding stormwater management, and has coordinated with the City, NHDOT and the Upper Valley Lake Sunapee Regional Planning Commission on the adequacy of the nearby roads. Impacts to water and sewer utilities will be reviewed by the City of Lebanon Department of Public Works as part of the Sewer/Water Allocation Permit process. Additionally, refer to the report

titled "Fiscal Impact Analysis" dated December 10, 2024 by Fougere Planning & Development for anticipated impacts on City resources and the contributions anticipated by the construction of the Project.

- e. *The PUD complies with all requirements of the Site Plan Review Regulations and Subdivision Regulations, as applicable.*

Response: The Project has provided responses to both the Planning Department and the Peer Review Engineer, who review for the requirements against the Site Plan Review Regulations. At the time of this narrative, the majority (if not all) comments related to the requirements of the Site Plan Review Regulations have been addressed. Any remaining comments would be minor in nature and addressable in a conditions of approval in coordination with the City Planning Department.

- f. *For developments proposing condominium ownership, the PUD is capable of complying with all applicable state statutes regulating the condominium form of ownership.*

Response: The Project is intended to comply with all applicable state statutes regulating the condominium form of ownership, which will be coordinated by the parties establishing the condominium agreements at the time of their development.

2. *The Planning Board may condition its approval of the PUD on reasonable conditions necessary to accomplish the objectives set forth in Section 501.2.A, 501.3.A, or 501.4.A, as applicable, including a reduction in allowed density if necessary to accomplish said objectives.*

Response: Acknowledged.

3. *Phasing of Development: The Planning Board may establish a reasonable timetable for phasing the development of a PUD in order to mitigate the impact of the development on community facilities, services and/or utilities.*

Response: Acknowledged. The Applicant will continue to coordinate with the City on this item as needed.

PURD Objectives / PURD "Criteria" (Section 501.2.A.1. through 9.)

- A. Objectives. The objectives of the PURD provisions of this ordinance are as follows:

1. To encourage conservation of Open Space to effect appropriate density and protect important natural resources such as agricultural soils, forested land, wildlife habitat, water resources, other natural resources, including geologic and scenic, and historical and archeological resources.

Response: The Project proposes to dedicate approximately 12.02 acres as protected open space on the Site, in addition to embracing Densmore Pond as an amenity for residents who will have access to a walking path overlooking the pond along its western side. Further, the Project proposes to maintain and feature two of the remaining brick kilns to highlight and

pay homage to the Site's history as a pillar of the community and prominent business in the Upper Valley. Impact to the existing nearby mountain bike trail network is not anticipated.

2. To establish a connected network of conservation lands, trails, and working farm and forest land throughout the City by linking the Open Spaces and trails within the development, to conservation lands, important natural resources and trails on adjoining lands wherever possible, and as particularly found in the Lebanon *Master Plan* and *Natural Lebanon*.

Response: As discussed throughout this document the Project will dedicate Open Space comprised of two large, contiguous areas. The Open Space is adjacent to the existing trail network transecting the hill west of the Site, available for future connection if appropriate.

3. To preserve areas of the property that have the highest ecological value, including, for example, wildlife habitat, large un-fragmented blocks of undeveloped land, and areas of co-occurring resources as shown in *Natural Lebanon*, and water resources, such as drinking water supply areas, wetlands, streams and rivers.

Response: The Project's development area is as close to Hanover Street as site constraints and regulations allow, leaving a contiguous 100-acre forested portion of the Site undeveloped. Proposed site work minimizes wetland impacts to the maximum extent practicable and is not expected to impact floodplain. The proposed wetlands impacts are necessary to access the developable portion of the property and were minimized by acquiring an additional parcel to allow crossing at the narrowest points of the resource area. The Project has been designed to work with the natural topography to minimize ground disturbance, and to utilize natural features, such as Densmore Pond, as a resident amenity, providing a walking path overlooking the pond along its length.

4. To encourage the development of environmentally sensitive outdoor recreation land uses.

Response: The Project features amenities such as the Densmore Pond overlook behind Building 2, a brick kiln overlook, two amenity spaces for outdoor gathering, and a playground to enhance the on-site community and living experience for residents, their families and their guests.

5. To allow flexibility in residential development to provide for a diversity of housing types, densities, and styles.

Response: The Project proposes housing densities commensurate with the zoning district in which the buildings are situated, including a single-family style house and leasing office, townhome-style multifamily units, and various sizes of mid-rise apartment buildings, the larger of which are pulled back from Hanover Street to soften their scale from the public realm and allow for far greater natural vegetative buffer.

6. To provide opportunities for the development of workforce or affordable housing.

Response: The Project will add up to 474 much needed residential units for the residents and families of the Upper Valley. The development program is focused on offering units aligned with market demands, consisting mainly of professionals and students seeking higher-end

accommodations. As such the program currently does not include affordable or workforce level housing. The variety in residential options provides different choices at different prices.

7. To locate buildings and structures on those portions of the property which are most appropriate for development and avoiding developing in areas ill-suited for development, including, areas with poor soil conditions, a high-water table, that are subject to frequent flooding or that have excessively steep slopes.

Response: The Project has been designed to work with the natural topography to minimize ground and steep slope disturbance, utilize natural features, and minimize impacts to natural resource areas such as the pond, streams, and wetlands that exist on-site. As the Site is positioned on a hillside and the proposed improvements include filling the majority of the Site, flooding and shallow groundwater issues are not anticipated. Buildings are above the estimated 100-year base flood elevation from the FEMA Mapping. When the Site is cleared and access roads can be established, a geotechnical exploration program will be executed to collect data on soil characteristics, seasonal high groundwater elevations, and bedrock elevations. That data will be compared to the site-specific soil mapping data to confirm expectations and stormwater management system design assumptions.

8. To encourage a more suitable form of development by facilitating the design, construction, and maintenance of housing, streets, utilities and public services in a more economic and efficient manner and by integrating the new development into the existing built and natural environment.

Response: The Project intends to compliment the neighborhood and provide much needed housing to support the local economy and growth in Lebanon and the Upper Valley. The scale of buildings will be aesthetically reduced as the majority of buildings are set well off of Hanover Street, better integrating the development with the surrounding environment. The Project is laid out to work with the hillside, offering views over Densmore Pond and the area east of the Site, as well as walking paths along Densmore Pond and a brick kiln viewing area. Two points of access at Hanover Street and a continuous route through the development offers improved vehicular and pedestrian circulation efficiency and disbursement.

9. To promote the reduction of impervious surface areas and sustainable stormwater management.

Response: Because the Site is mostly forested, the Project will add significant impervious area. However, the Project will provide a stormwater management system pursuant to City of Lebanon and New Hampshire Department of Environmental Services (NHDES) regulations and as such does not anticipate off-site stormwater impacts. To provide adequate water quality and water quantity control, improvements to the stormwater management system will include new catch basins and pipe network infrastructure that will direct the stormwater runoff to a series of surface and subsurface treatment/detention systems to achieve water quality and quantity control. A comprehensive Stormwater Management Report was submitted as part of this application. Please refer to that document for detailed stormwater management information.



On behalf of the Applicant, we hope this information is satisfactory in describing the Project, its approach, and its impacts to the community. Please feel free to contact me with any questions you may have.

Thank you,

A handwritten signature in blue ink, appearing to read "DF", with a long horizontal flourish extending to the right.

Dave Fenstermacher, PE
Managing Director



December 10, 2024

Ref: 52933.00

Mr. Nathan Reichert
Planning and Development Director
51 North Park Street
City Hall, 5th Floor
Lebanon, NH 03766

Re: Proposed Multi-Family PURD Development
174 Hanover Street
Response to Comments from City of Lebanon, Planning and Development Received 11/24/2024

Dear Mr. Reichert:

On behalf of Brickyard One Nominee Trust (the "Applicant"), VHB is pleased to provide the following responses to the second round of comments regarding the site plan application for the proposed multi-family Planned Unit Residential Development (PURD) (the "Project"). Comments from Keach-Nordstrom Associates, Inc. regarding this submission are addressed in a separate response to comments letter.

For ease of reference, VHB has provided a copy of each comment in italics followed by responses in plain text. Comments in bold are referenced as previously provided comments from the City. Responses have been prepared by the project team, including:

- › Brickyard One Nominee Trust – Applicant
- › VHB – Land Surveyor, Site Civil Engineer, Traffic Engineer, Landscape Architect, & Cultural Resource Consultant
- › Studio Integrate – Architect
- › Apex Lighting Solutions – Lighting Consultant
- › Attorney – Schuster, Buttry & Wing, P.A.

The following documents have been revised and are provided in support of these responses:

- PUD/PURD Narrative
- Site Plans
- Density Figure
- Density Calculations
- CUP Support Statement



Email from Tim Corwin, Deputy Planning and Development Director (11/24/2024)

General Comments

Comment 1. *PUD/PURD narrative date 7/2/24 does not address the following:*

Comment 1a. *501.1.F.5 – ownership of open space*

Response: The PUD/PURD narrative has been updated to note the applicant intends to hold, manage, and maintain the open space. .

Comment 1b. *501.1.F.6 – protection of open space*

Response: The PUD/PURD narrative has been updated to note the protection of the open space will be assured by the Planning Board's conditions of approval for the development.

Comment 1c. *501.1.F.7.a – open space documentation*

Response: The PUD/PURD narrative has been updated to note the establishment of a condominium form of ownership with the open space dedicated or conveyed to an association..

Comment 1d. *501.1.F.7.b – open space physical delineation*

Response: The PUD/PURD narrative has been updated to reference that the Open Space Plan (C1.2) has been revised to include metes and bounds to define the area, as well as physical signage being added to the plans.

Comment 1e. *Minimum required open space must be made available for public use*

Response: The Project provides a parking area and northern open space access point and trail connection to the Upper Valley Mountain Bike Association trail system at the northern driveway. The southern portion of the open space is accessible to the public along Hanover Street, with existing on-street parking available. The PUD/PURD Narrative has been updated accordingly.

Comment 1f. *501.1.G – design guidelines*

Response: The PUD/PURD narrative has been updated to included detailed responses to 501.1.G.

Comment 1g. *501.1.J.1 – CUP approval requirements (except for 501.1.J.1.a.ii which the applicant has already addressed)*

Response: The PUD/PURD narrative has been updated to include.

Comment 1h. *Typo: the 501.1.E.2.a numbering on page 5 begins with "e" instead of "a".*

Response: Noted, the numbering has been corrected.

Comment 2. *PURD density figure: wetlands area striping in legend is backwards*

Response: The legend has been updated.



Comment 3. *PURD calculations exhibit: under maximum quantity calculations, for density (SF required for first two units) change 20,000 for R1 to 10,000 and change 0 for RO1 to 10,000. Please readjust calculations accordingly.*

Response: Noted, the calculations have been adjusted.

Comment 4. *Waivers*

Comment 4a. *Test pit waiver – Staff was agreeable to a waiver for the purposes of application acceptance only, but are not supportive of this waiver for the purpose of final design or final site plan approval. Note the final bullet at Comment #20 in KNA's memo of 6/26 recommended expansion of the applicant's drainage report to include all information required by the AoT.*

- *Note that any waiver request from a requirements of Section 6.6 must address in writing the criteria of Section 6.6.I in addition to the general waiver criteria of Section 7.2*

Response: The Applicant is no longer requesting a waiver from the requirement of test pits and infiltration rate testing, but remains fully committed to completing them as part of the forthcoming geotechnical investigation for the Project once Site Plan Review has reached a conclusive stage. The work required to traverse the site and dig the test pits will require noticeable amounts of tree clearing and earth disturbance, which would be poorly received by the community if completed on a presumptive basis prior to the Project receiving its initial approval. The results of geotechnical investigation will be shared with the City of Lebanon and current stormwater assumptions based on site specific soil mapping will be adjusted accordingly. For the initial stormwater design, conservative values have been used for estimated seasonal high groundwater and infiltration rates.

Test pits and infiltration rate tests are also required as part of the NHDES Alteration of Terrain permitting under Env-Wq 1500. Copies of the AOT application, comments and approval are provided to the City of Lebanon throughout the process with the State.

Comment 4b. *A waiver from Section 5.1.E.21 is not require if the construction details are acceptable to the Reviewing Engineer ok as presented*

Response: Acknowledged. A waiver is not included with this response to comments.

Comment 5. *The project narrative submitted on 8/6/24 is now out of date. Staff recommends updating the narrative to reflect the new site layout.*

Response: The narrative has been updated to reflect the current site layout.

Comment 6. *Regarding Section 6.5.D.6.a of the Site Plan Regulations, the applicant noted the following in its letter of 8/7/24: "Interior to the development, the Applicant is considering ways to provide connectivity to existing trails, proposed dedicated open space, and other proposed site features [.]" Please provide an update.*



Response: Refer to the updated PUD/PURD narrative for the description of the open space. Additionally, the project has added more sidewalk connections to enhance connectivity to other areas of the site and the open space access points. A connector trail is proposed in the northern open space area, adjacent to a trail parking area, to connect to the nearby existing Upper Valley trail network, pending approval by abutting landowner(s). The Applicant will coordinate routing and construction of the proposed trail with the Upper Valley Trails Alliance and/or Upper Valley Mountain Bike Association, which will need to be field located to accommodate slopes, environmental constraints, and exposed bedrock.

Comment 6a. *Please coordinate with the Upper Valley Trail Alliance for additional connectivity opportunities/strategies.*

Response: As noted in the response to Comment 6, the Applicant will coordinate with the Upper Valley Trail Alliance to connect to the trail network up the hill. This coordination will take place during construction so that field conditions can be verified with the Upper Valley Trail Alliance and the optimal trail routing can be determined.

Comment 7. *Regarding Section 6.5.D.8 of the Site Plan Regulations, the applicant noted the following in its letter of 8/7/24: "a small extension [of sidewalk] is being considered by the Applicant to provide complete sidewalk coverage between site driveways." Please provide an update.*

Response: The updated layout permits users of the site sidewalks to walk from one driveway to the other within the site, and provides a connection to the sidewalk on the eastern side of Hanover Street at the south driveway. The north driveway includes sidewalk extensions to the northern frontage limit and south along the frontage to the point where additional wetland impacts would be necessary to continue. The Applicant will continue reviewing the feasibility of providing crosswalks and sidewalk crossing the northeast corner of the Old Etna/Hanover Street intersection to connect to the existing sidewalk. The applicant has already invested in off-site ROW survey outside the scope of the project to support the feasibility of the connection. A right of way discrepancy has been noted and needs to be resolved to determine ownership of the land on which the new sidewalk would be located on the northeast side of the intersection. If possible, the Applicant will construct the connection at that corner in order to provide access to the eastern Hanover Street sidewalk from both driveways.

Comment 8. *Regarding Section 6.5.D.9 of the Site Plan Regulations, the applicant noted the following in its letter of 8/7/24: "The Applicant will coordinate with Advanced Transit and City staff to determine whether a new transit stop location is warranted based on the Project's presumed increase in ridership demand. The design and maintenance practices described in the comment will be considered as this item progresses." Please provide an update.*

Response: VHB met with Advanced Transit on October 4th, 2024. Given the proximity of the Site to both the Heater Road/Old Etna Road bus stop and Hanover Street/Summer Street bust stop,



coupled with Advanced Transit objecting to a route modification that directs buses past the schools on Hanover Street, Advanced Transit concluded that no new stops are necessary.

Comment 9. *PUD/PURD CUP Support Statement:*

Comment 9a. *request is for a CUP per 501.1.B & per 501.2*

Response: The support statement has been updated.

Comment 9b. *project narrative needs to be updated (it identifies 440,054 sf of building area and 14 buildings)*

Response: The narrative has been updated to reflect the updated site layout.

Comment 9c. *The narrative states that the project is "not expected" to impact floodplain. Is there uncertainty with respect to the project's impact to the Floodplain District?*

Response: Based on the existing limits of the Zone A floodplain, the proposed limit of work does not impact the floodplain. The forthcoming NHDES permitting related to the stream crossings will include a hydraulic analysis that will aid in determining the elevation of the floodplain and allow confirmation that the either the floodplain will not be impacted, or proposed impacts will be properly mitigated.

Comment 9d. *The narrative states that, "Cultural and historic resource assessment will be performed prior to ground disturbing activity." Please clarify – issue being that such an assessment should be performed at the outset when designing a PURD.*

Response: This assessment is ongoing. To-date, VHB and Monadnock Archaeological Consulting have both completed assessments and submitted findings to NHDHR for review. NHDHR has responded and coordination is ongoing. Sign-off from NHDHR will be required as part of any wetlands approval from NHDES.

Comment 10. *55 ft. ht CUP support statement:*

Comment 10a. *project narrative needs to be updated (it identifies 440,054 sf of building area and 14 buildings)*

Response: The narrative has been updated to reflect the submitted site layout.

Comment 10b. *The narrative states that the project is "not expected" to impact floodplain. Is there uncertainty with respect to the project's impact to the Floodplain District?*

Response: Based on the existing limits of the Zone A floodplain, the proposed limit of work does not impact the floodplain. The forthcoming NHDES permitting related to the stream crossings will include a hydraulic analysis that will aid in determining the elevation of the floodplain and allow confirmation that the either the floodplain will not be impacted, or proposed impacts will be properly mitigated.

Plan Set Comments



General

Comment 11. Sheet 36 – why does the development need to be designed to accommodate a semi-trailer?

Response: The development was not designed to accommodate a semi-trailer, but the Traffic Peer Review Engineer requested the turns to be shown on the site plan. It is not expected that semi-trailers will enter or exit the site regularly, but it was demonstrated that in the event a semi-trailer entered the development, it could circle the driveway and exit.

Comment 12. Building 2 is located partially in the R-O District and therefore is restricted to a 45 ft. maximum height, whereas the plan set throughout indicates that Building 2 will be 55 ft. Please update plan set accordingly.

Response: The plans have been updated accordingly.

Comment 13. Remove all lot lines that will be eliminated with voluntary lot merger except on survey and existing conditions sheets.

Response: Lot lines to be removed via lot merger have been removed from the site plans, except for the existing conditions plans and the newly added Site Preparation & Demolition Plan, which provides the correlation between the existing condition and final proposed conditions.

Comment 14. Can wildlife areas be approximately depicted? See 7/2 PUD narrative letter – page 2

Response: Wildland areas have been identified on sheet C1.1.

Comment 15. Please provide elevation views of the townhouses.

Response: Elevation views have been included with the updated planset.

Comment 16. *Provide details of short and long-term bike storage sufficient to demonstrate compliance with design requirements of Appendix A of the SPR*

Response: The bike rack detail on sheet C7.2 applies to both short and long-term bike parking spaces. Layouts of racks and bike storage quantities are specified on the site plans and the architectural plans in the Parking Level Plan views.

Comment 17. *Can a crosswalk be provided across Hanover Street at the northern access drive?*

Response: The Applicant is continuing to explore the possibility of providing a crosswalk. Coordination with the City of Lebanon DPW will be required to make the determination based on the available right-of-way at the Old Etna Road/Hanover Street intersection. The plans have, however, been updated to include a sidewalk extension south of the northern driveway that aligns with the crosswalk being considered.

Comment 18. *The following information required by Section 5.1.E of the Site Plan Review Regulations is missing or incomplete (see highlighted text):*



Comment 18a. 5.1.E.4.e.4, 8, 9 and 10: The following basic site information in TABLE FORM (shall be provided on the cover sheet):

- **Gross floor area of existing and proposed buildings/ additions**
- **Height of existing and proposed buildings/additions**
- **Number of stories and gross square footage of each**

Response: The site information requested is shown in the Site Information Table on the Cover Sheet.

Comment 18b. 5.1.E.8: The location of existing natural features such as streams, marshes, lakes, ponds, wetlands, rock outcrops, or wooded areas, and existing man-made features such as roads and structures. The plan shall indicate those natural and man-made features that are to be removed, retained, or altered. Wetlands on the property shall be delineated by a NH Certified Wetlands Scientist, whose seal and signature shall appear on the plan. In addition, documentation in the form of the U.S. Army Corps of Engineers New England District Wetlands Delineation Data Sheets and/or other field notes and materials concerning the delineation shall be submitted to the Planning and Development Department. Indicate natural and man-made features to be removed, retained or altered on the existing conditions plan.

Response: The features to be removed, retained or altered have been included on the Site Preparation & Demolition Plan, sheet C1.4.

Comment 19. The plan set does not satisfy the following design requirements of Section 6.5 of the Site Plan Review Regulations (see highlighted text):

Comment 19a. 6.5.C.2: At least one primary entrance to the building shall face the public way on which the lot has frontage. Building 1 does not appear to meet this requirement. Building 1 does not appear to meet this requirement.

Response: Building 1 is oriented so that the primary entrance faces Hanover Street. A secondary entrance at the rear connects the rear parking area to the parking below the building and elevator lobby inside the primary entrance. An additional sidewalk connection has been added for connectivity between the primary entrance and site driveway sidewalk.

Comment 19b. 6.5.C.3: Pedestrian entrances shall be provided at least every 60 linear feet along the ground floor of the primary façade unless such egress would create safety or security concerns for the building's use. In such instances, a significant architectural feature that creates varied massing, such as a bay window or other feature, must be provided every 60 linear feet.

Response: Doors and large windows, façade material changes, and patio/balcony protrusions provide a varied massing at intervals less than 60 feet. Pedestrian entrances spaced 60 feet or less would not work with the building floorplan and intended operations, and presents a security concern. Additionally, many buildings have parking below the building at ground level.



Comment 19c. *6.5.C.4.a: When parking structure (e.g., parking garage) is located on a lot with frontage, the portion(s) with frontage, shall be designed to include attractive fenestrations, high-quality materials, and varied design elements. At least 1/3 of frontage-facing elements in new construction shall be screened by occupied active interior space for other uses at the ground floor level (retail, lobby, etc.), or at least 1/3 of the frontage must have variation in massing, substantial transparency and additional architectural detail that is distinct from the rest of the building and which visually enhances the remainder of the ground floor level. Occupied uses shall have a depth of at least 20 feet.*

Response: The proposed apartment buildings with parking structures below at the ground level include varying massing and materials across the structure as described in the response to comment 19b. The parking level will be screened by a decorative architectural panel, such as a mesh panel that allows airflow but limits visibility of the parking area and is materially different than the building façade above.

Comment 19d. *6.5.D.5: The development [...] shall install sidewalks along the street frontage(s) in order to support a walkable community that has continuous connections between existing and planned sidewalks.*

Response: The Applicant is continuing to explore the possibility of providing a crosswalk. Coordination with the City of Lebanon DPW will be required to make the determination based on the available right-of-way at the Old Etna Road/Hanover Street intersection. The plans have, however, been updated to include a sidewalk extension south of the northern driveway that aligns with the crosswalk being considered.

Comment 20. ***Phasing Plan - Sheets 30-33 (C8.1-4)***

Comment 20a. ***Label each sheet per phase; subphases of phase 3 need to be clearly identified***

Response: Phasing Plans have been updated to indicate what phase is shown on the specific sheet.

Comment 20b. ***Does not appear to include information required by Section 4.9.C***

Response: The Phasing Plans have been updated to include the information required by Section 4.9.C with more definitive schedules for each proposed building in the development.

Comment 21. ***Architectural renderings:***

Comment 21a. ***Garage floor plans should identify use of oil/grit separators***

Response: Oil/grit separators have been called out on the architectural plans.

Comment 21b. ***Remove "plans and elevations are subject to change" note***

Response: The note has been removed.



Plan Sheets

Comment 22. Cover Sheet

Comment 22a. Site information table needs to be reworked to address each proposed building separately:

- *For each building (Buildings 1, 2, 3, 4, and 5, the maintenance building, and each townhouse cluster): provide total gross floor area in total and per floor/story, number of floors/stories, # of units, unit mix (e.g. studios, 1 bedrooms, 2 bedrooms, 3 bedrooms), building height, number of garage parking spaces, number of long term bike storage spaces*

Response: The Site Information table has been updated accordingly.

Comment 22b. *Add note that the lots will be voluntarily merged*

Response: A note stating that the lots will be voluntarily merged has been added.

Comment 22c. *Zoning Summary Chart:*

- Side and rear yard minimum setbacks are 50 ft. per Section 501.1.H.2 of the ZO
- Identify building coverage provided in each zoning district (i.e. percentage of building coverage in the R-3, R-O-1, and R-1 portions of the development)

Response: The Zoning Summary Chart has been updated.

Comment 22d. ***Why are sheets 45-50 identified as "reference drawings"?***

Response: These plans are "reference drawings" as they were prepared and provided to VHB by other consultants to use as part of the plan set package.

Comment 22e. ***"Parking Note"***

- *includes a misspelling of "townhome"*
- *townhouse use is considered one-family dwelling attached for purposes of 607 of the ZO*

Response: The plans have been updated accordingly.

Comment 22f. ***All parking calculations and analysis needs to be updated to include the required parking for the townhouse units and maintenance building***

Response: Parking calculations and analysis have been updated.

Comment 22g. ***"Multifamily parking requirements":***

- *update to include townhouse and maintenance building parking.*
- *Update parking provided and maximum parking to include all parking on site not just parking for the multifamily buildings*



Response: Parking calculations and analysis have been updated.

Comment 22h. "Multifamily parking summary chart":

- update to include requirements for townhouse and maintenance building parking.
- There does not appear to be any item that references the 5-asterisk note

Response: Parking calculations and analysis have been updated.

Comment 22i. EV parking requirements:

- update to include townhouse and maintenance building parking.
- Note that EV parking is provided at 76% of the total parking; however, only a maximum of 65% is required. Please contact staff with any questions or for further clarification.

Response: Parking calculations and analysis have been updated. The total amount of EV parking is now 65% provided as part of the project.

Comment 22j. PURD Calculations table:

- why did the buildable area of the R-1 portion of the property change from prior calculations?
- Identify date of exhibits referenced
- The second asterisk applies to both the R-1 and the R-O-1

Response: The buildable area of the R-1 property was adjusted after a minor discrepancy was found. The PURD Calculations table has been updated.

Comment 22k. Open Space Calculations table – identify the amount of open space to be provided

Response: The Open Space Calculations table has been updated.

Comment 23. Sheet 1 (C1.0)

Comment 23a. Demolition note 1 must also be shown graphically on the existing conditions plan or a separate demolition plan sheet

Response: A Site Demolition and Preparation Plan has been added to the set as sheet C1.4.

Comment 23b. Local permits: add driveway permit and stormwater permit

Response: Permits have been listed on sheet C1.0 of the site plans.

Comment 23c. Layout materials and notes, note 4: site features need to be consistent with the site plan

Response: Note has been revised.

Comment 24. Sheet 2 (C1.1)



Comment 24a. *What is “limited” conservation land and where is it shown on the plan sheet?*

Response: Limited Conservation Land is shown from the standard legend from the City of Lebanon GIS Conservation Map that was used to make C1.1. Limited Conservation land is only shown on the plans at the parcel south of I-89 and west of Route 120.

Comment 24b. *Where is the “125 feet – NH Conservation Land” shown on the plan sheet?*

Response: 125 Feet – NH Conservation Land is shown from the standard legend from the City of Lebanon GIS Conservation Map that was used to make C1.1. Features of that layer do not actually appear on the map area provided on C1.1.

Comment 25. *Sheet 4 (C1.3)*

Comment 25a. *What is the “potential future pedestrian path” and is it proposed as part of this project?*

Response: The path is shown connecting the northern driveway with a sidewalk to the existing sidewalk along Old Etna Road and Hanover Street. The Applicant has committed to constructing the connection, pending further coordination on the available right-of-way at the intersection of Hanover Street and Old Etna Road. It is referred to as “potential” since it is currently unclear that the right-of-way can support that connection.

Comment 26. *Sheet 5 (C1.4)*

Comment 26a. *Please remove unnecessary layers including existing conditions. Please depict only proposed above-ground conditions.*

Response: Additional existing conditions layers (including subsurface) have been removed. The sheet is now C1.5.

Comment 26b. *Move EV notes to Sheets C2.1-3*

Response: EV notes have been moved to sheets C2.1-C2.3.

Comment 26c. *Change side and rear setbacks to 50 ft.*

Response: Side and rear setbacks have been updated.

Comment 26d. *Plan sheet should show all proposed improvements both on-site and off-site including but not limited to:*

- ***required sidewalks along Hanover Street portion of property***
- ***crosswalk at northern driveway entrance***

Response: The proposed improvements have been shown on the site plans.

Comment 27. *Sheet 7 (C2.1)*



Comment 27a. *The plat is very difficult to read. Please remove unnecessary layers including existing conditions, and provide additional labels to identify what's proposed*

- Remove underground features, including but not limited to the subsurface detention basin. Please depict only proposed above-ground conditions.

Response: Underground features have been removed from the plan.

Comment 27b. *What is the circle in the landscaped area in between the parking lots for Bldgs 2 and 6?*

Response: The circle had previously indicated a patio area, but the Amenity area layout has been updated. Refer to Landscape Plans for additional detail.

Comment 27c. *"existing mailboxes to be relocated" please show proposed relocation*

Response: Proposed locations have been added to the plans.

Comment 27d. *Sidewalk required along Hanover Street frontage*

Response: The updated layout permits users of the site sidewalks to walk from one driveway to the other within the site, and provides a connection to the sidewalk on the eastern side of Hanover Street at the south driveway. The north driveway includes sidewalk extensions to the northern frontage limit and south along the frontage to the point where additional wetland impacts would be necessary to continue.

Comment 27e. *Notes on features to be demolished should be removed and shown on the existing conditions plan or a separate demolition plan sheet*

Response: A Site Demolition and Preparation Plan has been added to the set as sheet C1.4.

Comment 27f. *What is meant by the box culvert being "anticipated"?*

Response: The current design is utilizing box culverts to span the stream crossing, but the final design will be determined in coordination with NHDES Wetlands Bureau. The span will be laid out as shown, but final details are to be worked out during the upcoming permitting process.

Comment 27g. *Identify outdoor bike storage and number of spaces per rack/fixture*

Response: Refer to detail on Sheet C7.2. The number of spaces per rack are specified on the Layout and Materials Plans.

Comment 27h. *The proposed decorative metal fence will be located behind the retaining wall except along the proposed patio/outlook where the fence will be placed on top of the retaining wall, is that correct?*

Response: The decorative metal fence will be located behind the retaining wall throughout the site. At this time, the fence is not proposed to be on top of the retaining wall. The plan has been updated to reflect this.



Comment 27i. ***Where are the snow storage areas?***

Response: Locations for snow storage have been identified on sheets C2.1-C2.3.

Comment 28. ***Sheet 8 (C2.2)***

Comment 28a. ***The plat is very difficult to read. Please remove unnecessary layers including existing conditions, and provide additional labels to identify what's proposed.***

- *Remove underground features, including but not limited to the subsurface detention basin. Please depict only proposed above-ground conditions.*

Response: Underground features have been removed from the plan.

Comment 28b. ***"Future" EV chargers – what is meant by "future"? When are they proposed to be installed? Please add note re: same***

Response: Future EV chargers are noted due to the "EV Ready" category of EV spaces – spaces that will not have a charger podium installed on day one but have the required conduit stubbed. The locations are shown since the space has to be accounted for at this point of the design stage.

Comment 28c. ***In areas marked "Park space", what is proposed for these spaces other than grass and landscaping?***

Response: Refer to the updated landscape plans included with this submission for the latest details for each space. The spaces have been renamed appropriately to provide more context.

Comment 28d. ***A grass area is proposed in front of the dumpster at the north end of building 2, is that correct?***

Response: Adjacent to the dumpster is the amenity space, but on the driveway side, it is pavement in order for a garbage truck to access the dumpster.

Comment 28e. ***Where are the snow storage areas?***

Response: Locations for snow storage have been identified on sheets C2.1-C2.3.

Comment 29. ***Sheet 9 (C2.3)***

Comment 29a. ***The plat is very difficult to read. Please remove unnecessary layers including existing conditions, and provide additional labels to identify what's proposed***

- *Remove underground features. Please depict only proposed above-ground conditions.*

Response: Underground features have been removed from the plan.

Comment 29b. ***Sidewalk required along Hanover Street frontage***

Response: The updated layout permits users of the site sidewalks to walk from one driveway to the other within the site, and provides a connection to the sidewalk on the eastern side of Hanover



Street at the south driveway. The north driveway includes sidewalk extensions to the northern frontage limit and south along the frontage to the point where additional wetland impacts would be necessary to continue.

Comment 29c. ***In connection with the maintenance building, add note that no outdoor storage is permitted***

Response: A note has been added to sheet C2.3.

Comment 29d. ***Change side and rear setbacks to 50 ft.***

Response: The side and rear setbacks have been updated.

Comment 29e. ***What is the purpose of the 6 parking spaces along the north side of the northern access drive?***

- ***Note that it's not clear that these parking spaces are permitted within the 50 ft. PUD buffer***

Response: The parking spaces serve the proposed trail connecting to the existing nearby trail network. Based on VHB's review of the Zoning Bylaw, it is not indicated that pavement for parking spaces or driveways is considered a "structure". During a call on November 26th, City staff also indicated agreement that parking could be located within the required side yard/PUD buffer.

Comment 29f. ***The maintenance building is identified as 2 stories, but in the rendering it appears to be 3, or at least 2 ½ stories***

Response: The plans have been updated to reflect the 3 story height.

Comment 29g. ***Where are the snow storage areas?***

Response: Locations for snow storage have been identified on sheets C2.1-C2.3.

Comment 29h. ***What is meant by the modular block retaining wall being "proposed"? Will it not be constructed?***

Response: "Proposed" in this instance is just indicating that it is a proposed feature, rather than suggesting it may not be constructed. For clarity "proposed" has been removed from the callouts to the modular block walls.

Comment 29i. ***What is meant by the box culvert being "anticipated"?***

Response: The current design is utilizing box culverts to span the stream crossing, but the final design will be determined in coordination with NHDES Wetlands. The span will be laid out as shown, but final details are worked out during the upcoming permitting process.

Comment 30. ***Sheet 43 (Sv-2)***

Comment 30a. ***Identify limits of disturbance/limit of clearing***

Response: A Site Demolition and Preparation Plan has been added to the set as sheet C1.4.



Comment 30b. *Identify features to be removed*

Response: A Site Demolition and Preparation Plan has been added to the set as sheet C1.4.

Comment 30c. *"Lane Holdings" and "Loney" incorrectly identified as property owners*

Response: The existing conditions plans have been updated.

Comment 30d. *Legend does not include/identify "dash-dot-dot-dash" line*

Response: The legend has been updated to property identify the noted line. See Sheet C1.0.

Comment 31. *Sheet 44 (Sv-3)*

Comment 31a. *"Lane Holdings" and "Richard Marchese" incorrectly identified as property owners*

Response: The existing conditions plans have been updated.

Comment 32. *Sheet 47*

Comment 32a. *To hide unsightly building features including stairwells and elevator shafts, please consider rotating Building 1 so that what's currently identified as the "surface parking area" elevation becomes the Hanover Street facing elevation*

Response: The Applicant will consult with the Architect and if feasible the architectural design will be updated to address the comment.

Emails from Tim Corwin, Deputy Planning and Development Director (12/8-12/9, 2024)

"Traffic Study Peer Review Brickyard"

Comment 1.b *"The Applicant indicated that a crash evaluation was not required by 'City, NHDOT, UVLSRPC, and WSP officials at the traffic scoping meeting.'" I don't believe this is a satisfactory answer. Just because something was supposedly decided at the scoping meeting doesn't mean that changes can't or needn't be made to address the concerns of the Planning Board and the peer reviewer.*

Response: The comment made by Weston & Sampson asked why certain information was not provided, to which VHB responded that VHB provided all the information that was required per the scope established by those governmental officials. If additional information is requested to address other concerns, that would certainly be considered and provided accordingly.

Comment 1.d *"The Applicant indicated that the trip distribution methodology was presented and accepted at the traffic scoping meeting." I don't believe this is a satisfactory answer. Just because something was supposedly decided at the scoping meeting doesn't mean that changes can't or needn't be made to address the concerns of the Planning Board and the peer reviewer.*

Response: The comment made by Weston & Sampson asked why certain information was not provided, to which VHB responded that VHB provided all the information that was required per the



scope established by those governmental officials. If additional information is requested to address other concerns, that would certainly be considered and provided accordingly.

Comment 1.e *"The Applicant indicated that 'NHDOT officials recommended that the proposed geometry identified in Alternative 1 (presented at the November 16, 2022 Project Advisory Committee meeting) be considered to be in place under the 2035 traffic-volume conditions (opening year plus 10 years) of the Traffic Impact Study.'" But what if another alternative is constructed? Or what if no improvements by NHDOT are made at all?...*

Response: The comment made by Weston & Sampson asked if NHDOT required VHB to assume the implementation of certain improvements for the NH 120/Old Etna Road intersection and if there was an alternative design. NHDOT directed VHB to use the specific improvements program they were developing in preparation of the Project traffic study.

Comment 1.f. *"The Applicant indicated that "NHDOT officials are evaluating different improvements along the NH Route 120 corridor that include the NH Route 120 and Evans Drive intersection." This does not strike me as a satisfactory response to the question of whether there is a feasible mitigation for the overcapacity that the development will cause at the Rt 120/Evans Drive intersection.*

Response: At the last Planning Board hearing, Jason Plourde, VHB Traffic Engineer, explained that VHB's traffic study evaluated higher traffic volumes than the NHDOT corridor study because land development projects in New Hampshire require peak-month and pandemic adjustments and a historical growth rate of no less than 1% compounded annually, whereas roadway improvement projects evaluate average month conditions and can vary with the other factors.

Comment 1.g. *"The applicant responded that the driveway location concept was considered but declined due to conflict with wetlands. All-way stop control was also considered with the Applicant claiming that "City of Lebanon and KNA officials and determined not to be desirable..." I do not recall the City of Lebanon determining that this is undesirable. Can you refresh my recollection as to when this was discussed and how it communicated and by whom on behalf of the City?"*

Response: VHB participated in a phone call with Steve Keach, Tim Corwin, Brian Vincent and other City officials on June 6, 2024. During that meeting, Steve had asked if we considered placing the Hanover Street/Old Etna Road under All-Way Stop-Control. Jason Plourde explained that a right turning larger vehicle (e.g., a bus) currently needs to stop on the Old Etna Road westbound approach and wait for the Hanover Street southbound vehicles to clear before proceeding northbound on Hanover Street. A right-turning vehicle from Old Etna Road would need to swing into on-coming vehicles on the Hanover Street southbound approach. If the Hanover Street southbound approach was placed under STOP-sign control, then a right turning vehicle from the Old Etna Road westbound approach would need to wait longer for the vehicles to clear from the Hanover Street southbound stop-controlled approach.



"Response to 11/22 KNA Letter"

Comment 1. *...your latest submission package is intended to respond to KNA's 11/22 review letter...?*

Response: The latest submitted plan package, dated December 4, 2024, addresses the comments from KNA's review letter.

Comment 2. *...you did not provide a written response to the 11/22 letter...?*

Response: A Response to Comments letter, dated December 3, 2024, addressing the comments from KNA was submitted electronically on December 4, 2024. Hard copies of the RTC letter and updated plans were delivered to the KNA office on 12/5.

Comment 3. *...is it your view that the latest submission package addresses all of the KNA's comments in their 11/21 review letter? Or are there any that, from your perspective, are still outstanding?*

Response: It is VHB's opinion that all of KNA's comments have been addressed, other than the open comment about providing test pit and infiltration rate testing data. The same comment is mentioned in this document.

"Brickyard - PB Member Traffic Observations"

Comment 1. *I would ask the Applicant and Board to consider widening the road coming from the development to three lanes, one for straight egress, one for left turn onto Hanover egress, and one for ingress.*

Response: As addressed at the December 9, 2024 Planning Board hearing, designing a two-lane approach on the southern site driveway intersection (three-lane cross-section) with Hanover Street and Evans Drive would require widening on the southeast corner of the intersection to receive the through vehicles from the site driveway onto Evans Drive eastbound. As discussed by Planning Board members, the single-lane approach design is a more standard configuration at an All-Way Stop-Controlled intersection and may provide a safer condition for pedestrians crossing Hanover Street and Evans Drive. Therefore, Planning Board members chose to maintain the single-lane approaches at the southern driveway intersection as currently proposed on the site plans.

Comment 2. *I would also suggest that Applicant and City explore the possibility of widening Evans with a right turn lane onto Hanover or a short merge lane on the south side of Evans to expand the intersection's capacity and safety without requiring a widening of the entire distance of Evans between Hanover and NH 120.*

Response: As addressed at the December 9, 2024 Planning Board hearing, reconstructing the Evans Drive approach at the Hanover Street and southern site driveway intersection to provide a right-turn lane would require widening along the northeast corner of the intersection to provide the alignment for through vehicles departing from Evans Drive. Similar to Response 1, Planning Board members chose to maintain the single-lane approaches designed at the proposed southern driveway intersection as currently proposed on the site plans.



“Brickyard – Open Space Plan Staff Comments”

Regarding the Open Space Plan (sheet C1.2, page 3 of the 53-page plan with a latest issue date of 12/4/24), staff has the following comments:

Comment 1. *Please remove the existing conditions*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 2. *Add metes and bounds to the easement area*

Response The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 3. *Add notes reflecting how the applicant proposes to address the following PUD requirements set forth in the Zoning Ordinance:*

Comment 3a. *501.1.F.3 – use/structure restrictions (and an identification of permissible uses of the open space)*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 3b. *501.1.F.5 – ownership of open space*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 3c. *501.1.F.6 – protection of open space*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 3d. *501.1.F.7.b – open space physical delineation*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 4. *Add a plan note indicating that the plan will be recorded prior to the issuance of any certificate of occupancy.*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

Comment 5. *Add a plan note that indicating that the open space is available and open to the public for use.*

Response: The Open Space Plan has been updated. Refer to Sheet C1.2.

“Brickyard - Phasing Plan Comments”

Comment 20 in my 11/24 e-mail providing you with Planning staff's comments provides as follows:

(Previously included comment from Plan Set Comments - General Section)

20. Phasing Plan - Sheets 30-33 (C8.1-4)

- a. Label each sheet per phase; subphases of phase 3 need to be clearly identified*
- b. Does not appear to include information required by Section 4.9.C*



Response: The Phasing Plans have been updated to label each sheet per phase and provide more information related to Section 4.9.C.

Comment 1. *With respect to a request to extend the 2-year building permit application deadline, your request should identify the specific date by which a building permit for each building will be obtained.*

Response: Acknowledged.

“Brickyard – Property Size(s)”

Comment 1. *The plan set cover sheet states that the size of the PURD is 126.3 acres...*

Per the Assessor the total size of the Property is 136.87. Are the assessing records correct?

Response: The cover sheet has been updated to reflect the 135.9 acre area provided by VHB land surveyors. The assessing records contain a discrepancy of about one acre.

“Agenda Item 3A Staff Memo”

Comment 1. *Section 5.1.G.4 of the Site Plan Review Regulations requires that, “[f]or multi-family dwelling developments and mixed-use developments resulting in a net increase of 50 dwelling units or more, the application shall include the information and impact statements identified in Section 6.9.B.” These include:*

- 1. Statement of impact of the proposed development on natural resources and environmental quality including, but not limited to, water quality, air quality, wetlands, soil erosion and agricultural soils and a statement of pollution control and environmental impact mitigation measures.*
- 2. Capacity of the school system; effect on school bus transportation and distance of the proposed subdivision from the nearest elementary school.*
- 3. Adequacy of streets and/or sidewalks in the general area of the development including major intersections providing access, and such other areas as requested by the Board.*
- 4. Sufficiency, availability and capacity of utility services to provide water, fire protection, and sewer, and further, the impact of the development on the municipal solid waste disposal facilities.*
- 5. (If applicable) The impact of on-site subsurface sewage disposal systems as to adjacent wells, water supply systems, and any known aquifers so designated by the United States Geological Survey.*
- 6. Any special fire, police and public safety problems due to location and/or special conditions related to the site’s proposed type of use.*
- 7. Impact of storm drainage from the development on abutting properties and potential storm drainage problems both on the site of the development and downstream from the development.*



8. Fiscal impact statement analyzing the impact of the development on municipal, school and county revenues and expenditures, including estimated potential tax revenue and estimated number of school children.

Response: Acknowledged.

We hope that the responses provided herein are satisfactory. We are available to discuss further if helpful.

Sincerely,

A handwritten signature in blue ink, appearing to read "D Fenstermacher".

Dave Fenstermacher, PE
Managing Director

Fiscal Impact Analysis

The Brickyard – Hanover Street
Lebanon, NH
December 10, 2024



FOUGERE PLANNING & DEVELOPMENT, Inc.

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FISCAL IMPACT ANALYSIS

**The Brickyard – Hanover Street
Lebanon, NH**

December 10, 2024

1. Introduction

Fougere Planning and Development has been engaged by VHB to undertake this Fiscal Impact Analysis to outline potential General Fund property tax and revenue increases, as well as demand for service impacts to the City of Lebanon from the proposal to develop 474 market rate apartments units¹ that will consist of 51 three bedroom townhomes & 422 garden apartment units (316 studio & 106 one bedroom). In addition, one single home is proposed (which includes the manager's residence, leasing office and maintenance storage; total units 474). The 133 acre +/- project is located off of Hanover Street, across from the Hanover Street Elementary School and Lebanon High. Two old existing industrial buildings and other site features will be demolished to make way for the new community. The proposed project will assist addressing the ongoing critical housing need impacting the Upper Valley, with the recently published Housing Needs Assessment² targeting the necessity for an additional 1,102 housing units by the year 2035.

All on site drives and trash pickup will be privately maintained by the project owner; public water and sewer will service the property.

This Report will address a number of municipal impacts as required in Lebanon's Subdivision Regulations Section 12.3, B. Areas of Study and Information:

¹ One unit will be for site manager, a detached single family home with office space & maintenance space.

² UVLSRPC Housing Needs Assessment, 2023, Table 5-1 – Summary of Future Housing Needs Targets.

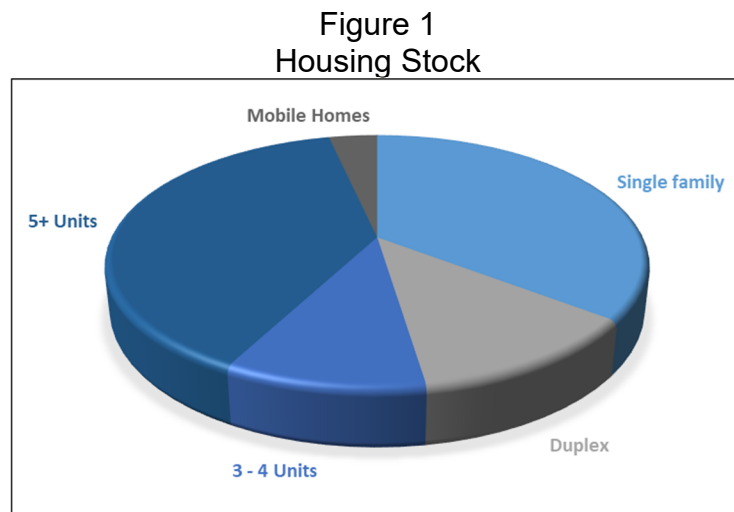
2. *Capacity of School System; effect on school bus transportation and distance of the proposed subdivision from the nearest elementary school.*

8. *Fiscal impact statement analyzing the impact of the subdivision on municipal, school and county revenues and expenditures, including estimated potential tax revenue and estimated number of school children.*

2. Regional and Local Trends

Census figures report that from 2000 to 2010 Lebanon's population increased from 12,568 to 13,151 over the 10-year period. The 2020 Census reports Lebanon's population to be 14,282, an 8.6% increase since 2010. The NH Office of Planning and Development reports the City's 2023 population to be 14,282.

Approximately 35.3% of Lebanon's housing stock consists of single-family homes, with the Census data reporting 2,790 homes out of a total housing stock of 7,886 units³ as outlined in Figure 1.



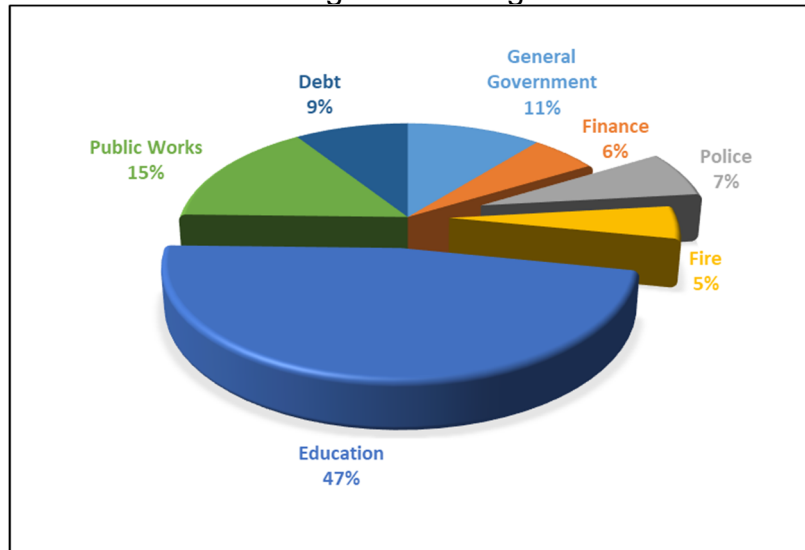
3. Budgets

The city's FY24 Budget, as detailed in Figure 2, outlines that education is the largest municipal budget line item, followed by the emergency service

³ NH Office of Planning and Development.

departments. Based on case studies of comparable properties, given the proposed use development program, potential increases in municipal service demands will be primarily focused on emergency service departments, along with the school department. Key budget drivers this Fiscal year include increases in workers compensation costs (17.96%), employee benefits (9.15%), and capital improvement investments (28.5%).

Figure 2
Budget Percentages



4. Fiscal Methodology Approach

Fiscal Impact Analyses can have many connotations, this analysis will follow the classic definition of fiscal impact as follows “A *projection of the direct, current public costs and revenues associated with residential or nonresidential growth to the local jurisdiction in which the growth is taking place*⁴.”

There are several methodologies that are used to estimate fiscal impacts of proposed development projects. The Per Capita/Unit Multiplier Method is the most often used analysis to determine municipal cost allocation. This method is the classic “average” costing method for projecting the impact of population growth on local spending patterns and is used to establish the costs of existing

⁴ Burchell.

services for new development. The basic premise of this method is that current revenue/cost ratios per person and/or per unit are a potential indicator of future revenue/cost impacts occasioned by growth. The advantage of this approach is its simplicity of implementation; however, the downside of this approach is that the methodology calculates the “average” cost as being the expected cost, which is often not the case, and costs can be exaggerated—in some cases significantly. For most new land uses, many department budgets are not measurable impacted in any long-term way.

The Marginal Cost Approach is an alternative methodology that can be used to estimate and measure developmental impacts based on actual costs that occur in the community. At this time, a “level of service” exists in Lebanon to serve the community. This existing service level addresses the needs of the community through existing tax collections. As new developments occur, pressures are placed on some departments to address increased demands, while other departments see little if any measurable service demand increases. In reviewing the potential impacted departments specifically, a truer picture of anticipated cost impacts can be determined. For this analysis, we will apply both the Average Cost and Marginal Cost Approach methodologies to review municipal service demand cost increases.

Given the nature of the proposed Project, as will be seen by the analysis below, few significant impacts will be felt by most City departments. Solid waste generated by the project will be removed by a private hauler. Any water and sewer expenses will be offset through user fees. All onsite driveways will be private, and all maintenance expenses will be paid for by the project owner. This is not to infer that no increased expenditure will occur because of this project. Measurable operational influences will be felt by a few departments, most noticeable the Police/Fire and Schools.

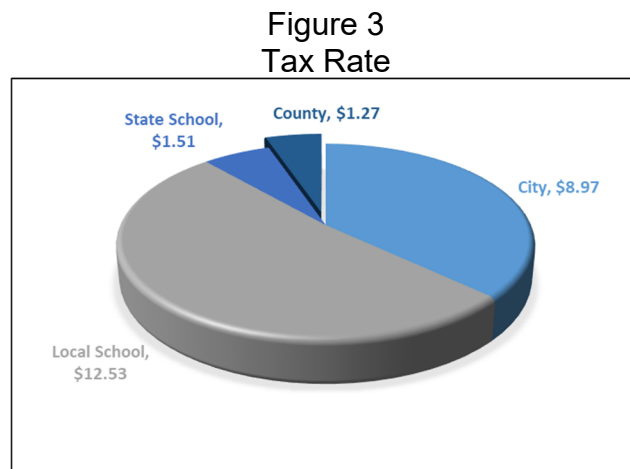
This fiscal report will outline General Fund revenues and municipal service costs. All data, tax rates and costs are assumed to be in FY2024. It should be noted

that the costs outlined are “estimates” and no actual costs will be realized without review and approval by appropriate department heads, administrators, and elected City officials.

5. Local Revenues

A) Property Taxes

Local property taxes provide the bulk of municipal revenues for New Hampshire communities. The 2024 total Tax Rate for Lebanon is \$26.28, with a “local” tax rate of \$24.98 which excludes the County charges. Figure 3 outlines the breakdown of the various tax rate components.



Reviewing local market conditions and the assessments of similar apartment complexes in the community, it is estimated the proposed project will have a value of \$73,371,669 once complete as outlined in Table 1.

