HARTFORD PLANNING COMMISSION
July 29, 2024
Meeting Notice and Agenda

The Hartford Planning Commission will meet on Monday, July 29, 2024, beginning at 6:00 p.m. to consider the following Administrative Matters and Applications.

This meeting will be conducted in person at Hartford Town Hall, 171 Bridge Street, White River Junction, Vermont. In addition, you may join the meeting remotely as follows:

Microsoft Teams
Join the meeting now
Meeting ID: 253 029 686 683
Passcode: 4uPjNo

Dial in by phone
+1 802-377-3677,,286487089#
1 (802) 377-3677
Phone conference ID: 286 487 089#

If you have problems accessing this meeting, please email Jo-Ann Ells at jells@hartford-vt.org

A. Administrative Matters beginning at **6:00 p.m.**

1. Public Comment. 2. Minutes. 3. Administrative Permits. 4. Act 250 Applications. 5. Town Plan Steering Committee update. 6. Regional Planning Commission update. 7. Climate Action Plan update. 8. Modification to exiting cell tower by T-Mobile, 1405 Connecticut River Road. 9. Availability for the next Public Hearing.

B. Public Hearing, beginning at **6:30 p.m.**

1. Application #24-09 by 99 Depot Street, LLC (owner) and Orian Welling (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations to convert an existing building to a Multi-Unit Dwelling, lot 22-0253-000, 99 Depot Street, Wilder, in VR-C and R-1 zoning districts.

2. Application #24-10 by the Town of Hartford (owner/applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations and the Quechee Lakes Master Plan for an addition to the Quechee Fire Station, lot 12-0027-002, 131 Willard Road, Quechee, in the Quechee Lakes Planned Development.

3. Application #24-11 by 12 Tremont Street, LLC (owner) and Tim Sidore (applicant) for Final Approval of a Planned Development under the Subdivision Regulations and section 260-47 of the Hartford Zoning Regulations for a Multi-Unit Dwelling, lot 09-0072-000, 1200 Christian Street, Hartford, in a R-3 zoning district.

4. Application #24-12 by 12 Tremont Street, LLC (owner) and Tim Sidore (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations to convert an existing structure into a Multi-Unit Dwelling, lot 09-0072-000, 1200 Christian Street, Hartford, in a Planned Development.

Please call the Department of Planning and Development (802) 295-3075 to request copies of the application materials. Persons wishing to be heard regarding these applications may do so by participating in the meeting, having another party participate in the meeting on their behalf, and/or by submitting written testimony.

An interested person who has **participated** in a municipal regulatory proceeding may appeal a decision rendered in that proceeding to the Vermont Environmental Court. Participation in a local regulatory proceeding shall consist of offering, through oral or written testimony, evidence or a statement of concern related to the subject of the proceeding.

John Reid, Chair

Planning Commission
Administrative Agenda
July 29, 2024

1. Public Comment

2. Minutes

    - June 24, 2024

3. Administrative Permits

    - Upper Valley Aquatic Center, play structure, Arboretum Drive

4. Act 250 Applications

    - Catamount, Self-Storage, Route 14
    - Jasmin Auto, Repair Parking, Jasmin Lane

5. Town Plan Steering Committee update (Bruce)

6. Regional Planning Commission update (Bruce)

7. Climate Action Plan update(John R.)

8. Modification to exiting cell tower by T-Mobile, 1405 Connecticut River Road

9. Availability for the next Public Hearing (Thursday, September 5, 2024)

DRAFT
Minutes
Hartford Planning Commission
June 24, 2024

THIS MEETING WAS CONDUCTED IN COMPLIANCE WITH THE VERMONT OPEN MEETING LAW IN PERSON WITH ELECTRONIC PARTICIPATION AVAILABLE

Present: John Reid, Toby Dayman, Colin Butler, Dylan Kreis, Kim Souza, Selectboard Liaison, and Jo-Ann Ells, Zoning Administrator

Absent: Bruce Riddle, Dillon Bianchi, and John Heath

John Reid read the hybrid meeting script, and took a roll call.

Administrative Matters

1. Public Comment

None

2. Minutes

Colin Butler moved to approved the minutes of May 20, 2024 with several corrections. Toby Dayman seconded, and the motion passed unanimously.

3. Administrative Permits

Jo-Ann Ells reviewed the following projects that were issued administrative permits:

- U.V. Haven 55 sq. ft. addition to food shelf
- U.V. Haven shed
- White River Urology, fence & walkway

4. Act 250 Applications

Jo-Ann Ells reviewed the following Act 250 application noting that a Zoning Permit had been issued for applicable parts of the project:

- 1403 Quechee West Hartford Road

  "Construction of an unheated garage attached to the main house; restoration of the outdoor riding arena from tennis court to riding arena; and the construction of a new on-site wastewater disposal system to serve the equestrian center and the two outbuildings that will be renovated into living spaces."

5. Town Plan Steering Committee update

Tabled

6. Regional Planning Commission update

Tabled

7. Climate Action Plan update

John Reid noted that he did not have anything to report.

8. Availability for the next Public Hearing

John Reid noted that he was not available for the July 29th Hearing.

Public Hearing

John Reid opened the Public Hearing and noted that the Hearing will not continue past 9:30PM unless agreed upon by the Commission. He explained that since only a quorum of the Commission was present, any vote would need unanimous consent to pass. He explained the Hearing process, interested party rule, asked that, given the length of the agenda, comments from the public be limited to 2 minutes, and administered the oath.

1. Application #24-05 by the Bettis Family Trust and Sean and Nadine Bettis (owners/applicants) for approval of a lot line adjustment between lots 03-0067-000 and 03-0067-004, 349 and 406 Rays Way, West Hartford, in RL-3 and Rl-10 zoning districts.

Skip Nalette of Pathways Consulting was present.

Skip Nalette gave an overview of the application and noted that the exchange of land was between family members.

John Reid asked about the area on the survey labeled “Parcel A.”

Skip Nalette explained that it represents the area of land being exchanged.

John Reid asked if the portion of the right-of-way being eliminated benefited the adjacent lot. Skip Nalette confirmed it did not.

There was no public comment.

Colin Butler moved to close the Public Hearing. Toby Dayman seconded, and the Public Hearing was closed.

Colin Butler moved to approve the application. Dylan Kreis seconded, and the motion passed unanimously.

2. Application #24-06 by Nelson Fogg Sr. (owner/applicant) for approval of the subdivision of lot 20-0031-000 into two lots, 429 Norwich Avenue, Hartford, in a R-1 zoning district.

Skip Nalette of Pathways Consulting was present.

Skip Nalette gave an overview of the application.

Toby Dayman asked if the force main indicated on the survey was capped. Skip Nalette noted it was proposed.

Colin Butler asked if there was room to provide driveway access if the adjacent lot to the left applied for a subdivision. Skip Nalette confirmed there was room.

There was no public comment.

Toby Dayman moved to close the Public Hearing. Colin Butler seconded, and the Public Hearing was closed.

Colin Butler moved to approve the application. Toby Dayman seconded, and the motion passed unanimously.

3. Application #24-07 by the State of Vermont (owner/applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations for approval of additions and improvements to the Windsor District Court, lot 46-0024-001, 82 Railroad Row, White River Junction, in CB and Design Reivew zoning districts.

Joe Aja and Sherilyn Lafley were present.

Jo-Ann Ells noted several corrections to the draft Findings of Fact and explained that the Commission's review criteria as limited by State Statue.

Sherilyn Lafley gave an overview of the project.

Joe Adja requested that Findings 14 and 20 be removed because they are out of the Commission's purview.

It was noted that the Certificate of Occupancy would be limited to items in the Town purview.

Toby Dayman requested that the caliper of the proposed tree be specified as 2 ½"-3' and the to the title of the plan set be changed to "Windsor District Court."

It was noted that parking and the EV charging spots would be available to the general public after hours, and that there was no room to expand the parking lot.

It was clarified that while one of the EV charging station spaces would be built to ADA standards, it would not be signed as such.

Dylan Kreis asked if the adjacent public park would be disturbed during construction. Joe Aja confirmed it would not be disturbed.

Sherilyn Lafley noted that the Court would not be occupied during construction. She explained that office space was being leased on Railroad Row and in person Hearings would take place in Woodstock.

There was no public comment.

Colin Butler asked about the dimension of the proposed terracotta tile. Joe Aja explained that the tiles are 6" high and 6' wide and that the building's façade was being redone to provide better insulation and address a water issue.

Colin Butler moved to close the Public Hearing. Toby Dayman seconded, and the Public Hearing was closed.

Colin Butler moved to approve the application with the noted changes. Dylan Kreis seconded, and the motion passed unanimously.

Noting new attendees, John Reid administered the oath.

4. Application #24-01 by Guernsey Ruth Hall Revocable Trust (owner) and Summit Distributing (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations for approval of a car wash, lot 44-0041-000, Sykes Mountain Avenue, White River Junction, in an IC zoning district. (Continued from May 20, 2024)

Tom Frawley, Nicole Duquette, and Aaron Farro were present.

Jo-Ann Ells stated that the application was last discussed in April and noted that a 3rd party review of the noise study had been completed.

Nicole Duquette reviewed changes to the plans since April.

Colin Butler noted a typo in Finding #11 and asked the applicant if they thought the concerns of the neighbors had been addressed. Nicole Duquette stated that while she could not speak for the neighbors, she believed their concerns had been addressed.

Colin Butler asked how/if the wooded area would be maintained. Nicole Duquette stated that the wooded area would be left natural.

Toby Dayman suggested the sound barrier be extended to the fence to on the west side of the lot.

Toby Dayman questioned if the light pole beyond the pavement in the rear of the lot was needed. Nicole Duquette noted that it could be removed.

Toby Dayman asked how someone could exit the wash lane if they, for example, realized they did not have their wallet. Tom Frawley explained that if the vehicle was in the inside lane with the gate, they would push the help button on the kiosk and an attendant would assist them and if the vehicle was in the outside lane, they could exit through the bypass lane as there is no gate for this lane.

Colin Butler asked what would occur if the neighbors are bothered by noise and it is determined that the levels in the sound report are exceeded. Tom Frawley acknowledged that this would be an enforcement issue and they would need to comply.

Dylan Kreis noted that the gate shown on the outside lane needed to be removed from the plans.

Dylan Kreis expressed concern with the lack of a clear escape route. It was agreed that the guardrail on the east side of the lot would be removed, and that information regarding the employees responsibility/training regarding managing on site congestion and emergencies would be provided to the Chair and Dylan Kreis for review and approval before a Zoning Permit is issued.

John Reid asked about maintenance and ownership of the fence on the neighbor's property once the fence is installed. Tom Frawley stated that the fence would be owned and maintained by the neighbor.

There was no public comment.

Colin Butler moved to close the Public Hearing. Toby Dayman seconded, and the Public Hearing was closed.

A poll of the Commission revealed that all Commissioners were in favor of granting approval.

Toby Dayman moved to approve the application with the noted changes. Colin Butler seconded, and the motion passed unanimously.

5. Application #24-08 by Craftstudies Inc. (owner) and The Upper Valley Haven (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations for an Emergency Shelter, lot 45-0003-000, 608 North Main Street, White River Junction, in the HCR Zoning District.

Michel Redmond, Doug Sonsalla, Adam Morse, Paul Simon, Mat Hardison, and Kim Butler were present.

Micheal Redmond gave an overview of the project and reasons a shelter is needed.

Noting the Planning Commission had approved an Emergency Sheter on the lot in December of 2023, Doug Sonsalla reviewed why the applicant had redesigned the project and gave an overview of the application.

John Reid noted that the applicant's plans to stabilize the bank was appealing.

Doug Sonsalla reviewed the design, materials, and drainage associate with the wall.

John Reid asked what the top of the wall would look like. Doug Sonsalla explained that it would be either be treated or capped.

Doug Sonsalla stated that construction of the wall was anticipated to take 2-3 weeks.

Mat Hardison explained that the building/building foundation could be removed before or after the wall is constructed as long as there is access, and the wall is installed beyond the building's footings.

Toby Dayman asked about access to the existing right-of-way on the west side of the property. Doug Sonsalla noted that access would remain, and a fence would be installed on the east side of the right-of-way.

It was noted that plantings and hardscape in front of the lot would be altered after the roundabout is constructed.

Toby Dayman asked for confirmation that the emergency travel lane will be plowed. Doug Sonsalla confirmed.

Colin Butler asked about the height of the exposed parts of the wall. Doug Sonsalla stated that it would range form 7' to 2'. Colin Butler noted that he was not adverse to leaving the wall untreated. Doug Sonsalla noted that they might opt to do this behind the building.

There was a discussion regarding the proposed mountable curbing.

Dylan Kreis stated that the project appeared to be more sustainable design. He asked if access behind the wall would be needed for maintenance.

Mat Hardison noted that this has not been determined and noted that the area could be crushed stoned or grass.

The material of the dumpster enclosure was reviewed.

John Reid asked what would happen if more than 17 parking spaces were needed. Micheal Redmond noted that The Haven can control vehicular traffic to some extent, and they would need to employ measures such as off-site parking and car sharing.

Colin Butler asked if the existing foundation would be buried. Doug Sonsalla noted it would be removed and filled in.

There was no public comment.

Colin Butler moved to close the Public Hearing. Dylan Kreis seconded, and the Public Hearing was closed.

Colin Butler moved to approve the application with the noted changes. Toby Dayman seconded, and the motion passed unanimously.

Adjournment

At 9:02 p.m., Toby Dayman moved to adjourn. John Reid seconded, and the Hearing was adjourned.

Respectively Submitted,

_____

Toby Dayman, Clerk

Planning Commission Terms

Bruce Riddle 02-07-25
Dillon Bianchi 09-05-25
Dylan Kreis 6-26-26
John Reid 02-05-27
John Heath 03-11-27
Toby Dayman 06-24-27
Colin Butler 06-24-27

Memorandum

To: Hartford Planning Commission

From: Jo-Ann Ells

Date: July 15, 2024

Re: 1405 Connecticut River Road, Wireless Telecommunications Facility

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Attached please find materials related to proposed modifications of an existing telecommunications facility located at 1405 Connecticut River Road by T-Mobile. This will be discussed during the administrative portion of your July 29th agenda.

The Planning Commission is being given a 60-day "Advanced Notice" to submit comments before the Applicant submits a formal application to the Public Utility Commission. Once an application is submitted, there will be a 30-day comment period for the Planning Commission to submit any additional comments. (See "Advance Notice Submission.")

T-Mobile is proposing to collocate telecommunication antennas and equipment at an existing telecommunications facility located at 1405 Connecticut River Road.

Modifications include:

- Extending the height of the monopole
- Installation of 6 antennas
- Installation of 9 reverse radio units
- Installation of equipment in the existing equipment compound

There are no changes proposed to the existing access road, the monopole will continue to be camouflaged with "tree branches"

(See project narrative and plans.)

SPRINGER LAW OFFICE, PLLC

Attorney At Law

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June 18, 2024

Town of Hartford Selectboard
Hartford Town Hall
171 Bridge Street
White River Junction, VT 05001

Town of Hartford Planning Commission
Hartford Town Hall
171 Bridge Street
White River Junction, VT 05001

RE: Advanced Notice of a collocation of telecommunications antennas and equipment at an existing telecommunications facility located at 1405 Connecticut River Road, Hartford, VT.

Dear Selectboard and Planning Commission:

Enclosed please find an Advanced Notice in support of a proposed modification to a wireless Telecommunications facility at 1405 Connecticut River Road, Hartford, VT. The Advanced Notice was e-filed with the Vermont PUC.

If you have any questions, please let me know.

Jonathan S. Springer

cc: T-Mobile Northeast LLC

RECEIVED
JUN 20 2024
By

ADVANCE NOTICE SUBMISSION

RE: ***60-day pre-filing notice of intent to file application to the Vermont Public Utility Commission for Certificate of Public Good Under Title 30 Chapter 5, Section 248a***

Wireless Facility Modification regarding the facility at 1405 Connecticut River Road, Hartford, VT

To Whom It May Concern:

This firm, in conjunction with local counsel David L. Grayck, Esq., represents T-Mobile Northeast, LLC ("T-Mobile") regarding the intent of T-Mobile to submit an application to the Vermont Public Utility Commission ("the Commission") pursuant to 30 V.S.A. §248a and the PUC's Standards and Procedures[1] seeking approval for modification of a personal wireless service facility ("the Project"), at 1405 Connecticut River Road, Hartford, VT ("the Property").

Under the relevant portions of Act 248a, and the Standards and Procedures, the Project is defined as "a project of limited size and scope" ("LSS")[2]. The LSS process requires an applicant to provide written notice to specified parties, at least 60 days in advance of filing a Section 248a application, which notice must contain meet certain notice and filing requirements. Only after that 60-day notice provision is observed, may an applicant file the actual application with the PUC. You are receiving this letter as you are such a party entitled to advanced notice.

Enclosed with this Advanced Notice is a set of site plans, radio frequency ("RF") plots showing the expected RF coverage, photosimulations and a project narrative.

Section 248a requires T-Mobile to provide written notice to you at least 60 days in advance of filing an application for a Certificate of Public Good. When that application is submitted to the PUC, any comments, motions to intervene, or requests for hearing regarding the Project must be filed with the Commission within the thirty (30) comment period commencing once the application is filed with the Commission. This notice is being given to you pursuant to the Standards and Procedures; the said Amended Order is available at the Commission's office or the website of the PUC at: https://puc.vermont.gov/section-248a-standards-and-procedures-re-telecommunications-facilities, as well as from the Clerk of the Commission at puc.clerk@vermont.gov.

In accordance with the Standards and Procedures, attached to this notice is a statement which itemizes the rights and opportunities available to the legislative body and planning commission of each municipality under Section 248-a(c)(2), (e)(2), (m), (n), (o) and (p).

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[1] The revised Standards and Procedures Implementing 30 VSA § 248a effective January 18, 2023 (the "Standards and Procedures").

[2] T-Mobile believes that the Project is also regulated by Section 6409 of the Federal Spectrum Act (47 U.S.C. Sect. 1455(a)), which governs certain "eligible facilities" as that term is defined by federal law and regulations. T-Mobile does not waive any rights it has pursuant to Section 6409, but is submitting this Advanced Notice in compliance with Vermont law.

You will be notified when the application is filed with the Commission, which will be at least 60 days and no longer than 180 days from the date of this advance notice. During this advance notice time frame, you may direct questions to undersigned counsel. Questions or comments regarding the proposed facility may be submitted to my attention at the address below. Thank you for your attention to this matter.

Respectfully submitted,

Dated: June 18, 2024

By: /s/ Jonathan S. Springer

Jonathan S. Springer, Esq.
Springer Law Office, PLLC
118 Maplewood Avenue, Suite C-3
Portsmouth, NH 03801
Tel (603) 319-8741
Email: jspringer@jspringerlaw.com

cc Town of Hartford Selectboard
cc: Town of Hartford Planning Commission
cc: Two Rivers - Ottauquechee Regional Planning Commission
cc: Vermont Public Utility Commission (via ePUC)
cc: Vermont Agency for Natural Resources (via ePUC)
cc: Vermont Division for Historic Preservation (via ePUC)
cc: Vermont Dept of Public Service (via ePUC)
cc: Director of Public Advocacy of the Dept of Public Service (via ePUC)
cc: Vermont Agency of Transportation (via ePUC)
cc: Vermont Natural Resources Board (via ePUC)
cc: Adjoining Property Owners, as shown on Exhibit 1
cc: Landowner
cc: T-Mobile Northeast, LLC
cc: Law Office of David L. Grayck, Esq.

Standards and Procedures Statement

In accordance with the Standards and Procedures, the following statement itemizes the rights and opportunities available to the legislative body and planning commission of each municipality under Section 248a(c)(2), (e)(2), (m), (n), (o) and (p).

248a(c)(2) Unless there is good cause to find otherwise, substantial deference has been given to the plans of the affected municipalities; to the recommendations of the municipal legislative bodies and the municipal planning commissions regarding the municipal plans; and to the recommendations of the regional planning commission concerning the regional plan. Nothing in this section or other provision of law shall prevent a municipal body from basing its recommendations to which substantial deference is required under this subdivision (2) on an ordinance adopted under 24 V.S.A. § 2291(19) or bylaw adopted under 24 V.S.A. Chapter 117 by the municipality in which the facility is located. A rebuttable presumption respecting compliance with the applicable plan shall be created by letter from an affected municipal legislative body or municipal planning commission concerning compliance with the municipal plan and by a letter from a regional planning commission concerning compliance with the regional plan.

248a(e)(2) On the request of the municipal legislative body or the planning commission, the applicant shall attend a public meeting with the municipal legislative body or planning commission, or both, within the 60-day notice period before filing an application for a certificate of public good. The Department of Public Service shall attend the public meeting on the request of the municipality. The Department shall consider the comments made and information obtained at the meeting in making recommendations to the Commission on the application and in determining whether to retain additional personal under subsection (o) of this section.

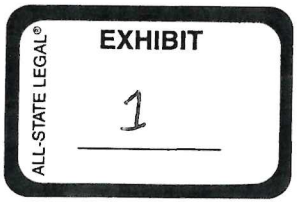
248a (m) Municipal bodies; participation. The legislative body and the planning commission for the municipality in which a telecommunications facility is located shall have the right to appear and participate on any application under this section seeking a certificate of public good for the facility.

248a (n) Municipal recommendations. The Commission shall consider the comments and recommendations submitted by the municipal legislative body and planning commission. The Commission's decision to issue or deny a certificate of public good shall include a detailed written response to each recommendation of the municipal legislative body and planning commission.

248a (o) Retention; experts. The Department of Public Service may retain experts and other personnel as identified in Section 20 of this title to provide information essential to a full consideration of an application for a certificate of public good under this section. The Department may allocate the expenses incurred in retaining these personnel to the applicant in accordance with Section 21 of this title. The Department may commence retention of these personnel once the applicant has filed the 60-day notice under this subsection (e) of this section. A municipal legislative body or planning commission may request that the Department retain

these personnel. Granting such a request shall not oblige the Department or the personnel it retains to agree with the position of the municipality.

248a (p) Each legislative body and planning commission is hereby informed of the existence of the guide published under Section 248-a(p) available through the Vermont Department of Public Service, which may be obtained at the Department of Public Services' website, at: https://publicservice.vermont.gov/content/public-guide-section-248a-process . The purpose of the guide is to explain the process of reviewing telecommunication facilities under Section 248-a for use by local governments, regional planning commissions and members of the public who seek to participate in the process.



Richard Michael Luce
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White River Junction, VT 05001

John Bugbee, Tr.
Barbara Bugbee, Tr.
Bugbee Family Trust
1751 Connecticut River Road
White River Junction, VT 05001

Kelsey Mae Thibodeau
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Carol Peper
1282 Connecticut River Road
White River Junction, VT 05001-2010

Hartford Select Board
Hartford Town Hall
171 Bridge Street
White River Junction, VT 05001

Hartford Planning Commission
Department of Planning & Development
171 Bridge Street
White River Junction, VT 05001

State of Vermont
Agency of Transportation
133 State Street
Montpelier, VT 05633-5001

Secretary Joe Flynn
Vermont Agency of Transportation
219 North Main Street
Barre, VT 05641

RECEIVED
JUN 20 2024
By

PROJECT NARRATIVE

T-Mobile Northeast, LLC ("T-Mobile) is proposing to collocate telecommunications antennas and equipment to an existing telecommunications facility consisting of an existing 81' "monopine" (monopole) tower at 1405 Connecticut River Road, Hartford, VT. (T-Mobile has measured the top of the existing monopole to be at 81 feet above ground level ("AGL") but there are existing antennas and camouflage, ie, fake tree branches, that extend to 83.9 feet AGL.) Currently, T-Mobile has no antennas mounted on the monopole tower.

T-Mobile intends to make the following changes at the facility (collectively referred to below as the "Project"), as detailed on the enclosed Site Plans:

(a) Extend the existing monopole by twenty feet (20') so that the top of the tower will be at one hundred and one feet (101') AGL. The centerline of T-Mobiles antennas will be at 95' AGL and the top of the camouflage will be at approximately 104' AGL. See Sheet C-201 on the submitted Site Plans

(b) Install six (6) new antennas. Three (3) of the new antennas will measure approximately 75.8" x 11.3"; and, three (3) of the new antennas will measure approximately 95.9" x 24". All of the antennas will be behind the camouflage. See Sheet C-201. The centerline of the new antennas will be approximately 95' AGL. See Sheet C-201.

(c) Install nine (9) new reverse radio units ("RRUs"). Three (3) of the new RRUs will measure approximately 15.7" x 7.5" and six (6) of the new RRUs will measure approximately 15.7" x 12.1". The proposed RRUs will not be visible

as they will be located entirely behind the antennas and/or mount, in addition to being behind the camouflage. See Sheet C-002.

(d) The proposed facial surface area of the new antennas and equipment will be 65.82 sq. ft., but all of the antennas and RRUs will be behind the camouflage of the monopine. See Sheet C-002 and C-201 on the submitted Site Plans.

(e) The new antenna mounts will extend horizontally a distance of eight feet (8') from the monopine but will be within the camouflage. The very top of the camouflage will extend vertically a distance of three feet (3') above the top of the extension. See Sheet C-002 and C-201 on the submitted Site Plans.

(f) T-Mobile is leasing an area measuring 10' x 15' for its base equipment. The leased area is entirely within the existing equipment compound, immediately adjacent to the base of the tower. See Sheet C-101. There will be no vegetation cleared as a result of this project and no additional impervious surface. See Sheet C-002.

(g) There will be a 10' x 15' concrete pad on which two (2) equipment cabinets, a generator and associated equipment will be placed. See Sheet C-101 and Sheet C-102. There will be an ice bridge (cable tray) running from the base equipment to the monopole tower, which will be off the ground and will hold the cables. See Sheet C-101 and Sheet C-102. There will be an H-frame on the pad which will hold more an additional cabinet and other equipment. There will be a canopy over the concrete pad to protect the equipment from the elements. See Sheet C-102

(h) T-Mobile will be using the existing access to the tower compound.

(i) There will be a canopy over part of the concrete pad to protect the cabinets from the elements. As the canopy is directly over the concrete pad, the canopy does not add any impervious surface to the facility. See Sheet C-102.

(j) Install ancillary improvements and appurtenances consisting of conduits and hardware necessary for the operation of the Facility.

(k) The proposed project will not involve clearing or excavations outside the current tower site, that is, all of the new antennas will be on the tower and the base equipment is going in the existing compound and therefore no outside ground disturbance or excavation is necessary. See Sheet C-001. The existing fence line is not being changed. See Sheet C-101.

Radio frequency ("RF") plots showing the lack of current RF coverage for T-Mobile in the area and showing the anticipated RF coverage if the site is approved are submitted with this narrative. Photosimulations showing that the current tower is not visible from the locations indicated and it is expected that this will not change after the project is done are also submitted.

Pursuant to 248a(e)(3), an applicant is required to provide a written assessment of the co-location requirements of subdivision (c)(3) of the statute, as those requirements pertain to the proposed telecommunications facility. In turn, the provisions of subsection (c)(3), require that if the proposed facility relates to the provision of wireless service, the applicant must show that the proposed facility reasonably cannot be co-located on or at an existing telecommunications facility, or such co-location would cause an undue adverse effect on aesthetics.

In this case, T-Mobile is not proposing a new facility, but is seeking to add antennas to an existing tower, in other words, T-Mobile is co-locating on an existing tower. The purpose of a

co-location requirement is to avoid building new towers where a carrier can install its antennas on an existing tower. Here, T-Mobile meets that purpose as it is proposing to co-locate on an existing tower.

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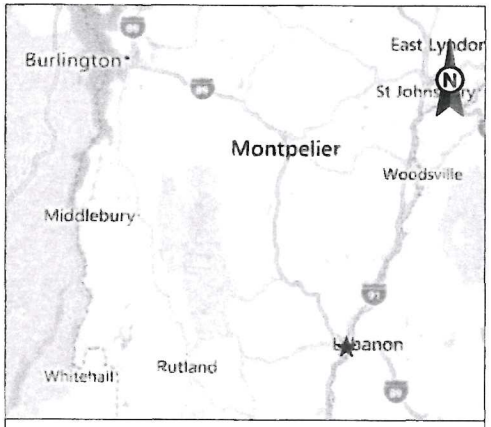
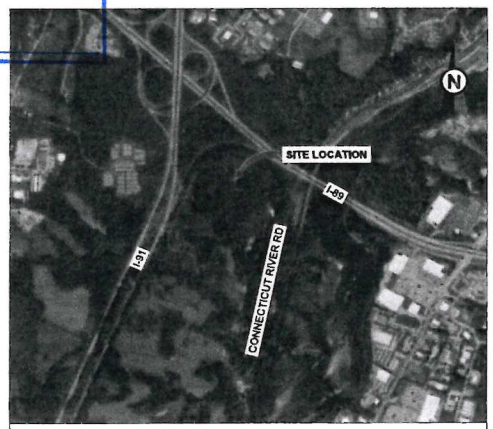


VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: WEST LEBANON
ATC SITE NUMBER: 208135
T-MOBILE SITE NAME: 4LN0802_ATC
T-MOBILE SITE NUMBER: 4LN0802A
SITE ADDRESS: 1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047
SITE CLASS: STEALTH - MONOPINE



LOCATION MAP

T-MOBILE COVERAGE STRATEGY COLLOCATION PLAN
67E998E 6160 CONFIGURATION

COMPLIANCE CODE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

2015 IBC
NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2017 W/ AMND)
VERMONT PLUMBING CODE (IPC 2018 W/ AMND)
2020 VERMONT COMMERCIAL BUILDING ENERGY STANDARDS (IECC 2018 W/ AMND)
FIRE CODE (NFPA 1, 2015 W/ AMND)
2015 VERMONT FIRE '&' BUILDING CODE
VERMONT RESIDENTIAL CODE (IRC 2012)

APPROVED
By Craig Cody at 4:40 pm, Apr 03, 2024

APPROVED
By Adam Alexander at 8:36 am, Apr 04, 2024

APPROVED
By KMeegan1 at 3:28 pm, Apr 05, 2024

APPROVED
By DJimine4 at 4:06 pm, Apr 05, 2024

UTILITY COMPANIES

POWER COMPANY: GREEN MOUNTAIN POWER
PHONE: (888) 835-4672

TELEPHONE COMPANY: UNKNOWN
PHONE: N/A

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047
COUNTY: WINDSOR

GEOGRAPHIC COORDINATES:

LATITUDE: 43.63487527

LONGITUDE: -72.33502626

GROUND ELEVATION: 625' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

T-MOBILE NORTHEAST LLC
15 COMMERCE WAY
NORTON, MA 02766

ENGINEER:

ATC TOWER SERVICES, LLC
1 FENTON MAIN, STE 300
CARY, NC 27511

PROPERTY OWNER:

RICHARD M LUCE
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES INSTALLING EQUIPMENT CABINETS ON A PROPOSED CONCRETE PAD INSIDE A 10' X 15' GROUND SPACE WITHIN THE EXISTING COMPOUND, AND INSTALLING NEW EQUIPMENT AND MOUNTS ON THE EXISTING TOWER.

TOWER SCOPE:
INSTALL (3) SECTOR FRAME(s), (1) COLLAR MOUNT(s), (6) ANTENNA(s), (6) RRU(s), AND (2) ERICSSON HYBRID TRUNK CABLE(s)

GROUND SCOPE:
INSTALL (1) CONCRETE PAD, (1) CANOPY, (1) ICE BRIDGE, (1) GPS ANTENNA, (1) GENERATOR, UNISTRUT(s), (1) PPC, (1) ATS, (1) AAV CABINET, (4) LED WORK LIGHT(s), (1) LIGHT SWITCH/TIMER, (1) ENCLOSURE 6160_v2 AC CABINET, (1) RP 6651, (1) CSR IXRe V2, AND (1) B160 BATTERY CABINET

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. HANDICAP ACCESS IS NOT REQUIRED.
6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).

PROJECT LOCATION DIRECTIONS

FROM MONTPELIER VIA I-89 S. FOLLOW I-89 S. 52.3 MI. TAKE THE EXIT ONTO I-91 N TOWARD WHITE RIVER JCT. 0.9 MI. TAKE EXIT 11 TO MERGE ONTO US-5 N/N HARTLAND RD TOWARD WHITE RIVER JCT. 0.2 MI. MERGE ONTO US-5 N/N HARTLAND RD. 230 FT. AT THE TRAFFIC CIRCLE, TAKE THE 1ST EXIT ONTO SYKES MOUNTAIN AVE. 446 FT. AT THE TRAFFIC CIRCLE, CONTINUE STRAIGHT TO STAY ON SYKES MOUNTAIN AVE. 0.9 MI. TURN RIGHT ONTO CONNECTICUT RIVER RD. 1.3 MI. COMPOUND ACCESS ROAD WILL BE ON THE RIGHT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	1	03/27/24	JLR
G-002	GENERAL NOTES	0	3/12/2024	JLR
C-001	OVERALL SITE PLAN	0	3/12/2024	JLR
C-002	VISUAL IMPACT CHART	0	3/12/2024	JLR
C-101	DETAILED SITE PLAN	1	03/27/24	JLR
C-102	DETAILED EQUIPMENT PLAN	1	03/27/24	JLR
C-201	TOWER ELEVATION	0	3/12/2024	JLR
C-401	ANTENNA INFORMATION & SCHEDULE	1	03/27/24	JLR
C-501	MOUNT DETAILS	0	3/12/2024	JLR
C-502	CONSTRUCTION DETAILS	0	3/12/2024	JLR
C-503	CONSTRUCTION DETAILS	0	3/12/2024	JLR
E-101	GROUNDING PLAN AND NOTES	1	03/27/24	JLR
E-501	GROUNDING DETAILS	1	03/27/24	JLR
E-601	PANEL SCHEDULE & ONE-LINE DIAGRAM	1	03/27/24	JLR
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
R-603	SUPPLEMENTAL			
R-604	SUPPLEMENTAL			
R-605	SUPPLEMENTAL			
R-606	SUPPLEMENTAL			
R-607	SUPPLEMENTAL			
R-608	SUPPLEMENTAL			
R-609	SUPPLEMENTAL			

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	3/12/2024
1	ADD GEN / 200A PPC	JLR	03/27/24

ATC SITE NUMBER:
208135
ATC SITE NAME:
WEST LEBANON
T-MOBILE SITE NAME:
4LN0802_ATC
SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

STATE OF VERMONT
JOSHUA L. WALTON
No. 018.0112953
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

Joshua Walton
Digitally signed by Joshua Walton
Date: 2024.03.29 15:59:53 -04'00'

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	1

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, T-MOBILE "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
   - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
   - B. AC/TELCO INTERFACE BOX (PPC)
   - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
   - D. TOWERS, MONOPOLES
   - E. TOWER LIGHTING
   - F. GENERATORS & LIQUID PROPANE TANK
   - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
   - H. ANTENNAS (INSTALLED BY OTHERS)
   - I. TRANSMISSION LINE
   - J. TRANSMISSION LINE JUMPERS
   - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
   - L. TRANSMISSION LINE GROUND KITS
   - M. HANGERS
   - N. HOISTING GRIPS
   - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS, IT IS THE POSITION OF T-MOBILE TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC, BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE T-MOBILE REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE T-MOBILE REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE T-MOBILE REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE T-MOBILE CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE T-MOBILE REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH T-MOBILE AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY T-MOBILE MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH T-MOBILE SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO T-MOBILE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO T-MOBILE SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY T-MOBILE REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE REP. ANY WORK FOUND BY THE T-MOBILE REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
34. T-MOBILE FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE T-MOBILE WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
35. T-MOBILE OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO T-MOBILE OR THEIR ARCHITECT/ENGINEER.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS
   - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
   - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
   - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
   - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
   - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS
   - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
   - B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
   - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
   - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
   - E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
   - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
   - G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
   - H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
   - I. ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER, AND T-MOBILE PROJECT MANAGER IN WRITING

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED
   - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY T-MOBILE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL
   - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND T-MOBILE SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
   - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
   - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
   - G. ANTENNA AND COAXIAL CABLE GROUNDING
2. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTOR/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS).

CONCRETE AND REINFORCING STEEL NOTES:

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
2. MIX DESIGN SHALL BE APPROVED BY T-MOBILE REP PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6 % AIR ENTRAINED (+/- 1.5%) WITH A SLUMP RANGE OF 3-6" AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI UNLESS OTHERWISE NOTED.
4. THE FOLLOWING MATERIALS SHALL BE USED

PORTLAND CEMENT	ASTM C150, TYPE 2
REINFORCEMENT	ASTM A185, PLAIN STEEL WELDED WIRE FABRIC
REINFORCEMENT BARS:	ASTM A615, GRADE 60, DEFORMED
NORMAL WEIGHT AGGREGATE:	ASTM C33
WATER	ASTM C 94/C 94M
WELDED WIRE FABRIC	ASTM A185
ADMIXTURES	
-WATER-REDUCING AGENT	ASTM C 494/C 494M, TYPE A
-AIR-ENTERING AGENT	ASTM C 260/C 260M
-SUPERPLASTICIZER	ASTM C494, TYPE F OR TYPE G
-RETARDING	ASTM C 494/C 494M, TYPE B

5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE NO LESS THAN 3".
6. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
7. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR APPROVAL FROM AN ATC ENGINEER WHEN DRILLING HOLES IN CONCRETE.
8. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN "METHOD 1" OF ACI 301.
9. DO NOT WELD OR TACK WELD REINFORCING STEEL.
10. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
13. FOR COLD-WEATHER (ACI 306) AND HOT-WEATHER (ACI 301M) CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
14. ALL CONCRETE SHALL HAVE A "SMOOTH FORM FINISH."
15. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
16. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
17. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
18. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS.
19. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 6".
20. BAR SUPPORTS SHALL BE ALL-GALVANIZED METAL WITH PLASTIC TIPS.
21. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE OF SUFFICIENT STRENGTH FOR INTENDED PURPOSE, BUT NOT LESS THAN NO. 18 GAUGE.
22. SLAB ON GROUND: COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH SLAB.

ELECTRICAL NOTES:

1. ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH ALL APPLICABLE LOCAL AND STATE CODES AND NATIONAL ELECTRICAL CODE.
2. ALL SUGGESTED ELECTRICAL ELEMENTS (SUCH AS BREAKER SIZES, WIRE SIZES, CONDUITS SIZES) ARE FOR ZONING PURPOSES ONLY. IT IS THE RESPONSIBILITY TO OF THE ELECTRICAL CONTRACTOR TO CONFIRM COMPLIANCE WITH LOCAL ELECTRICAL CODES AND PASS ALL APPLICABLE AND NECESSARY INSPECTIONS. IN SOME EVENTS, IT MAY BE NECESSARY TO PERFORM AN ELECTRICAL LOAD STUDY TO VERIFY THE CAPACITY OF THE EXISTING SERVICE. THIS IS NOT THE RESPONSIBILITY OF ATC. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
3. CONTRACTOR SHALL FIELD LOCATE ALL BELOW GRADE GROUNDING CABLES AND UTILITY LINES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RELOCATION OF ALL UTILITIES AND GROUNDING LINES THAT MAY BECOME DISTURBED OR CONFLICTING IN THE COURSE OF CONSTRUCTION.

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

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ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

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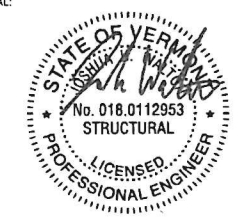
REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	3/12/2024

ATC SITE NUMBER:
208135
ATC SITE NAME:
WEST LEBANON
T-MOBILE SITE NAME:
4LN0802_ATC
SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:



Digitally Signed: 2024-03-29

T-Mobile

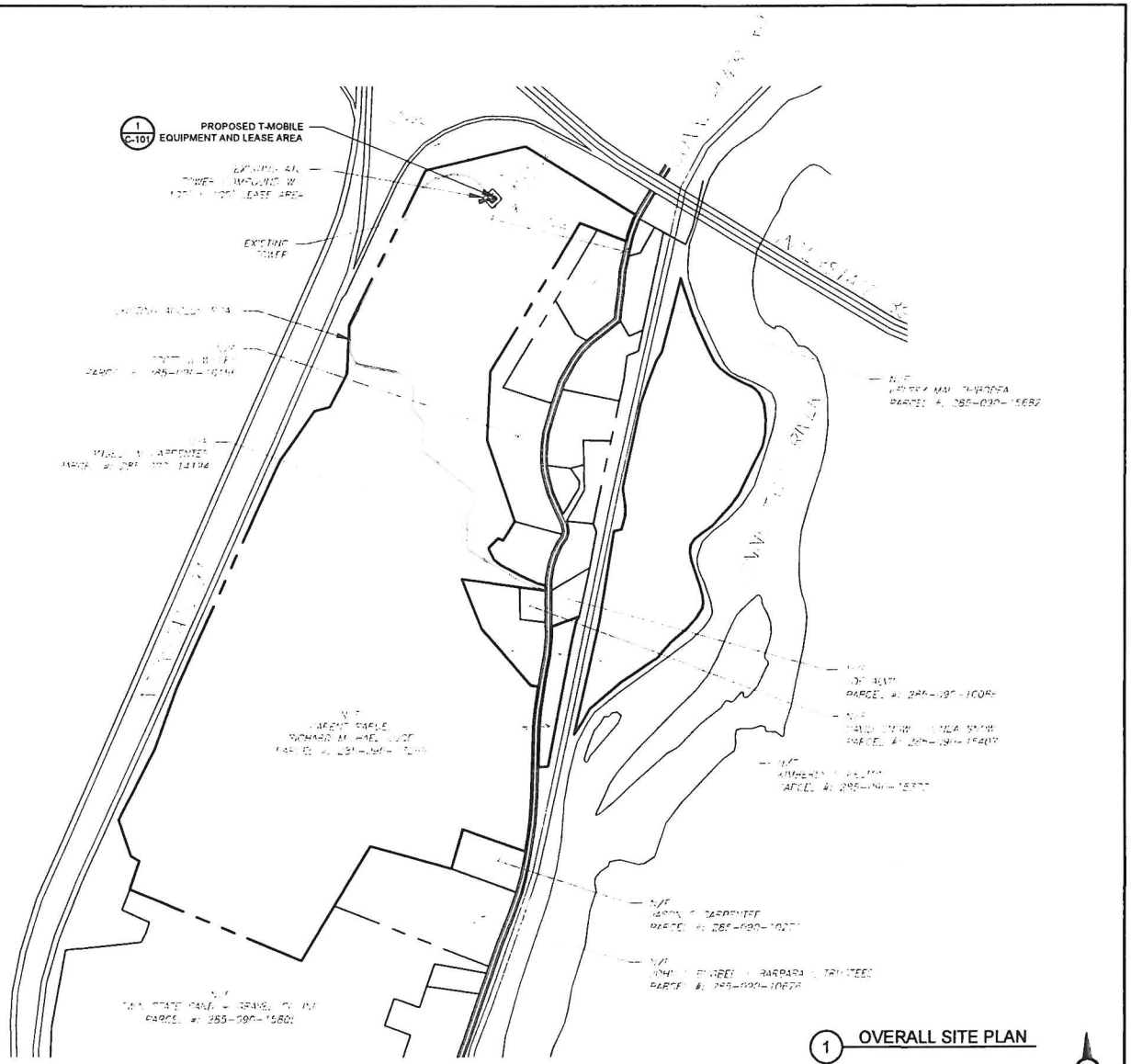
ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

NOTES:

1. BOUNDARY LINES OBTAINED FROM DATATREE ONLINE GIS.
2. ZONING INFORMATION OBTAINED FROM VERMONT PUBLIC UTILITY COMMISSION.



1 OVERALL SITE PLAN

GRAPHIC SCALE

800 0 400 800

(IN FEET)
1 UNIT = 800 FEET

N

LEGEND

PARCEL SETBACK INFORMATION		
DISTRICT: VERMONT PUBLIC UTILITY COMMISSION		
	EXISTING:	PROPOSED:
MAX HEIGHT:	81'±	101'±
MIN FRONT YARD SETBACK:	975'±	975'± *
MIN SIDE YARD SETBACK:	415'±	415'± *
MIN REAR YARD SETBACK:	500'±	500'± *
* NO CHANGE TO EXISTING		

NOTE:
EXISTING VEGETATION, COUNT, SPACING AND SPECIES SHOWN IS AN APPROXIMATION AND HAS NOT BEEN FIELD VERIFIED.

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ATC SITE NUMBER:
208135

ATC SITE NAME:
WEST LEBANON

T-MOBILE SITE NAME:
4LN0802_ATC

SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

Digitally Signed: 2024-03-29

T-Mobile

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OVERALL SITE PLAN

SHEET NUMBER:	REVISION:
C-001	0

PROJECT INFORMATION & DIMENSIONS			
DIMENSION	EXISTING	PROPOSED	FINAL
SURFACE AREA OF THE FACES OF EQUIPMENT ON SUPPORT STRUCTURE	N/A	ANTENNAS: (3) APXVLL19P 43-C-A20 = 5.95 SQ FT EACH (3) APXVAALL24 43-U-NA20 = 15.99 SQ FT EACH RRU: (3) RADIO 4480 B71+B85A = 2.38 SQ FT EACH RRU: (3) 4460 BAND 2/25 = 2.14 SQ FT EACH TTAs/RRUs NOT VISIBLE-BEHIND ANTENNAS TOTAL VISIBLE AREA = 65.82 SQ FT	ANTENNAS: (3) APXVLL19P 43-C-A20 = 5.95 SQ FT EACH (3) APXVAALL24 43-U-NA20 = 15.99 SQ FT EACH RRU: (3) RADIO 4480 B71+B85A = 2.38 SQ FT EACH RRU: (3) 4460 BAND 2/25 = 2.14 SQ FT EACH TTAs/RRUs NOT VISIBLE-BEHIND ANTENNAS TOTAL VISIBLE AREA = 65.82 SQ FT
MAXIMUM VERTICAL EXTENSION FROM SUPPORT STRUCTURE	3 FT - 11 IN	3 FT - 0 IN	3 FT - 0 IN
MAXIMUM HORIZONTAL EXTENSION FROM SUPPORT STRUCTURE	7 FT - 1 IN	8 FT - 0 IN	8 FT - 0 IN
IMPERVIOUS SURFACE AREA BEING ADDED TO THE SITE	N/A	0 SQ FT	0 SQ FT
NOTES			
1. NO ADDITIONAL VEGETATION CLEARING IS REQUIRED FOR SCOPE OF WORK. 2. NO PROPOSED SCREENING EXTERIOR LIGHTING, LANDSCAPING OR SIGNAGE IS BEING ADDED FOR PROPOSED SCOPE OF WORK. 3. THE PROJECT COMPLIES WITH THE LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL ISSUED BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION, REGARDLESS OF ANY PROVISIONS IN THE HANDBOOK THAT LIMIT IT'S APPLICABILITY. 4. THE EXISTING COMPOUND IS IMPERVIOUS AND THEREFORE NEW WORK INSIDE THE COMPOUND DOES NOT RESULT IN ADDITIONAL IMPERVIOUSNESS TO THE SITE.			

1 VISUAL IMPACT CHART

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1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

Digitally Signed: 2024-03-29

T-Mobile

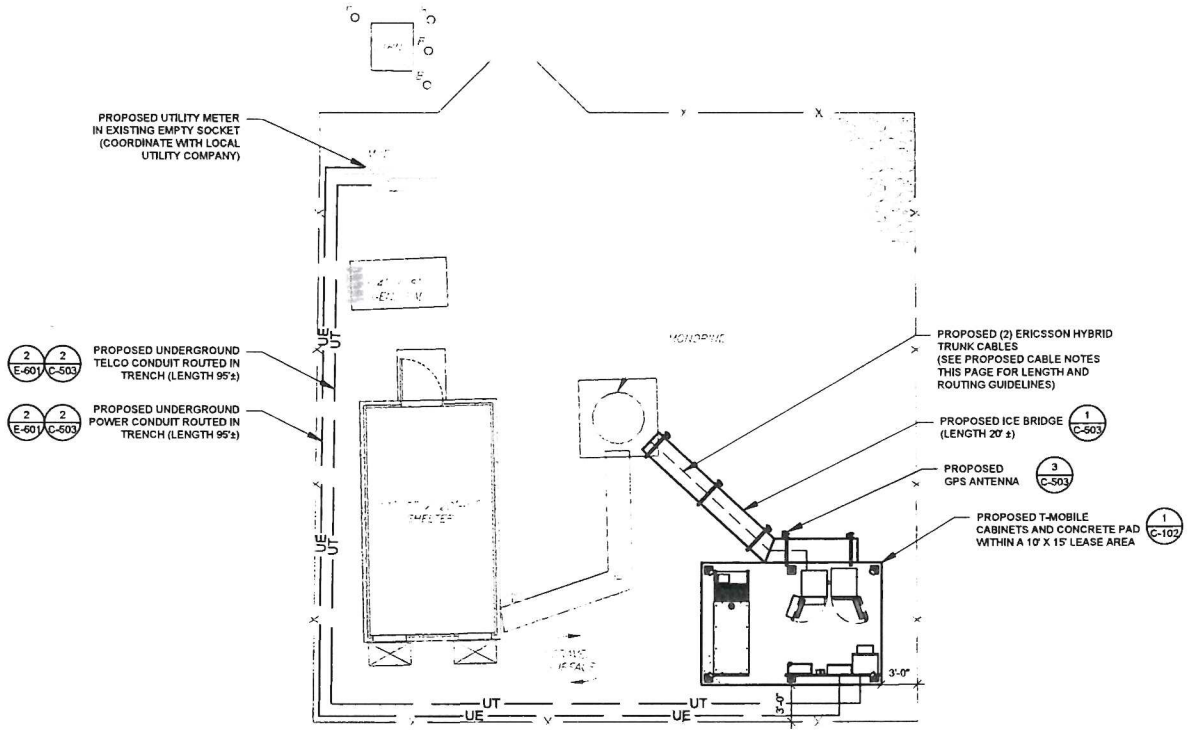
ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

VISUAL IMPACT CHART

SHEET NUMBER:	REVISION:
C-002	0

SITE PLAN NOTES:

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE T-MOBILE REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.