**Table 1
Estimated Project Assessment**

Apartment Community	Assessment	Units	Assess/Unit
Timberwood	\$50,378,000	252	\$199,913
Emerson Gardens	\$27,442,100	160	\$171,513
Altaria	\$28,857,700	153	\$188,612
Average	\$106,677,800	565	\$188,810
Proposed Townhomes	\$9,629,324	51	
Proposed Studio & One Beds⁵	\$63,742,346	422	
Total Est. Assessment	\$73,371,669		

⁵ Per unit assessment reduced by 20% to reflect smaller proposed units.

Based upon this estimated assessment, as outlined in Table 1, the development will generate \$1,802,405 in annual property tax payments, with \$708,770 being paid in local City property taxes and \$1,030,138 generated in school property taxes as outlined in Table 2. The existing site properties are assessed for \$1,313,300 and generate \$32,806 in total tax payments. With this redevelopment project, site property tax payments will increase by 6,629%.

Table 2
Estimated Property Tax Revenue

Units	Total Value	City Revenue	School Revenue	County Revenue	Total Taxes
474	\$73,371,669	\$708,770	\$1,030,138	\$95,383	\$1,834,292
			Existing Site Assessment	\$1,313,300	\$31,887
			Net New Property Revenue		\$1,802,405

Another source of revenue to the community is from vehicle registrations; Lebanon reported \$2,703,139 in vehicle registrations in FY23. Table 3 outlines the projected motor vehicle registration fee revenue stream for the proposed project.

Table 3
Motor Vehicle Registration Fees⁶

500 vehicles ⁷ x \$191	\$95,500
-----------------------------------	----------

Total estimated project revenues total \$1,897,905 as outlined in Table 4.

Table 4
Total Estimated Revenues

Local Property Taxes	\$1,802,405
Motor Vehicle Fees	\$95,500
Total	\$1,897,905

⁶ Based upon data from the City Clerk, the average cost of vehicle registrations is \$191 on 14,802 vehicle registrations, including processing fees; FY23 revenue totaled \$2,838,194.

⁷ 1 vehicle per studio/one bed, 1.5 per townhome.

C) Impact Fees

The City of Lebanon charges impact fees on new development projects. These Fees are related to school, recreation, police and fire capital projects. As outlined in Table 5, these one-time fees are estimated to total \$1,391,448 and are collected once the units are constructed. The 2023 updated impact fee report noted that excess capacity exists at all city schools.

Table 5
Estimated Impact Fees

Impact Fees		
Building Area	291,098	Fee
School	\$2.06	\$599,662
Recreation	\$1.22	\$355,140
Police	\$0.49	\$142,638
Fire	\$1.01	\$294,009
Total		\$1,391,448

School Impact Fees – Nexus Challenge

It should be noted that the assessment of impact fees in New Hampshire are authorized under RSA 674:21, with Section V and paragraph (a) noting:

V. As used in this section "impact fee" means a fee or assessment imposed upon development, including subdivision, building construction, or other land use change, in order to help meet the needs occasioned by that development for the construction or improvement of capital facilities....

(a) The amount of any such fee shall be a proportional share of municipal capital improvement costs which is reasonably related to the capital needs created by the development, and to the benefits accruing to the development from the capital improvements financed by the fee. Upgrading of existing facilities and infrastructures, the need for which is not created by new development, shall not be paid for by impact fees.

Impact fees must have a nexus between the charge being made and the facility being impacted, otherwise a fee cannot be assessed.

As noted, the development program involves 51 three bedroom rental townhomes and charging school impact fees for these units is entirely appropriate. The remaining units will consist of 316 studio units and 106 one

bedroom units. The studio units will generate no school age children (SAC) and the one bedroom few if any; yet the impact fee program requires a charge for all of these types of units based on their size without supporting the actual impact to schools. If there is no impact, there can be no fee. Based upon our SAC database for one bedroom units, the SAC ratio is .009 children per unit; applied to the proposed one bedroom program (106 townhome units x .009) equates to 1 (.954) school age child.

Given the statutory requirements for impact fees and the noted facts, the proposed studio and one-bedroom apartment units should not be charged a school impact fee as they are not “reasonably related to the capital needs created by the development, and to the benefits accruing to the development from the capital improvements financed by the fee”.

6. Municipal Service Costs

Police & Fire

The Police and Fire Departments are projected to experience some measurable impact from the proposed project. For fiscal year 2024, the Police Department budget was \$7,398,430 and the Fire Department budget \$5,278,980. To assess the degree of impact this Project would have on these departments, emergency calls to similar apartment developments in Lebanon were analyzed. As emergency calls are a reliable metric that provides a more realistic measure of demand for service, we will use this average costing method to allocate costs to the proposed apartment use. Emergency call data was obtained for both police and fire departments and averaged to determine the numbers of annual calls per unit. These ratios were then totaled to derive a total average call volume per unit, which was then used to generate projected emergency calls for each Department as outlined in Table 6.

Extrapolating from the comparable call data, increases in call volume are projected to the City's Police and Fire Departments. Annual Police calls are projected to increase by 60 calls per year (1.15 week). The Department responds to approximately 27,700 Calls For Service⁸ annually (532 call per week).

Annual Fire Department calls are projected to increase by 59 calls (21 fire/ 38 EMS) per year (1.13 calls per week). In 2023, the Department responded to a total of 4,105 calls in the city, of which 3,088 were EMS related.

⁸ City Manager Updates; January 2024

Table 6
Average Calls: Police-Fire-EMS

Project	Town	Units	Avg. Police Call Per Year	Avg. Call Per Unit	Projected Calls
Altaria	Lebanon	129	14	0.11	
Emerson Gardens	Lebanon	160	49	0.31	
Timberwood	Lebanon	252	6	0.02	
Totals		541	69	0.13	
Proposed	Brickyard	474			60

Project	Town	Units	Avg. Fire Call Per Year	Avg. Call Per Unit	Projected Calls
Altaria	Lebanon	129	11	0.085	
Emerson Gardens	Lebanon	160	7	0.044	
Timberwood	Lebanon	252	7.1	0.028	
Stone Farms	Lebanon	144	4.6	0.032	
Totals		685	30	0.043	
Proposed	Brickyard	474			21

Project	Town	Units	Avg. EMS Call Per Year	Avg. Call Per Unit	Projected Calls
Altaria	Lebanon	129	5	0.039	
Emerson Gardens	Lebanon	160	28	0.175	
Timberwood	Lebanon	252	7.3	0.029	
Stone Farms	Lebanon	144	3.1	0.022	
Totals		541	43	0.08	
Proposed	Brickyard	474			38

Police Department

The average cost of a police officer in Lebanon, with benefits, ranges from \$110,000 to \$120,000 a year. To assign some cost to the community from the proposed new land use, we have calculated an average cost per call of \$333 and when applied to the estimated 60 calls, as detailed in Table 7, a cost of \$19,980 is derived. To be conservative, we will carry a cost of **\$40,000**.

Table 7
Police Department Impact

Department	FY 2024 Budget	Yearly Calls ⁹	Cost/call	Est. Calls	Annual Cost
Police	\$7,398,430	22,210	\$333	60	\$19,980

This cost estimate is not inferring the Police Budget will increase as a result of the proposed development but assigns a “cost” to account for this expanded land use in the community.

⁹ Calls discounted by 20% to address minor calls.

Fire Department

As noted above, a projected increase of 59 new calls (21 fire/38 EMS) is anticipated for the Fire Department. The average cost of a fire fighter with benefits is approximately \$110,000. As with the police department, as outlined in Table 8, we have used cost averaging to estimate a **\$75,874** impact on the Fire Department.

Table 8
Fire Department Impact

Department	FY 2024 Budget	Yearly Calls	Cost/call	Est. Calls	Annual Cost
Fire	\$5,278,980	4,105	\$1,286	59	\$75,874

It should be noted that the EMS service is a revenue generator for the city and in FY2023 Budget, an estimated \$1,292,000 in revenue is reported. This translates into an average of \$417 in revenue per EMS call ($\$1,292,000 / 3,088$ EMS calls). As such, costs associated with EMS calls to the subject site will be somewhat mitigated by the estimated EMS revenues of **\$15,846** ($\417×38 EMS calls).

For both the police and fire departments, this project, when combined with other proposed and approved developments in the community will increase demands on the departments over time. This impact from this increased demand for services on the Departments will need to be addressed as the city continues to grow.

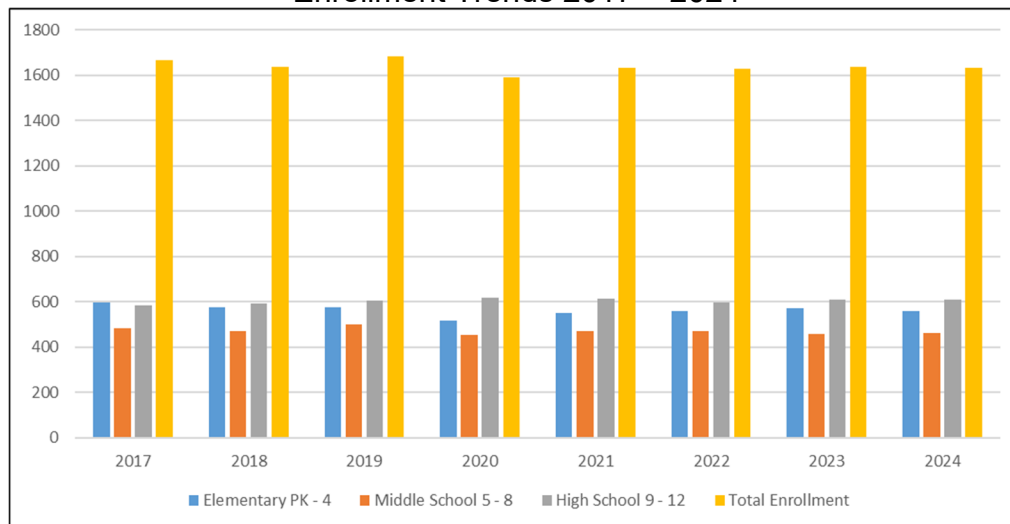
School Department

Table 9 and Figure 4 outline enrollment trends within the Lebanon School District since 2017. Overall, dramatic changes have not been seen and all schools are well within their building capacity¹⁰. The Elementary School has seen the largest decline in enrollment of 6.2%, overall school enrollment has declined by 2%. The subject site lies across the street from Hanover Street Elementary school and High School; the Elementary School has adequate capacity to accommodate additional students, with the most recent Impact Fee analysis noting the school at 65.7% capacity¹¹. In fact, ample capacity exists at all grade levels.

Table 9
School Enrollment 2017 - 24

School	2017	2018	2019	2020	2021	2022	2023	2024	% Change	Capacity
Elementary PK - 4	597	577	576	518	552	560	570	560	-6.20%	783
Middle School 5 - 8	483	470	500	454	469	471	456	464	-3.93%	600
High School 9 - 12	586	591	606	619	613	598	610	608	3.75%	720
Total Enrollment	1,666	1,638	1,682	1,591	1,634	1,629	1,636	1,632	-2.04%	2,103

Figure 4
Enrollment Trends 2017 – 2024



¹⁰ City of Lebanon Impact Fee Update 2021, BCM Planning, LLC.

¹¹ BCM Planning, LLC Impact fee update, 2024; school capacity 473 seats fall 2023 enrollment 311.

As noted above, the Project will involve the construction of 474 housing units. To estimate the number of School Age Children (SAC) that may reside within the residential community, we relied upon the Impact Fee Update Report prepared by BCM Planning¹² for the City. Based upon SAC ratios calculated per 1,000 square feet of living area for non-single family housing units, a preliminary estimate of 34 SAC may reside with the proposed complex as summarized in Table 10.

Table 10
Estimated School Age Children

	Units	Sq. Ft. / Unit	Total Sq. Ft.	Enrollment Per 1,000 Sq. Ft.	SAC
Studio	316	450	142,200		
One Bedrooms	106	683	72,398		
Townhomes	51	1,500	76,500		
Total	473		291,098	0.116	34

As noted above, including studio units (316) and one bedroom units (106) in a square foot based school impact fee program is inappropriate and greatly exaggerates the potential number of school age children that may reside in this community. As outlined in Table 11, applying the school impact fee enrollment ratio to the townhomes generates an estimated 9 school age children.

Table 11
Estimated School Age Children

	Units	Sq. Ft. / Unit	Total Sq. Ft.	Enrollment Per 1,000 Sq. Ft.	SAC
Townhomes	51	1,500	76,500		
Total	473		76,500	0.116	9

Based on our database where it is known how many children reside within studio units (0) and one-bedroom units (SAC ratio of .009), we believe one school child (106 one bedroom units x .009 = .954 school children) may reside within the complex. To be conservative, we will account for potentially 3 SAC for a total of **12 school age children** potential residing in the apartment community.

¹² City of Lebanon Impact Fee Update 2024 January BCM Planning, LLC.

Using these same SAC ratios, the anticipated grade breakdown of these 12 students is outlined in Table 12, with 3 elementary students anticipated, 4 middle school and 5 high school.

Table 12
Estimated Enrollment Breakdown

	Ratio	Grade Level
Elementary	0.235	3 (2.8)
Middle	0.323	4 (3.8)
High School	0.441	5 (5.2)

To account for potential school costs¹³, we will carry the cost of ½ a teaching position, \$60,000. In addition, to account for potential special educational spending, where 18% of the student body is provided with services, a cost of \$76,000 (2 SAC at \$38,000 each) will be accounted for, with a total cost of **\$136,000**.

The New Hampshire Department of Education distributes Adequacy Aid to communities, along with other qualified funding programs. For FY2025, it is estimated that Lebanon will receive \$7,212,696 in Aid¹⁴ through this program. Aid is distributed based upon a community's Average Daily Membership (ADM) and Base Aid totals \$4,182 per student. If the enrollment estimate of 12 students is assumed, **\$50,184 in Aid funds** would be received. Other qualified Aid includes Free/reduced Differentiated Aid; \$2,346 per student, Special Education Aid; \$2,142 per student, and English Language Aid; \$816 per student.

Other Departments

As noted previously, all areas within the development will be private (maintenance & refuse) and water/sewer expenses will be addressed through connection and user fees. Any costs to the Building Department will be offset

¹³ In the spring of 2024, we discussed the former development program with the Superintendent and Business Administrator when 55 SAC were estimated. Noted costs were derived from these discussions. At that time, no capacity issues were raised, and no new bussing costs were anticipated.

¹⁴ NHDOE, FY2025 Estimate, November 15, 2023.

by the payment of thousands of dollars in building permit fees. No other measurable impacts are anticipated to other City departments. To be conservative, we will account for \$120 per unit, or **\$56,880** potential miscellaneous City related costs¹⁵.

County Impacts

As noted in Table One, we are estimating \$95,383 in County property tax revenue from this project. Grafton County oversees a number of services for the region including nursing homes, sheriff's department, and the court system. Estimating new costs that may impact County services, with any confidence, would be extremely challenging and unreliable, therefore an estimated cost impact was not calculated in this analysis.

¹⁵ Estimated \$120 per unit, covering potential costs to libraries, humane services, community services.

Summary

Table 13
Fiscal Findings

Gross Local Property Taxes & Revenue		\$1,897,905
Municipal Costs		
	Police	-\$19,980
	Fire	-\$75,874
	Schools	-\$136,000
	Misl.	-\$56,880
	Total Estimated Costs	-\$288,734
Net Negative Fiscal Impact		+\$1,609,171

Based upon the report's findings, gross yearly local property taxes and revenues generated by the proposed project are estimated to total \$1,897,905. The anticipated fiscal cost impact to the city is estimated to be \$288,734, resulting with a positive fiscal impact from the proposed development of approximately \$1,609,171. All anticipated costs are estimates and no definitive costs are reported.

Key findings supporting this conclusion include:

- Calls to the Police Department are projected to increase by less than 1%, with an estimated 60 calls generated from the site annually.
- Calls to the Fire Department will realize less than a 1% increase in call volume, with an estimated 21 fire calls and 38 EMS calls annually. EMS revenue is estimated to total \$15,824 annually.
- An estimated 12 school age children may reside within the residential community, per student State Aid totals \$4,182 for FY2025. Hanover Elementary school enrollment has declined by 40 students over the last six years.
- The proposed project will include private drives and trash collection.
- Impact fee payments will be made for fire, police, schools and recreation capital facilities.
- Full time jobs will be created managing the new apartment complex along with temporary construction jobs, infusing millions of dollars into the local economy.



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Brickyard One Nominee Trust

Project Name: Brickyard Multi-family Planned Unit Residential Development

Project Address: 174 Hanover Street Ext.

WAIVER REGULATIONS

In order to grant a Waiver from a requirement of the City of Lebanon Site Plan Review or Subdivision Regulations, the Planning Board must find that the Waiver is justified under one of the following criteria (See Article VII of the Site Plan Review Regulations and Section 7.15 of the Subdivision Regulations):

Criteria A. Strict conformity would pose an unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and intent of the regulations;

OR

Criteria B. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.

WAIVER REQUEST(S)

I (we) hereby request a Waiver from:

[You can respond in the space provided, or attach a separate statement. Please be prepared to address each request during your public hearing. You must show that you have justified granting the Waiver(s).]

1. Section ^{5.1E(7)} of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because the required information for all but 2 buildings within 200' of the Site is provided. One omitted building is a school maintenance building that is nearly 200' from the Site. Both omitted buildings are of similar height to those shown on the site plans and are omitted because they are located beyond the limits of the existing conditions survey.
2. Section ^{5.1E(16)(b)} of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because the Site consists of 23 acres, the vast majority of which is wooded. A quantity of trees prohibitive to identifying all sitewide are 12" in diameter or larger. The Project will be planting a significant amount of trees as part of the landscaping requirements and compliance calculations are provided on the Landscape Plans.

- 6.6.C.1(2)k
3. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because the stormwater management design is based on preliminary data from a Certified Soil Scientist based on test pits completed for site specific soil mapping purposes. Confirmatory, stormwater-focused test pits will be completed as soon as proposed stormwater management locations are accessible. Results will be shared with the City and the stormwater management design updated if necessary.
- 6.5.D.5.
4. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because a sidewalk constructed along the entire frontage of the Project Site requires environmental impacts and results in a redundant sidewalk configuration along Hanover Street. Instead, the Site Plans propose sidewalk improvements that result in a continuous sidewalk from the northern side lot line to the existing pedestrian bridge over I-89, utilizing a mix of existing and proposed sidewalk.
5. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
- _____
- _____
6. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
- _____
- _____
7. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
- _____
- _____
8. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
- _____
- _____

SIGNATURE

I (we) hereby submit this application to the Planning Board and attest that to the best of my (our) knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As the applicant or as the agent of the applicant, I attest that I am duly authorized to act in this capacity.

Signature of Applicant:  Date: December 11, 2024



City of Lebanon, New Hampshire

APPLICATION FOR CONDITIONAL USE PERMIT

SUPPORT STATEMENT

Office Use Only Date Received: _____ Application No.: _____

I. APPLICATION CHECKLIST

- [Application form](#)
- [Public Hearing Notification List](#)
- [Filing fee](#)
- *This form, including written responses to the Section 302.4.D requirements, outlined below*
- *A site plan*
- *Optional: photos and any other materials in support of your application*

II. PROJECT DESCRIPTION

I (we) hereby request a Conditional Use Permit as provided for in Article(s) III,
Section(s) 308.4, of the Lebanon Zoning Ordinance.

Please describe your proposed project with as much detail as possible. You can respond in the space provided below or on a separate sheet of paper.

The Project proposes the construction of a 474-unit multi-family development totaling approximately
442,254 SF, with 14 total buildings. Parking, landscaping, access, utilities, and other site
improvements are proposed as part of the Project. This CUP is requested only for the buildings in the
R-1 zone, as buildings within R-0-1 will be 45' maximum in compliance with that zone.

III. CONDITIONAL USE PERMIT CRITERIA

In order to obtain a Conditional Use Permit, you must demonstrate to the Planning Board that the proposal satisfies the applicable criteria set forth in Sections A and B below. You must address each criteria in the space provided or on a separate sheet of paper.

A. Specific Criteria

The Conditional Use Permit is authorized by Article V, Section 501.1.B of the Zoning Ordinance which requires the applicant to demonstrate that (*please address any criteria set forth in the Zoning Ordinance that specifically apply to your proposed use or project*):

The Project is submitting a site plan application for the development as a Planned Unit Residential
Development (PURD). To minimize paved area on-site and provide covered parking for residents, the
proposed apartment building designs include parking below the buildings. Pursuant to Zoning
Ordinance Article III, Section 308.4, a CUP is required in support of building heights up to 55' with
parking below in the R-1 zone.

B. General Criteria per Section 302.4.D

A conditional use permit shall be granted only if the Planning Board determines that the proposal conforms to all of the following standards:

1. The site is suitable for the proposal. This includes:

a. Adequate vehicular and pedestrian access for the intended use.

The Project proposes two driveway and sidewalk connections to Hanover St. providing full circulation through the development. Additional sidewalks and walking paths are also proposed as resident amenities.

b. The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, safe access, and other municipal services.

Emergency vehicle access and separated sidewalks are proposed through the Site with two connections to Hanover St. Fire hydrants are proposed along the main vehicular route through the site. A fiscal impact analysis discussing municipal service and school system impacts is included with the application package.

c. The absence of environmental constraints (floodplain, steep slope, etc.) proposed to be impacted by the intended use.

Proposed site work minimizes wetland impacts to the maximum extent practicable and is not expected to impact floodplain. The Project has been designed to work with the natural topography to minimize ground disturbance, and to utilize natural features, such as Densmore Pond, as a resident amenity, providing a walking path overlooking the pond along its length.

d. The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater treatment, electricity, and similar utilities.

Municipal sewer and water are available in Hanover Street, and stormwater treatment is being provided via infiltration and detention systems in various areas across the Site. Electric and other telecommunication services are available in Hanover Street. Capacities of each utility will be confirmed through the design phase of the Project.

2. External impacts: The external impacts of the proposed use on abutting properties and the neighborhood shall be commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. This shall include, but not be limited to, water runoff, drainage, traffic, noise, odors, vibrations, dust, fumes, hours of operation, and exterior lighting and glare. In addition, the location, nature, design, and height of the structure and its appurtenances, its scale with reference to its surroundings, and the nature and intensity of the use, shall not have an adverse effect on the surrounding environment nor discourage the appropriate and orderly development and use of land and buildings in the neighborhood. The proportion of the site proposed to be occupied by impervious surfaces shall be minimized to the extent necessary to preclude unreasonable risk of runoff, erosion, sedimentation, and other potentially adverse on-site or off-site effects.

The Project has taken measures to minimize impacts to abutting properties and the predominately residential neighborhood. PURDs are an allowed use in each zoning district the Site lies within, and multifamily developments are an allowed use in the districts where the apartment buildings are proposed. Stormwater runoff quality and quantity shall be maintained or improved. The redevelopment

of the Site will be an improvement over the existing vacant, deteriorating remnants of the Densmore Brickyard that presents a public safety hazard and visually detracts from the area. Landscaping and architectural design will result in a pleasing and complimentary aesthetic across the currently derelict parcel. Mainly tucked away from the public road, the buildings' scale will be less noticeable and is also consistent with similar developments along the nearby Route 120 corridor. Construction impacts (dust, fumes, traffic) will be limited to the max. extent practicable and subject to US EPA sedimentation/dust control requirements.

3. **Character of the site development:** The proposed layout and design of the site shall not be incompatible with the established character of the neighborhood and shall mitigate any external impacts on abutters, the neighborhood, and nearby public ways and infrastructure. This shall include, but not be limited to, the relationship of the building(s) to the street, the amount, location, and screening of off-street parking, the treatment of yards and setbacks, the buffering of adjacent properties, and provisions for vehicular and pedestrian access to and within the site.

The largest proposed structures are located well beyond the required building setbacks, and landscape screening is proposed to address undesirable views. The vast majority of parking will not be visible to abutters, due to distance, vegetative screening, and positioning below the podium construction buildings in additionally screened parking areas. Vehicle and pedestrian access to/from the site will be provided at two driveway connections at Hanover Street that provide continual access across the Site.

4. **Character of the buildings and structures:** The design of any new buildings or structures and the modification of existing buildings or structures on the site shall not be incompatible with the established character of the neighborhood. This shall include, but not be limited to, the scale, height, and massing of the building or structure, the roof line, locations of access, and visual compatibility with the area.

The design of the new buildings is intended to be similar to other multi-family developments that have been recently built along the Mt. Support Road corridor. The Site also intends to utilize the existing features like Densmore Pond and the existing brick kilns to enhance the site. The heights of the buildings are a maximum of 35', 45', and 55' above grade, as permitted by zoning district in the Zoning Ordinance. See site plans for more information.

5. **Preservation of natural, cultural, historic, and scenic resources:** The proposed use and layout of the site, including all related development activities, shall to the greatest extent practicable preserve identified natural, cultural, historic, and scenic resources on the site and shall not degrade such identified resources on abutting properties. This shall include, but not be limited to, identified wetlands, floodplains, significant wildlife habitat and documented wildlife corridors, stone walls, mature tree lines, identified historic buildings or sites, scenic views, and viewsheds.

The Project has minimized wetland impacts by crossing at the narrowest locations practicable, and aims to maintain and utilize existing elements on-site to enhance the resident's experience. Some of the existing brick kilns will be maintained and multiple patios with overlooks of Densmore Pond are proposed. The elevation of the development provides desirable view corridors from the overlooks into the valley to the east. Cultural and historic resource assessment has been performed and submitted to the State DHR for review.



City of Lebanon, New Hampshire

APPLICATION FOR CONDITIONAL USE PERMIT

SUPPORT STATEMENT

Office Use Only Date Received: _____ Application No.: _____

I. APPLICATION CHECKLIST

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- [Filing fee](#)
- *This form, including written responses to the Section 302.4.D requirements, outlined below*
- *A site plan*
- *Optional: photos and any other materials in support of your application*

II. PROJECT DESCRIPTION

I (we) hereby request a Conditional Use Permit as provided for in Article(s) V ,
Section(s) 501.1.B and 501.2 , of the Lebanon Zoning Ordinance.

Please describe your proposed project with as much detail as possible. You can respond in the space provided below or on a separate sheet of paper.

The Project proposes the construction of a 474-unit multi-family development totaling approximately
442,254 SF, with 14 total buildings. Parking, landscaping, access, utilities, and other site
improvements are proposed as part of the Project.

III. CONDITIONAL USE PERMIT CRITERIA

In order to obtain a Conditional Use Permit, you must demonstrate to the Planning Board that the proposal satisfies the applicable criteria set forth in Sections A and B below. You must address each criteria in the space provided or on a separate sheet of paper.

A. Specific Criteria

The Conditional Use Permit is authorized by Article V , Section 501.1.B of the Zoning Ordinance which requires the applicant to demonstrate that *(please address any criteria set forth in the Zoning Ordinance that specifically apply to your proposed use or project)*:

The Project is submitting a site plan application for the development as a Planned Unit Residential
Development (PURD). Pursuant to Zoning Ordinance Article V, Section 501.1.B, a CUP is required in
support of PURD applications.

B. General Criteria per Section 302.4.D

A conditional use permit shall be granted only if the Planning Board determines that the proposal conforms to all of the following standards:

1. The site is suitable for the proposal. This includes:

a. Adequate vehicular and pedestrian access for the intended use.

The Project proposes two driveway and sidewalk connections to Hanover St. providing full circulation through the development. Additional sidewalks and walking paths are also proposed as resident amenities.

b. The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, safe access, and other municipal services.

Emergency vehicle access and separated sidewalks are proposed through the Site with two connections to Hanover St. Fire hydrants are proposed along the main vehicular route through the site. A fiscal impact analysis discussing municipal service and school system impacts is included with the application package.

c. The absence of environmental constraints (floodplain, steep slope, etc.) proposed to be impacted by the intended use.

Proposed site work minimizes wetland impacts to the maximum extent practicable and is not expected to impact floodplain. The Project has been designed to work with the natural topography to minimize ground disturbance, and to utilize natural features, such as Densmore Pond, as a resident amenity, providing a walking path overlooking the pond along its length.

d. The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater treatment, electricity, and similar utilities.

Municipal sewer and water are available in Hanover Street, and stormwater treatment is being provided via infiltration and detention systems in various areas across the Site. Electric and other telecommunication services are available in Hanover Street. Capacities of each utility will be confirmed through the design phase of the Project.

2. External impacts: The external impacts of the proposed use on abutting properties and the neighborhood shall be commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. This shall include, but not be limited to, water runoff, drainage, traffic, noise, odors, vibrations, dust, fumes, hours of operation, and exterior lighting and glare. In addition, the location, nature, design, and height of the structure and its appurtenances, its scale with reference to its surroundings, and the nature and intensity of the use, shall not have an adverse effect on the surrounding environment nor discourage the appropriate and orderly development and use of land and buildings in the neighborhood. The proportion of the site proposed to be occupied by impervious surfaces shall be minimized to the extent necessary to preclude unreasonable risk of runoff, erosion, sedimentation, and other potentially adverse on-site or off-site effects.

The Project has taken measures to minimize impacts to abutting properties and the predominately residential neighborhood. PURDs are an allowed use in each zoning district the Site lies within, and multifamily developments are an allowed use in the districts where the apartment buildings are proposed. Stormwater runoff quality and quantity shall be maintained or improved. The redevelopment

of the Site will be an improvement over the existing vacant, deteriorating remnants of the Densmore Brickyard that presents a public safety hazard and visually detracts from the area. Landscaping and architectural design will result in a pleasing and complimentary aesthetic across the currently derelict parcel. Mainly tucked away from the public road, the buildings' scale will be less noticeable and is also consistent with similar developments along the nearby Route 120 corridor. Construction impacts (dust, fumes, traffic) will be limited to the max. extent practicable and subject to US EPA sedimentation/dust control requirements.

3. **Character of the site development:** The proposed layout and design of the site shall not be incompatible with the established character of the neighborhood and shall mitigate any external impacts on abutters, the neighborhood, and nearby public ways and infrastructure. This shall include, but not be limited to, the relationship of the building(s) to the street, the amount, location, and screening of off-street parking, the treatment of yards and setbacks, the buffering of adjacent properties, and provisions for vehicular and pedestrian access to and within the site.

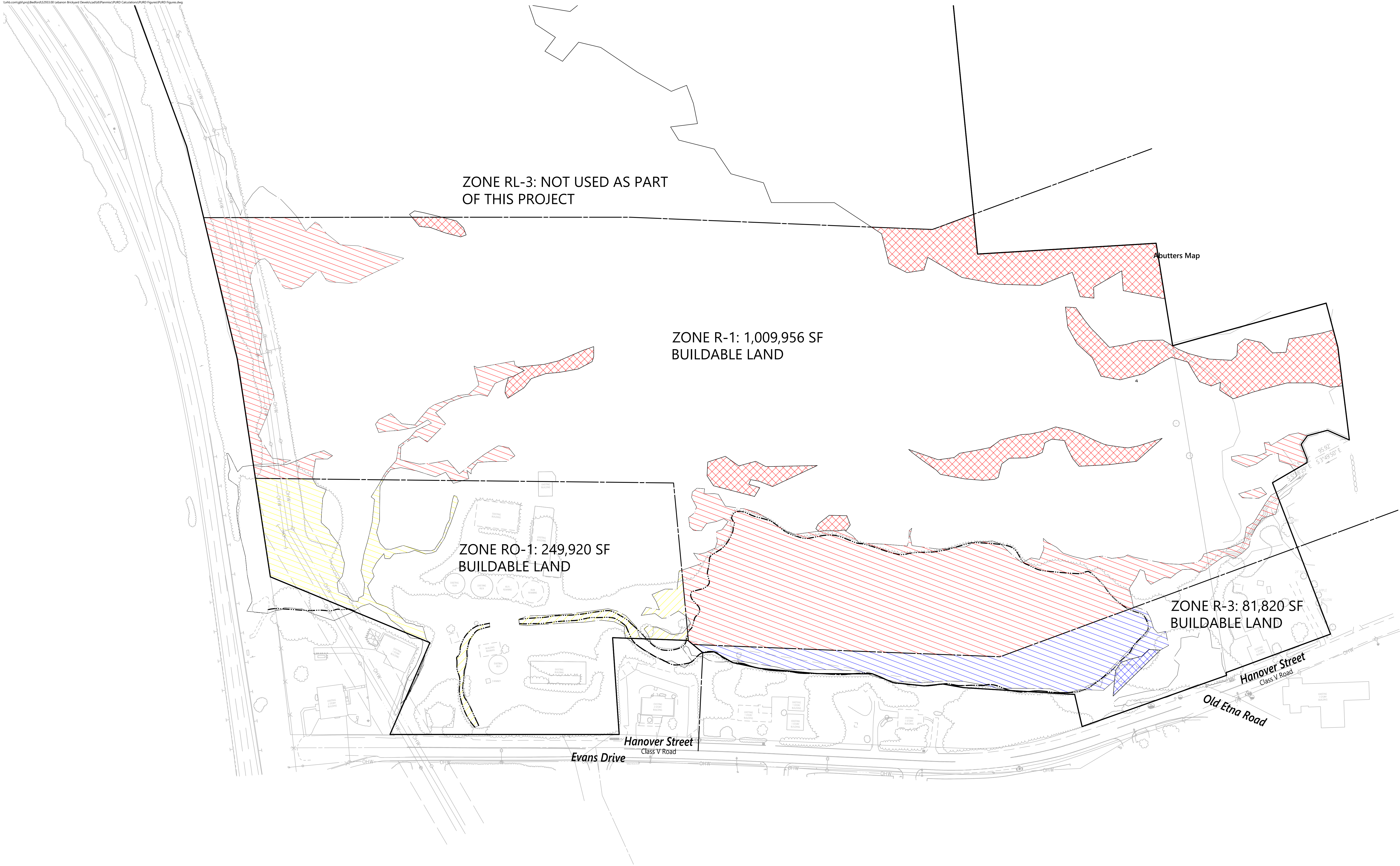
The largest proposed structures are located well beyond the required building setbacks, and landscape screening is proposed to address undesirable views. The vast majority of parking will not be visible to abutters, due to distance, vegetative screening, and positioning below the podium construction buildings in additionally screened parking areas. Vehicle and pedestrian access to/from the site will be provided at two driveway connections at Hanover Street that provide continual access across the Site.

4. **Character of the buildings and structures:** The design of any new buildings or structures and the modification of existing buildings or structures on the site shall not be incompatible with the established character of the neighborhood. This shall include, but not be limited to, the scale, height, and massing of the building or structure, the roof line, locations of access, and visual compatibility with the area.

The design of the new buildings is intended to be similar to other multi-family developments that have been recently built along the Mt. Support Road corridor. The Site also intends to utilize the existing features like Densmore Pond and the existing brick kilns to enhance the site. The heights of the buildings are a maximum of 35', 45', and 55' above grade, as permitted by zoning district in the Zoning Ordinance. See site plans for more information.

5. **Preservation of natural, cultural, historic, and scenic resources:** The proposed use and layout of the site, including all related development activities, shall to the greatest extent practicable preserve identified natural, cultural, historic, and scenic resources on the site and shall not degrade such identified resources on abutting properties. This shall include, but not be limited to, identified wetlands, floodplains, significant wildlife habitat and documented wildlife corridors, stone walls, mature tree lines, identified historic buildings or sites, scenic views, and viewsheds.

The Project has minimized wetland impacts by crossing at the narrowest locations practicable, and aims to maintain and utilize existing elements on-site to enhance the resident's experience. Some of the existing brick kilns will be maintained and multiple patios with overlooks of Densmore Pond are proposed. The elevation of the development provides desirable view corridors from the overlooks into the valley to the east. Cultural and historic resource assessment has been performed and submitted to the State DHR for review.



PURD Density Figure

Lebanon Brickyard Development

Lebanon, NH

Source: VHB
Prepared for: Planning Board Meeting
Date: May 2024



Planned Unit Residential Development Calculations

Project Brickyard Planned Unit Residential Development
 Hanover Street, Lebanon, NH
 Calculated by DJB
 Checked by TMD

Project # 52933.00
 Date 12/12/2024
 Date 12/12/2024

Buildable Area Calculations

Zoning District	Total Area On-Site (SF)	Wetlands Area (SF)	Steep Slopes Area (SF)	Combined Wetlands and Steep Slopes Area (SF)	% Coverage	% to be Subtracted	Wetlands/Steep Slopes Deduction Area (SF)	Gross Buildable Area (SF)	10% Road/Street Reduction
R3	123,849	52,370	2,527	54,897	44.3%	60%	32,938	90,911	81,820
R1	1,252,605	221,288	104,790	326,078	26.0%	40%	130,431	1,122,174	1,009,956
RO1	286,532	50,290	0	44,218	15.4%	20%	8,844	277,688	249,920
	1,662,986								

Maximum Dwelling Unit Quantity Calculations

Buildable Area PURD Formula Method (SF)	Zone	Density (SF required for first two Units)	Density (Units per SF)	Permitted Dwelling Units
81,820	R3	N/A	10,000	8
1,009,956	R1	10,000	3,000	335
249,920	RO1	10,000	3,000	80
Subtotal Number of Units				423.5
12% bonus				50.8
Total Number of Units				474.3

Open Space Requirement Calculation

Zoning District	Total Area On-Site (SF)	Open Space Requirement	Required Open Space (SF)
R3	123,849	50%	61,925
R1	1,252,605	30%	375,782
RO1	286,532	30%	85,960
		Total	523,666

Assumptions:

Delineated wetlands were used wherever possible
 Used LebGIS for steep slope delineation
 Used LebGIS for wetlands outside of field delineation and survey scope
 Wetlands and steep slopes could not overlap

Site Plans

Issued for	Permitting
Date Issued	May 10, 2024
Latest Issue	December 11, 2024

The Brickyard Residential Development

174 Hanover Street Extension

Lebanon, New Hampshire 03766

Grafton County

Owner/Applicant

Brickyard One Nominee Trust
Richard M. Marchese, Trustee
P.O. Box 720, Middleton, MA 01949

Assessor's Map/Lot:

Map 48 Lots 01, 02, & 04
Map 63 Lot 01

Multifamily Parking Requirements:

DWELLING, STUDIO APARTMENT	316 UNITS	x	1.0 SPACES	/	1 UNIT	=	316 SPACES
DWELLING, APARTMENT, ONE BEDROOM AND UP	106 UNITS	x	1.5 SPACES	/	1 UNIT	=	159 SPACES
	TOTAL PARKING REQUIRED						= 475 SPACES
	TOTAL PARKING PROVIDED						= 526 SPACES

Other Parking Requirements:

DWELLING, ONE FAMILY (TOWNHOMES AND MAINTENANCE BUILDING)	52 UNITS	x	2.0 SPACES	/	1 UNIT	=	104 SPACES
WAREHOUSE (MAINTENANCE BUILDING)	3,900 SF	x	1.0 SPACES	/	1,000 SF	=	4 SPACES
OFFICE (MAINTENANCE BUILDING)	500 SF	x	1.0 SPACES	/	250 SF	=	2 SPACES
	TOTAL PARKING REQUIRED						= 110 SPACES
	TOTAL PARKING PROVIDED						= 110 SPACES

* TOTAL PROVIDED PARKING OF 626 SPACES COMPLIES WITH 120% MAXIMUM PARKING REQUIREMENT OF 763 SPACES.

Multifamily Parking Summary Chart

Description	Size		Spaces	
	Required	Provided	Required	Provided
STANDARD SPACES	9 x 18	9 x 18*	0	166
EVSE-INSTALLED PARKING SPACES**	9 x 18	9 x 18	27	28**
EV-READY PARKING SPACES**	9 x 18	9 x 18	79	80***
EV-CAPABLE PARKING SPACES****	9 x 18	9 x 18	236	237*****
TOTAL/VAN ACCESSIBLE SPACES*****	8 x 18	9 x 18	10 / 2	15*****
LOADING BAYS			0	0

* 8 x 18 SPACES BELOW BUILDINGS REQUESTED AS ALTERNATE PARKING DESIGN PER SECTION 6.5.E(3) OF THE SITE PLAN REVIEW REGULATIONS; 9 x 16 SPACES AT LANDSCAPE AREAS PER SECTION 6.5.E(3) OF THE SITE PLAN REVIEW REGULATIONS.
** 28 SPACES LOCATED EXTERNALLY, 0 INTERNALLY
*** 70 SPACES LOCATED EXTERNALLY, 10 INTERNALLY
**** 20 SPACES LOCATED EXTERNALLY, 217 INTERNALLY
***** INCLUDES 2 ACCESSIBLE STALLS BELOW EACH APARTMENT BUILDING
***** ACCESSIBLE SPACES ARE INCLUDED IN THE PARKING TOTAL

Multifamily Bicycle Parking Requirements:

SHORT TERM PARKING	422 UNITS	x	0.15 SPACES	/	1 UNIT	=	64 SPACES
LONG TERM PARKING	422 UNITS	x	0.3 SPACES	/	1 UNIT	=	127 SPACES
	TOTAL PARKING REQUIRED						= 191 SPACES

Bicycle Parking Summary Chart

Description	Spaces	
	Required	Provided
SHORT TERM SPACES	64	70
LONG TERM SPACES	127	127
TOTAL SPACES	191	197

EV Parking Requirements (Included within Total Parking Required):

EVSE-INSTALLED PARKING SPACES	526 SPACES	x	5%	=	27 SPACES
EV-READY PARKING SPACES (EVR)	526 SPACES	x	15%	=	79 SPACES
EV-CAPABLE PARKING SPACES (EVC)	526 SPACES	x	45%	=	236 SPACES
TOTAL EV PARKING REQUIRED (INCLUDED IN TOTAL PARKING REQUIRED)					= 342 SPACES

TOTAL OF 65% OF MULTIFAMILY PARKING SPACES NEED TO BE EVSE, EVR, OR EVC



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3	C1.2	Open Space Plan	December 11, 2024
4	C1.3	Access and Circulation Plan	December 11, 2024
5	C1.4	Site Preparation & Demolition Plan	December 11, 2024
6	C1.5	Overall Site Plan	December 11, 2024
7	C2.0	Overall Layout and Materials Plan	December 11, 2024
8	C2.1	Layout and Materials Plan 1	December 11, 2024
9	C2.2	Layout and Materials Plan 2	December 11, 2024
10	C2.3	Layout and Materials Plan 3	December 11, 2024
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12	C3.1	Grading and Drainage Plan 1	December 11, 2024
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15	C4.0	Overall Utility Plan	December 11, 2024
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18	C4.3	Utility Plan 3	December 11, 2024
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22	C5.3	Erosion Control Plan 3	December 11, 2024
23	C6.1	Plan and Profile 1	December 11, 2024
24	C6.2	Plan and Profile 2	December 11, 2024
25	C6.3	Plan and Profile 3	December 11, 2024
26	C7.1	Site Details 1	December 11, 2024
27	C7.2	Site Details 2	December 11, 2024
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30	C7.5	Site Details 5	December 11, 2024
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32	C8.1	Phasing Plan 1 Phase 1	December 11, 2024
33	C8.2	Phasing Plan 2 Phase 2	December 11, 2024
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43	Sv-1	Existing Conditions Plan of Land	December 10, 2024
44	Sv-2	Existing Conditions Plan of Land	December 10, 2024
45	Sv-3	Existing Conditions Plan of Land	December 10, 2024
46	WU-1	Wildland-Urban Interface Plan	December 11, 2024

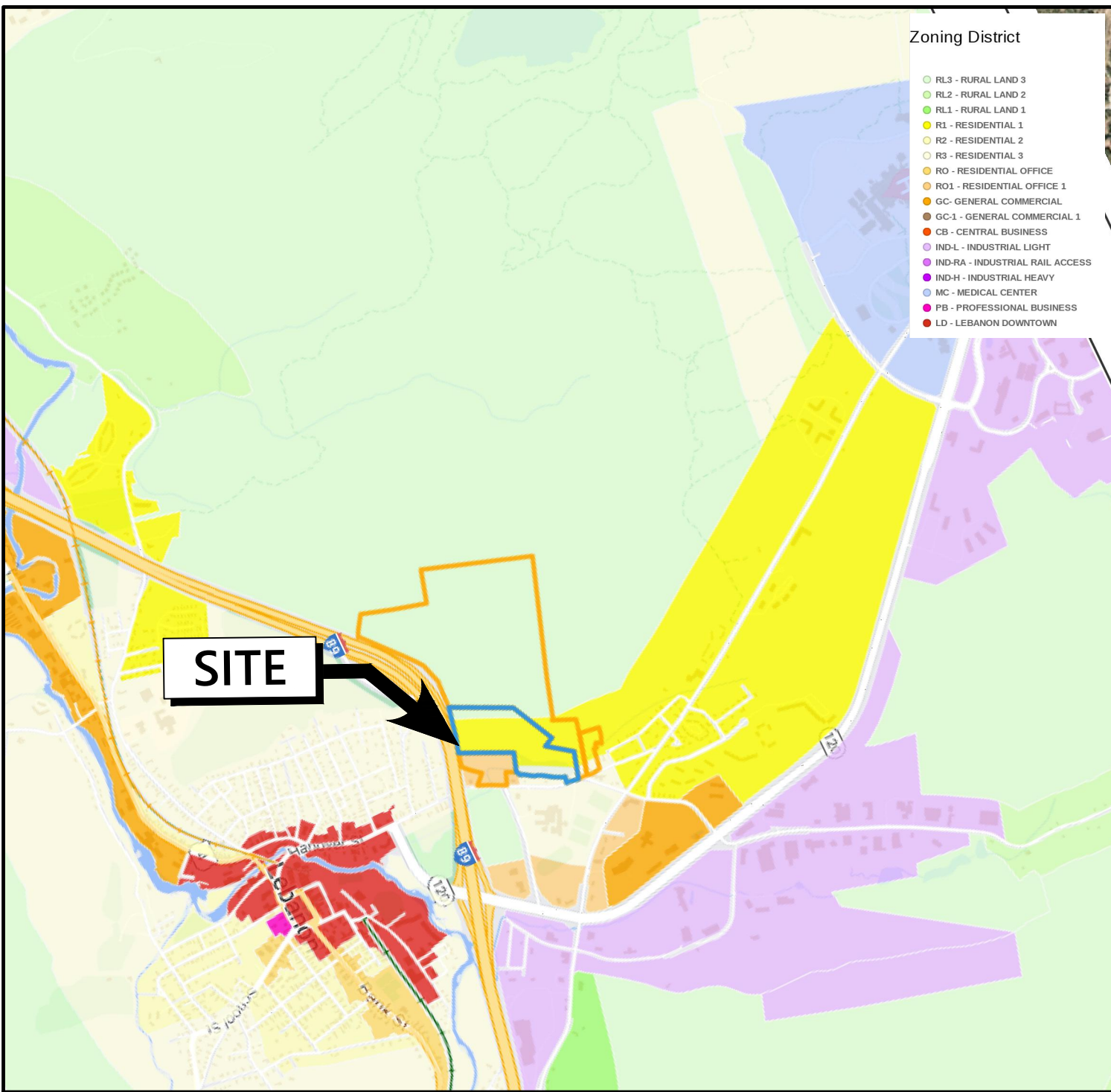


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48	SL-2C	Site Lighting Detail Sheet	October 24, 2024
49	0089-1201	Building 1 Proposed Plan & Elevations	December 11, 2024
50	0089-1202	Building 3 Proposed Plan & Elevations	December 11, 2024
51	0089-1203	Building 2 Proposed Plan & Elevations	December 11, 2024
52	0089-1204	Building 4-5 Proposed Plan & Elevations	December 11, 2024
53	ELEV	Townhouse Elevations	December 10, 2024

Zoning Summary Chart

Zoning Districts: Residential 1 (R-1), Residential 3 (R-3), Residential-Office-1 (R-O-1), Rural Lands 3 (RL-3)

Overlay District: Floodplain District, Wetlands Conservation District, Steep Slopes

Use: 474-unit multi-family Planned Unit Residential Development (PURD)

Tax Map & Lot #: 48-01, 48-02, 48-04, & 63-01

Zoning Regulation Requirements	Required (R-1)	Required (R-3)	Required (R-O-1)	Required (RL-3)	Required (PURD)	Provided (PURD)
MINIMUM LOT AREA	0.2 Acres	0.2 Acres	0.2 Acres	10.0 Acres	28.5 Acres	135.9 Acres
FRONTAGE	N/A	N/A	N/A	20.0 Feet	20.0 Feet	932.0 Feet
FRONT YARD SETBACK	20 Feet	20 Feet	20 Feet	50 Feet	20 Feet	21 Feet
SIDE YARD SETBACK	15 Feet	15 Feet	15 Feet	50 Feet	50 Feet	89 Feet
REAR YARD SETBACK	20 Feet	20 Feet	20 Feet	50 Feet	50 Feet	127 Feet
MINIMUM LOT WIDTH	75 Feet	75 Feet	75 Feet	N/A	75 Feet	932 Feet
MAXIMUM BUILDING HEIGHT	45/55 Feet	35 Feet	45 Feet	35 Feet	Per Zone	55 Feet (R-1)** 45 Feet (R-O-1) 35 Feet (R-3)
MAXIMUM BUILDING COVERAGE	25.0 %	25.0 %	25.0 %	1.0 %	25.0 %	7.2% Total 7.2% (R-1) 14.7% (R-O-1) 1.8% (R-3) 0.0% (RL-3)
MAXIMUM BUILDING COVERAGE	1,375,407 SF	1,375,407 SF	1,375,407 SF	55,016 SF	1,375,407 SF	128,518 SF
GROSS FLOOR AREA	N/A	N/A	N/A	N/A	N/A	442,254 SF
IMPERVIOUS COVERAGE	N/A	N/A	N/A	N/A	N/A	330,185 SF (26.6%)
USE	N/A	N/A	N/A	N/A	N/A	Planned Unit Residential Development (PURD)

* NO WORK IS PROPOSED IN THE RL-3 ZONING DISTRICT
** PROPOSED HEIGHT IS PERMITTED BY CLIP PER SECTION 308.4 OF THE CITY OF LEBANON, NEW HAMPSHIRE ZONING ORDINANCE LAST AMENDED APRIL 3, 2024

PURD Calculations

SEE PURD DENSITY AND PURD CALCULATION EXHIBITS UNDER SEPARATE COVER

Zone	Buildable Area (SF)*	/	Permitted Dwelling Units
RESIDENTIAL 1 (R-1)	999,956	3,000	333.3
RESIDENTIAL-OFFICE-1 (R-O-1)	239,920	3,000	80.0
RESIDENTIAL 3 (R-3)	81,820	10,000	8.2
1 PER 10,000**	20,000	10,000	2.0
SUBTOTAL	1,239,676		423
12% BONUS***			51
TOTAL (INCLUDES 12% BONUS)			474

* FOR THE PURD CALCULATIONS THE RL-3 ZONE (97.8 ACRES) HAS BEEN EXCLUDED, AS NO WORK IS CURRENTLY PROPOSED IN THE RL-3 ZONING DISTRICT; AREA RESERVED FOR POTENTIAL FUTURE BUILDOUT.
** FIRST 10,000 SQUARE FEET OF ZONE R-1 AND R-O-1 SUBTRACTED FROM TOTAL SQUARE FOOTAGE.
*** 12% BONUS PERMITTED THROUGH APPROVAL BY PLANNING BOARD.

Open Space Calculations

Zone*	Total Area (SF)	% Required	Open Space Required
RESIDENTIAL 1 (R-1)	1,252,605	30	375,782 SF
RESIDENTIAL-OFFICE-1 (R-O-1)	286,532	30	85,960 SF
RESIDENTIAL 3 (R-3)	123,849	50	61,925 SF
TOTAL OPEN SPACE REQUIRED			523,666 SF
TOTAL OPEN SPACE PROVIDED			523,666 SF

* THE RL-3 ZONE HAS BEEN EXCLUDED FROM THE PURD CALCULATIONS, AS NO WORK IS CURRENTLY PROPOSED IN THE RL-3 ZONING DISTRICT; AREA RESERVED FOR POTENTIAL FUTURE BUILDOUT

Building Information

BUILDING/CLUSTER	GROSS FLOOR AREA (PER FLOOR)	NUMBER OF STORIES	NUMBER OF UNITS (UNIT MIX)	BUILDING HEIGHT	GARAGE PARKING SPACES (LONG TERM BIKE PARKING SPACES)
BUILDING 1	34,650 GSF (11,550 SF)	3 STORIES	46 (34 STUDIO, 12 1-BEDROOM)	45'	25 SPACES (23 SPACES)
BUILDING 2	75,600 GSF (18,900 SF)	4 STORIES	98 (73 STUDIO, 25 1-BEDROOM)	45**	53 SPACES (26 SPACES)
BUILDING 3	56,700 GSF (18,900 SF)	3 STORIES	70 (51 STUDIO, 19 1-BEDROOM)	45'	53 SPACES (26 SPACES)
BUILDING 4	75,600 GSF (18,900 SF)	4 STORIES	98 (73 STUDIO, 25 1-BEDROOM)	55'	53 SPACES (26 SPACES)
BUILDING 5	75,600 GSF (18,900 SF)	4 STORIES	98 (73 STUDIO, 25 1-BEDROOM)	55'	53 SPACES (26 SPACES)
TH CLUSTER 1	16,128 GSF (5,376 SF)	4 STORIES	7 (7 ONE-FAMILY DWELLING)	45'	7 SPACES (7 SPACES)
TH CLUSTER 2	16,128 GSF (5,376 SF)	3 STORIES	7 (7 ONE-FAMILY DWELLING)	45'	7 SPACES (7 SPACES)
TH CLUSTER 3	16,128 GSF (5,376 SF)	4 STORIES	7 (7 ONE-FAMILY DWELLING)	45'	7 SPACES (7 SPACES)
TH CLUSTER 4	16,128 GSF (5,376 SF)	3 STORIES	7 (7 ONE-FAMILY DWELLING)	45'	7 SPACES (7 SPACES)
TH CLUSTER 5	16,128 GSF (5,376 SF)	4 STORIES	7 (7 ONE-FAMILY DWELLING)	45'	7 SPACES (7 SPACES)
TH CLUSTER 6	16,128 GSF (5,376 SF)	3 STORIES	7 (7 ONE-FAMILY DWELLING)	45'	7 SPACES (7 SPACES)
TH CLUSTER 7	11,520 GSF (3,840 SF)	4 STORIES	5 (5 ONE-FAMILY DWELLING)	45'	5 SPACES (5 SPACES)
TH CLUSTER 8	9,216 GSF (3,072 SF)	3 STORIES	4 (4 ONE-FAMILY DWELLING)	45'	4 SPACES (4 SPACES)
MAINTENANCE BUILDING	6,600 GSF (2,200 SF)	3 STORIES	1 (1 ONE-FAMILY DWELLING)	35'	2 SPACES (2 SPACES)

* EXCLUDES 10 FOOT BURIED PARKING GARAGE.



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Legend

Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
		EASEMENT			RIPRAP
		BUILDING SETBACK			CONSTRUCTION EXIT
		PARKING SETBACK			TOP OF CURB ELEVATION
		BASELINE			BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT			SPOT ELEVATION
		ZONING LINE			TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE			BORING LOCATION
		LIMIT OF DISTURBANCE			TEST PIT LOCATION
		WETLAND LINE WITH FLAG			MONITORING WELL
		FLOODPLAIN			UNDERDRAIN
		BORDERING LAND SUBJECT TO FLOODING			DRAIN
		WETLAND BUFFER ZONE			ROOF DRAIN
		NO DISTURB ZONE			SEWER
		200' RIVERFRONT AREA			FORCE MAIN
		GRAVEL ROAD			OVERHEAD WIRE
		EDGE OF PAVEMENT			WATER
		BITUMINOUS BERM			FIRE PROTECTION
		BITUMINOUS CURB			DOMESTIC WATER
		CONCRETE CURB			GAS
		CURB AND GUTTER			ELECTRIC
		EXTRUDED CONCRETE CURB			STEAM
		MONOLITHIC CONCRETE CURB			TELEPHONE
		PRECAST CONC. CURB			FIRE ALARM
		SLOPED GRAN. EDGING			CABLE TV
		VERT. GRAN. CURB			CATCH BASIN CONCENTRIC
		LIMIT OF CURB TYPE			CATCH BASIN ECCENTRIC
		SAWCUT			DOUBLE CATCH BASIN CONCENTRIC
					DOUBLE CATCH BASIN ECCENTRIC
					GUTTER INLET
					DRAIN MANHOLE CONCENTRIC
					DRAIN MANHOLE ECCENTRIC
					TRENCH DRAIN
					PLUG OR CAP
					CLEANOUT
					FLARED END SECTION
					HEADWALL
					SEWER MANHOLE CONCENTRIC
					SEWER MANHOLE ECCENTRIC
					CURB STOP & BOX
					WATER VALVE & BOX
					TAPPING SLEEVE, VALVE & BOX
					FIRE DEPARTMENT CONNECTION
					FIRE HYDRANT
					WATER METER
					POST INDICATOR VALVE
					WATER WELL
					GAS GATE
					GAS METER
					ELECTRIC MANHOLE
					ELECTRIC METER
					LIGHT POLE
					TELEPHONE MANHOLE
					TRANSFORMER PAD
					UTILITY POLE
					GUY POLE
					GUY WIRE & ANCHOR
					HAND HOLE
					PULL BOX
					MATCHLINE
					MINOR CONTOUR
					MAJOR CONTOUR
					PARKING COUNT
					COMPACT PARKING STALLS
					DOUBLE YELLOW LINE
					STOP LINE
					CROSSWALK
					ACCESSIBLE CURB RAMP
					ACCESSIBLE PARKING
					VAN-ACCESSIBLE PARKING

Abbreviations

General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EVC	ELECTRIC VEHICLE CAPABLE PARKING SPACE
EVR	ELECTRIC VEHICLE READY PARKING SPACE
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GFE	GARAGE FLOOR ELEVATION
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LDD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
AD	AREA DRAIN
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
DW	DRYWELL
FA	FIRE ALARM
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UGE/T	UNDERGROUND ELECTRIC/TELECOM
UP	UTILITY POLE

Notes

General

- THE PURPOSE OF THESE SITE PLANS ARE TO SHOW A PROPOSED SITE DESIGN FOR THE PERMITTING OF A PLANNED UNIT RESIDENTIAL PROJECT.
- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
- AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6-INCHES LOAM AND SEED.
- WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.
- WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL OLFACATORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- DAMAGE RESULTING FROM CONSTRUCTION LOADS AND ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.
- SNOW STORAGE LOCATIONS SHOWN ON LAYOUT AND MATERIALS PLAN. FUTURE SNOW REMOVAL AT THE FACILITY WILL FOLLOW THE CURRENT SNOW MANAGEMENT PLAN TO REMOVE SNOW TO REMOTE LOCATIONS AS NECESSARY.
- TREE CLEARING SHALL NOT BE CONDUCTED DURING JUNE 1 TO JULY 31 IN ORDER TO MINIMIZE ADVERSE IMPACTS TO THE NORTHERN LONG EARED BAT.
- CONTRACTOR TO FOLLOW STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (NHDOT) AND GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES (AASHTO) FOR CONSTRUCTIONS STANDARDS.

Utilities

- THE UTILITY COMPANIES SERVICING THE PROJECT AREA ARE:

A. WATER:	CITY OF LEBANON
B. SEWER:	CITY OF LEBANON
C. ELECTRIC:	LIBERTY UTILITIES
D. TELEPHONE:	CONSOLIDATED COMMUNICATIONS
E. CABLE TV:	COMCAST
F. GAS:	NONE

- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT. COORDINATE WITH CITY OF LEBANON FOR PUBLIC UTILITY INSTALLATION AND CONNECTION.
- SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
- RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
 - PAVEMENTS AND CONCRETE SURFACES: FLUSH
 - ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
 - LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.

- THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT, COORDINATE WITH CITY OF LEBANON FOR PUBLIC UTILITY INSTALLATION AND CONNECTION.
- CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
- UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:

- WATER PIPES SHALL BE CEMENT LINED DUCTILE IRON CLASS 52.
- SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE SDR 35.
- STORM DRAINAGE PIPES SHALL BE SMOOTH INTERIOR DUAL WALL HIGH DENSITY POLYETHYLENE (HDPE).

- CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
- CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
- ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.
- CONTRACTOR TO NOTIFY ENGINEER IN ADVANCE OF ANY INSTALLATION OF UNDERGROUND DETENTION, INFILTRATION OR FILTERING SYSTEMS. A LETTER SIGNED BY A QUALIFIED ENGINEER MUST BE PROVIDED TO DES STATING THAT THE INDIVIDUAL OBSERVED ANY UNDERGROUND DETENTION, INFILTRATION, OR FILTERING SYSTEMS PRIOR TO BACKFILLING, AND WHETHER, IN HIS OR HER PROFESSIONAL OPINION, THE SYSTEM(S) CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.

Layout and Materials

- DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- CURB RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
- CURBING SHALL BE PRECAST CONCRETE (PCC) WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
- IN ADDITION TO THE INFORMATION PROVIDED HEREIN, SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS FOR FEATURES THAT ARE CONTIGUOUS TO THE BUILDING, INCLUDING BUILDING ENTRANCES, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A LICENSED LAND SURVEYOR (LLS).
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Demolition

- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS, REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
- EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
- CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
- UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Existing Conditions Information

- BASE PLAN: THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB IN SEPTEMBER TO NOVEMBER 2022, AND APRIL 2023.
 - DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY GODDARD CONSULTING, LLC IN NOVEMBER, 2022.
 - FLAGS MARKING THE WETLANDS WERE LOCATED BY FIELD SURVEY BY VHB IN NOVEMBER, 2022.
- TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD 1988.

Local Permits

- NOTICE OF ACTION ISSUED BY THE PLANNING BOARD: PENDING
- WATER USE PERMIT FOR ALLOCATION (#TBD)
- SEWER USE PERMIT FOR ALLOCATION (#TBD)
- DRIVEWAY PERMIT (#TBD)
- STORMWATER CONNECTION PERMIT (#TBD)

State Permits

- NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES) ALTERATION OF TERRAIN PERMIT (#TBD)
- NHDES SEWER CONNECTION PERMIT (#TBD).
- NHDES WETLANDS AND NON-SITE SPECIFIC PERMIT (#TBD).

Federal Permits

- US EPA NPDES CONSTRUCTION GENERAL PERMIT (CGP) NOTICE OF INTENT TO (#TBD).

Document Use

- THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

New Hampshire Fish and Game

- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGreview@wildlife.nh.gov. EMAIL SUBJECT LINE:
- PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE.
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ENSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04.
- THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.
- ENV-WQ 1506.15 REQUIRES THAT:
 - ALL MANUFACTURED EROSION AND SEDIMENT CONTROLS PRODUCTS, EXCEPT FOR SILT FENCE INSTALLATED IN ACCORDANCE WITH ENV-WQ 1506.04, UTILIZED FOR, BUT NOT LIMITED TO, SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, INLET PROTECTION, CHECK DAMS, AND SEDIMENT TRAPS SHALL NOT CONTAIN WELDED PLASTIC, PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8" INCH TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.
 -



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

The Brickyard
Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Apprv.
1	Response to Comments Update	08/06/24	DF
2	Revised Layout Resubmission	10/24/24	DF
3	Response to Comments Rev 2	12/04/24	DF
4	Response to City Comments	12/11/24	DF

Designed by	Checked by
TMD	MJV
Issued for	Date

Permitting May 10, 2024

Not Approved for Construction

Legend and General Notes

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- RL3 - RURAL LAND 3
- RL2 - RURAL LAND 2
- RL1 - RURAL LAND 1
- R1 - RESIDENTIAL 1
- R2 - RESIDENTIAL 2
- R3 - RESIDENTIAL 3
- RO - RESIDENTIAL OFFICE
- RO1 - RESIDENTIAL OFFICE 1
- GC- GENERAL COMMERCIAL
- GC-1 - GENERAL COMMERCIAL 1
- CB - CENTRAL BUSINESS
- IND-L - INDUSTRIAL LIGHT
- IND-RA - INDUSTRIAL RAIL ACCESS
- IND-H - INDUSTRIAL HEAVY
- MC - MEDICAL CENTER
- PB - PROFESSIONAL BUSINESS
- LD - LEBANON DOWNTOWN

TRAILS

LEBANON CONSERVATION & PUBLIC LANDS
PROTECTION LEVEL

Limited
Permanent
Sub-Div Open Space

NH CONSERVATION LAND
125 Feet

PROJECT LIMIT OF WORK



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Permitting May 10, 2024

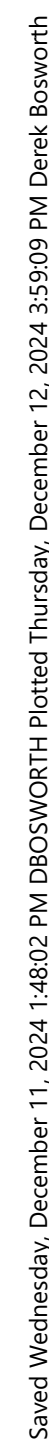
DAVID
H.
ZENSTERMACHER
No. 13332
LICENSED
PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE

C1.1

Sheet of 53

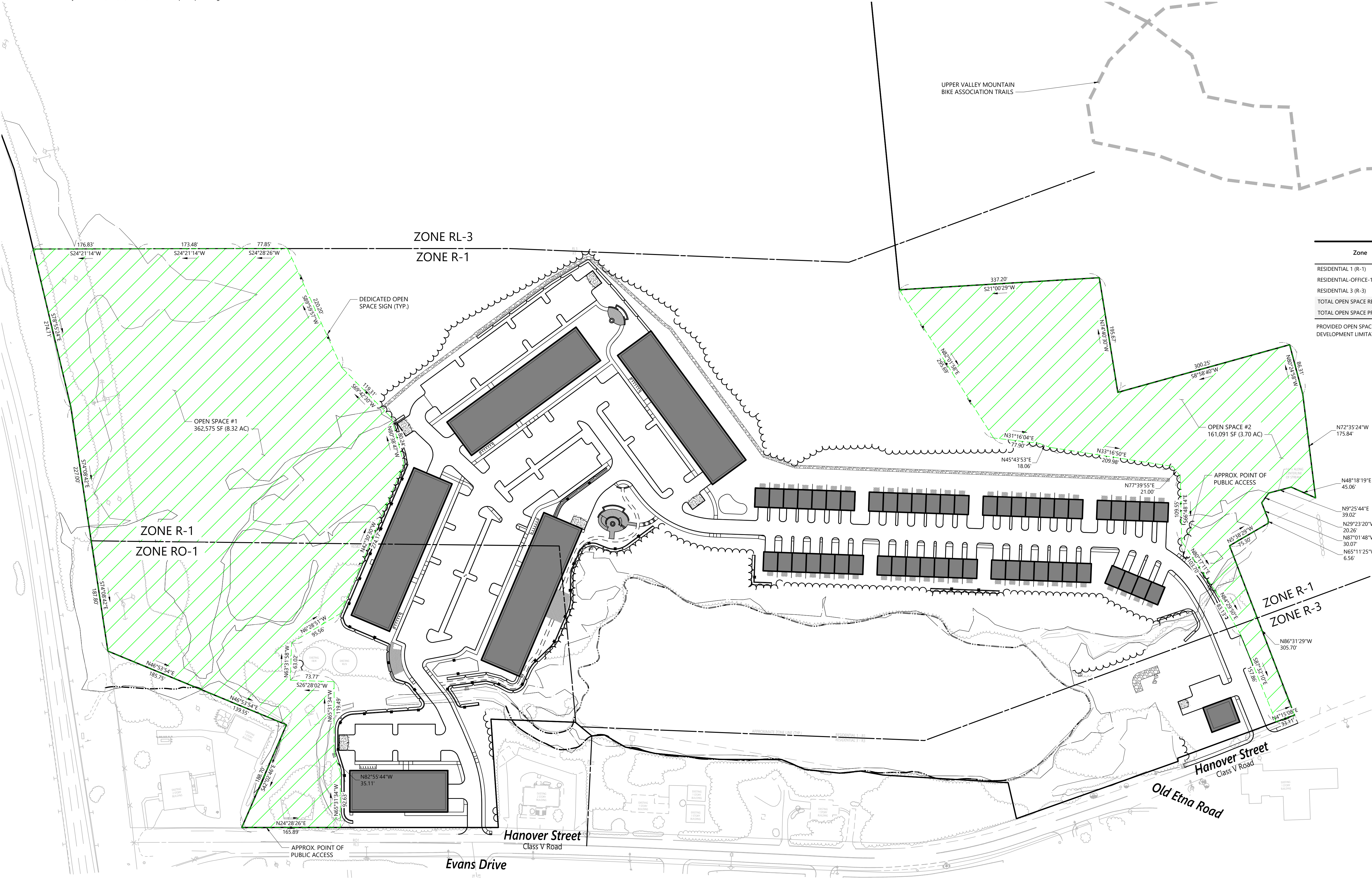
Project Number



Open Space Calculations

Zone	Total Area (SF)	% Required	Open Space Required
RESIDENTIAL 1 (R-1)	1,252,605	30	375,782 SF (8.62 AC)
RESIDENTIAL-OFFICE-1 (R-O-1)	286,532	30	85,960 SF (1.97 AC)
RESIDENTIAL 3 (R-3)	123,849	50	61,925 SF (1.42 AC)
TOTAL OPEN SPACE REQUIRED			523,666 SF (12.02 AC)
TOTAL OPEN SPACE PROVIDED			523,666 SF (12.02 AC)

PROVIDED OPEN SPACE SHOULD MATCH OR SLIGHTLY EXCEED REQUIRED SO THAT IT IS NOT A FUTURE DEVELOPMENT LIMITATION.



Notes

- OPEN SPACE USES MAY INCLUDE TRAILS, RECREATION (BOTH ACTIVE AND PASSIVE), AND FUTURE UNDERGROUND UTILITY BUILDOUT. STREETS, PARKING AREAS, RESIDENTIAL AND NON-RESIDENTIAL STRUCTURES ARE NOT PERMITTED IN THE OPEN SPACE.
- UNDER A CONDOMINIUM FORM OF OWNERSHIP, THE CONTROL AND MAINTENANCE OF THE OPEN SPACE WILL BE HELD BY AN OWNER'S ASSOCIATION ESTABLISHED BY THE APPLICANT FOR THE BENEFIT AND ENJOYMENT OF THE RESIDENTS AND/OR USERS OF THE DEVELOPMENT.
- THE PROTECTION OF THE OPEN SPACE WILL BE ASSURED BY THE PLANNING BOARD'S CONDITIONS OF APPROVAL FOR THE DEVELOPMENT SO THAT THE SPACE REMAINS UNDEVELOPED AND ANY ENVIRONMENTALLY SENSITIVE CONDITIONS ARE PROTECTED AND PRESERVED. ADDITIONALLY, VESTING THE MANAGEMENT AND CONTROL OF THE OPEN SPACE IN AN OWNERS' ASSOCIATION WILL ASSURE THAT IT IS MAINTAINED AS INTENDED.
- METES AND BOUND FOR OPEN SPACE ARE PROVIDED ON THIS PLAN AND WOODEN DEDICATED OPEN SPACE SIGNS ARE TO BE LOCATED AT THE ACCESS POINTS TO THESE AREAS.
- THE PLAN WILL BE RECORDED PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY.
- THE DEDICATED OPEN SPACE IS AVAILABLE AND OPEN TO THE PUBLIC FOR USE.



0 40 80 160Feet

The Brickyard Residential Development

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Lebanon, New Hampshire 03766

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Designed by TMD	Checked by MJV
Issued for Permitting	Date May 10, 2024

Not Approved for Construction

Drawing Title

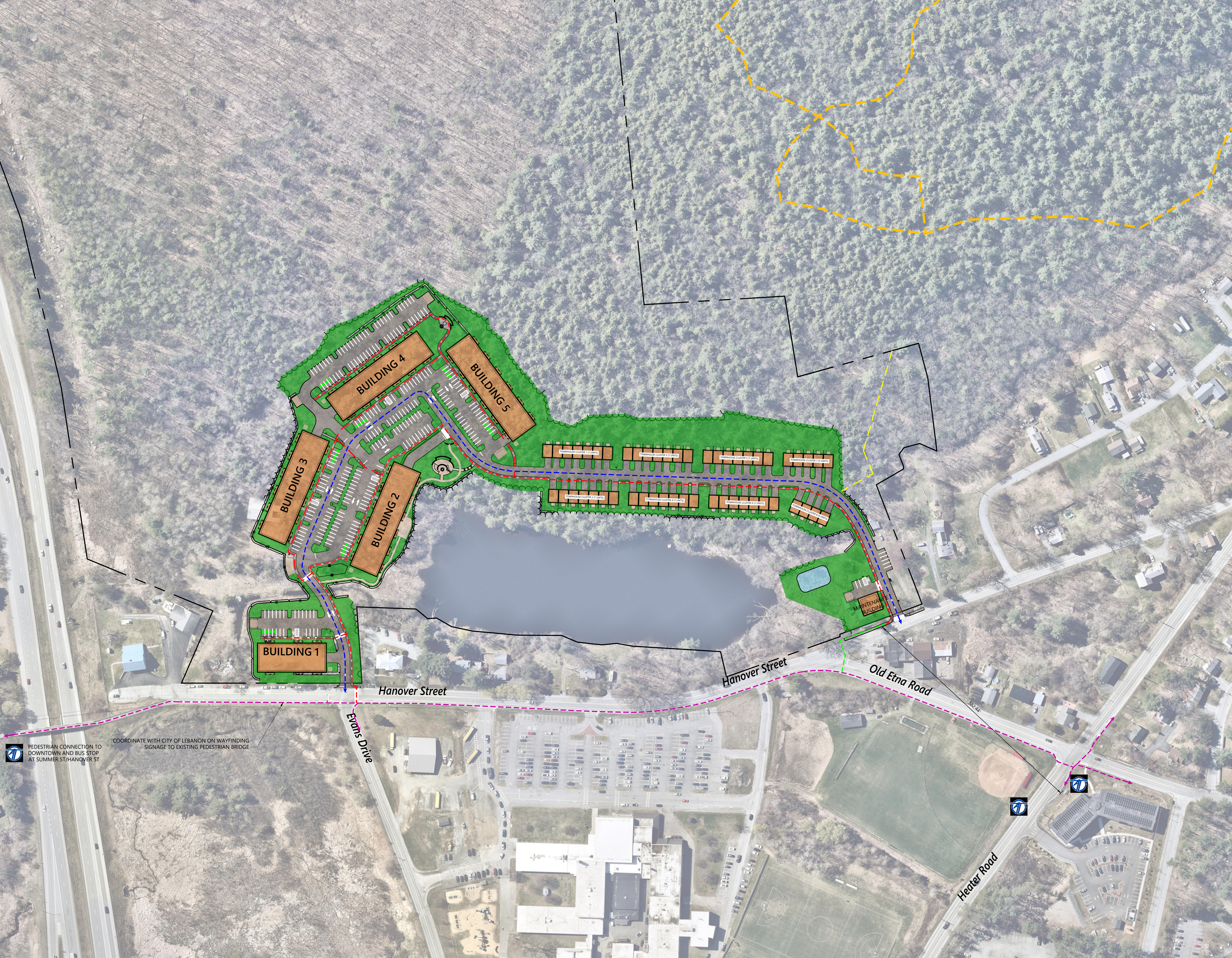
Open Space Plan



C1.2

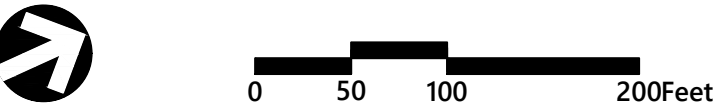
Sheet 3 of 53

Project Number
52933.00



Legend

- PEDESTRIAN PATH TO PUBLIC R.O.W.
- VEHICLE PATH TO PUBLIC R.O.W.
- EXISTING PEDESTRIAN PATHS
- UPPER VALLEY MOUNTAIN BIKE ASSOCIATION TRAILS
- APPROX. PEDESTRIAN TRAIL CONNECTION
- POTENTIAL FUTURE PEDESTRIAN PATH



**The Brickyard
Residential Development**

174 Hanover Street Extension
Lebanon, New Hampshire 03766

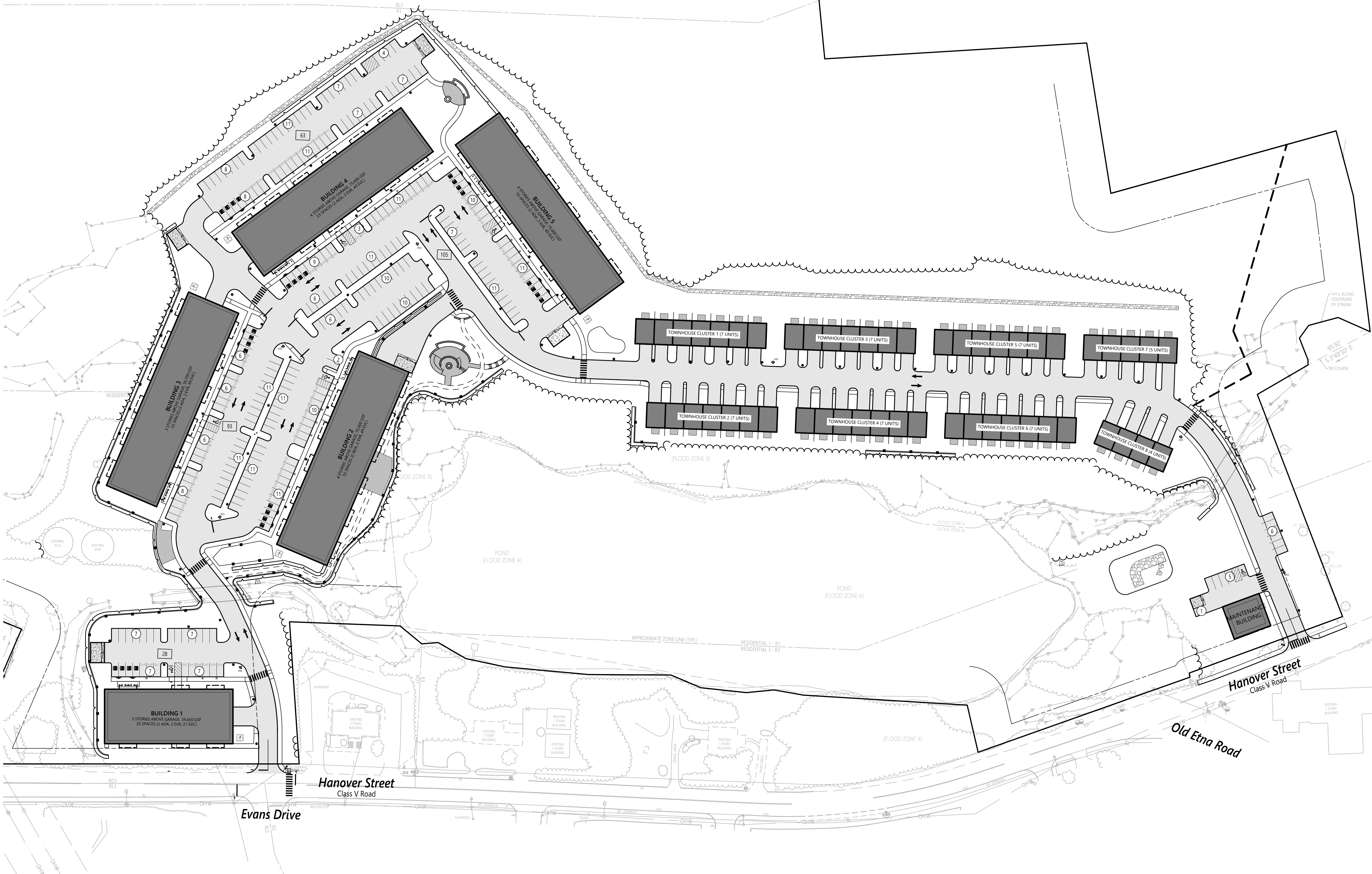
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Issued for Permitting Date May 10, 2024

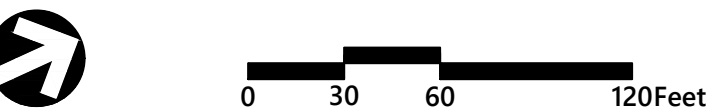
Not Approved for Construction
Drawing Title
Access and Circulation Plan





Notes

- EVC ELECTRIC VEHICLE CAPABLE PARKING SPACE
EVR ELECTRIC VEHICLE READY PARKING SPACE
EVI ELECTRIC VEHICLE INSTALLED PARKING SPACE



The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

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Designed by TMD	Checked by MJV
Issued for Permitting	Date May 10, 2024

Not Approved for Construction
Drawing Title
Overall Site Plan
Drawing Number

C1.5

Sheet 6 of 53

Project Number
52933.00

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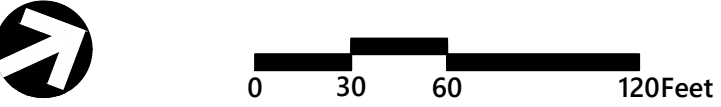
2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

ABUTTING PROPERTIES ACROSS INTERSTATE 89 INCLUDE THE FOLLOWING:

1. CITY OF LEBANON
MAP 76, LOT 8
BOOK 0, PAGE 0
51 NORTH PARK STREET
LEBANON, NH 03766
2. RADER III, GERALD LENARD
MAP 77, LOT 81
BOOK 0, PAGE 0
54 WINTER STREET
LEBANON, NH 03766
3. SEIDMAN, MAX JAMES
MAP 77, LOT 83
BOOK 0, PAGE 0
53 WINTER STREET
LEBANON, NH 03766
4. CITY OF LEBANON
MAP 77, LOT 107
BOOK 0, PAGE 0
51 NORTH PARK STREET
LEBANON, NH 03766
5. VALDIVIEZO ZENIA MAE
MAP 77, LOT 111
BOOK 0, PAGE 0
48 JUNIPER CIRCLE
LEBANON, NH 03766
6. LEE, CUONG V
MAP 77, LOT 113
BOOK 0, PAGE 0
194 PLAIN STREET
ROCKLAND, MA 02370
7. LEUCA MAGDALENA TTEE
MAP 77, LOT 115
BOOK 0, PAGE 0
9920 SE 40TH STREET
MERCER ISLAND, WA 98040

Notes

1. EXISTING BUS STOP AT CORNER OF HEATER RD AND OLD ETNA ROAD IS APPROXIMATELY 0.20 MILES AWAY FROM PROJECT SITE.
2. LOTS 48-01, 48-02, 48-04, AND 63-01 ARE TO BE CONSOLIDATED INTO ONE PARCEL



The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

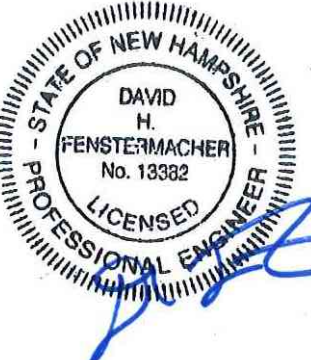
No.	Revision	Date	Apprv.
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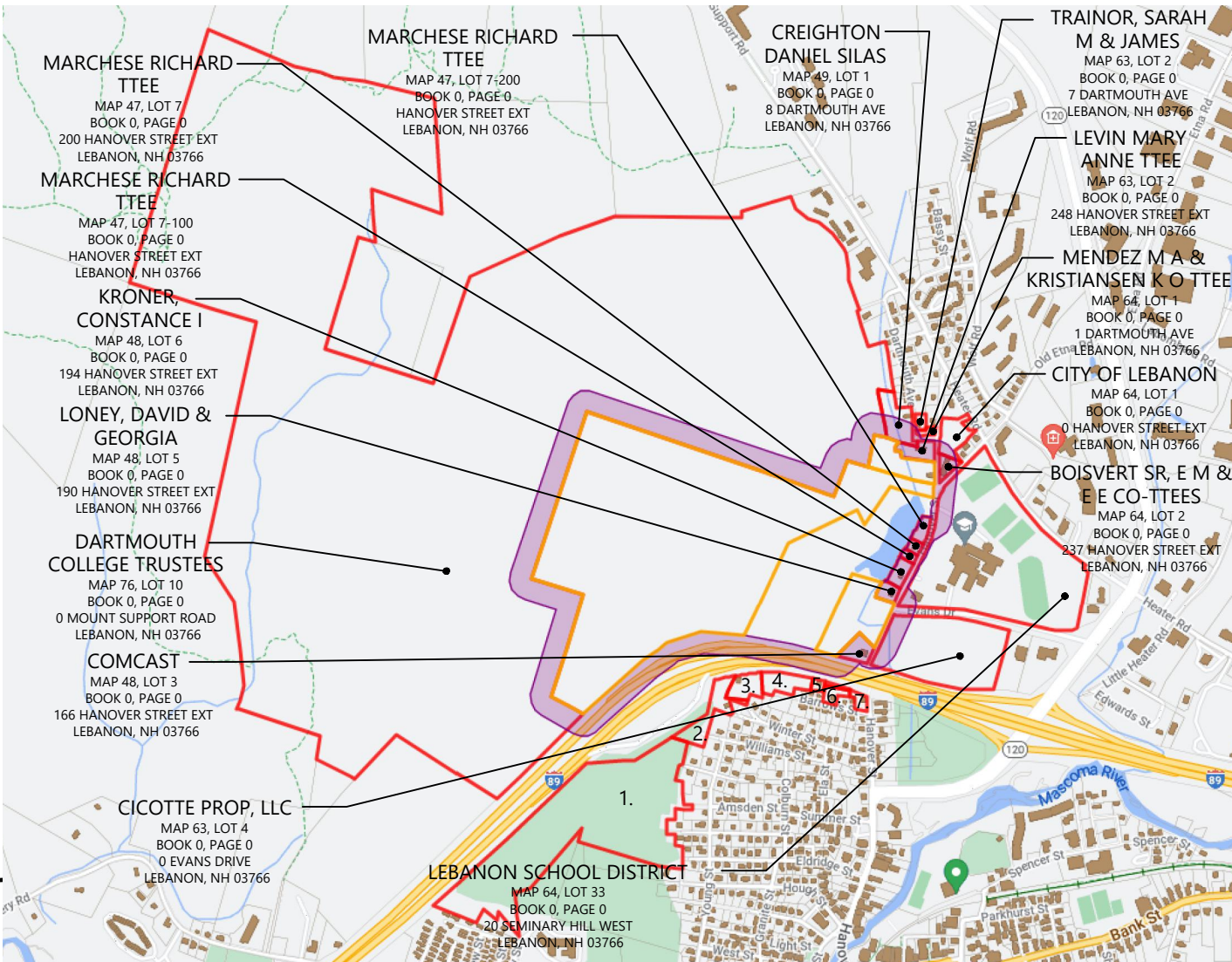
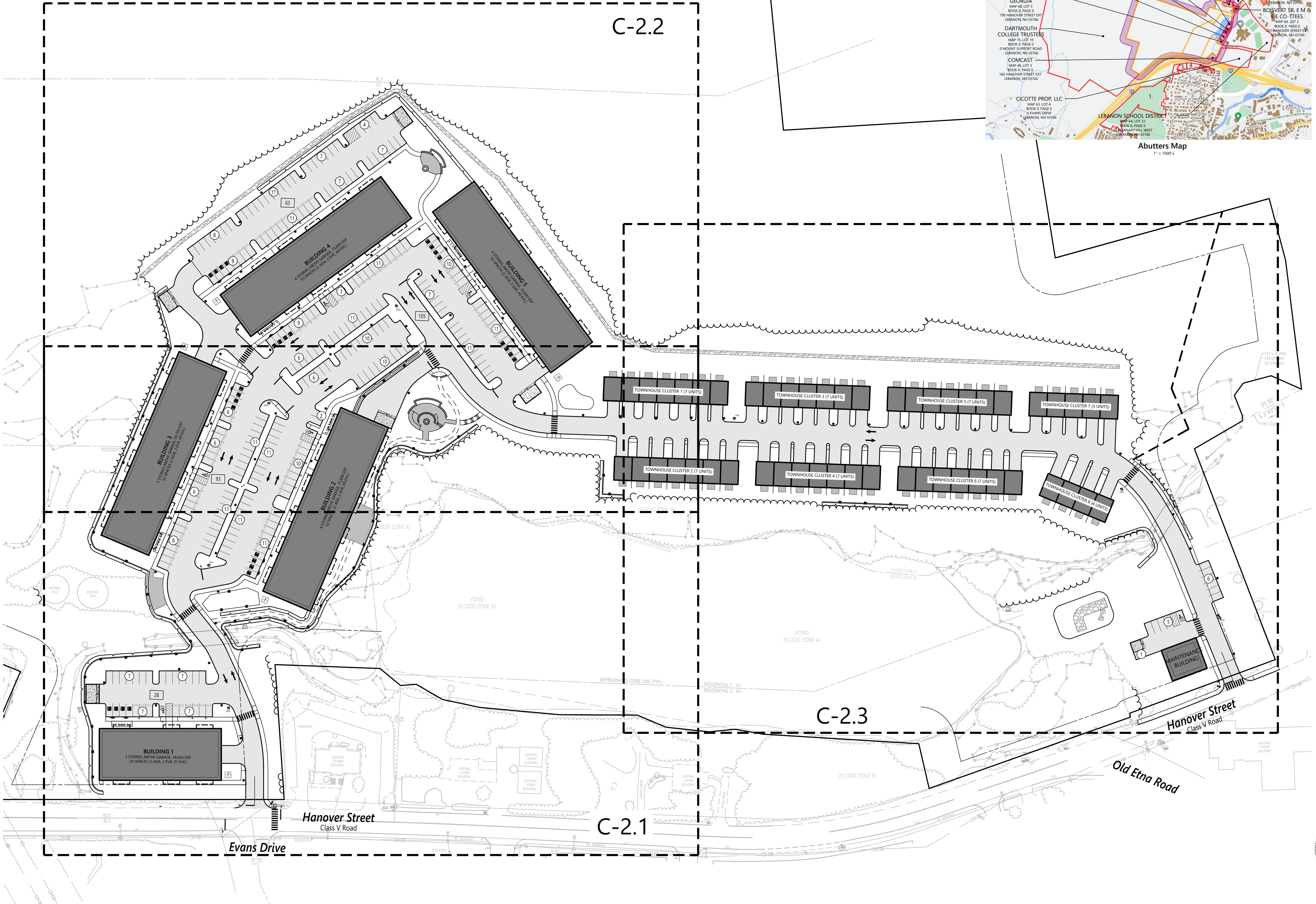
Overall Layout and
Materials Plan



C2.0

Sheet 7 of 53

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52933.00



Abutters Map

1" = 1000'



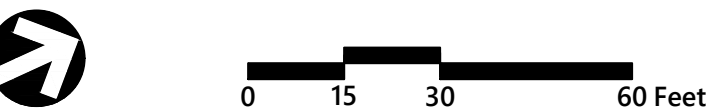
2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

LEGEND

- EVC ELECTRIC VEHICLE CAPABLE PARKING SPACE
EVR ELECTRIC VEHICLE READY PARKING SPACE
EVI ELECTRIC VEHICLE INSTALLED PARKING SPACE
SS SNOW STORAGE AREA

Sign Summary

M.U.T.C.D. Number	Specification Width	Height	Desc.
R1-1	30"	30"	STOP
R7-1	12"	18"	NO PARKING ANY TIME
R7-8	12"	18"	RESERVED PARKING
R7-8P	12"	6"	VAN
D9-11B	12"	18"	ELECTRIC VEHICLE CHARGING
D9-11BP	12"	12"	ELECTRIC VEHICLE CHARGING



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Issued for		Date	May 10, 2024

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Not Approved for Construction
Drawing Title
**Layout and Materials
Plan 1**

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Project Number 52933.00
Page 79 of 124

C2.1

STATE OF NEW HAMPSHIRE
DAVID H. FENSTERMACHER
No. 13382
LICENSED PROFESSIONAL ENGINEER

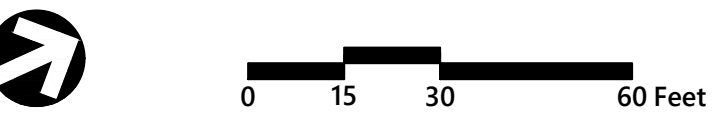




LEGEND

- EVC ELECTRIC VEHICLE CAPABLE PARKING SPACE
- EVR ELECTRIC VEHICLE READY PARKING SPACE
- EVC ELECTRIC VEHICLE INSTALLED PARKING SPACE

SNOW STORAGE AREA



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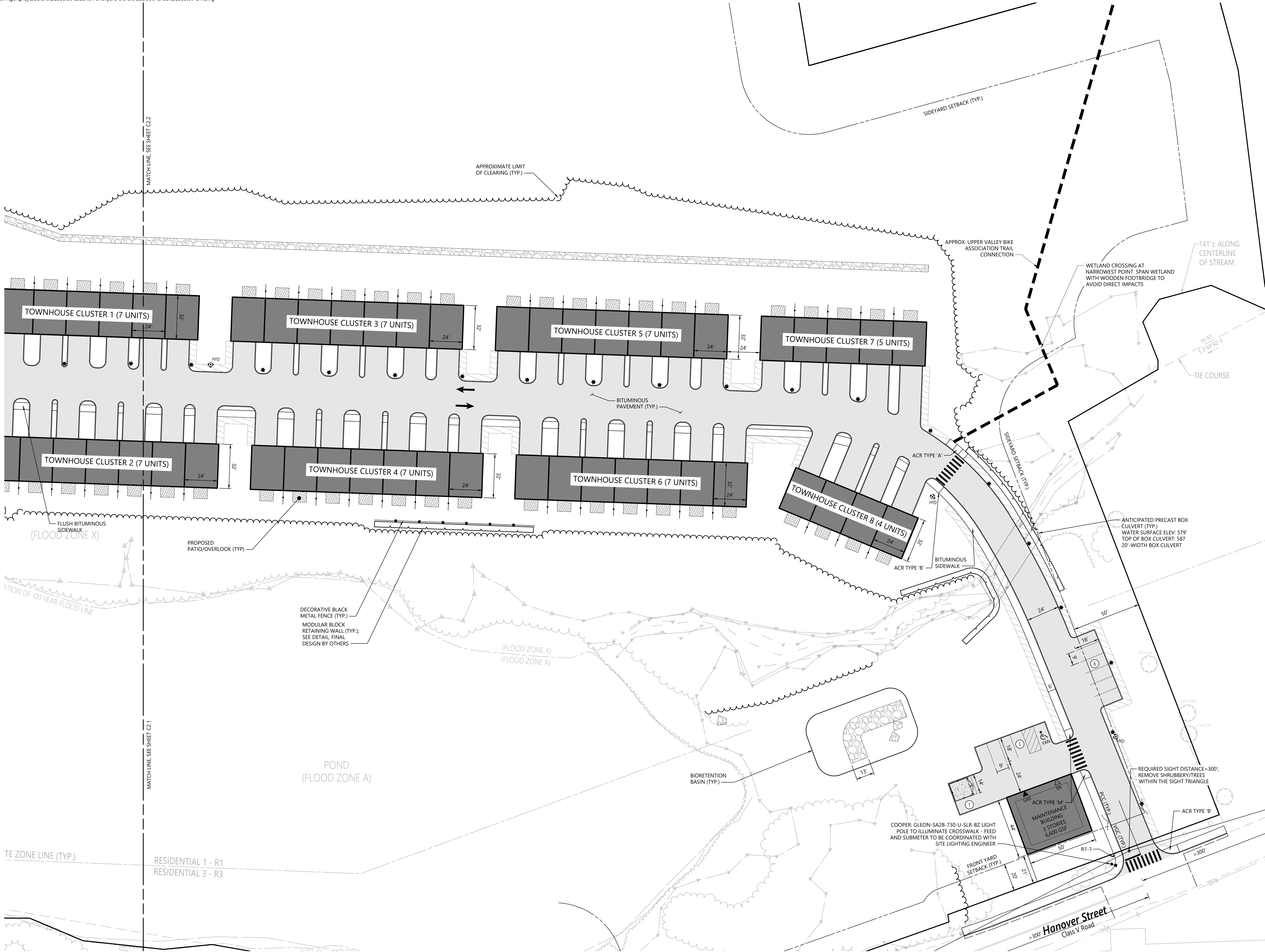
Layout and Materials
Plan 2

C2.2

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Project Number
52933.00

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NOTE:
1) NO OUTDOOR STORAGE IS PERMITTED AT MAINTENANCE BUILDING.

LEGEND

- EVC ELECTRIC VEHICLE CAPABLE PARKING SPACE
EVR ELECTRIC VEHICLE READY PARKING SPACE
EVI ELECTRIC VEHICLE INSTALLED PARKING SPACE

SNOW STORAGE AREA



The Brickyard Residential Development

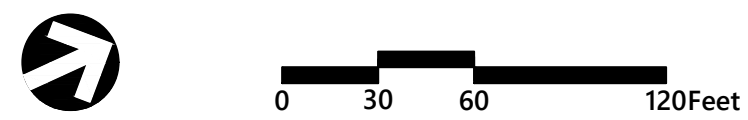
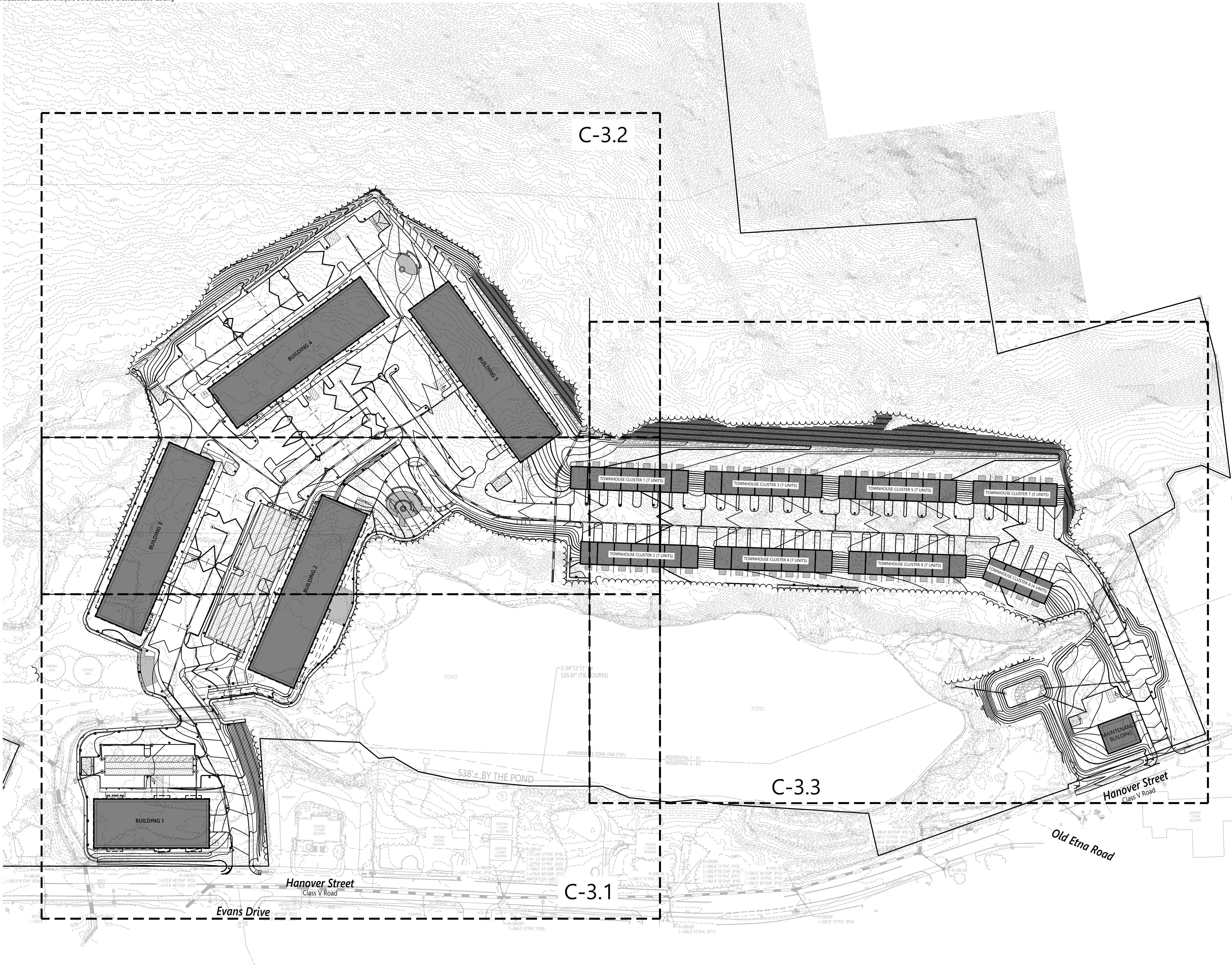
174 Hanover Street Extension
Lebanon, New Hampshire 03766

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Date
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Drawing Title
Layout and Materials
Plan 3



The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

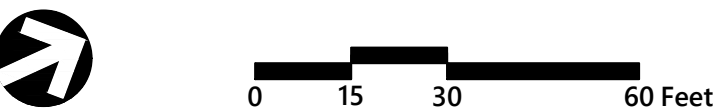
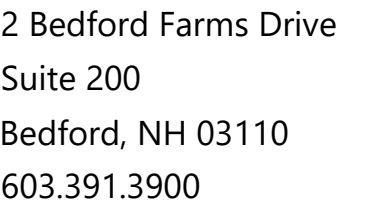
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Issued for Permitting Date May 10, 2024

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Overall Grading
and Drainage Plan



174 Hanover Street Extension
Lebanon, New Hampshire 03766

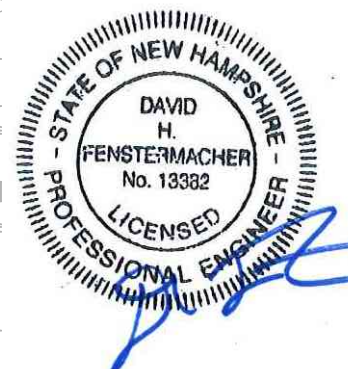
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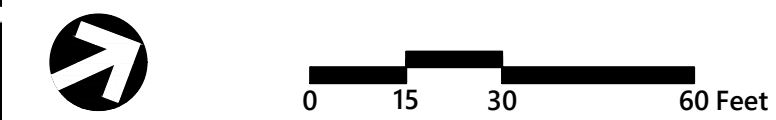
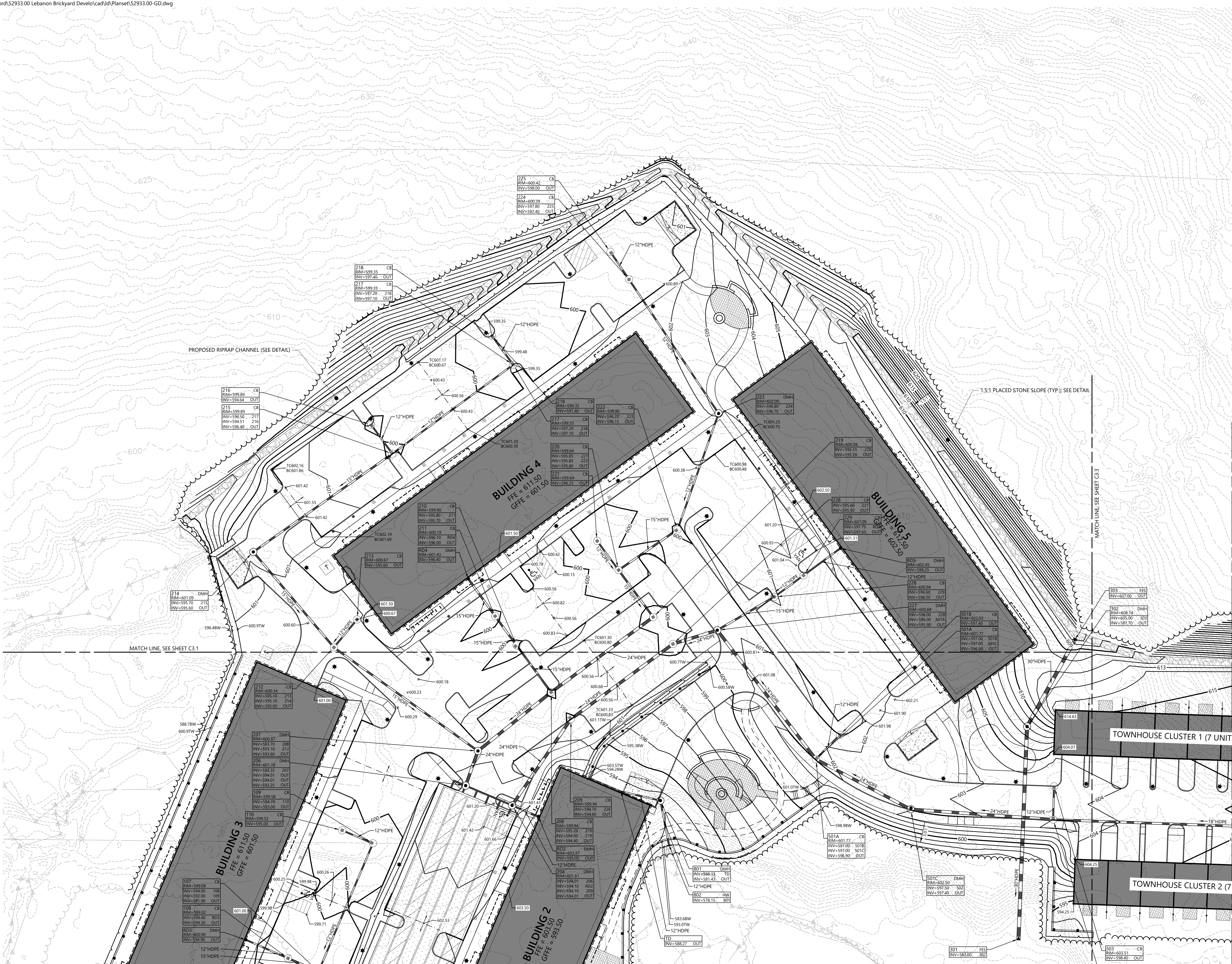
Permitting May 10, 2024

Drawing Number

12 of 53

Number
33.00





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174 Hanover Street Extension
Lebanon, New Hampshire 03766

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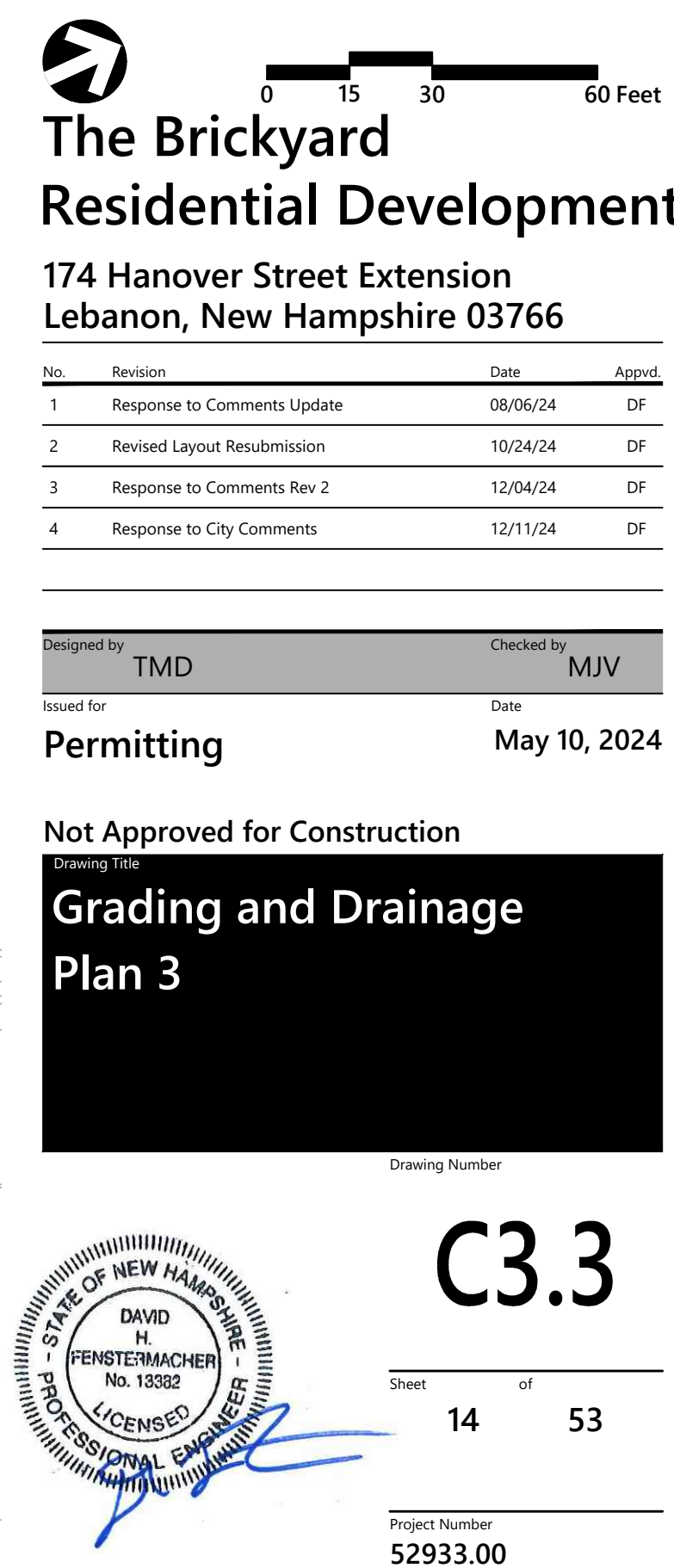
Drawing Title
**Grading and Drainage
Plan 2**

Drawing Number
C3.2

Sheet 13 of 53

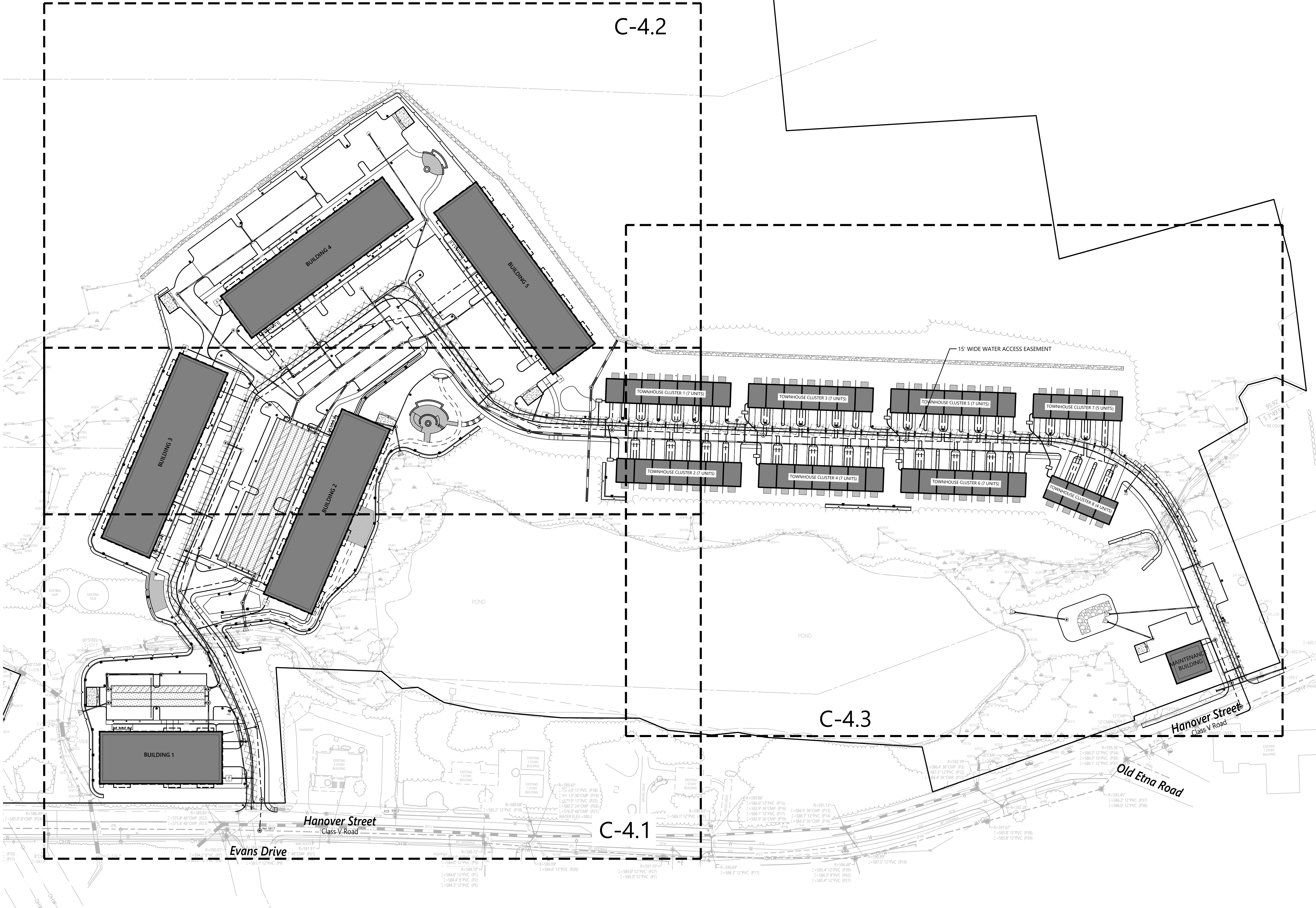
Project Number
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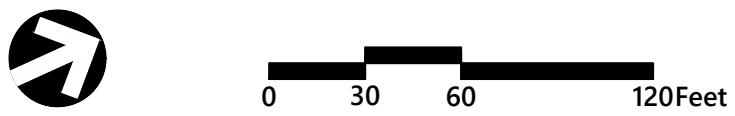




2 Bedford Farms Drive
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- NOTE:
- 1) AN ACCESS AND MAINTENANCE EASEMENT BENEFITING THE CITY OF LEBANON WILL BE PROVIDED FOLLOWING WATER INFRASTRUCTURE ACROSS THE SITE, WHICH WILL BE OWNED BY THE CITY OF LEBANON. THE EASEMENT BOUNDARIES WILL BE PROVIDED FOR CITY REVIEW FOLLOWING COORDINATION OF BUILDING PLUMBING DESIGN FINAL DESIGN ACCEPTANCE FROM THE LEBANON FIRE DEPARTMENT.
 - 2) SANITARY SEWER PIPE LESS THAN 6 FEET BELOW FINISHED GROUND SURFACE ELEVATION MUST BE INSULATED.