1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
- - - -	CHAINLINK FENCE

PROPOSED CABLE NOTES:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS 135'. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES). CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

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1	ADD GEN / 200A PPC	JLR	03/27/24

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WEST LEBANON
T-MOBILE SITE NAME:
4LN0802_ATC
SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

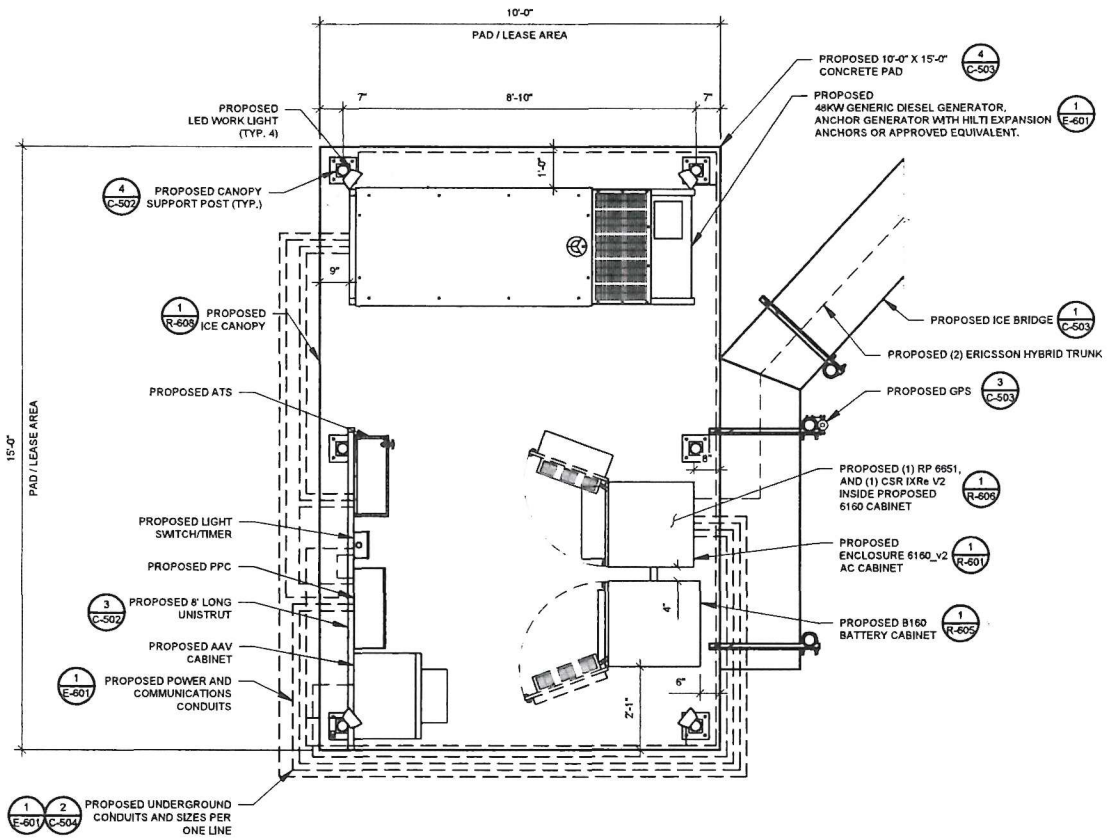
Digitally Signed: 2024-03-29

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	1



1 PROPOSED GROUND EQUIPMENT LAYOUT

GRAPHIC SCALE

3 0 1.5' 3

(IN FEET)
1 UNIT = 3 FEET

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T-MOBILE SITE NAME:
4LN0802_ATC

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HARTFORD, VT 05047

SEAL:

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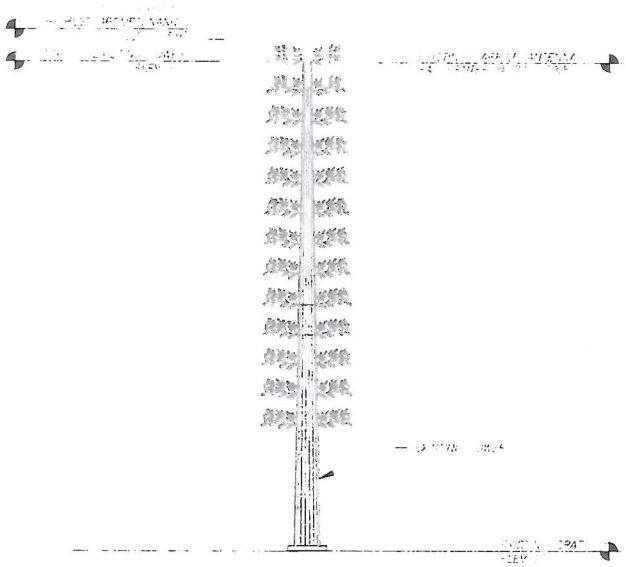
ATC PROJ. #:	14560440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

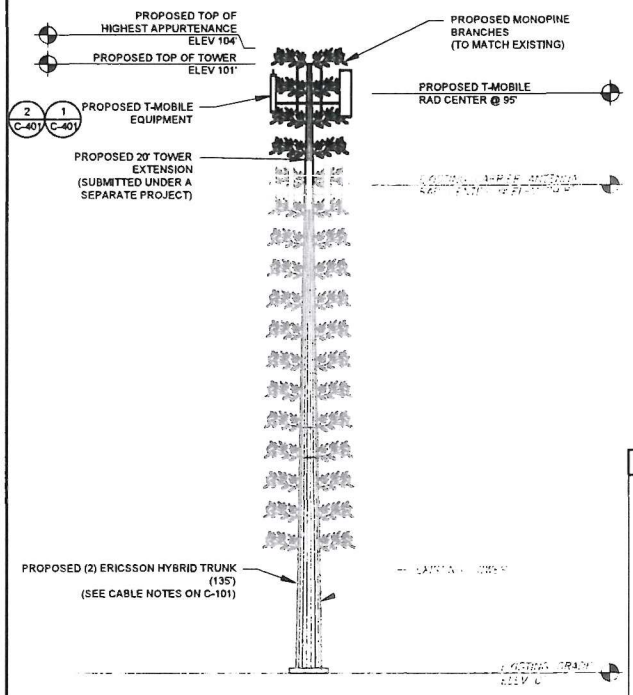
DETAILED EQUIPMENT PLAN

SHEET NUMBER:	REVISION:
C-102	1



1 EXISTING TOWER ELEVATION
SCALE: N.T.S.

GRAPHIC SCALE
20' 0 10' 20'
(IN FEET)
1 UNIT = 20 FEET



2 PROPOSED TOWER ELEVATION
SCALE: N.T.S.

GRAPHIC SCALE
20' 0 10' 20'
(IN FEET)
1 UNIT = 20 FEET

PER MOUNT ANALYSIS COMPLETED BY ATC TOWER SERVICES, LLC, DATED 01/31/2024, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.

ALL ELEVATIONS REFLECT ABOVE GROUND LEVEL (A.G.L.)

TOWER NOTE:
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
2. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
3. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
4. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

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ATC TOWER SERVICES, LLC
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SUITE 300
CARY, NC 27511
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1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

Digitally Signed: 2024-03-29

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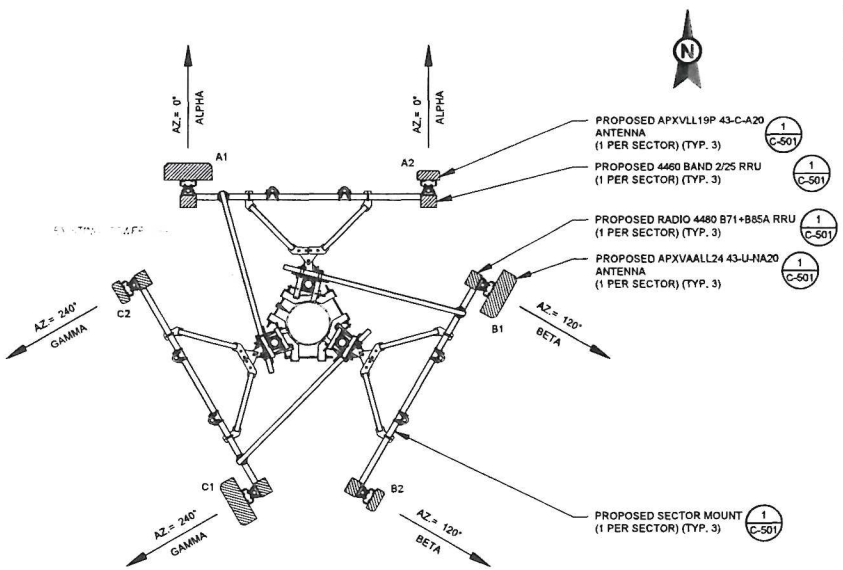
ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0

PER MOUNT ANALYSIS COMPLETED BY ATC TOWER SERVICES, LLC, DATED 01/31/2024, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



1 FINAL ANTENNA PLAN
SCALE: N.T.S.

FINAL ANTENNA/ COAX SCHEDULE						
SECTOR	ANT.	MODEL #	RAD CENTER	AZIMUTH	ADDITIONAL TOWER MOUNTED EQUIPMENT	CABLE DESCRIPTION
ALPHA	A1	APXVAALL24 43-U-NA20	95'	0°	RADIO 4480 B71+B85A	(2) ERICSSON HYBRID TRUNK (135')
	A2	APXVLL19P 43-C-A20		0°	4460 BAND 2/25	
BETA	B1	APXVAALL24 43-U-NA20		120°	RADIO 4480 B71+B85A	
	B2	APXVLL19P 43-C-A20		120°	4460 BAND 2/25	
GAMMA	C1	APXVAALL24 43-U-NA20		240°	RADIO 4480 B71+B85A	
	C2	APXVLL19P 43-C-A20		240°	4460 BAND 2/25	

1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT.
2. GC TO CAP ALL UNUSED PORTS.
3. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
4. INSTALL [TOWER JUNCTION BOX MODEL AND QUANTITY].

2 ANTENNA SCHEDULE

RF JUMPER LENGTH
MONOPOLE = 15'± GUYED / SELF SUPPORT = FACE WIDTH + 15'
REFER TO FINAL RFDS FOR TYPE AND QUANTITY

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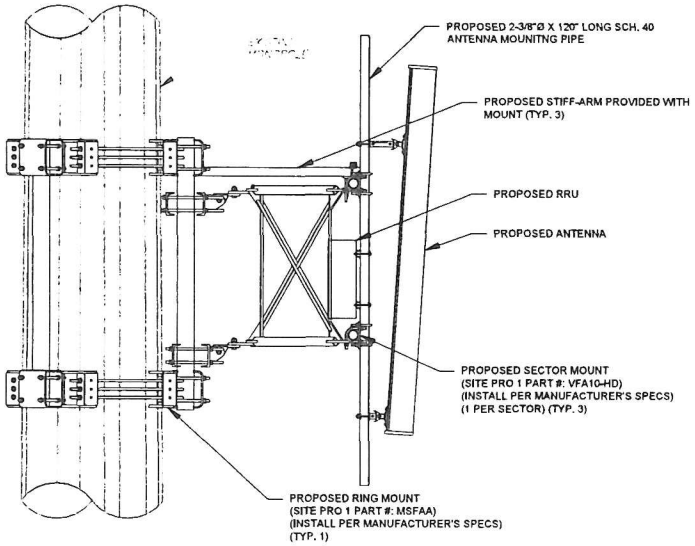
CUST. #:	4LN0802A

ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	REVISION:
C-401	1



1 PROPOSED ANTENNA MOUNTING DETAIL (ELEVATION)

SCALE: N.T.S.

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CARY, NC 27511
PHONE: (919) 468-0112

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	3/12/2024

ATC SITE NUMBER:
208135

ATC SITE NAME:
WEST LEBANON

T-MOBILE SITE NAME:
4LN0802_ATC

SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

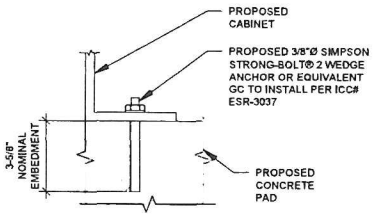
Digitally Signed: 2024-03-29

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

MOUNT DETAILS

SHEET NUMBER:	REVISION:
C-501	0

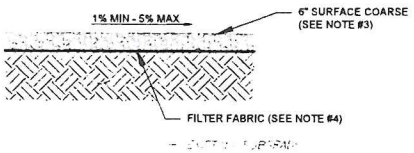


NOTE:

INSTALL SIMPSON STRONG-TIE® STRONG-BOLT® 2 WEDGE ANCHOR(S) STRICTLY PER INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR FOUND ONLINE AT WWW.STRONGTIE.COM. PROPER INSTALLATION IS CRITICAL FOR FULL PERFORMANCE.

1 CABINET ATTACHMENT DETAIL

SCALE: N.T.S.



NOTES:

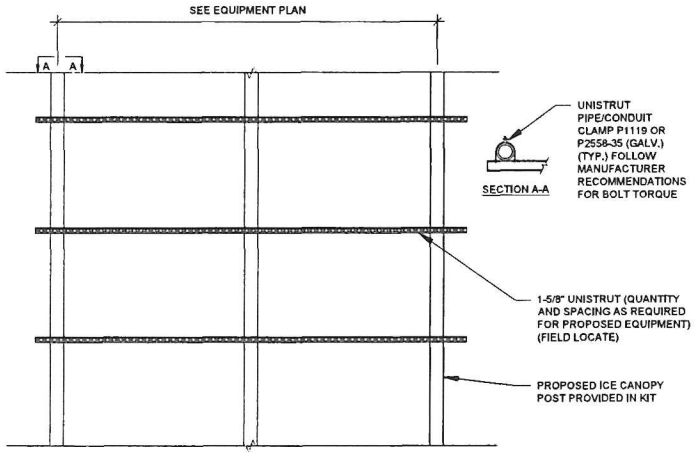
1. CONTRACTOR TO CONTACT ALL UTILITIES FOR LOCATION OF UNDERGROUND SERVICES. SERVICE LOCATIONS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
2. REMOVE ALL UNSUITABLE OR DELETERIOUS MATERIAL AS REQUIRED. COMPACT UNDERLYING SOIL TO 90% OF MAXIMUM DENSITY. REPLACE REMOVED SOIL WITH 8" LIFTS OF GRANULAR "B" MATERIAL TO A DEPTH OF 4" BELOW PROPOSED GRADE. COMPACT TO MINIMUM 95% OF MAXIMUM DRY DENSITY ALL COMPACTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT IBC. REVIEW WITH PROJECT MANAGER AND GEOTECT PRIOR TO CONSTRUCTION.
3. SURFACE COARSE OF GRANULAR "A" MATERIAL SHALL CONSIST OF EVENLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL, WITH 100% PASSING THROUGH 3/4" SIEVE AND NOT MORE THAN 5% PASSING THROUGH #4 SIEVE.
4. PROVIDE GEOTEXTILE FABRIC UNDER WASHED CHIPPED STONE COMPOUND UNLESS NOTED OTHERWISE. WOVEN GEOTEXTILE:US FABRICS: US 230 OR APPROVED EQUIVALENT. CONTRACTOR MAY SUBMIT DESIGN ALTERNATIVE AS OUTLINED IN THE AMERICAN TOWER MASTER SPECIFICATIONS.

2 COMPOUND CROSS SECTION

SCALE: N.T.S.

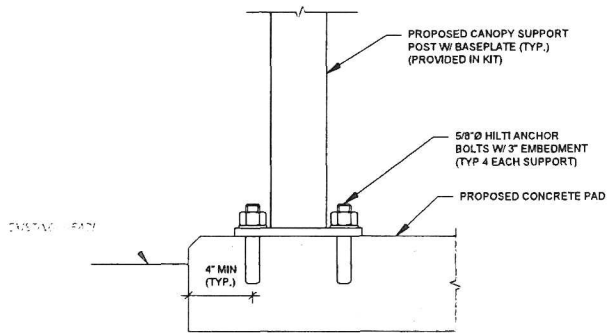
H-FRAME NOTES:

1. IF IT IS NECESSARY TO EXTEND THE H-FRAME, AN ADDITIONAL POST WILL ALWAYS BE REQUIRED.
2. PROPOSED UNISTRUTS TO BE FIELD CUT AND SHOULD NOT EXTEND MORE THAN 6 INCHES BEYOND THE LAST POST.
3. SPRAY ENDS OF UNISTRUT WITH COLD GALVANIZING SPRAY PAINT. ALLOW TO DRY, THEN COVER WITH RUBBER PROTECTIVE CAPS FOR SAFETY.
4. UNISTRUT TO BE CUT FLUSH WITH NO SHARP OR JAGGED EDGES.
5. ALL PROPOSED HARDWARE TO BE MOUNTED PER MANUFACTURERS SPECS.



3 H-FRAME ON CANOPY POST DETAIL

SCALE: N.T.S.



4 CANOPY SUPPORT ANCHOR DETAIL

SCALE: N.T.S.

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

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ATC SITE NUMBER:
208135

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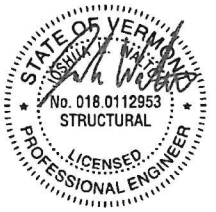
WEST LEBANON

T-MOBILE SITE NAME:
4LN0802_ATC

SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:



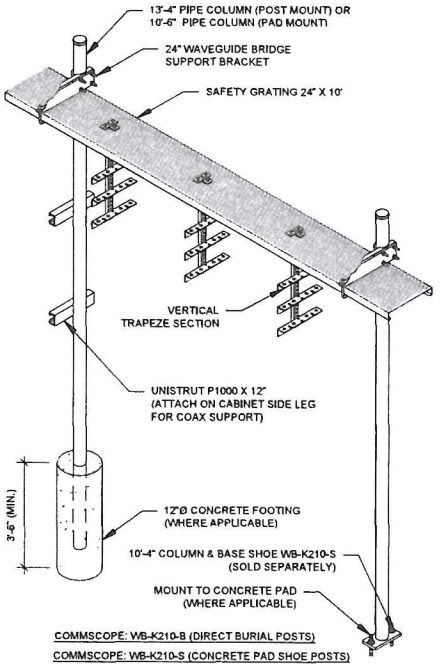
Digitally Signed: 2024-03-29

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-502	0

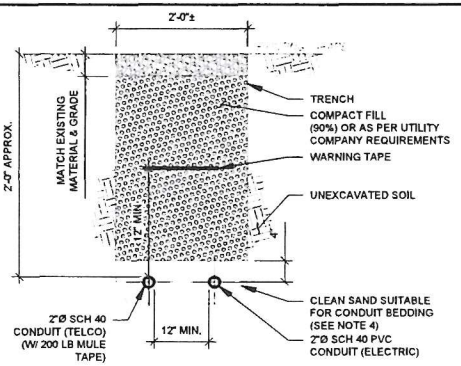


CONSTRUCTION NOTE:

1. INSTALL ICE BRIDGE TO ALLOW 7 FEET CLEARANCE ABOVE GRADE TO LOWEST APPURTENANCE.
2. INSTALL PER MANUFACTURES SPECIFICATION.

1 WAVEGUIDE BRIDGE KIT

SCALE: N.T.S.

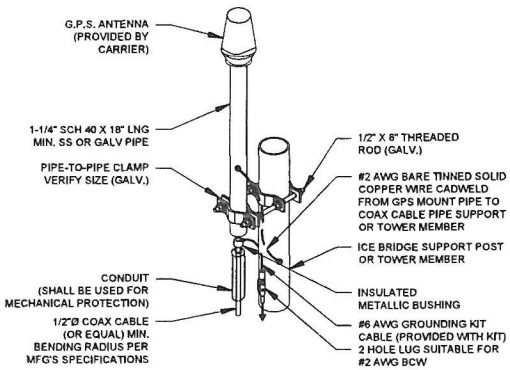


TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.
4. CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.

2 TELCO AND POWER CONDUIT JOINT TRENCH

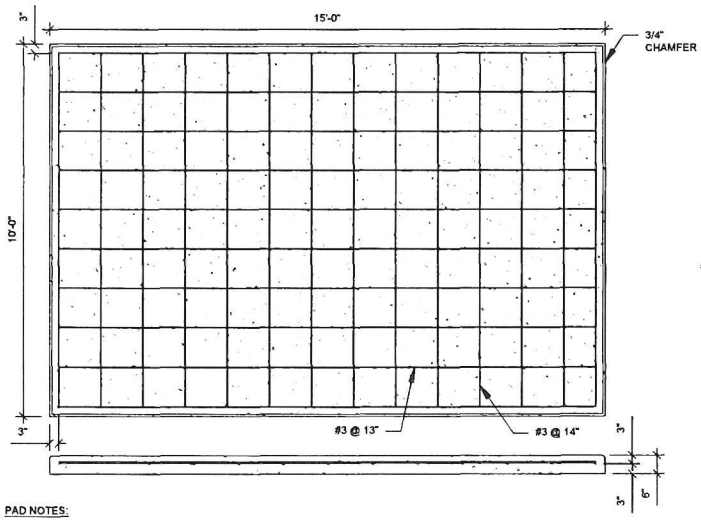
SCALE: N.T.S.



NOTE:
1. GPS SHALL BE PLACED WITH CLEAR SIGHT LINE TO THE SOUTHERN SKY.
2. CONTRACTOR TO SUPPLY COAX FOR GPS UNIT.

3 GPS ANTENNA ATTACHMENT DETAIL

SCALE: N.T.S.

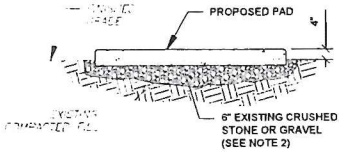


PAD NOTES:

1. PADS SHALL BE PRE-CAST MATCHING THIS DESIGN WHERE ALLOWED BY LOCAL JURISDICTION.
2. REFER TO CONCRETE & REINFORCED STEEL NOTES ON SHEET G-002 & ATC SPEC 033000 FOR CAST-IN-PLACE PADS.

4 REINFORCED PAD LAYOUT

SCALE: N.T.S.



PAD NOTES:

1. SUBGRADE AND FILL SHALL CONSIST OF CLEAN SOIL. DELETRIOUS MATERIAL AND ORGANICS SHALL BE REMOVED.
2. MECHANICALLY COMPACT FOOTPRINT OF PAD PLUS 2' PERIMETER.
3. USE GALVANIZED HILTI EXPANSION ANCHORS OR, APPROVED EQUAL, FOR EQUIPMENT ANCHORAGE.
4. FOR SIZE AND LOCATION OF ANCHORS AND OTHER REQUIREMENT, SEE EQUIPMENT VENDOR DRAWINGS.

5 GRAVEL PREPARATION

SCALE: N.T.S.

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ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

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208135
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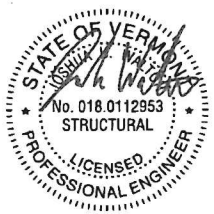
WEST LEBANON
T-MOBILE SITE NAME:
4LN0802_ATC
SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:



Digitally Signed: 2024-03-29

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-503	0

GROUNDING NOTES:

1. ALL EQUIPMENT ENCLOSURES, DEVICES AND CONDUITS SHALL BE GROUNDED TO CONFORM WITH THE LATEST REQUIREMENTS OF THE NEC BY THE INSTALLATION OF A SEPARATE, GREEN, INSULATED GROUND CONDUCTOR FOR ALL FEEDER AND BRANCH CIRCUITS. GROUND CONDUCTORS SHALL BE OF THE SIZE INDICATED ON THE DRAWINGS. GROUND CONDUCTORS SHALL BE CONTINUOUS IN LENGTH AND SHALL BE BONDED TO EACH ENCLOSURE THEY PASS THROUGH. CONDUIT SHALL NOT BE USED AS A GROUNDING CONDUCTOR.

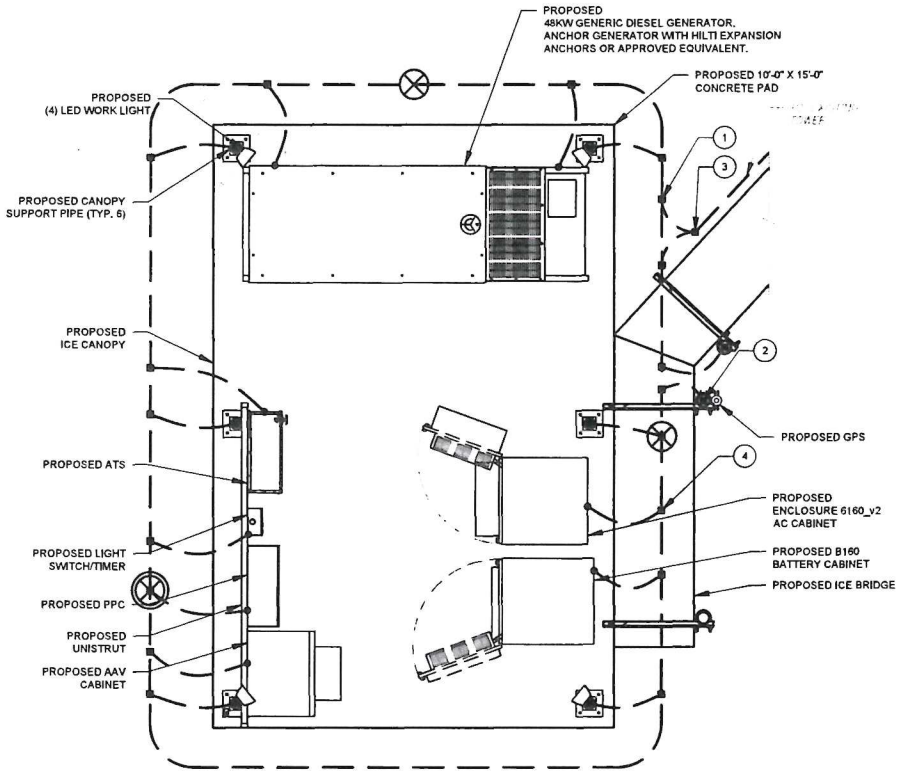
2. GROUNDING CONDUCTORS SHALL:
   - A. BE #2 AWG SOLID BARE TINNED COPPER (SBTC) FOR ALL GROUNDING SYSTEM WIRE UNLESS OTHERWISE NOTED, OR OTHERWISE REQUIRED BY CODE.
   - B. BE MINIMUM 12" BEND RADIUS. KEEP NUMBER OF BENDS TO A MINIMUM.
   - C. AVOID LONG BONDING CONNECTION RUNS. MAKE DIRECT AS POSSIBLE.
   - D. NOT HAVE ANY U-SHAPED RUNS.
   - E. BE IN NON-METALLIC CONDUIT ONLY, IF IN CONDUIT.
   - F. BE PLACED THROUGH NON-METALLIC SLEEVES IN FLOORS, WALLS, CEILINGS, ETC.
   - G. PROTECTED IN NON-METALLIC CONDUIT WHERE EXPOSED ABOVE GRADE.

2. INSTALL ALL GROUNDING RINGS AND RADIALS WITH CONDUCTIVE CEMENT, SANKOSHA AS DISTRIBUTED BY ELECTRIC MOTION COMPANY, INC., WINSTED, CT 06098, OR AS SPECIFICALLY INDICATED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

3. GROUND RINGS SHALL BE:
   - A. MINIMUM 30" BELOW GRADE, OR BELOW FROST LINE WHICHEVER IS DEEPER.
   - B. MINIMUM 2' FROM FOUNDATIONS, FOOTINGS, OTHER GROUNDING SYSTEMS AND ALL CONDUCTIVE OBJECTS.
   - C. WITH MINIMUM 12" BEND RADII.
   - D. WITH ALL CONNECTIONS IN CONTACT WITH EARTH, BONDED BY EXOTHERMIC WELDING.
   - E. BONDED TO A SINGLE POINT GROUND (SPG) WITH A SINGLE WIRE AS INDICATED ON DRAWINGS.

4. GROUND RODS SHALL BE:
   - A. MINIMUM 5/8" DIAMETER.
   - B. MINIMUM 10' LONG.
   - C. COPPER-CLAD GALVANIZED STEEL OR STAINLESS STEEL.
   - D. PLACED IN UNDISTURBED SOIL AND BELOW THE FROST LINE.
   - E. INSTALLED WITH MINIMUM SEPARATION DISTANCE OF TWICE THE DEPTH OF THE ROD(S), OR AS INDICATED ON DRAWINGS.
   - F. MINIMUM TWO (2) RODS ON THE TOWER RING OR ONE (1) PER LEG WHICHEVER IS LARGER. MINIMUM FOUR (4) RODS ON EVERY EQUIPMENT BUILDING RING WITH ONE AT EACH CORNER OR AS INDICATED, MINIMUM ONE (1) ROD FOR POWER SERVICE GROUNDING ELECTRODE, AND MINIMUM ONE (1) ROD AT END OF EACH RADIAL.

5. CONDUCTIVE OBJECTS, SUCH AS FENCES, SHALL BE BONDED TO THE GROUNDING SYSTEM IF WITHIN 20' OF THE TOWER GROUNDING SYSTEM, OR 5' OF ANY OTHER GROUNDED COMPONENT.



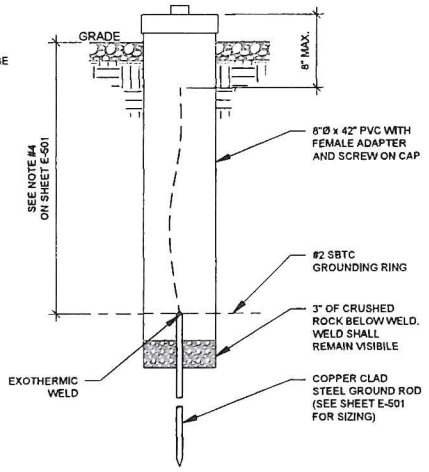
1 DETAILED GROUNDING PLAN
SCALE: N.T.S.

GROUNDING PLAN LEGEND:

- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL WELD
- 5/8"Ø X 10' COPPER GROUND ROD
- TEST WELL

GROUNDING KEYED NOTES:

1. BOND TO TOWER GROUND RING
2. #2 AWG BOND FROM VERTICAL H-FRAME AND ICE BRIDGE POST TO EXTERNAL GROUND RING (TYP. EVERY POST).
3. #2 AWG SBTC BOND FROM TOWER GROUND RING TO EQUIPMENT.
4. EQUIPMENT BOND TO GROUND RING (TYP.)



2 TEST WELL DETAIL
SCALE: N.T.S.

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ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	3/12/2024
1	ADD GEN / 200A PPC	JLR	03/27/24

ATC SITE NUMBER:
208135
ATC SITE NAME:
WEST LEBANON
T-MOBILE SITE NAME:
4LN0802_ATC
SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

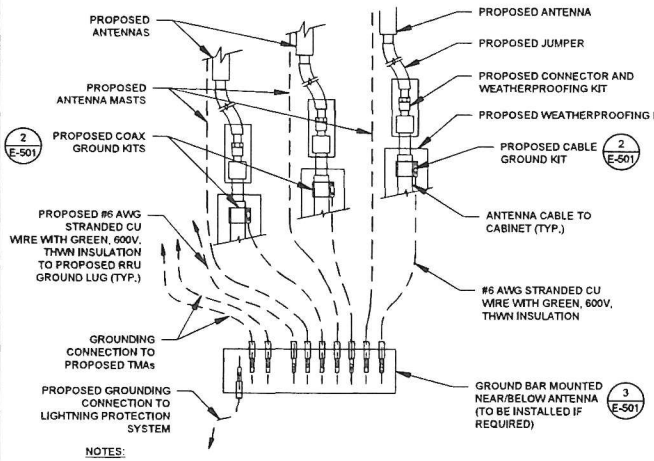
Mustapha Raha
Digitally signed by Mustapha Raha
Date: 2024.03.28 21:49:27 -04'00'

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

GROUNDING PLAN AND NOTES

SHEET NUMBER:	REVISION:
E-101	1

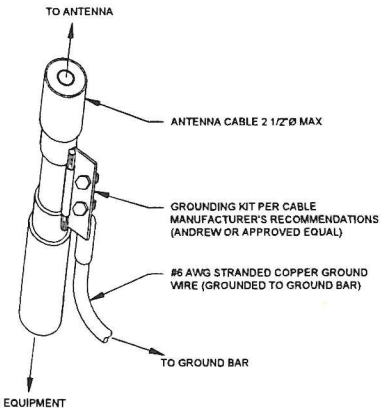


NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH T-MOBILE GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH T-MOBILE GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

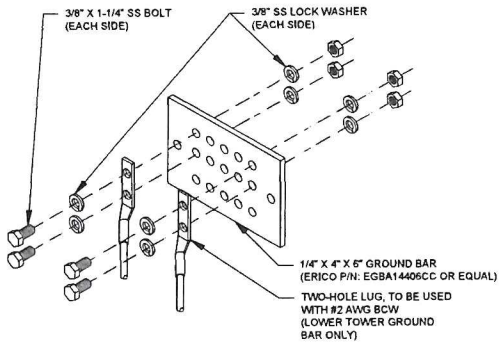


GROUND KIT NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.

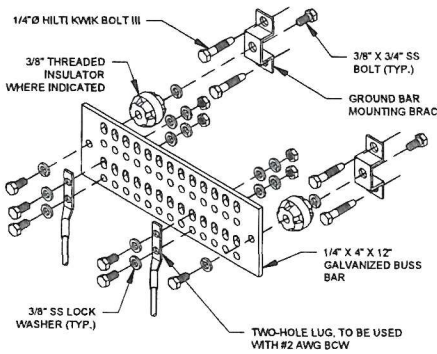


GROUND BAR NOTES:

1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.

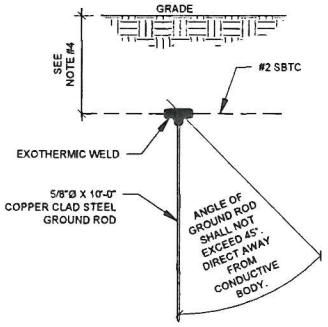


GROUND BAR NOTES

1. GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.

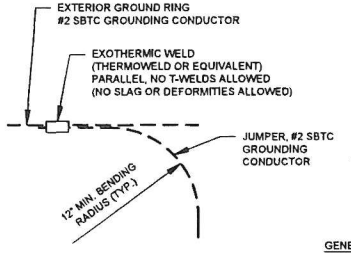


NOTES:

1. SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.
2. COORDINATE UTILITY, LOCATE BEFORE DIGGING.
3. CONDUIT TRENCHING DEPTHS AT 36" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.
4. ALL RING AND RADIAL DEPTHS AT 30" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.

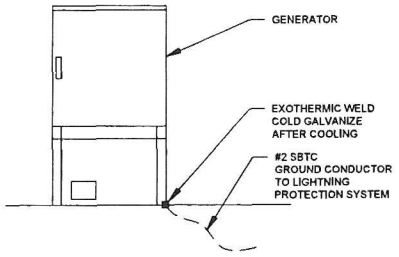
5 GROUND ROD DETAIL

SCALE: N.T.S.



6 TIE CONNECTION DETAIL

SCALE: N.T.S.



GENERATOR INSTALLATION NOTE:

INSTALL GENERATOR AND TRANSFER SWITCH WITH ALL SUPPLIED ACCESSORIES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, ACCESSORIES FOR THE EXHAUST SYSTEM, FUEL SYSTEM, ENCLOSURE INTEGRITY (CAPS, PLUGS, COVERS, ETC.), ELECTRICAL CONNECTIONS, AND GROUNDING CONNECTIONS.

7 GENERATOR GROUNDING

SCALE: N.T.S.

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

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GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	1

PANEL DESIGNATION:	TMO	TYPE:	LIGHTING & APPLIANCE	SYSTEM:	120/240V, 1Ø, 3W, 24 CKT	LOCATION:	TMO LEASE EQUIPMENT AREA
		MOUNTING:	SURFACE	MAIN BREAKER (MB):	200A		
		ENCLOSURE:	NEMA 3R	MAIN BUS RATING:	200A	PANEL NOTES:	PROPOSED
				MIN. A.I.C. RATING:	N/A		

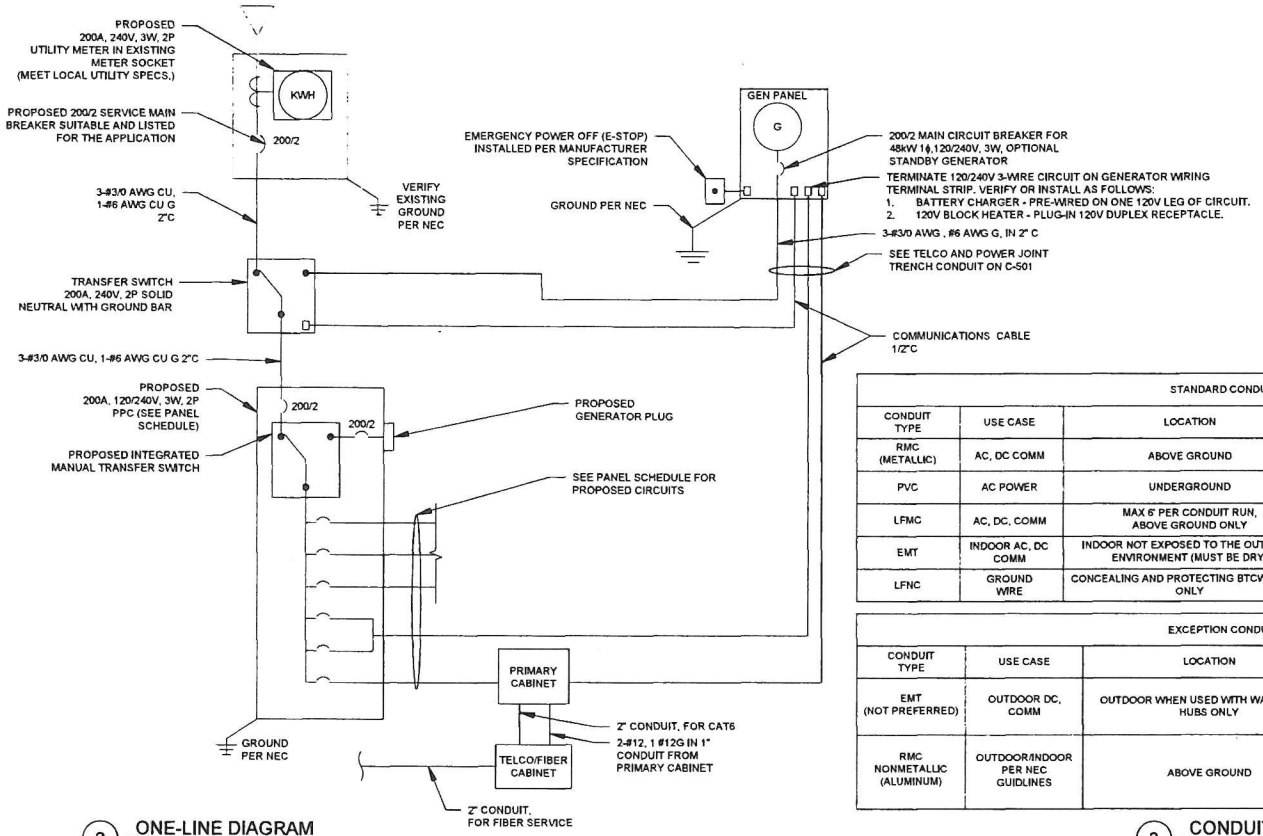
CONNECTED LOAD (kVA)		BRIEF DESCRIPTION	FEEDER OR BRANCH CIRCUIT					POLE NO.	NOTES	NOTES	POLE NO.	FEEDER OR BRANCH CIRCUIT					BRIEF DESCRIPTION	CONNECTED LOAD (kVA)	
			BREAKER		CIRCUIT							CIRCUIT			BREAKER				
A	B		AMPS	POLES	WIRE	GND	COND.					COND.	GND	WIRE	POLES	AMPS		A	B
0.01		SURGE	60	2	3-#6	#10	1"	1			2	1/2"	#12	2-#12	1	20	GFI	0.18	
	0.01							3			4	1/2"	#12	2-#12	1	20	LIGHT		0.50
7.50		ENCLOSURE 6160	200	2	2-#3/0	#6	2 1/2"	5			6	1/2"	#12	2-#12	1	20	AAV GFI	0.15	
	7.50							7			8	1/2"	#12	2-#12	1	20	GEN BLOCK HEATER		1.50
0.18		6160 GFI	20	1	2-#12	#12		9			10	1/2"	#12	2-#12	1	20	GEN BATTERY CHARGER	0.50	
	0.00							11			12								0.00
0.00								13			14							0.00	
	0.00							15			16								0.00
0.00								17			18							0.00	
	0.00							19			20								0.00
0.00								21			22							0.00	
	0.00							23			24								0.00
7.7	7.5								A	B	TOTAL							0.8	2.0
									8.5	9.5	18.0	CONNECTED LOAD (kVA)							
									8.5	9.5	18.0	DEMAND LOAD (kVA)							

DERATING FACTOR (80%)

DEMAND LOAD SIZING: *94 AMPS*

1 PANEL SCHEDULE

NOTE:
1. ALL EQUIPMENTS' SHORT-CIRCUIT CURRENT RATING SHALL EXCEED AVAILABLE FAULT CURRENT PER UTILITY
2. CONTRACTOR TO INSTALL HANDHOLES AT EVERY 3RD 90° TURN



2 ONE-LINE DIAGRAM

STANDARD CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
RMC (METALLIC)	AC, DC COMM	ABOVE GROUND	ABOVE GROUND PPC TO SSC
PVC	AC POWER	UNDERGROUND	UNDERGROUND PPC TO SSC OR BACKHAUL TRANSPORT HUB TO SSC
LFMC	AC, DC, COMM	MAX 6' PER CONDUIT RUN, ABOVE GROUND ONLY	TIGHT LOCATIONS BETWEEN HUB AND CONDUIT BUT NOT TO BE USED WHERE IT CAN BE STEPPED ON
EMT	INDOOR AC, DC COMM	INDOOR NOT EXPOSED TO THE OUTDOOR ENVIRONMENT (MUST BE DRY)	CIRCUIT PANEL TO JUNCTION BOX
LFNC	GROUND WIRE	CONCEALING AND PROTECTING BTCW RISERS ONLY	GROUND RING TO MGB OR SSC

EXCEPTION CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
EMT (NOT PREFERRED)	OUTDOOR DC, COMM	OUTDOOR WHEN USED WITH WATERTIGHT HUBS ONLY	BETWEEN EQUIPMENT AND BATTERY CABINET OR EQUIPMENT TO EQUIPMENT CABINETS FOR INTER CABINET CONNECTION
RMC NONMETALLIC (ALUMINUM)	OUTDOOR/INDOOR PER NEC GUIDLINES	ABOVE GROUND	MAT BE USED AS A LOWER COST ALTERNATIVE TO METALLIC RMC, MUST MEET OR EXCEED FEDERAL SPEC: WW-C-540C, UL-6A, ANSI C80.5, NEC 344.10 (A) ALLOWS THE USE OF EITHER ALUMINUM OR GALVANIZED FITTINGS

3 CONDUIT USE TABLES

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	3/12/2024
1	ADD GEN / 200A PPC	JLR	03/27/24

ATC SITE NUMBER:
208135

ATC SITE NAME:
WEST LEBANON

T-MOBILE SITE NAME:
4LN0802_ATC

SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

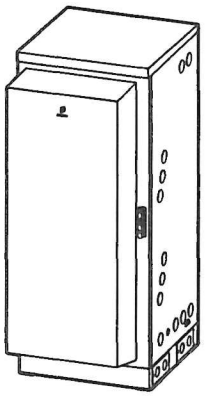
T-Mobile

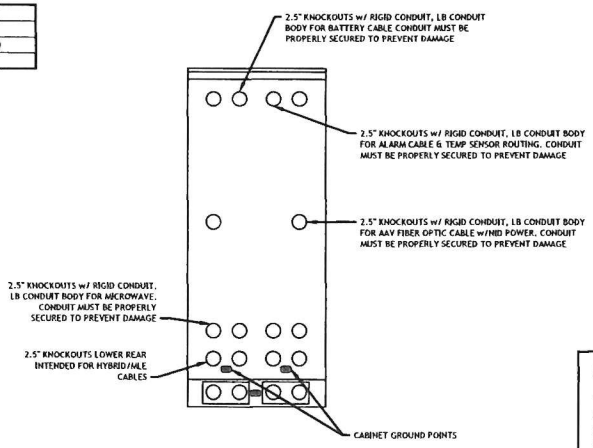
ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

PANEL SCHEDULE & ONE-LINE DIAGRAM

SHEET NUMBER:	REVISION:
E-601	1

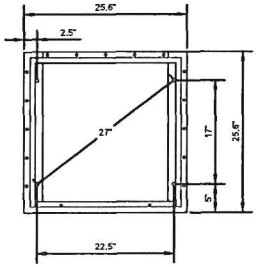
MANUFACTURER:	ERICSSON
MODEL:	6160 SITE SUPPORT CABINET
DIMENSIONS:	63" x 25.6" x 33.6" (H x W x D)
WEIGHT:	373 LBS





REAR VIEW

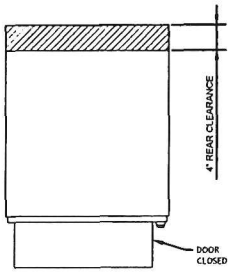
NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING

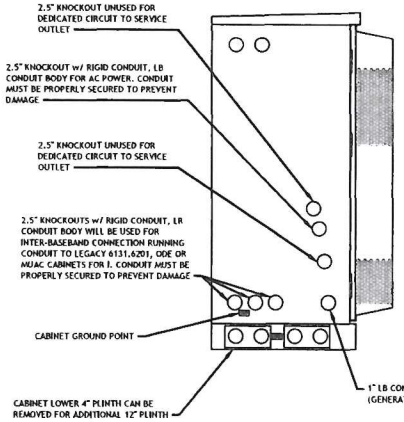


BOLT DOWN PATTERN

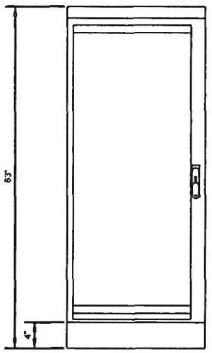
GROUNDING NOTE:

"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."

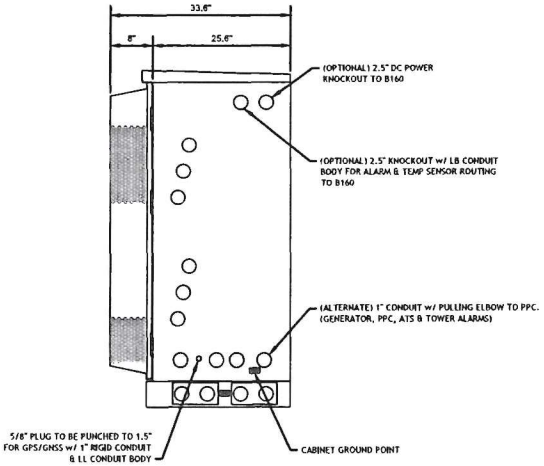




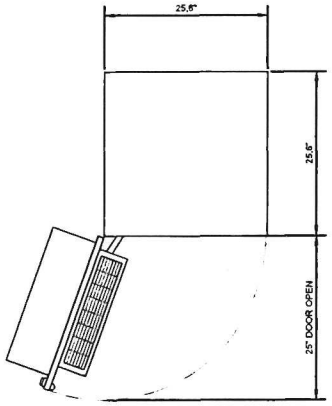
LEFT VIEW



FRONT VIEW



RIGHT VIEW



PLAN VIEW

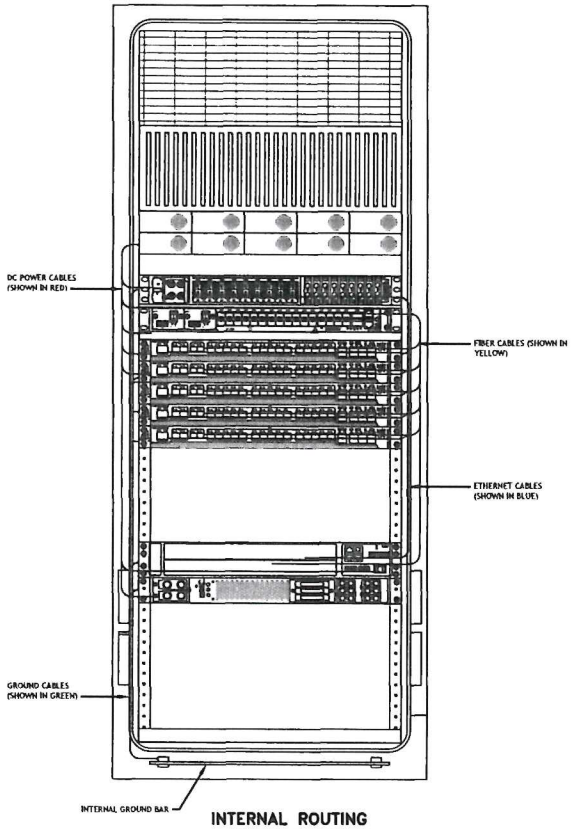
1 ERICSSON 6160 SITE SUPPORT CABINET SPECIFICATIONS

SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

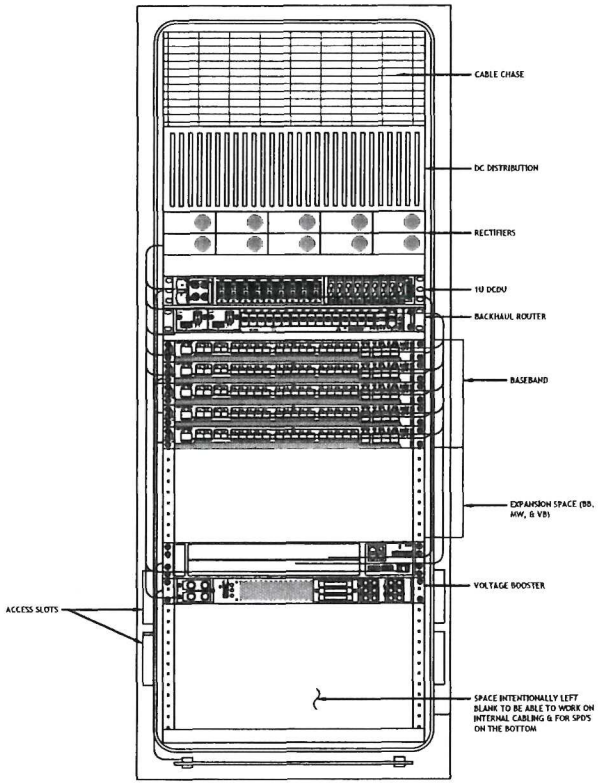
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0



INTERNAL ROUTING
(DOOR OPEN)

RACK ASSIGNMENTS	
RU SLOTS	DESCRIPTION
1	DC DISTRIBUTION
2	
3	
4	
5	RECTIFIER SHELF
6	
7	FIBER BOX
8	DCDU
9	BACKHAUL ROUTER
10	
11	1ST BASEBAND
12	2ND BASEBAND
13	3RD BASEBAND
14	4TH BASEBAND
15	5TH BASEBAND
16	EXPANSION
17	
18	
19	
20	EXPANSION / LEGACY BASEBAND / VOLTAGE BOOSTER
21	
22	VOLTAGE BOOSTER
23	OPEN SPACE FOR SPD ACCESS
24	
25	



FRONT VIEW
(DOOR OPEN)

1 ERICSSON 6160 CABINET DETAILS

SCALE: N.T.S.