The Brickyard Residential Development

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Designed by	Checked by
TMD	MJV
Issued for	Date
Permitting	May 10, 2024

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Overall Utility Plan

Drawing Number

C4.0

Sheet 15 of 53

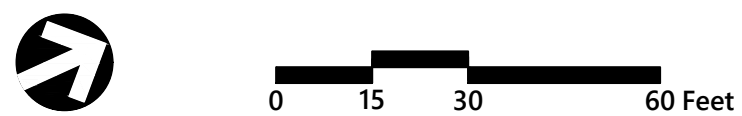
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Utility Plan 1

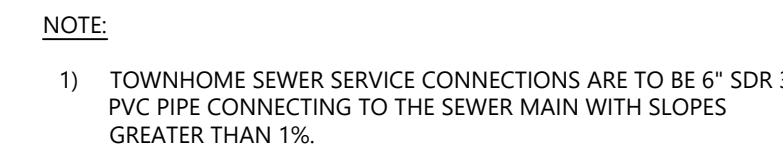
Drawing Number

C4.1

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 0 15 30 60 Feet

The Brickyard
Residential Development

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Utility Plan 2

STATE OF NEW HAMPSHIRE
DAVID H. FENSTERMACHER
No. 13382
LICENSED PROFESSIONAL ENGINEER

C4.2

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52933.00

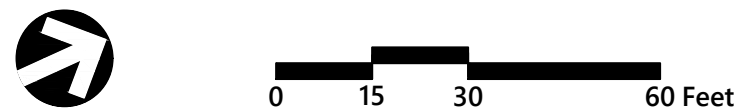


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NOTE:

- 1) TOWNHOME SEWER SERVICE CONNECTIONS ARE TO BE 6" SDR 35 PVC PIPE CONNECTING TO THE SEWER MAIN WITH SLOPES GREATER THAN 1%.



The Brickyard
Residential Development

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Checked by MJV
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Not Approved for Construction

Utility Plan 3

Professional Engineer Seal for David H. Fenstermacher, No. 13382, State of New Hampshire. The seal includes the text 'STATE OF NEW HAMPSHIRE', 'DAVID H. FENSTERMACHER', 'No. 13382', 'LICENSED PROFESSIONAL ENGINEER', and a signature.

C4.3

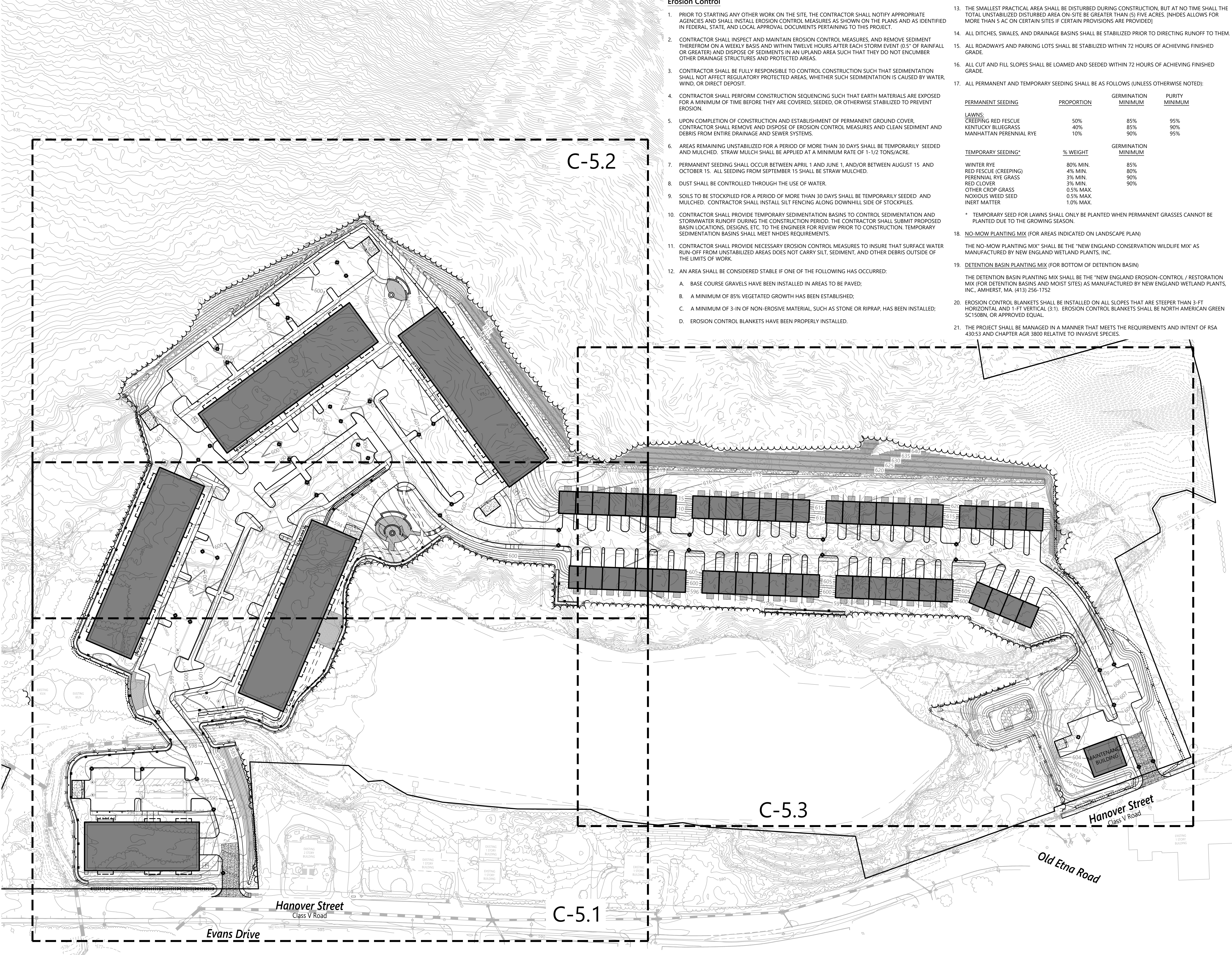
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Project Number 52933.00

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2 Bedford Farms Drive
Suite 200
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603.391.3900



Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT (0.5" OF RAINFALL OR GREATER) AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
6. AREAS REMAINING UNSTABILIZED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED. STRAW MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 1-1/2 TONS/ACRE.
7. PERMANENT SEEDING SHALL OCCUR BETWEEN APRIL 1 AND JUNE 1, AND/OR BETWEEN AUGUST 15 AND OCTOBER 15. ALL SEEDING FROM SEPTEMBER 15 SHALL BE STRAW MULCHED.
8. DUST SHALL BE CONTROLLED THROUGH THE USE OF WATER.
9. SOILS TO BE STOCKPILED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED. CONTRACTOR SHALL INSTALL SILT FENCING ALONG DOWNHILL SIDE OF STOCKPILES.
10. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENTATION BASINS TO CONTROL SEDIMENTATION AND STORMWATER RUNOFF DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL SUBMIT PROPOSED BASIN LOCATIONS, DESIGNS, ETC. TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. TEMPORARY SEDIMENTATION BASINS SHALL MEET NHDES REQUIREMENTS.
11. CONTRACTOR SHALL PROVIDE NECESSARY EROSION CONTROL MEASURES TO INSURE THAT SURFACE WATER RUN-OFF FROM UNSTABILIZED AREAS DOES NOT CARRY SILT, SEDIMENT, AND OTHER DEBRIS OUTSIDE OF THE LIMITS OF WORK.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3-IN OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED;
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

13. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT AT NO TIME SHALL THE TOTAL UNSTABILIZED DISTURBED AREA ON-SITE BE GREATER THAN (5) FIVE ACRES. [NHDES ALLOWS FOR MORE THAN 5 AC ON CERTAIN SITES IF CERTAIN PROVISIONS ARE PROVIDED]
14. ALL DITCHES, SWALES, AND DRAINAGE BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
15. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
16. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
17. ALL PERMANENT AND TEMPORARY SEEDING SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

PERMANENT SEEDING	PROPORTION	GERMINATION MINIMUM	PURITY MINIMUM
LAWNS:			
CREeping RED FESCUE	50%	85%	95%
KENTUCKY BLUEGRASS	40%	85%	90%
MANHATTAN PERENNIAL RYE	10%	90%	95%

TEMPORARY SEEDING*	% WEIGHT	GERMINATION MINIMUM
WINTER RYE	80% MIN.	85%
RED FESCUE (CREEPING)	4% MIN.	80%
PERENNIAL RYE GRASS	3% MIN.	90%
RED CLOVER	3% MIN.	90%
OTHER CROP GRASS	0.5% MAX.	
NOXIOUS WEED SEED	0.5% MAX.	
INERT MATTER	1.0% MAX.	

* TEMPORARY SEED FOR LAWNS SHALL ONLY BE PLANTED WHEN PERMANENT GRASSES CANNOT BE PLANTED DUE TO THE GROWING SEASON.

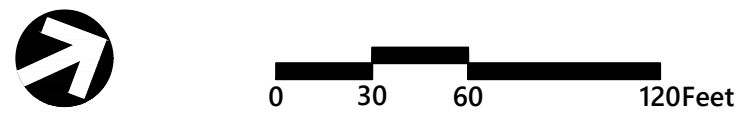
18. NO-MOW PLANTING MIX (FOR AREAS INDICATED ON LANDSCAPE PLAN)

THE NO-MOW PLANTING MIX* SHALL BE THE "NEW ENGLAND CONSERVATION WILDLIFE MIX" AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC.

19. DETENTION BASIN PLANTING MIX (FOR BOTTOM OF DETENTION BASIN)

THE DETENTION BASIN PLANTING MIX SHALL BE THE "NEW ENGLAND EROSION-CONTROL / RESTORATION MIX (FOR DETENTION BASINS AND MOIST SITES) AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC., AMHERST, MA. (413) 256-1752

20. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 3-FT HORIZONTAL AND 1-FT VERTICAL (3:1). EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN SC150BN, OR APPROVED EQUAL.
21. THE PROJECT SHALL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.



The Brickyard Residential Development

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Designed by	Checked by
TMD	MJV
Issued for	Date
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Not Approved for Construction
Drawing Title
**Overall Erosion
Control Plan**



C5.0

Sheet 19 of 53

Project Number
52933.00



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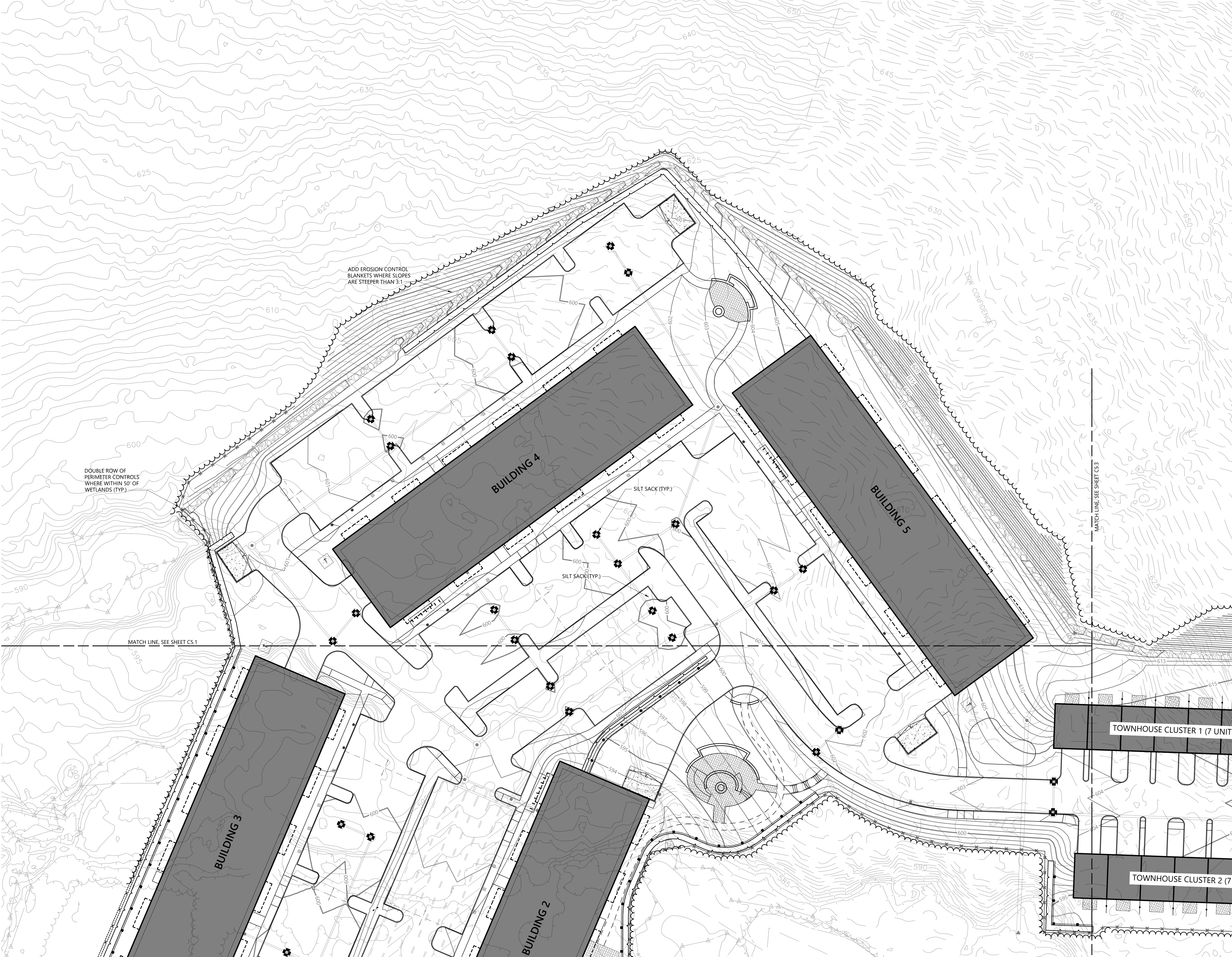
Erosion Control Plan 1

Drawing Number



C5.1

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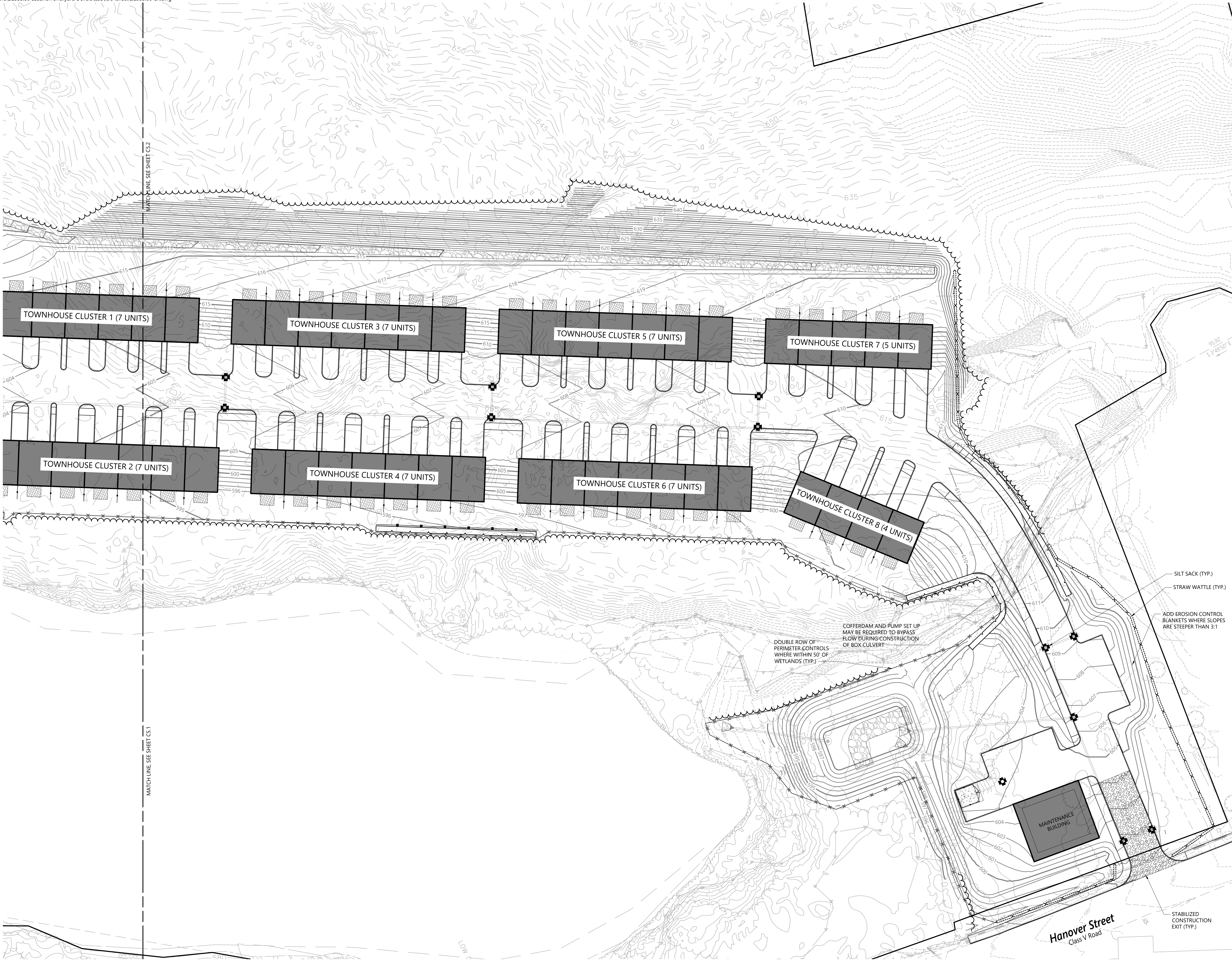


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Erosion Control Plan 2



The Brickyard
Residential Development
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Drawing Title

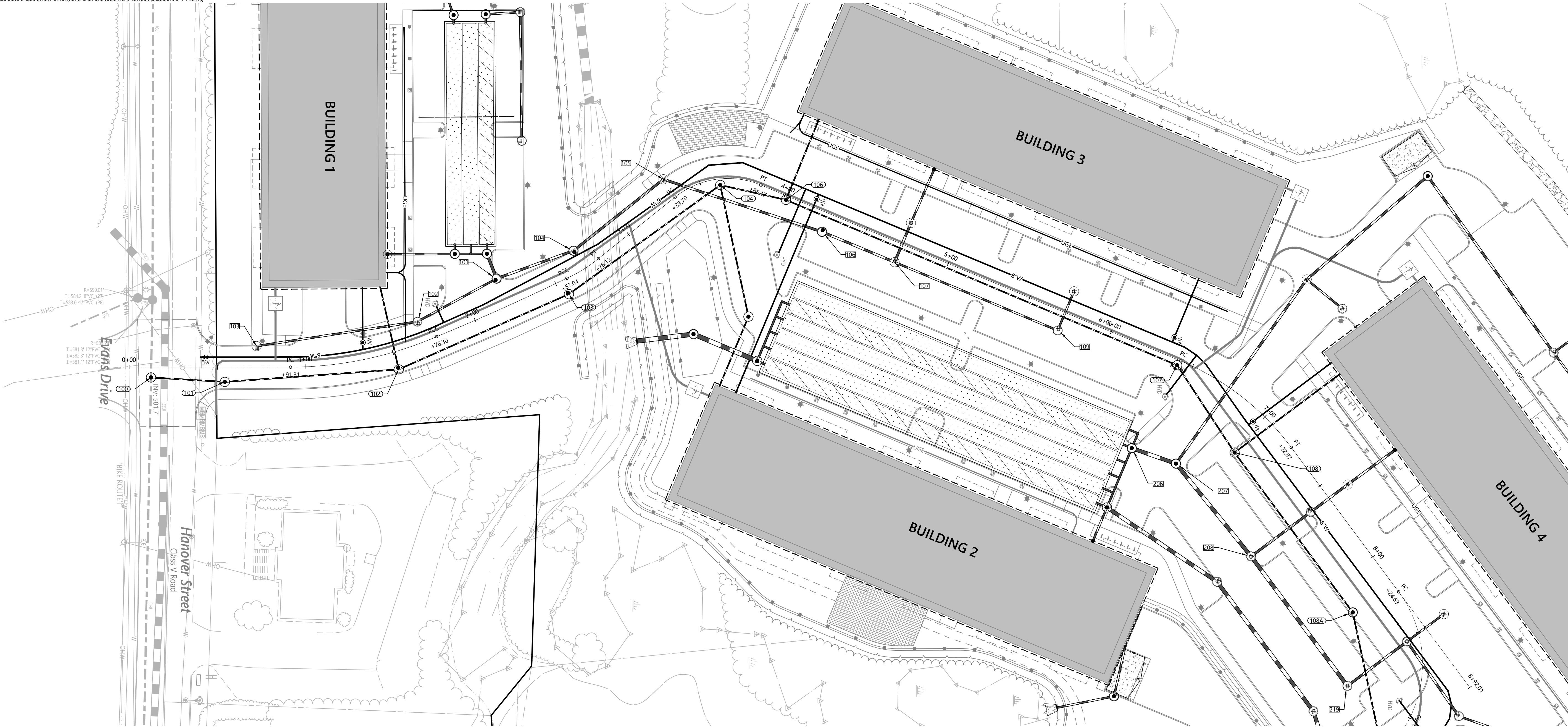
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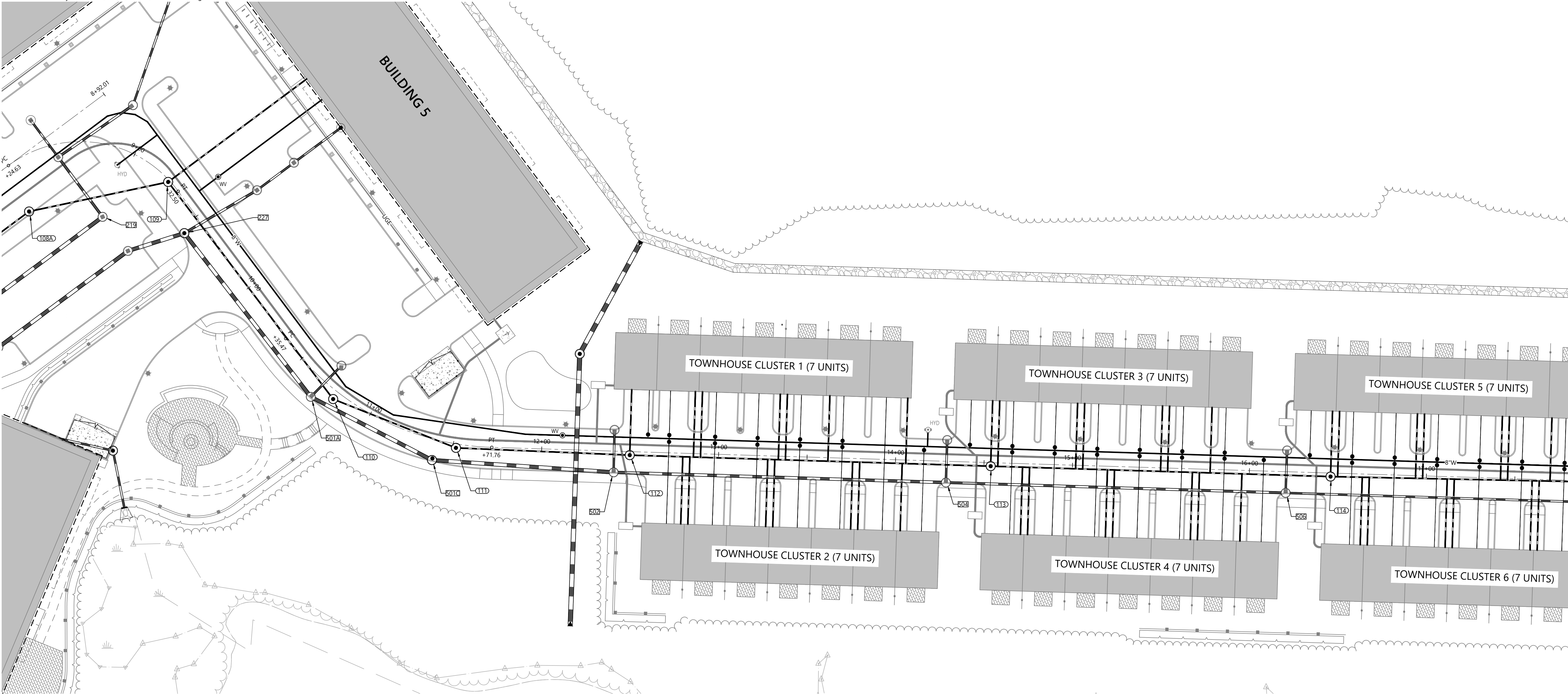
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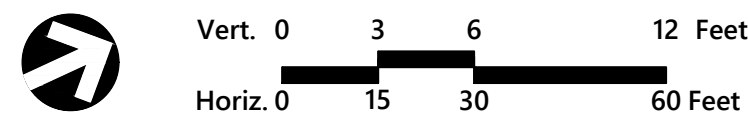
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NOTE:

1) SANITARY AND WATER CROSSINGS HAVE 18" MINIMUM SEPARATION AND WATER PIPES SHALL USE VERTICAL BENDS AS NEEDED TO MEET THAT SEPARATION.



The Brickyard Residential Development

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Designed by: TMD
Checked by: MJV

Issued for: Permitting
Date: May 10, 2024

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Drawing Title:
**Plan and Profile 2
Sewer, Drainage and Water**

STATE OF NEW HAMPSHIRE

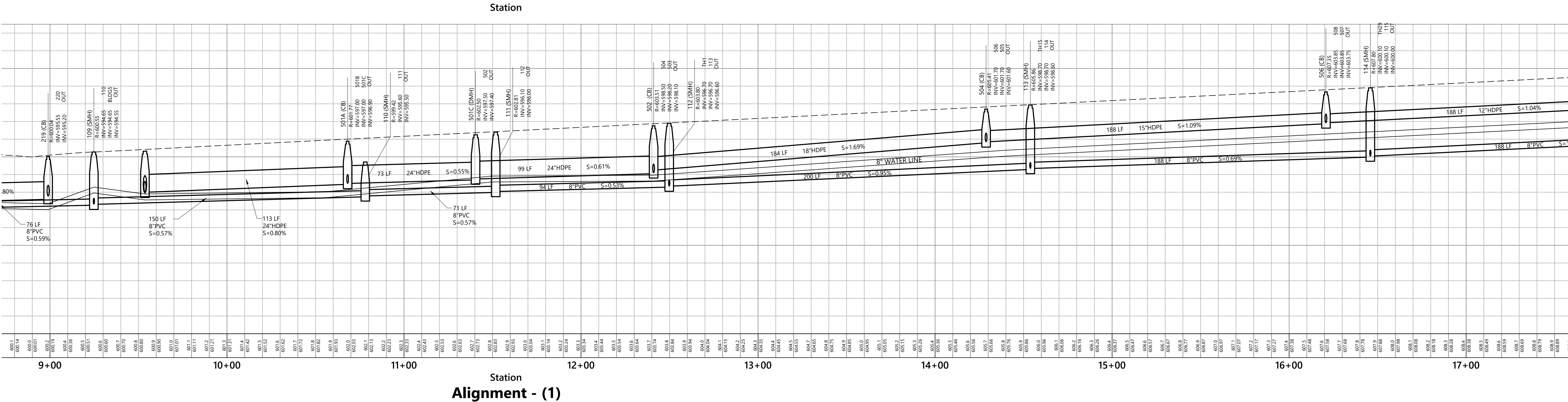
DAVID H. FENSTERMACHER
No. 13382
LICENSED PROFESSIONAL ENGINEER

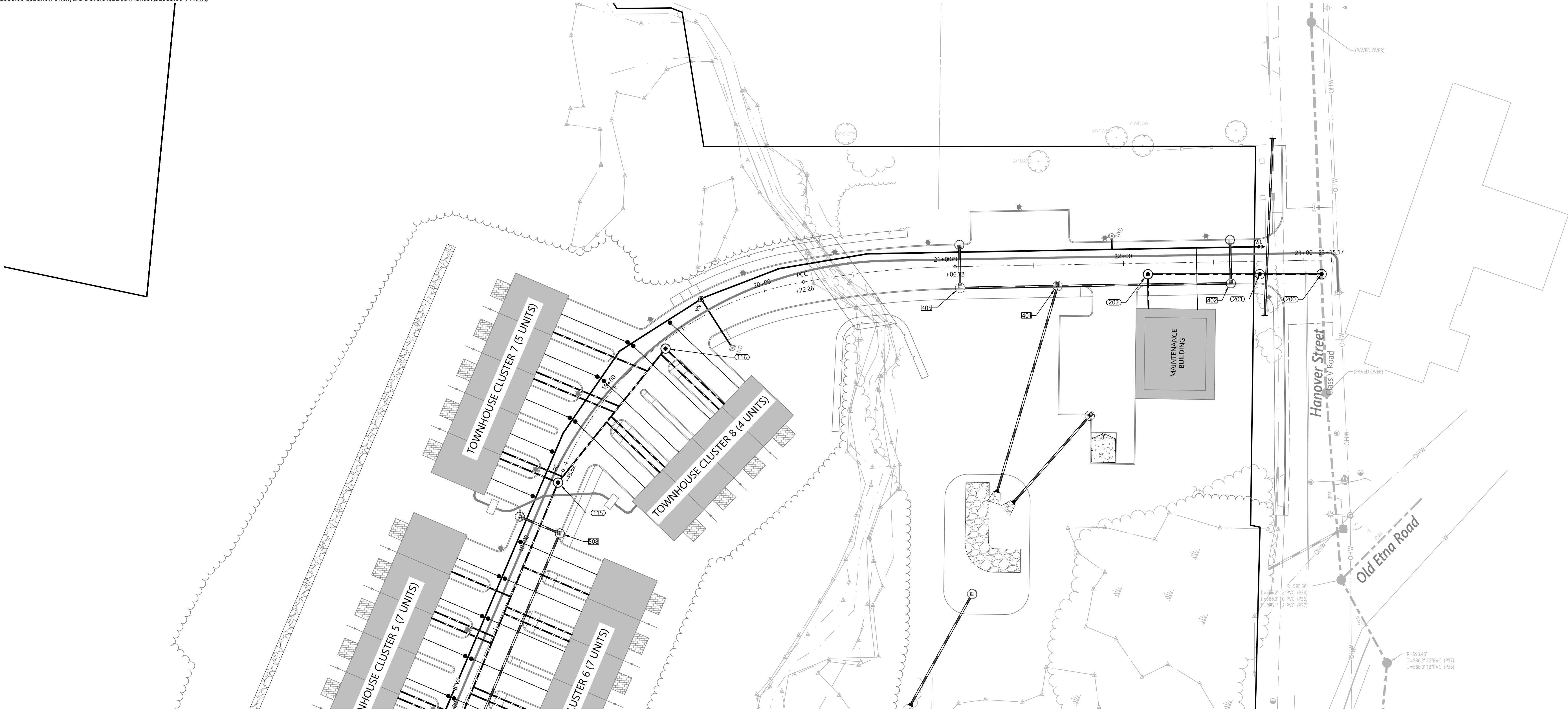
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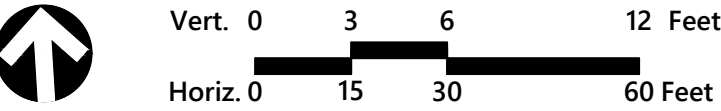
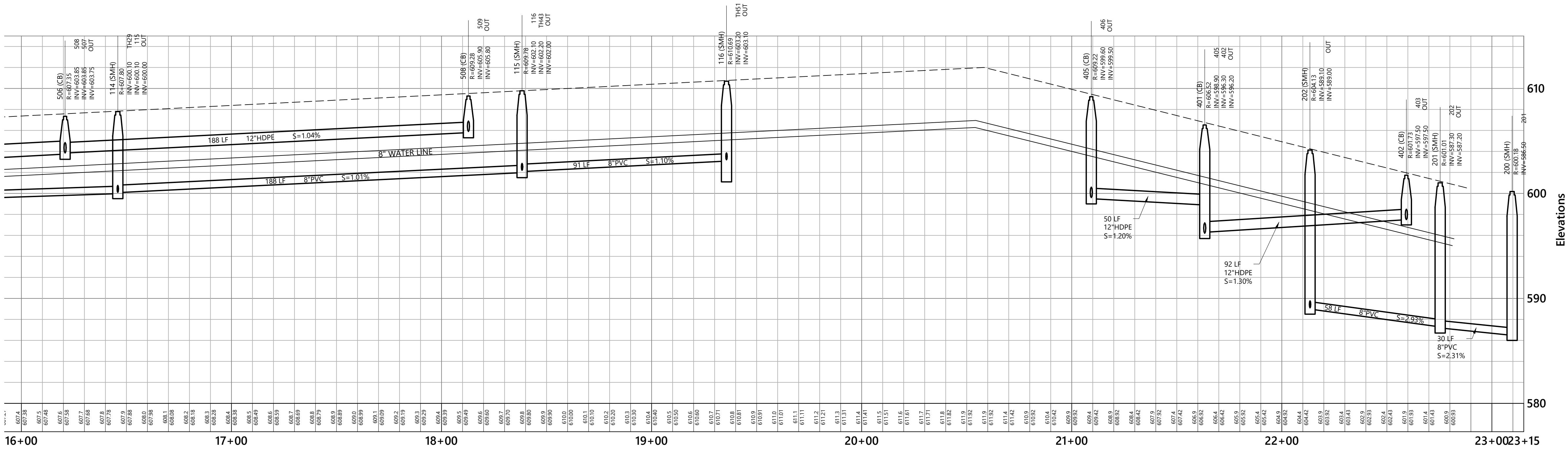
Project Number: 52933.00

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NOTE:
1) SANITARY AND WATER CROSSINGS HAVE 18" MINIMUM SEPARATION AND WATER PIPES SHALL USE VERTICAL BENDS AS NEEDED TO MEET THAT SEPARATION.



The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Appvd.
1	Revised Layout Resubmission	10/24/24	DF
2	Response to Comments Rev 2	12/04/24	DF
3	Response to City Comments	12/11/24	DF

Designed by
TMD

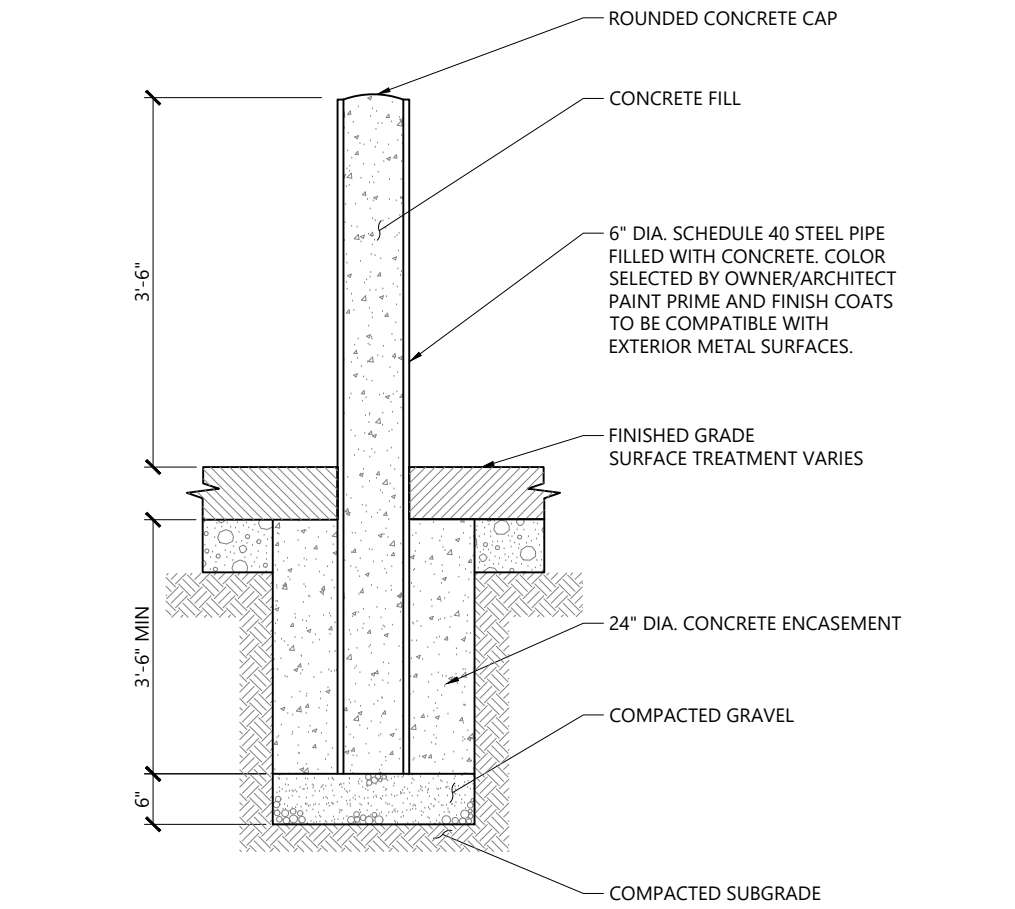
Checked by
MJV

Issued for
Permitting

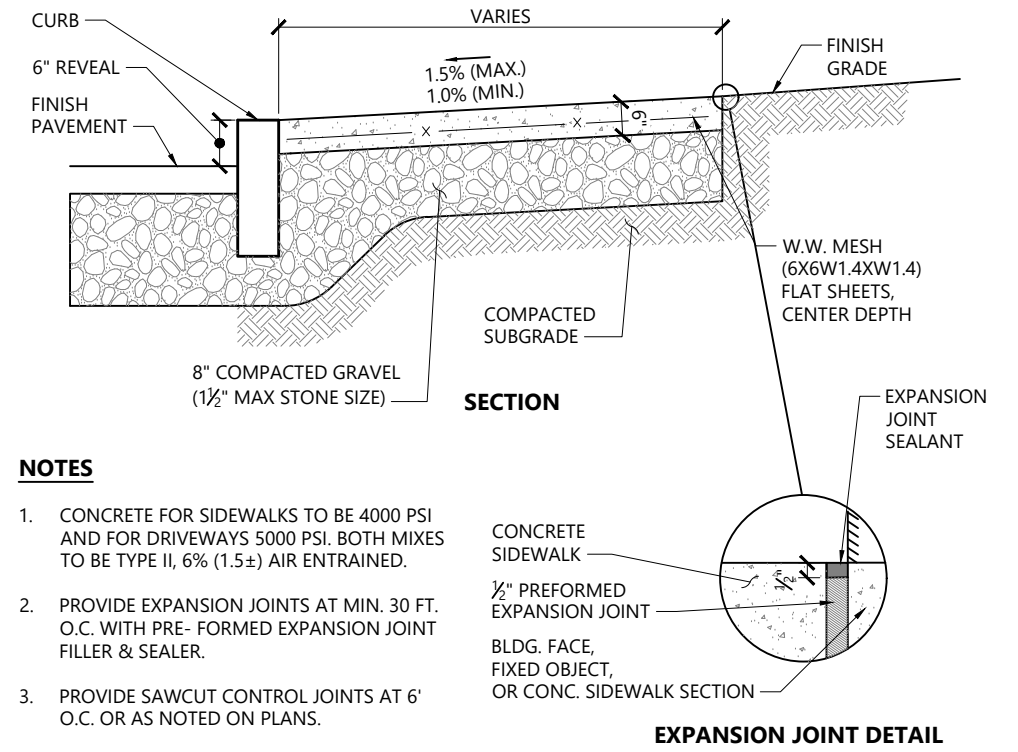
Date
May 10, 2024

Not Approved for Construction

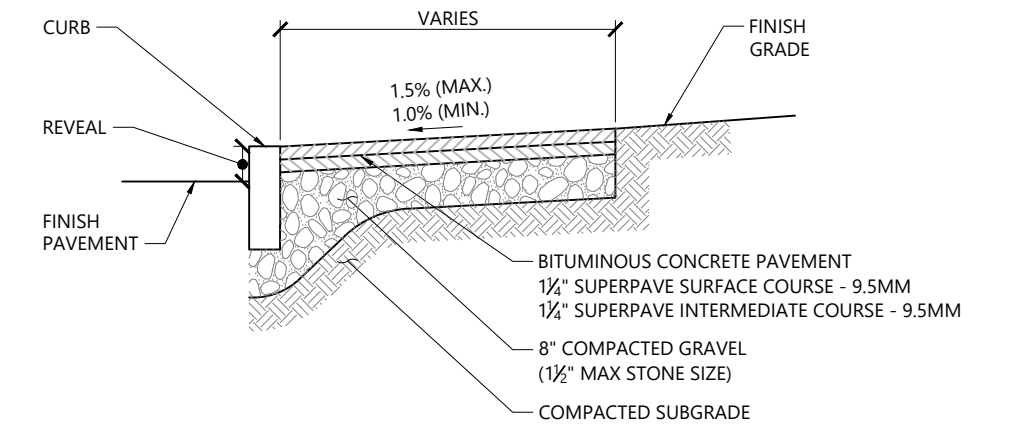
Drawing Title
Plan and Profile 3
Sewer, Drainage and Water



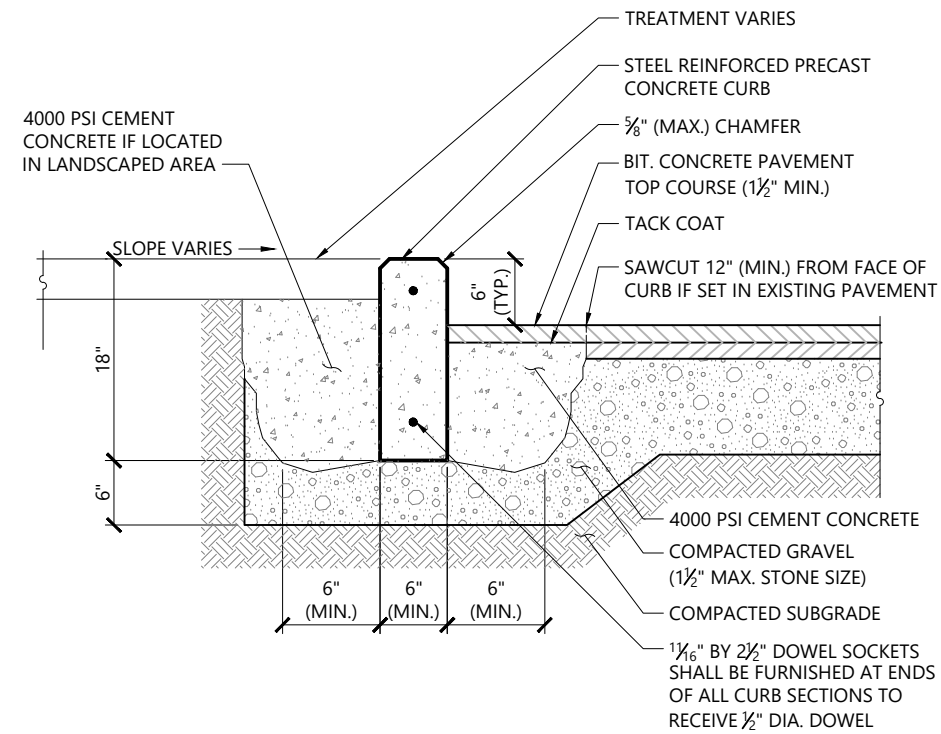
Bollard 12/19
N.T.S. Source: VHB REV LD_700



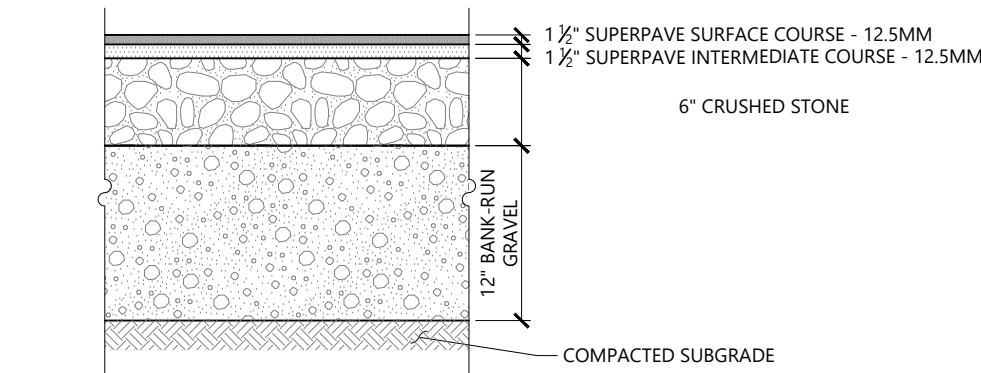
Concrete Sidewalk 3/20
N.T.S. Source: VHB REV LD_420