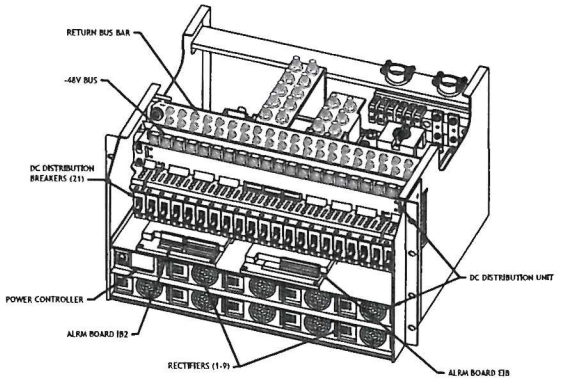
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

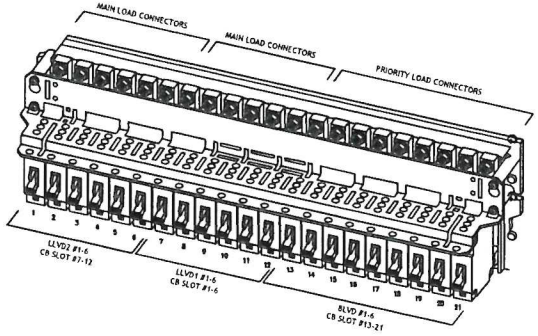
SHEET NUMBER:	REVISION:
R-602	0

NOTE:
THIS IS FOR REFERENCE ONLY, CHECK FOR SPECIFIC DETAIL IN T-MOBILE CABINET SPECIFIC INSTALLATION GUIDES

Breaker Allocation for L6160					
CB SLOT	Ckt #		w/ DCDU Prior to availability of the 4460 and 4480	w/ DCDU Later Design Post-4460 and Post-4480	w/ DCDU 4 and 6 Sector designs
1	LVD1 47.0V	1	Router PS-2*/Future		Radio 4460 B25/66 ζ-1
2		2	Future		Radio 4460 B25/66 ζ-2
3		3	PSU 4813 feeding B25/66 α, β and γ (AIR 1641s)		PSU 4813 feeding B41-δ & B71/12-δ (Air 6449s and Radio 4480ε)
4		4			
5		5	PSU 4813 feeding B41 α, β and γ (Air 6449s)		
6		6			
7	LVD2 45.1V	1	PSU 4813 feeding B71/12 α, β and γ (Radio 4449s)	PSU 4813 feeding B71/12 α, β and γ (Radio 4480s)	
8		2			
9		3	Future		Radio 4460 B25/66 δ-1
10		4	Future		Radio 4460 B25/66 δ-2
11		5	Future		Radio 4460 B25/66 ε-1
12		6	Future		Radio 4460 B25/66 ε-2
13	BLVD 43.2V	1	Router PS-1		
14		2	Radio 4415 B25/66 α	Radio 4460 B25/66 α-1	
15		3	Radio 4415 B25/66 β	Radio 4460 B25/66 α-2	
16		4	Radio 4415 B25/66 γ	Radio 4460 B25/66 β-1	
17		5	PSU 4813 feeding B2/25 α, β and γ (Radio 4424s)	Radio 4460 B25/66 β-2	
18		6		Radio 4460 B25/66 γ-1	
19		7	Future	Radio 4460 B25/66 γ-2	
20		8	DCDU		
21		9	AAV		
Sector Identification α = Alpha, β = Beta, γ = Gamma, δ = Delta, ε = Epsilon, ζ = Zeta					



POWER SUBRACK



DC DISTRIBUTION

1 ERICSSON 6160 ELECTRICAL DETAILS

SCALE: N.T.S.

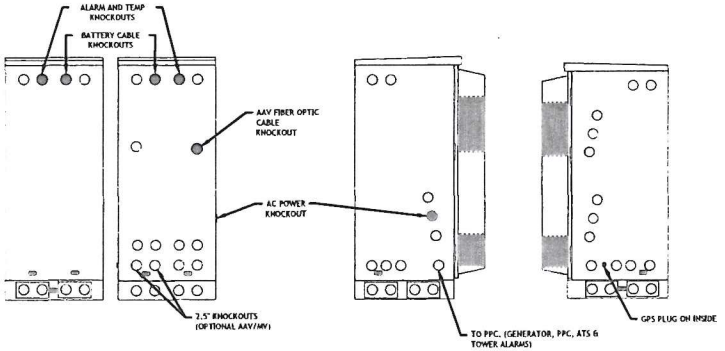
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

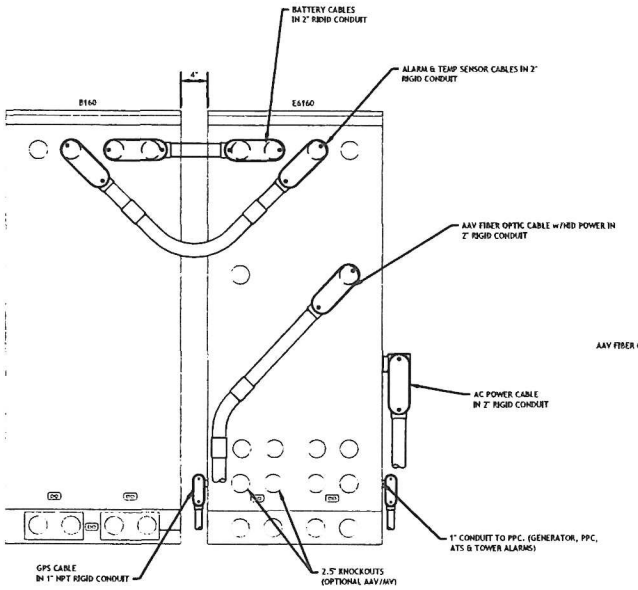
SHEET NUMBER:	REVISION:
R-603	0

NOTE:

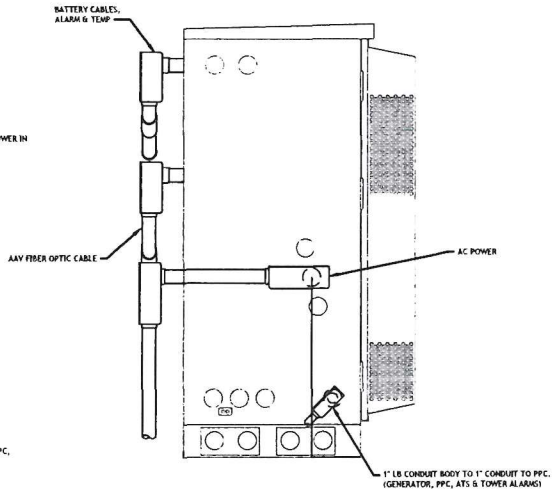
1. ALL CONDUIT AND FITTING ENTRANCES INTO CABINETS AND ENCLOSURES MUST UTILIZE MYERS OR EQUIVALENT HUBS OR SEALING WASHERS TO PREVENT WATER ENTRY/SEEPAGE INTO CABINETS AND ENCLOSURES.
2. (LIQUIDFLEX) FLEXIBLE METALLIC CONDUIT (LFMC) & ASSOCIATED FITTINGS CAN BE USED AS NEEDED BUT ONLY FOR TIGHT CONDUIT BENDS AND RUNS SUBJECT TO UL AND NEC LIMITATIONS. 6' MAX PER CONDUIT RUN.
3. POWER CONDUIT BODY ATTACHED WITH SHORT NIPPLE AND SEALING WASHER INSIDE & OUT. (FOR DOOR HOOD CLEARANCE)
4. PULLING ELBOWS MAY BE USED IN LIEU OF A CONDUIT BODIES WHEN CLEARANCE IS LIMITED.
5. ALL EXTERNAL ALARM CONDUITS ARE TOO TERMINATE AT THE PPC WITH A SINGLE 1" ALARM CONDUIT TO THE 6160.
6. (DO NOT USE CHASE NIPPLES) CONDUIT SHOULD HAVE SEALING WASHERS INSIDE AND OUT w/ LOCK NUT AND CAP.



CONDUIT LOCATIONS



REAR VIEW



SIDE VIEW

(1) ERICSSON 6160/B160 CONDUIT ROUTING DETAILS

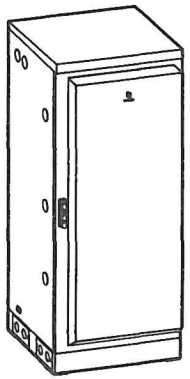
SCALE: N.T.S.

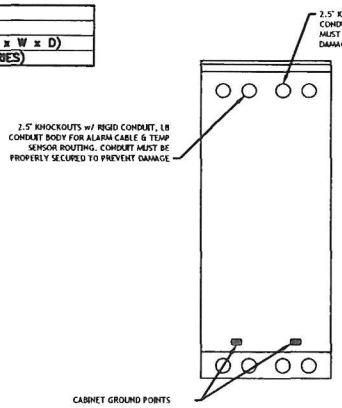
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

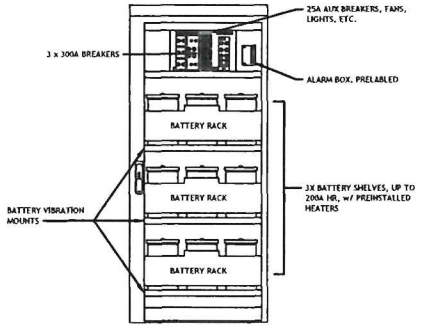
SHEET NUMBER:	REVISION:
R-604	0

MANUFACTURER:	ERICSSON
MODEL:	B160 BATTERY CABINET
DIMENSIONS:	63" x 25.6" x 29.5" (H x W x D)
WEIGHT:	295 LBS (WITHOUT BATTERIES)



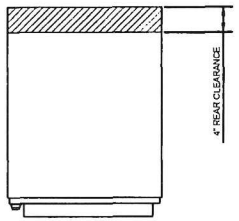


REAR VIEW



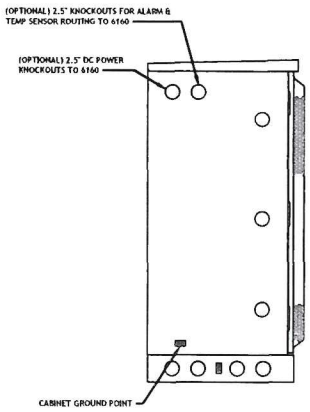
FRONT VIEW
(DOOR OPEN)

NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING

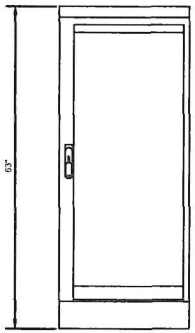


GROUNDING NOTE:

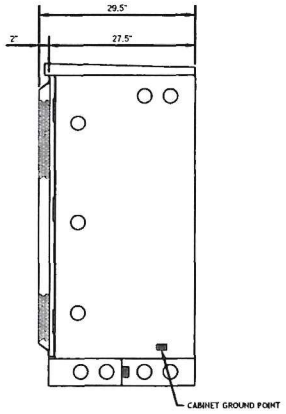
"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."



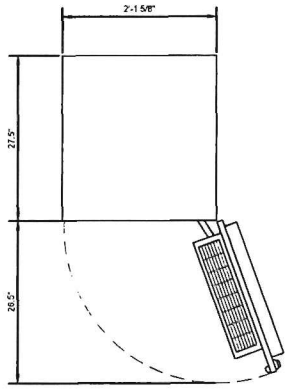
LEFT VIEW



FRONT VIEW



RIGHT VIEW



PLAN VIEW

B160 ERICSSON SITE SUPPORT BATTERY CABINET

1 ERICSSON B160 BATTERY CABINET SPECIFICATIONS

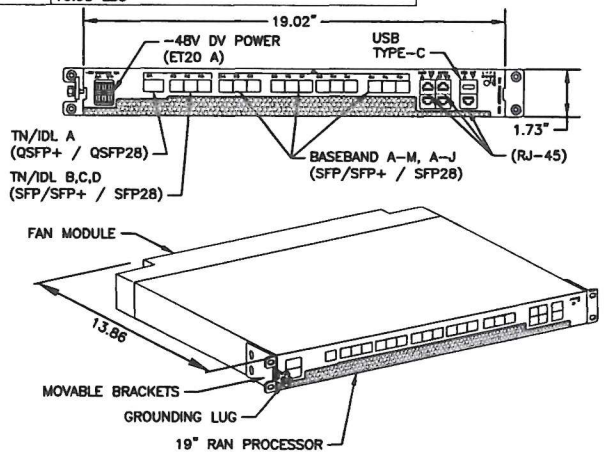
SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

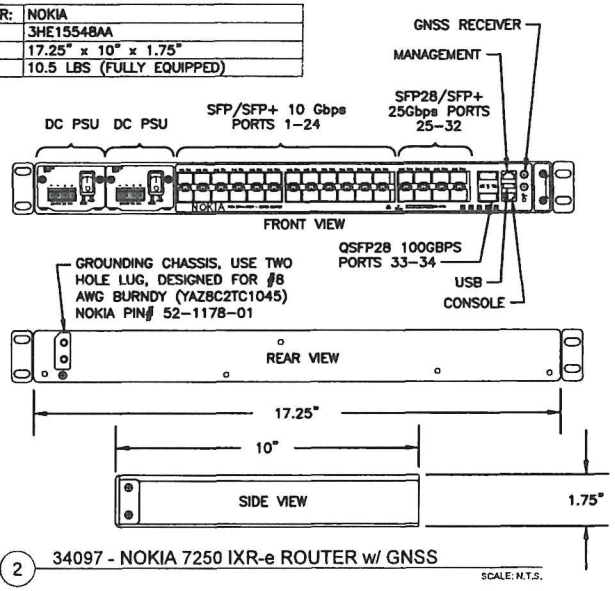
SHEET NUMBER:	REVISION:
R-605	0

MANUFACTURER:	ERICSSON
MODEL:	6651 RAN PROCESSOR (KDU1370093/11)
DIMENSIONS:	1.73" X 19.02" X 13.86" (H" X W" X D")
WEIGHT:	16.98 LBS



1 34553 - ERICSSON 6651 RAN PROCESSOR
SCALE: N.T.S.

MANUFACTURER:	NOKIA
MODEL:	3HE15548AA
DIMENSIONS:	17.25" x 10" x 1.75"
WEIGHT:	10.5 LBS (FULLY EQUIPPED)



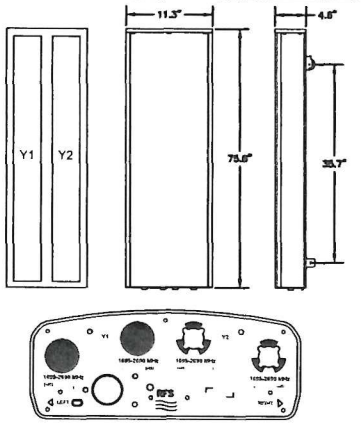
2 34097 - NOKIA 7250 IXR-e ROUTER w/ GNSS
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-606	0

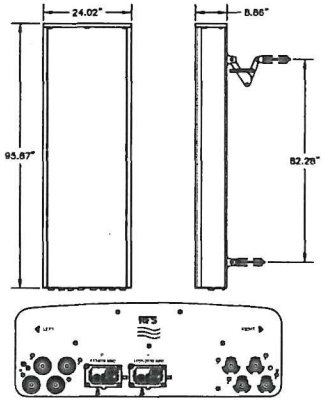
MANUFACTURER:	RFS
MODEL:	APXVLL19P_43-C-A20
DIMENSIONS:	75.6" x 11.3" x 4.6" H x W x D
WEIGHT:	40.9 LBS
CONNECTOR TYPE:	4 x 4.3-10 FEMALE/BOTTOM + 2 AISG CONNECTORS (1 MALE, 1 FEMALE)
MOUNTING KIT WEIGHT:	7.49 LBS (APM40-2 BEAM TILT KIT)



1 34403 - RFS APXVLL19P_43-C-A20

SCALE: N.T.S.

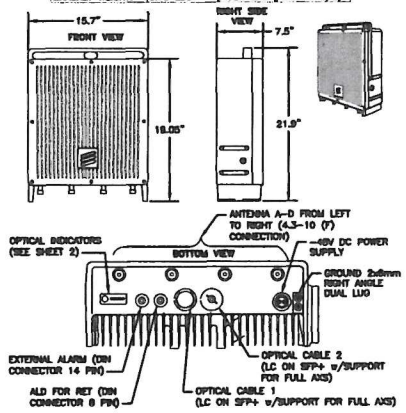
MANUFACTURER:	RFS
MODEL:	APXVAALL24_43-U-NA20
DIMENSIONS:	95.67" x 24.02" x 8.86"
WEIGHT:	119 LB
BAND:	QUAD BAND (8 PORT)
MOUNTING KIT & WEIGHT:	APM40-10E BEAM TILT KIT (INCLUDED) (16.53 LBS)



2 34087 - RFS APXVAALL24_43-U-NA20

SCALE: N.T.S.

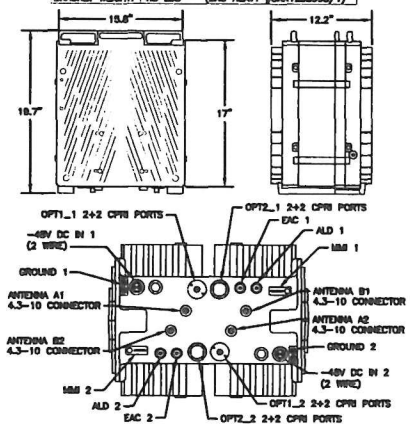
MANUFACTURER:	ERICSSON
MODEL:	4480 RADIO (KRC 161 922/1)
DIMENSIONS:	21.9" x 15.7" x 7.5" (H x W x D)
MODEL BAND:	B71, B66 FOR NR AND LTE
WEIGHT:	61 LBS
BRACKET WEIGHT:	3.75 LBS (MULTI SYS (KDU 1973/2)



3 34372 - ERICSSON 4480 RADIO

SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	4460 RADIO B2/25 B66 (KRC 161 812/3)
DIMENSIONS:	19.7" x 15.8" x 12.2" (H" x W" x D")
WEIGHT:	109 LBS
BRACKET WEIGHT:	4.8 LBS (ERS HEAVY (KDU(1255993/1)



4 34373 - ERICSSON 4460 RADIO B2/25 B66

SCALE: N.T.S.

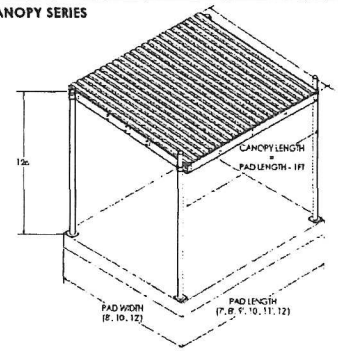
NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

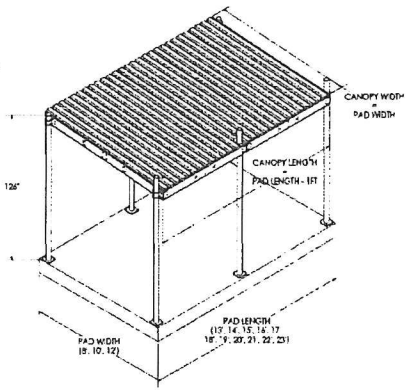
SHEET NUMBER:	REVISION:
R-607	0

WEATHER CANOPY SERIES

SERIES OVERVIEW



4 POST WEATHER CANOPY



6 POST WEATHER CANOPY

Weather Canopy Size Options

Pad Length	Pad Width (Roof Slope Direction) 8'		10'		12'	
7'	PW-WC0708-4	488 lbs	PW-WC1007-4	630 lbs	PW-WC1207-4	1026 lbs
8'	PW-WC0808-3	733 lbs	PW-WC1008-6	930 lbs	PW-WC1208-3	1128 lbs
9'	PW-WC0809-3	833 lbs	PW-WC1009-6	1065 lbs	PW-WC1209-3	1295 lbs
10'	PW-WC0810-3	895 lbs	PW-WC1010-6	1126 lbs	PW-WC1210-3	1378 lbs
11'	PW-WC0811-6	973 lbs	PW-WC1011-6	1254 lbs	PW-WC1211-6	1496 lbs
12'	PW-WC0812-3	1011 lbs	PW-WC1012-6	1340 lbs	PW-WC1212-6	1538 lbs
13'	PW-WC0813-6	1221 lbs	PW-WC1013-6	1569 lbs	PW-WC1213-6	1870 lbs
14'	PW-WC0814-6	1279 lbs	PW-WC1014-6	1649 lbs	PW-WC1214-6	1949 lbs
15'	PW-WC0815-6	1307 lbs	PW-WC1015-6	1755 lbs	PW-WC1215-6	2126 lbs
16'	PW-WC0816-6	1460 lbs	PW-WC1016-6	1854 lbs	PW-WC1216-6	2246 lbs
17'	PW-WC0817-6	1530 lbs	PW-WC1017-6	1954 lbs	PW-WC1217-6	2370 lbs
18'	PW-WC0818-6	1629 lbs	PW-WC1018-6	2085 lbs	PW-WC1218-6	2499 lbs
19'	PW-WC0819-6	1698 lbs	PW-WC1019-6	2179 lbs	PW-WC1219-6	2619 lbs
20'	PW-WC0820-6	1778 lbs	PW-WC1020-6	2288 lbs	PW-WC1220-6	2741 lbs
21'	PW-WC0821-6	1859 lbs	PW-WC1021-6	2364 lbs	PW-WC1221-6	2869 lbs
22'	PW-WC0822-9	1937 lbs	PW-WC1022-6	2464 lbs	PW-WC1222-6	2993 lbs
23'	PW-WC0823-6	2016 lbs	PW-WC1023-6	2564 lbs	PW-WC1223-6	3119 lbs

1 OF 12					
5/5/2021	1:40	PW-WC / PW-ED Series			
DIMENSIONS ARE IN INCHES UNLESS NOTED. ALL D ANGLES ±1/2°, ANGULAR WITH LESS THAN 1/4", ROUND ALL OTHERS ±1/4"		D.P.			
		T.R.			
		APPROVED			

PERFECT VISION

WCEQ-ENG-01-R6 | 6

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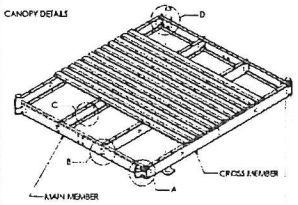
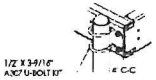
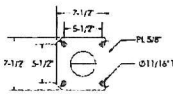
WEATHER CANOPY SERIES

CANOPY DETAILS

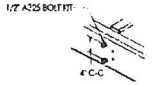




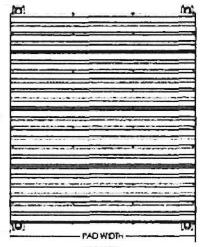
DETAIL A
SCALE 1 : 12



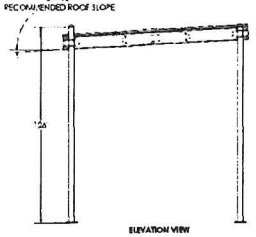
BASEPLATE DETAILS
SCALE 1 : 8



DETAIL B
SCALE 1 : 12



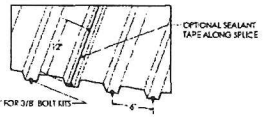
TOP VIEW



ELEVATION VIEW

DETAIL C
SCALE 1 : 12

WEATHER CANOPY
ROOF DECKING HIDDEN



DETAIL D
SCALE 1 : 12

- 8" C-C MAX SPACING ALONG ALL CROSS MEMBERS
- 12" C-C MAX SPACING ALONG EXTERIOR MAIN MEMBERS
- 12" C-C MAX SPACING ALONG SPLICES

ROOF DECKING DETAIL
SCALE 1 : 8

2 OF 12					
5/5/2021	1:36	PW-WC / PW-ED Series			
		D.P.			
		T.R.			
		APPROVED			

PERFECT VISION

WCEQ-ENG-01-R6 | 6

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AMERICAN TOWER®
ATC TOWER SERVICES, LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JLR	3/12/2024

ATC SITE NUMBER:
208135
ATC SITE NAME:
WEST LEBANON
T-MOBILE SITE NAME:
4LN0802_ATC
SITE ADDRESS:
1405 CONNECTICUT RIVER ROAD
HARTFORD, VT 05047

SEAL:

T-Mobile

ATC PROJ. #:	14580440_D2
CUST. ID:	4LN0802_ATC
CUST. #:	4LN0802A

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-608	0

AMERICAN TOWER CORPORATION

Mount Analysis Report

ATC Asset Name	:	West Lebanon
ATC Asset Number	:	208135
Engineering Number	:	14580440_C8_01
Mount Elevation	:	95 ft
Proposed Carrier	:	T-Mobile
Carrier Site Name	:	4LN0802_ATC
Carrier Site Number	:	4LN0802A
Site Location	:	1405 Connecticut River Road Hartford, VT 5047 43.634875, -72.335026
County	:	Windsor
Date	:	January 30, 2024
Max Usage	:	46%
Analysis Result	:	Contingent Pass

Prepared By:
Joseph Swier
Structural Engineer I

Joseph Swier

STATE OF VERMONT — ESHA MODI — 10 AUG 083319 — LICENSED PROFESSIONAL ENGINEER

Esha Modi

Introduction

The purpose of this report is to summarize results of the mount analysis performed for T-Mobile at 95 ft.

Supporting Documents

Specifications Sheet:	Site Pro 1 VFA10-HO, dated June 29, 2018 Site Pro 1 MSFAA, dated May 2, 2016
Radio Frequency Data Sheet:	RFDS ID 84LN0802A, dated December 22, 2023
Reference Photos:	Site photos from 2021

Analysis

This mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	109 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	40 mph (3-Second Gust) w/ 1.00" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (Lh):	0 ft
Spectral Response:	Ss = 0.243, S1 = 0.07
Site Class:	D - Stiff Soil - Default
Live Loads:	Lm = 500 lbs, Lv = 250 lbs

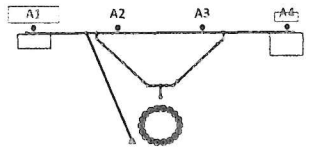
Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above provided the modifications listed below are completed:

- Analysis based on new installation of (3) Site Pro 1 VFA10-HO V-Frames (M12ODR(2800)-4[4]) with (1) Site Pro 1 MSFAA monopole sector frame attachment assembly.
- Install P2 (2.375" x 120") antenna mounting pipes (Mount Position 1, 2, 3 & 4) with Site Pro 1 SCX7-U (or approved equivalent) crossover plate kits.
- No structural failures were addressed with the noted contingencies. Contingencies address Carrier's antenna spacing requirements.

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact MountAnalysis@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Mount Layout



Equipment Position Table

RAD	RAD Center (ft)	Qty.	Antenna Model
A1	95.0	1	RFS APXVAALL24 43-U-NA20
	95.0	1	Ericsson Radio 4480 B71+B85A
A2	-	-	Empty
A3	-	-	Empty
A4	95.0	1	RFS APXVLL19P_43-C-A20
	95.0	1	Ericsson 4460 BAND 2/25

1 MOUNT ANALYSIS

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-609	0

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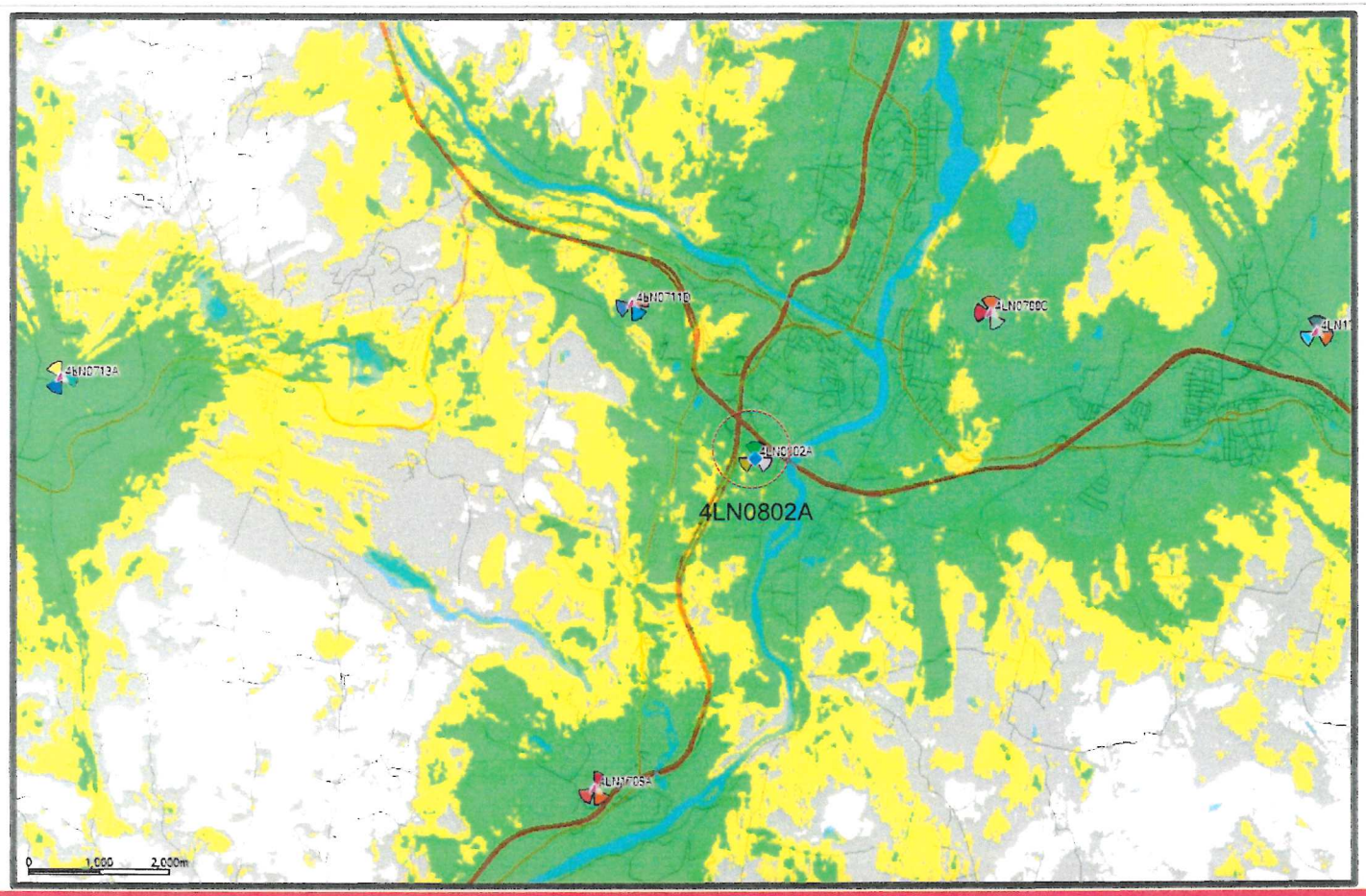
JUN 20 2024
By

Existing LTE (All Carrier) Coverage – White River Junction, VT



Proposed T-Mobile Site

Map Legend

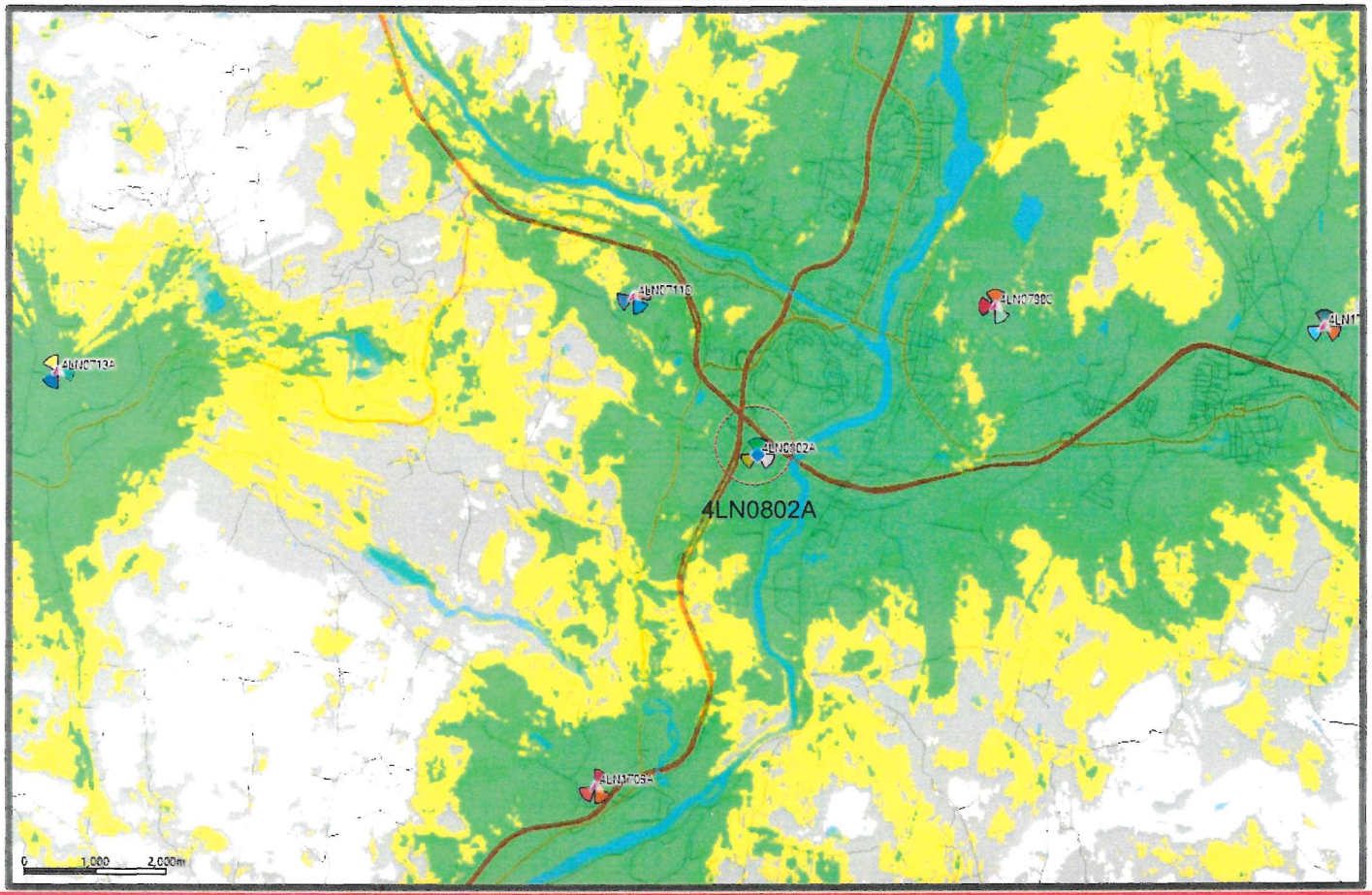
Other_Road
Line
Line 1
Primary_Road
Line
Line 1
Secondary_Road
Line
Line 1
Neighborhood_Road
Line
Line 1

Coverage Legend

LTE: Downlink Coverage 1
In-Building Commercial
In-Building Residential
In-Vehicle
Outdoor

T··Mobile·

Proposed LTE (All Carrier) Coverage for 4LN0802A at Proposed Antenna Height of 95 Feet



Proposed T-Mobile Site

Map Legend

Other_Road
Line
Primary_Road
Line
Secondary_Road
Line
Neighborhood_Road
Line

Coverage Legend

LTE: Downlink Coverage 1
In-Building Commercial
In-Building Residential
In-Vehicle
Outdoor

T··Mobile·

RECEIVED
JUN 20 2024
By

Prepared For:
ATC-T-MOBILE
Site Number:
4LN0802A
Site Name:
WEST LEBANON
1405 CONNECTICUT RIVER RD
HARTFORD, VT 05047

SITE NO: 4LN0802A **SITE NAME:** WEST LEBANON **ADDRESS:** 1405 CONNECTICUT RIVER RD HARTFORD, VT 05047	**T-MOBILE NORTHEAST LLC** 15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893	AMERICAN TOWER CORPORATION 116 HUNTINGTON AVE. 11TH FLOOR BOSTON, MA 02116	TEP NORTHEAST 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845 TEL: (978) 557-5553	SITE TYPE: MONOPINE DATE: 02/14/2024 REV: 0 DRAWN BY: AM SCALE: N.T.S.	THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE. PAGE 1 OF 7

LOCUS MAP

TAKEN FROM GOOGLE.COM ON 02/13/2024

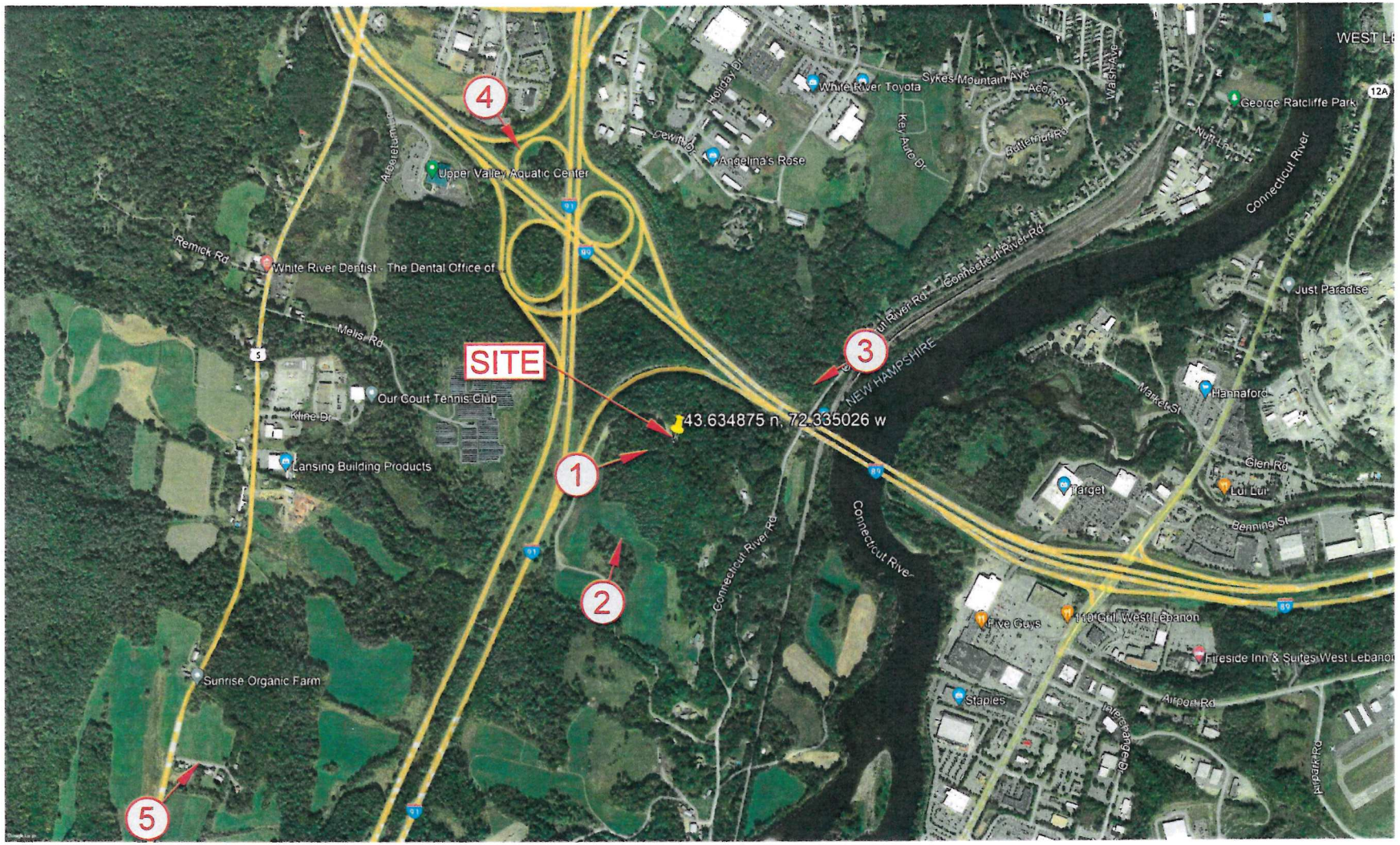


PHOTO LOCATION

SITE NO: 4LN0802A **SITE NAME:** WEST LEBANON **ADDRESS:** 1405 CONNECTICUT RIVER RD HARTFORD, VT 05047	**T-MOBILE NORTHEAST LLC** 15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893	AMERICAN TOWER CORPORATION 116 HUNTINGTON AVE. 11TH FLOOR BOSTON, MA 02116	TEP NORTHEAST 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845 TEL: (978) 557-5553	SITE TYPE: MONOPINE DATE: 02/14/2024 | REV: 0 DRAWN BY: AM SCALE: N.T.S.	THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

EXISTING/PROPOSED CONDITIONS LOCATION # 1 DATE OF PHOTO: 02/07/2024

VIEW NORTHEAST FROM KILBURN BROOK (EQUIPMENT NOT VISIBLE)

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EXISTING/PROPOSED CONDITIONS LOCATION # 2 DATE OF PHOTO: 02/07/2024

VIEW NORTH FROM KILBURN BROOK (EQUIPMENT NOT VISIBLE)

SITE NO: 4LN0802A SITE NAME: WEST LEBANON ADDRESS: 1405 CONNECTICUT RIVER RD HARTFORD, VT 05047	**T-MOBILE NORTHEAST LLC** 15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893	AMERICAN TOWER CORPORATION 116 HUNTINGTON AVE. 11TH FLOOR BOSTON, MA 02116	TEP NORTHEAST 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845 TEL: (978) 557-5553	SITE TYPE: MONOPINE DATE: 02/14/2024 REV: 0 DRAWN BY: AM SCALE: N.T.S.	THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

EXISTING/PROPOSED CONDITIONS LOCATION # 3 DATE OF PHOTO: 02/07/2024

VIEW SOUTHWEST FROM CONNECTICUT RIVER RD (EQUIPMENT NOT VISIBLE)

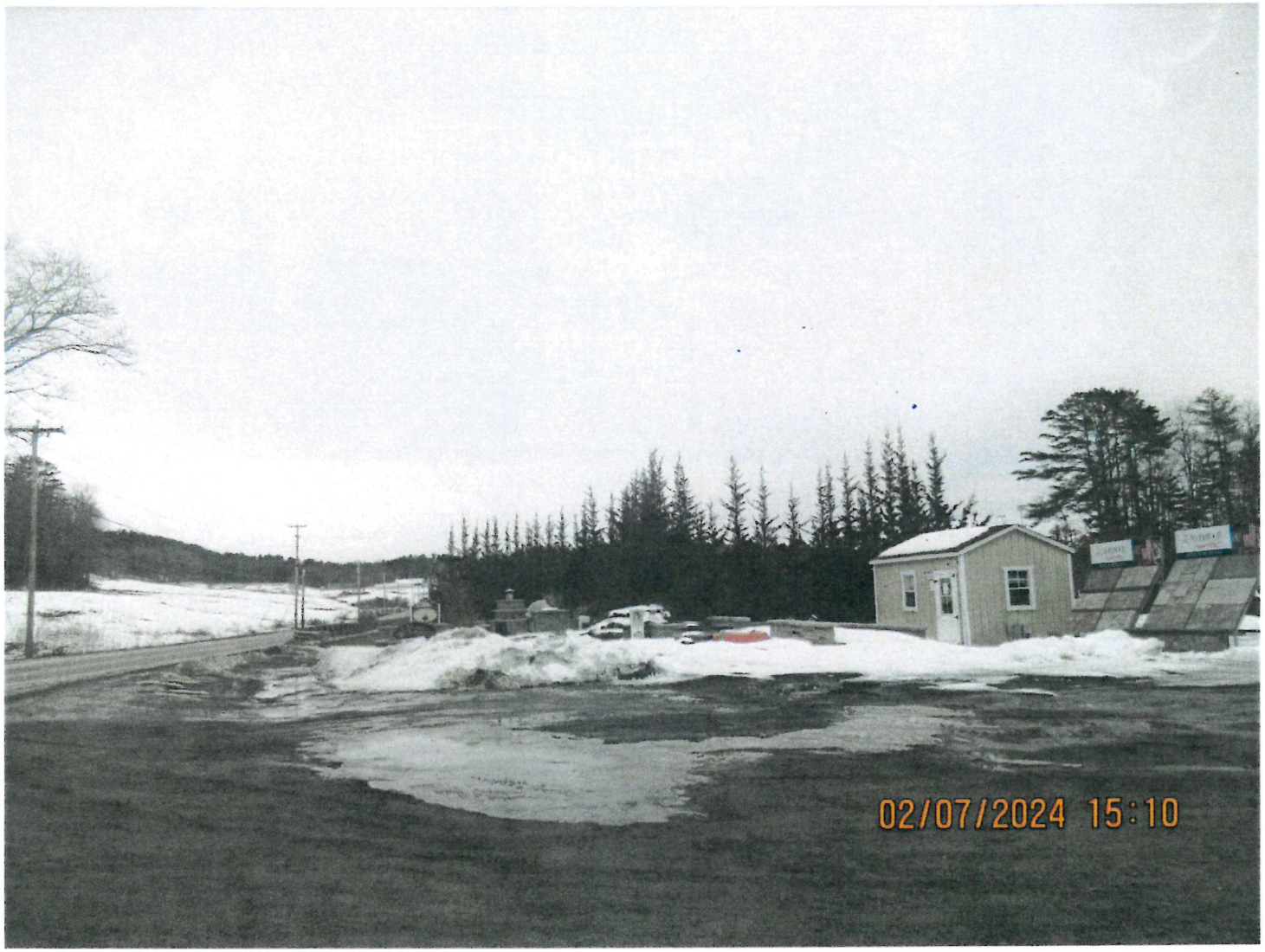
SITE NO: 4LN0802A SITE NAME: WEST LEBANON ADDRESS: 1405 CONNECTICUT RIVER RD HARTFORD, VT 05047	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893	AMERICAN TOWER CORPORATION 116 HUNTINGTON AVE. 11TH FLOOR BOSTON, MA 02116	TEP NORTHEAST 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845 TEL: (978) 557-5553	SITE TYPE: MONOPINE DATE: 02/14/2024 REV: 0 DRAWN BY: AM SCALE: N.T.S.	THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE. PAGE 5 OF 7

EXISTING/PROPOSED CONDITIONS LOCATION # 4 DATE OF PHOTO: 02/07/2024

VIEW SOUTHEAST FROM HOLIDAY INN PARKING LOT (EQUIPMENT NOT VISIBLE)

SITE NO: 4LN0802A SITE NAME: WEST LEBANON ADDRESS: 1405 CONNECTICUT RIVER RD HARTFORD, VT 05047	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893	AMERICAN TOWER CORPORATION 116 HUNTINGTON AVE. 11TH FLOOR BOSTON, MA 02116	TEP NORTHEAST 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845 TEL: (978) 557-5553	SITE TYPE: MONOPINE DATE: 02/14/2024 REV: 0 DRAWN BY: AM SCALE: N.T.S.	THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE. PAGE 6 OF 7

EXISTING/PROPOSED CONDITIONS LOCATION # 5 DATE OF PHOTO: 02/07/2024



VIEW NORTHEAST FROM N HAFTLAND RD (EQUIPMENT NOT VISIBLE)

SITE NO: 4LN0802A SITE NAME: WEST LEBANON ADDRESS: 1405 CONNECTICUT RIVER RD HARTFORD, VT 05047	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893	AMERICAN TOWER CORPORATION 116 HUNTINGTON AVE. 11TH FLOOR BOSTON, MA 02116	TEP NORTHEAST 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845 TEL: (978) 557-5553	SITE TYPE: MONOPINE DATE: 02/14/2024 REV: 0 DRAWN BY: AM SCALE: N.T.S.	THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE. PAGE 7 OF 7

DRAFT
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND
DECISION

HARTFORD PLANNING COMMISSION

Application #24-09 by 99 Depot Street, LLC and Orian Welling
for Site Development Plan Approval
to convert an existing building to a Multi-Unit Dwelling
lot 22-0253-000, 99 Depot Street, Wilder, in VR-C and R-1 zoning districts

This decision pertains to application #24-09 by 99 Depot Street, LLC (owner) and Orian Welling (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations to convert an existing building to a Multi-Unit Dwelling, lot 22-0253-000, 99 Depot Street, Wilder, in VR-C and R-1 zoning districts.

FINDINGS OF FACT

Based upon the information contained in the exhibits for this application (see attached list) and the evidence adduced at the Planning Commission meeting of July 29, 2024 the Hartford Planning Commission makes the following Findings of Fact:

General Information

1. The owner of record of lot 22-0253-000 is 99 Depot Street, LLC, who acquired the lot on 01-26-24. The deed is recorded in volume 618, page 509 of the Hartford Land Records.

2. The lot is approximately 0.29 acres/12,770 sq. ft.

3. The lot is located at 99 Depot Street in Wilder.

4. The lot is developed with a residential building built before the adoption of Zoning Regulations. The building has been vacant for approximately ten years.

5. The lot is in VR-C and R-1 zoning districts.

This Application

6. The applicant proposes to convert the building to a three-unit dwelling, construct a 19’ x 7’ two-level porch and stairs to all units on the rear of the structure, and repair the front porch. (See exhibit #4)

7. Multi-unit dwellings are listed in the Zoning Regulations as Conditional Uses in the VR-C and R-1 zoning districts requiring approval by the Zoning Board of Adjustment.

   24 V.S.A. 4412 D was enacted in 2023 and requires that "In any district that is served by municipal sewer and water infrastructure that allows residential development, multiunit dwellings with four or fewer units shall be a permitted use, unless that district specifically requires multiunit structures to have more than four dwelling units."

   Therefore, Conditional Use Approval from the Zoning Board of Adjustment is not required.

8. The VR-C/R-1 zoning district boundary line bisections the structure.

   Density in the VR-C zoning district for a class 1 lot is one unit/3,500 sq. ft.

   Density in the R-1 zoning district for a class 1 lot is one unit/4,000 sq. ft.

   Using the more restrictive calculation, three dwelling units are possible. (12,770/4,000 =3.19)

9. According to the applicant, they "plan to improve the sustainability and energy efficiency of the building to meet or exceed (mostly exceed) all local standards through the renovation and have reached out to Hartford's Environmental Sustainability Coordinator, Dana Clawson, for advice on incentive programs, and new state rules. Improvements will include conversion to full electric, efficient split system heating and high-efficiency heat-pump style water heaters. Conduit will be placed to provide 240V service near parking for EV charging. The building envelope and insulation will be improved and heat exchanging ventilation will be installed."

10. Six parking spaces are required/two per dwelling unit. The applicant proposes 5 paved parking spaces behind the structure and one gravel parking space on the east side of the structure.

11. The existing access drive is undersized (the Zoning Regulations require the access drive be 26' wide at the intersection with the public street and 24' beyond this point to the parking area). (See exhibit #2)

    The Zoning Regulations allow the Planning Commission to vary these requirements based on evidence supplied by a qualified transportation professional, specializing in the field of traffic analysis.

    Corey Mack, P.E., Consulting Transportation Engineer reviewed the project and supports the access drive reduction. (See exhibit #6)

12. The applicant proposed to maintain the ceiling mounted light at the front porch and install four downlit fixtures as depicted on the site plan. (See exhibit #2)

    The applicant understands that lighting must not create excessive off-site or sky glow. If the Zoning Administrative Officer determines that lighting does not meet this condition,

the applicant will be required to comply.

13. The applicant proposes to plant and maintain one tree behind the building and two trees along the eastern property line. (See exhibit #2)

According to the applicant, "Landscaping maintenance will be provided by my property management company, Welling Properties LLC, or contracted to a professional snow removal and lawn care company.

Low maintenance perennial plantings will be used to reduce the maintenance requirements (However, it has been my practice to allow tenants to maintain more complex/high maintenance decorative gardens if it is of interest to them and if such interest arose, I would offer this option at this three family building. I ask to review any gardening proposals ahead of time to ensure they are reasonable and generally improve the aesthetics of the property. I typically provide funding for major plantings, edging, mulch, etc. for such plans.)"

14. Section 260-27 C of the Hartford Zoning Regulations states:

> C. **Grading and drainage.** The following provisions shall apply to any changes which affect drainage of water to or from a property:
> (1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.
> (2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.
> (3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

According to the applicant, "Grading changes will be minimal and largely focused on addressing surface unevenness and low points that collect water today while maintaining the prevailing grade. Currently, drainage is predominantly to the rear of the property with a shallow slope extending from the house, through the planned yard and parking area, to the steeply sloped rear third of the lot. Drainage to the rear is currently effective failing two depressions in the planned parking area that pool for short periods in and immediately following heavy rain. Infiltration, especially towards the rear sloping area of the lot, is typically strong and the soil drains well/does not remain saturated.

The addition of the paved parking area will create a new impervious section of the lot and increase the drainage/infiltration load to the rear of the lot. Based on the square footage of the lot, and strong infiltration today, I don't anticipate a need for additional runoff control from placement of the lot. However, the placement of the lot leaves sufficient space for an infiltration trench or other surface stormwater control strategy if ultimately needed. Ongoing work to control garlic mustard and replace it with native, more absorptive and erosion resistant species, will further improve infiltration and erosion resistance at the rear of the lot (garlic mustard is established over the full sloping area of at the rear of the lot and I've begun the process to remove it).

One exception to keeping existing grades will be re-grading the area around the planned single parking location on the North-East corner of the building. Over time, erosion from informal parking in the area has caused a low-spot that pools ~5" deep in most rainstorms (the low spot catches runoff from the road before it reaches a catch basin ~20' to the east). The grade will be re-established in this area to prevent capture of runoff from the road and allow it to again flow to the nearby catch basin. This low-spot spans the property boundary and I have had productive discussions with Derik Rogers, owner of the adjacent lot to the east (22-254) to complete re-grading in this ~150 SF low spot concurrently to stop pooling on both properties."

15. Snow will be stored on site and will be removed as needed. Snow will not be stored in such a manner as to create a hazard.

16. The applicant understands that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary.

17. During construction of the project, erosion and sediment control measures as specified in the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed.

18. The applicant understands that construction of the project must comply with the following:

    Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations.

19. The applicant understands that no structure, including construction/office trailers, signage, parking spaces or plantings may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any signs, parking spaces or plantings found to obstruct sight distance will be required to be relocated.

20. The applicant retains the obligation to identify, apply for, and obtain relevant local and state permits for this project.

21. The applicant understands that all activities authorized by the issuance of the zoning permit shall be started within six (6) months and completed within two (2) years of its date of issue, or the zoning permit shall become null and void and reapplication to complete any activities shall be required. Any activities not completed within the above permit period shall be subject to any ordinance in effect at the time of reapplication. One six (6) month extension to both time periods may be granted by the Planning Commission.

22. The applicant understands that they must obtain a Certificate of Occupancy from the

Zoning Administrative Officer upon completion of the project and before the building may be occupied. The applicant understands that a Certificate of Occupancy will not be issued if the project is not in compliance with these Findings, Plans and any conditions placed on the Decision.

CONCLUSIONS OF LAW

Based upon the foregoing Findings of Fact, the Hartford Planning Commission concludes that the proposed site plan provides, as required by **§260-45 C** of the Hartford Zoning Regulations:

(1) Maximum safety of **traffic circulation between the site and the street network** and integration with the overall traffic pattern, including provisions for auxiliary roadways connecting with adjacent properties where appropriate. Included in this evaluation shall be the location, number and width of access points, curve radii at access points, acceleration or deceleration lanes on adjacent public streets, sight distances, lighting, location of sidewalks and other walkways, and the overall relationship of the proposed development with existing traffic conditions in the area. All modes of transportation shall be taken into account, including pedestrian, bicycle, handicapped, delivery and emergency vehicles and public transportation.

(2) Adequacy of **on site circulation, parking, and loading facilities,** with particular attention to safety. Included in this evaluation shall be traffic movement patterns, drive and aisle widths, directional signs, location of loading docks and parking areas, number and size of parking spaces, and provision for lighting, drainage, snow removal and access for emergency vehicles and public transportation.

(3) Adequacy of **landscaping, screening, and setbacks** in achieving maximum compatibility with and protection of adjacent properties by screening from them any glare produced by interior or exterior lights and unsightly areas such as storage areas, and parking lots; assurance that landscape materials will not interfere with visibility or safety and that they are of a type that can survive and be maintained as proposed.

(4) Adequacy of **provision for safety and convenience of pedestrians, bicyclists, and handicapped persons**. Included in this evaluation shall be lighting of walks and entrances, design and placement of walks and crosswalks, pick-up points for public transportation and provision of bicycle racks.

(5) **Protection of renewable energy resources,** including a finding that the proposed development does not adversely affect the ability of adjacent properties to use this form of energy.

(6) **Compliance with other provisions of these regulations** including § 260-27, Landscaping, and § 260-31, Land use performance standards.

(7) **Other** factors that are directly related to the above aspects of site plan review.

6. #24-09

DECISION

The Hartford Planning Commission, based upon the forgoing Findings of Fact and Conclusions of Law, hereby approves application #24-09 by 99 Depot Street, LLC (owner) and Orian Welling (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations to convert an existing building to a Multi-Unit Dwelling, lot 22-0253-000, 99 Depot Street, Wilder, in VR-C and R-1 zoning districts **on the condition that:**

1. **Before a Zoning Permit is issued:**

    - **The wattage of the proposed light for the parking area and walkway is changed to "100 watt" on the site plan.**
    - **The applicant submits written verification that the only change(s) to the final site plan was as required by the Planning Commission.**

2. **Before a Certificate of Occupancy is issued the applicant:**

    - **Submits written verification certifying that the project was constructed in compliance with the approved plans and Findings of Fact.**
    - **Submits verification that the water and sewer have been inspected and approved by the Department of Public Works.**
    - **Records an Energy Code Certificate in the Land Records.**

This decision is also subject to the condition that no modification or expansion shall be made to the project as described and limited in the above Findings of Fact and Conclusions of Law without the written approval of the Hartford Zoning Board of Adjustment and/or the Hartford Planning Commission. This decision may be revoked, and a new application or permit required if conditions and findings are violated or modified without written approval.

The applicants are responsible for insuring compliance with all applicable State and Federal regulations pertaining to this application.

Those in favor:

Those in opposition:

Those not participating:

Dated at Hartford, Vermont this ____ day of July 2024

HARTFORD PLANNING COMMISSION

By:_____
Chairperson/Vice-Chairperson

Appeal Rights: An interested person who has participated in the proceeding related to this decision has the right to appeal this decision to the Vermont Environmental Court, pursuant to 24 V.S.A. s. 4471 and V.R.E.C.P.5, in writing, within 30 days of the date of this decision. The fee is $250.00. If you fail to appeal this decision, your right to challenge this decision at some future time may be lost because you waited too long. You will be bound by this decision, pursuant to 24 V.S.A. s. 4472 (d) (exclusivity of remedy; finality).

EXHIBIT LIST

1. Application #24-09

2. Site plan entitled "99 Depot Street, Tax Map 22, Lot 253, 99 Depot Street, Wilder, VT 05001" prepared by Orain Welling

3. Boundary Plan entitled "99 Depot Street, Tax Map 22, Lot 253, 99 Depot Street, Wilder, VT 05001" prepared by Pathways Consulting

4. Project Narrative prepared by Orian Welling

5. Response Memo from Orian Welling dated July 3, 2024

6. Memo from Corey Mack, dated June 28, 2024

7. Memo from Jo-Ann Ells, dated June 28, 2024

Town of Hartford

Planning Commission App # _____
Zoning Board of Adjustment App # _____

APPLICATION TO
PLANNING COMMISSION &/OR ZONING BOARD OF ADJUSTMENT

PLEASE COMPLETE ALL ITEMS APPLICABLE AND PROVIDE THE CORRECT NUMBER OF COPIES OF THIS APPLICATION AND THE SITE PLAN OR SUBDIVISION PLAT. ABUTTING LANDOWNERS WILL BE NOTIFIED BY THE PLANNING/ZONING OFFICE.

1. **NAME & ADDRESS OF RECORD OWNER(S)** 99 Depot Street LLC

   PO Box 5220, Hanover NH 03755

   Deed Recorded Book 618 Page 509 (Available at Town Clerk's Office)

   Telephone: Work 802.738.0135 Cell 857.206.2091 Email Address: [redacted]

2. **NAME & ADDRESS OF APPLICANTS(S)** Orian Welling, PO Box 5220, Hanover NH 03755

   Telephone: Work 802.738.0135 Cell 857.206.2091 Email Address: [redacted]

3. **NAME & ADDRESS OF APPLICANTS' CONSULTANT** N/A

   Telephone: Work _____ Cell _____ Email Address: _____

4. **PROJECT LOCATION** 99 Depot Street, Hartford VT 05001

5. **PRESENT USE OF PROPERTY** Three family house, currently vacant w/ renovation started by previous owner

6. **BRIEFLY DESCRIBE PROJECT** (in addition, a detailed narrative must be submitted)
   Complete renovation as three unit house including construction of new multi-story back porch and stairways w/ access to all floors, and improved driveway and parking area

7. **PROJECT SIZE IN SQ. FT OR ACREAGE** 2,800 SF finished living area, 0 2 acre improved area

   Lot Width 55 FT Lot Depth 230 FT

8. **IS PROJECT ON TOWN WATER/SEWER?** Yes X No _____ If Yes, estimated

   Water Consumption/day 500-700gpd Amount of Sewer Flow Projected 450-630gpd

   Size of Closest Lines Above (water) _____ (sewer) _____

9. **DESCRIBE LANDSCAPING PLAN** Paved single driveway along east of home and paved parking in rear (south) of home, single gravel parking spot on west of home, grass in remaining area

10. **IF A BUSINESS** - Present # of Employees _____

    Proposed Days & Hours of Operation _____

    Will you use the landfill & recycling center? Yes _____ No _____

    The main waste by-product of your business is: _____

11. **IF A RESTAURANT** - Present seating _____ Proposed _____

12. **PARKING SPACES** - Number to be provided 6

13. **SIGNAGE** - Free Standing _____ Attached _____

14. **FENCING** – Location _____ Height _____

15. **NEAREST WATER SUPPLY FOR FIRE PROTECTION** USPS, 80 Depot St (~200ft to hydrant)

16. **ESTIMATED VALUE OF PROPOSED WORK** $200,000

17. **IS THERE AN EXISTING DRIVEWAY?** Yes

18. **IF A SUBDIVISION** - Number of New Lots to be Created _____

    Do you request that the Town consider taking over maintenance of – Roads _____

    Or Park/Open Space _____

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. (This certification must be signed by lot owners and applicants).

[signature]	6/22/2024	[signature]	6/22/2024
Applicant's Signature	Date	Lot Owner's Signature	Date
Orian Welling		Orian Welling, President 99 Depot St LLC	
_____		_____	
Co-Applicant's Signature	Date	Co-Owner's Signature	Date

The applicant retains the obligation to identify, apply for, and obtain any relevant local or state permits before any construction may commence. Please call 802-282-6488 to speak with the State Permit Specialist.

For Office Use Only		
Map/Lot #		
Fee Paid $:		Receipt #:
PC: Site Plan	Min. Sub.	Maj. Sub.
PD	PD Amend.	Other
ZBA: Conditional Use	Variance	Appeal
Other		
Zoning District (s)		Date Filed:
Official Submittal Date:		

99 Depot St, Wilder VT Project Description for Application to Planning Commission and Zoning Board

Prepared and submitted by:

Orian Welling
PO Box 5220
Hanover, NH 03755
857-206-2091
Applicant, and sole beneficiary of 99 Depot St LLC (property owner)

The purpose of this project is to complete renovations of 99 Depot St, Wilder, as a three-unit dwelling and return it to use for local housing. The building at 99 Depot Street was constructed in 1902 as a store and tenement building. The ground floor was the store, and the second and third floors were tenement housing. Around the mid 1900's the building was converted into three units with he ground floor being converted from a store to a two-bedroom living unit, the second floor as a two-bedroom unit, and the third floor as a single bedroom unit. The building has been vacant for approximately 10 years, and renovation (also as a 3 unit) was begun by the previous owners in 2021. This project aims to complete that renovation including remodel of all interior living spaces, update of the driveway and parking area, construction of exterior stairs at the rear of the building to improve access to all floors, and beautification / improvements to landscaping.

Currently the interior of the building has been removed down to stud walls, and all plumbing and electrical wiring has been removed. Interior renovations will include repair of structural walls to meet current load requirements, complete upgrade of wiring and plumbing, and finishing with 2 bedrooms on the first and second floors and 1 bedroom on the third floor (as previously configured). Interior stairs from the first to second floor will be updated to meet current code, and insulation will be updated to meet code. Heating and hot water will be fully electric utilizing modern split systems and high-efficiency heat-pump water heaters. A sprinkler system will be added, and all fire and CO alarms will be hard wired to improve fire safety of the building.

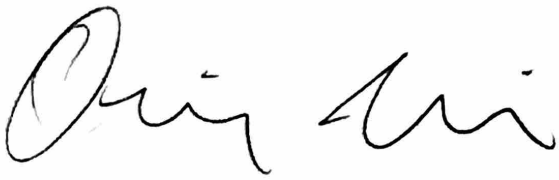
A new exterior stair access at the rear of the building will provide access to all floors of the building and the interior back staircase (current second egress for second floor) will be removed as it does not meet current code / the interior space available is not suitable to fit a staircase that would meet current code. The new exterior staircase and associated porches will be constructed fully inside the building area of the property as defined by the 10' front and side setbacks in this zoning district. The third-floor interior access will be removed creating a full fire-break floor between the second and third floors. The single exterior access, along with the sprinkler system, will allow the third floor to meet current fire code (a single interior staircase, since it necessitates a hole through the firebreak floor, would not meet current fire code).

A new paved parking lot with 5 parking spaces will be added behind the building and accessed via an interior drive along the west side of the building. The area available does not allow a drive meeting current zoning width guidelines, but will be an improvement on the current poorly delimited parking area and access and the narrower drive is reasonable for a building with only three units based on

relatively low expected traffic volume (see justification from transportation consulting firm Wall Consultant Group submitted with this application). A single paved parking spot will be constructed on the east side of the house to meet the required 6 parking spaces for the three-unit building.

The back-yard area between the building and new planned parking lot will be landscaped to improve appeal of the property and provide residents with an outdoor greenspace to enjoy. Shade trees will be planted at three points around the backyard to both provide shade and aesthetic appeal of the backyard, and to prevent vehicles from being driven across the yard.

The front porch, which is in moderate to poor condition and is non-conforming as the entirety of the porch structure is within 10' of the front property line, will be repaired in the existing footprint to improve visual appeal from the street and will continue to service the first-floor unit and the interior stairway to the second-floor unit.



Dr. Orian Welling

Memo

Submitted To: Orian Welling, 99 Depot Street LLC

Submitted By: Corey Mack, PE, PTOE, Consulting Transportation Engineer

Project Name: 99 Depot Street – Site Access Review

Date: 28 June 2024

Wall Consultant Group (WCG) reviewed the proposed site access to the 3-unit multifamily residential property at 99 Depot Street, Wilder, VT. This memo documents our assessment of the operating characteristics of the proposed driveway.

PROJECT DESCRIPTION

The property at 99 Depot Street consists of a 3-unit multifamily residential structure. The existing site includes two narrow driveway / parking aisles on either side of the existing structure. An existing rear parking area / back yard is primarily accessed by the western driveway.

The proposed site plan illustrates a formalized 12-foot driveway along the western property line accessing the rear of the property to provide five (5) off-street parking spaces. The western driveway is limited in width due to the property layout and an existing streetlight post. A sixth parking space is illustrated as a head in parking space directly off Depot Street on the eastern property line, opposite Norwich Avenue.

The Town of Hartford Zoning Regulations, section 260-24 C.(4) states:

> *The following dimensional requirements shall apply unless varied by the Planning Commission based on evidence supplied by a qualified transportation professional, specializing in the field of traffic analysis:*
>
> > *Access drive at its intersection with a public street: 15 feet for one-way traffic, 26 feet for two-way traffic, and 12 feet per lane for three or more lanes. A minimum curb return radius of 20 feet shall be provided.*
> >
> > *Internal drive which does not directly access any parking spaces: 12 feet for one-way traffic and 24 feet for two-way traffic.*

The proposed project is seeking a variance from the dimensional requirement to provide the minimum 26-foot two-way traffic aisle to the rear of the property for access to the five (5) off-street parking spaces.

ESTIMATED TRIP GENERATION

Trip generation refers to the number of vehicle trips originating at or destined for a particular land use development. Data from the Institute of Transportation Engineers (ITE) can be applied to estimate base vehicle trip generation associated with the existing 3-unit structure. Using ITE Land Use Code 220 – Multifamily Housing (Low-Rise), we would expect the peak hour of trip generation to be no greater than 2 trips per hour.

Given the proposed driveway length of approximately 85-feet and an operating speed of 5 MPH, a vehicle will clear the driveway in about 12 seconds. Even if all five vehicles were entering or exiting the driveway in an hour, the driveway would be occupied by a vehicle for only one minute within that hour. Furthermore, not all vehicles will be in conflict: daily driving behavior is often directional. Peak hour traffic flows are more likely to be exiting in the morning and entering in the evening, indicating that likelihood of a conflicting vehicle entrance and exit at the same time will be low.

In the rare event that a vehicle conflict occurs, the restricted width of the proposed driveway, the proximity of the existing streetlight, and the nearby corner at the intersection of Depot Street & Norwich Avenue indicate that travel speeds will be low. Vehicles will be able to adjust course and allow for safe passage.

CONCLUSION

The proposed formalized 12-foot driveway serving two-way traffic appears to be consistent with the historic access patterns of the residential property. The proposed 12-foot-wide driveway serving five (5) parking spaces is expected to operate safely and efficiently with low likelihood of vehicle conflict. With low travel speeds and low traffic volumes, the rare instance of vehicle conflict will have the opportunity to adjust course and allow for safe passage.

The dimensional requirement for a 26-foot-wide driveway access to the five (5) parking spaces in the rear of the 3-unit multifamily residential property at 99 Depot Street does not appear to be required for safe and convenient vehicle access.

Submitted by:

28 June 2024

Corey Mack, PE, PTOE
Transportation Engineer

Response Memorandum

To: Hartford Zoning and Planning Commissions
From: Orian Welling
Date: July 3, 2024
Re: Response to comments / questions memorandum dated June 28,2024

Responses to the questions and comments provided in the memorandum dated Jun 28, 2024 from Jo-Ann Ells, Hartford Zoning Administrator, are provided here following the same numbering for each topic as the original memo.

1. State and Local Permitting

   I, Orian Welling, confirm I understand it is my obligation to apply for and obtain any relevant local and state permits for this project. This includes but is not limited to a building permit from the Hartford building inspector and plumbing and electrical permits from the State. I will also review and re-visit resources such as the ANR's Permit Navigator Tool to ensure all required permits for the project are identified, applied for, and obtained.

2. Environmental sustainability and energy efficiency

   I plan to improve the sustainability and energy efficiency of the building to meet or exceed (mostly exceed) all local standards through the renovation and have reached out to Hartford's Environmental Sustainability Coordinator, Dana Clawson, for advice on incentive programs, and new state rules. Improvements will include conversion to full electric, efficient split system heating and high-efficiency heat-pump style water heaters. Conduit will be placed to provide 240V service near parking for EV charging. The building envelope and insulation will be improved and heat exchanging ventilation will be installed.

3. Water / Sewer allocation requirement

   I have confirmed a new allocation for water and sewer is not required. The Vermont Agency of Natural Resources Department of Environmental Conservation Drinking Water & Groundwater Protection Division has confirmed there is no permit requirement for reconnection of the water and sewer (email confirmation available on request). Hartford Public Works Project Manager, Chris Holzwarth, confirmed that without a permitting requirement, no new allocation is needed to turn back on / use the existing service lines. There is no change to design flows to the building vs. those in service in the past.

4. Amendments to site plan

   The site plan has been amended as requested. If shielding of a building mounted area light to prevent visibility from neighboring residences is not sufficient, I am happy to instead install poll-mounted lights near the parking area. My choice of building mounted shielded area light over poll mounted lights aims at preserving the residential / neighborhood feel of the building and lot, and a perception that poll mounted lights would move the aesthetic further towards that of a commercial apartment building. Though originally constructed as a commercial space on the first floor and tenements above, this building (which was since converted and used as a 3-family dwelling) has a construction style and curb view more aligned with that of a traditional one or two family home than of a larger apartment building, and my intention is to maintain that aesthetic to the extent possible while also updating to meet current code and requirements for a three-unit building.

5. Landscaping maintenance

   Landscaping maintenance will be provided by my property management company, Welling Properties LLC, or contracted to a professional snow removal and lawn care company. Low maintenance perennial plantings will be used to reduce the maintenance requirements (However, it has been my practice to allow tenants to maintain more complex / high maintenance decorative gardens if it is of interest to them and if such interest arose I would offer this option at this three family building. I ask to review any gardening proposals ahead of to ensure they are reasonable and generally improve the aesthetics of the property. I typically provide funding for major plantings, edging, mulch, etc. for such plans.)

6. Grading and drainage, section 260-27 C

   Grading changes will be minimal and largely focused on addressing surface unevenness and low points that collect water today while maintaining the prevailing grade. Currently, drainage is predominantly to the rear of the property with a shallow slope extending from the house, through the planned yard and parking area, to the steeply sloped rear third of the lot. Drainage to the rear is currently effective failing two depressions in the planned parking area that pool for short periods in and immediately following heavy rain. Infiltration, especially towards the rear sloping area of the lot, is typically strong and the soil drains well / does not remain saturated.

   The addition of the paved parking area will create a new impervious section of the lot and increase the drainage / infiltration load to the rear of the lot. Based on the square footage of the lot, and strong infiltration today, I don't anticipate a need for additional runoff control from placement of the lot. However, the placement of the lot leaves sufficient space for an infiltration trench or other surface stormwater control strategy if ultimately needed. Ongoing work to control garlic mustard and replace it with native, more absorptive and erosion resistant species, will further improve infiltration and erosion resistance at the rear of the lot (garlic mustard is established over the full sloping area of at the rear of the lot and I've begun the process to remove it).

One exception to keeping existing grades will be re-grading the area in an around the planned single parking location on the North-East corner of the building. Over time, erosion from informal parking in the area has caused a low-spot that pools ~5" deep in most rainstorms (the low spot catches runoff from the road before it reaches a catch basin ~20' to the east). The grade will be re-established in this area to prevent capture of runoff from the road and allow it to again flow to the nearby catch basin. This low-spot spans the property boundary and I have had productive discussions with Derik Rogers, owner of the adjacent lot to the east (22-254) to complete re-grading in this ~150 SF low spot concurrently to stop pooling on both properties.

7. Access memo edit

   "section 3-3.3.4" has been updated to "section 260-24 C (4)" in revised memo as requested.

8. Certificate of Occupancy

   I acknowledge I understand that once the project is completed, and before I can receive a Certificate of Occupancy, I must first:
   - Submit written verification certifying that the project was constructed in compliance with the approved plans and Findings of Fact.
   - Submit verification that the water and sewer have been inspected and approved by the Department of Public Works.
   - Record an Energy Code Certificate in the Land Records.

   I further acknowledge that I understand each of these requirements.

9. Submission fee

   An updated check will be provided with submission of this response.

10. Emailing application materials

    An emailed copy of these revised materials will be provided, including all application materials in a single email.

11. Copies for review

    14 hard copies of all application materials, including this memo, will be submitted. Site plans and surveys will be folded not rolled.

Signed:

Orian Welling

Memorandum

To: Orian Welling

From: Jo-Ann Ells, Hartford Zoning Administrator

Date: June 28, 2024

Re: 99 Depot Street

Please submit a response to the following comments/questions on your application for a multi-unit dwelling before **9:00 a.m., Monday, July 8, 2024.** If you are unable to meet this deadline, please contact me as soon as possible to discuss the deadline to have your application considered at the next round of Public Hearings.

Prior to the Zoning Board and Planning Commission Hearings, you will receive an agenda, draft Findings of Fact, and additional staff comments if there are any. Please feel free to contact me at any time during this process.

1. Please confirm that you understand that you retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.

   To determine what State Environmental Permits may be required for your project, The Vermont Agency of Natural Resources (ANR) recommends that you use ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website Welcome to DEC | Department of Environmental Conservation (vermont.gov) and going to the "Permit Navigator Tool" Permit Navigator (force.com)

   If further assistance is needed, please contact the Community Assistance Specialist for our area:

   Jeff McMahon, Community Assistance Specialist

   Jeff.McMahon@Vermont.gov

   802-477-2241

2. If you have not done so already, I encourage you to talk to Hartford's Environmental Sustainability Coordinator, Dana Clawson, about energy efficiency including new State rules.(dclawson@hartford-vt.org 295-9353 x 223)

3. Have you been able to determine if an allocation is required for water/sewer?

4. Please amend the site plan as follows:

    - Include existing and proposed exterior lights including type of fixture, and wattage, in order for the Commission/Board to evaluate safe passage from the parking spaces to the entrances to the building.

      Please note the Zoning Regulations require that "Illumination from lighting fixtures or other light sources shall be shielded or of such low intensity as not to cause undue glare, reflected glare, sky glow, or a nuisance to traffic or abutting properties. Lights used to illuminate parking areas and drives shall be so arranged and designed as to deflect light downward and away from adjacent residential areas and public highways. Lights shall be of a "downshield luminaire" type where the light source is not visible from any public highway or from adjacent properties. Only fixtures which are shielded to not expose a light source, and which do not allow light to "flood" the property, are permitted to be attached to buildings."

    - Identify the species and caliper of the proposed trees.

    - Indicate snow storage for the parking space located directly off Depot Street.

    - Add the density and area requirements for the R-1 zoning district

5. What will be done to ensure that the proposed landscaping is maintained in a healthy condition?

6. Please outline how the application conforms with section 260-27 C of the Hartford Zoning Regulations which states:

   C. **Grading and drainage.** The following provisions shall apply to any changes which affect drainage of water to or from a property:
   (1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.

(2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.
(3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

7. Please ask Cory Mack to change "section 3-3.3.4" to "section 260-24 C (4)" in his memo.

8. Please acknowledge that you understand that once the project is complete and before I can issue a Certificate of Occupancy you need to:

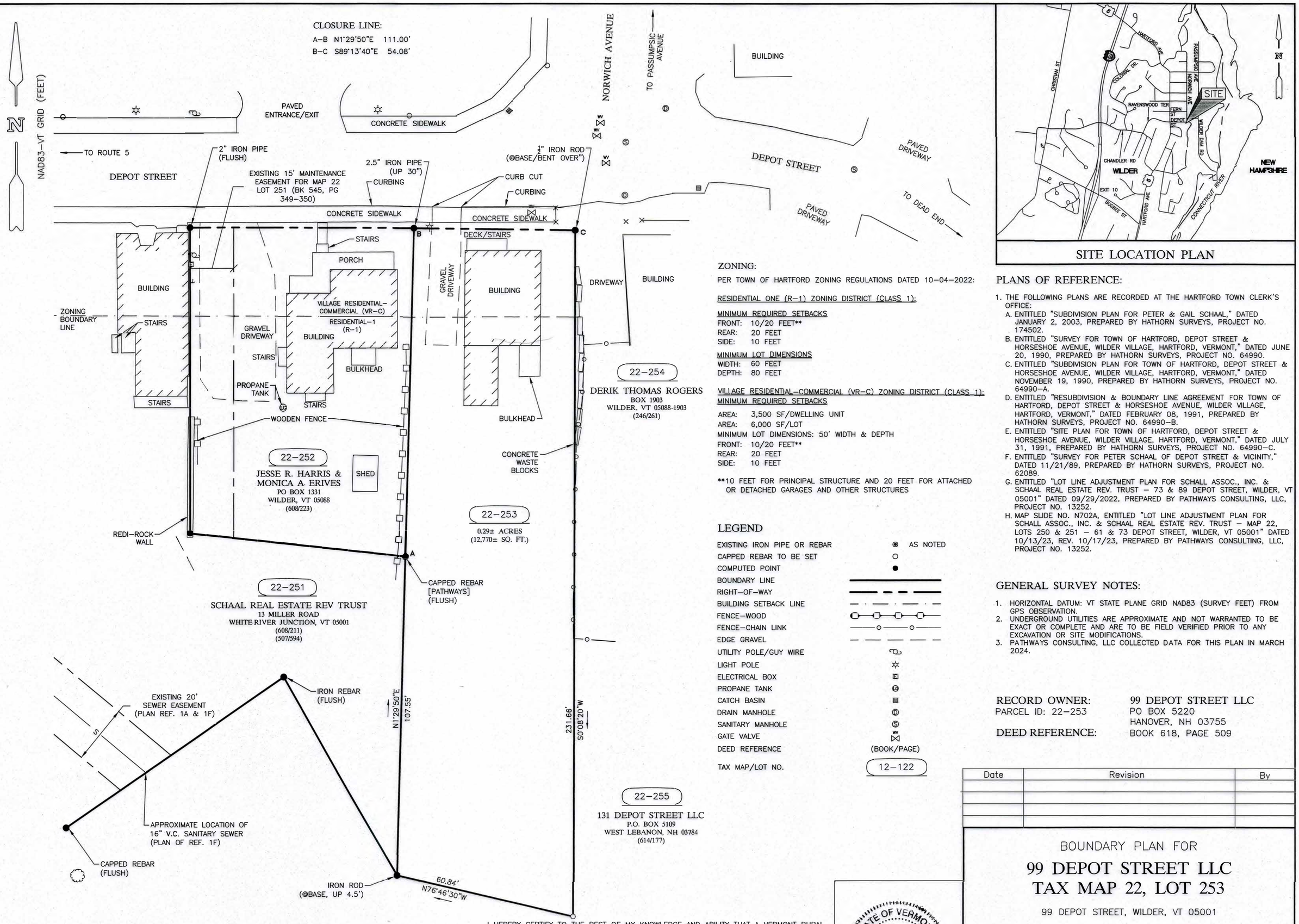
    - Submit written verification certifying that the project was constructed in compliance with the approved plans and Findings of Fact.
    - Submit verification that the water and sewer have been inspected and approved by the Department of Public Works.
    - Record an Energy Code Certificate in the Land Records.

    Please acknowledge that you understand these requirements.

9. The fee for the Planning Commission Hearing is $155 and the fee for the Zoning Board of Adjustment Hearing is $155. Please submit a new check for $310 payable to the Town of Hartford. The check you submitted will be returned to you. I apologize for the confusion.

10. Please send me a single email with *all* application materials, including your response to this memo. (Please have the survey stamped by the preparer.)

11. Please submit 14 copies of *all* application materials, including your response to this memo and revised plan. Please fold the site plans and surveys.



SITE LOCATION PLAN

ZONING:

PER TOWN OF HARTFORD ZONING REGULATIONS DATED 10–04–2022:

RESIDENTIAL ONE (R–1) ZONING DISTRICT (CLASS 1):

MINIMUM REQUIRED SETBACKS
FRONT: 10/20 FEET**
REAR: 20 FEET
SIDE: 10 FEET

MINIMUM LOT DIMENSIONS
WIDTH: 60 FEET
DEPTH: 80 FEET

VILLAGE RESIDENTIAL–COMMERCIAL (VR–C) ZONING DISTRICT (CLASS 1):
MINIMUM REQUIRED SETBACKS

AREA: 3,500 SF/DWELLING UNIT
AREA: 6,000 SF/LOT
MINIMUM LOT DIMENSIONS: 50' WIDTH & DEPTH
FRONT: 10/20 FEET**
REAR: 20 FEET
SIDE: 10 FEET

**10 FEET FOR PRINCIPAL STRUCTURE AND 20 FEET FOR ATTACHED OR DETACHED GARAGES AND OTHER STRUCTURES

LEGEND

EXISTING IRON PIPE OR REBAR	AS NOTED
CAPPED REBAR TO BE SET	
COMPUTED POINT	
BOUNDARY LINE	
RIGHT–OF–WAY	
BUILDING SETBACK LINE	
FENCE–WOOD	
FENCE–CHAIN LINK	
EDGE GRAVEL	
UTILITY POLE/GUY WIRE	
LIGHT POLE	
ELECTRICAL BOX	
PROPANE TANK	
CATCH BASIN	
DRAIN MANHOLE	
SANITARY MANHOLE	
GATE VALVE	
DEED REFERENCE	(BOOK/PAGE)
TAX MAP/LOT NO.	12–122

PLANS OF REFERENCE:

1. THE FOLLOWING PLANS ARE RECORDED AT THE HARTFORD TOWN CLERK'S OFFICE:
   - A. ENTITLED "SUBDIVISION PLAN FOR PETER & GAIL SCHAAL," DATED JANUARY 2, 2003, PREPARED BY HATHORN SURVEYS, PROJECT NO. 174502.
   - B. ENTITLED "SURVEY FOR TOWN OF HARTFORD, DEPOT STREET & HORSESHOE AVENUE, WILDER VILLAGE, HARTFORD, VERMONT," DATED JUNE 20, 1990, PREPARED BY HATHORN SURVEYS, PROJECT NO. 64990.
   - C. ENTITLED "SUBDIVISION PLAN FOR TOWN OF HARTFORD, DEPOT STREET & HORSESHOE AVENUE, WILDER VILLAGE, HARTFORD, VERMONT," DATED NOVEMBER 19, 1990, PREPARED BY HATHORN SURVEYS, PROJECT NO. 64990–A.
   - D. ENTITLED "RESUBDIVISION & BOUNDARY LINE AGREEMENT FOR TOWN OF HARTFORD, DEPOT STREET & HORSESHOE AVENUE, WILDER VILLAGE, HARTFORD, VERMONT," DATED FEBRUARY 08, 1991, PREPARED BY HATHORN SURVEYS, PROJECT NO. 64990–B.
   - E. ENTITLED "SITE PLAN FOR TOWN OF HARTFORD, DEPOT STREET & HORSESHOE AVENUE, WILDER VILLAGE, HARTFORD, VERMONT," DATED JULY 31, 1991, PREPARED BY HATHORN SURVEYS, PROJECT NO. 64990–C.
   - F. ENTITLED "SURVEY FOR PETER SCHAAL OF DEPOT STREET & VICINITY," DATED 11/21/89, PREPARED BY HATHORN SURVEYS, PROJECT NO. 62089.
   - G. ENTITLED "LOT LINE ADJUSTMENT PLAN FOR SCHALL ASSOC., INC. & SCHAAL REAL ESTATE REV. TRUST – 73 & 89 DEPOT STREET, WILDER, VT 05001" DATED 09/29/2022, PREPARED BY PATHWAYS CONSULTING, LLC, PROJECT NO. 13252.
   - H. MAP SLIDE NO. N702A, ENTITLED "LOT LINE ADJUSTMENT PLAN FOR SCHALL ASSOC., INC. & SCHAAL REAL ESTATE REV. TRUST – MAP 22, LOTS 250 & 251 – 61 & 73 DEPOT STREET, WILDER, VT 05001" DATED 10/13/23, REV. 10/17/23, PREPARED BY PATHWAYS CONSULTING, LLC, PROJECT NO. 13252.

GENERAL SURVEY NOTES:

1. HORIZONTAL DATUM: VT STATE PLANE GRID NAD83 (SURVEY FEET) FROM GPS OBSERVATION.
2. UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.
3. PATHWAYS CONSULTING, LLC COLLECTED DATA FOR THIS PLAN IN MARCH 2024.

RECORD OWNER: 99 DEPOT STREET LLC
PARCEL ID: 22–253
PO BOX 5220
HANOVER, NH 03755

DEED REFERENCE: BOOK 618, PAGE 509

Date	Revision	By

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND ABILITY THAT A VERMONT RURAL CLASS SURVEY WAS PERFORMED ON THE PROPERTY SHOWN HEREON. THIS SURVEY IS BASED ON THE FIELD NOTES OF SAID SURVEY AND THE BOUNDARY LINES ARE CONSISTENT WITH EXISTING MONUMENTATION AND THE REFERENCED DEEDS AND PLANS EXCEPT AS NOTED. I FURTHER CERTIFY THIS PLAT CONFORMS TO 27 VSA 1403 (a) AND (b).

05–24–24
DATE

JOSEPH E. NALETTE, LLS 63501

STATE OF VERMONT
JOSEPH E NALETTE No. 63501
LICENSED LAND SURVEYOR

JOSEPH E. NALETTE, LLS 63501

BOUNDARY PLAN FOR

99 DEPOT STREET LLC
TAX MAP 22, LOT 253

99 DEPOT STREET, WILDER, VT 05001

0 20 40 60 80 100

MAY 24, 2024 SCALE: 1"= 20' PROJ. NO. 13405

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766

NAD83–VT GRID (FEET)

ZONING:

PER TOWN OF HARTFORD ZONING REGULATIONS DATED 10–04–2022:

RESIDENTIAL ONE (R–1) ZONING DISTRICT (CLASS 1):

MINIMUM REQUIRED SETBACKS
FRONT: 10/20 FEET**
REAR: 20 FEET
SIDE: 10 FEET

MINIMUM LOT DIMENSIONS
WIDTH: 60 FEET
DEPTH: 80 FEET

DENSITY:
AREA: 4,000 SF/DWELLING UNIT
AREA: 6,000 LOT

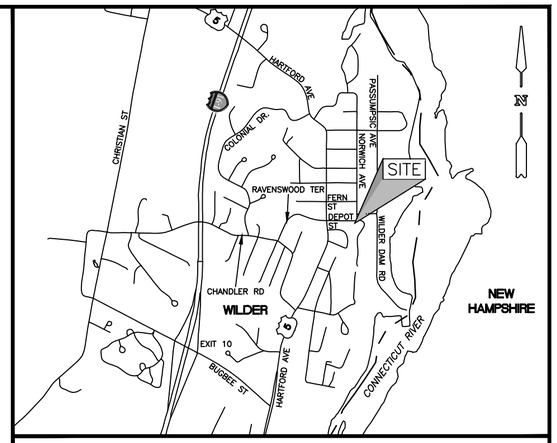
VILLAGE RESIDENTIAL–COMMERCIAL (VR–C) ZONING DISTRICT (CLASS 1):

MINIMUM REQUIRED SETBACKS
FRONT: 10/20 FEET**
REAR: 20 FEET
SIDE: 10 FEET

MINIMUM LOT DIMENSIONS
WIDTH: 50 FEET
DEPTH: 50 FEET

DENSITY:
AREA: 3,500 SF/DWELLING UNIT
AREA: 6,000 LOT

**10 FEET FOR PRINCIPAL STRUCTURE AND 20 FEET FOR ATTACHED OR DETACHED GARAGES AND OTHER STRUCTURES



SITE LOCATION PLAN

ZONING BOUNDARY

RESIDENTIAL-1 (R-1) | VILLAGE RESIDENTIAL COMMERCIAL (VR-C)

22–247–2
TWIN PINES HOUSING TRUST
C/O ADANA ALLEN
P.O. BOX 1152
WILDER, VT 05088-1152
(511/337)

22–251
SCHAAL REAL ESTATE REV TRUST
13 MILLER ROAD
WHITE RIVER JUNCTION, VT 05001
(608/211)
(507/594)

22–252
JESSE R. HARRIS &
MONICA A. ERIVES
PO BOX 1331
WILDER, VT 05088
(608/223)

N1°29'50"E
107.55'

N76°46'30"W
60.84'

22–253
0.29± ACRES
(12,770± SQ. FT.)

Existing Gravel Driveway

Proposed Paved Driveway

New photosensitive 1000W Wall Mounted Area Light (for parking / walkay), shielded

12' Drive
(Constrained by streetlight)

100W motion sensing sconse for stairway

Rolling Bin Storage Under Stairs

New Tree (Eastern Redbud or sim.)
Planted ~1.5" caliper

Proposed 19' x 7' 2 story Back Porch / Stairs to all units

EXISTING BUILDING

Porch/ Stairs

Proposed Walkway (brick pavers)

New 100W motion sensing sconces above 3rd floor entry door)

New 100W motion sensing sconces for 2nd and 1st floor porches / entry

BULKHEAD

54.08'

GRASS YARD

New Shade Tree (Red Maple or sim.)
Planted 1.5-2" caliper

Snow Storage

9'x18' Parking Spot

24' Turn Around

Slope / Embankment

Snow Storage

New photosensitive 100W area light for parking

Proposed Paved Parking
10' BUILDING SETBACK

231.66'
S0°08'20"W

SIDEWALK
CURBING
2.5" IRON PIPE (UP 30")
DEPOT STREET
CONCRETE SIDEWALK
CURB CUT
Existing ceiling mounted porch light
CURBING
Existing concrete walkway to be repaird
CONCRETE SIDEWALK
NORWICH AVENUE

22–255
131 DEPOT STREET LLC
P.O. BOX 5109
WEST LEBANON, NH 03784
(614/177)

22–254
DERIK THOMAS ROGERS
BOX 1903
WILDER, VT 05088-1903
(246/261)

LEGEND

EXISTING IRON PIPE OR REBAR	AS NOTED
CAPPED REBAR TO BE SET	
COMPUTED POINT	
BOUNDARY LINE	
PROPOSED PAVEMENT EDGE	
RIGHT–OF–WAY	
ZONING BOUNDAR	
BUILDING SETBACK LINE	
FENCE–WOOD	
FENCE–CHAIN LINK	
EDGE GRAVEL	
UTILITY POLE/GUY WIRE	
LIGHT or LIGHT POLE	
ELECTRICAL BOX	
PROPANE TANK	
CATCH BASIN	
DRAIN MANHOLE	
SANITARY MANHOLE	
GATE VALVE	
DEED REFERENCE	(BOOK/PAGE)
TAX MAP/LOT NO.	12–122

Date	Revision	By
7/3/2024	1. Added lighting, tree species, snow storage, density	OZW

APPLICANT: ORIAN WELLING
PO BOX 5220
HANOVER, NH 03755

RECORD OWNER: 99 DEPOT STREET LLC
PARCEL ID: 22–253
PO BOX 5220
HANOVER, NH 03755

DEED REFERENCE: BOOK 618, PAGE 509

SITE PLAN FOR:

99 DEPOT STREET LLC
TAX MAP 22, LOT 253

99 DEPOT STREET, WILDER, VT 05001

0 20 40 60

PREPARED BY: ORIAN WELLING
WELLING PROPERTIES LLC
JUNE 13, 2024 PO BOX 5220
HANOVER, NH 03755

DRAFT
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND
DECISION

HARTFORD PLANNING COMMISSION

Application #24-10 by the Town of Hartford
for approval of an addition to the Quechee Fire Station
lot 12-0027-002, 131 Willard Road
Quechee, in the Quechee Lakes Planned Development

This decision pertains to Application #24-10 by the Town of Hartford (owner/applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations and the Quechee Lakes Master Plan for an addition to the Quechee Fire Station, lot 12-0027-002, 131 Willard Road, Quechee, in the Quechee Lakes Planned Development.

FINDINGS OF FACT

Based upon the information contained in the exhibits for this application (see attached list) and the evidence adduced at the Planning Commission meetings of July 29, 2024 the Hartford Planning Commission makes the following Findings of Fact:

General Information

1. The owner of record of 12-0027-002 is the Town of Hartford Fire Department who acquired the lot on 10-04-78. The deed is recorded in volume 85, page 261 of the Hartford Land Records.

2. The lot is approximately 1.72 acres.

3. The lot is developed with the Quechee Fire Station and a mobile home for living/sleeping quarters for staff.

4. The lot is a class 1 (municipal water and wastewater).

5. The lot is part of the Quechee Lakes Planned Development. The lot designated as Common Land in the Quechee Lakes Master Plan which includes parcels for public purposes including but not limited to Fire Stations.

This Application

6. According to the applicant, "the project includes the removal of the temporary housing trailer and the demolition of an existing bathroom, allowing for additional implement and vehicle storage at the rear of the existing firehouse. In addition, the two damaged truck bay doors will be replaced with a single door, permitting easier ingress and egress for the fire trucks. The existing asphalt paving to the south of the building will be patched and repaired, providing parking for 4 staff and visitor vehicles. An emergency generator powered by an existing buried propane tank will be located in the southeast corner of this lot.

   A 47' x 35' two-story addition is proposed for the north side of the existing firehouse on what is currently lawn and into about 25' of the forested hillside. This location avoids encroaching on a wetlands buffer on the east and south of the existing station. Two parking spaces (for a total on-site of 6), including one accessible, are located to the addition's west side. Lawn will be planted in the areas adjacent to the new parking and in the immediate vicinity of the addition. The forest beyond will remain. Dark sky compliant lights (cutsheets attached) will be located over the front and rear entrances to the addition, supplementing the substantial existing lighting on the firehouse.

   The first floor contains one office each for the fire and police departments, a conference room, storage for essential equipment and gear, and living/dining/kitchen/bathroom facilities for the resident firefighters. The second floor contains four sleeping quarters, a fitness room, another bathroom and additional storage space."

7. The proposed addition meets the required setbacks (front 35', sides & rear 25').

8. The Zoning Regulations do not include a calculation for the number of parking spaces for a public facility. Therefore, the Planning Commission determines the number of required parking spaces.

   The applicant proposes 6 parking spaces including one accessible parking space.

9. Access to the property is via two existing curb cuts.

10. The applicant understands that lighting must not create excessive off-site or sky glow. If the Zoning Administrative Officer determines that lighting does not meet this condition, the applicant will be required to comply.

11. The applicant anticipates a maximum of 2 firefighters and 1 patrol office on site at any given time. However, the facility is designed to accommodate 4 firefighters should the Town increase staffing for the Fire Department in the future.

12. The project will be connected to municipal water and sewer in accordance with Hartford's Water and Wastewater Rules and Regulations.

13. Section 260-27 C of the Hartford Zoning Regulations states:

Grading and drainage. The following provisions shall apply to any changes which affect drainage of water to or from a property:

(1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.

According to the applicant, "The site grading and drainage has been designed to direct runoff to the existing swale in Willard Rd., there is a proposed drip edge that will collect up-gradient drainage and help to infiltrate some runoff and direct the remaining runoff into the ditch along Willard Rd."

(2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.

According to the applicant, "There is likely to be a slight increase in site runoff with this project due to increased impervious surfaces of 2,800 sf +/-. The building drip edge and French drain will help to offset some of the increased runoff. We do not expect a detrimental effect on any downstream infrastructure, however, due to the minor increase in impervious area and the site being in close vicinity to wetlands."

(3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

According to the applicant, "An erosion prevention and sediment control plan has been provided. As shown on the plan, silt fences and a stabilized construction entrance will reduce sediment transport to the downstream waterbodies and the roadway during construction. At the completion of construction all disturbed areas will be stabilized with hardscape, 6" of topsoil, erosion fabric and or mulch with conservation grass mix."

14. A stream on the lot is identified on the most recent edition of the Hartford G.I.S. Natural Resources Map. The stream and required 30' riparian buffer are shown on the plans. The addition is outside of the riparian buffer.

15. Snow will be stored on site and will be removed as needed. Snow will not be stored in such a manner as to create a hazard.

16. The applicant understands that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary.

17. During construction of the project, erosion and sediment control measures as specified in

the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed.

18. The applicant understands that construction of the project must comply with the following:

    Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations.

19. The applicant understands that no structure, including construction/office trailers, signage, parking spaces or plantings may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any signs, parking spaces or plantings found to obstruct sight distance will be required to be relocated.

20. The applicant retains the obligation to identify, apply for, and obtain relevant local and state permits for this project.

21. The applicant understands that all activities authorized by the issuance of the zoning permit shall be started within six (6) months and completed within two (2) years of its date of issue, or the zoning permit shall become null and void and reapplication to complete any activities shall be required. Any activities not completed within the above permit period shall be subject to any ordinance in effect at the time of reapplication. One six (6) month extension to both time periods may be granted by the Planning Commission.

22. The applicant understands that they must obtain a Certificate of Occupancy from the Zoning Administrative Officer upon completion of the project. The applicant understands that a Certificate of Occupancy will not be issued if the project is not in compliance with these Findings, Plans and any conditions placed on the decision.

CONCLUSIONS OF LAW

The Hartford Planning Commission, based upon the forgoing Findings of Fact, concludes Based upon the foregoing Findings of Fact, the Hartford Planning Commission concludes that the proposed site plan provides, as required by **§260-45 C** of the Hartford Zoning Regulations:

(1) Maximum safety of **traffic circulation between the site and the street network** and integration with the overall traffic pattern, including provisions for auxiliary roadways connecting with adjacent properties where appropriate. Included in this evaluation shall be the location, number and width of access points, curve radii at access points, acceleration or deceleration lanes on adjacent public streets, sight distances, lighting, location of sidewalks and other walkways, and the overall relationship of the proposed

development with existing traffic conditions in the area. All modes of transportation shall be taken into account, including pedestrian, bicycle, handicapped, delivery and emergency vehicles and public transportation.