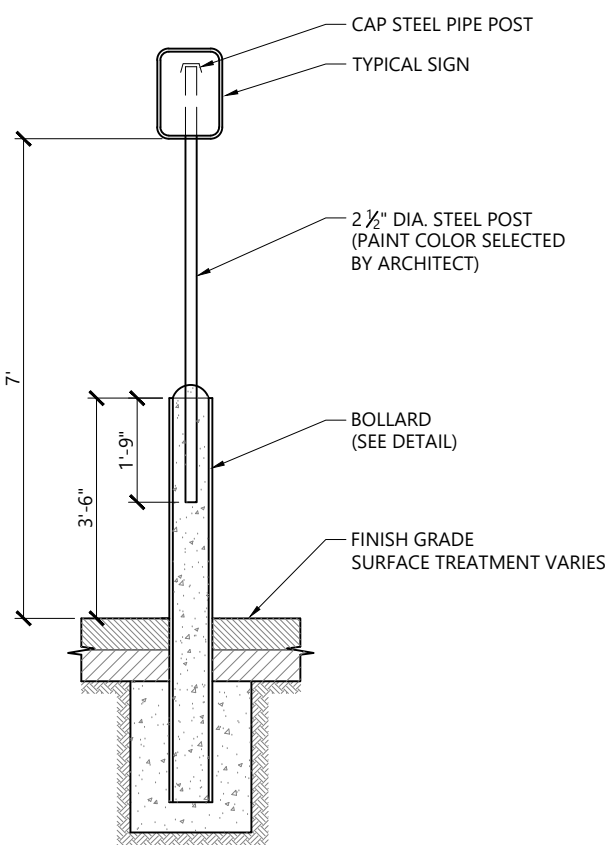
Bituminous Concrete Sidewalk 3/20
N.T.S. Source: VHB REV LD_422



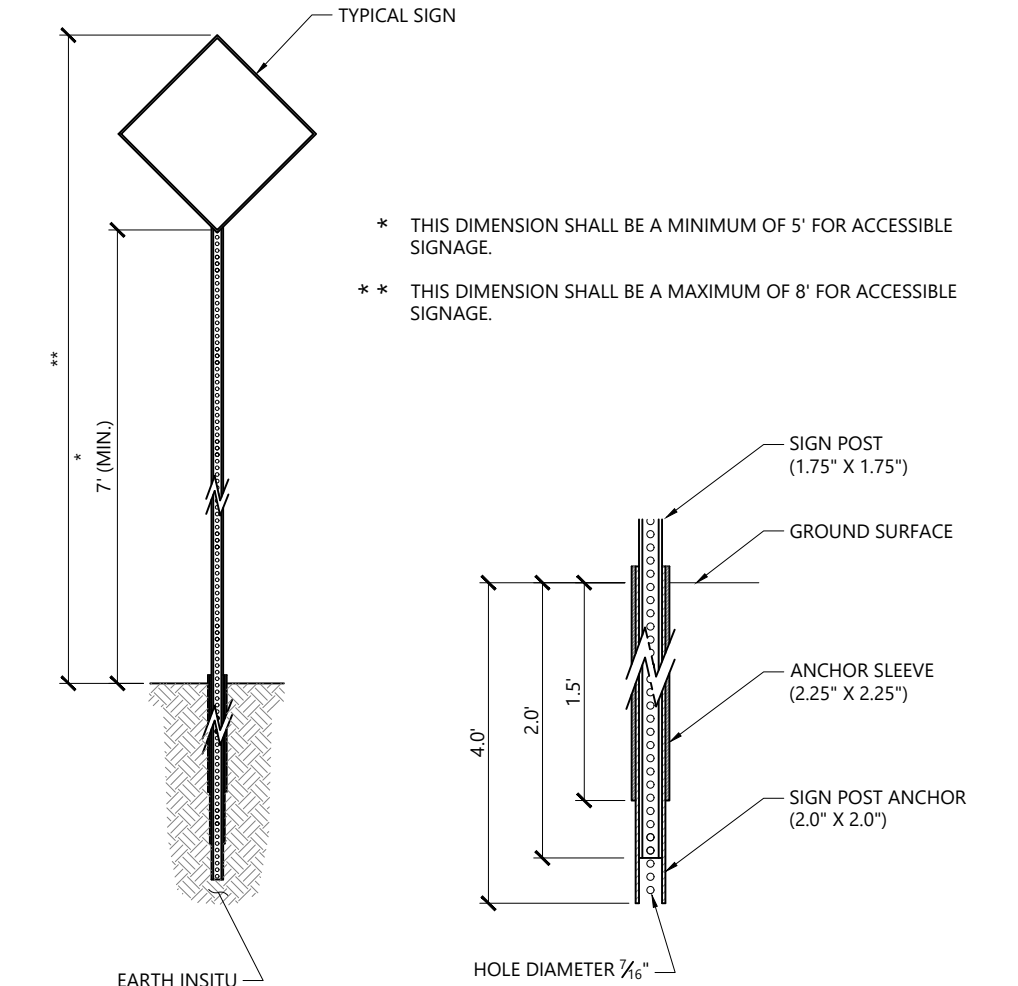
Precast Concrete Curb (PCC) 3/20
N.T.S. Source: VHB REV LD_404



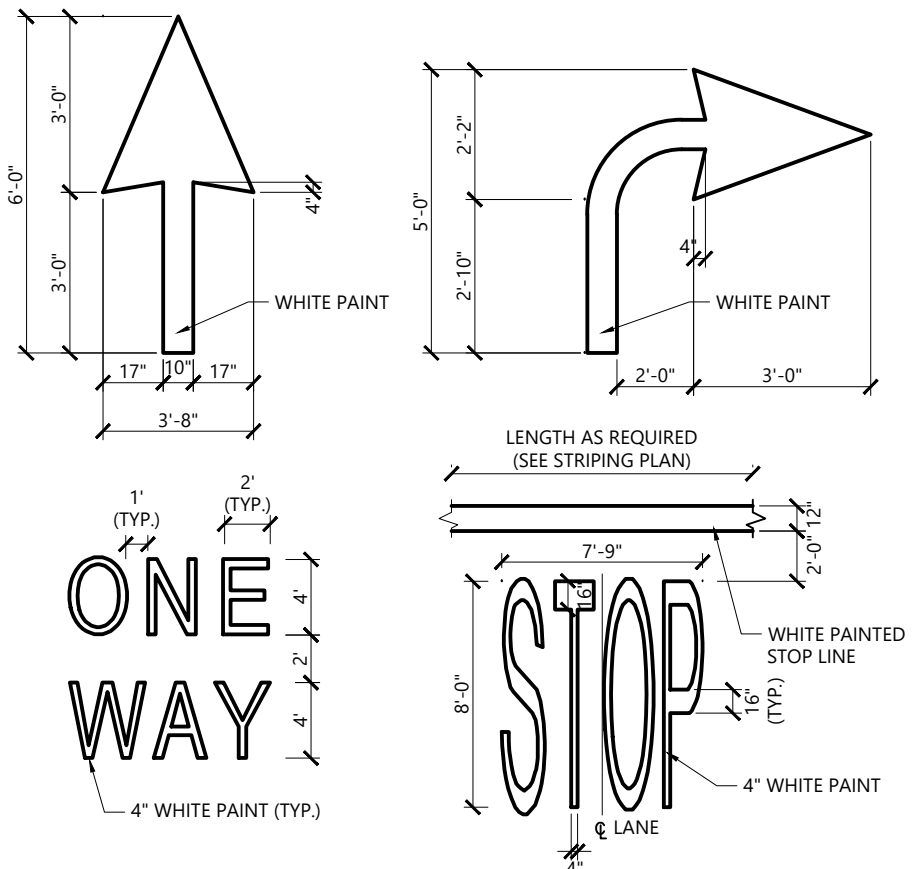
Bituminous Concrete Pavement Sections 7/22
N.T.S. Source: VHB REV LD_430



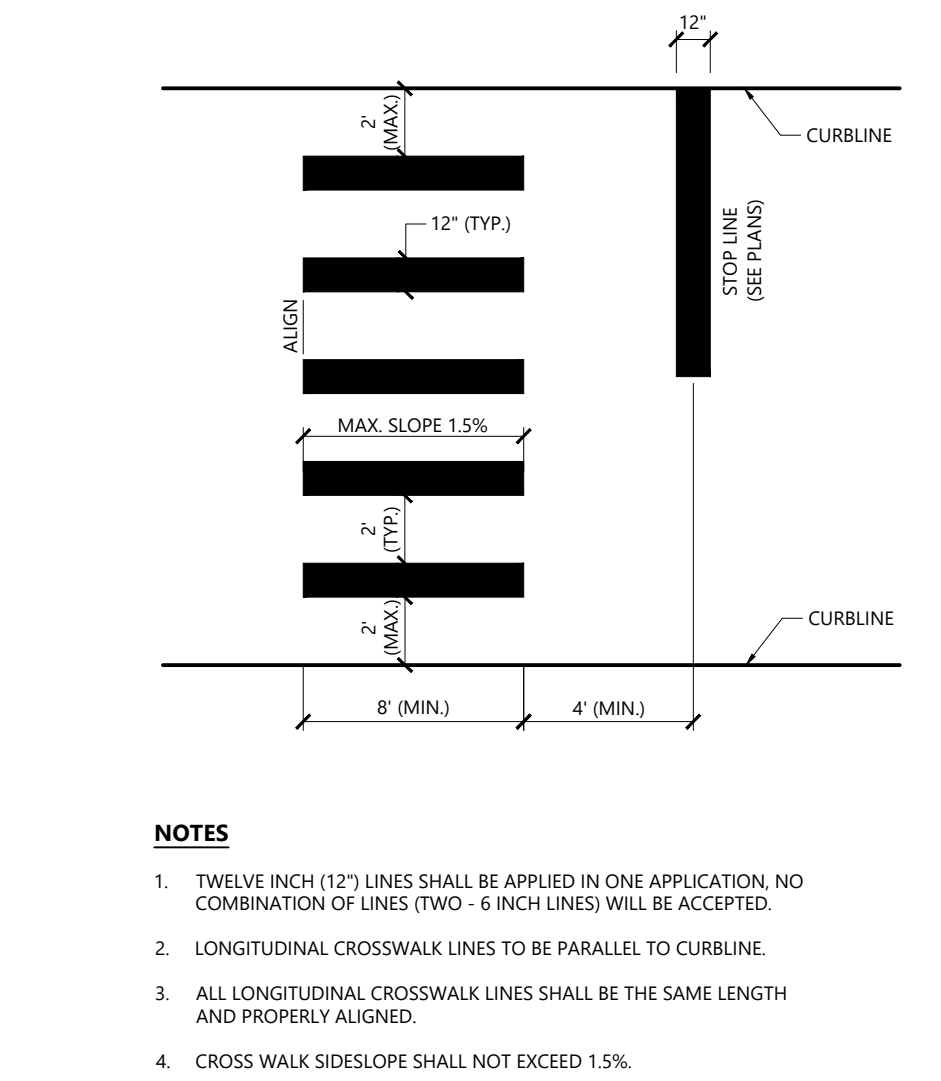
Bollard Mounted Sign 1/16
N.T.S. Source: VHB REV LD_703-NH



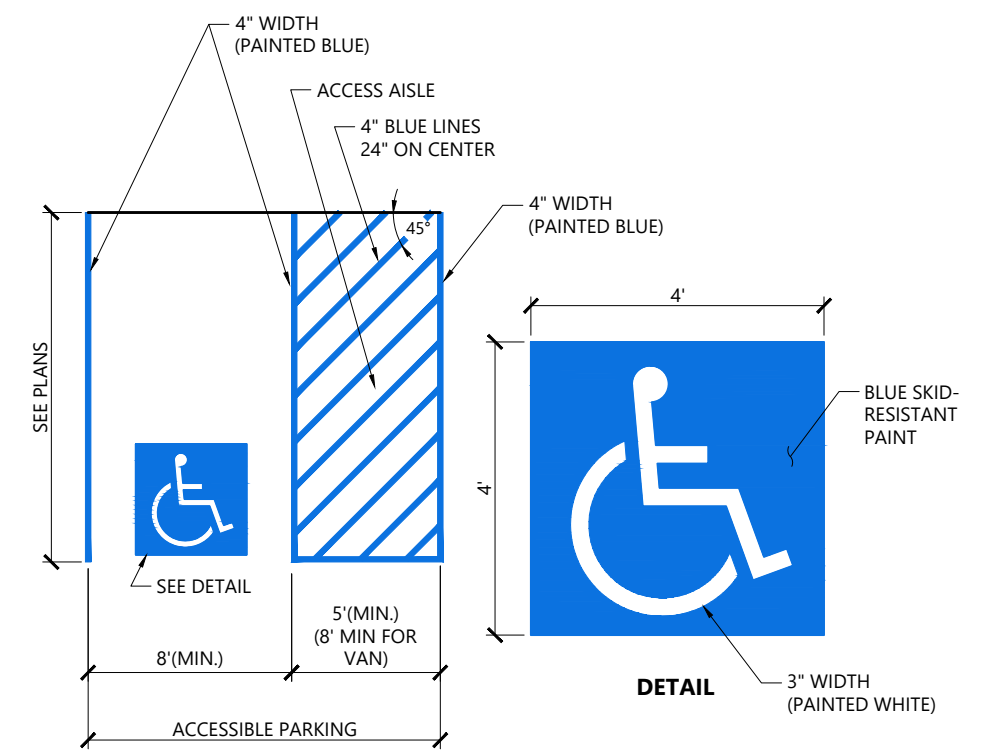
Sign Post - Type 'B' 1/16
N.T.S. Source: VHB REV LD_702



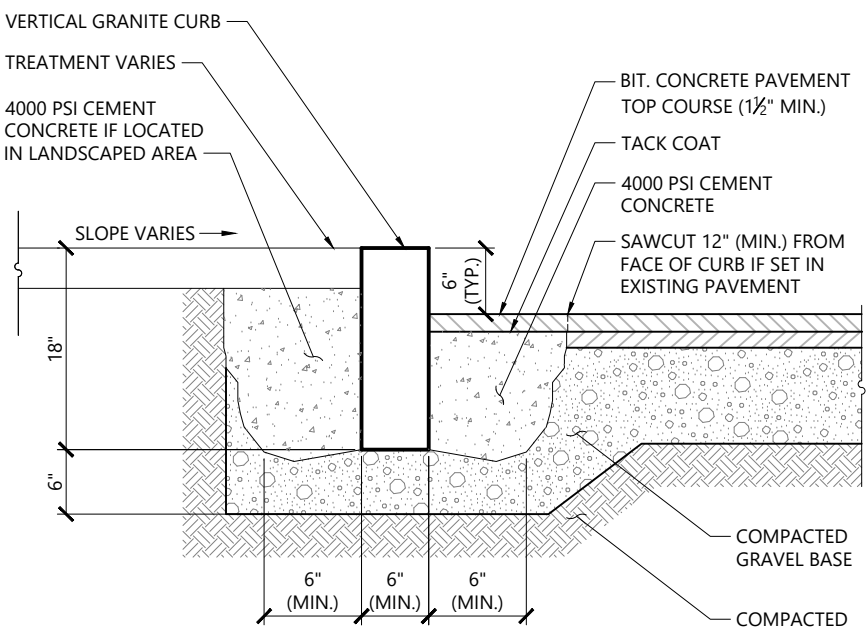
Painted Pavement Markings - On Site 1/16
N.T.S. Source: VHB REV LD_554



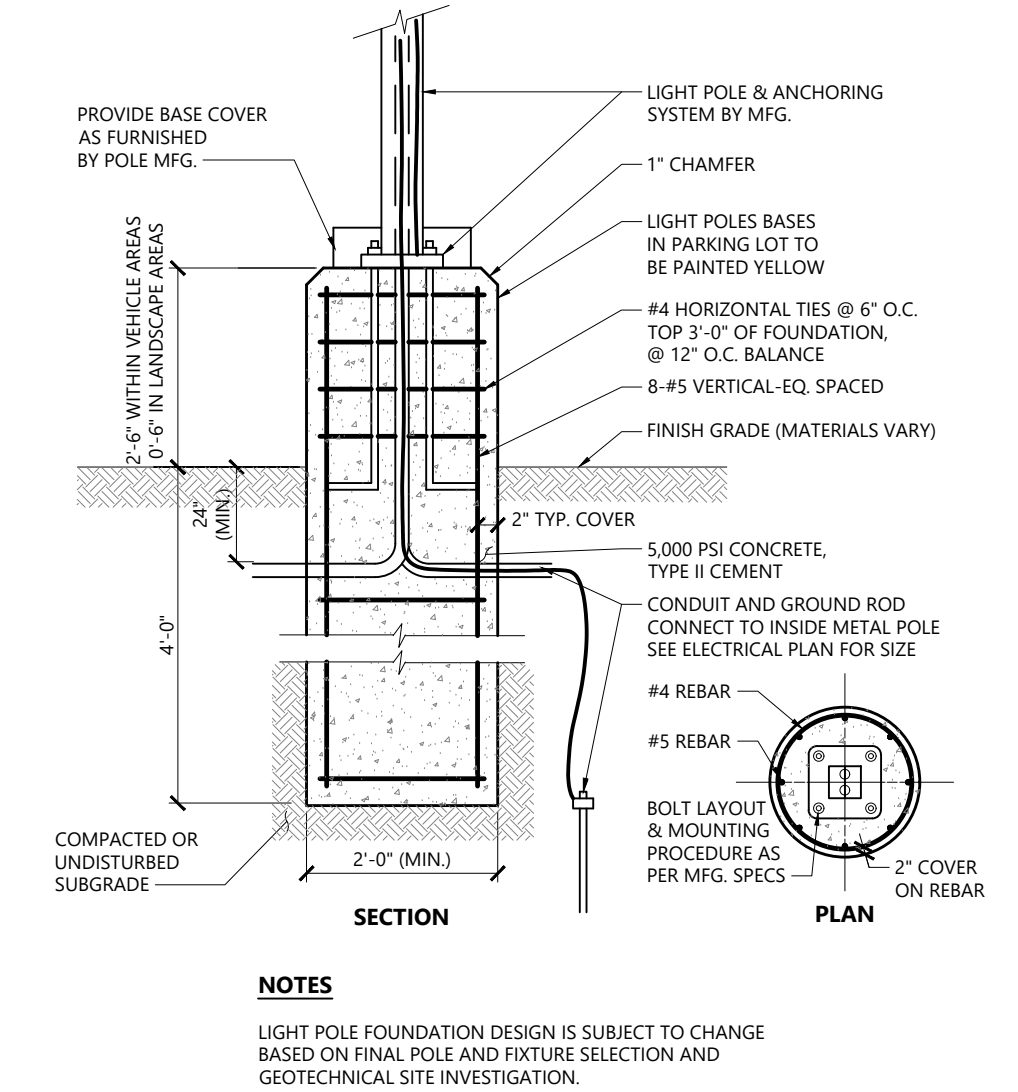
Crosswalk 12/19
N.T.S. Source: VHB REV LD_553A



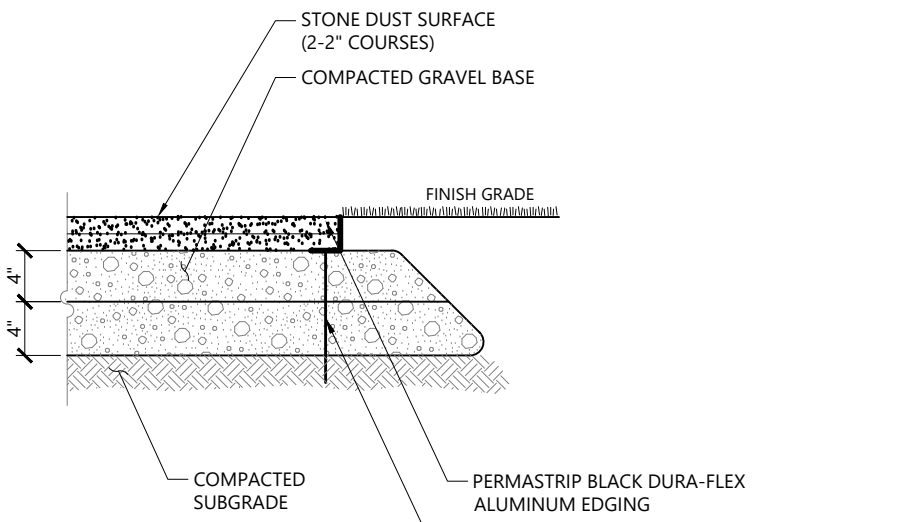
Accessible Parking Space 1/16
N.T.S. Source: VHB REV LD_552-NH



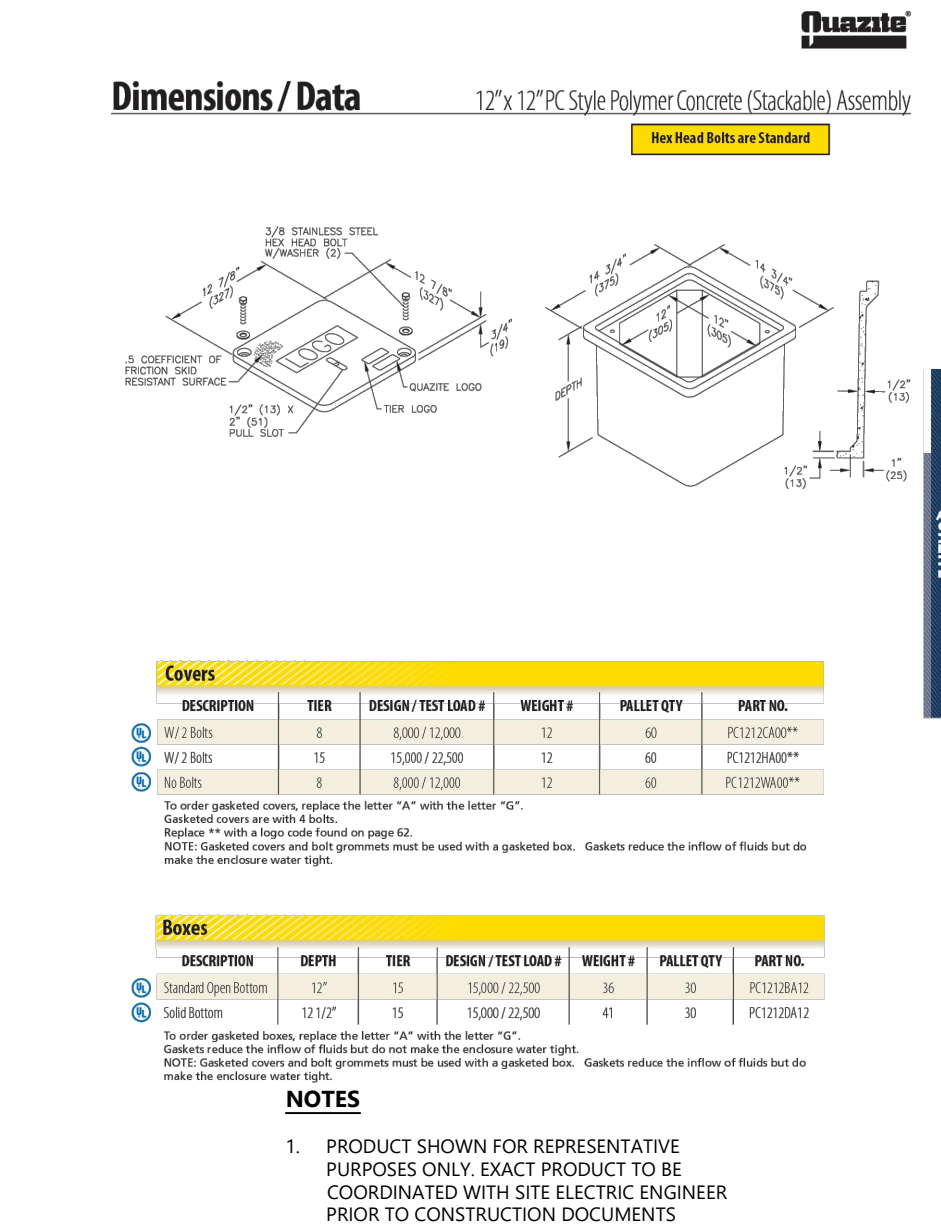
Vertical Granite Curb (VGC) 3/20
N.T.S. Source: VHB REV LD_402



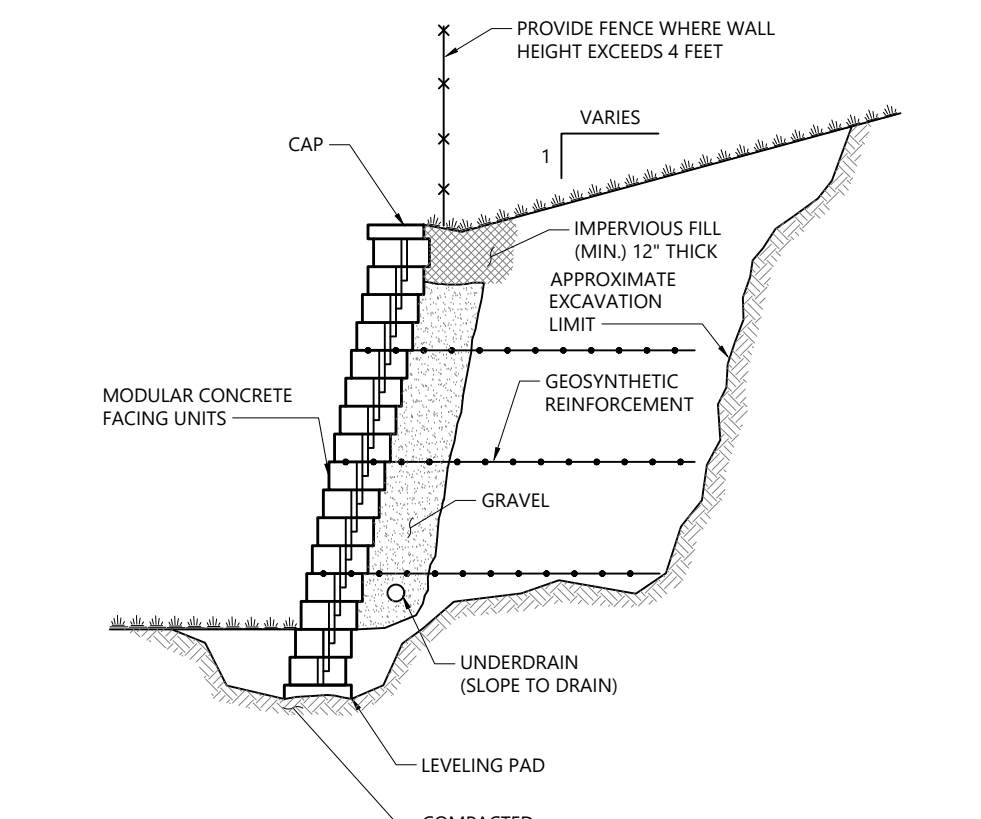
Light Pole Foundation Detail (Up to 15' Pole) 5/23
N.T.S. Source: VHB REV LD_310A



Stonedust Path 1/16
N.T.S. Source: VHB REV LD_447



Future EV Charging Vault 1/16
N.T.S. Source: VHB REV LD_447



Modular Retaining Wall 10/20
N.T.S. Source: VHB REV LD_750

The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Appr'd
1	Response to Comments Update	08/06/24	DF
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3	Response to City Comments	12/11/24	DF

Designed by **TMD** Checked by **MJV**
Issued for **Permitting** Date **May 10, 2024**

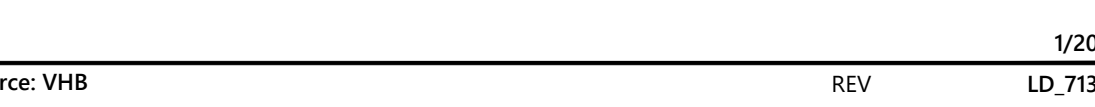
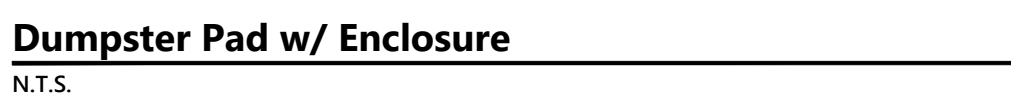
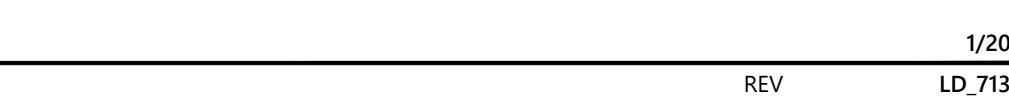
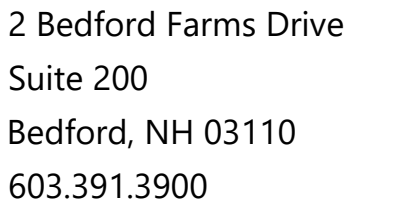
Not Approved for Construction

Drawing Title
Detail Sheet 1

Drawing Number

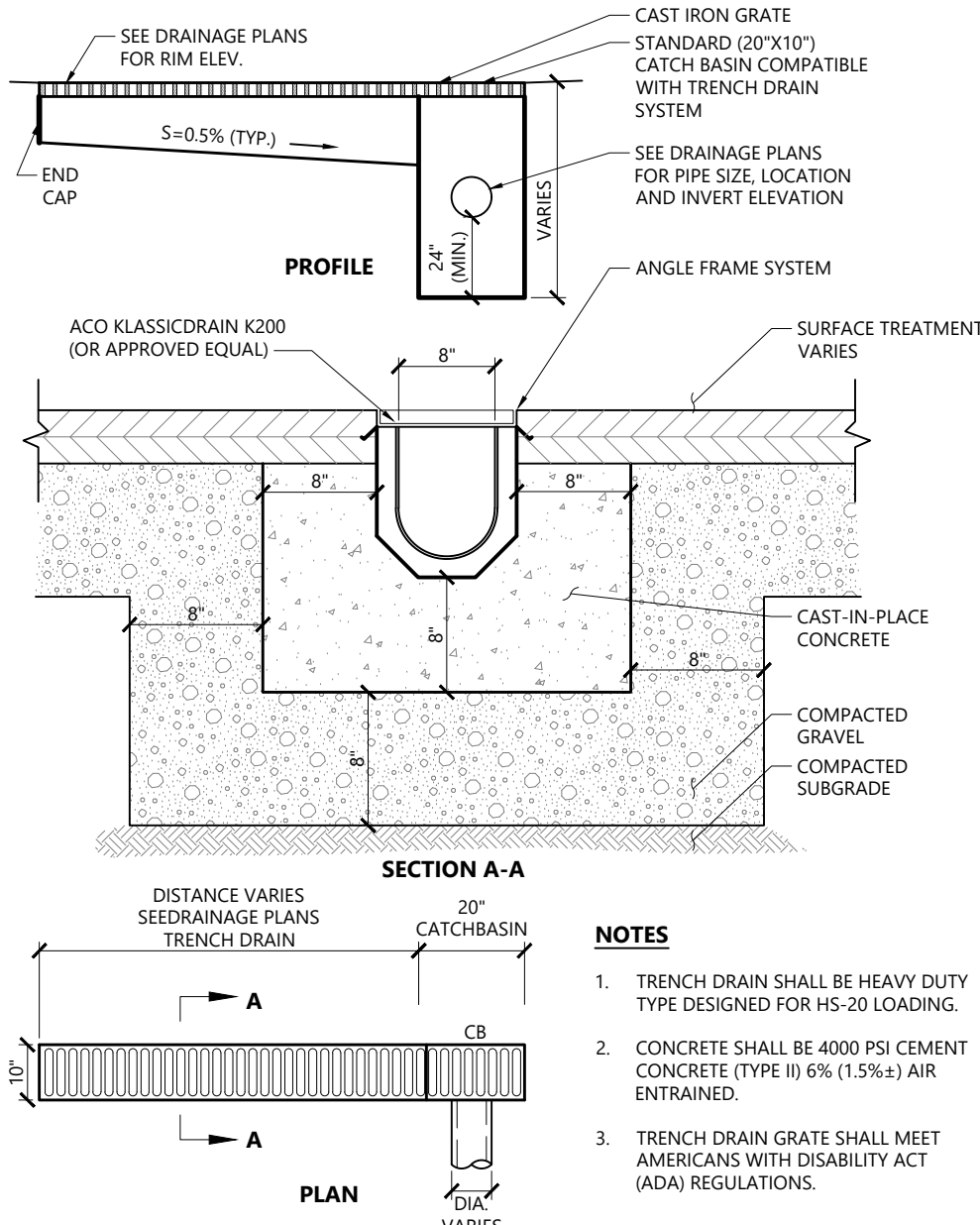
C7.1
Sheet 26 of 53
Project Number
52933.00

STATE OF NEW HAMPSHIRE
DAVID H. FENSTERMACHER
No. 13382
LICENSED PROFESSIONAL ENGINEER

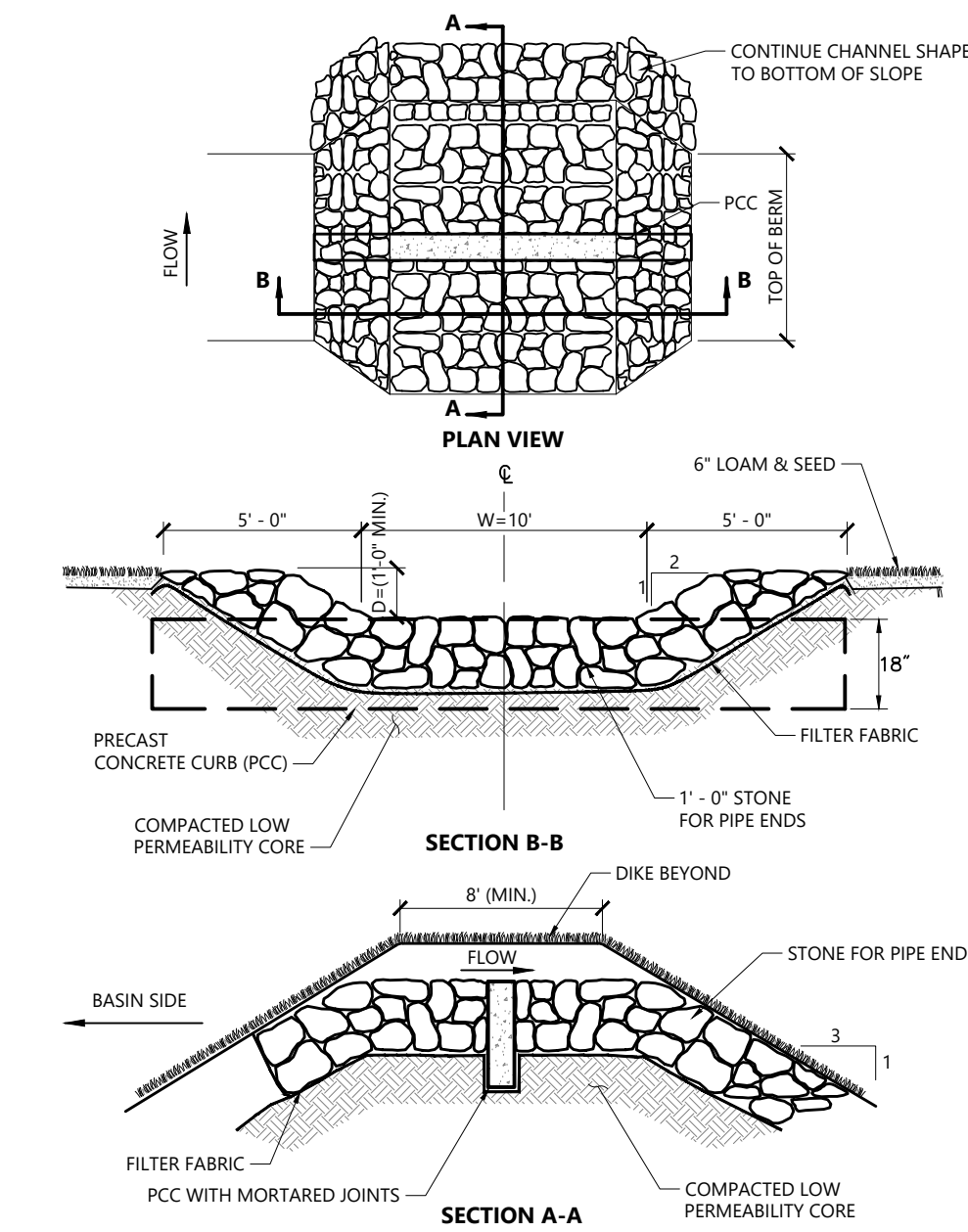


Storm Sewer Pipe Schedule

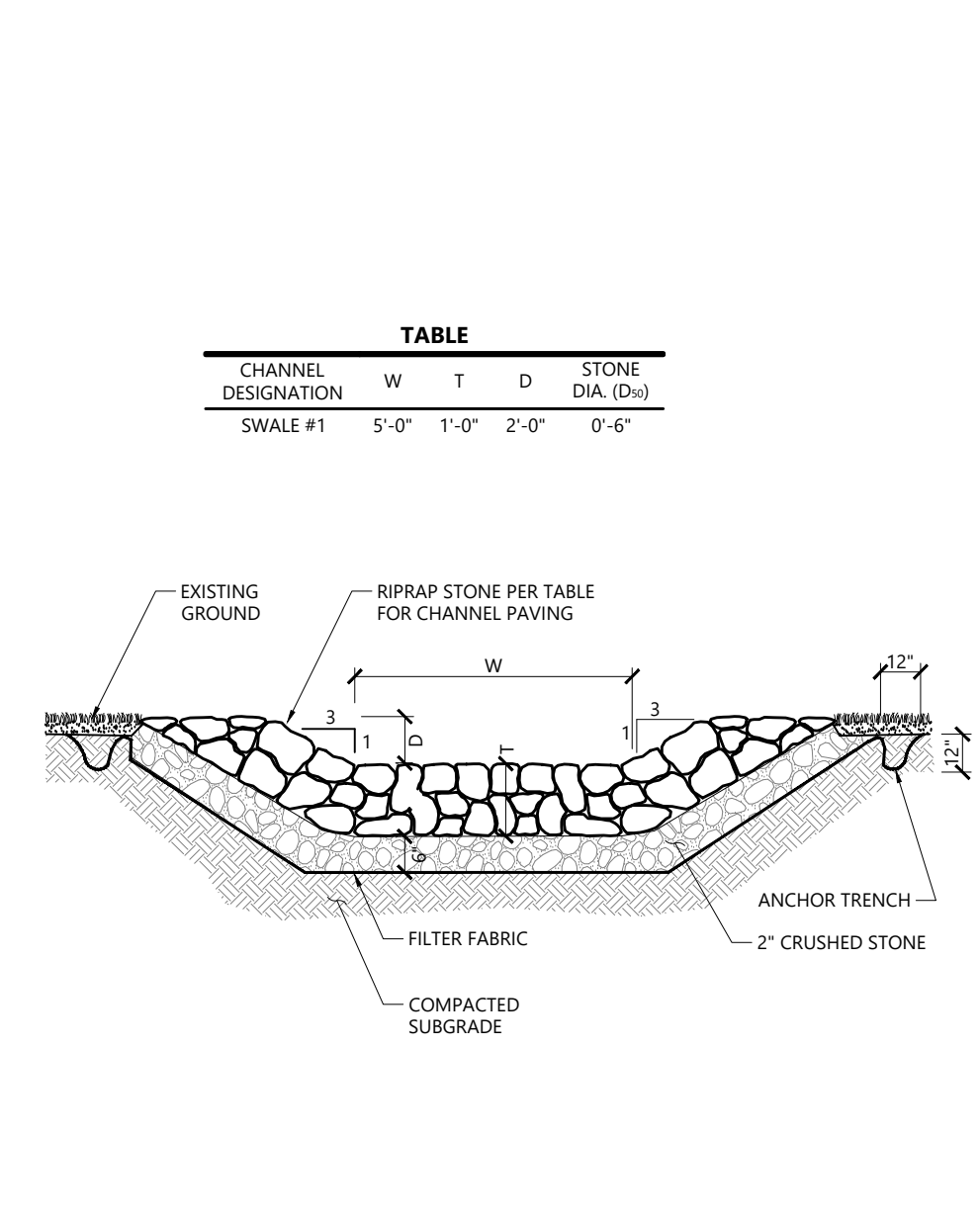
Start Str.	End Str.	Size	Material	Length	Slope	Start Inv.	End Inv.
101	902	18	HDPE	15.067	1.33%	585.20	585.00
102	101	12	HDPE	50.933	2.36%	586.50	585.30
103	102	12	HDPE	91.944	0.54%	587.90	587.40
104	101	15	HDPE	46.274	3.24%	587.00	585.50
105	104	15	HDPE	64.942	2.16%	588.50	587.10
106	105	15	HDPE	94.485	0.95%	589.50	588.60
107	106	15	HDPE	44.501	2.02%	591.90	591.00
108	107	15	HDPE	24.000	1.25%	594.30	594.00
109	107	12	HDPE	100.000	1.00%	593.00	592.00
110	109	12	HDPE	24.000	1.25%	595.00	594.70
202	201	30	HDPE	32.230	9.31%	584.00	581.00
203	202	30	HDPE	39.071	1.28%	592.50	592.00
207	206	24	HDPE	26.465	0.94%	593.60	593.35
208	207	24	HDPE	67.531	1.04%	594.40	593.70
209	204	24	HDPE	75.131	0.67%	594.60	594.10
210	208	15	HDPE	42.000	1.19%	595.70	595.20
211	210	15	HDPE	26.000	0.77%	596.00	595.80
212	207	15	HDPE	127.691	1.49%	595.00	593.10
213	212	12	HDPE	26.053	1.92%	595.60	595.10
214	212	15	HDPE	89.967	0.56%	595.60	595.10
215	214	15	HDPE	122.618	0.57%	596.40	595.70
216	215	12	HDPE	26.000	0.50%	594.64	594.51
217	215	12	HDPE	108.000	0.56%	597.10	596.50
218	217	12	HDPE	26.000	0.77%	597.40	597.20
219	208	24	HDPE	91.243	0.77%	595.20	594.50
220	219	15	HDPE	42.000	0.60%	595.80	595.55
221	220	12	HDPE	26.000	1.54%	596.25	595.85
222	220	15	HDPE	51.411	0.58%	596.15	595.85
223	222	12	HDPE	88.684	0.56%	596.70	596.20
224	223	12	HDPE	116.036	0.52%	597.40	596.80
225	224	12	HDPE	24.021	0.83%	598.00	597.80
226	209	24	HDPE	91.243	0.88%	595.50	594.70
227	226	24	HDPE	33.385	0.90%	595.90	595.60
228	227	15	HDPE	47.687	1.05%	596.50	596.00
229	228	12	HDPE	26.000	4.04%	597.65	596.60
302	301	30	HDPE	152.935	3.07%	587.70	583.00
303	302	30	HDPE	71.412	2.80%	607.00	605.00
401	400	12	HDPE	118.227	0.59%	596.20	595.50
402	401	12	HDPE	95.980	1.25%	597.50	596.30
403	402	12	HDPE	24.012	1.25%	597.80	597.50
405	401	12	HDPE	54.001	1.11%	599.50	598.90
406	405	12	HDPE	23.869	1.68%	600.00	599.60
501A	227	24	HDPE	116.834	0.77%	596.90	596.00
501B	501A	12	HDPE	24.688	1.62%	597.40	597.00
501C	501A	24	HDPE	77.183	0.52%	597.40	597.00
502	501C	24	HDPE	102.858	0.58%	598.10	597.50
503	502	12	HDPE	24.001	0.83%	598.40	598.20
504	502	18	HDPE	187.804	1.65%	601.60	598.50
505	504	12	HDPE	24.000	2.08%	602.20	601.70
506	504	15	HDPE	192.000	1.07%	603.75	601.70
507	506	12	HDPE	24.000	1.25%	604.15	603.85
508	506	12	HDPE	192.000	1.02%	605.80	603.85
509	508	12	HDPE	24.000	1.67%	606.30	605.90
601	602	12	HDPE	98.236	0.31%	599.00	598.70
701	700	12	HDPE	74.335	1.35%	597.00	596.00
RD1	901	12	HDPE	38.061	1.05%	589.40	589.00
RD2	204	12	HDPE	20.500	4.39%	595.00	594.10
RD3	108	12	HDPE	33.002	1.52%	594.90	594.40
RD4	211	15	HDPE	33.002	0.91%	596.40	596.10
RD5	229	12	HDPE	33.013	1.51%	598.25	597.75



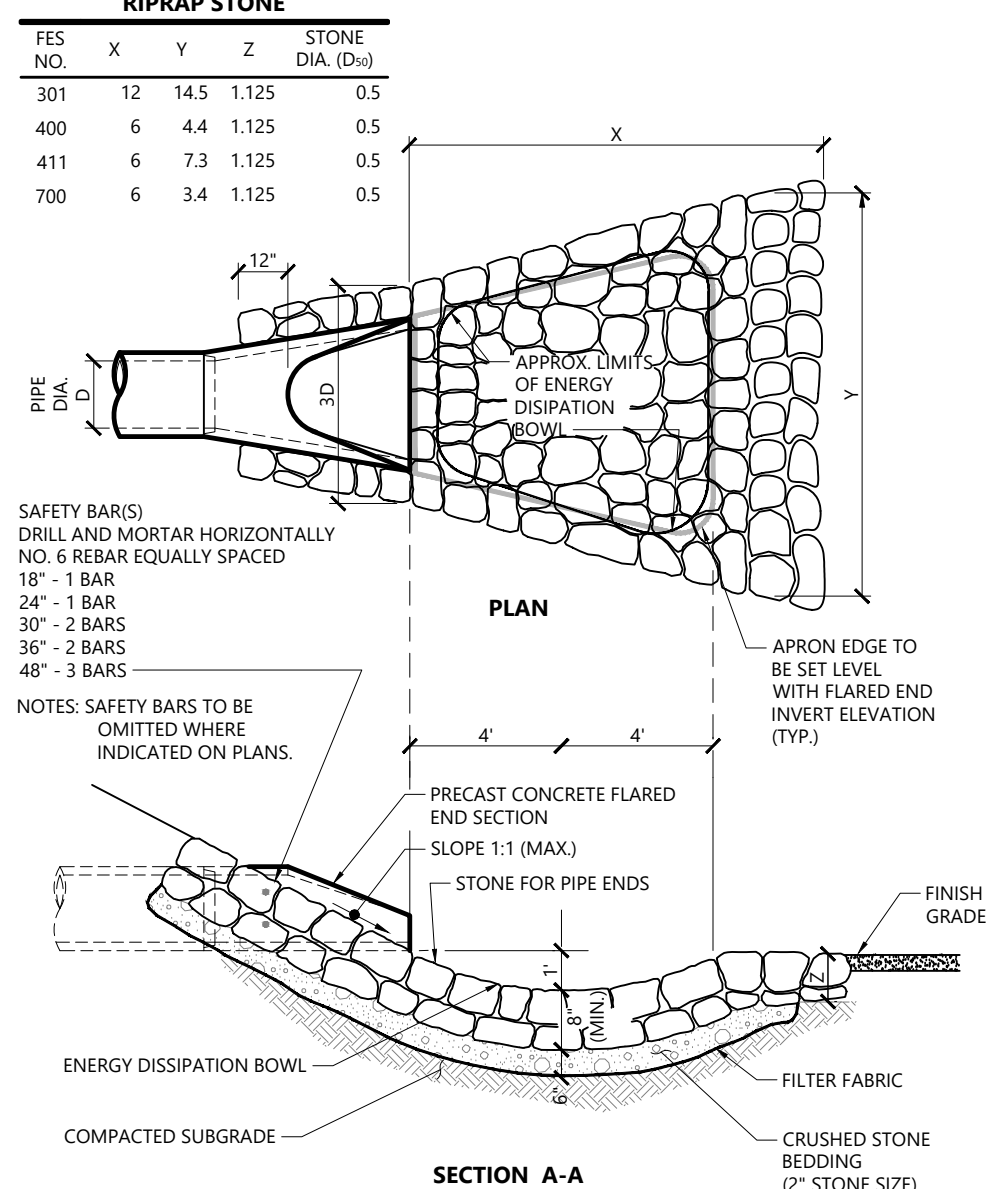
Trench Drain 12/19
N.T.S. Source: VHB REV LD_190-A



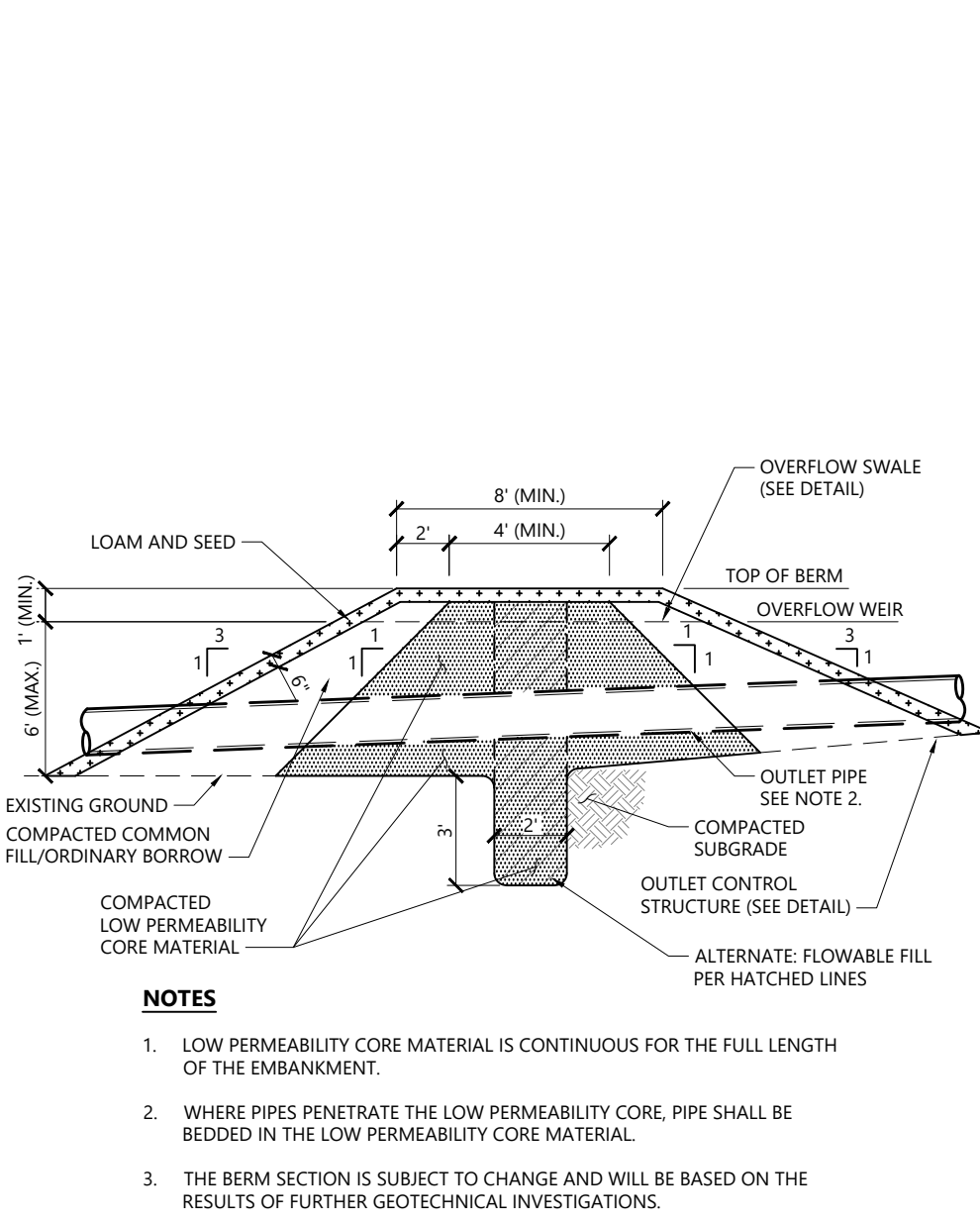
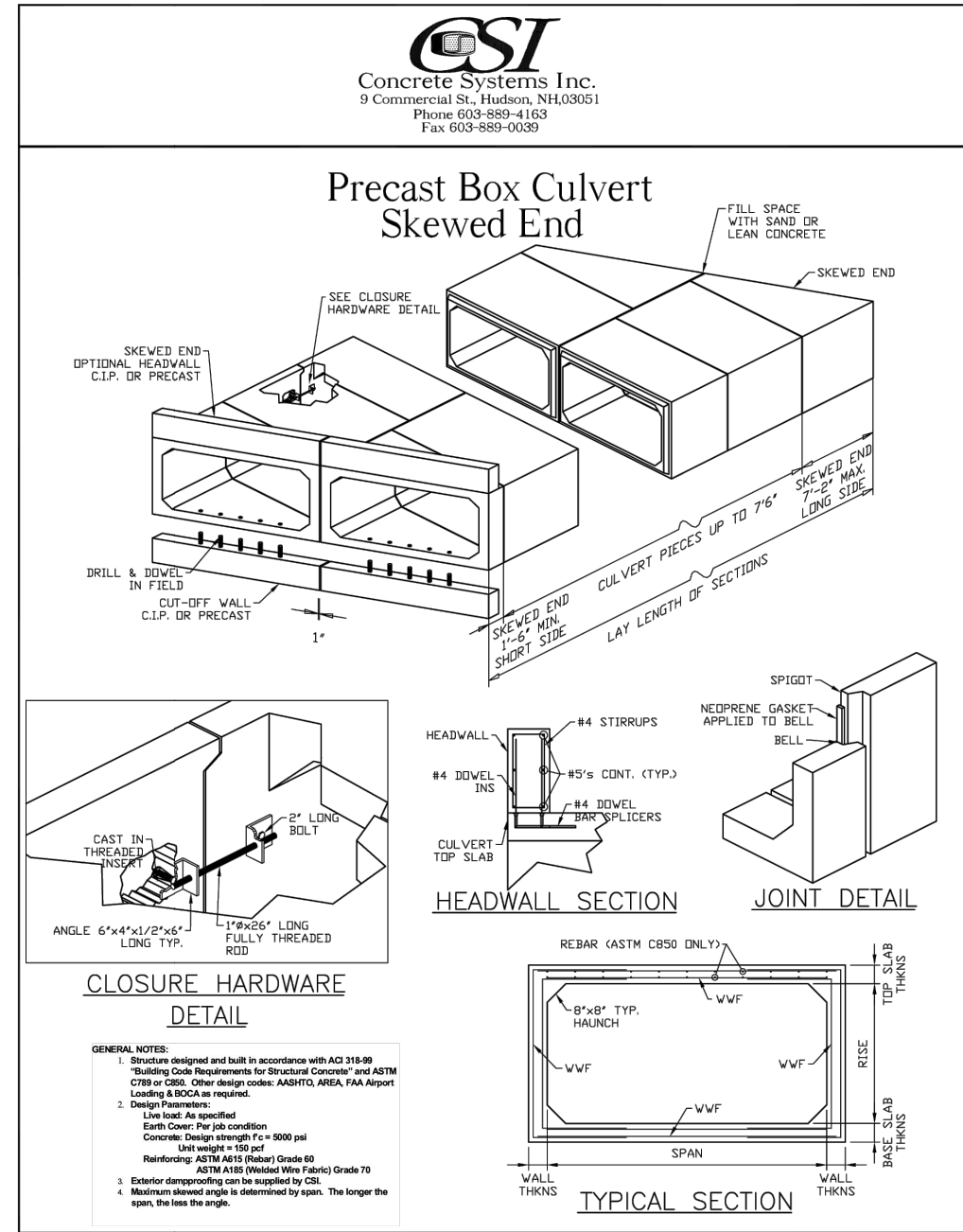
Overflow Stone Swale 1/16
N.T.S. Source: VHB REV LD_161



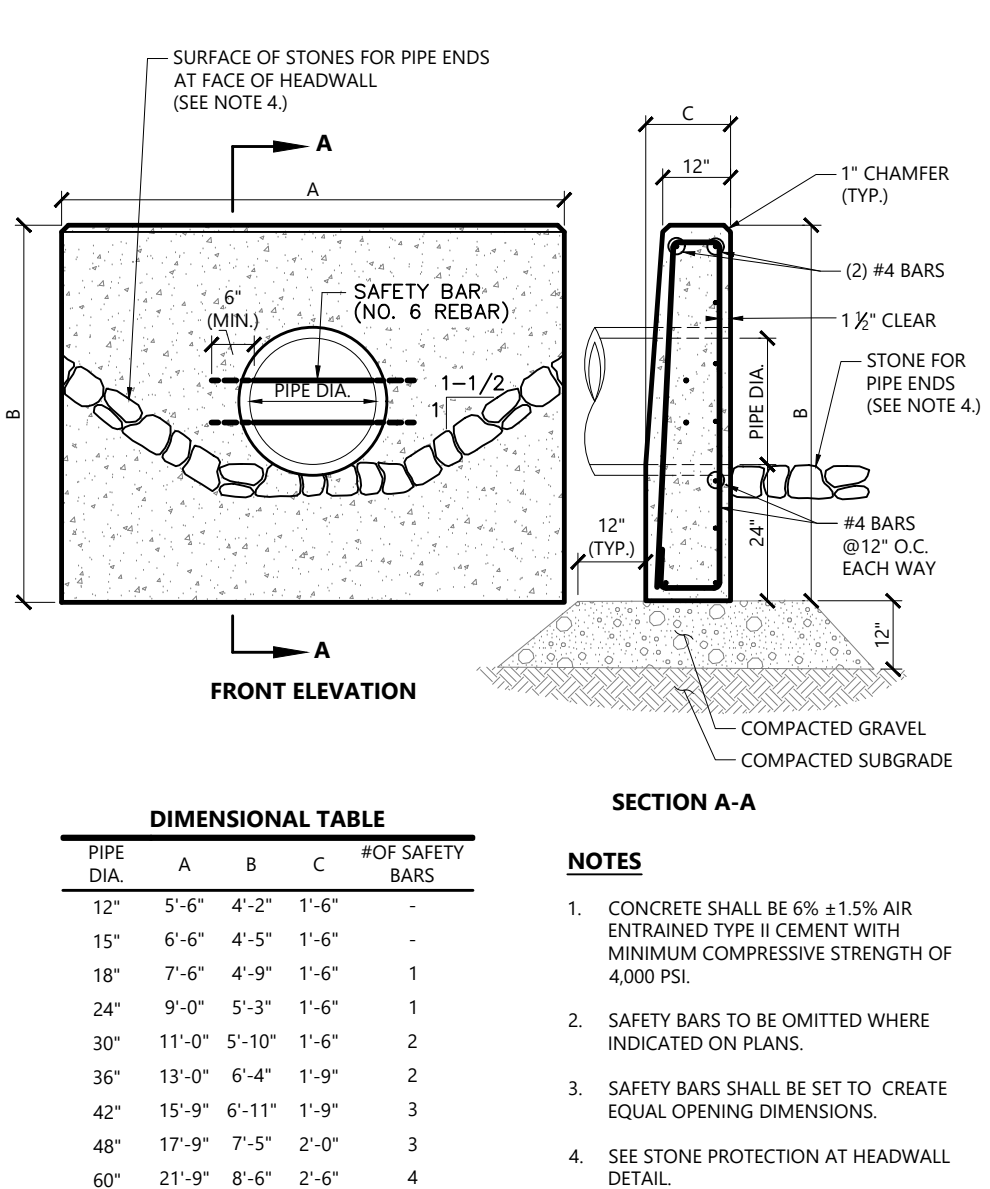
Perimeter Riprap Channel 1/16
N.T.S. Source: VHB REV LD_170



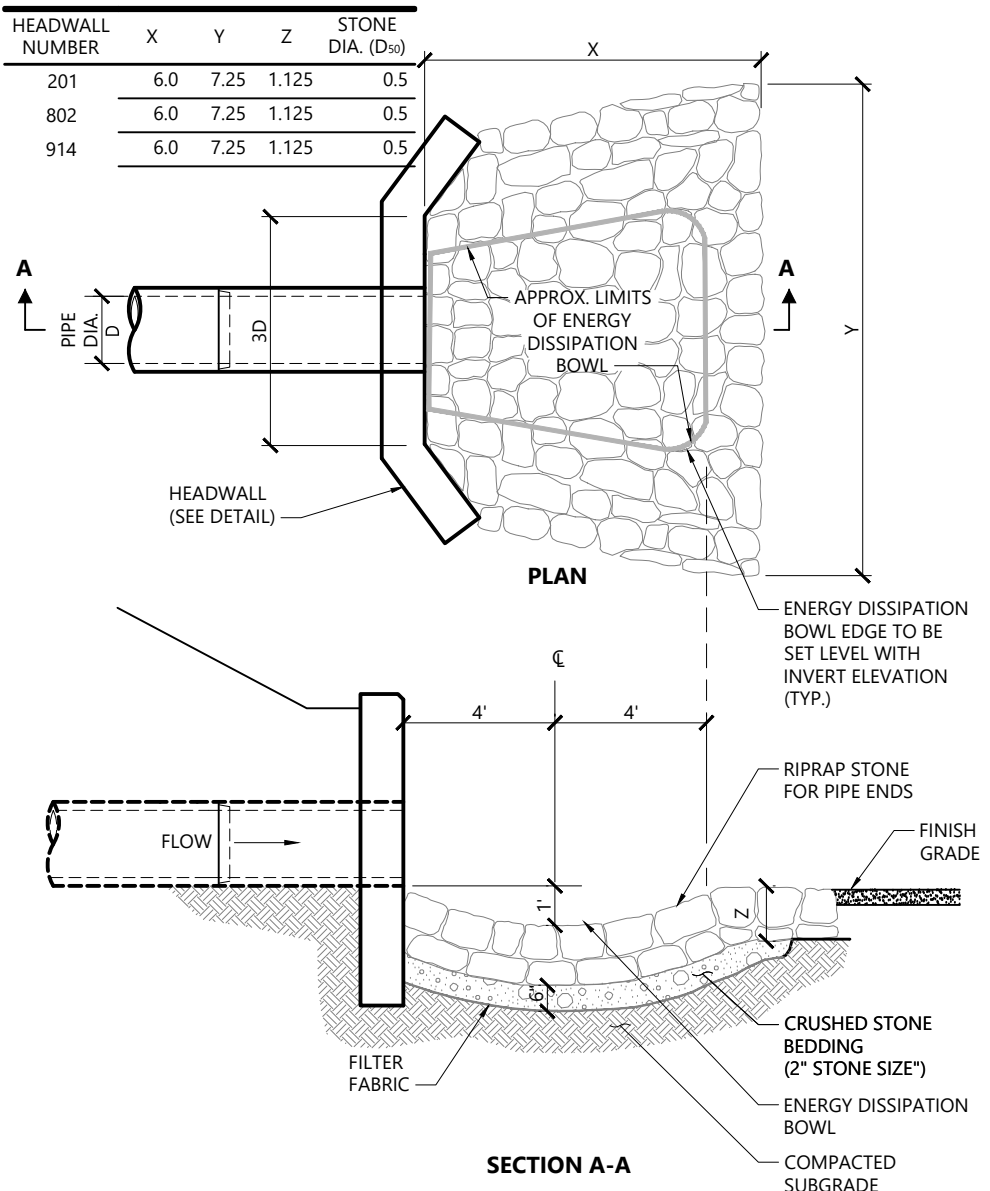
Flared End Section (FES) with Stone Protection 3/19
N.T.S. Source: VHB REV LD_134



Detention Basin Berm Section 12/20
N.T.S. Source: VHB REV LD_160



Concrete Headwall (HW) 10/20
N.T.S. Source: VHB REV LD_130



Stone Protection at Headwall 1/16
N.T.S. Source: VHB REV LD_133

The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Appr.
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4	Response to City Comments	12/11/24	DF

Designed by TMD
Checked by MJV
Issued for Permitting
Date May 10, 2024

Not Approved for Construction

Drawing Title
Detail Sheet 3

Drawing Number
C7.3
Sheet 28 of 53
Project Number
52933.00

STATE OF NEW HAMPSHIRE
DAVID H. FENSTERMACHER
No. 13382
LICENSED PROFESSIONAL ENGINEER

Diagram illustrating the cross-section (SECTION A-A) of the manhole structure, showing the internal components and elevations:

- FINISH GRADE
- SEE NOTE 5
- 60" DIA.
- PRECAST CONCRETE WEIR
- INV = 597.30
- 12" W X 15" H ORIFICE
- INV = 596.05
- SEE NOTE 4
- WATER-TIGHT JOINT
- 12" (TYP.)
- SECTION A-A
- COMPACTED GRAVEL
- COMPACTED SUBGRADE



1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED, ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

N.T.S. Source: VHB REV LD_162A

Diagram illustrating the cross-section (Section A-A) of a manhole structure. The structure is composed of precast concrete walls and a central orifice. The orifice is labeled "4'W X 24'H ORIFICE INV = 585.50". The walls are labeled "PRECAST CONCRETE WALL INV = 587.50". The structure is shown with a "FINISH GRADE" line above it and a "WATER-TIGHT JOINT" indicated. The base of the structure is supported by "COMPACTED GRAVEL" and "COMPACTED SUBGRADE". The diameter of the upper section is labeled "48\" DIA.". Other labels include "SEE NOTE 4" and "SEE NOTE 5". A vertical dimension of "13\" (TYP.)" is shown for the lower section of the wall.



- NOTES**
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
 2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
 3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
 4. JOINT SEALS BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
 5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN COURSE MORTAR BED. ADJUST TO GRADES WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

N.T.S. Source: VHB REV LD_162A

**174 Hanover Street Extension
Lebanon, New Hampshire 03766**

Designed by	TMD	Checked by	MJV
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May 10, 2024

Not Approved for Construction

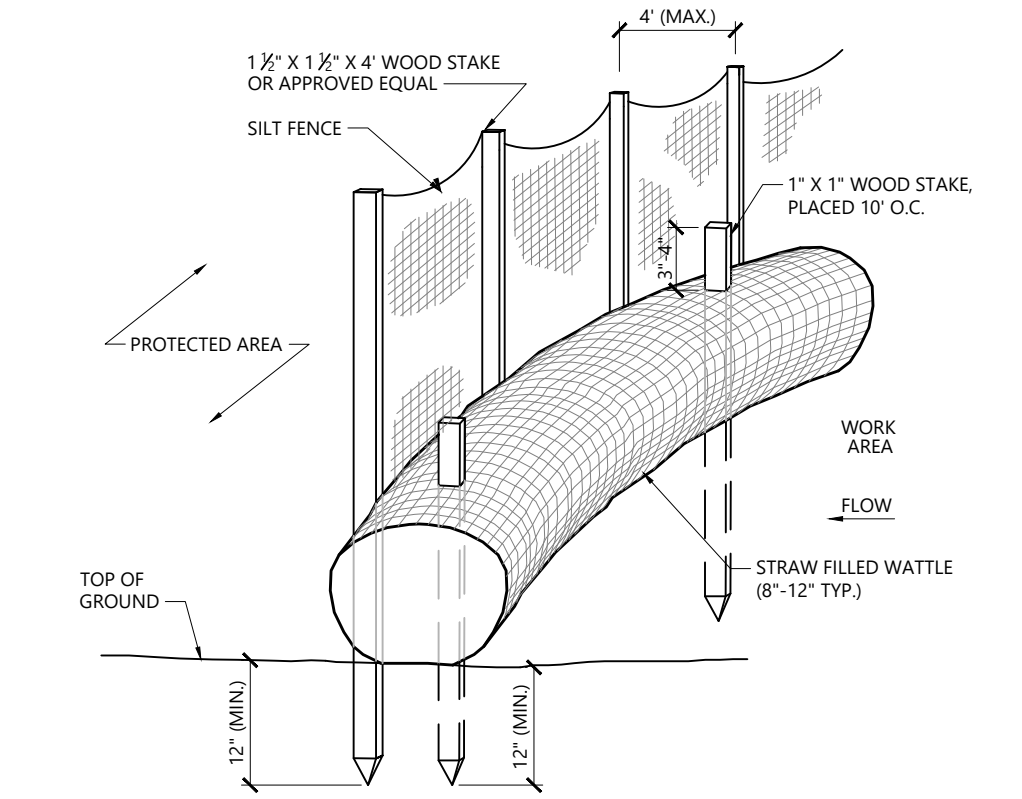
Detail Sheet 5

Drawing Number

C7.5

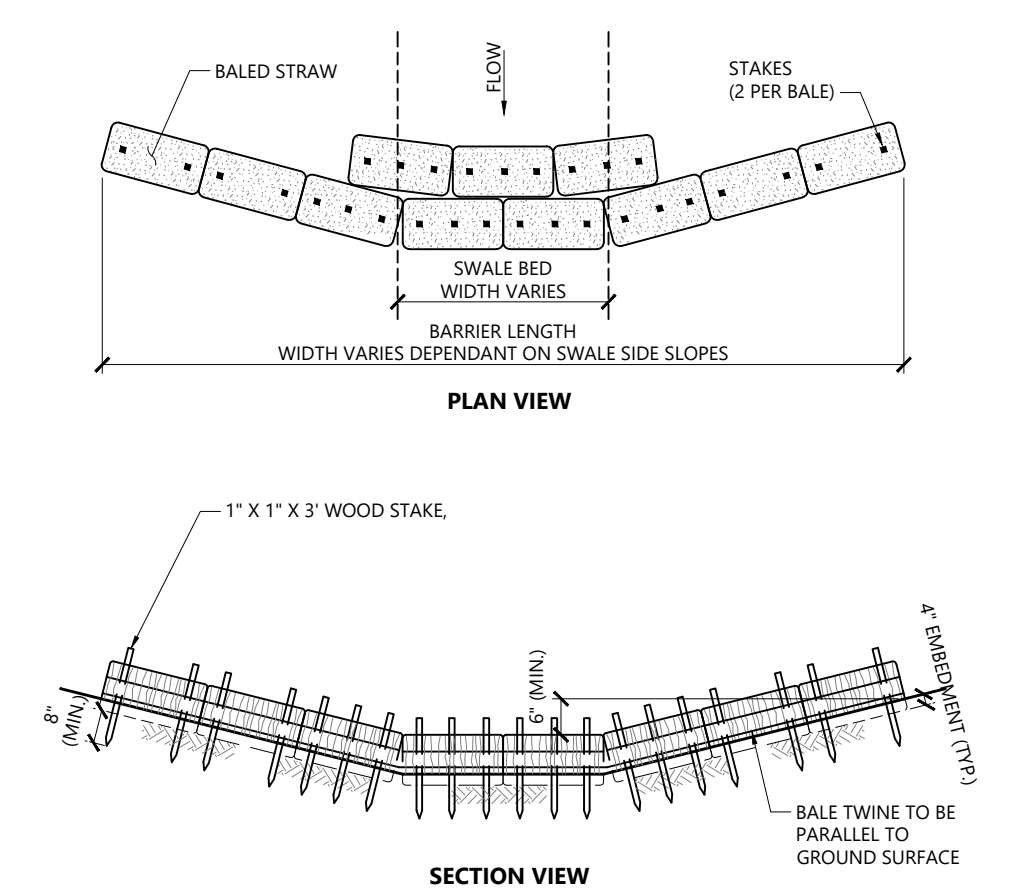
Sheet 30 of 53

Project Number
52933.00



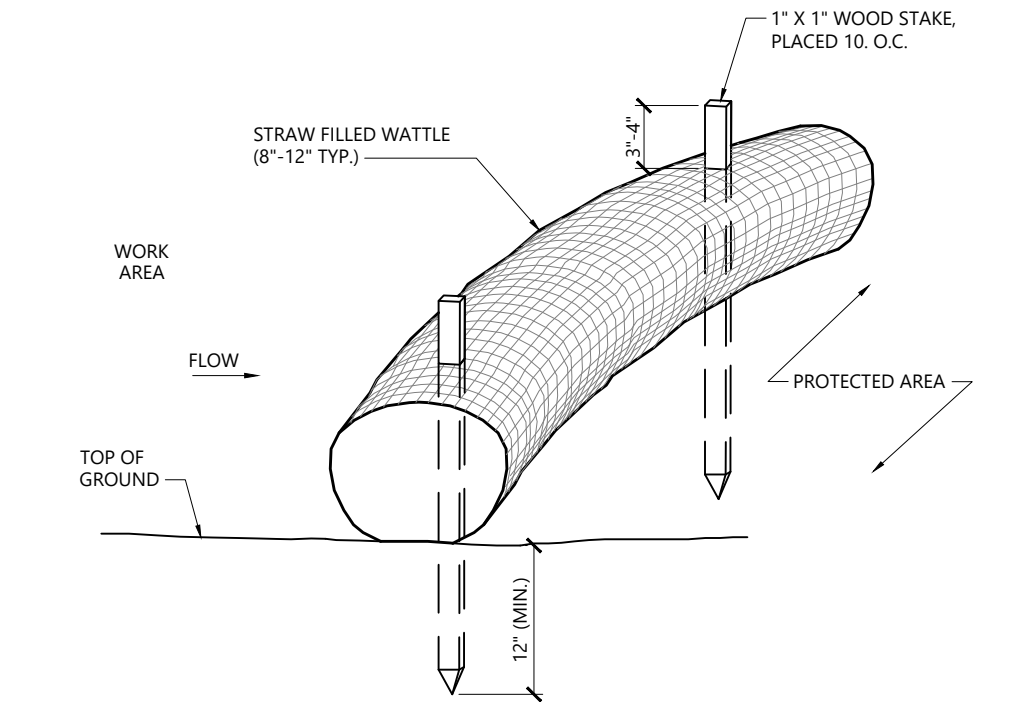
- NOTES**
1. STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
 2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
 3. STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
 4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
 5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Double Row Perimeter Erosion Control Barrier 10/21
N.T.S. Source: VHB REV LD_659-A



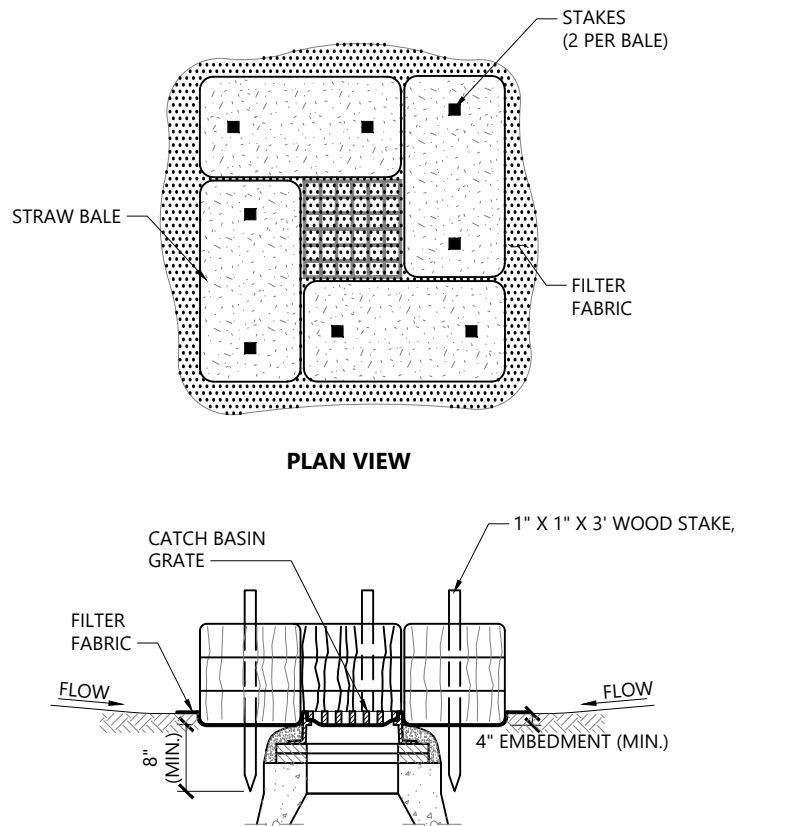
- NOTES**
1. THIS CHECKDAM SHALL BE INSTALLED IN A DRAINAGE SWALE WITH BED WIDTHS OF 2 FT. OR MORE.
 2. THE DISTANCE BETWEEN BALE CHECKDAMS SHALL BE DETERMINED BY THE SLOPE OF THE SWALE. CHECKDAMS SHALL BE SET AT EVERY 2 FT. DROP IN SWALE ELEVATION.
 3. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
 4. INSTALL 3 STAKES PER BALE WITHIN SWALE BED AREA.

Straw Bale Checkdam (Wide Swale) 1/16
N.T.S. Source: VHB REV LD_670



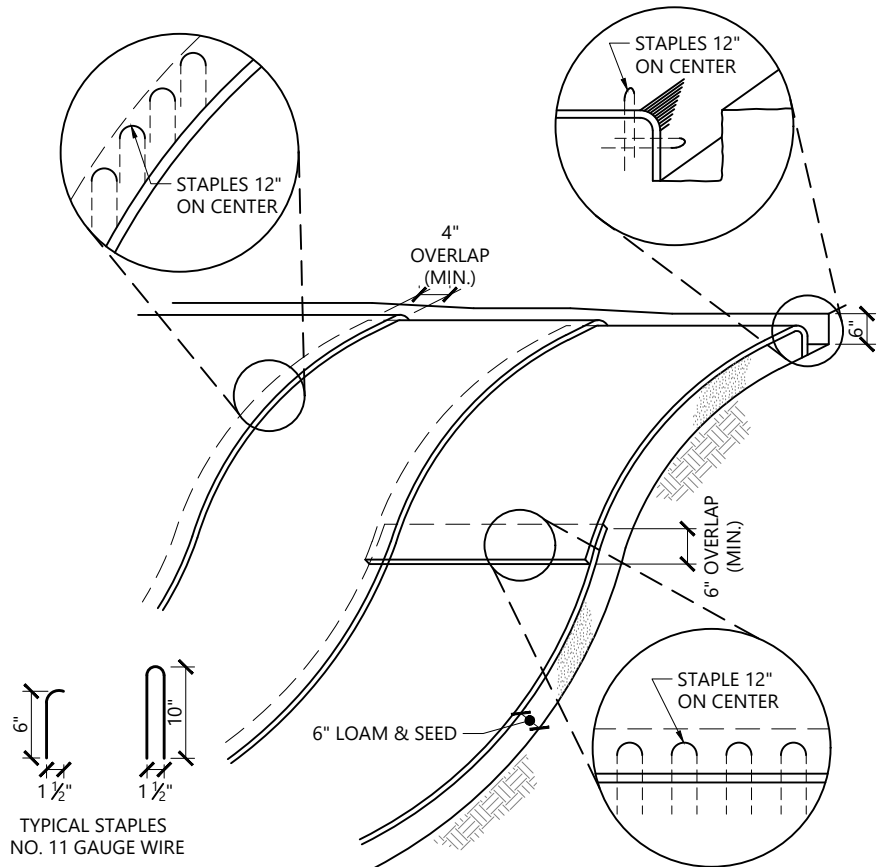
- NOTES**
1. STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
 2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
 3. STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
 4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
 5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Straw Wattle - Erosion Control Barrier 1/20
N.T.S. Source: VHB REV LD_659



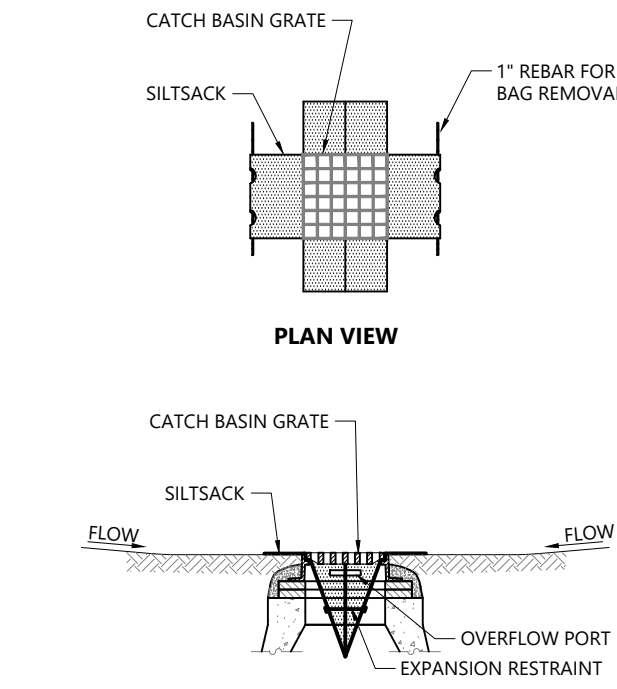
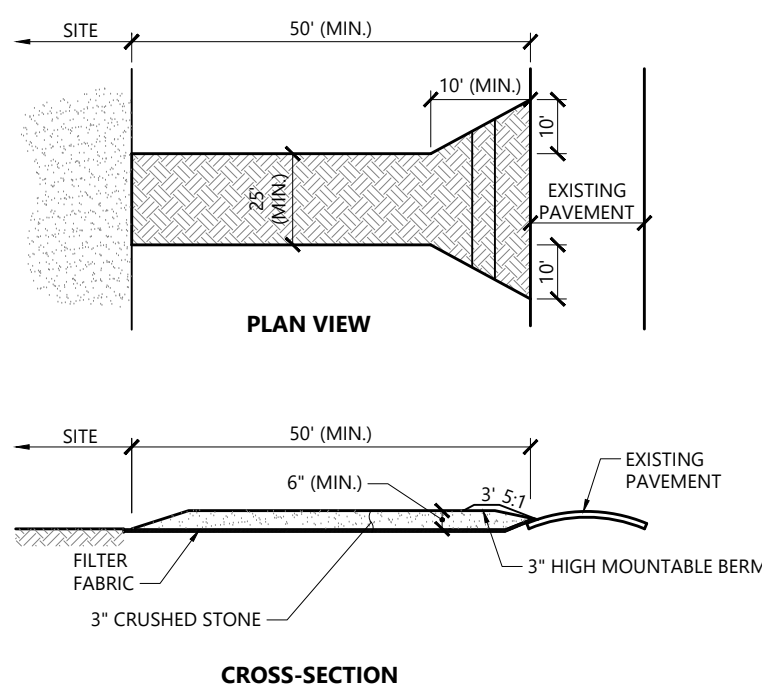
- NOTES**
1. ENCLOSE STRUCTURE WITH STRAW BALES IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING BINDER COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
 2. IF GRATE IS AGAINST EXISTING CURB THEN BALES ARE TO BE PLACED AROUND THREE SIDES OF GRATE ONLY.
 3. GRATE TO BE PLACED OVER FILTER FABRIC.
 4. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

Catch Basin Sediment Trap 1/16
N.T.S. Source: VHB REV LD_673



- NOTES**
1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6\"/>
 2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
 3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
 4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE UPPER BLANKET END OVER LOWER END WITH 6 INCH (MIN.) OVERLAP AND STAPLE BOTH TOGETHER.
 5. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.
 6. EROSION CONTROL BLANKETS SHALL BE USED IN ALL AREAS WHERE SLOPES EXCEED 3:1.

Erosion Control Blanket Slope Installation 10/20
N.T.S. Source: VHB REV LD_680



- NOTES**
1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND STRAW BALES HAVE BEEN REMOVED.
 2. GRATE TO BE PLACED OVER SILTSACK.
 3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment Trap 1/20
N.T.S. Source: VHB REV LD_674

Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR TO MANAGE PROJECT IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
3. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT (0.5\"/>
4. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
5. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
6. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
7. AREAS REMAINING UNSTABILIZED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE TEMPORARILY SEED, MULCHED, HAY MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 1-1/2 TONS/ACRE.
8. PERMANENT SEEDING SHALL OCCUR BETWEEN APRIL 1 AND JUNE 1, AND/OR BETWEEN AUGUST 15 AND OCTOBER 15. ALL SEEDING FROM SEPTEMBER 15 SHALL BE HAY MULCHED.
9. DUST SHALL BE CONTROLLED THROUGH THE USE OF WATER.
10. SOILS TO BE STOCKPILED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE TEMPORARILY SEED, AND MULCHED. CONTRACTOR SHALL INSTALL SILT FENCING ALONG DOWNHILL SIDE OF STOCKPILES.
11. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENTATION BASINS TO CONTROL SEDIMENTATION AND STORMWATER RUNOFF DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL SUBMIT PROPOSED BASIN LOCATIONS, DESIGNS, ETC. TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. TEMPORARY SEDIMENTATION BASINS SHALL MEET NHDES REQUIREMENTS.
12. CONTRACTOR SHALL PROVIDE NECESSARY EROSION CONTROL MEASURES TO INSURE THAT SURFACE WATER RUN-OFF FROM UNSTABILIZED AREAS DOES NOT CARRY SILT, SEDIMENT, AND OTHER DEBRIS OUTSIDE OF THE LIMITS OF WORK.
13. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3-IN OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED;
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
14. AT NO TIME SHALL THE TOTAL UNSTABILIZED DISTURBED AREA ON-SITE BE GREATER THAN (5) FIVE ACRES.
15. ALL DITCHES, SWALES, AND DRAINAGE BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
16. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
17. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEED, WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
18. ALL PERMANENT AND TEMPORARY SEEDING SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

PERMANENT SEEDING	PROPORTION	GERMINATION MINIMUM	PURITY MINIMUM
LAWNS:			
CREeping RED FESCUE	50%	85%	95%
KENTUCKY BLUEGRASS	40%	85%	90%
MANHATTAN PERENNIAL RYE	10%	90%	95%
TEMPORARY SEEDING*	% WEIGHT	GERMINATION MINIMUM	
WINTER RYE	80% MIN.	85%	
RED FESCUE (CREeping)	4% MIN.	80%	
PERENNIAL RYE GRASS	3% MIN.	90%	
RED CLOVER	3% MIN.	90%	
OTHER CROP GRASS	0.5% MAX.		
NOxious WEED SEED	0.5% MAX.		
INERT MATTER	1.0% MAX.		

* TEMPORARY SEED FOR LAWNS SHALL ONLY BE PLANTED WHEN PERMANENT GRASSES CANNOT BE PLANTED DUE TO THE GROWING SEASON.

18. **NO-MOW PLANTING MIX** (FOR AREAS INDICATED ON LANDSCAPE PLAN)
THE NO-MOW PLANTING MIX SHALL BE THE "NEW ENGLAND CONSERVATION WILDLIFE MIX" AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC.
19. **STORMWATER BASIN PLANTING MIX** (FOR BOTTOM OF DETENTION BASIN)
THE STORMWATER BASIN PLANTING MIX SHALL BE THE "NEW ENGLAND EROSION-CONTROL / RESTORATION MIX (FOR DETENTION BASINS AND MOIST SITES) AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC., AMHERST, MA. (413) 256-1752
18. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 3-FT HORIZONTAL AND 1-FT VERTICAL (3:1). EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN SC150BN, OR APPROVED EQUAL.

NHDES WINTER NOTES

1. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

NHDES PERMIT CONDITIONS

1. EROSION CONTROL MATERIALS SUCH AS WELDED PLASTIC OR "BIODEGRADABLE PLASTIC" NETTING OF THREAD (E.G. POLYPROPYLENE) SHALL NOT BE USED. THE USE OF EROSION CONTROL BERM, WHITE FILTREX, DEGRADABLE WOVEN SILT SOCK OR WOVEN ORGANIC MATERIALS (E.G. COCO OR JUTE MATTING SUCH AS NORTH AMERICAN GREEN SC150BN) SHALL BE USED.

**The Brickyard
Residential Development**
174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Appr'd
1	Response to Comments Update	08/06/24	DF
2	Revised Layout Resubmission	10/24/24	DF
3	Response to City Comments	12/11/24	DF

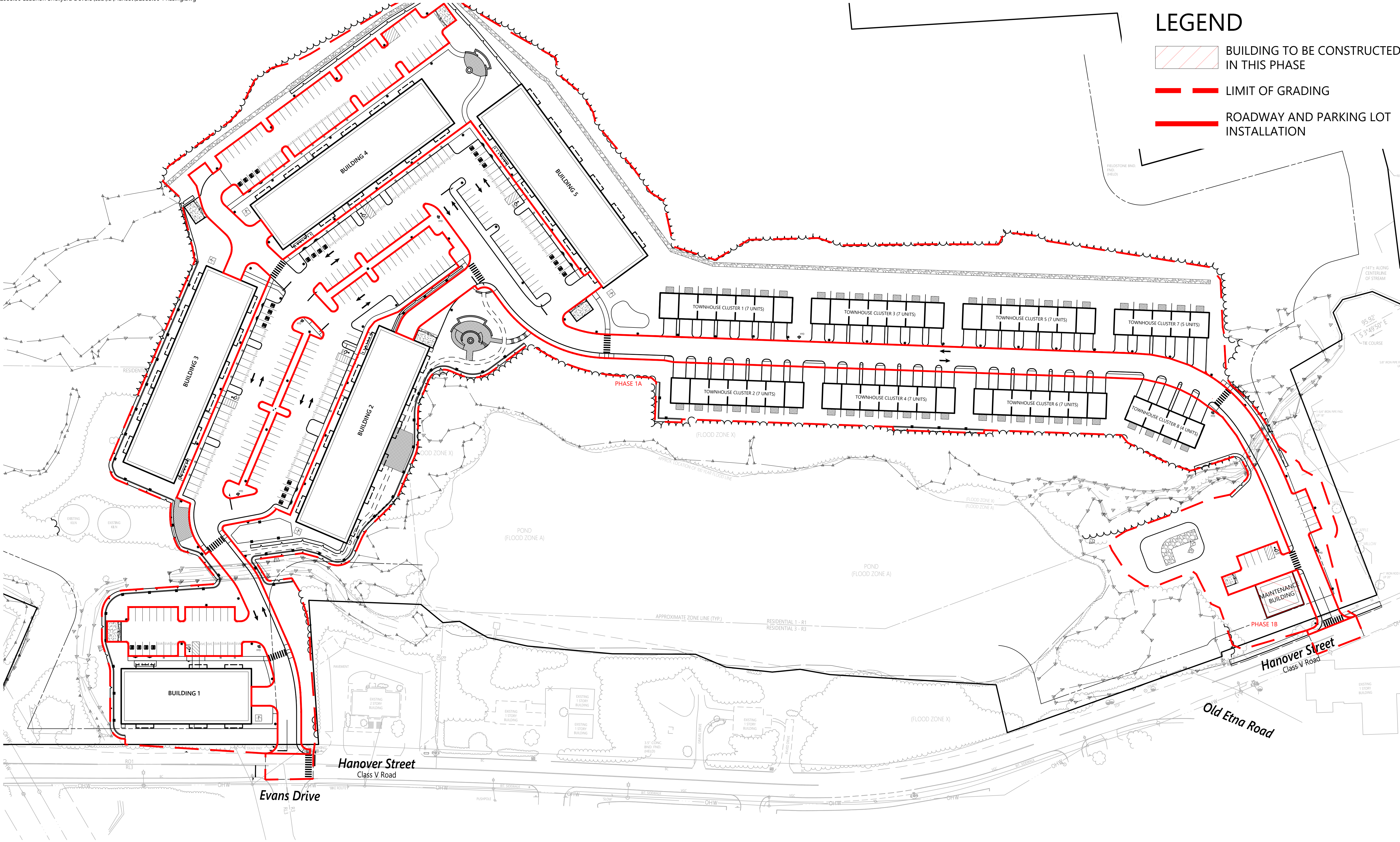
Designed by **TMD** Checked by **MJV**
Issued for _____ Date _____
Permitting May 10, 2024

Not Approved for Construction

Drawing Title
Detail Sheet 6



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

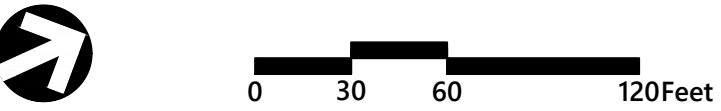


LEGEND

- BUILDING TO BE CONSTRUCTED IN THIS PHASE
- LIMIT OF GRADING
- ROADWAY AND PARKING LOT INSTALLATION

Note

THE INTENT OF THE PHASING OF THE PROJECT IS TO INITIALLY CONSTRUCT THE NECESSARY ROADWAYS, UTILITY INFRASTRUCTURE AND BUILDING FOUNDATIONS. THE BUILDINGS WILL THEN BE CONSTRUCTED AND OCCUPIED SEQUENTIALLY. THE PRELIMINARY SCHEDULE PROVIDED REPRESENTS THE CURRENT UNDERSTANDING OF THE INTENDED PHASING.



The Brickyard
Residential Development

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TMD	MJV
Issued for	Date
Permitting	May 10, 2024

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Drawing Title

Phasing Plan 1

Phase 1



C8.1

Sheet 32 of 53

Project Number
52933.00

Phasing Schedule

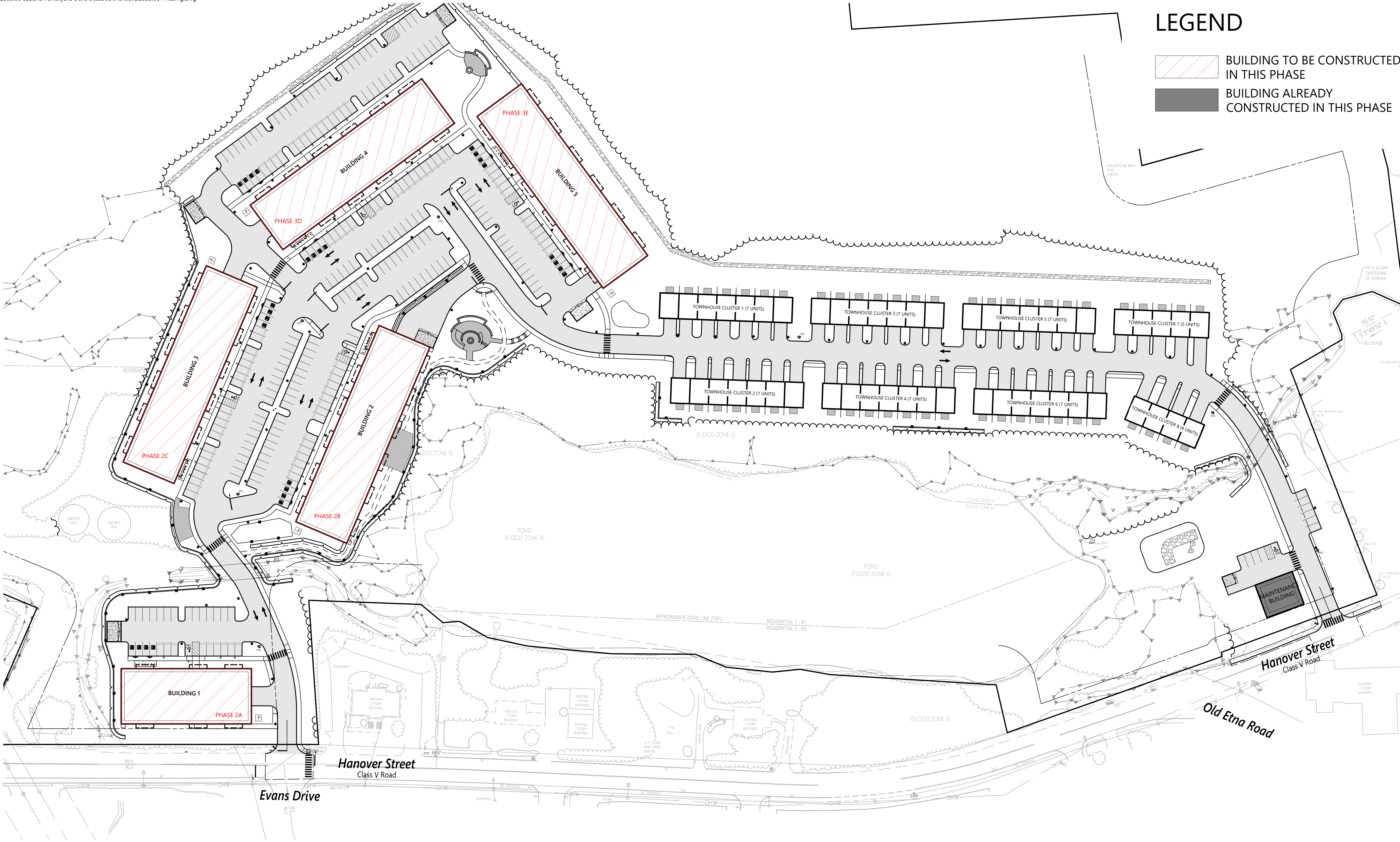
Phase	Summary Of Improvements	Estimated Start
Phase 1		
Phase 1A	Roadway (Binder Only), Utilities, Parking Lots, Foundation Preparations	February 1, 2025
Phase 1B	Maintenance Building	February 1, 2026
Phase 2		
Phase 2A	Building 1	March 1, 2026
Phase 2B	Building 2	March 1, 2027
Phase 2C	Building 3	March 1, 2028
Phase 2D	Building 4	March 1, 2029
Phase 3E	Building 5	March 1, 2030

Phasing Schedule

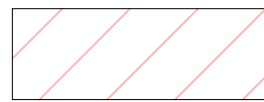
Phase	Summary Of Improvements	Estimated Start
Phase 3		
Phase 3A	Townhouse Cluster 8	March 1, 2027
Phase 3B	Townhouse Cluster 7	September 1, 2027
Phase 3C	Townhouse Cluster 6	March 1, 2028
Phase 3D	Townhouse Cluster 5	September 1, 2028
Phase 3E	Townhouse Cluster 4	March 1, 2029
Phase 3F	Townhouse Cluster 3	September 1, 2029
Phase 3G	Townhouse Cluster 2	March 1, 2030
Phase 3H	Townhouse Cluster 1	September 1, 2030



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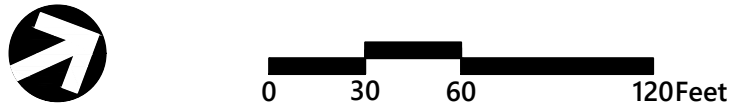


LEGEND

-  BUILDING TO BE CONSTRUCTED IN THIS PHASE
-  BUILDING ALREADY CONSTRUCTED IN THIS PHASE

Note

THE INTENT OF THE PHASING OF THE PROJECT IS TO INITIALLY CONSTRUCT THE NECESSARY ROADWAYS, UTILITY INFRASTRUCTURE AND BUILDING FOUNDATIONS. THE BUILDINGS WILL THEN BE CONSTRUCTED AND OCCUPIED SEQUENTIALLY. THE PRELIMINARY SCHEDULE PROVIDED REPRESENTS THE CURRENT UNDERSTANDING OF THE INTENDED PHASING.



The Brickyard Residential Development

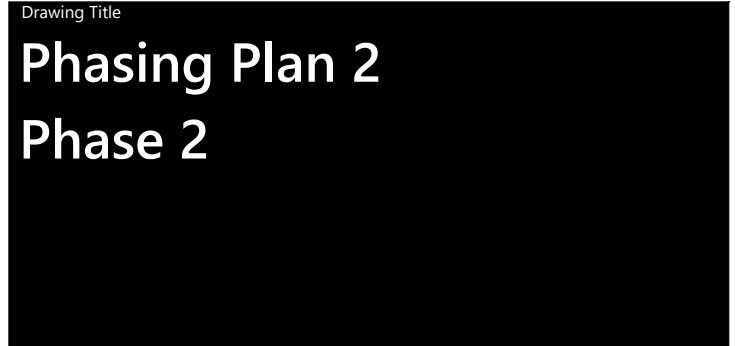
174 Hanover Street Extension
Lebanon, New Hampshire 03766

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TMD	MJV

Issued for Permitting Date May 10, 2024

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C8.2

Sheet 33 of 53

Project Number 52933.00

Phasing Schedule

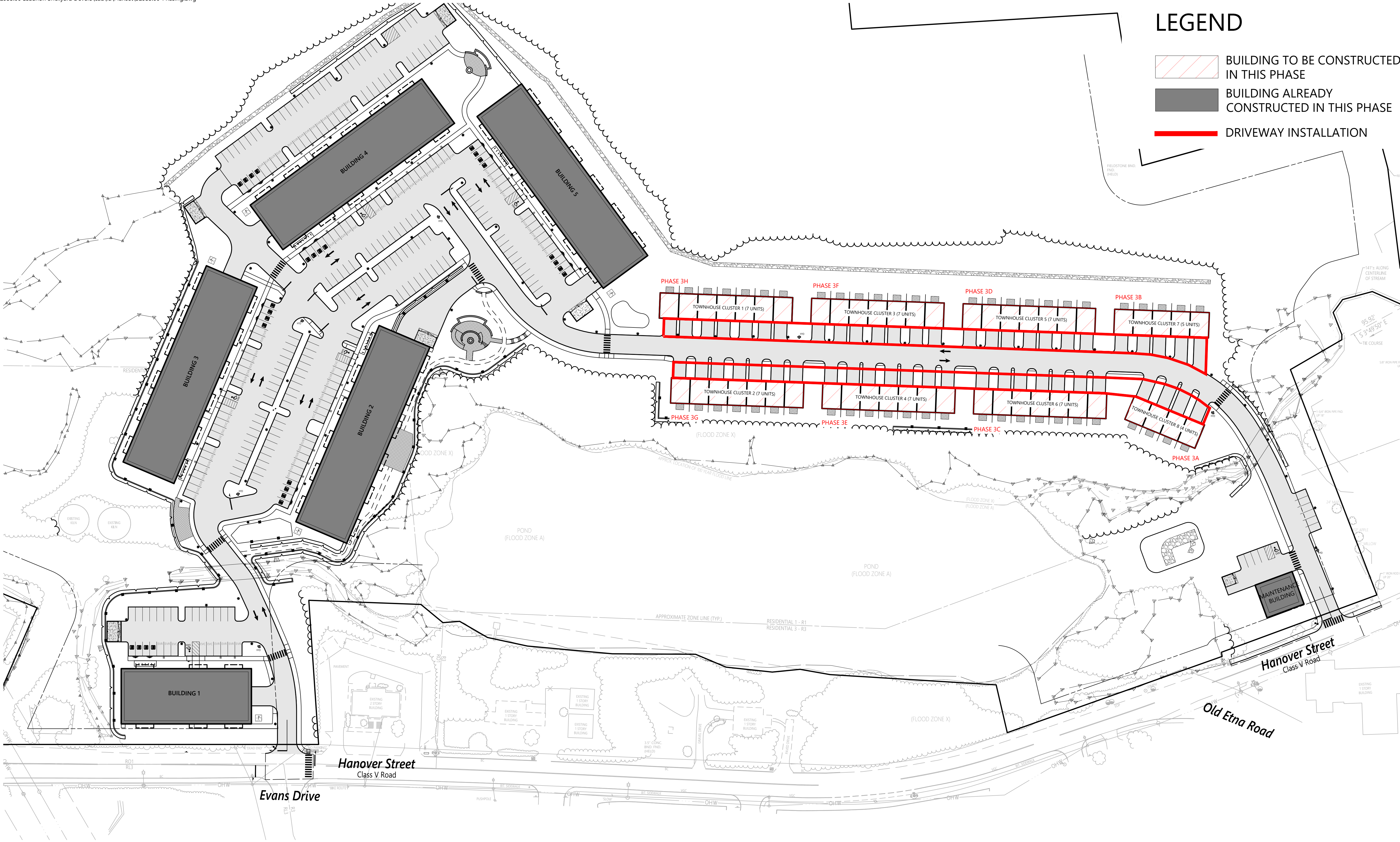
Phase	Summary Of Improvements	Estimated Start
Phase 1		
Phase 1A	Roadway (Binder Only), Utilities, Parking Lots, Foundation Preparations	February 1, 2025
Phase 1B	Maintenance Building	February 1, 2026
Phase 2		
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Phase 2B	Building 2	March 1, 2027
Phase 2C	Building 3	March 1, 2028
Phase 2D	Building 4	March 1, 2029
Phase 3E	Building 5	March 1, 2030

Phasing Schedule

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Phase 3D	Townhouse Cluster 5	September 1, 2028
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Phase 3G	Townhouse Cluster 2	March 1, 2030
Phase 3H	Townhouse Cluster 1	September 1, 2030



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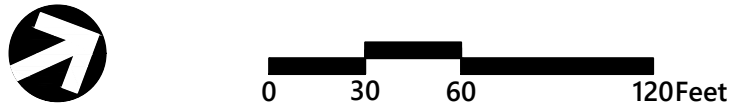


LEGEND

- BUILDING TO BE CONSTRUCTED IN THIS PHASE
- BUILDING ALREADY CONSTRUCTED IN THIS PHASE
- DRIVEWAY INSTALLATION

Note

THE INTENT OF THE PHASING OF THE PROJECT IS TO INITIALLY CONSTRUCT THE NECESSARY ROADWAYS, UTILITY INFRASTRUCTURE AND BUILDING FOUNDATIONS. THE BUILDINGS WILL THEN BE CONSTRUCTED AND OCCUPIED SEQUENTIALLY. THE PRELIMINARY SCHEDULE PROVIDED REPRESENTS THE CURRENT UNDERSTANDING OF THE INTENDED PHASING.