(2) Adequacy of **on site circulation, parking, and loading facilities,** with particular attention to safety. Included in this evaluation shall be traffic movement patterns, drive and aisle widths, directional signs, location of loading docks and parking areas, number and size of parking spaces, and provision for lighting, drainage, snow removal and access for emergency vehicles and public transportation.

(3) Adequacy of **landscaping, screening, and setbacks** in achieving maximum compatibility with and protection of adjacent properties by screening from them any glare produced by interior or exterior lights and unsightly areas such as storage areas, and parking lots; assurance that landscape materials will not interfere with visibility or safety and that they are of a type that can survive and be maintained as proposed.

(4) Adequacy of **provision for safety and convenience of pedestrians, bicyclists, and handicapped persons**. Included in this evaluation shall be lighting of walks and entrances, design and placement of walks and crosswalks, pick-up points for public transportation and provision of bicycle racks.

(5) **Protection of renewable energy resources,** including a finding that the proposed development does not adversely affect the ability of adjacent properties to use this form of energy.

(6) **Compliance with other provisions of these regulations** including § 260-27, Landscaping, and § 260-31, Land use performance standards.

(7) **Other** factors that are directly related to the above aspects of site plan review.

And compliance with the Quechee Lakes Master Plan

DECISION

The Hartford Planning Commission, based upon the forgoing Findings of Fact and Conclusions of Law, hereby approves Application #24-10 by the Town of Hartford (owner/applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations and the Quechee Lakes Master Plan for an addition to the Quechee Fire Station, lot 12-0027-002, 131 Willard Road, Quechee, in the Quechee Lakes Planned Development **the condition that:**

1. **Before a Zoning Permit is issued:**

    - **The applicant submits a copy of their water and sewer allocation to the Zoning Administrator.**

- **The applicant submits a copy of their excavation permit to the Zoning Administrator.**
- **Final permit plans are emailed to the Zoning Administrator.**

2. **Before a Certificate of Occupancy is issued the applicant:**

- **Submits written verification from their Engineer certifying that the project was constructed in compliance with the approved civil plans and Findings of Fact.**
- **Submits written verification from their Architect certifying that the project was constructed in compliance with the approved architectural plans and Findings of Fact.**
- **Submits verification that the water and sewer have been inspected and approved by the Department of Public Works.**
- **Submits a record drawing to the Department of Public Works with swing ties for the water and wastewater lines.**
- **Submits a PDF of the record drawing to the Zoning Administrator.**
- **Records an Energy Code Certificate in the Land Records.**

This decision is also subject to the condition that no modification or expansion shall be made to the project as described and limited in the above Findings of Fact and Conclusions of Law without the written approval of the Hartford Zoning Board of Adjustment and/or the Hartford Planning Commission. This decision may be revoked, and a new application or permit required if conditions and findings are violated or modified without written approval.

The applicants are responsible for insuring compliance with all applicable State and Federal regulations pertaining to this application.

Those in favor:

Those in opposition:

Those not participating:

Dated at Hartford, Vermont this ____ day of July 2024.

HARTFORD PLANNING COMMISSION

By:_____
Chairperson/Vice-Chairperson

Appeal Rights: An interested person who has participated in the proceeding related to this decision has the right to appeal this decision to the Vermont Environmental Court, pursuant to 24

V.S.A. s. 4471 and V.R.E.C.P.5, in writing, within 30 days of the date of this decision. The fee is $250.00. If you fail to appeal this decision, your right to challenge this decision at some future time may be lost because you waited too long. You will be bound by this decision, pursuant to 24 V.S.A. s. 4472 (d) (exclusivity of remedy; finality).

EXHIBIT LIST

1. Application #24-10

2. Set of plans including

    - Civil Plans prepared by Engineering Ventures

        - C0.1 Existing Conditions Plan
        - C1.1 Erosion Prevention and Sediment Control Plan
        - C1.0 Demo Plan
        - C2.0 Site Plan
        - C3.0 Site Details
        - C3.1 Water Details
        - C3.2 Water Details
        - C3.3 Sewer Details
        - C3.4 Erosion Prevention and Sediment Control Details
        - C3.5 Erosion Prevention and Sediment Control Plan

    - Architectural Plans prepared by Studio Nexus Architects and Planners

        - SD-1 First Floor Plan
        - SD-2 Second Floor Plan
        - SD-3 Elevations

3. Project Narrative dated June 24, 2024

4. Applicant's response to Jo-Ann Ells' June 28, 2024 memo

5. Photographs

6. Lighting Cutsheets

Town of Hartford

Planning Commission App # _____
Zoning Board of Adjustment App # _____

APPLICATION TO
PLANNING COMMISSION &/OR ZONING BOARD OF ADJUSTMENT

PLEASE COMPLETE ALL ITEMS APPLICABLE AND PROVIDE THE CORRECT NUMBER OF COPIES OF THIS APPLICATION AND THE SITE PLAN OR SUBDIVISION PLAT. ABUTTING LANDOWNERS WILL BE NOTIFIED BY THE PLANNING/ZONING OFFICE.

1. **NAME & ADDRESS OF RECORD OWNER(S)** Town of Hartford
   171 Bridge Street, Hartford, VT 05001
   Deed Recorded Book 85 Page 261-262 (Available at Town Clerk's Office)
   Telephone: Work 802-295-3232 Cell 802-598-0061 Email Address: scooney@hartford-vt.org
2. **NAME & ADDRESS OF APPLICANTS(S)** Town of Hartford Fire Department (Scott Cooney, Fire Chief)
   812 VA Cutoff Road, White River Junction, VT 05001
   Telephone: Work 802-295-3232 Cell _____ Email Address: scooney@hartford-vt.org
3. **NAME & ADDRESS OF APPLICANTS' CONSULTANT** Studio Nexus Architects + Planners, P.C.
   (Jim Wasser), P.O. Box 275, White River Junction, VT 05001
   Telephone: Work 802-295-3232 Cell _____ Email Address: _____
4. **PROJECT LOCATION** 131 Willard Road, Quechee, VT
5. **PRESENT USE OF PROPERTY** Fire station
6. **BRIEFLY DESCRIBE PROJECT** (in addition, a detailed narrative must be submitted)
   A 47' x 33' 2-story addition to the existing firehouse with an office each for the fire and police departments, sleeping rooms for up to 5 fire fighters and support spaces. This replaces an existing trailer.
7. **PROJECT SIZE IN SQ. FT OR ACREAGE** 3,009 SF Building, 1.72 Acres Lot
   Lot Width varies--approx. 155' Lot Depth varies--approx. 483'
8. **IS PROJECT ON TOWN WATER/SEWER?** Yes X No _____ If Yes, estimated
   Water Consumption/day 2.0 Amount of Sewer Flow Projected Total 100 per quarter
   Size of Closest Lines Above (water) 8 (sewer) 8
9. **DESCRIBE LANDSCAPING PLAN** The site is heavily wooded and the woods beyond the addition will remain.
   Grass/lawn will fill in the area directly north of 2 added parking spaces; the asphalt to the south of the fire station will remain.
10. **IF A BUSINESS** - Present # of Employees 2-3 day
    Proposed Days & Hours of Operation 24/7/365
    Will you use the landfill & recycling center? Yes _____ No X
    The main waste by-product of your business is: Normal use for living quarters

11. **IF A RESTAURANT** - Present seating N/A Proposed _____

12. **PARKING SPACES** - Number to be provided 7

13. **SIGNAGE** - Free Standing _____ Attached Existing sign over truck bays to remain.

14. **FENCING** – Location none Height _____

15. **NEAREST WATER SUPPLY FOR FIRE PROTECTION** A hydrant exists in front of the building on Willard Street

16. **ESTIMATED VALUE OF PROPOSED WORK** $1.2 million

17. **IS THERE AN EXISTING DRIVEWAY?** Yes, as shown on civil drawings.

18. **IF A SUBDIVISION** - Number of New Lots to be Created N/A

Do you request that the Town consider taking over maintenance of – Roads _____

Or Park/Open Space _____

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. (This certification must be signed by lot owners and applicants).

Fire Chief 6/20/24
Applicant's Signature Date

Fire Chief 6/20/24
Lot Owner's Signature Date

_____ _____
Co-Applicant's Signature Date

_____ _____
Co-Owner's Signature Date

The applicant retains the obligation to identify, apply for, and obtain any relevant local or state permits before any construction may commence. Please call 802-282-6488 to speak with the State Permit Specialist.

For Office Use Only		
Map/Lot #		
Fee Paid $:		Receipt #:
PC: Site Plan	Min. Sub.	Maj. Sub.
PD	PD Amend.	Other
ZBA: Conditional Use	Variance	Appeal
Other		
Zoning District (s)		Date Filed:
Official Submittal Date:		

HARTFORD FIRE STATION #2 ADDITIONS AND RENOVATIONS

NARRATIVE 6.24.2024

In 2018, the Town sponsored five community forums during the development of the 2019 Town Plan. One of the strategies identified to address “Emergency Service Goals” was to explore staffing options for the Quechee Fire Station. In 2018, the Town authorized increasing fire department staffing to five (5) responders per shift. Call volume has steadily increased in the last few years. In reviewing call volume for the years (2018 & 2019), Quechee and West Hartford experienced combined totaled 1,256 calls for service. The greatest disparity in delivering emergency services town wide is the total response time from the VA Cutoff Rd station to the Quechee and West Hartford villages. In White River Junction, Wilder and Hartford village first responder’s 90 percent of the time arrive on scene in 7 minutes 44 seconds. In Quechee and West Hartford first responder’s 90 percent of the time on average arrive in 15 minutes and 30 seconds.

On October 20, 2020, we presented this project to the Selectboard. During the meeting they approved the study to begin for the remaining FY 21 fiscal year and into the FY 22 fiscal year. This allowed the staff to present data that supported the funding of a Quechee station renovation. During the study period the department evaluated call volume, reduction in response time data, the effects of maintaining staffing levels to support two stations and the impact on fire department operations.

Since 2021, to provide living quarters to the two firefighters assigned to Station #2, the Town has contracted with Emergency Temporary Housing in South Grafton, MA to provide a living trailer for $24,000 annually. In FY 23 the Board approved hiring four firefighters to provide staffing Station #2 permanently in Quechee. On January 1, 2023 we began staffing Station #2 24 hours a day.

The existing Fire Station #2 was constructed in 1987-89 as a heated two bay garage to store fire apparatus; there are no living quarters in the building. In October of 2021, the department contracted with Studio Nexus Architects and Planners to develop and generate conceptual drawings and cost estimates for a renovation of Station #2.

The Town entered into a Construction Management Agreement with Estes & Gallup, Inc. and during this year’s Town Meeting the voters approved a bond for $1.3 million dollars for the renovation and expansion of Fire Station No. 2. This project creates a lasting public safety presence, reduces response times and provides increased safety to the residents and visitors of this area of our community.

The renovation project includes the removal of the temporary housing trailer and the demolition of an existing bathroom, allowing for additional implement and vehicle storage at the rear of the existing firehouse. In addition, the two damaged truck bay

doors will be replaced with a single door, permitting easier ingress and egress for the fire trucks. The existing asphalt paving to the south of the building will be patched and repaired, providing parking for 4 staff and visitor vehicles. An emergency generator powered by an existing buried propane tank will be located in the southeast corner of this lot.

A 47’ x 35’ two-story addition is proposed for the north side of the existing firehouse on what is currently lawn and into about 25’ of the forested hillside. This location avoids encroaching on a wetlands buffer on the east and south of the existing station. Two parking spaces (for a total on-site of 6), including one accessible, are located to the addition’s west side. Lawn will be planted in the areas adjacent to the new parking and in the immediate vicinity of the addition. The forest beyond will remain. Dark sky compliant lights (cutsheets attached) will be located over the front and rear entrances to the addition, supplementing the substantial existing lighting on the firehouse.

Sitting on a concrete base clad in veneer stone, the addition will be sided in metal that matches that of the existing station. The first floor contains one office each for the fire and police departments, a conference room, storage for essential equipment and gear, and living/dining/kitchen/bathroom facilities for the resident firefighters. The second floor contains four sleeping quarters, a fitness room, another bathroom and additional storage space.

dweLED

Fixture Type:

Catalog Number:

Project:

Location:

Sodor

Outdoor Wall Sconce 3000K

Model & Size	*Color Temp & CRI*	*Finish*	*Watt*	*LED Lumens*	*Delivered Lumens*	*Title 24*
WS-W15708 8"	3000K 90	BK Black	12W	1000	314	Yes
	3000K 90	BZ Bronze	9W	750	315	No
	3000K 90	GH Graphite	9W	750	315	No

Example: **WS-W15708-BK**

DESCRIPTION

A Steam work inspired approach to a traditional lantern design. Sodor is constructed with a solid die-cast aluminum shade that provides fantastic glare cutoff and a weather resistant powder coated finish. The light engine is factory sealed for maximum protection against the harshest elements.

FEATURES

- Weather resistant powder coated finishes
- Light engine is factory sealed for maximum protection from the elements
- Heavy aluminum shade provides great glare cutoff
- Title 24 may not be available for all finishes, check for availability
- ACLED driverless technology
- 5 year warranty

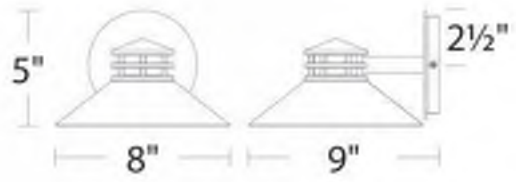
SPECIFICATIONS

Color Temp:	3000K
Input:	120 VAC, 50/60Hz
CRI:	90
Dimming:	ELV: 100 - 10%
Rated Life:	54000 Hours
Standards:	ETL, cETL, IP65, Title 24 JA8-2016 Compliant, Dark Sky Friendly
	Wet Location Listed
Construction:	Aluminum hardware with glass diffuser

FINISHES

Black Bronze Graphite

LINE DRAWING



WS-W15708

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. May 2020

dweLED

Fixture Type:

Catalog Number:

Project:

Location:

Sodor

Outdoor Wall Sconce 3000K

Model & Size	*Color Temp & CRI*	*Finish*	*Watt*	*LED Lumens*	*Delivered Lumens*	*Title 24*
WS-W15710 10"	3000K 90	BK Black	15W	1200	484	Yes
	3000K 90	BZ Bronze	11.5W	1200	560	No
	3000K 90	GH Graphite	11.5W	1200	560	No

Example: **WS-W15710-BK**

DESCRIPTION

A Steam work inspired approach to a traditional lantern design. Sodor is constructed with a solid die-cast aluminum shade that provides fantastic glare cutoff and a weather resistant powder coated finish. The light engine is factory sealed for maximum protection against the harshest elements.

FEATURES

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- Heavy aluminum shade provides great glare cutoff
- Title 24 may not be available for all finishes, check for availability
- ACLED driverless technology
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SPECIFICATIONS

Color Temp:	3000K
Input:	120 VAC, 50/60Hz
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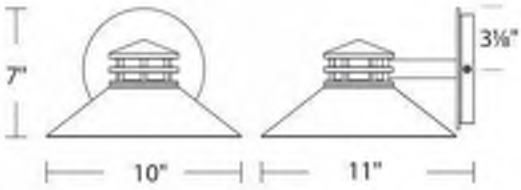
Dimming:	ELV: 100 - 10%
Rated Life:	54000 Hours
Standards:	ETL, cETL, IP65, Title 24 JA8-2016 Compliant, Dark Sky Friendly
	Wet Location Listed
Construction:	Aluminum hardware with glass diffuser

FINISHES

Black Bronze Graphite

LINE DRAWING



WS-W15710

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. May 2020

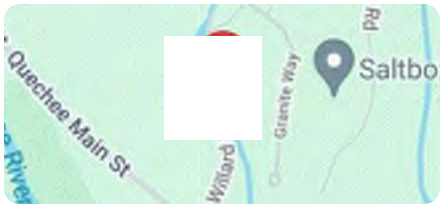
Google Maps 131 Willard Rd

Hartford, Vermont

Google Street View

Jul 2019 See more dates

Image capture: Jul 2019 © 2024 Google



QUECHEE ENGINE CO.
HARTFORD STATION 2
NO PARKING FIRE STATION
NO PARKING FIRE STATION

QUECHEE ENGINE CO.
HARTFORD STATION 2
NO PARKING FIRE STATION
NO PARKING FIRE STATION

NO PARKING FIRE STATION

Dyna-Glo
DeadRiver
Camping

Dyna-Glo

Memorandum

To: Scott Cooney

Cc: Jim Wasser, Adam Morse, and Chris Holzwarth

From: Jo-Ann Ells

Date: June 28, 2024

Re: Addition to Quechee Fire Station

Please submit a response to the following comments/questions on your application for a car wash before **9:00 a.m., Monday, July 8, 2024.** If you are unable to meet this deadline, please contact me as soon as possible to discuss the deadline to have your application considered at the next round of Public Hearings.

Prior to the Planning Commission Hearing, you will receive an agenda, draft Findings of Fact, and additional staff comments if there are any. Please feel free to contact me at any time during this process.

1. Please confirm that you understand that you retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.
   Understood.

   To determine what State Environmental Permits may be required for your project, The Vermont Agency of Natural Resources (ANR) recommends that you use ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website Welcome to DEC | Department of Environmental Conservation (vermont.gov) and going to the "Permit Navigator Tool" Permit Navigator (force.com)

   If further assistance is needed, please contact the Community Assistance Specialist for our area:

   Jeff McMahon, Community Assistance Specialist

   Jeff.McMahon@Vermont.gov

   802-477-2241

2. Any approval will include a condition that your engineer certify that no changes, other than those required by the Planning Commission/Zoning Board, were made to the final plans that are submitted for the Zoning Permit. Please confirm your understanding. Understood.

3. Any approval will include a condition that, in addition to the required hard copies, the final/approved plans are emailed to the Zoning Administrator. Please confirm your understanding. Understood.

4. If you have not done so already, I encourage you to talk to Hartford's Environmental Sustainability Coordinator, Dana Clawson, about energy efficiency options and new State rules for your project. Understood; we will contact Dana.
(dclawson@hartford-vt.org)

5. There is a water main in the swale along Willard Road that will need to be protected and monitored during construction. Note W3 on C2.0 was added to address this concern.

6. Please include areas for the storage of snow on the plans. Note C6 on C2.0 was added to locate the snow storage area.

7. Please provide information about the adequacy of lighting from the parking areas to the entrances to the building. As noted on the cutsheets, the fixtures are "dark sky compliant", which conforms to section 260-31E of the Hartford Zoning Regulations.

   Please note that the proposed lights must conform with section 260-31 E of the Hartford Zoning Regulations which states:

   > Illumination from lighting fixtures or other light sources shall be shielded or of such low intensity as not to cause undue glare, reflected glare, sky glow, or a nuisance to traffic or abutting properties. Lights used to illuminate parking areas and drives shall be so arranged and designed as to deflect light downward and away from adjacent residential areas and public highways. Lights shall be of a "downshield luminaire" type where the light source is not visible from any public highway or from adjacent properties. Only fixtures which are shielded to not expose a light source, and which do not allow light to "flood" the property, are permitted to be attached to buildings. Searchlights are not permitted.

8. Please outline how the application conforms with section 260-27 C of the Hartford Zoning Regulations which states:

   C. **Grading and drainage.** The following provisions shall apply to any changes which affect drainage of water to or from a property:
   (1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities. The site grading and drainage has been designed to direct runoff to the existing swale in Willard Rd., there is a proposed drip edge that will collect up-gradient drainage and help to infiltrate some runoff and direct the remaining runoff into the ditch along Willard Rd.
   (2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development. There is likely to be a slight increase in site runoff with this project due to increased impervious surfaces of 2,800 sf +/-. The building drip edge and French drain will help to offset some of the increased runoff. We do not expect a detrimental effect on any downstream infrastructure, however, due to the minor increase in impervious area and the site being in close vicinity to wetlands.
   (3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil. An erosion prevention and sediment control plan has been provided. As shown on the plan, silt fences and a stabilized construction entrance will reduce sediment transport to the downstream waterbodies and the roadway during construction. At the completion of construction all disturbed areas will be stabilized with hardscape, 6" of topsoil, erosion fabric and or mulch with conservation grass mix.

9. Please acknowledge that you understand that once the project is complete and before I can issue a Certificate of Occupancy you need to:

   - Submit written verification from a Professional Engineer licensed by the State of Vermont certifying that the project was constructed in compliance with the approved civil plans and Findings of Fact. Understood.
   - Submit written verification from your Architect certifying that the project was constructed in compliance with the approved architectural plans and Findings of Fact. Understood.
   - Submit verification that the water and sewer have been inspected and approved by the Department of Public Works. Understood.
   - Submit a record drawing to the Department of Public Works with swing ties for the water and wastewater lines. Understood.
   - Submit a PDF of the record drawing to me. Understood.
   - Record an Energy Code Certificate in the Land Records. Understood.

Please acknowledge that you understand these requirements.

10. It would be helpful if you could provide a few photographs of the property.
    These have been included.

11. Please send me a single email with all application materials, including your response to this memo.

12. Please submit 8 copies of all application materials, including your response to this memo. Please staple and fold the plan sets.

C0.1

Sheet Title: Existing Conditions Plan

Project Title: 131 Willard Road
Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project # 24022
Drawn By: AM
Checked By: AM
Scale: 1" = 20'
Date: 6/24/2024

TOWN OF HARTFORD
171 BRIDGE STREET
HARTFORD, VT
802-295-6382

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85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-630-9614
www.engineeringventures.com

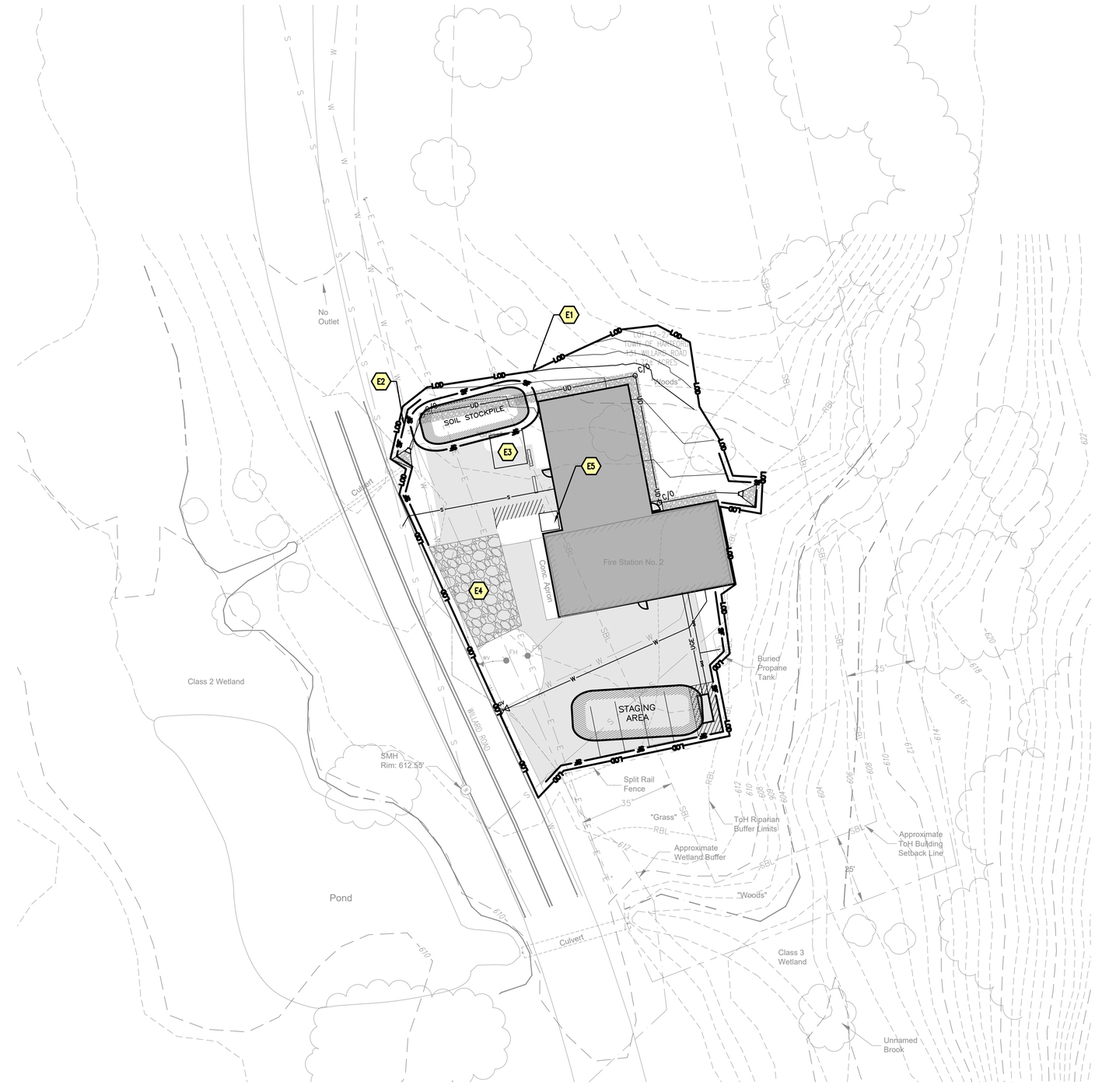
No.	Description	Date

Stamp

PLOTTED: 6/21/2024 10:11 AM

STORMWATER POLUTION PREVENTION NOTES

- E1 LIMIT OF DISTURBANCE
- E2 SILT FENCE
- E3 CONCRETE WASHOUT
- E4 STABILIZED CONSTRUCTION ENTRANCE
- E5 PORTABLE TOILET



CONSTRUCTION SEQUENCE

1. CONTRACTOR TO COORDINATE STOCKPILE AND STAGING AREAS WITH THE OWNER.
2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL HOST A PRECONSTRUCTION MEETING WITH OWNER, ENGINEER, PLANNING DEPARTMENT, POLICE, FIRE, AND PUBLIC WORKS STAFF.
3. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
5. INSTALL INLET PROTECTION ON EXISTING CATCH BASINS AFFECTED DURING CONSTRUCTION.
6. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
7. DEMO EXISTING STRUCTURES AS REQUIRED.
8. CLEAR AND GRUB, REMOVE LOOSE PAVING/DEMO PAVING AS REQUIRED AND HAUL OFF SITE USING EXISTING PARKING AREA AS STAGING.
9. GRADE DRIVE ENTRANCE AND EXCAVATE BUILDING PAD
10. BEGIN VERTICAL CONSTRUCTION OF BUILDING ADDITION CONCURRENT WITH WATER AND SEWER UTILITIES.
11. CONSTRUCT STORMWATER SYSTEM.
12. INSTALL STORMWATER PIPING AND STRUCTURES
13. BACKFILL AND SUBGRADE PREP FOR NEW PARKING AND SIDEWALK AREAS
14. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
15. INSTALL LIGHT POLES.
16. PAVE BASE COURSE.
17. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, REPAIR AND REESTABLISH ALL DISTURBED VEGETATED/LAWN AREAS, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
18. PAVE WEARING COURSE.
19. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY.
20. ANTICIPATED FINAL COMPLETION DATE SUMMER/FALL 2024.

EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES. HAY PRODUCTS SHALL NOT BE USED.

TEMPORARY INLET PROTECTION – STONE COLLARS AND/OR INLET SOCKS. INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS ≤ 1/2 DEPTH OF STONE. REMOVE ALL SEDIMENT COLLECTED IN STRUCTURE OR SOCK AS SOON AS POSSIBLE.

STONE CHECK DAM
THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

PERMANENT EROSION CONTROL NETTING.
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE SEEDED AND MULCHED.

TEMPORARY SEDIMENT BASIN
THIS STRUCTURAL MEASURE INVOLVES CONSTRUCTING TEMPORARY SEDIMENT BASINS IN THE LOCATION OF PROPOSED STORMWATER PONDS. GENERALLY THE STORMWATER PONDS CAN BE CONSTRUCTED AS SHOWN ON THE PLANS HOWEVER ORIFICE ON THE OUTLET STRUCTURES SHALL BE OMITTED UNTIL THE SITE IS STABILIZED TO IMPOUND RUNOFF AND ALLOW FOR SETTLING OF SUSPENDED FINES. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE THE SITE IS STABILIZED, SEDIMENT SHALL BE REMOVED FROM THE BASINS AND THE OUTLET ORIFICE SHALL BE DRILLED INTO THE OUTLET STRUCTURE AS NOTED ON THE PLANS.

TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE NON-SOIL, NON-ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.

TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SILT FENCING AROUND THE DOWN GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.

TEMPORARY SILT FENCING
THIS STRUCTURAL MEASURE IS A TEMPORARY BARRIER OF GEOTEXTILE FABRIC USED TO INTERCEPT SEDIMENT LADEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE FILL SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, INSTALL CONSTRUCTION FENCE BEHIND THE SILT FENCE. SILT FENCING IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ONTO ADJACENT AREAS. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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414 Union Street, Schenectady, NY 12305 • 518-630-9614
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TOWN OF HARTFORD
171 BRIDGE STREET
HARTFORD, VT
802-295-6382

Sheet Title: Erosion Prevention and Sediment Control Plan

Project Title: 131 Willard Road
Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	6/24/2024

C1.1

S:\PROJECTS\24\24022 QUECHEE FD\WS\SHEET FILES\24022 WILLARD FIRE - C1.1 EPSC PLAN.DWG

PLOTTED: 6/18/2024 3:31 PM

LOT 12-27-2
TOWN OF HARTFORD
131 WILLARD ROAD
1.72± ACRES

"Woods"

"Grass"

No Outlet

Culvert

Fire Station No. 2

Conc. Apron

Buried Utility Service Lines

Buried Propane Tank

Class 2 Wetland

WILLARD ROAD

SMH
Rim: 612.55'

Split Rail Fence

"Grass"

ToH Riparian Buffer Limits

Approximate Wetland Buffer

"Woods"

Approximate ToH Building Setback Line

Class 3 Wetland

Pond

Culvert

Unnamed Brook

To Quechee Main ST.

X1 EXCAVATE AND REMOVE UTILITIES

X2 REMOVE TRAILER

DEMO NOTES

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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TOWN OF HARTFORD
171 BRIDGE STREET
HARTFORD, VT
802-295-6382

Sheet Title: Demo Plan

Project Title: 131 Willard Road
Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	6/24/2024

C1.0

X:\PROJECTS\24022-QUECHEE FD\DWG\SHEET FILES\24022 WILLARD FIRE - C2.0 SITE PLAN.DWG

PLOTTED: 7/1/2024 9:44 AM

N

SITE NOTES

- C1 PRECAST WHEEL STOPS
- C2 ASPHALT PARKING
- C3 5' WIDE CONCRETE WALKWAY
- C4 ADA VAN ACCESSIBLE PARKING AND SIGNAGE
- C5 CONCRETE PAD
- C6 SNOW STORAGE

DRAINAGE NOTES

- D1 STONE DRIP EDGE AND UNDERDRAIN
- D2 FLARED END SECTION AND STONE PAD

WATER NOTES

- W1 6" SPRINKLER LINE
- W2 2" EX. DOMESTIC WATER LINE TO REMAIN
- W3 EXISTING WATER MAIN TO BE PROTECTED AND MONITORED DURING CONSTRUCTION

SEWER NOTES

- S1 6" SEWER SERVICE LINE

GAS NOTES

- G1 GAS LINE

ELECTRICAL NOTES

- E1 UNDERGROUND ELECTRICAL CONDUIT
- E2 GENERATOR

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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171 BRIDGE STREET
HARTFORD, VT
802-295-6382

Sheet Title: Site Plan

Project Title: 131 Willard Road
Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C2.0

S:\PROJECTS\24022 QUECHEE TC\DWG\SHEET FILES\24022 WILLARD FIRE - C2.0 SITE PLAN.DWG

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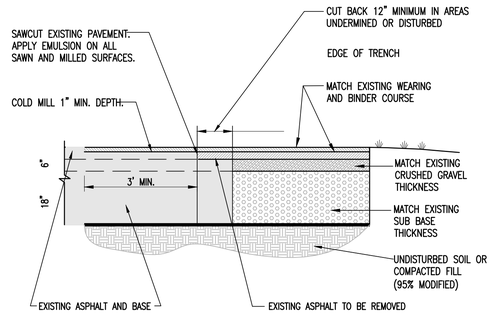

ASPHALT PAVEMENT TRENCH PATCH

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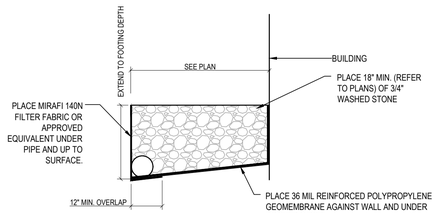

TYPICAL DRIP EDGE

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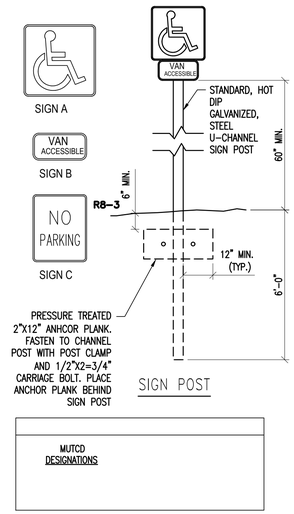

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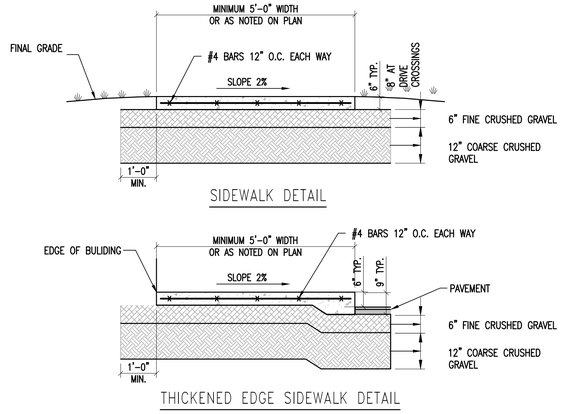

SIDEWALK DETAIL

THICKENED EDGE SIDEWALK DETAIL

CONCRETE SIDEWALK NOTES:

1. PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH, TYPICALLY AT INTERVALS MATCHING THE SIDEWALK WIDTH, OR AS NOTED ON PLANS (NOT TO EXCEED 10'-0").
2. PLACE EXPANSION JOINT AS INDICATED ON PLANS, NOT TO EXCEED 20'-0" MAX. ALL EXPANSION JOINTS SHALL BE DOWELED WITH A $\frac{3}{4}$" DIAMETER SMOOTH DOWEL AT 12" O.C. DOWEL SHALL BE 15" IN LENGTH AND SHALL HAVE AN EXPANSION CAP INSTALLED AT THE END. SEE DETAIL ON THIS SHEET.
3. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUAL.
4. CAST-IN-PLACE CONCRETE TO BE 4000 psi CONCRETE, 5%-7% AIR ENTRAINMENT WITH 6x6-W4.0xW4.0 REINFORCING CENTERED IN SIDEWALK.
5. WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" oc (PORTION OF DOWEL IN SIDEWALK TO BE GREASED).
6. WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/4" EXPANSION MATERIAL (FULL DEPTH OF SIDEWALK), BETWEEN FEATURE AND SIDEWALK.
7. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR.

CONCRETE SIDEWALK

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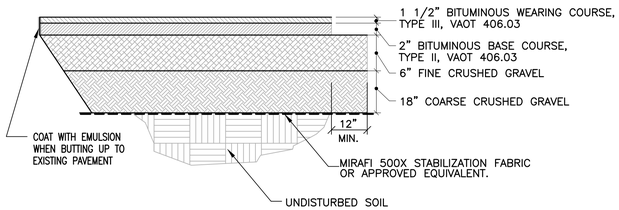

PAVEMENT PATCHING NOTES:

1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

PAVEMENT SECTION

NOT TO SCALE 3

EARTHWORK NOTES

1. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, AND PROJECT ENGINEER TO REVIEW PROCEDURES, IDENTIFY RESPONSIBILITIES. UNLESS STATED OTHERWISE, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF TOWN OF HARTFORD SPECIFICATIONS.
2. CLEARING AND GRUBBING- SITE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING DRIVEWAYS, STONE WALLS, AND GRASS AREAS. THE DRIVEWAY SUB-GRADE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVING.
3. COMPACTION OF ALL MATERIALS SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY ASTM D2922 AND SHALL NOT BE LESS THAN THE REQUIRED AMOUNT AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
4. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 1000 SQUARE FEET OF AREA.
5. PAVEMENT SHALL MEET THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS PUBLISHED BY VTRANS.
6. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO THE COMPLETION OF ROLLING. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.
7. ALL REMAINING DISTURBED AREAS SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS FOR EROSION CONTROL.
8. THE SEEDING OF 10% OR GREATER SLOPES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.
9. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL, REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLES:

A. SAND BLANKET/BEDDING: MESH SIEVES

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE
2 INCHES	100
1-1/2 INCHES	90 – 100
1/2 INCH	70 – 100
NO. 4	60 – 100
NO. 100	0 – 20
NO. 200	0 – 8

B. 3/4" CRUSHED STONE: MESH SIEVES ASTM C33-03, STONE SIZE #67

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE
1 INCH	100
3/4 INCHES	90 – 100
3/8 INCH	20 – 55
NO. 4	0 – 10
NO. 8	0 – 5

C. 1-1/2" CRUSHED STONE: MESH SIEVES

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE
2 INCH	100
1-1/2 INCH	95 – 100
3/4 INCH	35 – 70
3/8 INCH	10 – 30
NO. 4	0 – 5

D. COARSE CRUSHED GRAVEL: MESH SIEVES

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE
4 INCHES	95 – 100
NO. 4	25 – 50
NO. 100	0 – 12
NO. 200	0 – 6

E. FINE CRUSHED GRAVEL: MESH SIEVES

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE
2 INCHES	100
1-1/2 INCHES	90 – 100
NO. 4	30 – 60
NO. 100	0 – 12
NO. 200	0 – 6

F. GRANULAR BACKFILL: MESH SIEVES

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE
3 INCHES	100
NO. 4	45 – 75
NO. 100	0 – 12
NO. 200	0 – 6

G. TYPE I STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF FOUR INCHES.

H. TYPE II STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM TWO INCHES TO 36 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

I. TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS:
   1. THE pH OF THE MATERIAL SHALL BE BETWEEN 5.5 AND 7.6.
   2. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 2% NOR MORE THAN 20%.
   3. GRADATION:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1 INCH	85 – 100
1/4 INCH	65 – 100
NO. 200	20 – 80

THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHOD TO MEET THE ABOVE SPECIFICATIONS.

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Date:	6/24/2024

C3.0

S:\PROJECTS\24\24022\DWG\SHEET FILES\24022 WILLARD FIRE - C3.0 DETAILS.DWG

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WATER NOTES

WATER MAINS
1. PERFORM A HYDROSTATIC AND LEAKAGE TEST ACCORDING TO AWWA C600(LATEST REVISION) ON EACH PIPE LINE.
2. THE ENGINEER SHALL BE GIVEN AT LEAST 48 HOURS NOTICE BEFORE THE TEST IS CONDUCTED. TEST MUST BE WITNESSED BY THE ENGINEER.
3. SPECIFIED TEST PRESSURE IS A MINIMUM OF 200 PSI OR 1.5X THE WORKING PRESSURE, WHICHEVER IS GREATER, AND PRESSURE DURING TEST SHALL NOT VARY BY MORE THAN 5 PSI. SEE THE CURRENT EDITION OF AWWA C600 FOR ALLOWABLE LEAKAGE.

EXISTING UTILITIES
1. LOCATION OF UTILITY INSTALLATIONS AND UNDERGROUND STRUCTURES ARE SHOWN AS APPROXIMATE ON THE CONTRACT DOCUMENTS SOME UTILITIES MAY NOT BE SHOWN.
2. ALL UTILITIES SHALL BE LOCATED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
3. EXISTING UTILITIES SHALL BE PROTECTED AND SUPPORTED DURING CONSTRUCTION.
4. ALL WATER, GAS, CABLE, TELEPHONE, ELECTRIC, SEWER, AND OTHER UTILITIES FOUND TO INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED IN A MANNER ACCEPTABLE TO THE ENGINEER, PRIOR TO COMMENCING DEMOLITION.

PIPE BEDDING
1. SAND BLANKET/BEDDING SHALL MEET REQUIREMENTS OF EARTHWORK SPECIFICATIONS
2. TRENCH FINAL BACKFILL MATERIAL – MATERIAL WILL EXCLUDE PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT, CLAY, LARGE ROCKS(GREATER THAN 12" DIMENSION), OR ANY MATERIAL DETERMINED BY THE ENGINEER THAT WILL NOT BE SUITABLE.

PIPE TRENCH BACKFILL
1. MEET EARTHWORK SPECIFICATIONS FOR PLACEMENT AND COMPACTION.

DUCTILE IRON PIPE (WATER)
1. D.I. PIPE CONFORM TO AWWA/ANSI C151.
2. LININGS AND LINING REPAIR TO AWWA/ANSI C104.
3. JOINTS CONFORM TO AWWA/ANSI C 111 AND C115.
4. FITTINGS CONFORM TO AWWA/ANSI C110, C153, C105.
5. KEEP INSIDE OF PIPE CLEAN AND FREE OF DEBRIS.
6. REJECT ANY PIPE WHICH IS DROPPED DURING HANDLING.
7. MECHANICAL JOINT GLANDS SHALL BE "MEGA-LUG" RETAINER GLANDS.
8. DUCTILE IRON FITTINGS: ANSI A21.10, 350 PSI PRESSURE RATING.
9. JOINTS: MECHANICAL, PUSH-ON, AND FLANGED:
   A. RUBBER GASKET JOINT, ANSI A21.11
10. GASKETS:
    A: MECHANICAL AND PUSH-ON JOINTS: ANSI A21.11
    B. FLANGED JOINT: ⅛" THICK RING OR FULL FACED RUBBER, ANSI A21.15.
11. BOLTS/NUTS
    A. MECHANICAL JOINT: ANSI A21.11
    B. FLANGED JOINT: ANSI A21.15
12. LININGS:
    A. INTERIOR- CEMENT LINED, DOUBLE THICKNESS BITUMINOUS SEAL
    B. EXTERIOR-BITUMINOUS COATING APPROX. 1 MIL THICK, ANSI A21.51, ANSI A21.15, AND ANSI A21.10.
    C. FLANGE MACHINED FACE COATING: ANSI A21.15.
13. LAYING PIPE
    A. PIPE SHALL BE LAID WITH BELL ENDS FACING IN THE DIRECTION OF LAYING.
    B. WHERE PIPE IS LAID ON A SLOPE OF 5% OR MORE, THE LAYING SHALL START AT THE LOW END AND PROCEED UPHILL, WITH THE BELL ENDS UPGRADE.
    C. A WATERTIGHT PLUG SHALL BE PLACED IN THE OPEN ENDS OF INSTALLED PIPE WHEN PIPE LAYING IS NOT IN PROGRESS.
    D. MAX. PERMISSIBLE DEFLECTION IS 75% OF AWWA SPEC. C600.

CHLORINATION OF DOMESTIC WATER LINES
1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF BEGINNING ANY DISINFECTION OF WATER MAINS
2. CONTRACTOR SHALL BE RESPONSIBLE FOR BACTERIOLOGICAL TESTING AS REQUIRED BY THIS SPECIFICATION AND REFERENCE STANDARDS MENTIONED.
3. DISINFECT ALL NEW PIPELINE SYSTEMS IN ACCORDANCE WITH AWWA C651, INCLUDING:
   A. METHOD OF CHLORINE APPLICATION. USE CONTINUOUS FEED METHOD OR SLUG METHOD (TABLET METHOD IS NOT ACCEPTABLE).
   B. FORM OF CHLORINE UTILIZED.
   C. FINAL FLUSHING.
   D. BACTERIOLOGICAL TESTING
   E. REPETITION OF PROCEDURE

GATE VALVES
1. RESILIENT SEAT GATE VALVES BY KENNEDY "KEN-SEAL" OR EQUAL.
2. IRON BODY GATE VALVES TO MEET AWWA C-509-87.
3. STEM CONSTRUCTION: NON-RISING.
4. STEM SEALS: DOUBLE O-RING.
5. GATE: CAST IRON RESILIENT WEDGE WITH SYNTHETIC ELASTOMER COATING, AND SHALL BE EPOXY COATED (FUSION BONDED) INSIDE AND OUT.
6. BONNET HARDWARE SHALL MEET ASTM A307, CADMIUM PLATED.
7. OUTLET CONNECTION: STANDARD MECHANICAL JOINT
8. OPERATION: OPEN COUNTERCLOCKWISE.

TAPPING SLEEVES AND VALVES

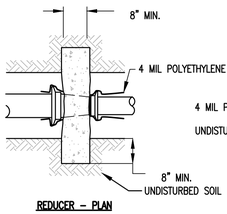
TAPPING VALVES
1. TAPPING VALVES TO MEET ANSI/AWWA C509-87, STANDARD FOR RESILIENT SEATED GATE VALVES.
2. VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI.
3. VALVES SHALL OPEN COUNTERCLOCKWISE.
4. INLET FLANGES SHALL BE CLASS 125, ANSI B16.1, OR ANSI/AWWA C110/A21.10.
5. OUTLET CONNECTION: STANDARDIZED MECHANICAL JOINT.
6. STEM SEALS: O RING.
7. STEM CONSTRUCTION: NON-RISING.
8. SEATING: PARALLEL SEAT
9. END CONNECTIONS: MECHANICAL ON RUN, FLANGED ON BRANCH.
10. BURIED TAPPING VALVES SHALL BE PROVIDED WITH A 2 INCH SQUARE WRENCH NUT AND CAST IRON VALVE BOX. IF DEPTH FROM GRADE TO TOP OF VALVE OPERATING NUT IS GREATER THAN 6'-0 , A VALVE STEM RISER MADE OF HIGH STRENGTH STEEL SHALL BE PROVIDED. DEPTH FROM VALVE STEM RISER NUT TO GRADE WILL BE 4 TO 6 FEET.

TAPPING SLEEVES
1. AWWA C509, LATEST REVISION.
2. AWWA C207, CLASS D, MAX. WORKING PRESSURE OF 150 PSI.
3. SLEEVES: SPLIT SLEEVES OF CAST IRON OR DUCTILE IRON.
4. MECHANICAL JOINT ENDS WITH END AND GASKET SEALS.
5. BOLTS AND NUTS, MECHANICAL JOINTS: HIGH STRENGTH CAST IRON OR HIGH STRENGTH LOW ALLOY STEEL, ANSI/AWWA C111/A21.11-90.
6. BOLTS AND NUTS, FLANGED JOINTS: HIGH STRENGTH, LOW CARBON STEEL CONFORMING TO ANSI/AWWA C110/A21.10-87, APPENDIX
7. COAT ALL NUTS AND BOLTS WITH A RUST RESISTANT LUBRICANT.
8. ALL BOLTS AND NUTS USED WITH PIPE SLEEVES SHALL BE BRUSH COATED HEAVILY AFTER FINAL TIGHTENING WITH BITUMASTIC COLD-APPLIED MATERIAL TO THOROUGHLY COVER ALL EXPOSED SURFACES OF BOLTS AND NUTS.

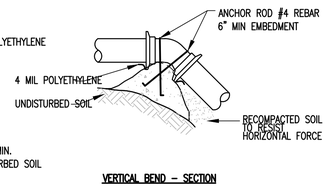
VALVE BOXES
1. ACCEPTABLE MANUFACTURER'S: MUELLER, CLOW, OR EQUAL.
2. CLOW F-2452 SLIDING TYPE, TWO PIECE, OR EQUAL.
3. 5 ¼ INCH SHAFT.
4. SIZE 664-A (40-60 INCH OVERALL LENGTH).
5. CAST IRON.
6. CLOW F-2490 LIDS OR EQUAL.
7. THE WORD "WATER" TO BE CAST INTO TOP OF COVERS, AND ARROW SHOWING DIRECTION OF OPENING.

CONCRETE
1. CONCRETE SHALL HAVE:
   A. MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS
   B. AIR ENTRAINMENT OF 4% TO 6% BY VOLUME.
   C. WATER CEMENT RATIO OF 0.49 LBS. WATER/CEMENT.
   D. SLUMP OF 2 TO 4 INCHES.
1. CONCRETE SHALL NOT BE PLACED WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT OR MORE THAN 90 DEGREES FAHRENHEIT.
2. CONCRETE SHALL NOT BE DROPPED MORE THAN SIX FEET INSIDE A FORM.
3. MAINTAIN TEMPERATURE OF CONCRETE SURFACE AT MINIMUM 50 DEGREES FAHRENHEIT FOR 72 HOURS AFTER PLACING CONCRETE. PREHEAT ALL ENCLOSURES FOR A MINIMUM OF 2 HOURS TO PROVIDE A MIN. SURFACE TEMPERATURE OF 45 DEGREES FAHRENHEIT.
4. ALLOW TO SET AND CURE ALL THRUST BLOCKS, CONCRETE SUPPORTS, AND ANCHORS A MINIMUM OF 24 HOURS BEFORE BACKFILLING.
5. COMPLETELY CURE AND SET CONCRETE BEFORE ANY HYDROSTATIC OR LEAKAGE TESTING OF PIPELINE SYSTEMS.
6. NONSHRINK GROUT SHALL BE HALCO TRADEMARK, AS MANUFACTURED BY LEHN & FINK INDUSTRIAL PRODUCTS.
7. DO NOT PLACE ANY MORTAR OR GROUT WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT.
8. MORTAR FOR MANHOLES SHALL CONSIST OF THE FOLLOWING:
   A. CEMENT-TYPE II, ASTM C150.
   B. HYDRATED LIME-TYPE N, ASTM C207.
   C. SAND- ASTM C 33, FINE AGGREGATES FOR CONCRETE.
   D. WATER-CLEAN, SUITABLE FOR DRINKING.
10. MIX(BY VOLUME): 1 PART CEMENT, ½ PART LIME, 4 ½ PARTS SAND.

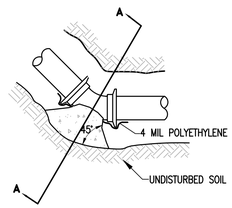
GENERAL
1. CONTRACTOR SHALL NOTIFY BURLINGTON DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS BEFORE BEGINNING WATER LINE WORK..
2. "AS BUILT" DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AT THE TIME OF COMPLETION OF THE SYSTEM.