The Brickyard Residential Development

174 Hanover Street Extension
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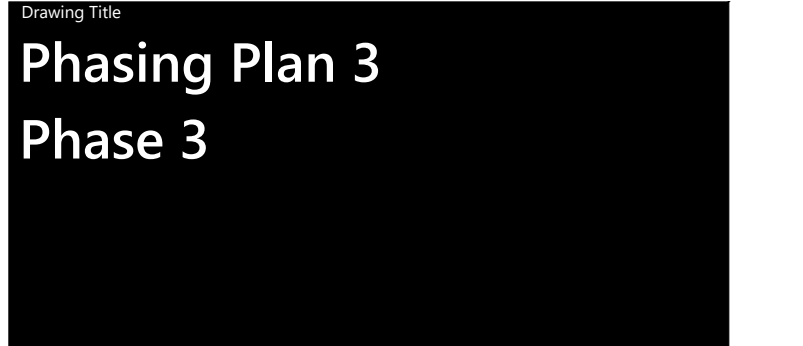
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C8.3

Sheet 34 of 53

Project Number
52933.00

Phasing Schedule

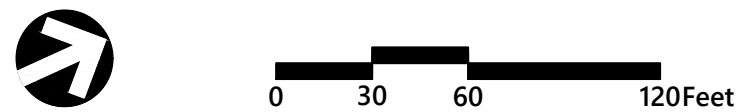
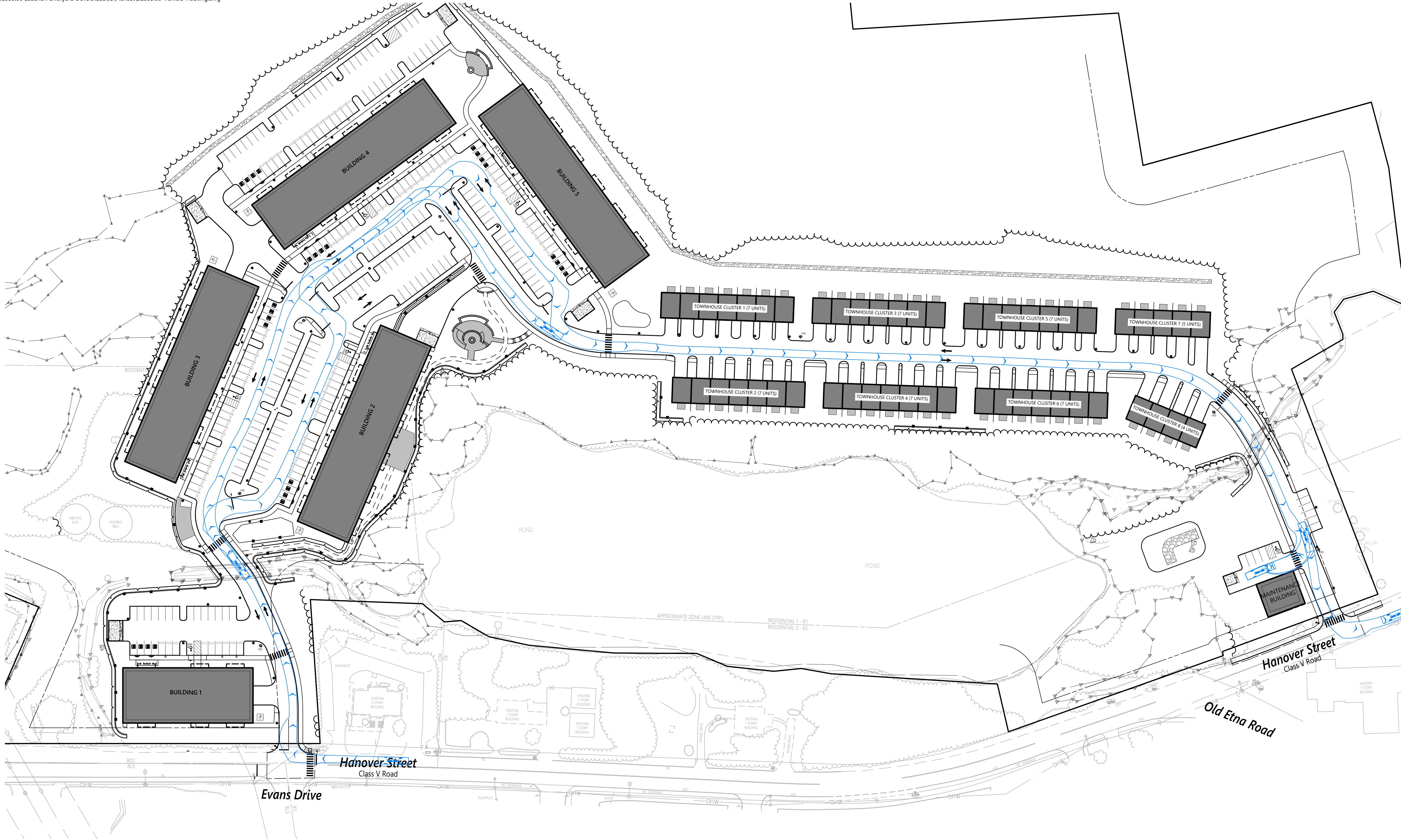
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Phase 1B	Maintenance Building	February 1, 2026
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Phasing Schedule

Phase	Summary Of Improvements	Estimated Start
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The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

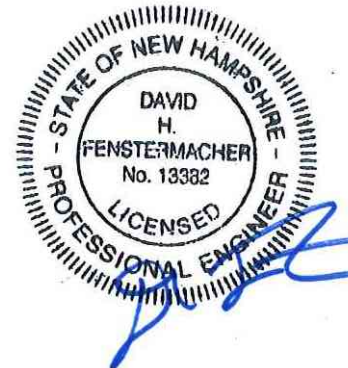
No.	Revision	Date	Apprv.
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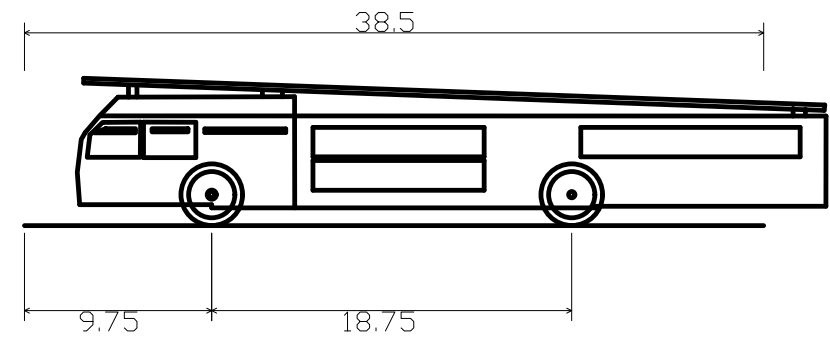
Drawing Title
Vehicle Tracking
City of Lebanon Firetruck



C9.1

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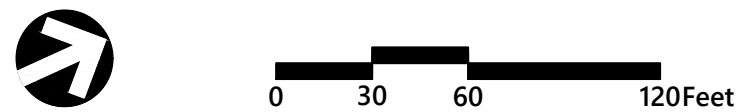
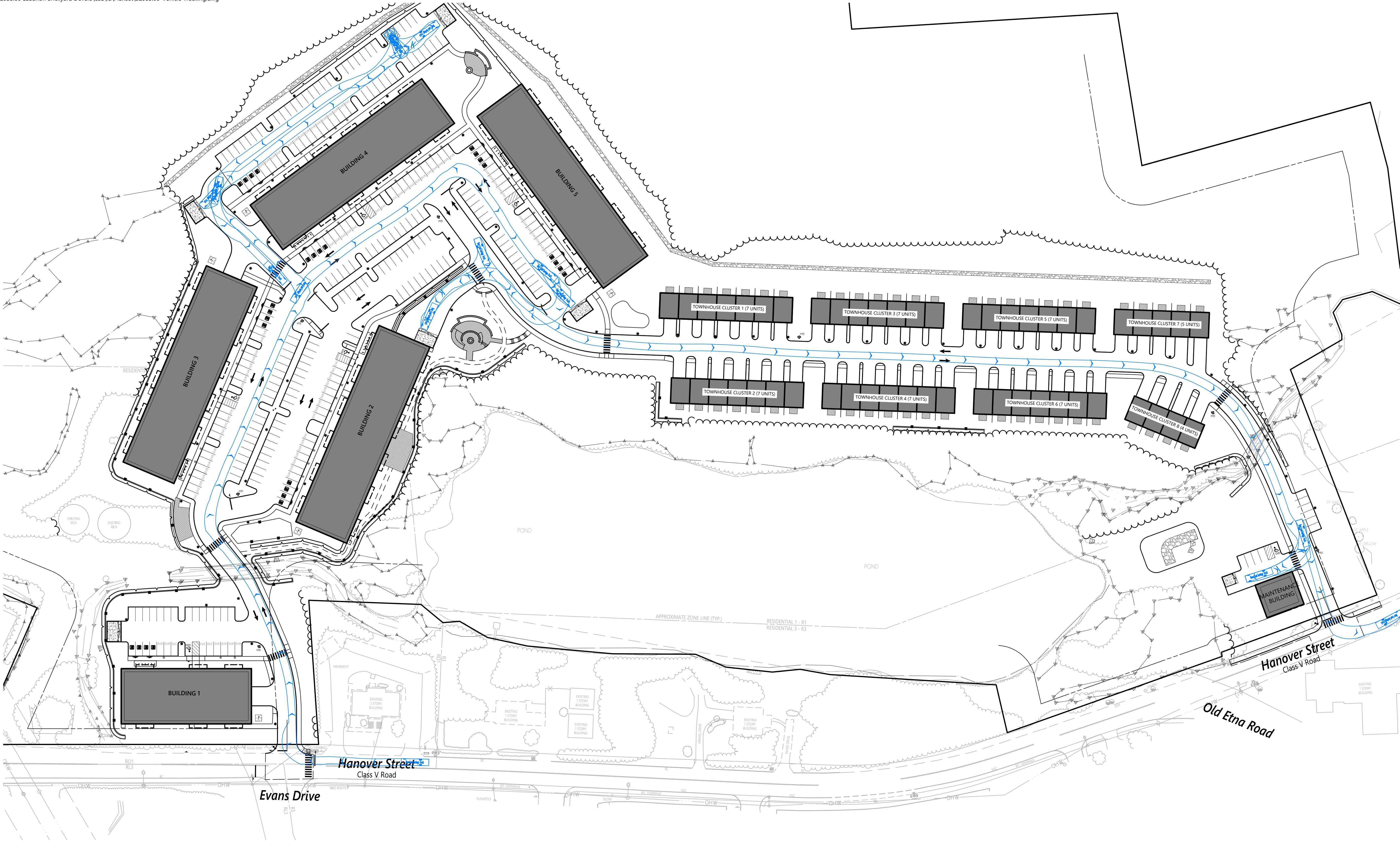
Project Number
52933.00



Lebanon Ladder 1
Overall Length 38.500ft
Overall Width 9.167ft
Overall Body Height 7.675ft
Min. Body Ground Clearance 0.925ft
Track Width 9.167ft
Lock-to-lock time 5.00s
Curb to Curb Turning Radius 33.000ft



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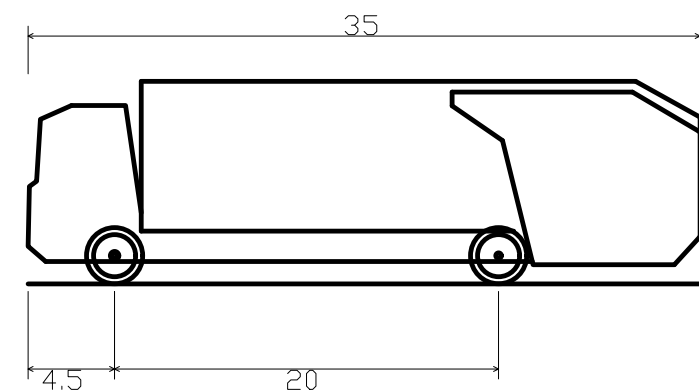
Vehicle Tracking
Garbage Truck



C9.2

Sheet 36 of 53

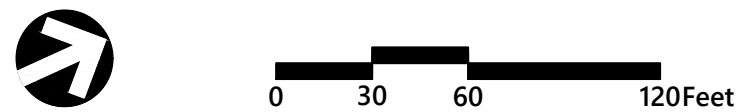
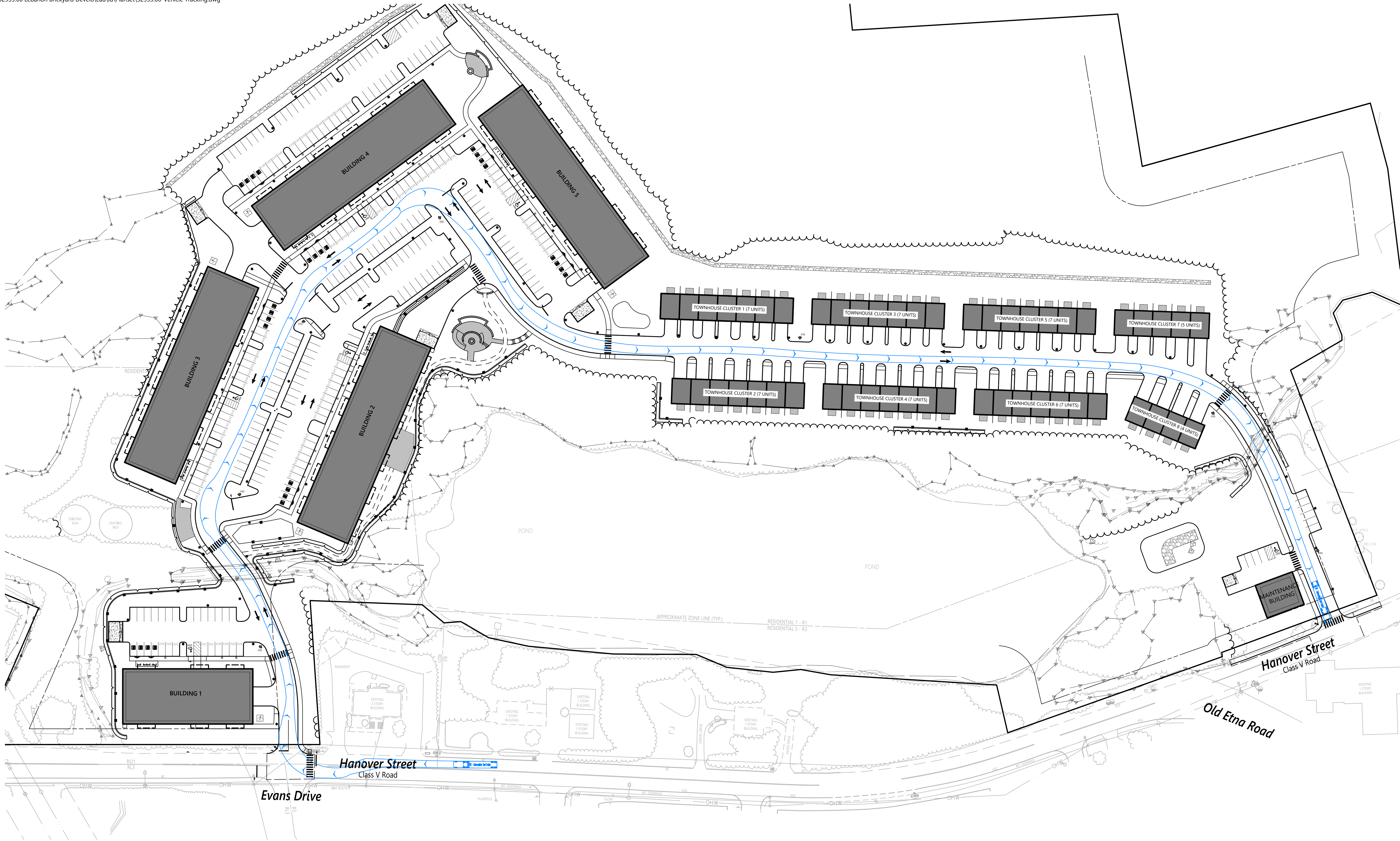
Project Number
52933.00



Rear-Load Garbage Truck
Overall Length 35.000ft
Overall Width 8.375ft
Overall Body Height 10.546ft
Min Body Ground Clearance 1.000ft
Track Width 8.375ft
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 29.300ft



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Vehicle Tracking
WB-50

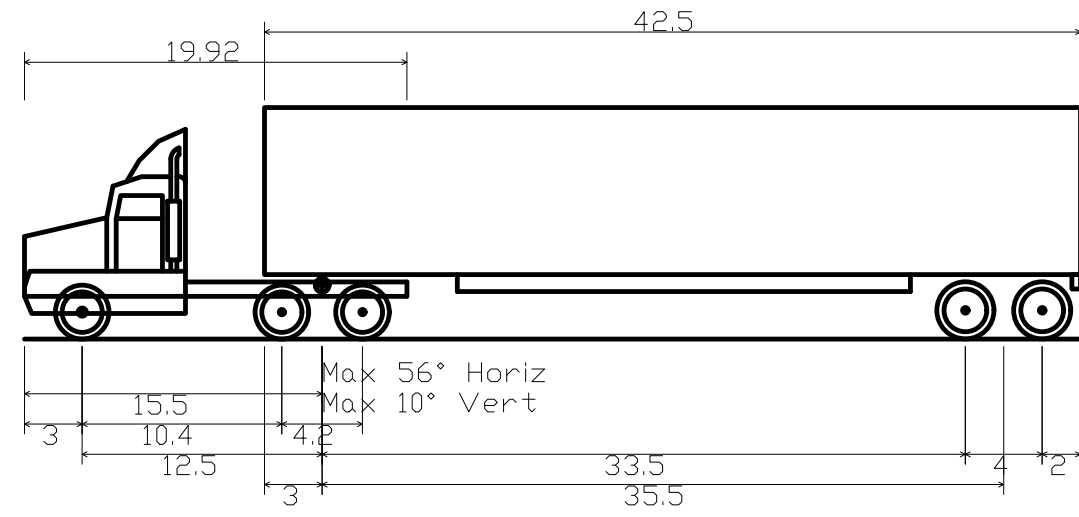
Drawing Number



C9.3

Sheet 37 of 53

Project Number
52933.00



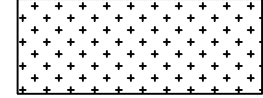
WB-50 - Intermediate Semi-Trailer
Overall Length 55.000ft
Overall Width 8.500ft
Overall Body Height 12.052ft
Min Body Ground Clearance 1.334ft
Max Track Width 8.500ft
Lock-to-lock time 6.00s
Max Steering Angle (Virtual) 17.90°

Plant Maintenance Notes

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION IS PROPOSED FOR THIS SITE. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE PERIOD.
2. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY THE CONTRACTOR.
3. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.
6. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING, TO INCLUDE GRASS AND MULCH, IN GOOD HEALTHY CONDITION SO AS TO PRESENT A NEAT AND ORDERLY APPEARANCE. THE PROPERTY OWNER SHALL REPLACE ANY UNHEALTHY OR DEAD PLANT MATERIALS IN CONFORMANCE WITH THE LANDSCAPE PLAN APPROVED BY THE BOARD AS PART OF THE SITE PLAN.
7. THE PROPERTY OWNER SHALL PLANT MATERIALS APPROPRIATE TO THE SITES SOIL AND MOISTURE CONDITIONS, AS WELL AS ITS PROXIMITY TO SUBSTANTIAL OPEN SPACE AND WILDLANDS.

Planting Notes

1. ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
3. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
4. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
6. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
10. AREAS DESIGNATED AS "LAWN" OR "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
11. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
12. THESE PLANS ARE INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

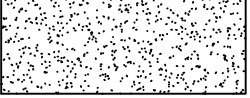


SHRUB LIST

CODE	BOTANICAL NAME	COMMON NAME
SHRUBS		
CAH	Clethra alnifolia 'Hummingbird'	'Hummingbird' Summersweet
CAE	Cornus alba 'Elegantissima'	Variegated RedTwig Dogwood
CR	Cornus racemosa	Gray Dogwood
CS	Cornus sericea	Red Twig Dogwood
CS1	Cornus stolonifera	Red Osier Dogwood
FG	Fothergilla gardenii	Dwarf Fothergilla
IG	Ilex glabra	Inkberry
IGS	Ilex glabra 'Shamrock'	Shamrock Inkberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
JBH	Juniperus horizontalis 'Bar Harbor'	Bar Harbor Creeping Juniper
RC	Rhododendron x 'Cunningham's Blush'	Cunningham's Blush Rhododendron
RA	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac
VN	Viburnum nudum 'Winterthur'	Smooth Witherod
GRASSES		
PVS	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass

SEEDING

1. AREAS INDICATED AS "RAIN GARDEN" ARE TO BE SEEDED WITH NEW ENGLAND EROSION CONTROL / RESTORATION MIX FOR DETENTION PONDS AND MOIST AREAS, AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (413) 548-8000, www.NEWP.com,OR AN APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
2. AREAS INDICATED AS "EROSION CONTROL SEED MIX" ARE TO BE SEEDED WITH NEW ENGLAND CONSERVATION EROSION CONTROL/RESTORATION MIX FOR DRY SITES, AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (413) 548-8000, www.NEWP.com,OR AN APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



PERIMETER LANDSCAPING

Length of southern Property Line along Hanover Street = 380' *
380 x 15 = 5,700
5,700 / 600 = 9.5
10 Shade Trees Required
9 shade trees and 15 Evergreen Trees provided.
5 shrubs per tree required = 50 shrubs
51 shrubs provided.

PERIMETER LANDSCAPING

Length of northern Property Line along Hanover Street = 180' *
180 x 15 = 2,700
2,700 / 600 = 4.5
5 Shade Trees Required
4 shade trees and 6 Evergreen Trees provided.
5 shrubs per tree required = 25 shrubs
25 shrubs provided.

* Property Line length does not include 30' driveway width.

PLANT SCHEDULE - TREES

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
DECIDUOUS TREES				
AR	19	Acer rubrum	Red Maple	2 1/2 - 3" CAL.
BN	22	Betula nigra 'Heritage'	Heritage River Birch	10 - 12' HT./Multi-Stem
NS	18	Nyssa sylvatica	Black Tupelo	2 1/2 - 3" CAL.
PO	11	Platanus occidentalis	American Sycamore	2 1/2 - 3" CAL.
TA	16	Tilia americana	American Linden	2 1/2 - 3" CAL.
TC	23	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	2 1/2 - 3" CAL.
EVERGREEN TREES				
JVB	19	Juniperus virginiana 'Blue Arrow'	Blue Arrow Juniper	6 - 7' HT.
JVC	27	Juniperus virginiana 'Corcorcor' TM	Emerald Sentinel Juniper	6 - 7' HT.
PG	24	Picea glauca	White Spruce	6 - 7' HT.
TO	45	Thuja occidentalis 'Nigra'	Dark American Arborvitae	6 - 7' HT.
FLOWERING TREES				
ACS	16	Amelanchier canadensis	Shadblow Serviceberry	8 - 10' HT./Multi-Stem
MS	8	Malus hybrid 'Spring Snow'	Spring Snow Crab Apple	2 1/2 - 3" CAL.
PF	6	Prunus sargentii 'Pink Flair'	Sargent Cherry	2 1/2 - 3" CAL.
SHRUBS				
IG	102	Ilex glabra	Inkberry	2 - 3' HT.
RC	55	Rhododendron x 'Cunningham's Blush'	Cunningham's Blush Rhododendron	24 - 30" HT.

Planting Requirements

1. AREAS CONTAINING ONE OR TWO ROWS OF PARKING SHALL BE PLANTED WITH DECIDUOUS TREES ALONG THE PERIMETER, SO PLACED TO SHADE 30% OF THE PARKING AREA.
2. DECIDUOUS TREES TO BE A MINIMUM 2.5 TO 3 INCHES IN CALIPER.
3. EVERGREEN TREES TO BE A MINIMUM OF 6 TO 7 FEET HEIGHT.

SHADE TREE CALCULATION BUILDING 1

8,690 sf parking area
x 30% = 2,607 sf
Shade area = 2,905 sf (33.8%)

SHADE TREE CALCULATION MAINT. BLDG.

4,536 sf parking area
x 30% = 1,361 sf
Shade area = 1,459 sf (32.1%)

SHADE TREE CALCULATION PARKING LOTS

69,245 sf parking area
x 30% = 20,774 sf
Shade area = 22,153 sf (31.9%)

03060120Feet

The Brickyard
Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Apprv.
1	Completeness Review Comments	07/02/24	DF
2	Revised Layout Resubmission	10/24/24	DF
3	Response to Comments Rev 2	12/04/24	DF

Designed by
EJB

Checked by

Issued for

Date
May 10, 2024

Permitting

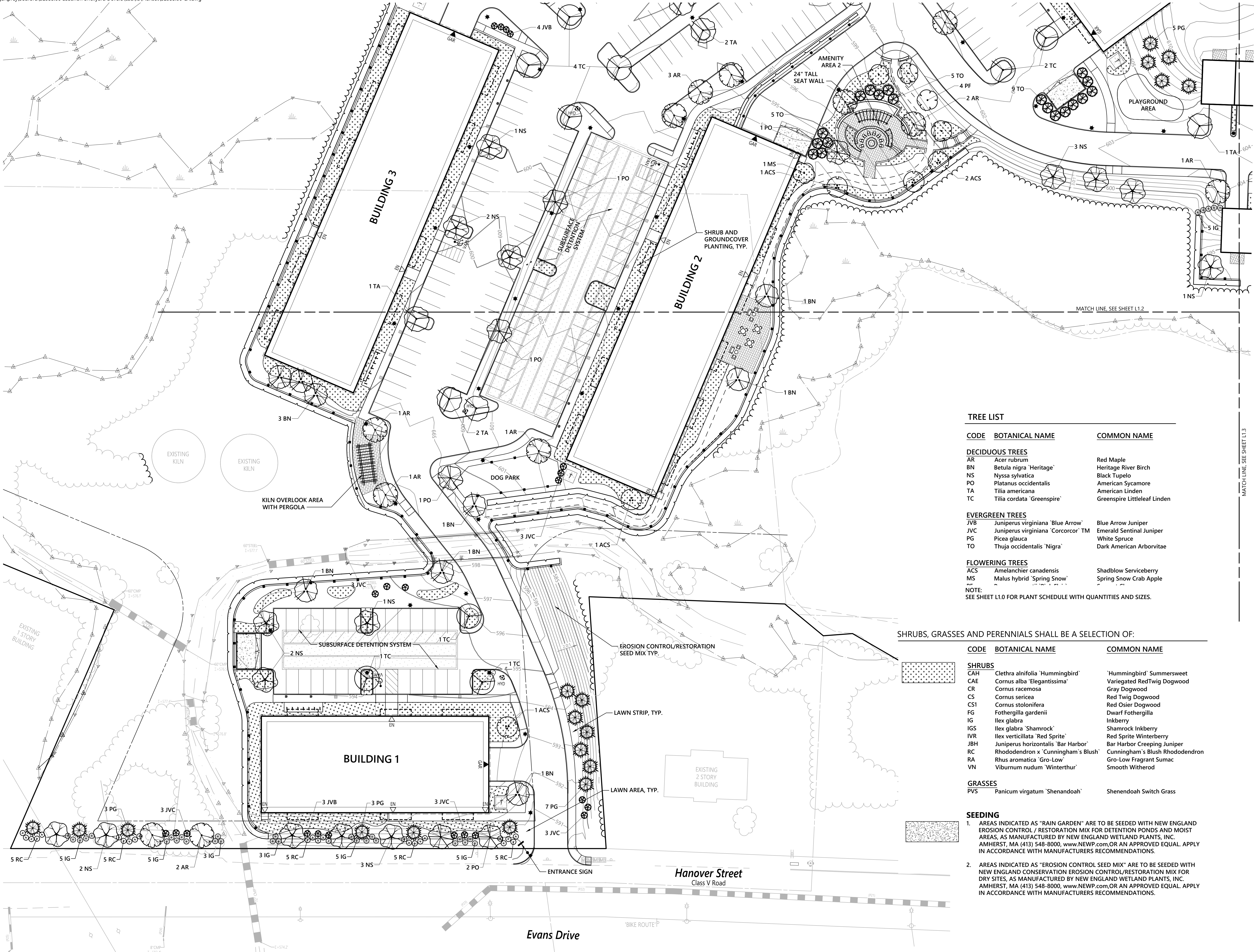
Not Approved for Construction

Drawing Title
Overall Landscape and
Tree Shading Plan



L1.0

Sheet
38 of
53



TREE LIST

CODE	BOTANICAL NAME	COMMON NAME
DECIDUOUS TREES		
AR	Acer rubrum	Red Maple
BN	Betula nigra 'Heritage'	Heritage River Birch
NS	Nyssa sylvatica	Black Tupelo
PO	Platanus occidentalis	American Sycamore
TA	Tilia americana	American Linden
TC	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden

EVERGREEN TREES		
JVB	Juniperus virginiana 'Blue Arrow'	Blue Arrow Juniper
JVC	Juniperus virginiana 'Corcorcor' TM	Emerald Sentinel Juniper
PG	Picea glauca	White Spruce
TO	Thuja occidentalis 'Nigra'	Dark American Arborvitae

FLOWERING TREES		
ACS	Amelanchier canadensis	Shadblow Serviceberry
MS	Malus hybrid 'Spring Snow'	Spring Snow Crab Apple
NOTE: SEE SHEET L1.0 FOR PLANT SCHEDULE WITH QUANTITIES AND SIZES.		

SHRUBS, GRASSES AND PERENNIALS SHALL BE A SELECTION OF:

CODE	BOTANICAL NAME	COMMON NAME
SHRUBS		
CAH	Clethra alnifolia 'Hummingbird'	'Hummingbird' Summersweet
CAE	Cornus alba 'Elegantissima'	Variegated RedTwig Dogwood
CR	Cornus racemosa	Gray Dogwood
CS	Cornus sericea	Red Twig Dogwood
CS1	Cornus stolonifera	Red Osier Dogwood
FG	Fothergilla gardenii	Dwarf Fothergilla
IG	Ilex glabra	Inkberry
IGS	Ilex glabra 'Shamrock'	Shamrock Inkberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
JBH	Juniperus horizontalis 'Bar Harbor'	Bar Harbor Creeping Juniper
RC	Rhododendron x 'Cunningham's Blush'	Cunningham's Blush Rhododendron
RA	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac
VN	Viburnum nudum 'Winterthur'	Smooth Witherod

GRASSES		
PVS	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass

SEEDING

- AREAS INDICATED AS "RAIN GARDEN" ARE TO BE SEEDED WITH NEW ENGLAND EROSION CONTROL / RESTORATION MIX FOR DETENTION PONDS AND MOIST AREAS, AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (413) 548-8000, www.NEWP.com, OR AN APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
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The Brickyard
Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

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1	Completeness Review Comments	07/02/24	DF
2	Revised Layout Resubmission	10/24/24	DF
3	Response to Comments Rev 2	12/04/24	DF

Designed by EJB	Checked by
Issued for Permitting	Date May 10, 2024

Not Approved for Construction
Drawing Title
Landscape
Plan 1



L1.1

Sheet 39 of 53

SHRUBS, GRASSES AND PERENNIALS SHALL BE A SELECTION OF:

CODE	BOTANICAL NAME	COMMON NAME
SHRUBS		
CAH	Clethra alnifolia 'Hummingbird'	'Hummingbird' Summersweet
CAE	Cornus alba 'Elegantissima'	Variegated RedTwig Dogwood
CR	Cornus racemosa	Gray Dogwood
CS	Cornus sericea	Red Twig Dogwood
CS1	Cornus stolonifera	Red Osier Dogwood
FG	Fothergilla gardenii	Dwarf Fothergilla
IG	Ilex glabra	Inkberry
IGS	Ilex glabra 'Shamrock'	Shamrock Inkberry
IVR	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry
JBH	Juniperus horizontalis 'Bar Harbor'	Bar Harbor Creeping Juniper
RC	Rhododendron x 'Cunningham's Blush'	Cunningham's Blush Rhododendron
RA	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac
VN	Viburnum nudum 'Winterthur'	Smooth Witherod
GRASSES		
PVS	Panicum virgatum 'Shenandoah'	Shenendoah Switch Grass

SEEDING

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TREE LIST

CODE	BOTANICAL NAME	COMMON NAME
DECIDUOUS TREES		
AR	Acer rubrum	Red Maple
BN	Betula nigra 'Heritage'	Heritage River Birch
NS	Nyssa sylvatica	Black Tupelo
PO	Platanus occidentalis	American Sycamore
TA	Tilia americana	American Linden
TC	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden
EVERGREEN TREES		
JVB	Juniperus virginiana 'Blue Arrow'	Blue Arrow Juniper
JVC	Juniperus virginiana 'Corcorcor' TM	Emerald Sentinel Juniper
PG	Picea glauca	White Spruce
TO	Thuja occidentalis 'Nigra'	Dark American Arborvitae

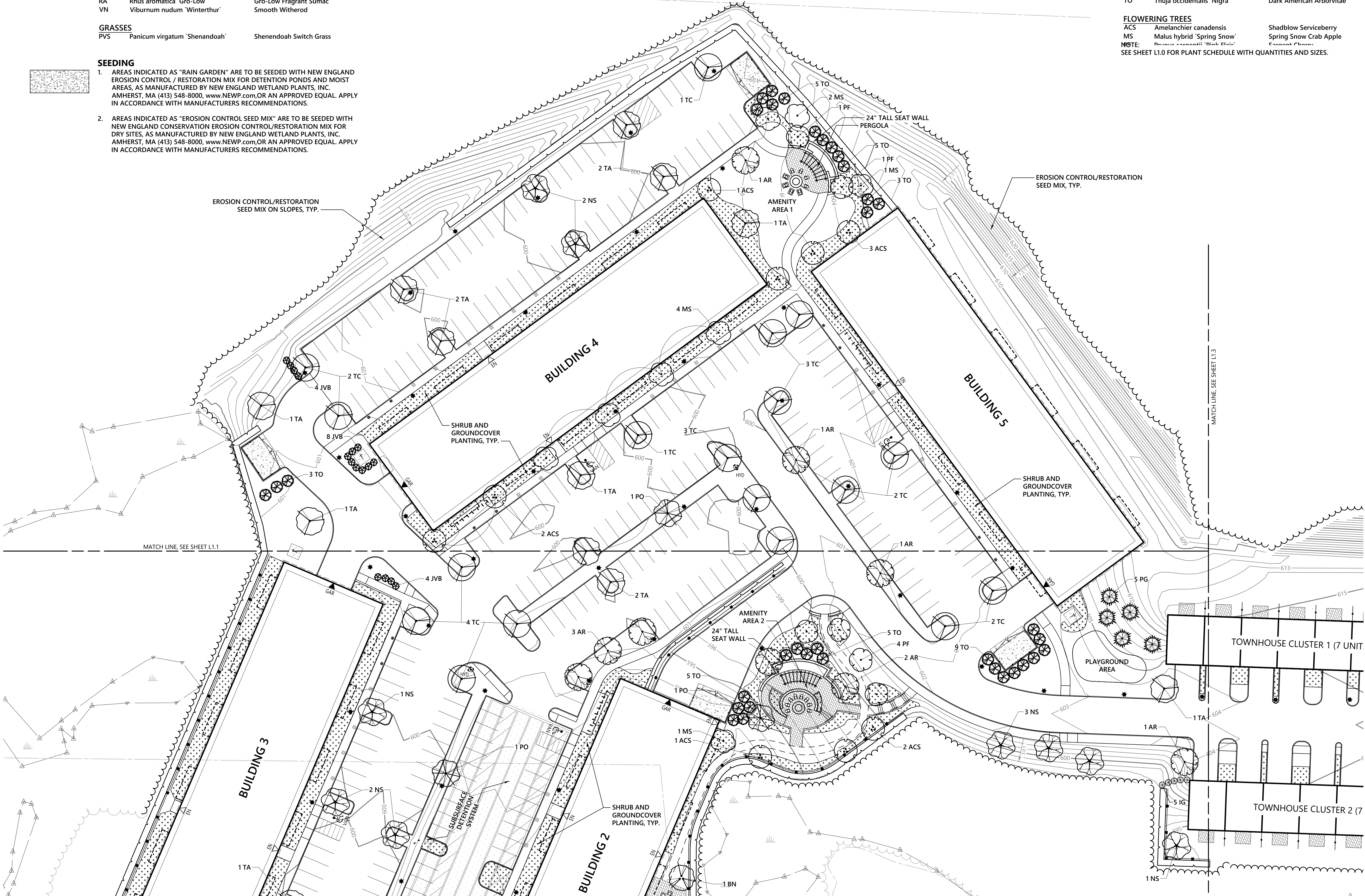
FLOWERING TREES

ACS	Amelanchier canadensis	Shadblow Serviceberry
MS	Malus hybrid 'Spring Snow'	Spring Snow Crab Apple
NOTE: <i>Prunus pennsylvanica</i> 'Black Choke'		Smooth Cherry

SEE SHEET L1.0 FOR PLANT SCHEDULE WITH QUANTITIES AND SIZES.



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900



**The Brickyard
Residential Development**

174 Hanover Street Extension
Lebanon, New Hampshire 03766

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3	Response to Comments Rev 2	12/04/24	DF

Designed by **EJB** Checked by
Issued for **Permitting** Date **May 10, 2024**

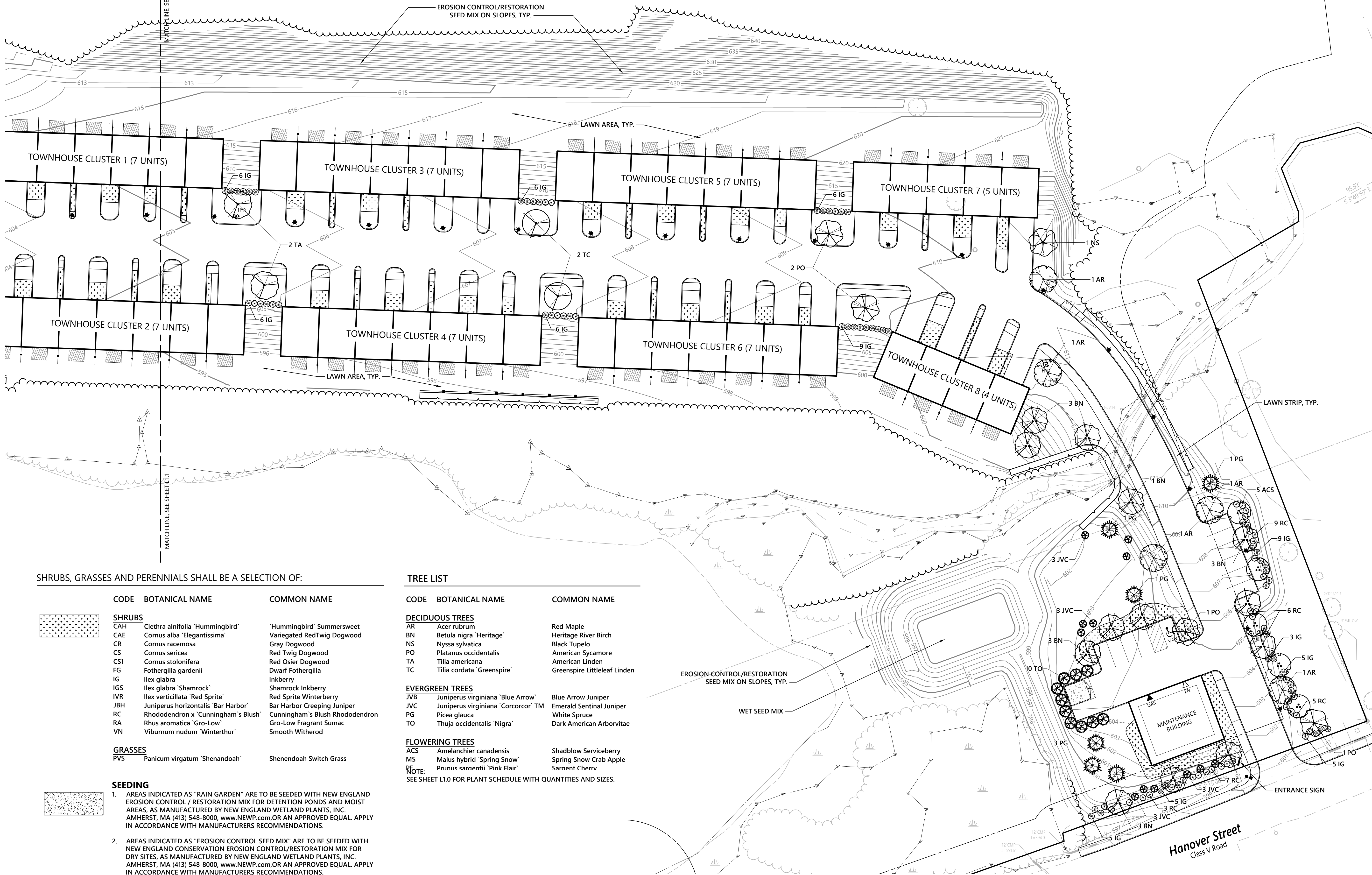
Not Approved for Construction
Drawing Title
**Landscape
Plan 2**



L1.2

Sheet **40** of **53**

Project Number
52933.00



The Brickyard
Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Appr'd.
1	Completeness Review Comments	07/02/24	DF
2	Revised Layout Resubmission	10/24/24	DF
3	Response to Comments Rev 2	12/04/24	DF

Designed by
EJB

Checked by

Issued for
Permitting

Date
May 10, 2024

Not Approved for Construction

Landscape
Plan 3

ERIK
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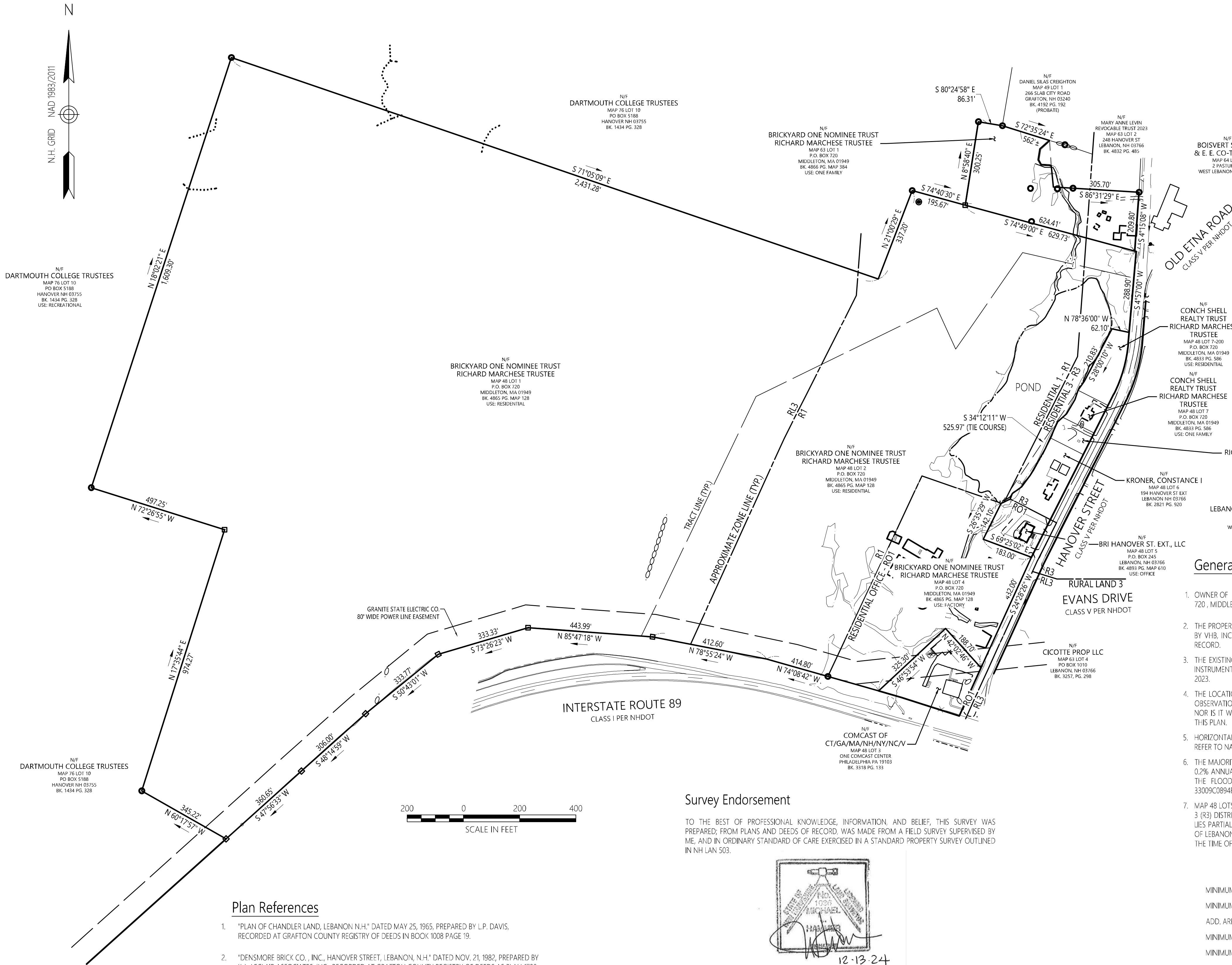
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Sheet
41

of
53

Project Number
52933.00

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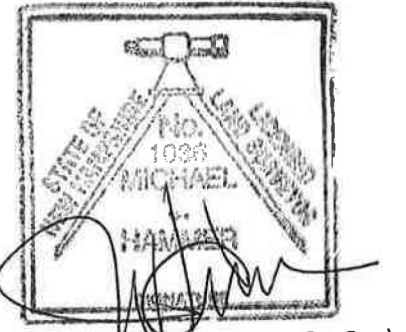


Plan References

- "PLAN OF CHANDLER LAND, LEBANON, N.H." DATED MAY 25, 1965, PREPARED BY L.P. DAVIS, RECORDED AT GRAFTON COUNTY REGISTRY OF DEEDS IN BOOK 1008 PAGE 19.
- "DENSMORE BRICK CO., INC., HANOVER STREET, LEBANON, N.H." DATED NOV. 21, 1982, PREPARED BY K.A. LECLAIR ASSOCIATES, INC., RECORDED AT GRAFTON COUNTY REGISTRY OF DEEDS AS PLAN 1700.
- "DENSMORE BRICK CO., INC., HANOVER STREET, LEBANON, N.H." DATED NOV. 21, 1982, REVISED OCT. 4, 1983, PREPARED BY K.A. LECLAIR ASSOCIATES, INC., RECORDED AT GRAFTON COUNTY REGISTRY OF DEEDS AS PLAN 2089.
- "DENSMORE BRICK CO., INC., HANOVER STREET, LEBANON, N.H." DATED NOV. 21, 1982, REVISED APRIL 24, 1984, PREPARED BY K.A. LECLAIR ASSOCIATES, INC., RECORDED AT GRAFTON COUNTY REGISTRY OF DEEDS AS PLAN 2934.
- "HODGES DEVELOPMENT CORP., HANOVER STREET, GRAFTON COUNTY, LEBANON, N.H." DATED APRIL 4, 1986, REVISED THROUGH 5/4/89, PREPARED BY K.A. LECLAIR ASSOCIATES, INC., RECORDED AT GRAFTON COUNTY REGISTRY OF DEEDS AS PLAN 5625.
- "ELBTHAL REALTY TRUST, LEBANON, N.H." DATED JULY 3, 1980, PREPARED BY K.A. LECLAIR ASSOCIATES, INC., RECORDED AT GRAFTON COUNTY REGISTRY OF DEEDS AS PLAN 6453.
- "STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS, PLANS OF PROPOSED FEDERAL AID PROJECT, I 89-1(45)53, N.H. PROJECT NO. P-3821-B" UNDATED, ON FILE WITH NHDOT AS PLAN P5821.B.

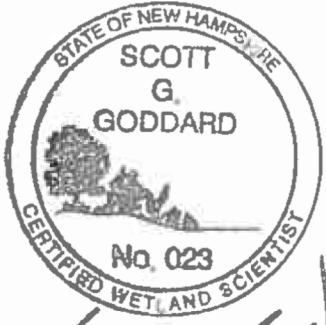
Survey Endorsement

TO THE BEST OF PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THIS SURVEY WAS PREPARED; FROM PLANS AND DEEDS OF RECORD, WAS MADE FROM A FIELD SURVEY SUPERVISED BY ME, AND IN ORDINARY STANDARD OF CARE EXERCISED IN A STANDARD PROPERTY SURVEY OUTLINED IN NH LAN 503.



Wetland Endorsement

THIS IS TO CERTIFY THAT THE WETLANDS HAVE BEEN DELINEATED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (TECHNICAL REPORT Y-87-1)



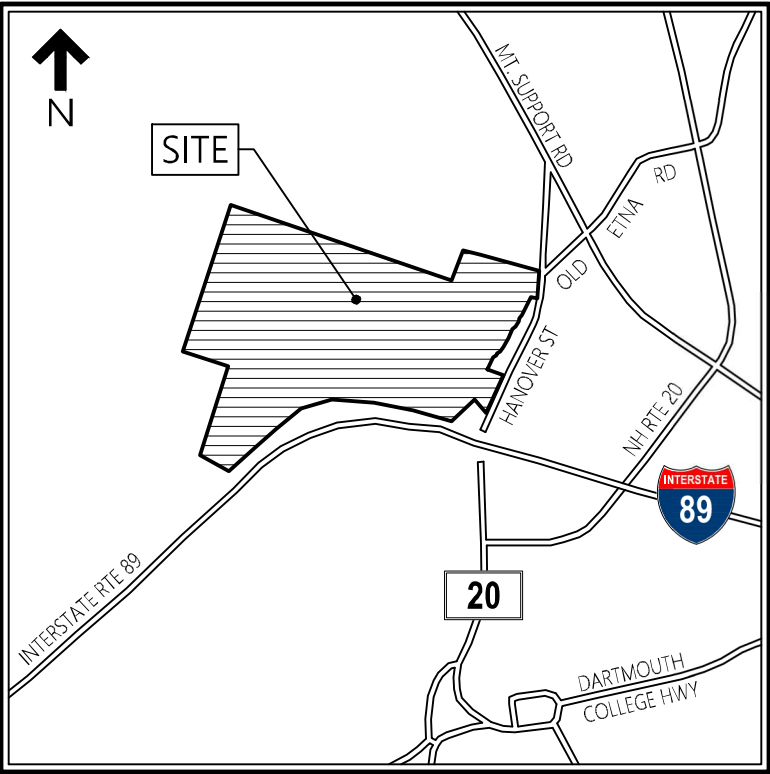
General Notes

- OWNER OF RECORD OF TAX MAP 48 LOTS 1, 2, AND 4 IS BRICKYARD ONE NOMINEE TRUST, P.O. BOX 720, MIDDLETON, MASSACHUSETTS 01949. GCRD BOOK 4865 PAGE 128.
- THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN SEPTEMBER AND OCTOBER OF 2022, APRIL 2023, AND FROM DEEDS AND PLANS OF RECORD.
- THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB, INC. FROM SEPTEMBER THRU NOVEMBER, 2022, AND APRIL 2023.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
- HORIZONTAL DATUM IS BASED ON NH GRID SYSTEM, NAD 1983. ELEVATIONS SHOWN ON THIS PLAN REFER TO NAVD OF 1988.
- THE MAJORITY OF MAP 48, LOTS 1, 2 & 4 LIES WITHIN ZONE X (UNSHADED) (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) WITH THE EXCEPTION OF THE POND (ZONE A) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR GRAFTON COUNTY, NEW HAMPSHIRE, MAP NUMBER 33009C0894E, EFFECTIVE DATE FEBRUARY 20, 2008.
- MAP 48 LOTS 1 & 2 LIE PARTIALLY WITHIN THE RURAL LAND 3 (RL3), RESIDENTIAL 1 (R1) AND RESIDENTIAL 3 (R3) DISTRICTS, MAP 48 LOT 4 LIES ENTIRELY WITHIN THE RESIDENTIAL OFFICE 1 (RO1), MAP 63 LOT 1 LIES PARTIALLY IN THE R1 AND R3 DISTRICTS AS SHOWN ON THE "OFFICIAL ZONING MAP OF THE CITY OF LEBANON, NH", DATED JUNE 1, 2020. DIMENSIONAL REQUIREMENTS FOR THE ZONING DISTRICTS AT THE TIME OF THIS SURVEY ARE:

	RL3	R1 & RO1	R1 & RO1	R1 & RO1
		(CLASS 1)	(CLASS 2)	(CLASS 3)
MINIMUM LOT AREA	____ 10 AC.	10K SF	15K SF	40K SF
MINIMUM LOT WIDTH	____ N/A	75 FT	75 FT	100 FT
ADD. AREA PER D.U. AFTER TWO	____ N/A	3K SF	5K SF	15K SF
MINIMUM FRONT YARD SETBACK	____ 50 FT	20 FT	20 FT	25 FT
MINIMUM SIDE YARD SETBACK	____ 50 FT	15 FT	15 FT	25 FT
MINIMUM REAR YARD SETBACK	____ 50 FT	20 FT	20 FT	30 FT
MAXIMUM BUILDING HEIGHT	____ 35 FT	45 FT*	45 FT*	45 FT*
MAXIMUM BUILDING COVERAGE	____ 1%	25%	20%	15%

* WITHIN THE R1 DISTRICT, THE BUILDING HEIGHT MAY BE INCREASED TO 55 FT TO ACCOMMODATE A PARKING STRUCTURE UNDERNEATH OR WITHIN THE PROPOSED BUILDING (SEE SECTION 308.4).

- THE WETLANDS SHOWN ON THIS PLAN WERE FLAGGED BY GODDARD CONSULTING, LLC AND LOCATED IN NOVEMBER 2022.
- THE TREE SYMBOL OUTLINE SHOWN ON THIS PLAN DOES NOT REPRESENT THE ACTUAL TREE CANOPY.
- FOOT TRAILS WERE OBSERVED CROSSING THE NORTH AND WEST LOT LINES AS SHOWN. NO DOCUMENTS WERE FOUND AT THE GCRD PROVIDING RIGHTS OF ACCESS OR USE.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT AND MAY BE SUBJECT TO ADDITIONAL INFORMATION DISCLOSED IN SUCH.



Locus Map
(NOT TO SCALE)

Legend

- ① DRAIN MANHOLE
- CATCH BASIN
- Ⓢ SEWER MANHOLE
- Ⓢ ELECTRIC MANHOLE
- Ⓢ TELEPHONE MANHOLE
- Ⓢ MANHOLE
- Ⓢ WATER GATE
- Ⓢ FIRE HYDRANT
- Ⓢ GAS GATE
- Ⓢ BOLLARD
- Ⓢ STREET SIGN
- Ⓢ LIGHT POLE
- Ⓢ UTILITY POLE
- Ⓢ GUY WIRE
- Ⓢ GUY WIRE
- Ⓢ MONITORING WELL
- Ⓢ FLOOD LIGHT
- Ⓢ PEDESTRIAN SIGNAL
- Ⓢ MAST ARM
- Ⓢ FLASHING SIGNAL
- Ⓢ WELL
- Ⓢ MARSH
- Ⓢ F.F.E.=45.27' FINISHED FLOOR ELEVATION
- Ⓢ DYL DOUBLE YELLOW LINE
- Ⓢ DWL DASHED WHITE LINE
- Ⓢ EDGE OF PAVEMENT
- Ⓢ VERTICAL GRANITE CURB
- Ⓢ SLOPED GRANITE EDGE
- Ⓢ GUARD RAIL
- Ⓢ CHAIN LINK FENCE
- Ⓢ SEWER LINE
- Ⓢ DRAINAGE LINE
- Ⓢ OVERHEAD WIRE
- Ⓢ UNDERGROUND ELECTRIC
- Ⓢ TELEPHONE LINE
- Ⓢ GAS LINE
- Ⓢ WATER LINE
- Ⓢ STONE WALL
- Ⓢ TREE LINE
- Ⓢ LIMIT OF BANK
- Ⓢ VEGETATED WETLAND BOUNDARY
- Ⓢ EDGE OF WATER (AERIAL PHOTOGRAMMETRY)

The Brickyard

Hanover Street
Lebanon, Grafton County, N.H.