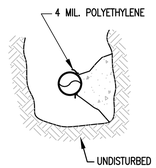
REDUCER – PLAN



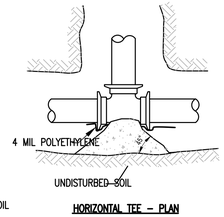
VERTICAL BEND – SECTION



HORIZONTAL BEND – PLAN



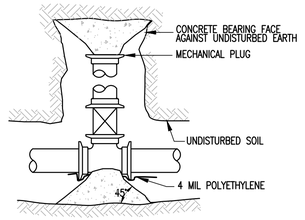
SECTION A–A



HORIZONTAL TEE – PLAN

MINIMUM BEARING SURFACE (SF) 150 PSI WORKING PRESSURE								
	PIPE DIA.	TEE	HYD.	90° BEND	45° BEND	22.5° BEND	11.25° BEND	END CAP
1,000 PSF SOIL BEARING CAPACITY	10"	16	–	16	6	3	2	16
	8"	10	–	10	4	2	1	10
	6"	7	7	7	2	1	0.5	7
	4"	3	–	3	1	0.5	0.5	3
	2"	1	–	1	0.5	0.5	0.5	1
3,000 PSF SOIL BEARING CAPACITY	10"	6	–	6	2	1	2	6
	8"	4	–	4	1.25	1	1	4
	6"	2	2	2	1	1	1	2
	4"	1	–	1	1	1	1	1
	2"	1	–	1	1	1	1	1
5,000 PSF SOIL BEARING CAPACITY	10"	4	–	4	1.25	1	1	4
	8"	2	–	2	1	1	1	2
	6"	1.25	1.25	1.25	1	1	1	1.25
	4"	1	–	1	1	1	1	1
	2"	1	–	1	1	1	1	1

THRUST BLOCK NOTES:
1. THRUST BLOCKS SHALL BE PROVIDED AT ALL WATER LINE TEES, HYDRANTS, BENDS, REDUCERS, AND END CAPS.
2. HYDROSTATIC AND LEAKAGE TEST PRESSURE PER SPECIFICATIONS.
3. PLACE 4 MIL POLYETHYLENE BETWEEN FITTINGS AND THRUST BLOCKS.
4. CONCRETE SHALL HAVE 4000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AND AIR ENTRAINMENT OF 4 TO 6% BY VOLUME.
5. UTILIZE MEGALUG MECHANICAL JOINT RESTRAINTS ON ALL FITTINGS IN ADDITION TO CONCRETE THRUST BLOCKS.



CAPPED STUB WITH VALVE – PLAN

TYPICAL BEARING THRUST BLOCK

SCALE: NONE 1

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Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	6/24/2024

C3.1

S:\PROJECTS\0-2024\24022\DUECHEK FD\DWG\SHEET FILES\24022 WILLARD FIRE - C3.0 DETAILS.DWG

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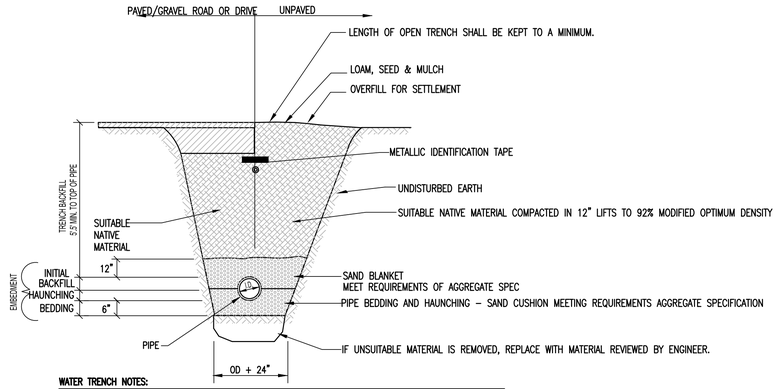
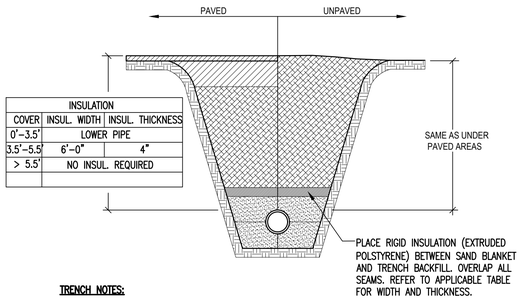


WATER TRENCH NOTES:

1. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
2. PROVIDE 6' MINIMUM COVER OVER WATER PIPE.
3. INSTALL WATER PIPE IN ACCORDANCE WITH AWWA STANDARD C600.
4. COMPACT SOILS IN ACCORDANCE WITH SPECIFICATION
5. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.

TYPICAL WATER TRENCH DETAIL

SCALE: NONE — 1



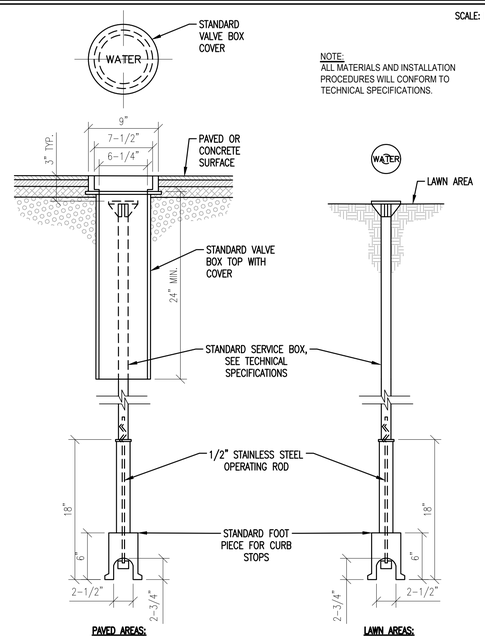
INSULATION		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3.5'	LOWER PIPE	
3.5'-5.5'	6'-0"	4"
> 5.5'	NO INSUL. REQUIRED	

TRENCH NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.

INSULATION OVER SHALLOW WATER LINE DETAIL

SCALE: NONE — 2

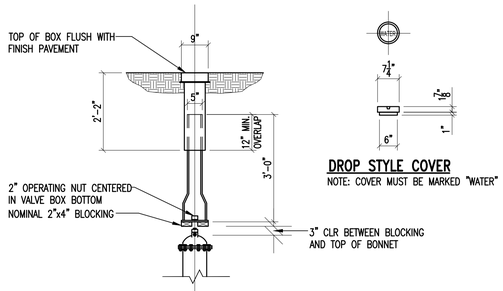


NOTE:
ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TECHNICAL SPECIFICATIONS.

PAVED AREAS: **LAWN AREAS:**

TYPICAL SERVICE BOX

NOT TO SCALE — 3



BOTTOM DETAIL

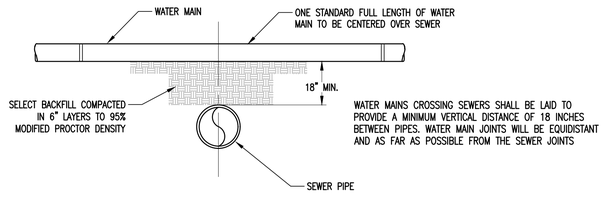
DROP STYLE COVER
NOTE: COVER MUST BE MARKED "WATER"

VALVE BOX NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TECHNICAL SPECIFICATIONS.
2. ALL PIPES SHOULD HAVE A MINIMUM DEPTH OF 5.5' FROM TOP OF PIPE TO FINISH GRADE.
3. ALL GATE VALVES SHALL BE OPEN RIGHT.

TYPICAL VALVE BOX DETAIL

SCALE: NONE — 5



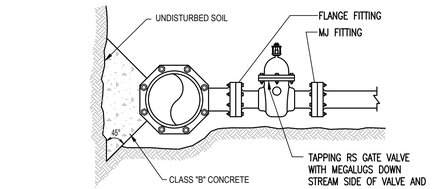
WATER MAIN ABOVE SEWER

SEPARATION NOTES:

1. WATER MAIN RELATIONS TO SEWER SHALL BE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WATER WORKS" SO-CALLED TEN STATE STANDARDS.
2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
3. WHEN IT IS IMPOSSIBLE TO MAINTAIN 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN; 1) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS; 2) THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICH EVER IS GREATER; 3) THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 psi FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS.

SANITARY SEWER/WATER LINE CROSSING

SCALE: NONE — 6

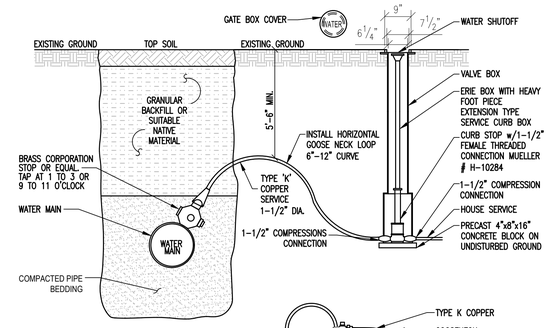


ELEVATION

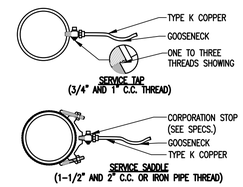
NOTE:
1. SEE GATE VALVE DETAIL FOR ADDITIONAL REQUIREMENTS
2. AREA OF BEARING AGAINST UNDISTURBED SOIL SHALL BE THE SAME AS FOR 1/4" BEND (90°) THRUST BLOCK

TAPPING SLEEVE AND VALVE

SCALE: NONE — 7

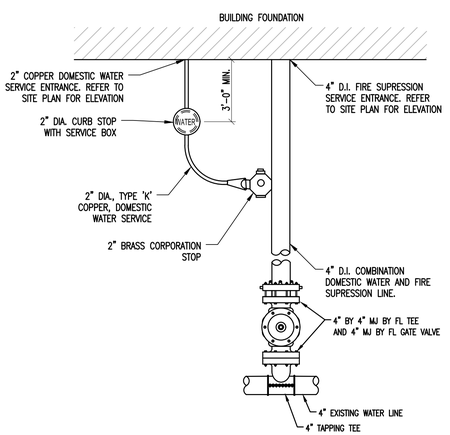


NOTES:
1. TEFLON THREADED SEALANT TAPE WILL BE USED ON ALL CORPORATION STOPS PRIOR TO INSTALLATION.
   A. SPIRAL WRAP COMPLETELY COVERING THE THREAD AREA WITH TWO WRAPS.
   B. PIPE DOPE OR OTHER LIQUID THREAD SEALANTS ARE NOT ACCEPTABLE.
2. LEAVE UP TO THREE THREADS SHOWING OUTSIDE OF PIPE. A TORQUE OF 35 POUNDS IS RECOMMENDED.



COPPER SERVICE CONNECTION DETAIL

NOT TO SCALE — 8



WATER SERVICE ENTRANCE DETAIL

SCALE: NONE — 9

Stamp

No.	Description	Date

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Sheet Title: Water Details

Project Title: 131 Willard Road
Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
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C3.2

S:\PROJECTS\0-2024\24022 DUECHER FROW\SHEET FILES\24022 WILLARD FIRE - C3.0 DETAILS.DWG

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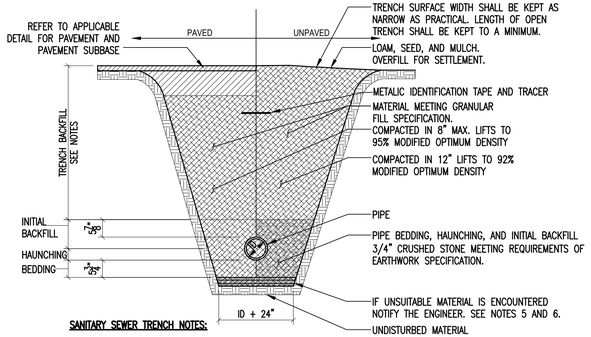
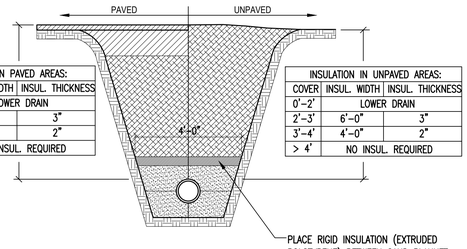


SANITARY SEWER TRENCH NOTES:

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR FULL LENGTH OF PIPE.
3. FOR BUILDING SEWERS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 4'–0". WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH LESS THAN 3'–0" UNDER DRIVEWAYS, EXTRA HEAVY CAST IRON OR OTHER HIGH STRENGTH PIPE SHALL BE USED. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
4. FOR SEWER COLLECTION SYSTEMS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 5'–0". THIS DEPTH SHALL BE INCREASED TO 6'–0" IN AREAS TO BE PLOWED DURING THE WINTER MONTHS. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
5. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.
6. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.
7. SEWERS ON 20 PERCENT SLOPES OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS OR EQUIVALENT, SPACED AS FOLLOWS:
   A. NOT OVER 36 FEET CENTER TO CENTER ON GRADES 20 PERCENT AND UP TO 35 PERCENT
   B. NOT OVER 24 FEET CENTER TO CENTER ON GRADES 35 PERCENT AND UP TO 50 PERCENT
   C. NOT OVER 16 FEET CENTER TO CENTER ON GRADES 50 PERCENT AND OVER

SANITARY SEWER TRENCH
NOT TO SCALE — 1



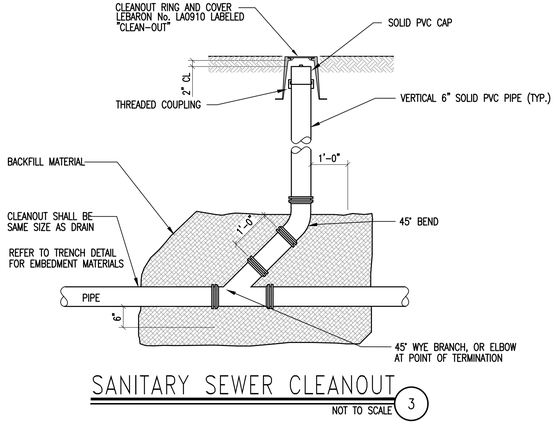
INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'–3'	LOWER DRAIN	
3'–4'	6'–0"	3"
4'–5'	4'–0"	2"
> 5'	NO INSUL. REQUIRED	

INSULATION IN UNPAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'–2'	LOWER DRAIN	
2'–3'	6'–0"	3"
3'–4'	4'–0"	2"
> 4'	NO INSUL. REQUIRED	

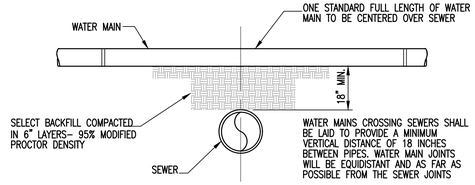
TRENCH NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 – STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW SANITARY SEWER
NOT TO SCALE — 2



SANITARY SEWER CLEANOUT
NOT TO SCALE — 3



WATER MAIN ABOVE SEWER

SEPARATION NOTES:

1. WATER MAIN RELATIONS TO SEWER SHALL BE IN ACCORDANCE WITH THE 'ENVIRONMENTAL PROTECTION RULES, CHAPTER 21, WATER SUPPLY RULE (VWSR), SECTIONS 8.5 AND 8.6'

2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

3. WHEN IT IS IMPOSSIBLE TO MAINTAIN 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN; 1) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS.

SANITARY SEWER WATER SEPARATION
NOT TO SCALE — 4

SEWER NOTES

CONTRACTOR SHALL CONFORM TO GUIDELINES DETAILED IN THE VERMONT STATE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR READING AND FOLLOWING THE FULL COMPLETE EDITION PROVIDED BY THE STATE.

A. THE BUILDING SEWER SHALL BE CONSTRUCTED IN A MANNER WHICH WILL PREVENT LEAKING, BREAKING OR CLOGGING.

B. SIZING AND SLOPE: MINIMUM BUILDING SEWER SIZE IS 4 INCHES (UNLESS SHOWN ON THE PLAN) AND A MINIMUM SLOPE IS 1/8" PER FOOT.

C. CLEANOUTS: CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL CHANGE IN DIRECTION OF THE BUILDING SEWER GREATER THAN 45 DEGREES AND WHERE INDICATED ON THE DESIGN DRAWINGS. BUILDING SEWER CHANGES IN DIRECTION WHICH EXCEED 45 DEGREES SHOULD BE MADE WITH TWO 45 DEGREE ELLS OR LONG SWEEP FITTINGS. MANHOLES ARE ACCEPTABLE IN LIEU OF CLEANOUTS. WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH OF LESS THAN 3 FEET UNDER DRIVEWAYS ARE ANTICIPATED, EXTRA HEAVY CAST IRON PIPE SHALL BE USED.

D. LEAKAGE: BUILDING SEWERS SHALL MEET THE LEAKAGE STANDARDS PRESCRIBED IN THE STATE OF VERMONT SPECIFICATIONS (EPR– CHAPTER 1). SEE BELOW FOR MORE DETAIL.

E. SLOPE, VELOCITY: ALL GRAVITY SEWER LINES SHALL BE INSTALLED WITH NOT LESS THAN THE SLOPES SHOWN BELOW:

PIPE SIZE (INCHES)	SLOPE (FEET/100 FEET)
4"	2%
6"	1%
8"	0.4%

F. CHANGES IN PIPE SIZE: WHEN A SMALLER SEWER JOINS A LARGE ONE, THE INVERT OF THE LARGER SEWER SHALL BE LOWERED SUFFICIENTLY TO MAINTAIN THE SAME ENERGY GRADIENT.

G. MATERIAL: PVC SDR 35, ASTM D3034, WITH PUSH–ON GASKETED JOINTS. GASKETS SHALL CONFORM TO ASTM D3212. SEWER JOINTS SHALL BE CONSTRUCTED TO MINIMIZE INFILTRATION AND TO PREVENT THE ENTRANCE OF ROOTS INTO THE SYSTEM.

H. TRENCHING: LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.

I. BEDDING: SEE TRENCH DETAIL DRAWING FOR MATERIALS. TRENCH BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL FREE FROM DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS.

J. LEAKAGE TESTS: UPON COMPLETION OF SEWER LINE CONSTRUCTION, THE SEWER LINE SHALL BE TESTED IN ACCORDANCE WITH THE STATE OF VERMONT SPECIFICATIONS (EPR – CHAPTER 1, APPENDIX "A").

LEAKAGE TESTS FOR GRAVITY SEWERS

PERFORM A PRESSURIZED AIR TEST ON THE GRAVITY LINE IN ACCORDANCE WITH THE VERMONT ENVIRONMENTAL PROTECTION RULES ON EACH SECTION OF THE GRAVITY SEWER. THE ENGINEER SHALL BE GIVEN 72 HOURS NOTICE BEFORE THE TEST IS CONDUCTED. TEST MUST BE WITNESSED BY THE ENGINEER.

PLUG ALL OPENINGS IN THE TEST SECTION. ADD AIR UNTIL THE INTERNAL PRESSURE OF THE LINE IS RAISED TO
APPROXIMATELY 4.0 POUNDS/SQUARE INCH (PSI) GREATER THAN THE AVERAGE PRESSURE OF ANY GROUND WATER. AFTER THIS PRESSURE IS REACHED, ALLOW THE PRESSURE TO STABILIZE. THE PRESSURE WILL NORMALLY DROP AS THE AIR TEMPERATURE STABILIZES. THIS USUALLY TAKES 2 TO 5 MINUTES DEPENDING ON THE PIPE SIZE. THE PRESSURE MAY BE REDUCED TO 3.5 PSI BEFORE STARTING THE TEST.

WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE THE STARTING TEST PRESSURE OF 3.5 PSI ABOVE THE PIPE, START THE TEST. IF THE PRESSURE DROPS MORE THAN 1.0 PSI DURING THE TEST TIME, THE LINE IS PRESUMED TO HAVE FAILED THE TEST. IF A 1.0 PSI DROP DOES NOT OCCUR WITHIN THE TEST TIME, THE LINE HAS PASSED THE TEST. THE TEST TIME SHALL BE DERIVED FROM THE FOLLOWING TABLE. IF THE SECTION OF LINE TO BE TESTED INCLUDES MORE THAN ONE PIPE SIZE, CALCULATE THE TEST TIME FOR EACH SIZE AND ADD THE TEST TIMES TO ARRIVE AT THE TOTAL TEST TIME FOR THE SECTION.

PIPE SIZE (IN)	T (TIME) (MIN./100FT)
3	0.2
4	0.3
6	0.7
8	1.2

K. INSTALLATION: PIPE SHALL BE LAID WITH BELL ENDS FACING UPGRADE AND LAYING SHALL START AT THE DOWNGRADE END.

L. WATER LINE SEPARATION

a. HORIZONTAL SEPARATION: SEWERS SHALL BE LAID FLAT AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.

WHERE IMPOSSIBLE OR IMPRACTICABLE TO MAINTAIN THE TEN FOOT SEWER/WATER PIPE HORIZONTAL SEPARATION, (DUE TO LEDGE, BOULDERS OR OTHER UNUSUAL CONDITIONS) THE WATER LINE MAY BE IN A SEPARATE TRENCH OR ON AN EARTH SHELF IN THE SEWER TRENCH PROVIDED THAT THE BOTTOM OF THE WATER LINE IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. WHEREVER IMPOSSIBLE OR IMPRACTICAL TO MAINTAIN THE 18 INCH VERTICAL SEPARATION, THE SEWER LINE SHALL BE CONSTRUCTED USING PRESSURE PIPE TO NORMAL WATER LINE STANDARDS AND PRESSURE TESTED TO 50 PSI FOR 15 MINUTE PRIOR TO BACKFILLING.

b. CROSSINGS: SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO MAINTAIN THE 18 INCH VERTICAL SEPARATION;

1.) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AWAY AS POSSIBLE FROM WATER JOINTS;
2.) THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICHEVER IS GREATER;
3.) THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS;
4.) WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

M. MANHOLES

a. DIAMETER: THE MINIMUM DIAMETER OF MANHOLES SHALL BE 48 INCHES; LARGE DIAMETERS ARE PREFERRED FOR CONNECTION TO LARGE DIAMETER SEWERS. A MINIMUM ACCESS DIAMETER OF 24 INCHES SHALL BE PROVIDED.
b. FLOW CHANNEL: FLOW CHANNELS SHALL BE PROVIDED IN THE BASE OF ALL MANHOLES AND THE FLOW CHANNEL THROUGH MANHOLES SHOULD BE MADE TO CONFORM IN SHAPE AND SLOPE TO THAT OF THE SEWERS.
c. MANHOLES SHALL BE OF THE PRE–CAST CONCRETE OR POUR–IN PLACE CONCRETE TYPE. MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR.
d. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A RUBBER–GASKETED FLEXIBLE WATERTIGHT CONNECTION THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL TO TAKE PLACE.
e. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE. LEAKAGE TESTING OF GRAVITY SEWERS UTILIZING THE WATER TESTING PROCEDURES TAKES INTO ACCOUNT THE LEAKAGE FROM ONE MANHOLE IN THE TEST SECTION. OTHERWISE, MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

AFTER THE MANHOLE HAS BEEN ASSEMBLED IN PLACE, ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED WITH AND POINTED WITH AN APPROVED NON–SHRINKING MORTAR. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED AND THE PLUGS PLACED TO PREVENT BLOWOUT.

EACH MANHOLE SHALL BE CHECKED FOR INFILTRATION BY FILLING WITH WATER TO THE TOP OF THE CONE SECTION. A STABILIZATION PERIOD OF ONE HOUR SHALL BE PROVIDED TO ALLOW FOR ABSORPTION. AT THE END OF THIS PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, IF NECESSARY, AND THE MEASURING TIME OF AT LEAST SIX HOURS BEGUN. AT THE END OF THE TEST PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE MEASURING THE VOLUME OF WATER ADDED. THIS AMOUNT SHALL BE CONVERTED TO A 24 HOUR RATE AND THE LEAKAGE DETERMINED ON THE BASIS OF DEPTH. THE LEAKAGE FOR EACH MANHOLE SHALL NOT EXCEED ONE GALLON PER VERTICAL FOOT FOR A 24 HOUR PERIOD FOR EXFILTRATION AND THERE SHALL BE NO VISIBLE INFILTRATION. IF AN AIR TEST IF PERFORMED ON THE MANHOLE, INSTEAD OF THE WATER TEST, THE MANHOLE SHALL REMAIN UN–BACKFILLED DOWN TO THE SEWER LINE INVERTS DURING THE AIR TEST.

Stamp

No.	Description	Date

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TOWN OF HARTFORD
171 BRIDGE STREET
HARTFORD, VT
802-295-6382

Sheet Title: Sewer Details

Project Title: 131 Willard Road
Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	6/24/2024

C3.3

S:\PROJECTS\24022\AM\02 DUECHET FD\DWG\SHEET FILES\24022 WILLARD FIRE C3.0 DETAILS.DWG

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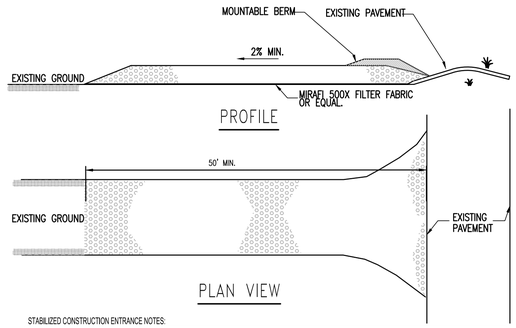
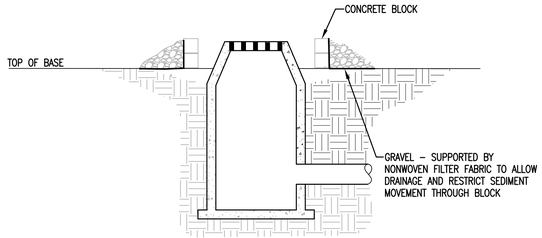


STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: USE 1-1/2" CRUSHED STONE.
2. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
5. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONSTRUCTION ENTRANCE DETAIL

SCALE: NONE (1)

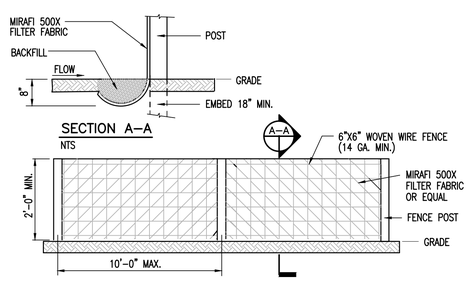


CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER FLOW.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, REMOVE GRAVEL AND BLOCK AND STABILIZE SURROUNDING AREA PER PLAN.
4. GRAVEL BAGS, GRATE GUARDS, FILTREXX OR SEDIGUARD INLET PROTECTION DEVICES MAY BE USED. SUBMIT PRODUCT INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE VT EPSC STANDARDS AND SPECIFICATIONS.

STONE AND BLOCK CATCH BASIN PROTECTION DETAIL

SCALE: NONE (2)

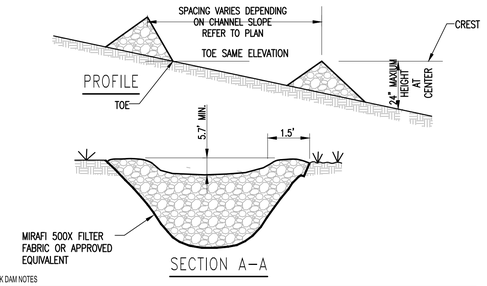


SILT FENCE NOTES:

1. SILT FENCE SHALL BE PRE-FABRICATED EROSION CONTROL FENCE BY MIRAFI OR EQUAL, OR CONSTRUCTED IN PLACE AS SPECIFIED HEREIN.
2. CONSTRUCTED IN PLACE SILT FENCE:
   A. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
   B. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE TIES SPACED EVERY 24" AT TOP OF MID SECTION.
   C. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
3. INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL). MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

SILT FENCE DETAIL

SCALE: NONE (3)

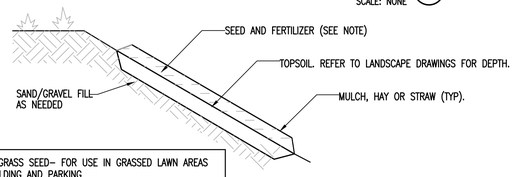


CHECK DAM NOTES

1. TYPE I STONE FILL WILL BE PLACED ON A FILTER FABRIC FOUNDATION AT THE GRADES AND LOCATIONS AS DESCRIBED HEREIN, AND TO MEET THE ABOVE DETAIL IN AREAS SHOWN ON PLANS
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM FOR A MINIMUM OF 100' DOWNSTREAM OF DISTRUBED EARTH.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED WEEKLY (EVERY 7 DAYS) AND WITHIN 24 HOURS AFTER EACH RAIN.
6. REMOVE SEDIMENT COLLECTED BEHIND EACH DAM WHEN DEPTH OF SEDIMENT IS ONE HALF THE HEIGHT OF THE DAM.

STONE CHECK DAM DETAIL

SCALE: NONE (4)



URBAN MIX GRASS SEED- FOR USE IN GRASSED LAWN AREAS AROUND BUILDING AND PARKING		
% BY WEIGHT	LBS. LIVE SEED BY ACRE	TYPE OF SEED
44.44	20.0	CREEPING RED FESCUE
44.44	20.0	KENTUCKY BLUEGRASS
11.11	5.0	RYEGRASS
100	45.0 # LIVE SEED/ ACRE	

CONSERVATION MIX GRASS SEED- FOR USE IN ALL OTHER AREAS		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
50	15.0	SMOOTH BROMEGRASS
16.67	5.0	RYEGRASS
33.33	10.0	BIRDSFOOT TREFOIL
100	30.0 # LIVE SEED/ACRE	

FERTILIZER- 40 LBS. PER 1000S.F.
USE STANDARD 10-20-20 WHEN NO SOIL TEST DATA IS AVAILABLE
SPRING SEEDING
FALL SEEDING

LIME- 100 LBS. PER 1000S.F.
DOLOMITIC GROUND LIMESTONE
NOT LESS THAN 85% OF THE TOTAL CARBONATE

TOP SOIL
6" MINIMUM TOPSOIL

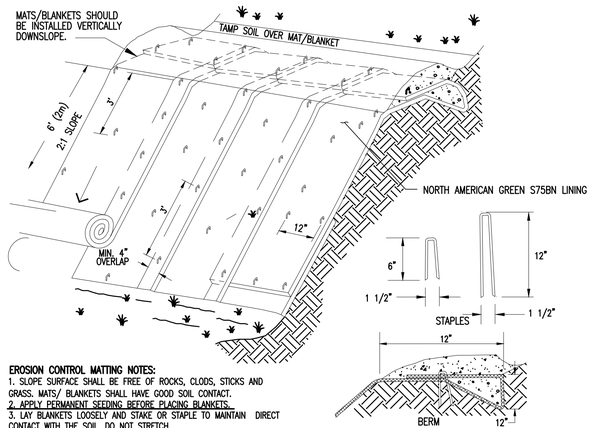
HAY OR STRAW MULCH- 90-100LBS PER 1000S.F. APPLY BINDER OR NETTING AS NEEDED

NOTES FOR SEEDED AND MULCHED AREAS

1. ALL DISTURBED SURFACES SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED WITHIN 7 DAYS OF DISTURBANCE.
2. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.
3. MULCH: TYPICALLY HAY OR STRAW MAY BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 90-100 LBS/1,000 SF. MULCH SHALL NOT BE PLACED ON SLOPES OF GREATER THAN 3:1. SEED IMPREGNATED EROSION CONTROL NETTING SHALL BE USED IN ITS PLACE.
4. SEED: SEEDING SHALL OCCUR AFTER APRIL 15 AND PRIOR TO SEPTEMBER 15TH IN ORDER TO ESTABLISH A STAND OF GRASS PRIOR TO GROUND FREEZING. SEED SHALL BE IN ACCORDANCE WITH SEED SPECIFICATION ON THIS SHEET.
5. COVER SEED WITH ¼ INCH SOIL UNLESS A HYDROSEEDER IS USED.
6. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
7. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.

SEEDED AND MULCHED AREAS DETAIL

SCALE: NONE (5)

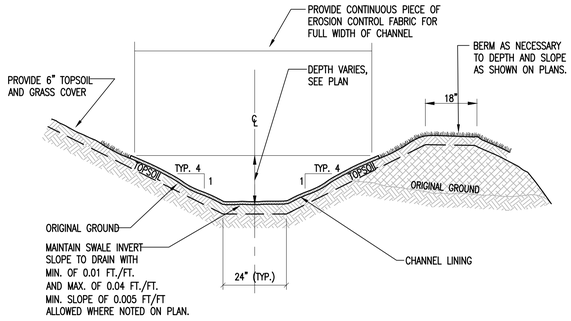


EROSION CONTROL MATTING NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. MATTING SHALL BE NATURAL FIBER.

EROSION CONTROL MATTING

SCALE: NONE (6)

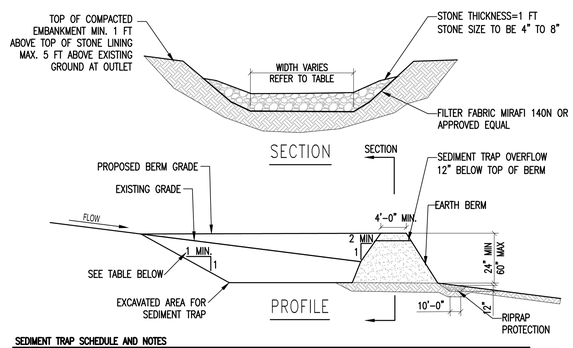


GRASSED SWALE NOTES:

1. PROVIDE CHANNEL LINING AS REQUIRED TO STABLIZE NEW VEGETATED SWALES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. LAP UPSTREAM BLANKET OVER DOWNSTREAM BLANKET MIN. OF 12"

GRASSED DRAINAGE SWALE DETAIL

SCALE: NONE (7)



SEDIMENT TRAP SCHEDULE AND NOTES

TRAP	DRAINAGE AREA IN ACRES	REQUIRED VOLUME OF SEDIMENT TRAP*	VOLUME PROVIDED	OVERFLOW WEIR ELEVATION	WEIR WIDTH	BOTTOM OF TRAP	TOP OF TRAP	SIDE SLOPE
TST-1	0.5	1800 CF	TBD	TBD	4'	TBD	TBD	2:1

* SEE NOTE 5 BELOW

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.

2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONE, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET, MEASURED AT CENTERLINE OF EMBANKMENT.

3. ANY EXCAVATED PORTION OF SEDIMENT TRAP SHALL HAVE 2:1 SLOPES OR FLATTER.

4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF EMBANKMENT.

5. THE VOLUME OF SEDIMENT STORAGE SHALL BE 3,600 CF PER ACRE OF CONTRIBUTORY DRAINAGE. MINIMUM VOLUMES AND OUTLET SIZES FOR EACH TRAP ARE LISTED IN THE SEDIMENT TRAP SCHEDULE SHOWN ABOVE.

6. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACE ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.

7. STONE USED IN THE OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCH RIP-RAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACE ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.

8. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF OF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.

9. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.

10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.

11. THE STRUCTURE SHALL BE REMOVED AND AREA BROUGHT TO FINAL GRADE AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

12. DRAINAGE AREA FOR THIS PRACTICE IS LIMITED TO 15 ACRES OR LESS.

13. SEDIMENT TRAPS SHALL MEET THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE (8)

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-6225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-630-9614
www.engineeringventures.com

TOWN OF HARTFORD
171 BRIDGE STREET
HARTFORD, VT
802-295-6382

Sheet Title: Erosion Prevention and Sediment Control Details

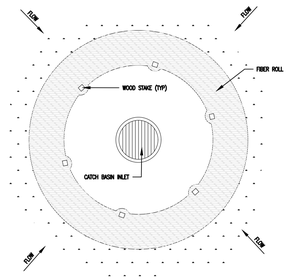
Project Title: 131 Willard Road Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	6/24/2024

C3.4

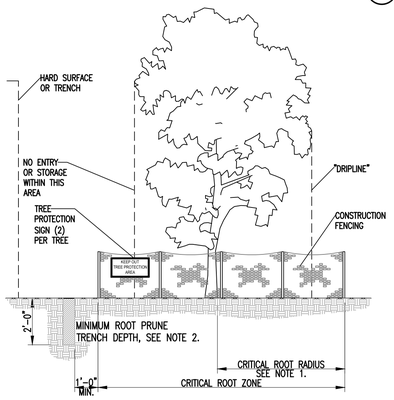
S:\PROJECTS\5-2024\24022 DUECHES FROW\SHEET FILES\24022 WILLARD FIRE - C3.0 DETAILS.DWG

PLOTTED: 6/18/2024 3:32 PM



FIBER ROLL INLET PROTECTION DETAIL

1

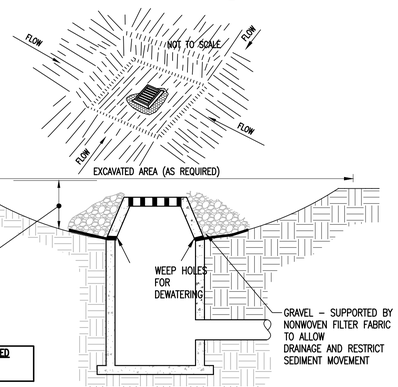


TREE PROTECTION NOTES:

1. TO CALCULATE THE CRITICAL ROOT RADIUS, ESTIMATE THE TREE'S HEIGHT AND MULTIPLE BY 40 PERCENT (0.40). THE RESULT IS THE APPROXIMATE DISTANCE FROM THE TREE TRUNK TO THE EDGE OF THE CONSTRUCTION FENCING.
2. FENCE SPECIMEN TREES AND GROUPS OF TREES. WHERE ROOF LOSS WILL OCCUR, ROOT PRUNE ONE FOOT BEYOND THE CONSTRUCTION FENCE USING A VIBRATING KNIFE OR NARROW TRENCHER – ALWAYS WITH SHARP BLADES TO MAKE CLEAN CUTS. BACKFILL IMMEDIATELY AND COVER WITH 3 INCHES OF MULCH.
3. INSTALL SILT FENCE ON THE INTERIOR OF THE CONSTRUCTION FENCING TO KEEP SOIL FROM DISTURBED AREAS OUT OF THE ROOT ZONES OF TREES TO BE SAVED.
4. FERTILIZE, WATER, AERATE AND OTHERWISE AID TREE HEALTH.
5. COORDINATE THE FINAL LOCATION OF THE CONSTRUCTION FENCING AND ROOT PRUNING WITH THE OWNER.

TREE PROTECTION DETAIL

2



TO BE USED ON ALL PROPOSED CATCH BASINS OR DRAINS

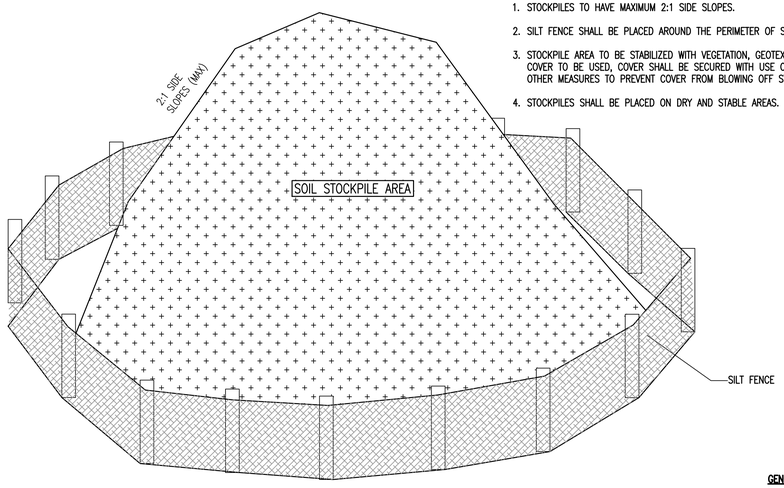
CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
5. GRAVEL BAGS, GRATE GUARDS, FILTREXX OR SEDIGUARD INLET PROTECTION DEVICES MAY BE USED. SUBMIT PRODUCT INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE VT EPSC STANDARDS AND SPECIFICATIONS.

EXCAVATED STORM DRAIN INLET PROTECTION DETAIL

NOT TO SCALE

3



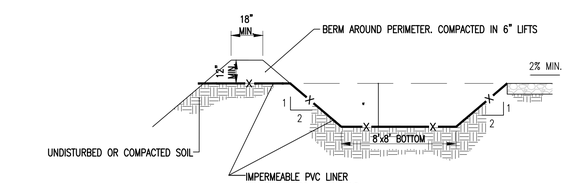
STOCKPILE NOTES

1. STOCKPILES TO HAVE MAXIMUM 2:1 SIDE SLOPES.
2. SILT FENCE SHALL BE PLACED AROUND THE PERIMETER OF STOCKPILE AREA.
3. STOCKPILE AREA TO BE STABILIZED WITH VEGETATION, GEOTEXTILE, OR COVER. IF COVER TO BE USED, COVER SHALL BE SECURED WITH USE OF SAND BAGS OR OTHER MEASURES TO PREVENT COVER FROM BLOWING OFF STOCKPILE.
4. STOCKPILES SHALL BE PLACED ON DRY AND STABLE AREAS.

TEMPORARY SOIL STOCKPILE AREA DETAIL

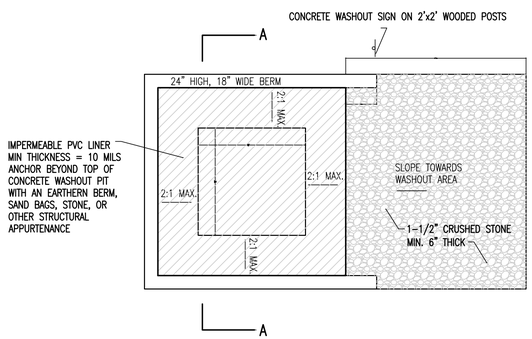
SCALE: NONE

4



CONCRETE WASHOUT AREA NOTES

1. ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED/REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHOULD BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP.
2. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF–SITE.
3. DISPOSE OF THE HARDENED MATERIAL OFF–SITE IN AN APPROPRIATE FACILITY. ON–SITE DISPOSAL MAY BE ALLOWED IF THIS HAS BEEN APPROVED AND ACCEPTED AS PART OF THE PROJECTS SWPPP. IN THAT CASE, THE MATERIAL SHALL BE RECYCLED AS SPECIFIED, OR BURIED AND COVERED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED EARTHFILL THAT IS PERMANENTLY STABILIZED TO PREVENT EROSION.
4. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
5. INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON–DESIGNATED AREAS.
6. IN LEIU OF CONCRETE WASHOUT AREA, A PRE–FABRICATED WASHOUT MAY BE USED. CONTRACTOR SHALL SUBMIT SHOP DRAWING OF SUCH PRE–FABRICATERD WASHOUT AREA TO DESIGN ENGINEER FOR REVIEW AND APPROVAL.



CONCRETE TRUCK WASHOUT AREA

SCALE: NONE

5

WINTER EROSION CONTROL NOTES

WINTER CONSTRUCTION PROCEDURES

1. DURING WINTER CONSTRUCTION, INSPECTIONS BY THE ON–SITE PLAN COORDINATOR SHALL OCCUR DAILY WHEN AREAS ARE UN–STABLE, AND WEEKLY PRIOR TO ANY FORECASTED RAIN, THAW OR SPRING MELT WHEN TEMPORARY STABILIZATION IS IN PLACE.
2. IN AREAS TO BE STABILIZED BY VEGETATION, ALL SEEDING MUST BE COMPLETED BY SEPTEMBER 15 TO ALLOW GROWTH TO OCCUR PRIOR TO THE GROUND FREEZING. STABILIZATION OF ALL OTHER DISTURBED AREAS SHALL BE COMPLETED BY OCTOBER 15.
3. ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING SHALL BE INSTALLED.
4. LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
5. SNOW WILL NOT BE PILED WITHIN 25 FEET OF PERIMETER CONTROLS (SUCH AS SILT FENCE) TO ALLOW FOR CLEARING AND MAINTENANCE. SNOW IS TO BE REMOVED FROM ALL STRUCTURAL EROSION PREVENTION AND SEDIMENTATION CONTROL MEASURES FOLLOWING EACH SIGNIFICANT SNOWFALL. NO SNOW STORAGE UP–GRADIENT OF DISTURBANCE. NO SNOW DISPOSAL IN SEDIMENT PONDS/BASINS. IF NECESSARY, SNOW/ICE MUST BE REMOVED PRIOR TO STABILIZATION OF DISTURBED AREAS. ACCESS POINTS SHALL BE ENLARGED AND STABILIZED TO ALLOW FOR SNOW STOCKPILING.
6. IN AREAS OF DISTURBANCE WITHIN 100 FT OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
7. DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
8. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TO BE IN PLACE BY OCTOBER 15, OR IF NOT POSSIBLE, THEN PRIOR TO GROUND FREEZE.
9. MULCH IS TO BE APPLIED AT THE END OF EACH WORKDAY TO ALL EXPOSED AREAS THAT HAVE NOT YET REACHED FINAL GRADE AT TWICE THE RATE INDICATED IN THE SEEDING AND MULCHING DETAIL FOR THE REGULAR CONSTRUCTION SEASON. MULCH SHALL BE TRACKED IN OR STABILIZED WITH NETTING.
10. TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
    A) IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
    B) DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS HOUSE FOUNDATIONS OR OPEN UTILITY TRENCHES.
11. SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1" THICKNESS PRIOR TO STABILIZATION.
12. STONE STABILIZATION, 10 TO 20 FT WIDE IN AREAS SUCH AS THE PERIMETER OF BUILDINGS UNDER CONSTRUCTION WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED SHALL BE INSTALLED.

GENERAL EROSION CONTROL NOTES

1. THE "ON–SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON–SITE FROM DAY–TO–DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS DISTURBED, THE DISTURBANCE SHALL BE KEPT TO THE SHORTEST PRACTICAL DURATION AS APPROVED BY THE OWNER'S REP.
3. DUST SHALL BE CONTROLLED WITH WATER DISTRIBUTED BY A TRUCK MOUNTED SPRAY BAR. CALCIUM CHLORIDE(AASHTO M 144) OR SODIUM CHLORIDE (AASHTO M 143) SHALL BE USED AS DIRECTED BY THE OWNER'S REP.
4. ALL EROSION AND STORMWATER CONTROL SYSTEMS SHALL BE INSPECTED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE OCCURRENCE OF A STORM EVENT OF 0.5" OR GREATER. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS THEY ACCUMULATE AND PLACED IN AREAS WHERE FURTHER EROSION IS UNLIKELY.
5. A REPORT, STAMPED BY A QUAUIFIED ENGINEER OR A CPESC SPECIALIST, SHALL BE WRITTEN WITHIN 24 HOURS OF EACH INSPECTION THAT:
    A) DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;
    B) IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND
    C) INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT; AND
6. RETAIN A COPY OF THE REPORT PREPARED PURSUANT TO (5), ABOVE, ON–SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL, STATE, AND LOCAL OFFICIALS
7. ALL PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
8. DETENTION BASINS AND SWALES SHALL BE INSTALLED PRIOR TO ROUGH GRADING THE SITE.
9. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
10. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    – BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
    – A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    – A MINIMUM OF 3" OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
    – EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
13. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
14. THE APPLICANT SHALL NOTIFY IN WRITING DES WETLANDS BUREAU AND THE LEBANON CONSERVATION COMMISSION OF THEIR INTENTION TO COMMENCE CONSTRUCTION NO LESS THAN FIVE (5) BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
15. APPROPRIATE SILTATION/EROSION/TURBIDITY CONTROLS SHALL BE IN PLACE PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND REMAIN IN PLACE UNTIL THE AREA IS STABILIZED. SILT FENCE(S) MUST BE REMOVED ONCE THE AREA IS STABILIZED.
16. DISCHARGE FROM DEWATERING OF WORK AREAS SHALL BE TO SEDIMENT BASINS THAT ARE:
    A) LOCATED IN UPLANDS;
    B) LINED WITH HAY BALES OR OTHER ACCEPTABLE SEDIMENT TRAPPING LINERS;
    C) SET BACK AS FAR AS POSSIBLE FROM WETLANDS AND SURFACE WATERS, IN ALL CASES WITH A MINIMUM OF 20 FEET OF UNDISTURBED VEGETATED BUFFER.
17. WITHIN THREE DAYS OF FINAL GRADING, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED BY SEEDING AND MULCHING DURING THE GROWING SEASON, OR IF NOT WITHIN THE GROWING SEASON, BY MULCHING WITH TACK OR NETTING AND PINNING ON SLOPES STEEPER THAN 3:1.
18. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED WITHIN THE GROWING SEASON, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY SEEDING AND MULCHING.
19. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED OUTSIDE THE GROWING SEASON, ALL EXPOSED AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY MULCHING AND TACK. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED BY MATTING AND PINNING.
20. PROPER HEADWALLS SHALL BE CONSTRUCTED WITHIN SEVEN DAYS OF CULVERT INSTALLATION.

EROSION CONTROL CONSTRUCTION SEQUENCE:

1. THE "ON–SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON SITE FROM DAY TO DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. HOLD PRE–CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION, WITH THE CONTRACTOR, OWNER, AND ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL EROSION CONTROL MEASURES DELINEATED ON THE PLANS AND ANY ADDITIONAL MEASURES THAT ARE NECESSARY TO MINIMIZE EROSION. THE CONTRACTOR SHALL HAVE EROSION CONTROL MATERIALS AND INSTALLATION EQUIPMENT ON SITE AT ALL TIMES.
3. IF POSSIBLE, ALL TEMPORARY EROSION CONTROL MEASURES REQUIRED FOR WORK PROPOSED DURING THE WINTER (BETWEEN OCTOBER 15 AND MAY 1), SHALL BE INSTALLED PRIOR TO OCTOBER 1.
4. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
5. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
6. INSTALL INLET PROTECTION ON EXISTING AND NEW CATCH BASINS.
7. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
8. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
9. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
10. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

TEMPORARY/CONSTRUCTION EROSION CONTROL MEASURES:

1. SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE PLANS. THESE SHALL REMAIN IN PLACE UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
2. INSTALL STONE CHECK DAMS IN GRASS–LINED SWALES 50 FEET ON CENTER TO PREVENT SILT FROM WASHING INTO THE DRAINAGE SYSTEM DURING CONSTRUCTION. SEDIMENT SHALL BE REMOVED FROM BEHIND THE DAMS WHEN IT BECOMES 6 INCHES DEEP. STONE CHECK DAMS SHALL BE REMOVED WHEN VEGETATION IS ESTABLISHED.
3. DROP INLET PROTECTION SHALL BE PROVIDED AROUND ALL EXISTING AND PROPOSED CATCH BASINS. PROTECTION SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. SEDIMENT SHALL BE REMOVED FROM DROP INLET PROTECTION WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN IT NO LONGER DRAINS PROPERLY.
4. EXCAVATED MATERIAL FROM EARTH EXCAVATION AND DITCH DIGGING SHALL BE DISPOSED OF OFFSITE OR USED FOR PROJECT FILL MATERIAL IF DETERMINED SUITABLE BY THE OWNER'S REPRESENTATIVE.
5. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC.) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.

PERMANENT EROSION CONTROL MEASURES:

1. GRASS LINED SWALES SHALL BE TOP SOILED, SODDED AND FERTILIZED AREAS WHICH EXHIBIT SIGNS OF EROSION SHALL BE RE–SODDED IMMEDIATELY AND MAINTAINED UNTIL SOD HAS PERMANENT HOLD AND IS HEALTHY.
2. WHEN CONSTRUCTION IS COMPLETED IN AN AREA, IT SHALL BE IMMEDIATELY TOP SOILED, SEEDED, FERTILIZED AND MULCHED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF ALL DISTURBED AREAS, INCLUDING WATERING, UNTIL THE AREA IS INSPECTED AND ACCEPTED BY THE OWNER OR ENGINEER.
4. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
5. RE–SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STRAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE CONTAINS A VERDUROUS STAND OF GRASS. AREAS THAT, IN THE OPINION OF THE ENGINEER, ARE PREDOMINATELY WEEDS SHALL BE PLOWED UP, FINE GRADED, FERTILIZED AND RE–SEEDED IN THE MANNER SPECIFIED PREVIOUSLY, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-6225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-630-9614
www.engineeringventures.com

TOWN OF HARTFORD
171 BRIDGE STREET
HARTFORD, VT
802-295-6382

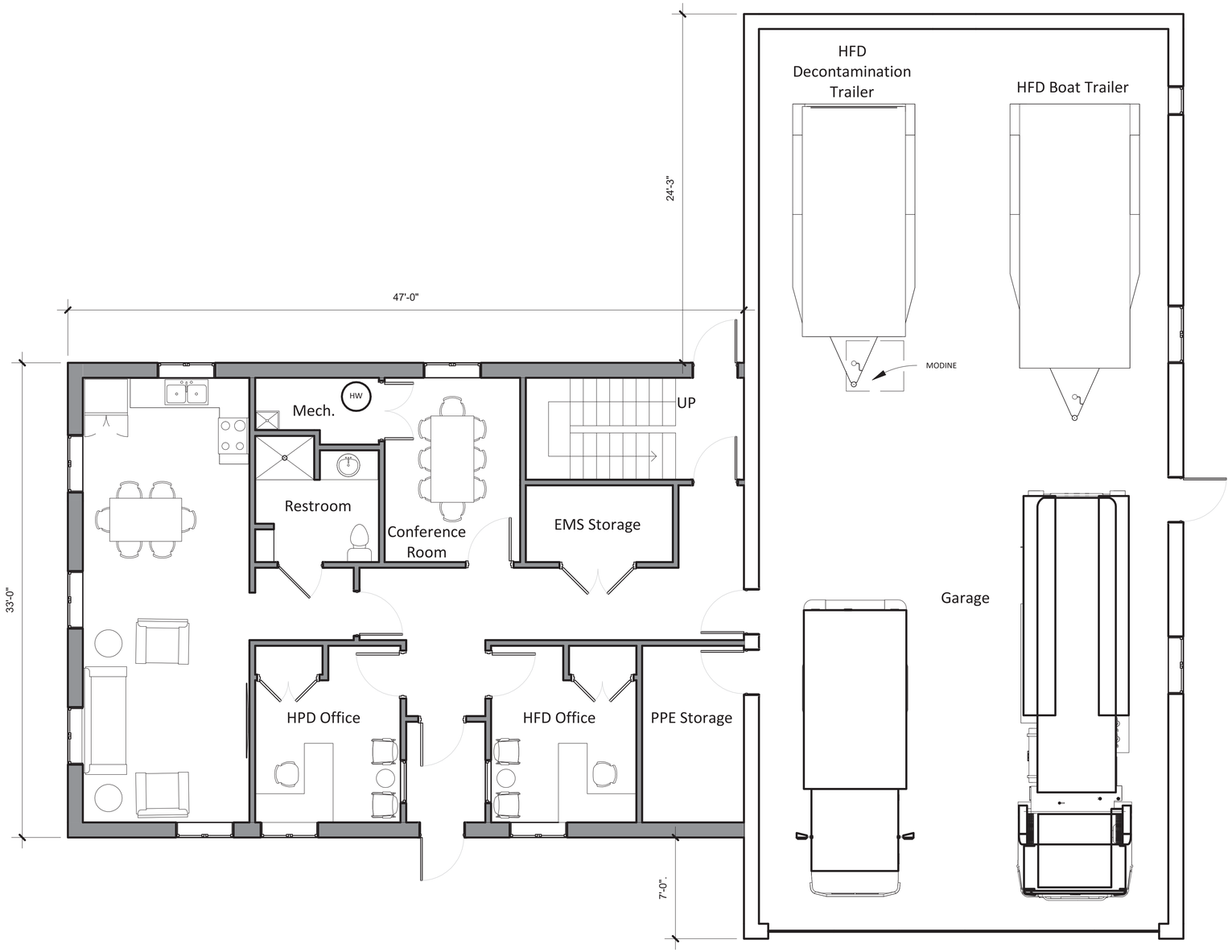
Sheet Title: Erosion Prevention and Sediment Control Plan

Project Title: 131 Willard Road Fire Station Improvements
Hartford, Windsor County, Vermont

EV Project #	24022
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	6/24/2024

C3.5

S:\PROJECTS\5-2024\24022 DUECHES FD\DWG\SHEET FILES\24022 WILLARD FIRE - C3.0 DETAILS.DWG



Existing Walls

New Walls

Building Insulation Requirments:

Slab - R-10 for entire slab and around perimeter
Walls above grade - R-13 + R-17 continuous
Walls below grade - R-15 continuous
Roof - R-25 + R-11 + R-11 linear system

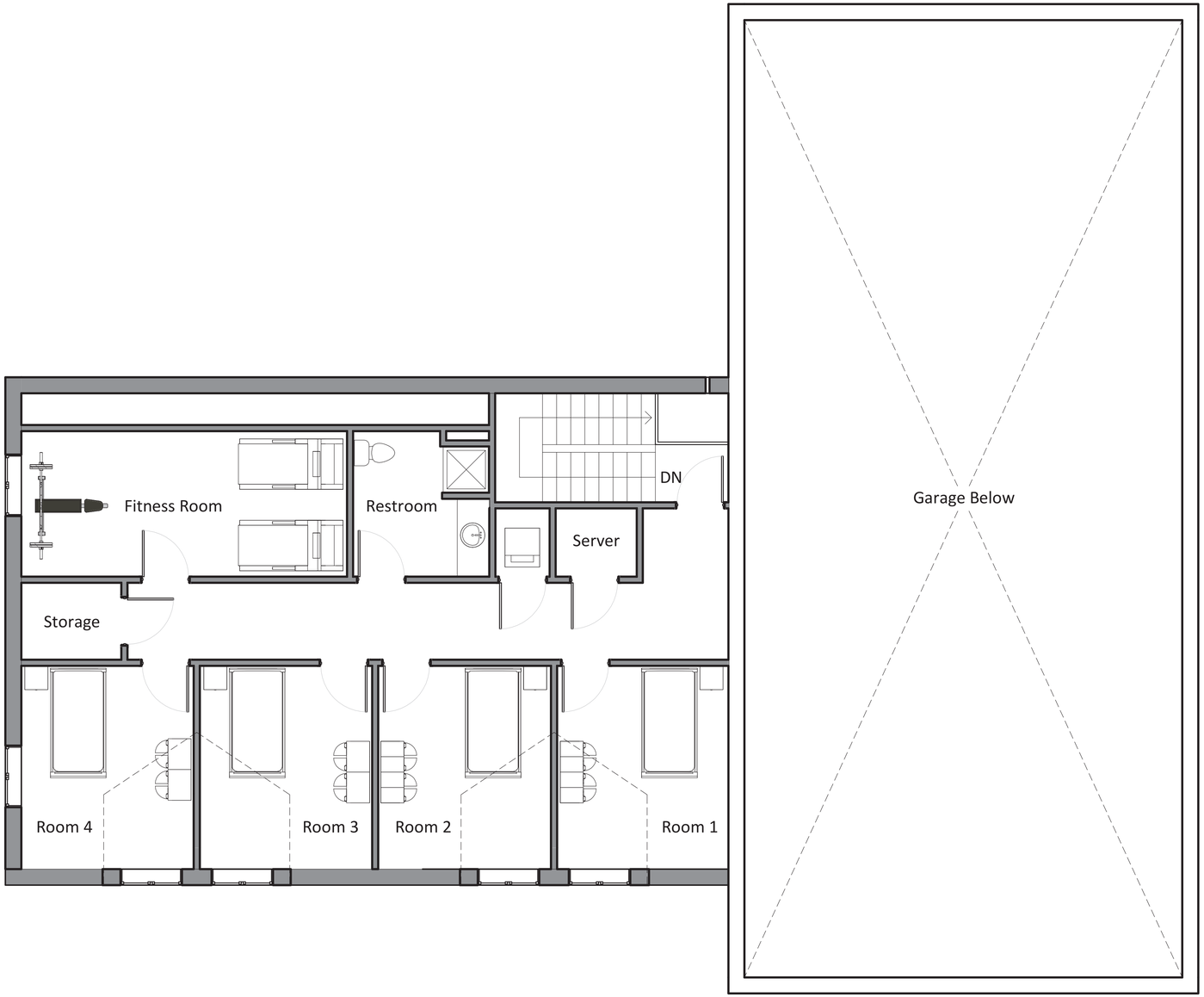
PROJECT
NORTH

STUDIO NEXUS
ARCHITECTS + PLANNERS
PO Box 275, White River Junction VT 05001
802 275 5110 | www.studionexusarch.com

Hartford Fire Department

Station 2

First Floor Plan
SD-1
June 24, 2024
1/4" = 1'-0"



Existing Walls

New Walls

Building Insulation Requirments:

Slab - R-10 for entire slab and around perimeter
Walls above grade - R-13 + R-17 continuous
Walls below grade - R-15 continuous
Roof - R-25 + R-11 + R-11 linear system

PROJECT NORTH

STUDIO NEXUS
ARCHITECTS + PLANNERS
PO Box 275, White River Junction VT 05001
802 275 5110 | www.studionexusarch.com

Hartford Fire Department

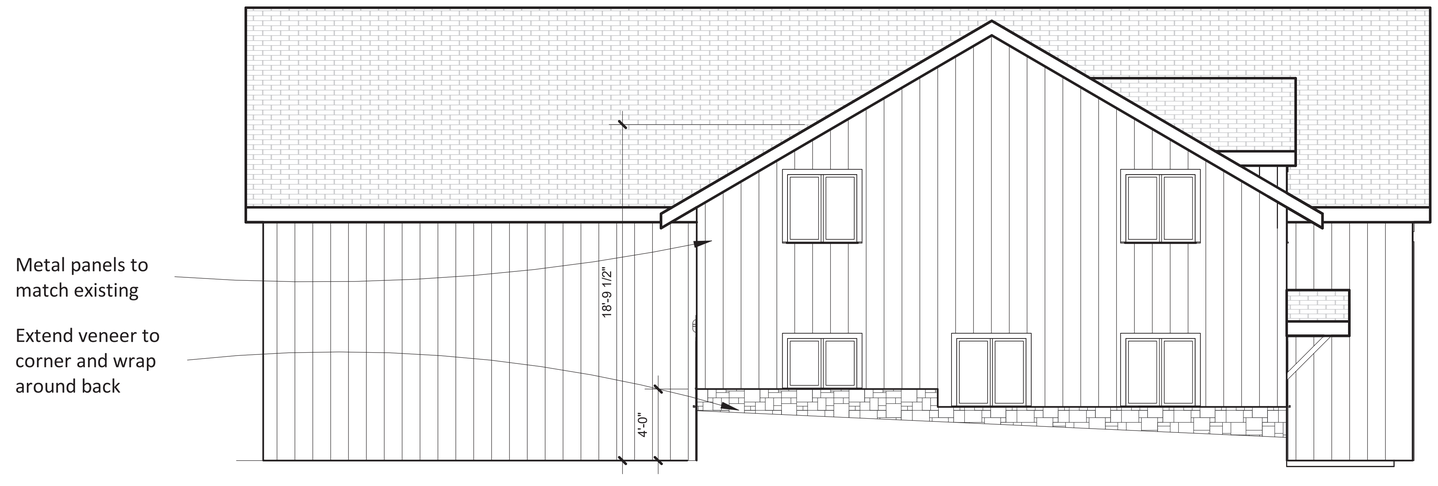
Station 2

Second Floor Plan

SD-2

June 24, 2024

1/4" = 1'-0"



2 East Elevation
1/8" = 1'-0"

1 North Elevation
1/8" = 1'-0"

STUDIO NEXUS
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Hartford Fire Department

Station 2

Elevations
SD-3
June 24, 2024
1/4" = 1'-0"

DRAFT
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND
DECISION

HARTFORD PLANNING COMMISSION

Application #24-11 by 12 Tremont Street, LLC and Tim Sidore
for Final Approval of a Planned Development
for a Multi-Unit Dwelling, lot 09-0072-000
1200 Christian Street, Hartford, in a R-3 zoning district

This decision pertains to application #24-11 by 12 Tremont Street, LLC (owner) and Tim Sidore (applicant) for Final Approval of a Planned Development under the Subdivision Regulations and section 260-47 of the Hartford Zoning Regulations for a Multi-Unit Dwelling, lot 09-0072-000, 1200 Christian Street, Hartford, in a R-3 zoning district.

FINDINGS OF FACT

Based upon the information contained in the exhibits for this application (see attached list) and the evidence adduced at the Planning Commission meeting of July 29, 2024, the Hartford Planning Commission makes the following Findings of Fact:

General Information

1. The owner of record of lot 09-0072-000 is 12 Tremont Street, LLC, who acquired the lot on 08-17-23. The deed is recorded in volume 614, page 623 of the Hartford Land Records.

2. The lot is developed with the former “Brookside Nursing Home” including a garage.

3. The lot is approximately 3.95 acres.

4. The lot is located at 1200 Christian Street

5. The lot abuts Christian Street on one side and Brookside Drive on two sides.

6. The lot is class one (1), municipal water and wastewater.

This Application

7. The applicant proposes to convert the former the nursing home to a multi-unit dwelling with 38 dwelling units comprised of 22 studio units and 16 one-bedroom units. The existing garage is proposed to be used for maintenance associated with the property.

8. Planned Developments require Preliminary and Final approval from the Planning Commission.

   The Planning Commission granted Preliminary approval at their May 20, 2024 Hearing on the condition that the application for Final Approval include a number of items (see exhibit #5).

9. Section 260-47 D of the Zoning Regulations states "The predominant use or impact of the land use shall not differ substantially from the uses permitted in the district in which the plan is located. In a Planned Development, dwelling units may be multifamily. In a Planned Development in a residential district, commercial educational and public facilities may be allowed which are designed to serve the development and the area around the development."

   Multi-unit dwellings are not allowed in the R-3 zoning district, therefore the applicant must obtain approval of a Planned Development.

   A multi-unit dwelling is a Conditional Use in the applicant's proposed Master Plan.

10. Section 260-47 and 260-47 A (1) and (2) of the Zoning Regulations, requires a Survey, Site (Layout) Plan, and Master Plan to be submitted for a Planned Development.

    - Survey (See exhibit #2)
    - Site Plan (See exhibit #2)
    - Master Plan (See exhibit #3)

    The applicant understands that these documents are the official documents for the Planned Development, and any changes to these documents require approval.

11. The objective of the R-3 zoning district as stated in the Zoning Regulations is "To encourage predominantly residential development at lower densities in established neighborhoods more distant from village centers. While not all parts of these districts are now served by public water and sewer, such services can be extended relatively efficiently as development continues."

12. According to the applicant, "The intent of the Planned Development is to afford the applicant the ability to request approval of a multi-unit dwelling. The proposed 38 unit

development will decrease the density from the existing 68 bed nursing home. This project will add critical housing units to the market to help alleviate the housing crisis as cited by the State of Vermont."

13. Section 260-47 B of the Zoning Regulations states that the purpose (conditions) of a Planned Development shall be to encourage a development which will result in:

(1) A choice in the types of environment and living units (where applicable) available to the public, and quality in land uses so that development will be a permanent and long-term asset to the Town.

According to the applicant, "We are providing small, but high quality studios for lease in a suburban environment suitable primarily for singles or couples, a familial demographic that is increasing rapidly in the Upper Valley (as cited in the Town of Hartford Town Plan Housing Draft Chapter). It will cater to those individuals seeking an environment nestled in a tranquil Vermont neighborhood that is conveniently located in proximity to neighboring Upper Valley communities and amenities."

(2) Open space and recreation areas if dwelling units are a part of the development.

Section 260-59 of the Zoning Regulations defines Open Space as:

> Those areas within a lot or parcel of land that are not paved, roofed, or occupied by structures and are equally accessible to all users of the property or development. Examples of outdoor areas that will not be considered open space are private yards, streets and drives, parking lots, tennis courts, swimming pools, and paved pedestrian malls. Meadowlands, woodlands and other natural areas, playgrounds, courtyards, golf courses, and recreation fields will be considered open space.

According to the applicant they will provide, "A gazebo, grill area, lawn space and small dog park providing opportunities for rest, relaxation, pet and social interaction."

(3) A pattern of development which preserves trees, outstanding natural topography and geologic features and prevents soil erosion.

According to the applicant, "The redevelopment will maintain and enhance the existing natural topography and features, including the stream, while site grading and maintenance will aid in preventing soil erosion."

(4) An efficient use of land resulting in small networks of utilities and streets.

According to the applicant, "Electrical lines on the site will not be increased. Stormwater is collected and detained on-site. Water and sewer connect directly to the street. Access roads

have been pared to the minimum necessary to serve parking, delivery, trash, fire and life-safety needs. This includes installing an emergency access gate at the Brookside Drive entrance."

(5) An environment in harmony with surrounding development.

According to the applicant, "This project in no way alters the footprint of the existing structures and is well-suited to the characteristics of the neighborhood, which already includes several multifamily developments on the east side of Christian Street."

(6) A more desirable environment than would be possible through the strict application of other sections of these regulations.

According to the applicant, "The smaller units will add housing units to the suburban core, bringing more residents to the Wilder community, who in turn become consumers to downtown retail and restaurants--adding life and activity, especially in the evenings. By choosing to utilize a previously developed lot that has been rendered functionally obsolete instead of a large tract of undeveloped land outside the core, the project helps reduce sprawl and environmental degradation and build a sustainable and livable community."

14. Section 260-47 C of the Zoning Regulations states:

> Density may vary within the development. The Planning Commission may permit an additional number of dwelling units in an area designated for residential use so long as the total number of such dwelling units shall not exceed one hundred twenty-five (125) percent of the permitted number of units based on a calculation in conformance with strict application of the zone district standards for area per family contained in the table of Article II for the district in which the land is situated. This density bonus shall never be automatic, but shall be based on a review by the Planning Commission that concludes that the developer's plan includes design, innovative features, or facilities that satisfy the purposes listed in subsection B above.

22 dwelling units are possible based on the density calculation in the R-3 zoning district (172,062/8,000= 21.5[1])

28 dwelling units are possible with a density bonus under 260-47 C. (22 X 1.25 = 27.5)

[1] **Hartford Zoning Regulations, § 260-18, Dwelling unit density.** In every case, the Administrative Officer shall determine the maximum number of dwelling units permitted on any lot by dividing the lot size, provided by a survey (furnished by the owner and sealed by a Vermont registered land surveyor), by the minimum area per dwelling unit. standards for the district in which the lot is located. In all cases such determination shall be rounded to the nearest whole number.

According to the applicant, a "density bonus as described in §260.47(B-C) is appropriate given this project's merits. Specifically, single-occupant units are called for by 76% of the respondents in Hartford's 2020 survey. The Brookside redevelopment utilizes the existing facility while preserving the natural beauty of its surroundings, both on the property and in the neighborhood. The efficient use of resources, both natural and constructed, promotes the harmonious use of property while preserving the existing topography, tree cover and geology." (See exhibit #5)

15. In 2023, the Vermont Legislature enacted Act 47 "An act relating to housing opportunities made for everyone."

24 V.SA. 4412 (13) states:

In any area served by municipal sewer and water infrastructure that allows residential development, bylaws shall permit any Affordable Housing Development, as defined in subdivision 4303(2) of this title, including mixed-use development, to exceed density limitations for residential developments by an additional 40 percent, which shall include exceeding maximum height limitations by one floor, provided that the structure complies with the Vermont Fire and Building Safety Code.

24 V.S.A. § 4303 (2) defines Affordable Housing Development as a housing development of which at least 20 percent of the units or a minimum of five units, whichever is greater, are affordable housing units. Affordable units shall be subject to covenants or restrictions that preserve their affordability for a minimum of 15 years or longer as provided in municipal bylaws.

24 V.S.A. 4303 (B) defines Affordable Housing Units as:

Rental housing for which the total annual cost of renting, including rent, utilities, and condominium association fees, does not exceed 30 percent of the gross annual income of a household at 80 percent of the highest of the following:
(i) the county median income, as defined by the U.S. Department of Housing and Urban Development;
(ii) the standard metropolitan statistical area median income if the municipality is located in such an area, as defined by the U.S. Department of Housing and Urban Development; or
(iii) the statewide median income, as defined by the U.S. Department of Housing and Urban Development.

The applicant seeks to develop Affordable Housing Development, meeting the requirements outlined above. Therefore, 39 units are possible (28 x 0.40=11.2)
(28+11=39)

According to the applicant, they "pledge to designate 40% of the units as

'affordable/workforce housing,' based on 24 V.S.A. 4412 (13) , 24 V.S.A. § 4303 (2), and 24 V.S.A. 4303 (B)." Given this, 15 of the units will be "Affordable" as defined above. (38 x 0.40=15.2)

16. Section 260-47 F (2) of the Zoning Regulations states:

> At least 50% of the (*planned*) development shall be in open space for public and/or common usage. The regulations for control and maintenance of this open space shall be approved by the Planning Commission. This may be waived by the Planning Commission for commercial and industrial planned developments, providing adequate screening and landscaping are provided.

As outlined in the Master Plan, "Greater than 50% of the development will remain in open space, as defined by Hartford Zoning Regulations for public and or common usage."

17. There is a stream, pond, and class 2 wetlands on the property. (See exhibit #2)

18. Project Access

Christian Street

The applicant proposes to continue use of the curb cuts on Christian Street for access.

The applicant proposes to restrict use of the southern curb cut on Christian Street to an entrance only and restrict use of the northern curb cut on Christian Street to an exit only.

Brookside Drive

The applicant proposes to restrict use of the existing curb cut on the west side of the lot from Brookside Drive to maintenance and emergency vehicles. A gate will be installed to prevent access from this curb cut to the remainer of the lot.

The applicant will coordinate access to the gate with the Hartford Fire Department.

The applicant understands that the curb cuts/driveway entrances need to be improved to meet the Hartford Transportation Ordinance.

(See exhibit #2)

19. According to the applicant, "Site amenities at the redeveloped facility include the natural beauty of the site with its brook, a pond, generous lawn and thick woods, as well as a small courtyard with a gazebo and outdoor cooking facilities. Existing trees and shrubs

will be selectively pruned; a wide variety of new trees and shrubs and 3,400 SF of wildflowers will be planted. We would like to add a small, fenced-in area at the south end of the property, near to the culvert, creating a dog friendly park.

The building itself will feature generous 8' wide, skylit hallways; near the main south entry a small community lounge space looks out onto the courtyard. The apartments, though small, will be well appointed with quality materials and fixtures. The walls, with their concrete block structure, minimize sound transmission and will keep the apartments quiet. Laundry facilities will be provided in some apartments and in publicly accessed laundry rooms. The high-ceiling basement will provide additional tenant storage and depending on demand, could be repurposed to provide exercise and game room space."

20. The applicant has not submitted a professional traffic study.

According to the applicant, "Under our proposal, we are reducing density from the previous 68 bed nursing home. Fewer people living onsite, and without all of the employees, caregivers and vendors, the parking and use of municipal resources will be significantly less. We usually have .8 cars/studio unit parked each night at our other all studio buildings, including our 69-unit apartment building at 132 S. Main Street in WRJ and our 43-unit building at 75 Bank Street—the former Lebanon Junior High. Based on this past experience, we estimate approximately 35 trips per day for our proposed redevelopment. This compares to 87 trips per day, including delivery trucks, for the existing 68 bed nursing home."

21. The approval of the Planned Development does not authorize any construction.

The applicant understands that in addition to Final Approval for the Planned Development, they need Site Development Plan Approval from the Planning Commission and Conditional Use Approval from the Zoning Board of Adjustment.

22. The project will be connected to municipal water and sewer.

23. The applicant understands that they retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.

24. The applicant understands that a Mylar and the Master Plan must be properly endorsed and recorded within 180 days of Final approval, or the decision will be void. The applicant will submit a zoning permit (finalizing the decision) at the time the Mylar and Master Plan are submitted. Issuance of the zoning permit is to finalize the approval of the Planned Development and will not authorize any construction.

CONCLUSIONS OF LAW

Based upon the foregoing Findings of Fact, the Hartford Planning Commission concludes that the proposed Planned Development meets the requirements of the Town of Hartford Subdivision Regulations including:

Section 200-2 Hartford Subdivision Regulations:

A. To guide future development in accordance with the Hartford Master Plan (the Plan), Zoning Regulations, Flood Hazard Area Regulations, Capital Budget and Program, and all other Town adopted bylaws, ordinances, regulations, plans, policies, and procedures.

B. To promote a desirable relationship to the landform, its topography and geology, natural drainage and surface water runoff, surface water, and groundwater.

C. To conserve natural resources and fragile features such as prime agricultural soils, wetlands, streams, ponds, steep slopes, ridgelines, important wildlife habitat and connectivity, and scenic views.

D. To minimize the fragmentation of productive resource lands, including farm and forest land, and to promote their continued use and availability for agriculture, forestry, and wildlife.

E. To maintain Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.

F. To encourage variety, innovation, flexibility, and greater efficiency in residential development including clustering of lots, in accordance with the provisions of 24 V.S.A. §4417 (Planned Unit Development).

G. To establish standards of subdivision design including, but not limited to provisions for pedestrian and vehicular traffic, surface water runoff, surface water, and suitable building sites for the land use contemplated.

H. To ensure development does not exceed the ability of the Town to provide public services and facilities, and that these facilities and services are available and will have sufficient capacity to serve any proposed subdivision. Such facilities and services include, but are not limited to: parks, recreation areas, schools, police and fire protection, libraries, water and wastewater facilities, roads, and public parking.

I. To provide adequate utilities such as water, wastewater, electricity, telephone, and broadband.

J. To provide the most efficient relationship between land use and the circulation of traffic throughout the Town, encourage access management, and avoid undue traffic congestion and overburdening of roads, highways, and intersections.

K. To promote the conservation of energy and use of renewable energy resources.

L. To encourage variety in the type, size, and cost of housing to meet the needs of Hartford's diverse population.

AND Complies with **section 260-47** of the Hartford Zoning Regulations.

DECISION

The Hartford Planning Commission, based upon the forgoing Findings of Fact and Conclusions of Law, hereby approves application #24-11 by 12 Tremont Street, LLC (owner) and Tim Sidore (applicant) for Final Approval of a Planned Development under the Subdivision Regulations and section 260-47 of the Hartford Zoning Regulations for a Multi-Unit Dwelling, lot 09-0072-000, 1200 Christian Street, Hartford, in a R-3 zoning district **on the condition that before a Zoning Permit is issued:**

- **The applicant submits covenants/restrictions outlining compliance with 24 V.S.A. § 4303 (2) for review and approval by the Chair. The information must include a process for the applicant to demonstrate compliance on an annual basis, and include any guidance on compliance provided by the State. Once approved, the applicant must record the document in Hartford's Land Records and provide a copy to the Zoning Administrator.**
- **The applicant submits a letter from their surveyor verifying that the monuments have been according to the locations identified on the approved survey plat.**
- **The plans are amended to include a defined access route from the parallel parking spaces adjacent to Brookside Drive to the building's entrance for review and approval by the Chair.**
- **The landscape plan is amended to correctly identify the location of the "mulch bed area" located on the western side of the building along Brookside Drive.**
- **The applicant submits a copy of their water and wastewater Allocation from the DPW.**
- **The plans are amended to include the charging station for the shared electric vehicle.**
- **The applicant provides information from Advance Transit regarding their ability to add a bus stop near the project.**

- **A final set of plans is submitted to the Zoning Administrator accompanied by verification from the applicant's Engineer, Landscape Architect, and Architect confirming that changes to the plans approved were limited to those required by the Planning Commission.**

- **The applicant makes arrangements with the Zoning Administrator to record the Master Plan in the Land Records.**

This decision is also subject to the condition that no modification or expansion shall be made to the project as described and limited in the above Findings of Fact and Conclusions of Law without the written approval of the Hartford Zoning Board of Adjustment and/or the Hartford Planning Commission. This decision may be revoked, and a new application or permit required if conditions and findings are violated or modified without written approval.

The applicant is responsible for insuring compliance with all applicable State and Federal regulations pertaining to this application.

Those in favor:

Those in opposition:

Those not participating:

Dated at Hartford, Vermont this ____ day of July 2024.

HARTFORD PLANNING COMMISSION

By:_____
Chairperson/Vice-Chairperson

Appeal Rights: An interested person who has participated in the proceeding related to this decision has the right to appeal this decision to the Vermont Environmental Court, pursuant to 24 V.S.A. s. 4471 and V.R.E.C.P.5, in writing, within 30 days of the date of this decision. If you fail to appeal this decision, your right to challenge this decision at some future time may be lost because you waited too long. You will be bound by this decision, pursuant to 24 V.S.A. s. 4472 (d) (exclusivity of remedy; finality).

EXHIBIT LIST

1. Application #24-11

2. Plan Set including:

    - Survey prepared by DiBernardo Associated, LLC

- Civil Plans prepared by Engineering Ventures including:

    - C1.0 Demolition Plan
    - C1.1 Erosion Prevention and Sediment Control plan
    - C1.2 Garbage Truck Turning Plan
    - C1.3 Fire Truck Turning Plan
    - C1.4 Fire Truck Turning Plan (2)
    - C2.0 Site Plan Overall
    - C2.1 Site grading and Drainage Plan
    - C3.0 Site Details
    - C3.1 Drainage Details
    - C3.2 Erosion Prevention and Sediment Control Details (1)
    - C3.3 Erosion Prevention and Sediment Control Details (2)
    - PH1 Site Photometrics Plan

- Landscape Plans prepared by Park Architecture including:

    - L1.0 Existing Conditions & Site Preparation Plan
    - L1.1 Existing Conditions
    - L2.0 Site Landscape Plan
    - L2.0 Site Landscape Plan (color version)
    - L3.0 Landscape Details
    - L3.1 Landscape Details
    - L3.2 Landscape Details

- Architectural Plans prepared by Studio Nexus including:

    - SD1 Existing Floor Plan
    - SD2 Proposed Floor Plans
    - SD3 Renderings

3. Document entitled “Brookside Apartments, Planned Development Master Plan”

4. Document entitled “Brookside Apartments, 1200 Christian Street, Narrative” dated June 24, 20-24, updated July 7, 2024

5. Memo from Jo-Ann Ells dated July 2, 2024 with the applicant’s response in red

6. Letter from Jesse Klymn, Anika Gilbert, Frank Klymn, Jessica and Jay McDonough, Carey O’Neil, John O’Neil, Emily and Dillon Owens, Benjamin Davis, Susan Goodwin, Deborah Rodgers, Jeff Arnold, Hilde Ojibway, Michael and Dorothea Barton, Jenny Horn, Jeni and Jeff Frechette, Mark and Kathy Detzer, Marie Wesson, Ann Kerigan, Susan Loskutoff, and John and Kathy Wetzel dated July 8, 2024

7. Letter from Michael and LeeAnne Heeremans dated July 8, 2024

Town of Hartford

Planning Commission App # _____
Zoning Board of Adjustment App # _____

APPLICATION TO
PLANNING COMMISSION &/OR ZONING BOARD OF ADJUSTMENT

PLEASE COMPLETE ALL ITEMS APPLICABLE AND PROVIDE THE CORRECT NUMBER OF COPIES OF THIS APPLICATION AND THE SITE PLAN OR SUBDIVISION PLAT. ABUTTING LANDOWNERS WILL BE NOTIFIED BY THE PLANNING/ZONING OFFICE.

1. **NAME & ADDRESS OF RECORD OWNER(S)** 12 Tremont Street, LLC
   77 Bank Street, Lebanon, NH 03766
   Deed Recorded Book 9 Page 72 (Available at Town Clerk's Office)
   Telephone: Work (603) 322-3260 Cell same Email Address: tim@ledgeworks.com
2. **NAME & ADDRESS OF APPLICANTS(S)** Tim Sidore
   77 Bank Street, Lebanon, NH 03766
   Telephone: Work _____ Cell _____ Email Address: mike@ledgeworks.com
3. **NAME & ADDRESS OF APPLICANTS' CONSULTANT** Jim Wasser, Studio Nexus Architects & Planners
   PO Box 275, WRJ, VT 05001
   Telephone: Work (802) 275-5110 Cell _____ Email Address: jimw@studionexusarch.com
4. **PROJECT LOCATION** 1200 Christian Street
5. **PRESENT USE OF PROPERTY** nursing home
6. **BRIEFLY DESCRIBE PROJECT** (in addition, a detailed narrative must be submitted)
   Convert nursing home to planned unit development with 38 residential apartments. The existing building footprint will remain as is, but with interior and exterior improvements.
7. **PROJECT SIZE IN SQ. FT OR ACREAGE** 3.95 acres
   Lot Width _____ Lot Depth _____
8. **IS PROJECT ON TOWN WATER/SEWER?** Yes X No _____ If Yes, estimated
   Water Consumption/day _____ Amount of Sewer Flow Projected _____
   Size of Closest Lines Above (water) _____ (sewer) _____
9. **DESCRIBE LANDSCAPING PLAN** See attached. New landscaping will be added throughout and much of the existing landscape will be preserved.
10. **IF A BUSINESS** - Present # of Employees _____
    Proposed Days & Hours of Operation _____
    Will you use the landfill & recycling center? Yes _____ No _____
    The main waste by-product of your business is: _____

11. **IF A RESTAURANT** - Present seating _____ Proposed _____

12. **PARKING SPACES** - Number to be provided 46

13. **SIGNAGE** - Free Standing _____ Attached _____

14. **FENCING** – Location _____ Height _____

15. **NEAREST WATER SUPPLY FOR FIRE PROTECTION** on site (sprinkler service)

16. **ESTIMATED VALUE OF PROPOSED WORK** $1,800,000

17. **IS THERE AN EXISTING DRIVEWAY?** yes

18. **IF A SUBDIVISION** - Number of New Lots to be Created _____

    Do you request that the Town consider taking over maintenance of – Roads no

    Or Park/Open Space _____

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. (This certification must be signed by lot owners and applicants).

Timothy P Sydore 21 June 2024

Applicant's Signature Date

Timothy P Sydore 21 June 2024

Lot Owner's Signature Date

_____

Co-Applicant's Signature Date

_____

Co-Owner's Signature Date

The applicant retains the obligation to identify, apply for, and obtain any relevant local or state permits before any construction may commence. Please call 802-282-6488 to speak with the State Permit Specialist.

For Office Use Only		
Map/Lot #		
Fee Paid $:		Receipt #:
PC: Site Plan	Min. Sub.	Maj. Sub.
PD	PD Amend.	Other
ZBA: Conditional Use	Variance	Appeal
Other		
Zoning District (s)		Date Filed:
Official Submittal Date:		

EXECUSUITE LLC

Bringing new life to our historic downtowns

Brookside Apartments, 1200 Christian Street, Narrative

June 24, 2024; Updated: July 7, 2024

Formerly known as the Brookside Nursing Home, the existing facility is located on the busy Christian Street corridor with access to major routes including route 5, route 4, I-89 and I-91. The 19,500 sq. ft. facility sits on 3.95+/- acres and includes the original 2-story facility built in 1925, the primary one-story building constructed in the early 70's and a remote maintenance garage constructed in 1980. Inside features include the original nursing home rooms (some with baths), a large activity center room, a separate wing of office spaces and a commercial style kitchen in the basement. Outside there are paved parking spaces on both sides of the building, a delivery entrance and a 1500+/- sq. ft. garage/outbuilding.

Our preference is to convert the existing facility to a multi-unit dwelling. The site is zoned R-3, which requires a minimum of 8,000 SF per unit. With a PUD and a density bonus of 25%, Brookside's 3.95 acre lot would allow 3.95 acres x 43,560 SF/acre/8,000 SF/unit = 22 units x 1.25 = 28 units. With a 40% affordable housing bonus, the total allowable is 39 units. The density bonus as described in 260.47 (B-C) is appropriate given this project's merits and the housing needs for the Hartford community. Specifically, 76% of all households in Hartford consist of 1-2 persons as detailed in a 2020 survey conducted by *American Community Survey* (Tables S2504 and S2501) and referenced in Hartford's 2023 *draft* housing chapter of the Town Plan. That same study notes that only 18.7% of Hartford's current housing stock is 0-1 bedroom. The Brookside redevelopment utilizes the existing facility while preserving the natural beauty of its surroundings, both on the property and in the neighborhood. The efficient use of resources, both natural and constructed, promotes the harmonious use of property while preserving the existing topography, tree cover and geology.

Working entirely within the existing building footprint, we envision a redevelopment that creates 38 smaller studio and one-bedroom apartments. We anticipate our residents will be 50% area professionals and graduate students and 50% service industry, support/administrative and trades workers. 40% of units will be offered at below market, affordable rents, in line with Twin Pines Housing rent levels. Easy cycling opportunities and a shared electric vehicle powered by on site solar generation will reduce parking/trips/carbon footprint.

Site amenities at the redeveloped facility include the natural beauty of the site with its brook, a pond, generous lawn and thick woods, as well as a small courtyard with a gazebo and outdoor cooking facilities. Existing trees and shrubs will be selectively pruned; a wide variety of new trees and shrubs and 3,400 SF of wildflowers will be planted. We would like to add a small, fenced-in area at the south end of the property, near to the culvert, creating a dog friendly park.

We are providing 3 accessible parking spaces (2 by the accessible entrance on the north side and 1 for the units at the basement level) directly adjacent to the entries they serve. A nearly continuous walk is provided around the north, west and east sides of the building, continuing into the courtyard/gazebo/ BBQ/deck area. In addition, a 5'; wide accessible pathway leads to the southernmost parking. A stonedust path leads to and around the dog park, the open and wooded areas to its south and the southeasternmost tip of the parking lot. As shown on the photometric plan, all seven building entries are well lit, including the primary entry on the south, and the courtyard on the east. Adequate but neighborhood sensitive lighting has been provided for the parking and drive aisles. There is parking for 6 bikes located adjacent to the north entry.

Under our proposal, we are reducing density from the previous 68 bed nursing home. Fewer people living onsite, and without all of the employees, caregivers and vendors, the parking and use of municipal resources will be significantly less. We are providing 46 parking spaces, a reduction of approximately 7 spaces from what was there previously. 40 of those spots will be EV Capable Spaces. We added 4 parking spots along Brookside Drive from what was approved for the PUD. They are necessary to provide some additional accommodation for folks with limited mobility (the southern entry is not accessible) and because the bulk of the housing units (21) are located in the northern portion of the building.

We usually have .8 cars/studio unit parked each night at our other all studio buildings, including our 69-unit apartment building at 132 S. Main Street in WRJ and our 43-unit building at 75 Bank Street—the former Lebanon Junior High. However, assuming a full occupancy at all times with 38 persons and no staff, the 8th Edition of the ITE Trip Generation Report calculates the project would generate **126 daily trips**. According to that same ITE report, the prior 68-bed nursing home—with 12 staff on site at any one time--would generate **209 daily trips**. The total of 12 staff is based on Federal rules issued 4/2024 that requires 3.48 hours of nursing/aide care per patient. This translates to 10 health staff *on average* on site at any one time for full occupancy; assuming an additional 2 maintenance staff, the total comes to 12 coming and going on 3 shifts per day, 7 days per week. (Note, according to the 2001 Federal Report on Staffing Standards, https://nursinghome411.org/federal-staffing-standard/, staffing for nurses and aides should total 4.1 hours per resident per day *to meet the bare minimum* for resident safety.)

The building itself will feature generous 8' wide, skylit hallways; near the main south entry a small community lounge space looks out onto the courtyard. The apartments, though small, will be well appointed with quality materials and fixtures. The walls, with their concrete block structure, minimize sound transmission and will keep the apartments quiet. Laundry facilities will be provided in some apartments and in publicly accessed laundry rooms. The high-ceiling basement will provide additional tenant storage and depending on demand, could be repurposed to provide exercise and game room space.

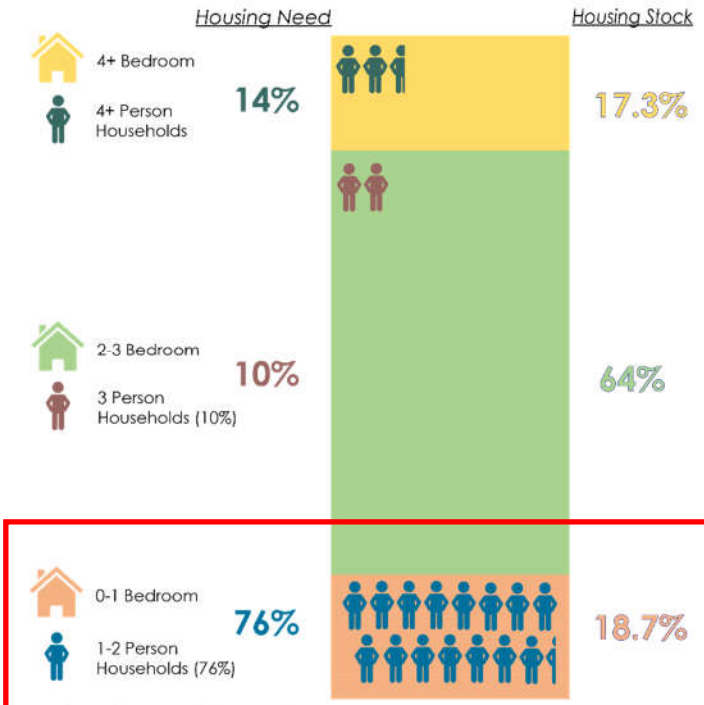
This project can be completed quickly, providing critically needed housing units to the area inventory; in turn existing multi-bedroom housing stock will open up for families and those seeking larger housing options.

This data shows that housing supply is not increasing in any significant way, especially when compared to the 1970s and 1980s. This along with low vacancy rates across Vermont at just over 3%, and increasing costs for homes and rental units, means that would-be homeowners and renters are struggling to find adequate housing. This creates an economic burden on residents struggling to live in Hartford.

Demographics and Housing

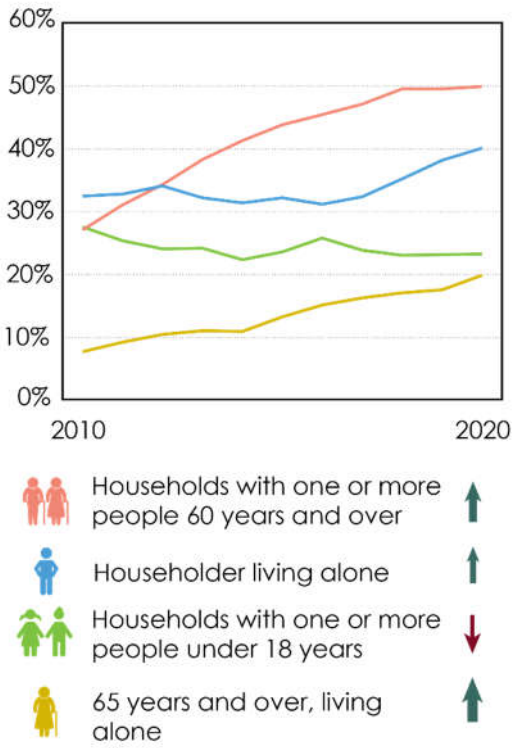
The physical housing itself is not the only important factor when determining housing need. Understanding the population, the age of residents, size of households, and current trends can indicate what types of homes are needed and whether the current housing stock meets the needs of residents. The chart on the right shows the percent of housing units by size (bar graph), while the people indicate the percent of households that would likely fit into each home size category. While there is likely some overlap between the 1-2 person households and the 2–3-bedroom homes, there is clear indication that most households are quite small, and that the housing units available are larger than what is needed or desired, especially for small families looking to buy a home for the first time, or for older adults who may be looking to downsize. Many more adequate starter homes, along with smaller units near public transit and public services, would help ensure the needs of these groups are met.

Does our housing stock match our household need?
Hartford, VT



American Community Survey, 2020
Tables S2504, S2501

How are our households changing?
Hartford, VT



* *American Community Survey*
Table S1101

Changes in households over time can also provide some insight into what our families will look like in the future. The graph on the left shows the percentage of specific household types in Town. It is estimated that nearly 50% of households have one or more people over the age of 60. This is up from just under 30% in 2010. Other crucial indicators, householders living alone regardless of age and those over 65 who are living alone, have both increased by about 10% since 2010. Finally, households with children have declined marginally during that same period. This

EXECUSUITE LLC

Bringing new life to our historic downtowns

Brookside Apartments

Planned Development Master Plan

Landowners and Applicants: 12 Tremont Street, LLC/Execusuite, LLC

1200 Christian Street
Wilder, VT 05001
Lot: 9-0072-000

1. Objective

- Conversion of a nursing home into a primarily one-story multifamily structure totaling approximately 19,500 gross square feet (GSF) of housing space,not including basement storage.
- Thirty-Eight (38) dwelling units, including 22 studios and 16 one-bedrooms.

2. Permitted and Conditional Uses

Permitted Uses:

- Dwelling unit, single

Conditional Uses:

- Bed & Breakfast
- Cemetery
- Day-Care Facility
- Dwelling, Multi-Unit
- Dwelling, Two-Unit
- Farmstand
- Home Business
- Kennel
- Nursing Care Facility
- Place of Worship
- Public Assembly Facility, <2,500 square feet
- Public Facility
- Recreational Facility
- School

3. Area and Dimensional Standards (in feet)

Minimum Area (SF)		Minimum Dimensions (Ft)			Minimum Setbacks * (From Property Lines)	
Class	Per Dwelling Unit	Per Lot	Width	Depth	Front	Side
1	8,000	12,000	80	100	25	15

*The lot is a corner lot. Front setbacks apply to sides adjoining a street and the side setback applies to the remaining side.

4. Height Limitations:

Building and structures shall not exceed 40 feet in height as measured in the Town of Hartford Zoning Regulations.

5. Parking Requirements:

As approved by the Planning Commission.

6. Waivers:

There are no waivers requested.

7. Landscaping:

As required by the Planning Commission.

8. Lighting:

As required by the Planning Commission.

9. Coverage:

Greater than 50% of the development will remain as open space, as defined by Hartford Zoning Regulations for public and or common use.

10. Project Modifications:

With the filing of the appropriate application, amendments to the approved site plan may be made by the Zoning Administrator, provided the Chair of the Planning Commission and the Zoning Administrator agree that the changes are minor, conform with the Zoning Regulations and this Master Plan.

11. Phasing:

The project will not be phased.

12. Applicability:

Except as modified herein, the Town of Hartford Zoning Regulations shall apply.

Hartford Planning Commission Chair/Vice Chair — Date

Memorandum

To: Tim Sidore

Cc: Jim Wasser, Adam Morse, Paul Simon, Tom Peltier, Dana Clawson, and Chris Holzwarth

From: Jo-Ann Ells

Date: July 2, 2024; Response July 8, 2024

Re: 1200 Christian Street- Multi-Unit Dwelling

Please submit a response to the following comments/questions on your application for a multi-unit dwelling before **9:00 a.m., Tuesday, July 9, 2024.** If you are unable to meet this deadline, please contact me as soon as possible to discuss the deadline to have your application considered at the next round of Public Hearings.

Prior to the Zoning Board and Planning Commission Hearings, you will receive an agenda, draft Findings of Fact, and additional staff comments if there are any. Please feel free to contact me at any time during this process.

1. Please confirm that you understand that you retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.
   Understood.

   To determine what State Environmental Permits may be required for your project, The Vermont Agency of Natural Resources (ANR) recommends that you use ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website Welcome to DEC | Department of Environmental Conservation (vermont.gov) and going to the "Permit Navigator Tool" Permit Navigator (force.com)

   If further assistance is needed, please contact the Community Assistance Specialist for our area:

   Jeff McMahon, Community Assistance Specialist

   Jeff.McMahon@Vermont.gov

802-477-2241

2. Please confirm you have contacted the Fire Marshal, Tom Peltier, to discuss obtaining a Public Building permit. tpeltier@hartford-vt.org (802-299-7013). Confirmed.

3. Any approval will include a condition that your engineer certify that no changes, other than those required by the Planning Commission/Zoning Board, were made to the final plans that are submitted for the Zoning Permit. Please confirm your understanding. Understood.

4. Any approval will include a condition that, in addition to the required hard copies, the final approved plans are emailed to the Zoning Administrator. Please confirm your understanding. Understood.

5. If you have not done so already, I encourage you to talk to Hartford's Environmental Sustainability Coordinator, Dana Clawson, about energy efficiency and new State rules pertaining to Commercial Building Energy Standards. (dclawson@hartford-vt.org) Understood. We talked with Dana.

6. Please confirm that your application complies with the new State rules regarding EV charging stations or amend the plans, as necessary. (Dana Clawson can assist you with this item if needed.) Confirmed. Per Table C405.13.1 and equation 4-11 of the newest Vermont Commercial Energy Code we will be providing 40 EV Capable Spaces per the following requirement:
    - line diagrams on drawing C2.1 showing pathways for future Level 2 EVSE electric vehicle charging

7. Preliminary approval of the Planned Development required that the Application for Final Approval includes:

    - Additional justification for a density bonus under section 260-47 C of the Zoning Regulations.

        - Applicant's Response: The density bonus as described in 260.47 (B-C) is appropriate given this project's merits. Specifically, single-occupant units are called for by 76% of the respondents in Hartford's 2019 survey. The Brookside redevelopment utilizes the existing facility while preserving the natural beauty of its surroundings, both on the property and in the neighborhood. The efficient use of resources, both

natural and constructed, promotes the harmonious use of property while preserving the existing topography, tree cover and geology.