No.	Revision	Date	Appr'd.
1	RESPONSE TO COMMENTS UPDATE	8/06/2024	MJH
2	RESPONSE TO CITY COMMENTS	12/10/2024	MJH

Designed by	Checked by
Issued for	Date

April 1, 2024

Boundary
Plan of Land

Drawing Number

Sv-1

Sheet 43 of 53

Project Number
52933.00



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

Legend

- ① DRAIN MANHOLE
- ⊞ CATCH BASIN
- ⊞ SEWER MANHOLE
- ⊞ ELECTRIC MANHOLE
- ⊞ TELEPHONE MANHOLE
- ⊞ MANHOLE
- ⊞ HAND HOLE
- ⊞ WATER GATE
- ⊞ FIRE HYDRANT
- ⊞ GAS GATE
- ⊞ BOLLARD
- ⊞ STREET SIGN
- ⊞ LIGHT POLE
- ⊞ UTILITY POLE
- ⊞ GUY POLE
- ⊞ GUY WIRE
- ⊞ MONITORING WELL
- ⊞ FLOOD LIGHT
- ⊞ PEDESTRIAN SIGNAL
- ⊞ MAST ARM
- ⊞ FLASHING SIGNAL
- ⊞ WELL
- ⊞ MARSH
- ⊞ F.F.E.=45.27'
- ⊞ FINISHED FLOOR ELEVATION
- ⊞ DVL
- ⊞ DWL
- ⊞ VGC
- ⊞ SCE
- ⊞ EDGE OF PAVEMENT
- ⊞ VERTICAL GRANITE CURB
- ⊞ SLOPED GRANITE EDGE
- ⊞ GUARD RAIL
- ⊞ CHAIN LINK FENCE
- ⊞ DRAINAGE LINE
- ⊞ SEWER LINE
- ⊞ OVERHEAD WIRE
- ⊞ UNDERGROUND ELECTRIC
- ⊞ TELEPHONE LINE
- ⊞ GAS LINE
- ⊞ WATER LINE
- ⊞ STONE WALL
- ⊞ TREE LINE
- ⊞ LIMIT OF BANK
- ⊞ VEGETATED WETLAND BOUNDARY
- ⊞ 80'-100'
- ⊞ 150'-300'
- ⊞ EDGE OF WATER (AERIAL PHOTOGRAMMETRY)

See Sheet Sv-3

The Brickyard

Hanover Street
Lebanon, Grafton County, N.H.

No.	Revision	Date	Appvd.
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Designed by	Checked by
Issued for	Date
	April 1, 2024

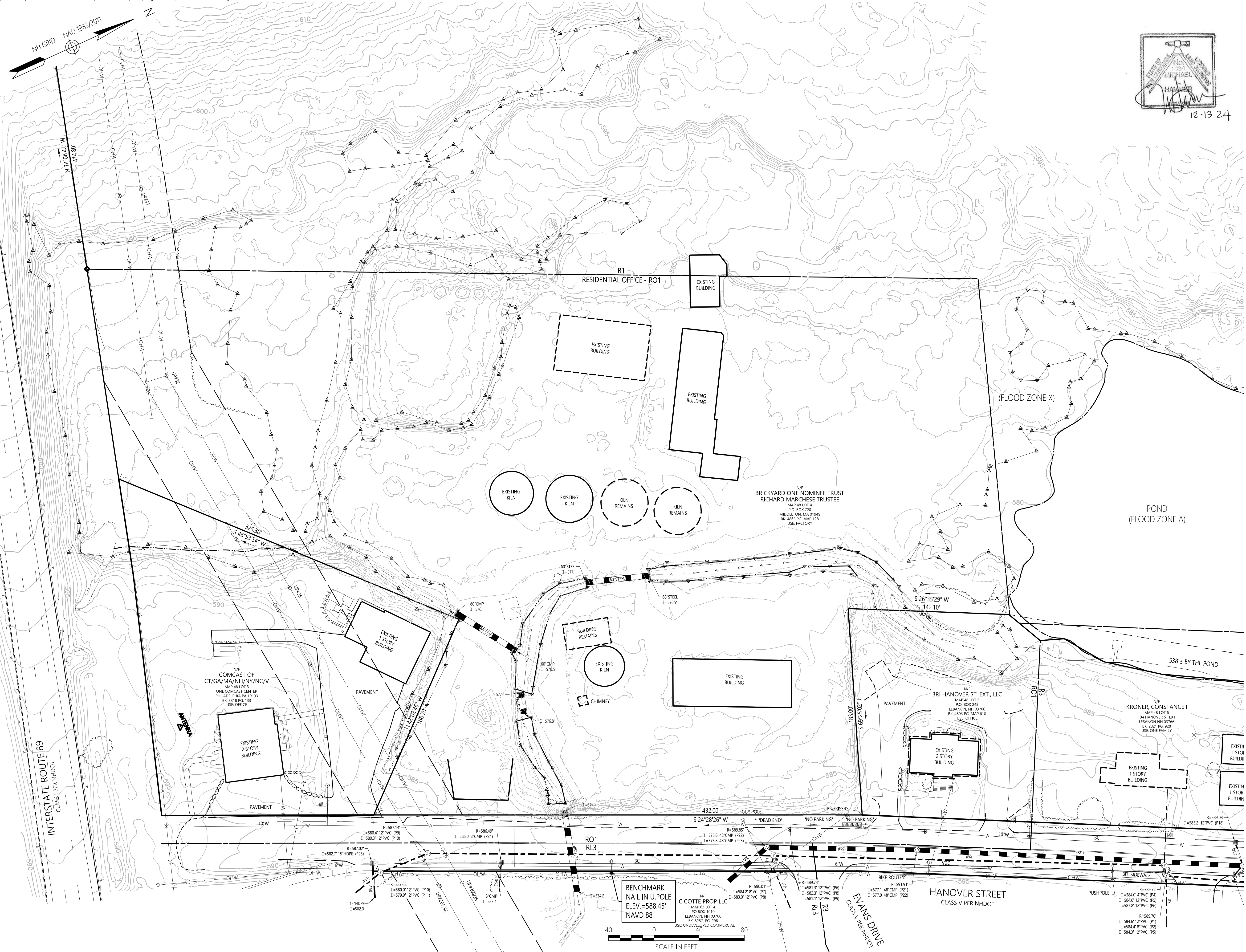
Drawing Title
**Existing Conditions
Plan of Land**

Drawing Number

Sv-2

Sheet of
44 53

Project Number
52933.00





2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

Legend

- ① DRAIN MANHOLE
 - ② CATCH BASIN
 - ③ SEWER MANHOLE
 - ④ ELECTRIC MANHOLE
 - ⑤ TELEPHONE MANHOLE
 - ⑥ MANHOLE
 - ⑦ HAND HOLE
 - ⑧ WATER GATE
 - ⑨ FIRE HYDRANT
 - ⑩ GAS GATE
 - ⑪ BOLLARD
 - ⑫ STREET SIGN
 - ⑬ LIGHT POLE
 - ⑭ UTILITY POLE
 - ⑮ GUY POLE
 - ⑯ GUY WIRE
 - ⑰ MONITORING WELL
 - ⑱ FLOOD LIGHT
 - ⑲ PEDESTRIAN SIGNAL
 - ⑳ MAST ARM
 - ㉑ FLASHING SIGNAL
 - ㉒ WELL
 - ㉓ MARSH
 - ㉔ F.F.E.=45.27'
 - ㉕ FINISHED FLOOR ELEVATION
 - ㉖ DOUBLE YELLOW LINE
 - ㉗ DASHED WHITE LINE
 - ㉘ EDGE OF PAVEMENT
 - ㉙ SLOPED GRANITE CURB
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 - ㉛ DRAINAGE LINE
 - ㉜ SEWER LINE
 - ㉝ OVERHEAD WIRE
 - ㉞ UNDERGROUND ELECTRIC
 - ㉟ TELEPHONE LINE
 - ㊱ GAS LINE
 - ㊲ WATER LINE
 - ㊳ STONE WALL
 - ㊴ TREE LINE
 - ㊵ LIMIT OF BANK
 - ㊶ VEGETATED WETLAND BOUNDARY
 - ㊷ EDGE OF WATER (AERIAL PHOTOGRAMMETRY)
- EOP
VGC
SGE
SLOPED GRANITE CURB
CHAIN LINK FENCE
DRAINAGE LINE
SEWER LINE
OVERHEAD WIRE
UNDERGROUND ELECTRIC
TELEPHONE LINE
GAS LINE
WATER LINE
STONE WALL
TREE LINE
LIMIT OF BANK
VEGETATED WETLAND BOUNDARY
EDGE OF WATER (AERIAL PHOTOGRAMMETRY)

The Brickyard

Hanover Street
Lebanon, Grafton County, N.H.

No.	Revision	Date	Appvd.
1	RESPONSE TO COMMENTS UPDATE	8/06/2024	MJH
2	RESPONSE TO CITY COMMENTS	12/10/2024	MJH

Designed by	Checked by
Issued for	Date
	April 1, 2024

Drawing Title
**Existing Conditions
Plan of Land**

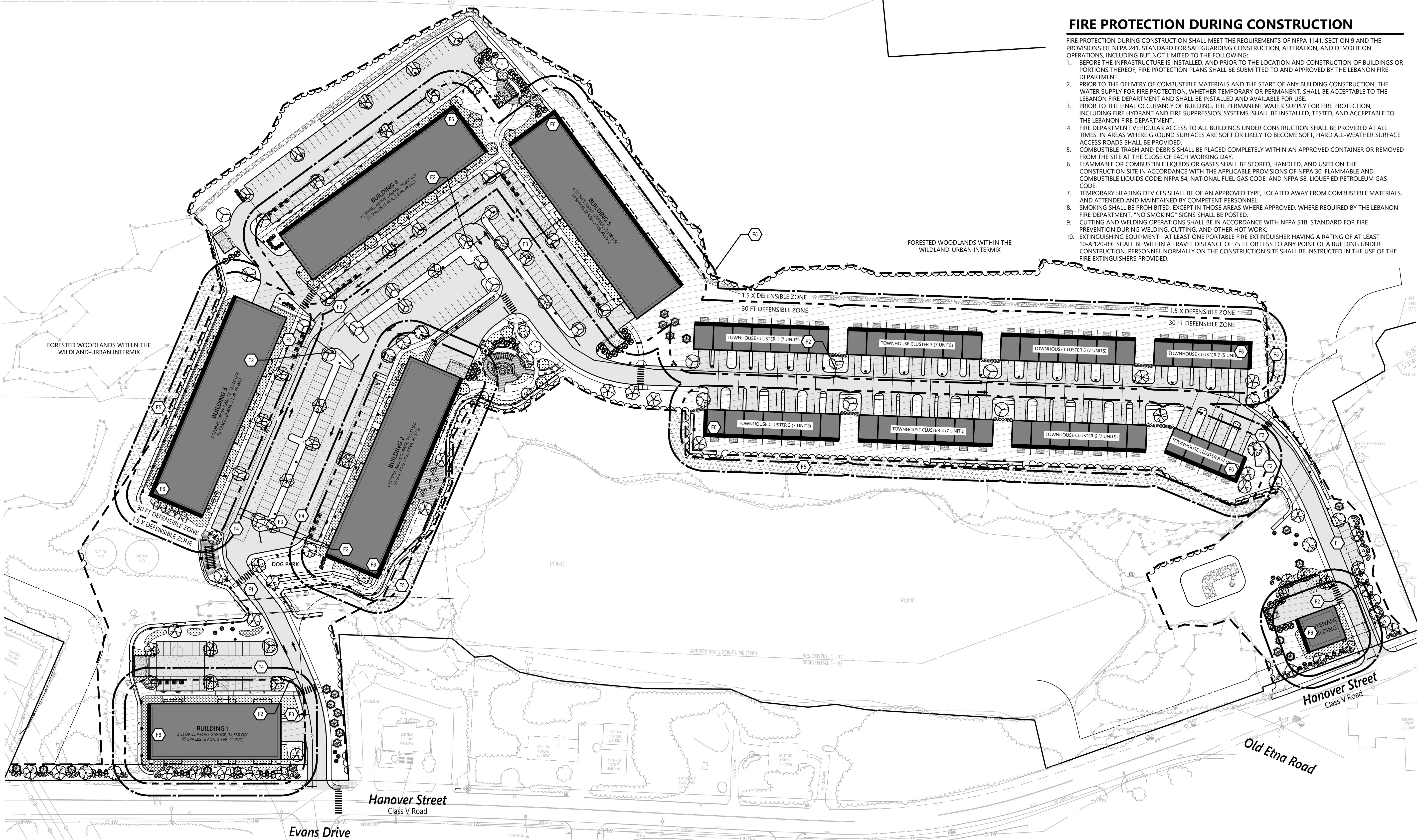
Drawing Number

Sv-3

Sheet 45 of 53

Project Number
52933.00





CONSTRUCTION REQUIREMENTS:

- ALL NEW CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 1141; NFPA 1144; AND ALL APPLICABLE LOCAL BUILDING CODES. ALL CONSTRUCTION MATERIALS SHALL MEET THE REQUIREMENTS OF NFPA 1144, SECTION 5, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - ROOF MATERIALS
 - ROOF COVERING ASSEMBLIES SHALL BE ONLY LISTED ROOF COVERING, TESTED AND RATED IN ACCORDANCE WITH ASTM E 108, STANDARD TEST METHODS FOR FIRE TESTS OF ROOF COVERINGS, OR EQUIVALENT AND THE SPECIFIC CLASS SHALL BE CONSISTENT WITH THE WILDLAND FIRE HAZARD ASSESSMENT;
 - WHERE THE ROOF PROFILE ALLOWS SPACE BETWEEN THE ROOF COVERING, AND THE ROOF DECKING, THE SPACES SHALL BE CONSTRUCTED TO PREVENT THE INTRUSION OF FLAMES AND EMBERS, BE FIRE STOPPED WITH APPROVED MATERIALS, OR HAVE ADDITIONAL ASSEMBLY COMPONENTS OF NONCOMBUSTIBLE MATERIALS TO PREVENT IGNITION;
 - ROOF GUTTERS, DOWNSPOUTS, AND CONNECTORS SHALL BE NONCOMBUSTIBLE AND COVERED TO PREVENT THE ACCUMULATION OF DEBRIS. EAVES SHALL BE BOXED IN WITH $\frac{1}{2}$ " NOMINAL SHEATHING OR NONCOMBUSTIBLE MATERIALS;
 - VENTS SHALL BE SCREENED WITH A CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH OPENINGS NOT TO EXCEED NOMINAL $\frac{3}{4}$ " IN SIZE;
 - VENTILATION OPENINGS IN VERTICAL WALLS SHALL BE COVERED WITH NOMINAL $\frac{3}{4}$ " CORROSION-RESISTANT METAL MESH SCREEN OR OTHER NONCOMBUSTIBLE MATERIAL OFFERING EQUIVALENT PROTECTION. NO ATTIC VENTILATION OPENINGS SHALL BE PERMITTED IN SOFFITS, IN EAVE OVERHANGS, BETWEEN RAFTERS AT EAVES, OR IN OTHER OVERHANGING AREAS ON THOSE EXPOSURES FACING HAZARDOUS VEGETATION;
 - OVERHANGING PROJECTIONS - ALL PROJECTIONS (EXTERIOR BALCONIES, CARPORTS, DECKS, PATIO COVERS, UNENCLOSED ROOFS AND FLOORS, ETC) SHALL BE OF HEAVY TIMBER CONSTRUCTION; BE CONSTRUCTED OF NONCOMBUSTIBLE MATERIAL, FIRE-RETARDANT-TREATED WOOD, OR OTHER IGNITION-RESISTANT MATERIALS; OR BE A 1-HOUR FIRE-RATED ASSEMBLY.
 - OVERHANGING BUILDINGS - THE UNDERSIDE OF OVERHANGING BUILDINGS AND SUPPORTING STRUCTURAL ELEMENTS SHALL BE OF HEAVY TIMBER CONSTRUCTION; BE CONSTRUCTED OF NONCOMBUSTIBLE MATERIAL, FIRE-RETARDANT-TREATED WOOD, OR OTHER IGNITION-RESISTANT MATERIALS; OR BE A 1-HOUR FIRE RATED ASSEMBLY.
 - EXTERIOR VERTICAL WALLS:
 - EXTERIOR VERTICAL WALLS SHALL MEET THE REQUIREMENTS FOR HEAVY TIMBER CONSTRUCTION, IGNITION-RESISTIVE MATERIAL, FIRE RETARDANT TREATED WOOD, OR BE A MINIMUM 20-MINUTE FIRE-RATED ASSEMBLY WHERE WALLS ARE POTENTIALLY EXPOSED TO A WILDLAND FIRE;

- ALL EXTERIOR WALLS SHALL BE PROTECTED WITH 2 IN. NOMINAL SOLID BLOCKING BETWEEN EXPOSED RAFTERS AT ALL ROOF OVERHANGS, UNDER THE EXTERIOR WALL COVERING ON ALL SIDES EXPOSED TO NATIVE VEGETATION;
- WHEN APPENDAGES AND PROJECTIONS ARE ATTACHED TO EXTERIOR FIRE-RESISTIVE WALLS, THEY SHALL BE CONSTRUCTED TO MAINTAIN THE FIRE-RESISTIVE INTEGRITY OF THE WALL;
- STRUCTURAL ELEMENTS THAT RESULT IN OR COULD RESULT IN THE COLLECTION OF COMBUSTIBLE MATERIALS PROXIMAL TO THE STRUCTURE SHALL BE PROTECTED.
- EXTERIOR OPENINGS:
 - EXTERIOR WINDOWS, WINDOWS WITHIN EXTERIOR DOORS, AND SKYLIGHTS SHALL BE TEMPERED GLASS, MULTI-LAYERED GLAZED PANELS, GLASS BLOCK, OR HAVE A FIRE RESISTANCE RATING OF NO LESS THAN 20 MINUTES. WINDOW SCREENING SHALL BE NONCOMBUSTIBLE MESH AND INSTALLED TO PREVENT THE COLLECTION OF FIREBRANDS AND EMBERS OR THEIR ENTRY INTO OPEN WINDOWS.
 - EXTERIOR DOORS SHALL BE SOLID-CORE WOOD NO LESS THAN 1-3/4" THICK, APPROVED NONCOMBUSTIBLE CONSTRUCTION, OR HAVE A FIRE PROTECTION RATING OF NO LESS THAN 20 MINUTES.
 - VENTS FOR ATTIC AND SUB-FLOOR VENTILATION SHALL BE SCREENED WITH A CORROSION-RESISTANT WIRE MESH, WITH THE MESH OPENING NOT EXCEEDING NOMINAL $\frac{3}{4}$ " IN SIZE OR INHIBIT EMBER INTRUSION IN AN APPROVED MANNER.
- CHIMNEYS AND FLUES - EVERY FIREPLACE AND WOOD STOVE CHIMNEY (IF APPLICABLE) AND FLUE SHALL BE PROVIDED WITH AN APPROVED SPARK ARRESTER CONSTRUCTED OF A MINIMUM 12-GAUGE WELDED WIRE OR WOVEN WIRE MESH, WITH OPENINGS NOT EXCEEDING $\frac{3}{4}$ ". VEGETATION SHALL NOT BE ALLOWED WITHIN 10 FT OF A CHIMNEY OUTLET.
- ACCESSORY STRUCTURES - SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THIS CHAPTER OR SHALL BE SEPARATED FROM THE MAIN STRUCTURE BY A MINIMUM OF 30 FT.
- VEHICLE PARKING AREAS - PARKING WITHIN THE IMMEDIATE LANDSCAPED ZONE SHALL BE MAINTAINED FREE OF DRY GRASSES AND FINE FUELS THAT COULD BE IGNITED BY HOT EXHAUST SYSTEMS OR FIREBRANDS.
- EXTERIOR EXPOSURE HAZARDS:
 - HEAT AND FLAME SOURCES THAT ARE UNPROTECTED OR UNSUPERVISED SHALL NOT BE PERMITTED WITHIN 30 FT OF THE PRIMARY STRUCTURE. INCINERATORS, OUTDOOR FIREPLACES, PERMANENT BARBECUES, AND GRILLS SHALL NOT BE BUILT, INSTALLED, OR MAINTAINED IN HAZARDOUS FIRE AREAS. OPENINGS IN INCINERATORS, OUTDOOR FIREPLACES, PERMANENT BARBECUES, AND GRILLS SHALL BE PROVIDED WITH AN APPROVED SPARK ARRESTER, SCREEN OR DOOR.
 - PROPANE TANKS AND OTHER FLAMMABLE OR COMBUSTIBLE LIQUIDS STORAGE SHALL CONFORM TO NFPA 58, LIQUEFIED PETROLEUM GAS CODE. OTHER COMBUSTIBLE MATERIALS WITHIN 30 FT OF ANY STRUCTURE SHALL BE REMOVED.

LANDSCAPE AND MAINT. REQUIRMENTS

ROUTINE MAINTENANCE OF THE LANDSCAPING WITHIN THE DEFENSIBLE ZONE AND LANDSCAPED AREA IS MEANT TO REDUCE THE FUEL LOAD AND RADIANT HEAT GENERATED NEAR THE BUILDING IN THE EVENT OF A WILDFIRE. MAINTENANCE MEANS/MEASURES SHALL MEET THE REQUIREMENTS OF NFPA 1144, SECTION 6, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- GROUND FUELS, INCLUDING NATIVE VEGETATION AND PLANTS USED FOR LANDSCAPING SHALL BE TREATED OR REMOVED. ACCEPTABLE METHODS OF FUEL TREATMENT INCLUDE, BUT ARE NOT LIMITED TO, PRESCRIBED BURNING BY QUALIFIED PERSONNEL, MOWING, PRUNING, REMOVING, SUBSTITUTION, MULCHING, CONVERTING TO COMPOST, AND GRAZING.
- LANDSCAPED PLANTINGS SHALL POSSESS CHARACTERISTICS TO REDUCE MAINTENANCE SUCH AS DROUGHT RESISTANCE, PEST RESISTANCE, NON INVASIVE, SLOW GROWING, WIND-RESISTANT SPECIES WITH TYPICAL FIRE-RESISTANT CHARACTERISTICS SUCH AS HIGH MOISTURE CONTENT IN LEAVES, LOW OIL OR RESIN CONTENT (NOT AROMATIC), DROUGHT TOLERANCE OR RESISTANCE, MINIMAL SEASONAL ACCUMULATION OF DEAD VEGETATION OR ACCUMULATION OF DEAD LEAVES, LIMITED FOLIAGE AND FEW DEAD BRANCHES, OPEN OR LOOSE BRANCHING HABIT AND EASY MAINTENANCE/PRUNING.
- LIVE VEGETATION WITHIN THE DEFENSIBLE ZONE AND LANDSCAPED AREA SHALL HAVE DEAD MATERIAL REMOVED AND SHALL BE THINNED AND PRUNED REGULARLY. ANY DEAD AND DOWNED FUELS WITHIN 30 FT OF ALL BUILDINGS SHALL BE REMOVED.
- VEGETATION UNDER TREES WITHIN THE DEFENSIBLE ZONE AND LANDSCAPED AREA SHALL BE MAINTAINED AT A HEIGHT THAT WILL PRECLUDE GROUND FIRE FROM SPREADING IN THE TREE CROWN.
- TREE CROWNS WITHIN THE DEFENSIBLE ZONE AND LANDSCAPED AREA SHALL BE SPACED TO PREVENT STRUCTURE IGNITION FROM RADIANT HEAT. RECOMMENDED MINIMUM TREE CROWN SPACING OF 18 FT.
- THE FACILITIES OWNER AND/OR FACILITY MAINTENANCE STAFF SHALL BE RESPONSIBLE INSPECTING THE CONDITION OF VEGETATION, WITHIN THE DEFENSIBLE ZONE AND LANDSCAPED AREA, TWICE YEARLY (AS A MINIMUM) TO IDENTIFY DEAD AND DOWNED MATERIALS AS WELL AS ANY PRUNING/THINNING THAT MAY BE REQUIRED TO MAINTAIN THE AREA AS OUTLINED ABOVE. LAWN AND MULCHED AREAS SHALL BE MOWED AND MAINTAINED ON A REGULAR BASIS.

FIRE PROTECTION DURING CONSTRUCTION

FIRE PROTECTION DURING CONSTRUCTION SHALL MEET THE REQUIREMENTS OF NFPA 1141, SECTION 9 AND THE PROVISIONS OF NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

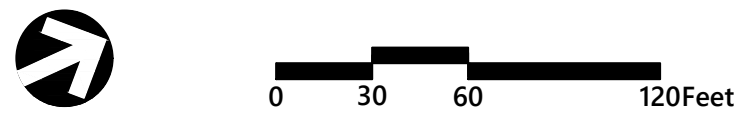
- BEFORE THE INFRASTRUCTURE IS INSTALLED, AND PRIOR TO THE LOCATION AND CONSTRUCTION OF BUILDINGS OR PORTIONS THEREOF, FIRE PROTECTION PLANS SHALL BE SUBMITTED TO AND APPROVED BY THE LEBANON FIRE DEPARTMENT.
- PRIOR TO THE DELIVERY OF COMBUSTIBLE MATERIALS AND THE START OF ANY BUILDING CONSTRUCTION, THE WATER SUPPLY FOR FIRE PROTECTION, WHETHER TEMPORARY OR PERMANENT, SHALL BE ACCEPTABLE TO THE LEBANON FIRE DEPARTMENT AND SHALL BE INSTALLED AND AVAILABLE FOR USE.
- PRIOR TO THE FINAL OCCUPANCY OF BUILDING, THE PERMANENT WATER SUPPLY FOR FIRE PROTECTION, INCLUDING FIRE HYDRANT AND FIRE SUPPRESSION SYSTEMS, SHALL BE INSTALLED, TESTED, AND ACCEPTABLE TO THE LEBANON FIRE DEPARTMENT.
- FIRE DEPARTMENT VEHICULAR ACCESS TO ALL BUILDINGS UNDER CONSTRUCTION SHALL BE PROVIDED AT ALL TIMES, IN AREAS WHERE GROUND SURFACES ARE SOFT OR LIKELY TO BECOME SOFT, HARD ALL-WEATHER SURFACE ACCESS ROADS SHALL BE PROVIDED.
- COMBUSTIBLE TRASH AND DEBRIS SHALL BE PLACED COMPLETELY WITHIN AN APPROVED CONTAINER OR REMOVED FROM THE SITE AT THE CLOSE OF EACH WORKING DAY.
- FLAMMABLE OR COMBUSTIBLE LIQUIDS OR GASES SHALL BE STORED, HANDLED, AND USED ON THE CONSTRUCTION SITE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF NFPA 30, FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE; NFPA 54, NATIONAL FUEL GAS CODE; AND NFPA 58, LIQUEFIED PETROLEUM GAS CODE.
- TEMPORARY HEATING DEVICES SHALL BE OF AN APPROVED TYPE, LOCATED AWAY FROM COMBUSTIBLE MATERIALS, AND ATTENDED AND MAINTAINED BY COMPETENT PERSONNEL.
- SMOKING SHALL BE PROHIBITED, EXCEPT IN THOSE AREAS WHERE APPROVED, WHERE REQUIRED BY THE LEBANON FIRE DEPARTMENT, "NO SMOKING" SIGNS SHALL BE POSTED.
- CUTTING AND WELDING OPERATIONS SHALL BE IN ACCORDANCE WITH NFPA 51B, STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING, AND OTHER HOT WORK.
- EXTINGUISHING EQUIPMENT - AT LEAST ONE PORTABLE FIRE EXTINGUISHER HAVING A RATING OF AT LEAST 10-A-120-B-C SHALL BE WITHIN A TRAVEL DISTANCE OF 75 FT OR LESS TO ANY POINT OF A BUILDING UNDER CONSTRUCTION. PERSONNEL NORMALLY ON THE CONSTRUCTION SITE SHALL BE INSTRUCTED IN THE USE OF THE FIRE EXTINGUISHERS PROVIDED.

FIRE PROTECTION SCHEDULE

- F1 8" DI WATER MAIN
- F2 FIRE HYDRANT
- F3 8" DI WATER SERVICE LINE
- F4 26' WIDE PARKING LOT AISLE
- F5 EXISTING VEGETATION IN THIS AREA SHALL BE THINNED AND PRUNED REGULARLY AND ALL DEAD MATERIALS SHALL BE REMOVED REGULARLY
- F6 BUILDING FACE EXPOSED TO WILDLAND, TYP

LEGEND

- 30 FOOT DEFENSIBLE ZONE
- SHARED PARKING AISLE AND FIRE LANE
- EXISTING VEGETATION IN THIS AREA SHALL BE THINNED AND PRUNED REGULARLY AND ALL DEAD MATERIALS SHALL BE REMOVED REGULARLY



The Brickyard Residential Development

174 Hanover Street Extension
Lebanon, New Hampshire 03766

No.	Revision	Date	Appr'd
1	Response to City Comments	12/11/24	DF

Designed by	TMD	Checked by	MJV
Issued for		Date	

Permitting November 22, 2024

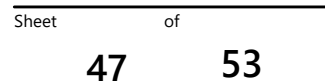
Not Approved for Construction
Wildland-Urban Interface Plan

Drawing Number

WU-1

Sheet 46 of 53

Project Number
52933.00

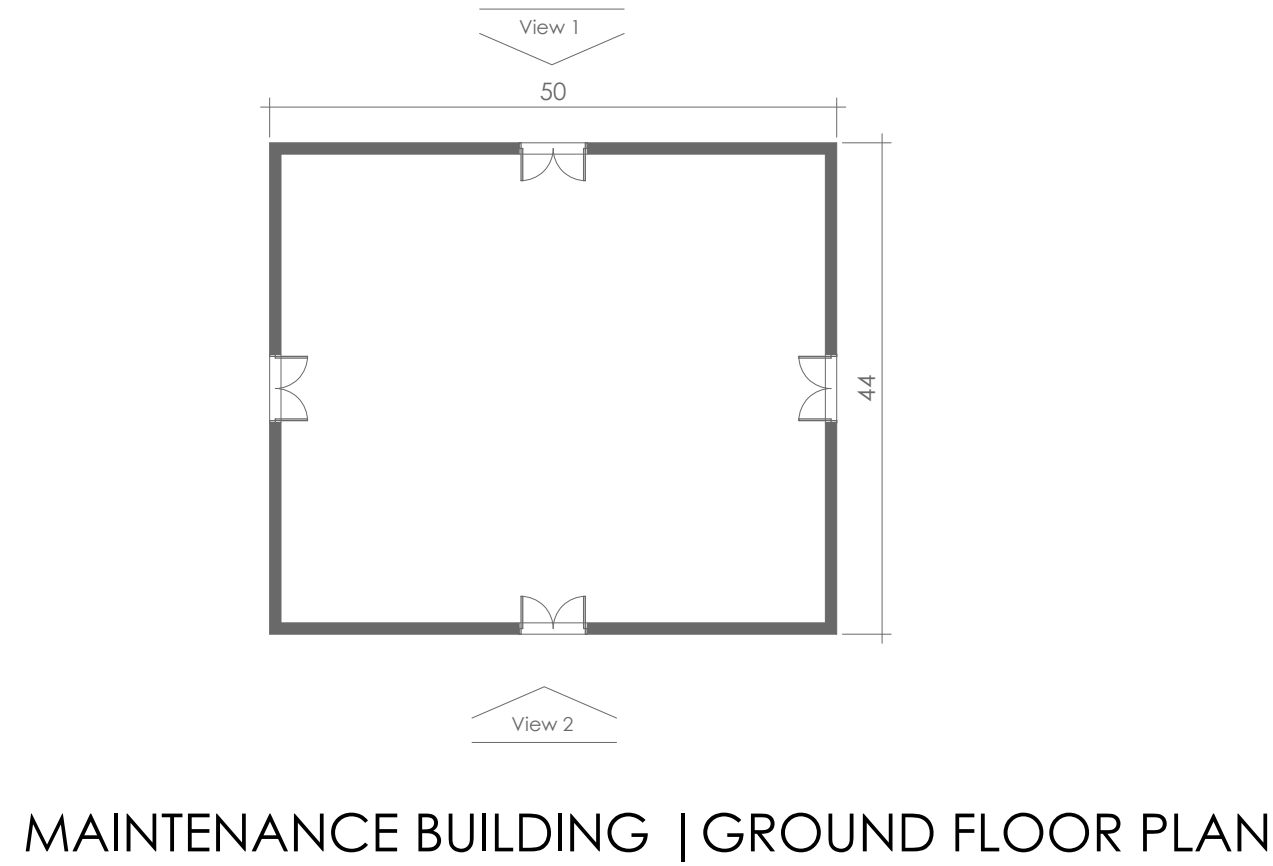
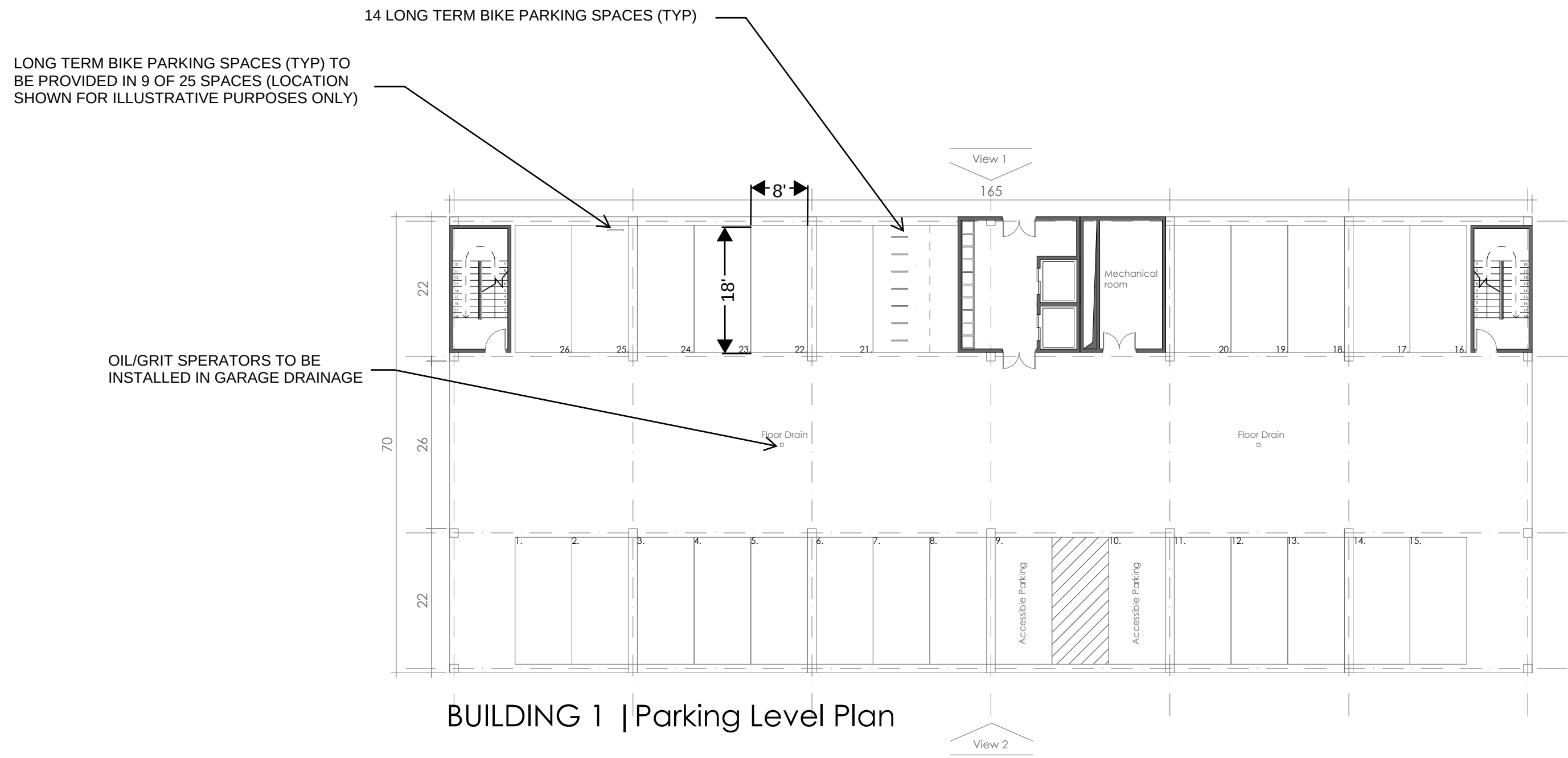


Calculation Summary						
Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
BLDG ENTRY DRIVES	0	1.18	3.0	0.2	5.90	15.00
OVERALL SITE	0	0.33	4.6	0.0	N.A.	N.A.
PARKING LOTS	0	1.26	3.7	0.4	3.15	9.25
SIDEWALKS	0	0.86	3.3	0.1	8.60	33.00
SITE ENTRY DRIVES	0	1.04	3.0	0.1	10.40	30.00
TOWNHOME DRIVEWAYS AND DRIVE LANES	0	0.81	2.1	0.0	N.A.	N.A.

FILE NAME: 2024-10-22 SL-1D THE BRICKYARD - LEBANON, NH - LED.dwg

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LONG TERM BIKE PARKING SPACE DETAIL SHOWN ON SHEET C7.2 OF SITE PLANS

Sheet 49 of 53

P3	Submission	VT	24/08/02
P2	Submission	SS	24/08/02
P1	Submission	SS	24/05/07
REV	DESCRIPTION	DRN	DATE



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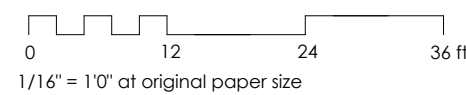
PROJECT
Lebanon NH

DRAWING STATUS
PLANNING

DRAWING NAME
BUILDING 1 & MAINTENANCE BUILDING
PROPOSED PLAN & ELEVATIONS
DRAWING NO.
0089-1201-F3
REV
F3

DATE
DECEMBER 11, 2024
SS
SCALE
1/16" = 1'0" @A1
DRAWN
DECEMBER 11, 2024
SS
CHECKED
VT

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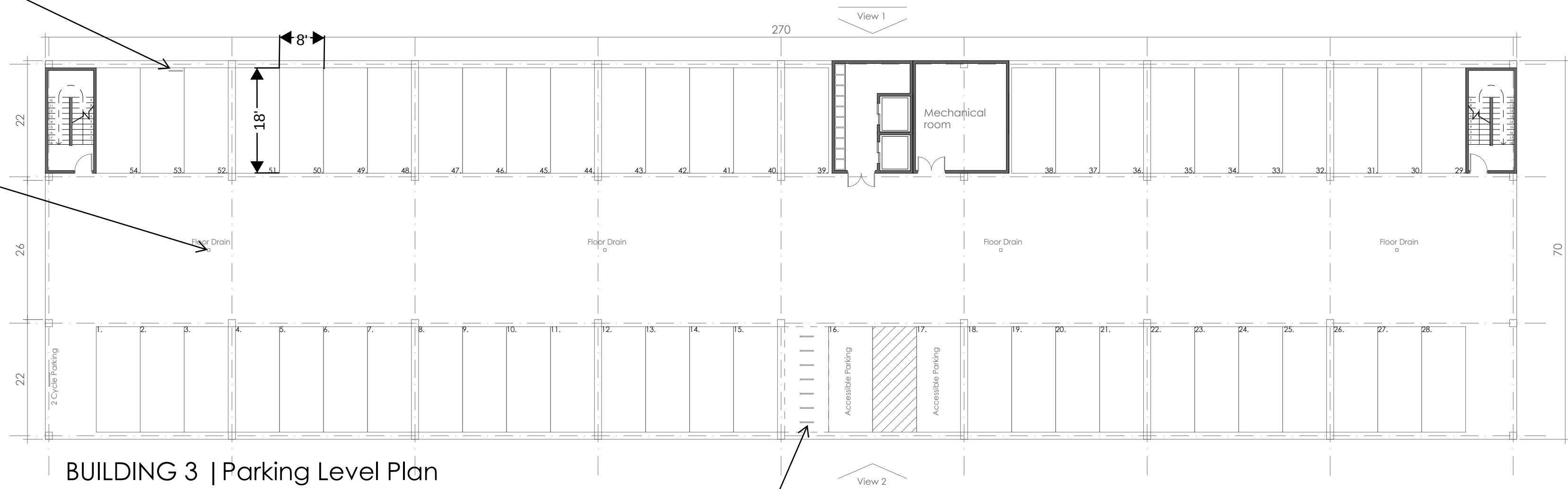


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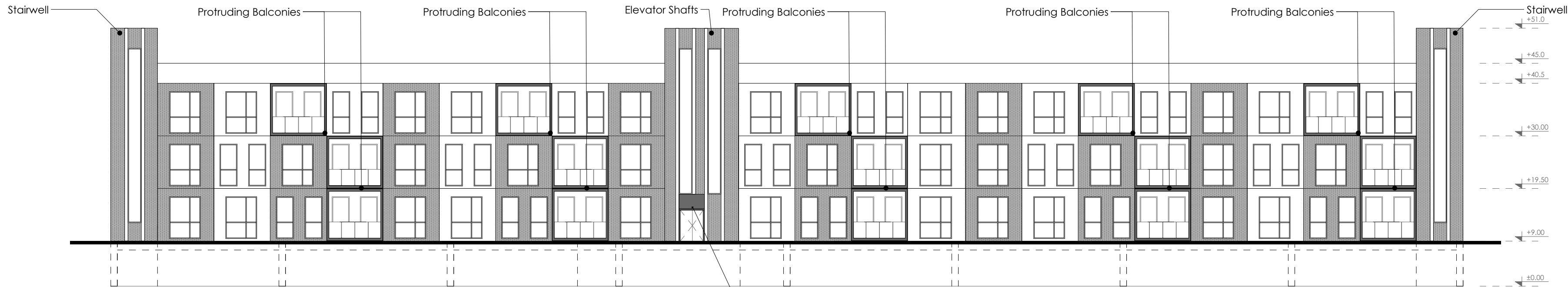
LONG TERM BIKE PARKING SPACES (TYP) TO BE PROVIDED IN 12 OF 53 SPACES (LOCATION SHOWN FOR ILLUSTRATIVE PURPOSES ONLY)

OIL/GRIT OPERATORS TO BE INSTALLED IN GARAGE DRAINAGE



BUILDING 3 | Parking Level Plan

14 LONG TERM BIKE PARKING SPACES (TYP)



BUILDING 3 | View 1 | Mountain Elevation



BUILDING 3 | View 2 | Lake Elevation

LONG TERM BIKE PARKING SPACE DETAIL SHOWN ON SHEET C7.2 OF SITE PLANS

Sheet 50 of 53

REV	DESCRIPTION	DRN	DATE
P3	Submission	VT	24/08/02
P2	Submission	SS	24/08/02
P1	Submission	SS	24/05/07



CLIENT

PROJECT
Lebanon NH

DRAWING STATUS
PLANNING

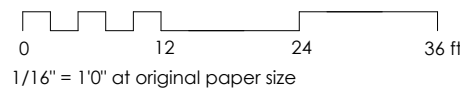
DRAWING NAME
BUILDING 2 | PROPOSED PLAN & ELEVATIONS

DRAWING NO. 0089-1202-F3
REV F3

DATE DECEMBER 11, 2024
DRAWN SS

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CHECKED VT

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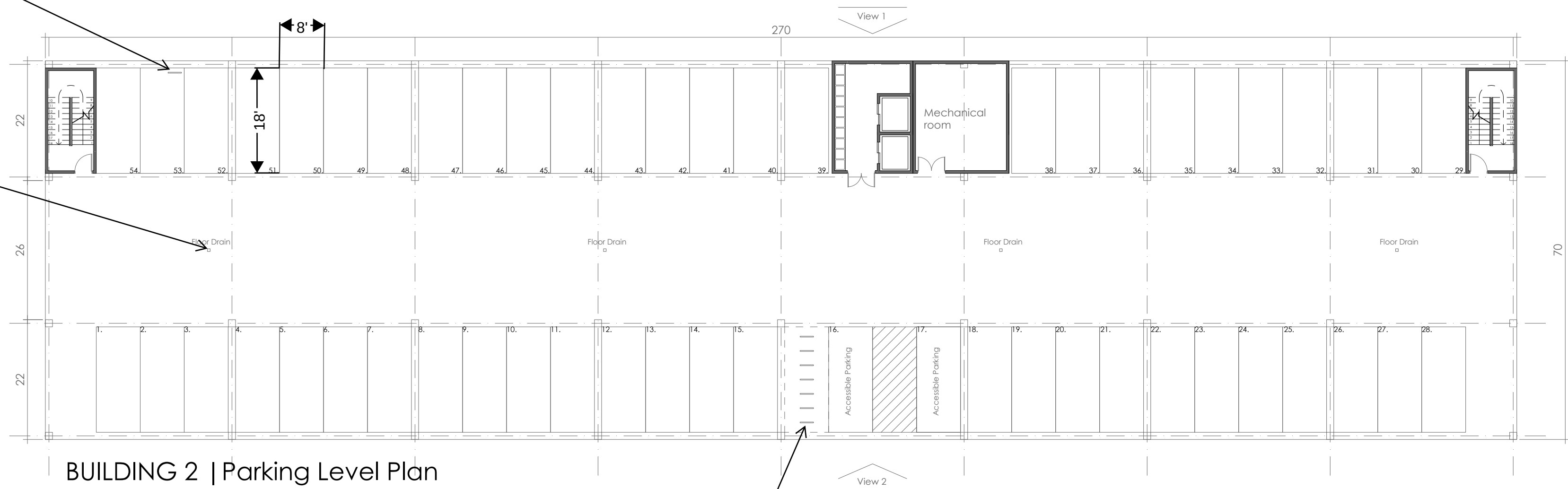


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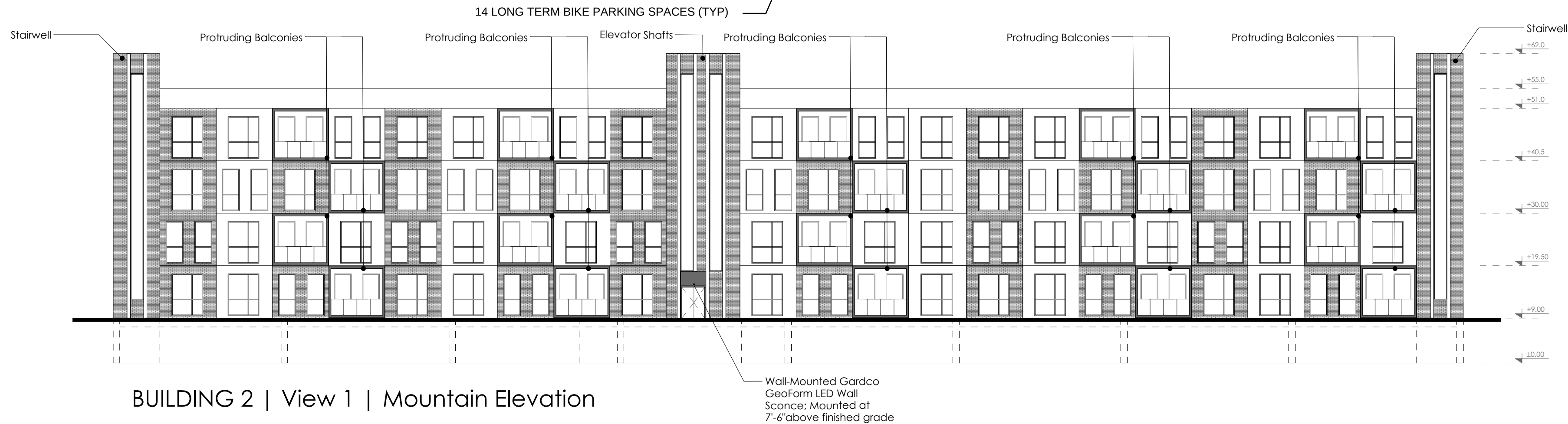
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LONG TERM BIKE PARKING SPACES (TYP) TO BE PROVIDED IN 12 OF 53 SPACES (LOCATION SHOWN FOR ILLUSTRATIVE PURPOSES ONLY)

OIL/GRIT OPERATORS TO BE INSTALLED IN GARAGE DRAINAGE



BUILDING 2 | Parking Level Plan



BUILDING 2 | View 1 | Mountain Elevation



BUILDING 2 | View 2 | Lake Elevation

LONG TERM BIKE PARKING SPACE DETAIL SHOWN ON SHEET C7.2 OF SITE PLANS

Sheet 51 of 53

P3	Submission	VT	24/08/02
P2	Submission	SS	24/08/02
P1	Submission	SS	24/05/07
REV	DESCRIPTION	DRN	DATE



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PROJECT
Lebanon NH

DRAWING STATUS
PLANNING

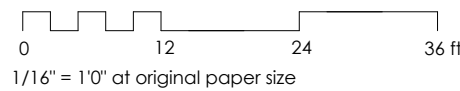
DRAWING NAME
BUILDING 3-5 | PROPOSED PLAN & ELEVATIONS

DRAWING NO. 0089-1203-F3 REV F3

DATE DECEMBER 11, 2024 DRAWN SS

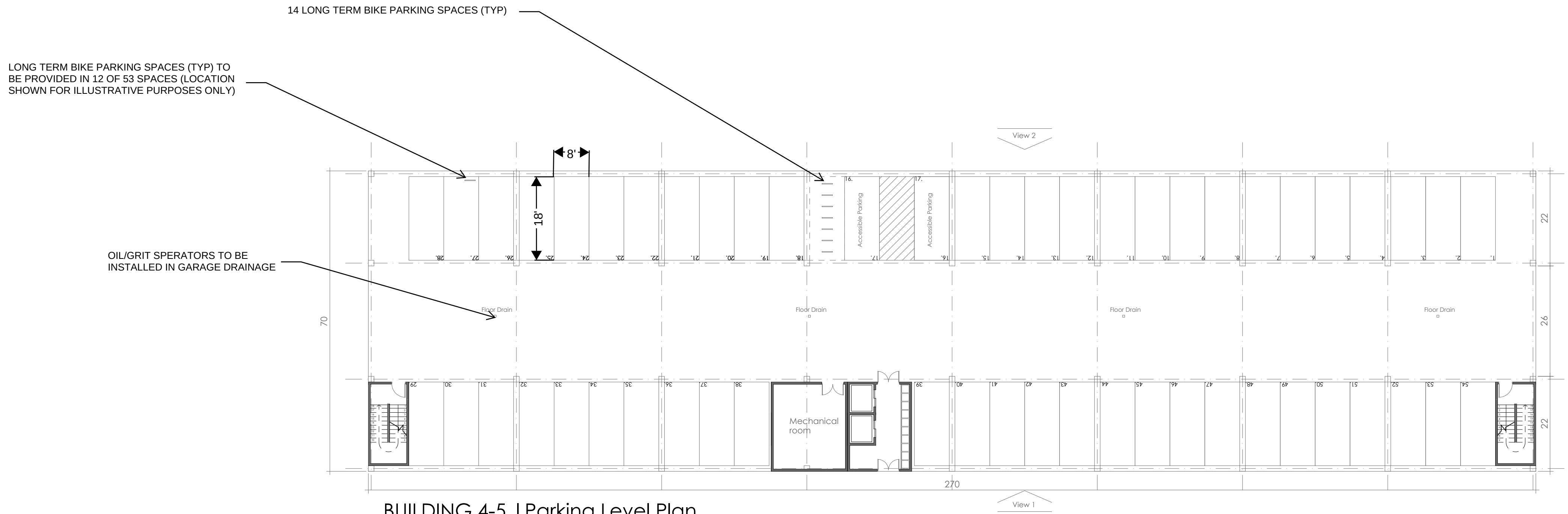
SCALE 1/16" = 1'0" @A1 CHECKED VT

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LONG TERM BIKE PARKING
SPACE DETAIL SHOWN ON
SHEET C7.2 OF SITE PLANS

Sheet 52 of 53

P3	Submission	VT	24/08/22
P2	Submission	SS	24/08/22
P1	Submission	SS	24/05/22
REV	DESCRIPTION	DRN	DATE



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PROJECT
Lebanon NH

DRAWING STATUS
PLANNING

DRAWING NAME
BUILDING 7-10 | PROPOSED PLAN & ELEVATIONS

DRAWING NO. 0089-1205-P3 REV P3

DATE DECEMBER 11, 2024 DRAWN SS

SCALE 1/16" = 1'0" @A1 CHECKED VT

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