Comment: Can you please provide information regarding the survey you are referring to? Please see updated Narrative. The survey we are referring to is the 2020 survey conducted by American Community Survey as referenced by you below.

The 2023 *draft* Housing Chapter (attached) identifies the need for smaller units. See Demographics and Housing on page 4 attached.

- A current survey meeting the requirements of the Subdivision and Zoning Regulations.
    - Applicant's Response: Included in drawing set.

      Comment: Please amend the survey to include the following signature block on the survey: Amended and attached.

      This Plat is approved subject to the Findings of Fact, Conclusions of Law, and Decision for this subdivision, a copy of which is on file in the Hartford Department of Planning and Development Services.
      Approval #____ Hartford Planning Commission
      Date _____ By_____
      Hartford Planning Commission Chair/Vice Chair

- Information regarding the proximity of the proposed dumpster enclosure and dog park to the stream/wetland buffer.
    - Applicant's Response: The dumpster pad will be made of concrete and is sloped so that the run-off runs away from the wetlands to a stabilized outfall. The dog park will have a pea stone surface and a 6" gravel base to filter and contain dog waste (see landscape detail on L3.2)

      Comment: There is a stream on the property that is identified on Hartford's G.I.S. Natural Resources Map.

      Section 260-25 B of the Zoning Regulations, Protection of Surface waters states:

A riparian buffer shall be maintained for a minimum of 100 feet from the top of the bank of the Connecticut, Ottauquechee and White Rivers, or for a minimum of 30 feet from the edge of a stream or any other surface water identified on the most recent edition of the Hartford G.I.S. Natural Resources Map. The riparian buffer also includes the area between the river and the top of the bank. No development, excavation, filling, clearing or grading shall occur within the buffer without conditional use approval from the Zoning Board of Adjustment except as specified in Subsections D and E.

It would be helpful if you could provide a plan that highlights the location of the riparian buffer as required by the Zoning Regulations and wetland buffer as required by the State and a narrative description of any activities proposed in the buffer areas. Shown with a long, bold dashed lines on all the C1 and C2 sheets.

In addition, please provide answers to sections 260-25 D, E, and F of the Zoning Regulations and information regarding any State permits required for activity in the wetland buffer.
260-25D: The dumpster pad encroaches by approximately 280 sf +/-, all other disturbed areas within the riparian buffer are part of existing parking areas to be maintained as parking and minor disturbances for stormwater management, a VT ANR wetland permit will be required for this and other work in the wetland buffer.
260-25E: The existing riparian buffer will be managed in accordance with Part E with the exception of the above dumpster enclosure and stormwater management encroachments.
260-25F: It is noted that a conditional use permit from the ZBA is required for the above outlined encroachments, the permit will be filed with the ZBA in accordance with 260-25-part F, section 1- and 2-. The location of the dumpster is the best possible location given the site constraints and proximity to existing parking areas. Other locations on the site would constrain emergency vehicle access and reduce parking. Disturbed areas will be replanted with dense native vegetation, steep slopes will be stabilized with riprap and or biodegradable erosion control netting and restored with native vegetation. The erosion prevention and sediment control plan will be followed during construction in accordance with the VTDEC EPSC Handbook.

- Updated information regarding the number of parking spaces/Information regarding visitor parking.

    - Applicant's Response: 46 parking spaces are proposed comprised of 38 parking spaces assigned to units and 8 visitor parking spaces.

      Comment: Please confirm/correct if your justification for reduced parking is the same/has changed since Preliminary approval of the Planned Development. The justification remains the same.

- Confirmation that the applicant has contacted Advance Transit regarding providing a bus stop and the results of the discussion.

  Applicant's Response: They were contacted by Tim Sidore several weeks ago (copy of email can be provided), however they have not yet responded

  Comment: Suggested contact is Adams Carroll, Executive Director ACarroll@advancetransit.com 802 295-1824 ext. 202

  Please provide an update. Updates to follow.

- Details regarding proposed indoor and outdoor amenities.

    - Applicant's Response: Site amenities at the redeveloped facility include the natural beauty of the site with its brook, a pond, generous lawn and thick woods, as well as a small courtyard with a gazebo and outdoor cooking facilities. Existing trees and shrubs will be selectively pruned; a wide variety of new trees and shrubs and 3,400 SF of wildflowers will be planted. We would like to add a small, fenced-in area at the south end of the property, near to the culvert, creating a dog friendly park.

      The building itself will feature generous 8' wide, skylit hallways; near the main south entry a small community lounge space looks out onto the courtyard. The apartments, though small, will be well appointed with quality materials and fixtures. The walls, with their concrete block structure, minimize sound transmission and will keep the apartments quiet. Laundry facilities will be provided in some apartments and in publicly accessed laundry rooms. The high-ceiling

basement will provide additional tenant storage and depending on demand, could be repurposed to provide exercise and game room space.

No comment.

- An open space management plan including protection of the wetlands and stream.
    - Applicant's Response: We are in discussion with the Department of Environmental Services and will be applying for a wetlands permit if the project is approved, however for landscape of this type which includes wetlands, DES will want minimal management and the forest left wild.

      Comment: Please provide an update. We agree in that DES will likely want minimal management of the forest here because of the nature of wetlands on this property. We have included riparian native VT species to add around the perimeter of the developed portion of the landscape as a measure to go back toward a natural environment within the wetland buffer areas. An additional column on the LA plan set was added to the plant list to indicate the riparian varieties.

- An Updated Master Plan:
    - Including the correct number of studio and one-bedroom apartments.

      Applicant's Response: Done

      No comment.

    - Including the removal of "Zoning R-3" from item #2.

      Applicant's Response: Done

      No comment.

    - Including setbacks for a corner lot.

      Applicant's Response: Done.

No comment.

New comment- Please remove "Maximum lot coverage 65%" from the Master Plan. Removed.

- Updated Project Narrative
    - Including correction of the gsf of the housing space in item #1

      Applicant's Response: Done

      Comment: Please confirm the gsf is correct under item #1, Objective in the Master Plan for the dwelling units and common area and in the project narrative. Confirmed at 19,500 GSF.

    - Removal of "Common Community Room" from item #2

      Applicant's Response: Done

      No comment.

- Updated Plans including:
    - A demolition plan

      Applicant's Response: Provided.

      No comment.

    - A landscape plan

      Applicant's Response: Provided.

      No comment.

    - Delineation of the stream, wetlands and their associated buffers.

      Applicant's Response: Delineated

Comment: See comments above regarding riparian and wetland buffers. This has now been reflagged by a wetland scientist and as stated earlier, native VT riparian species have been included in the buffer areas of the project.

- An updated photometric plan portraying the proposed site plan

  Applicant's Response: Provided, although one fixture along Brookside Drive will need to be eliminated.

  Comment: Please update the plan such that the proposed site plan is used as a base and remove the fixture you noted above. The plan has been updated and the fixture removed.

  Please note that the proposed lights must conform with section 260-31 E of the Hartford Zoning Regulations which states:

  > Illumination from lighting fixtures or other light sources shall be shielded or of such low intensity as not to cause undue glare, reflected glare, sky glow, or a nuisance to traffic or abutting properties. Lights used to illuminate parking areas and drives shall be so arranged and designed as to deflect light downward and away from adjacent residential areas and public highways. Lights shall be of a "downshield luminaire" type where the light source is not visible from any public highway or from adjacent properties. Only fixtures which are shielded to not expose a light source, and which do not allow light to "flood" the property, are permitted to be attached to buildings. Searchlights are not permitted. Noted. All fixtures will be dark-sky compatible.

- A turning movement plan for Emergency Vehicles approved by the Fire Marshal.

  Applicant's Response: Provided.

  Comment: Please submit confirmation from the Fire Marshal verifying they have approved the plan. Please provide information regarding why you did not indicate that the fire truck would exit on to Brookside Drive. A fire truck can exit onto Brookside Drive and we have added

sheet C1.4 to illustrate this (a gate and knox box will be provided), however it also has the capability of performing a hammerhead turn and exiting back onto Christian Street. We have been in discussion with the Fire Marshal concerning our plans, and a final copy of the proposed has been submitted to him, but as of 7/8 no response has been received.

- A turning movement plan for passenger vehicles

  Applicant's Response: This is similar to the garbage truck turning movement plan.

  No comment.

- A parking space and a turning movement plan for delivery vehicles (i.e., UPS/Fed Ex)

  Applicant's Response: Shown by dash lines at the primary entry. The turning movement is again similar to the garbage truck moving plan.

  No comment.

- Stormwater Management plan

  Applicant's Response: An erosion control plan and stormwater details have been provided in the civil drawings.

  Comment: Please provide a narrative description of the stormwater plan.
  A portion of stormwater runoff will be infiltrated into the ground and another portion will be treated in the grass swale with check dams along the south edge of the parking area. Along Brookside Drive in front of the building overall impervious surface has been reduced. Overall site impervious is expected to be increased by approximately 2,600 sf. Stormwater attenuation will be provided with underground stormwater detention chambers and infiltration. A curb will be provided along the south edge of pavement at the upper driveway off Christian St. to collect and treat runoff in the underground detention system. In addition, a portion of rooftop surfaces will also be collected in the same underground chamber system. Post development

stormwater runoff rates are expected to be reduced upon completion of the stormwater management plan.

- A note indicating that each dwelling units will have an assigned parking space
  .
  Applicant's Response: Noted on C2.0.

  No comment.

- Identification of the main entrance to the building and lobby

  Applicant's Response: Identified on C2.0.

  No comment:

- Inclusion of areas for snow storage

  Applicant's Response: Noted on C2.1.

  Comment: Please clarify for all parking areas. Snow storage remains in the location to the northeast of the lower (southernmost) parking lot, as this location is away from the riparian buffer and is relatively level. Snow removed in other locations on the site will be trucked here.

- Applicable directional signage for vehicles

  Applicant's Response: Shown on Civil set.

  No comment.

- Parking spaces on Brookside Drive are limited to two accessible parking spaces as approved by the DPW.

  Applicant's Response: In addition to the 2 handicapped spaces, which by code are required to be head-on we are providing 8 parallel parking spaces.

  DPW Comment: The parking layout along Brookside Drive is

not acceptable to DPW as there are many conflicting turning movements and blind maneuvers required of motorists utilizing the accessible parking spaces.

The architect indicates that on street parallel handicap parking is not allowed. This is true where an aisle cannot be provided, and the handicap person would be entering and exiting within the roadway. There appears to be adequate room to establish the necessary improvements to allow parallel parking for handicap individuals. As a note, exceptions are allowed for historic sites with space limitations such as White River Junction and Hartford Village.

Please contact the DPW and amend the plans (and any applicable application materials) such that they are approved by the DPW and comply with the Zoning Regulations. Chris Holzwarth was contacted. Our plan for parking along Brookside (north of the building) now conforms to the sketch be provided for us with 6 parallel parking spaces, two of which are accessible. The additional 4 spots (from what was approved for the PUD) are necessary to provide some additional accommodation for folks with limited mobility (the southern entry is ***not*** accessible) and because the bulk of the housing units (21) are located in the northern portion of the building. At the southernmost parking lot we added 4 additional parallel parking spaces to maintain our total of 46. We did not provide head-on parking at the southern lot per his sketch as it would require a wider access road and a retaining wall into the hill.

- Identification of all outdoor and indoor amenities

  Applicant's Response: Identified on drawings.

  Comment: Please review the civil, landscape and architectural plans for consistency and update, as necessary. The landscape plans are provided and demonstrate a change in what was provided between the preliminary submission and the final permit plan set. The outdoor amenities include several outdoor gathering areas, a gazebo, outdoor dining with a BBQ station, multi-purpose open space area, a nature

walk (stonedust walk) along the forest perimeter, and an enclosed dog run area with equipment.

8. Please update the number of proposed parking spaces on the application form. Updated.

9. Please update the project narrative to reflect the density calculation as described in Findings 14 &15 of the preliminary approval of the Planning Development. Updated.

10. I have an email stating that the gate is no longer proposed, however, it is shown on sheet C2.1. This gate is referred to in Findings #13 and #18 of the Preliminary approval of the Planned Development. That email was a mistake and the gate and a knox box will be installed per C2.1, note C1 and approved by Tom Peltier.

    Please clarify and amend the plans, as necessary.

11. Please respond to the following concerns of the DPW.

    The 10" sewer line at the projects entrance was developed before the unpermitted/lower parking lot was established. The main only has 4' of cover which is fine in cross country and unpaved situations. The line should be inspected and rated for the necessary structural cover and insulation requirements. The engineer should provide an acceptable plan to provide some combination of moving parking spaces, providing cover, insulation, or replacement of pipe to conform to the town and state standards.
    We have specified 4 inches of XPS insulation over the existing sewer line within the paved parking area. The insulation would be placed at the bottom of the parking lot engineered fill section. The added insulation will bring the sewer line into compliance with Section 1-1002(g) 2(B) of the VT Wastewater System and Potable Water Supply Rules.

12. Please submit additional details regarding how you calculated your anticipated traffic volume and the traffic volume for the former nursing home. Details have been provided (and updated) in the narrative utilizing the most recent ITE Trip Generation Report (8th Edition) calculator.

13. Please provide a description of how the site plan provides for the safety and convenience of pedestrians, bicyclists, and handicapped persons including lighting of walkways and entrances, design and placement of walks and crosswalks, pick-up points for public transportation if offered, and bike racks. (Please consider providing additional bike racks.) We are providing 3 accessible parking spaces (2 by the accessible entrance on the north side and 1 for the units at the basement level) directly adjacent to the entries they serve. A nearly continuous walk is provided around the north, west and east sides of the building, continuing into the courtyard/gazebo/BBQ/deck area. In addition, a 5'; wide accessible pathway leads to the southernmost parking. A stonedust path leads to and around the dog park, the open and wooded areas to its south and the southeasternmost tip of the parking lot. As shown on the photometric plan, all seven building entries are well lit, including the primary entry on the south, and the courtyard on the east. Adequate but neighborhood sensitive lighting has been provided for the parking and drive aisles. There is parking for 6 bikes located adjacent to the north entry.

14. What will be done to ensure that the landscaping is maintained in a healthy condition? The project plans include a 2-year guarantee on all proposed landscape plantings. In addition, all varieties specified are VT native and hardy varieties that will thrive on their own once established. The owner has an in-house maintenance team that will provide regular landscape maintenance including mowing lawn areas, pruning, mulching beds annually, etc.

15. Please outline how the application conforms with section 260-27 C of the Hartford Zoning Regulations which states: Adam

    C. **Grading and drainage.** The following provisions shall apply to any changes which affect drainage of water to or from a property:
    (1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.
    (2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.
    (3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.
    Pursuant to section 260-27, part C of the Town of Hartford Zoning Regulations, the site grading has been designed so that runoff is directed to established drainage swales and curbing and will not cause ponding or flooding of other properties or exceed the capacity of downstream drainage facilities. The

drainage system will be designed so that water runoff existing prior to site development will not be increased after development. All changes in grade will be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

16. Please acknowledge that during construction erosion and sediment control measures as specified in the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed. Acknowledged.

17. Any approval will include a requirement that no structure, including construction/office trailers, signage, parking spaces or plantings may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any signs, parking spaces or plantings found to obstruct sight distance will be required to be relocated. Please confirm that you understand this requirement and that all proposed structures and plantings meet this requirement or amend the plan accordingly. Understood.

18. Please acknowledge that you understand that once the project is complete and before I can issue a Certificate of Occupancy you need to:

    - Submit written verification from your Professional Engineer certifying that the project was constructed in compliance with the approved plans and Findings of Fact
    - Submit written verification from your Architect certifying that the project was constructed in compliance with the approved architectural plans and Findings of Fact.
    - Submit written verification from your Landscape Architect certifying that the project was constructed in compliance with the approved architectural plans and Findings of Fact.
    - Submit verification that the water and sewer have been inspected and approved by the Department of Public Works.
    - Submit a record drawing to the Department of Public Works with swing ties for the water and wastewater lines.
    - Submit a PDF of the record drawing to me.
    - Record an Energy Code Certificate in the Land Records.

    Please acknowledge that you understand these requirements. Acknowledged.

19. Please acknowledge that you understand that construction of the project must comply with Section 260-31 B of the Hartford Zoning Regulations, which states:

    Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations. Understood.

20. Please acknowledge that you understand that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary. Understood.

21. The Hartford Zoning Regulations provide that "Construction trailers may be used at construction sites for office and laboratory use on the condition that they are placed a minimum of ten feet from any property line, are used for a project with a valid zoning permit and are removed before a certificate of occupancy is requested. No construction trailer may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any construction trailer found to obstruct sight distance will be required to be relocated immediately."

    Please acknowledge that you understand these requirements. Understood.

22. The project requires 3 approvals:

    - Final Approval from the Planning Commission for the Planned Development
    - Site Plan Approval from the Planning Commission
    - Conditional Use Approval from the Zoning Board of Adjustment

    The materials for Site Plan and Conditional Use approval are the same.

23. Please send me two separate emails for these applications including:

    Planned Development: Application form, Master Plan, Narrative, response to this memo, survey, and the revised plan set.

    Site Plan/Conditional Use Approval: Application form, Narrative, response to this memo and the revised plan set.

24. Please submit:

    Eight (8) hard copies of the application materials listed above for the Planned Development. Please fold the plans.

    Fourteen (14) hard copies of the application materials listed above for Site Plan/Conditional Use Approval. Please fold the plans.

    (The plans submitted were a little difficult to read. Please consider providing larger plans)

143 Brookside Drive

White River Junction, VT 05001-9259

July 8, 2024

Re: Proposed Brookside Apartments, 1200 Christian Street, Hartford, VT

Dear Hartford Zoning and Planning Commissions,

As the south abutter of the proposed Brookside Apartments on 1200 Christian Street, we believe this project could well serve our community.

Having built our house 40 years ago, we have seen changes in our little neighborhood- the development of Apple Lane off of Brookside Drive, the addition of apartments on Brookside Drive and Christian Street, and the closure of the Brookside Nursing Home which directly affected the housing and care of a parent. Change is often unsettling.

However, we have carefully considered and studied the Brookside Apartment proposal details and find that we are in support of this project. Housing is a major barrier to the local economy. This repurposing/recycling of the Brookside Nursing Home into apartments can provide the opportunity for hard-working people to have a place to live closer to where they work.

Sincerely,

Michael & LeeAnne Heeremans

July 11, 2024

Dear Hartford Zoning Board and Planning Commission,

We are representing a group of 18 property owners who live next to, and near the proposed development of the former Brookside Nursing Home at 1200 Christian Street. We are submitting this letter to be part of the pre-meeting materials to be reviewed by the upcoming July Zoning Board and Planning Commission meetings where Final Approval of the Brookside Nursing Home Development Project is being sought.

We have appreciated the improvements that the Developer has made to the building and grounds to date. There are, however, a number of serious concerns that remain regarding this project, as summarized below:

1. We are asking for a formal presentation to be done by the Developer at the July Zoning and Planning Commission meetings when the Final Approval application is being reviewed.
2. The Brookside project land is mostly surrounded by single family homes. The Developers refer to apartments nearby to suggest their plan "fits" the neighborhood, however these were pre-planned apartment complexes which were proposed as fully-equipped apartments and built for that purpose. The Developer also makes several comparisons to "in-town/downtown" buildings they have developed in Lebanon and White River Junction. These, however, are not appropriate comparisons since the location of this property is not in the downtown area.

   Given the above, we are requesting that both the Zoning and Planning boards each do a site visit/review to actually see "the lay of the land" – the majority of which, again, is surrounded by single family homes. **We ask that all abutters and neighbors to the Brookside property are invited to join that review.**

3. a) The extremely small size of the proposed units is of great concern. Eighteen of the units are Studio apartments with a size of 250-350 sq ft, and 7 of the 1-bedroom apartments are less than 385 sq ft in size. In total, 25 of the 38 units are less than 385 sq ft. These units do not provide enough space to include a stove/oven, washer/dryer, closets and dressers, and places to sleep, while housing 2 adults, a child under 2 years old, and a pet dog. **We would like to note that the US Housing and Urban Development lists these size ranges for public housing: Studio: 500 sq ft, 1 bedroom 700 sq ft, 2 bedroom 900 sq feet (HUD.gov), sizes well above the current proposal.**
   b) Clearly the Developer would want to maximize each square foot of building for occupancy, but the proposed density is not ideal for either the residents or the broader

community. When such small apartments are in areas with nearby amenities (laundry, transportation, stores, restaurants, public parks), it may make it easier for people to have a reasonable quality of life with limited space in individual apartments. **But that is not the case with this site; it actually feels like a proposal for high density urban apartments in what is basically rural/suburban area.**

4. Since it seems unlikely there is room for washer/dryer in the studios, and we do not see a laundry room on the final project proposal, it appears residents will have to travel to a local laundromat (the closest one is in a building on Hartford Ave, currently 1 mile away and is currently for sale).
5. We, the abutters, and neighbors, have been very clear to the Developer and the Planning Commission that we feel that the density of this project, at 38 units, is too high. There seems to be a rush to squeeze in as many units as possible. It is also important to note that the Planning and Zoning commissions just approved the Sykes avenue project which will be adding 250 rental units to the Town of Hartford. Trying to squeeze 10 more 250 sq ft studio apartments into this property, and project, does not fit the existing building and neighborhood.
6. To get to 38 units, the Developer is applying for a density bonus. Unless there is a mechanism to ensure that affordability requirements are maintained, what is the guarantee, that if granted by the town, these additional units will serve the intended purpose of increasing affordable housing for the required term?

   We suggest that if a density bonus is granted, that it be conditional upon annual town/third party compliance monitoring, paid for by the developer in accordance with a compliance monitoring plan/covenant to be approved by the town, reviewed by town legal counsel, and agreed to by the developer.

7. The present plan of 38 units, some housing more than one person, will more than double the total number of people who are living in the neighborhood, that includes the new 1200 Christian Street residents and existing abutters and neighbors on Christian Street, Brookside Drive, and Apple Lane. We would expect an increase in Hartford police presence.
8. **We are extremely concerned that there has been no required traffic study by Town.** The traffic on Christian street has increased greatly since the nursing home was originally built. The Developer's comments comparing traffic flow between the original nursing home and this development was called "absurd" by one neighbor.

   Rarely did nursing home residents travel when residing at Brookside Nursing Home, and few, unfortunately, had visitors. Staff who worked at Brookside commuted during shifts

across their 24-hour operating hours. Comparing the 66 nursing home residents living at this property, vs. 38 dwellings is an inappropriate comparison, as some of the new studio and one-bedroom units will house more than one resident.

The Developer is significantly underestimating the traffic involved in the future apartment dwellers commuting, their outside visitors, deliveries of meals, FedEx, UPS, US Mail coming in and out of the parking area.

9. Individuals without a vehicle will have difficulty living in this development.
   a) **The closest Advanced Transit/AT stop is one mile way**. We see that in the final proposal there have been unsuccessful attempts by the Developer to contact Advanced Transit. Without a commitment of Advanced Transit to have Brookside Drive/1200 Christian Street as part of their route, it will make commuting very difficult for renters without a working vehicle. According to Google Maps it is a 20-minute walk from Brookside Drive, along Christian and Bugbee streets, walking on the side of the road with no sidewalks, making this especially challenging and dangerous, especially in winter.
   b) The idea of a shared car available is good in theory…but who will manage that? Does the Developer have experience in their other properties offering this type of service? It seems likely that residents without a vehicle may well feel "trapped." How will the Town hold the Developer accountable to provide and maintain this auto service?
   c) There is reference to a bicycle rack in the final proposal. Traffic, weather, and lack of bike lanes on Christian Street and Bugbee make bicycle riding as a form of transportation very unsafe, and unlikely.
10. Reference has been made to a gazebo onsite as a gathering spot for residents. The existing open air wooden structure is only usable when weather allows. There are **no indoor spaces** in the final plans designated for resident gatherings to allow residents of the 38 units to connect with each other.
11. We see a commitment to landscape design in the final proposal. Will the proposed parking lot provide landscaping of trees/shrubs that will help screen it from Brookside Drive and Christian Street views--- with the exception of clear eyesight for entering/exiting the complex from Christian Street?
12. What is the policy regarding residents and visitors who smoke? Will smoking be allowed in the apartments, or in designated smoking areas on the grounds?

13. **We believe the Developer has overstated their efforts at preservation of the natural setting of the brook, trees etc.** We continue to have questions regarding this:
    - **a)** Does the 50% "open space" include the paved parking lot?
    - **b)** Will the mature black locust trees opposite 1187 Christian Street be preserved?
    - **c)** The Developer refers to "a pond" but is that actually something that exists on the current property? Or does the ecosystem have to be altered to create that?
    - **d)** How would a "dog park" enhance that aspect of the property, and is that really needed? It is likely to actually increase traffic to and from the development. In addition, the Town of Hartford's Watson Dog Park, and Kilowatt Field are within a very close distance.

    We do not understand why the Planning Commission ignored our previous concerns regarding the impact on the natural resources on this site. We need to note, again, that the State of Vermont has identified Brookside creek as a nesting area for deer. The Town of Hartford Natural Resource map talks about protection of surface water and wildlife habitat. We see deer frequently emerge from the woods and drink from the stream that runs through the 1200 Christian Street property. We have also observed countless other animals using the wooded property onsite, including birds, woodchucks, rabbits, etc. We strongly recommend that the natural habitat, in particular the stream and wooded areas, not be disturbed by the new development.

    We ask that the Hartford Conservation Commission be consulted on this project regarding how to preserve the integrity of the natural resources of this property.

14. It was good to see more specifics regarding parking lot and outdoor lighting in the final proposal. It is key to limit the negative impact of the project on the existing neighbors, most of whom are in single family homes on Brookside/Christian Street. We strongly support the careful selection, review and adjustment of the lights themselves, and landscaping that helps keep lighting for parking and not shining into the abutters and neighbors' homes.

15. We want to again confirm there is a solid commitment by the Developer, and Town, to lock the Brookside Drive entrance and that this will be rigorously enforced. Our preference is that it be closed completely.

a) The Rogers and Klymn families, abutters whose home driveways are directly across from that are especially concerned that this entrance be rarely (if ever) used.

b) As part of the previously requested traffic study, we also want to note that the road on the north bend of Brookside Drive next to the nursing home is eroding which is a dangerous situation. It is also a blind corner, flanked by guard rails, which creates

significant issues for emergency vehicles including fire trucks and ambulance. The guard rails have been severely damaged several times by large vehicles failing to make the turn slowly and safely. This has required the Town of Hartford Public Works team to repeatedly come out and do extensive repairs.

c) One suggestion is to name the Development "Christian Street Apartments" to support the above.

16. What is the existing track record of the Developer regarding keeping up their other properties, and what is the longer-term commitment regarding that for the Brookside project?

17. Neighbors attending the 5.20.24 Planning Commission meeting believe the Planning Commission moved too quickly to grant preliminarily approval for this project, despite the significant r54 concerns expressed to the Planning Commission in writing before, and verbally during the meeting.

We witnessed a great deal of interest/support for the Developer and their wants/needs, but very little acknowledgement of our previous letter to the Commission at that meeting – which included input from many of the neighbors and abutters to this project. It is of utmost importance that both Zoning and Planning Boards are careful in their review and decision making about this project.

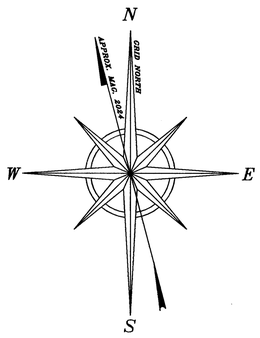
We look forward to your serious consideration of these important concerns regarding this Project, and the discussion of them at the upcoming July Zoning and Planning Commission meetings.

Respectfully,

Jesse Klymn, 246 A Brookside Drive
Anika Gilbert, 246 B Brookside Drive

Written with input and strong support from these 17 Hartford property owners, all abutters, and neighbors to this project:
Frank Klymn, 246 Brookside Drive
Jessica and Jay McDonough, 50 Brookside Drive
Carey O'Neil, John O'Neil, 88 Brookside Drive
Emily and Dillon Owens, 110 Brookside Drive
Benjamin Davis, 136 Brookside Drive
Susan Goodwin, 196 Brookside Drive
Deborah Rodgers, 256 Brookside Drive
Jeff Arnold, 1187 Christian Street
Hilde Ojibway, 1285 Christian Street
Michael and Dorothea Barton, 35 Apple Lane

Jenny Horn, 36 Apple Lane
Jeni and Jeff Frechette, 50 Apple Lane
Mark and Kathy Detzer, 59 Apple Lane
Marie Wesson, 80 Apple Lane
Ann Kerrigan, 98 Apple Lane
Susan Loskutoff, 143 Apple Lane
John and Kathy Wetzel, 157 Apple Lane



~ NOTES ~

1. METHOD OF SURVEY: LEICA TS16 TOTAL STATION & STONEX S900 GPS.
2. BEARINGS ARE REFERENCED TO THE VERMONT STATE PLANE COORDINATE SYSTEM NORTH AMERICAN DATUM (NAD83) GRID NORTH.
3. DIBERNARDO ASSOCIATES IS NOT RESPONSIBLE FOR PROPERTY DESCRIPTIONS PREPARED BY OTHER PERSONS FOR CONVEYANCE OF THE PROPERTY SHOWN HEREON.
4. THIS PLAN WAS PREPARED FOR THE SOLE USE OF 12 TREMONT STREET, LLC AND IS NOT INTENDED TO BE USED BY ANY OTHER INDIVIDUAL OR BUSINESS WITHOUT THE CONSENT OF SAID PARTIES AND DIBERNARDO ASSOCIATES, LLC.
5. PROPERTY SHOW HEREON IN LOCATED IN THE RESIDENTIAL THREE (R-3) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:

   MINIMUM LOT AREA PER DWELLING UNIT: 8,000 SQFT CLASS 1, 1 ACRE CLASS 2-3
   MINIMUM LOT AREA PER LOT: 12,000 SQFT CLASS 1, 1 ACRE CLASS 2-3
   LOT WIDTH: 80' CLASS 1, 125' CLASS 2-3
   LOT DEPTH: 100' CLASS 1, 100' CLASS 2-3
   FRONT BUILDING SETBACK: 25' CLASS 1, 25' CLASS 2-3
   SIDE BUILDING SETBACK: 15' CLASS 1, 15' CLASS 2-3
   REAR BUILDING SETBACK: 20' CLASS 1, 20' CLASS 2-3
6. WETLANDS SHOWN HEREON WERE DELINEATED BY AUDRA L. KLUMB OF A&D ENVIRONMENTAL, LLC. P.O. BOX 155 CANTERBURY, NH 03224. (603)-746-5065.
7. WATER LINES SHOWN HEREON ARE TRACED FROM REFERENCE PLAN A. SHOWN FOR REFERENCE ONLY.
8. ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND SHOWN FOR REFERENCE ONLY. NO UNDERGROUND EXPLORATION WAS DONE BY THIS FIRM. PRIOR TO CONSTRUCTION CALL DIG SAFE AT 811.

~ REFERENCE PLANS ~

A. PLAN ENTITLED "ALTASCM LAND TITLE SURVEY IN HARTFORD WINDSOR COUNTY VERMONT FOR BROOKSIDE NURSING HOME" PREPARED BY BRUNO ASSOCIATES INC. P.C. ON DECEMBER 7, 1999.

~ REFERENCE DEEDS ~

RECORDED AT THE TOWN OF HARTFORD LAND RECORDS

1. DEED FROM GRANADA AND WILLIAMS LOANS, LLC TO 12 TREMONT STREET, LLC. RECORDED IN BOOK 614 AT PAGE 623 ON AUGUST 17, 2023.

~ EASEMENTS ~

A. SEWER & WATER EASEMENT – BROOKSIDE NURSING HOME, INC. TO NORWICH ASSOCIATES, DATED NOVEMBER 7, 1974. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 73 PAGE 476.

A. SEWER EASEMENT – BROOKSIDE NURSING HOME, INC. TO NORWICH ASSOCIATES, DATED DECEMBER 28, 1981. SEWER LINE EXTENDING ALONG WESTERLY BOUNDARY AS SHOWN ON PLAT #2. RECORDED IN THE HARTFORD LAND RECORDS BOOK 100 PAGE 505.

A. SEWER EASEMENT – NORWICH ASSOCIATES TO BROOKSIDE NURSING HOME, INC., DATED DECEMBER 29, 1981. SEWER LINE EXTENDING ALONG WESTERLY BOUNDARY AS SHOWN ON PLAT # 2 RESERVED BY NORWICH ASSOCIATES. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 100 PAGE 508.

B. RIGHT OF WAY – NORWICH ASSOCIATES TO BROOKSIDE NURSING HOME, INC. 22 FEET WIDE BY 200 FEET RIGHT OF WAY CONVEYED. RECORDED 200 FEET LONG RESERVED FOR A ROAD OR STREET. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 56, PAGE 441.

B. RIGHT OF WAY – NORWICH ASSOCIATES TO BROOKSIDE NURSING HOME, INC. 22 FEET WIDE BY 200 FEET RIGHT OF WAY CONVEYED. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 73, PAGE 478.

C. RIGHT OF WAY – ARTHUR W. STONE & ANNA M. STONE TO IRVING J. & BARBARA TROMBLEY, DATED JANUARY 12, 1952. 25 FOOT WIDE EASEMENT FOR ROAD, DITCHES, AND UTILITIES RESERVED. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 54, PAGE 271.

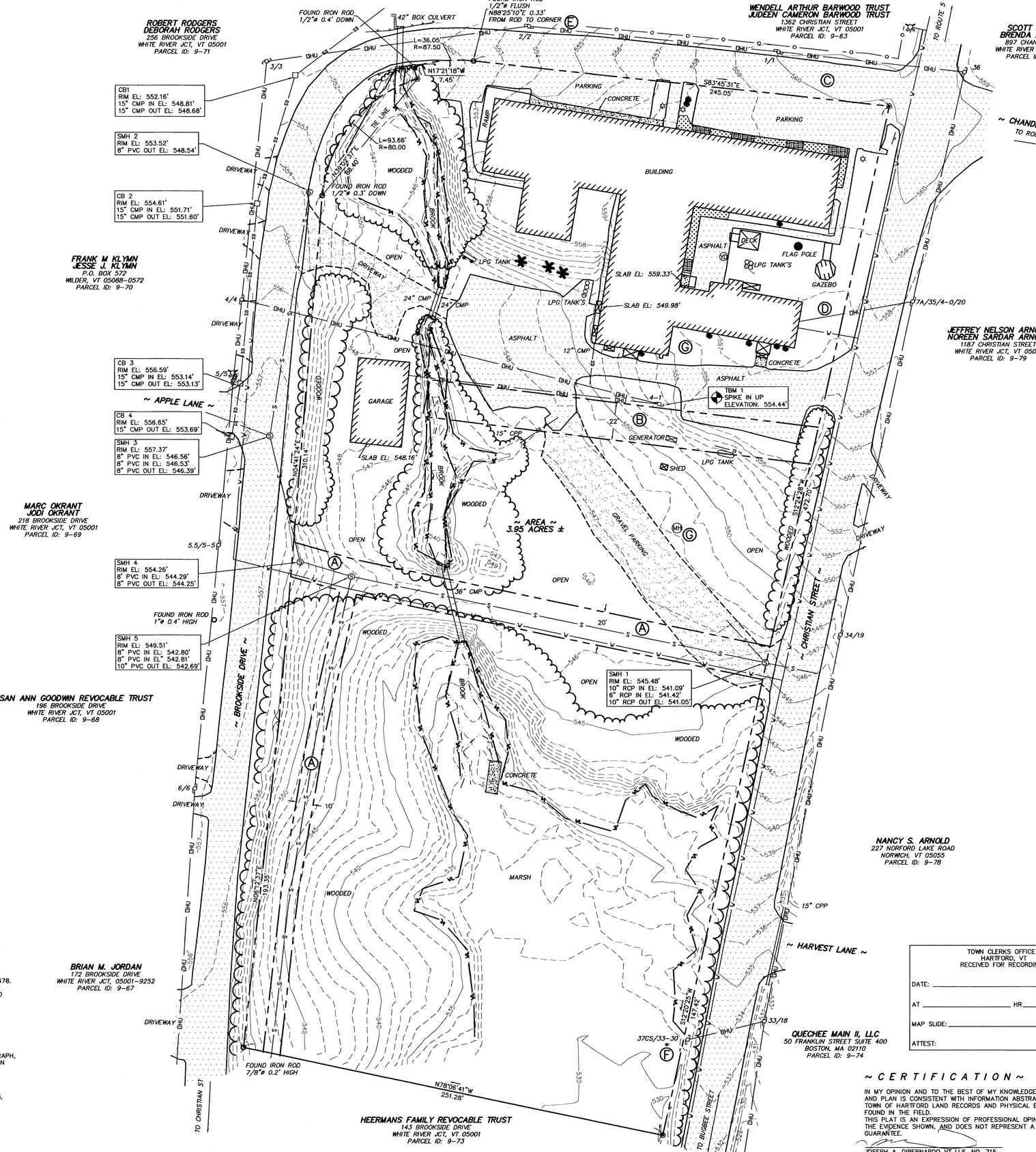
C. RIGHT OF WAY – ARTHUR W. STONE & ANNA M. STONE TO THE TOWN TOWN OF HARTFORD, DATED MAY 29, 1958. FROM CHRISTIAN STREET WESTERLY R.O.W. – 25 FEET WIDE 296 FEET LONG AND 40 FEET WIDE 600.8 FEET LONG. – RECORDED IN THE HARTFORD LAND RECORDS – BOOK 57, PAGE 364.

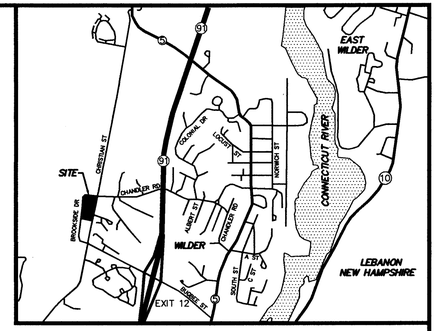
D. UTILITY EASEMENT – ARTHUR W. STONE & ANNA M. STONE TO NEW ENGLAND TELEPHONE & TELEGRAPH, DATED JUNE 19, 1947. 50 FEET WIDE UNDERGROUND & OVERHEAD TELEPHONE EASEMENT, LOCATION UNCERTAIN. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 51, PAGE 587.

E. UTILITY EASEMENT – NORWICH ASSOCIATES TO GREEN MOUNTAIN POWER CORPORATION, DATED OCTOBER 11, 1967. 20 FEET WIDE OVERHEAD OVERHEAD ELECTRIC & TELEPHONE EASEMENT FROM CHRISTIAN STREET TO BROOKSIDE DRIVE. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 63, PAGE 16.

F. GUY & ANCHOR EASEMENT – NORWICH ASSOCIATES TO GREEN MOUNTAIN POWER CORPORATION, DATED JANUARY 12, 1978. 10 FEET WIDE GUY ANCHOR EASEMENT. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 83, PAGE 152.

G. NOTICE OF UNDERGROUND STORAGE TANKS, DATED NOVEMBER 17, 1987. RECORDED IN THE HARTFORD LAND RECORDS – BOX 135, PAGE 206.





~ LOCATION MAP ~

~ LEGEND ~

- PROPERTY LINE
- RIGHT OF WAY LINE
- DELINEATED WETLANDS
- IRON PIN FOUND
- 5/8" ø IRON ROD SET
- YARD DRAIN
- SEWER MANHOLE
- STOCK FENCE
- POST AND RAIL FENCE
- UTILITY POLE
- BROOK
- CATCH BASIN
- FIRE HYDRANT
- BENCH MARK
- BOLLARD
- LIGHT POLE
- STORM DRAIN
- SEWER LINE
- WATER LINE
- MAN HOLE UNKNOWN
- GUY WIRE
- EASEMENT TABLE IDENTIFIER
- STOP SIGN
- PLANT
- BUSH
- OVERHEAD UTILITY
- HEDGE
- GARDEN
- TREE LINE
- GUARD RAIL

THIS PLAT IS APPROVED BY THE PLANNING COMMISSION SUBJECT TO THE FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION FOR THIS PLANNED DEVELOPMENT, A COPY OF WHICH IS ON FILE IN THE DEPARTMENT OF PLANNING AND DEVELOPMENT SERVICES.

APPROVAL NO. _____ HARTFORD PLANNING COMMISSION

DATE: _____ BY: _____ CHAIRPERSON

~ REVISIONS ~

NO.	DATE	DESCRIPTION	BY
1.	7-3-24	ADDED PC SIGNATURE BLOCK AND RECORDING BLOCK.	JAD

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

TOWN CLERKS OFFICE
HARTFORD, VT
RECEIVED FOR RECORDING

DATE: _____

AT _____ HR _____ MIN AM/PM

MAP SLIDE: _____

ATTEST: _____

~ CERTIFICATION ~

IN MY OPINION AND TO THE BEST OF MY KNOWLEDGE THIS SURVEY AND PLAN IS CONSISTENT WITH INFORMATION ABSTRACTED FROM THE TOWN OF HARTFORD LAND RECORDS AND PHYSICAL EVIDENCE FOUND IN THE FIELD.
THIS PLAT IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE EVIDENCE SHOWN, AND DOES NOT REPRESENT A WARRANTY OR A GUARANTEE.

JOSEPH A. DIBERNARDO VT LLS. NO. 715

TOPOGRAPHIC PLAN OF PROPERTY OF

12 TREMONT STREET, LLC

77 BANK STREET
LEBANON, NH 03766
PARCEL ID: 9-72

~ BROOK SIDE DRIVE & CHRISTIAN STREET ~
~ WINDSOR COUNTY ~ VILLAGE OF WILDER ~ TOWN OF HARTFORD, VERMONT ~

DIBERNARDO ASSOCIATES, LLC
VT NH
LICENSED LAND SURVEYORS
P.O. BOX 52
BELLOWS FALLS, VT 05101
802-463-3031 ~ 603-358-5509

STATE OF VERMONT
JOSEPH A. DIBERNARDO NO. 715
LICENSED LAND SURVEYOR

DATE	MAY 16, 2024	SCALE	1"=30'
DRAWN BY	JW	CK'D BY	JAD
SURVEYED BY	BG, JD		
DWG.NO.	3577		

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PLOTTED: 7/8/2024 9:26 AM

N

ROBERT RODGERS
DEBORAH RODGERS
256 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-71

FOUND IRON ROD
1/2"ø 0.4' DOWN

42" BOX CULVERT

1/2"ø FLUSH
N88°25'10"E 0.33'
FROM ROD TO CORNER

WENDELL ARTHUR BARWOOD TRUST
JUDEEN CAMERON BARWOOD TRUST
1362 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-63

SCOTT A. DAVIS
BRENDA A. CARTER
897 CHANDLER ROAD
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-83-2

TO ROUTE 5

~ CHANDLER ROAD ~
TO ROUTE 5

CB1
RIM EL: 552.16'
15" CMP IN EL: 548.81'
15" CMP OUT EL: 548.68'

SMH 2
RIM EL: 553.52'
8" PVC OUT EL: 548.54'

CB 2
RIM EL: 554.61'
15" CMP IN EL: 551.71'
15" CMP OUT EL: 551.60'

CB 3
RIM EL: 556.59'
15" CMP IN EL: 553.14'
15" CMP OUT EL: 553.13'

~ APPLE LANE ~

CB 4
RIM EL: 556.65'
15" CMP OUT EL: 553.69'

SMH 3
RIM EL: 557.37'
8" PVC IN EL: 546.56'
8" PVC IN EL: 546.53'
8" PVC OUT EL: 546.39'

MARC OKRANT
JODI OKRANT
218 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-69

SMH 4
RIM EL: 554.26'
8" PVC IN EL: 544.29'
8" PVC OUT EL: 544.25'

FOUND IRON ROD
1"ø 0.4' HIGH

SMH 5
RIM EL: 549.51'
8" PVC IN EL: 542.80'
8" PVC IN EL" 542.81'
10" PVC OUT EL: 542.69'

ANN GOODWIN REVOCABLE TRUST
196 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-68

~ BROOKSIDE DRIVE ~

FRANK M KLYMN
JESSE J. KLYMN
P.O. BOX 572
WILDER, VT 05088-0572
PARCEL ID: 9-70

L=36.05'
R=87.50
N17°21'18"W
7.45'

TIE LINE
L=93.66'
R=80.00
N39°02'31"E
88.40'

S83°45'31"E
245.05'

S12°24'28"W
412.70'

N04°41'24"E
310.14'

50' WETLAND SETBACK

50' WETLAND SETBACK

DRIVEWAY

WOODED

OPEN

GARAGE

BUILDING

PARKING

CONCRETE

RAMP

ASPHALT

DECK

FLAG POLE

GAZEBO

LPG TANK

LPG TANK'S

SLAB EL: 559.33'

SLAB EL: 549.98'

SLAB EL: 548.16'

24" CMP

12" CMP

15" CPP

36" CMP

20'

BROOK

GENERATOR

SHED

GRAVEL PARKING

~ AREA ~
3.95 ACRES ±

CHRISTIAN STREET

JEFFREY NELSON ARNOLD
NOREEN SARDAR ARNOLD
1187 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-79

TBM 1
SPIKE IN UP
ELEVATION: 554.44'

SMH 1
RIM EL: 545.48'
10" RCP IN EL: 541.09'
6" RCP IN EL: 541.42'
10" RCP OUT EL: 541.05'

X1 REMOVE OIL TANK, PIPING AND PUPMP HOUSE
X2 REMOVE PAVEMENT
X3 REMOVE LPG TANKS
X4 REMOVE LIGHT
X5 REMOVE PIPE

DEMOLITION NOTES

GRAPHIC SCALE
20 0 10 20 40 80
1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
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414 Union Street, Schenectady, NY 12305 • 518-530-9614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Demolition Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.0

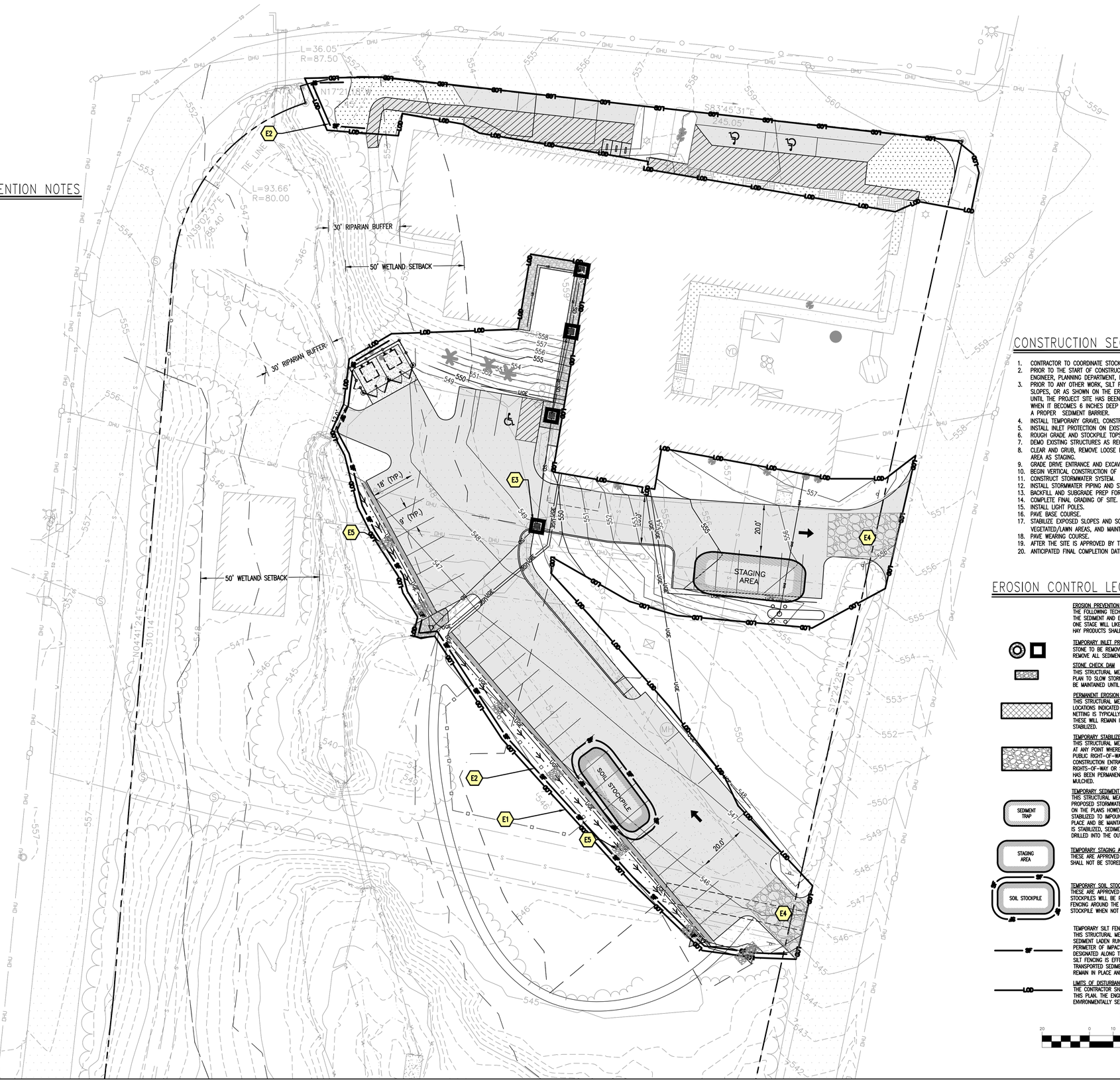
S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C1.0 DEMOLITION PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM

N

STORMWATER POLUTION PREVENTION NOTES

- E1 LIMIT OF DISTURBANCE
- E2 SILT FENCE
- E3 INLET PROTECTION (TYP.)
- E4 STABILIZED CONSTRUCTION ENTRANCE
- E5 STONE CHECK DAM (TYP.)



CONSTRUCTION SEQUENCE

1. CONTRACTOR TO COORDINATE STOCKPILE AND STAGING AREAS WITH THE OWNER.
2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL HOST A PRECONSTRUCTION MEETING WITH OWNER, ENGINEER, PLANNING DEPARTMENT, POLICE, FIRE, AND PUBLIC WORKS STAFF.
3. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
5. INSTALL INLET PROTECTION ON EXISTING CATCH BASINS AFFECTED DURING CONSTRUCTION.
6. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
7. DEMO EXISTING STRUCTURES AS REQUIRED.
8. CLEAR AND GRUB, REMOVE LOOSE PAVING/DEMO PAVING AS REQUIRED AND HAUL OFF SITE USING EXISTING PARKING AREA AS STAGING.
9. GRADE DRIVE ENTRANCE AND EXCAVATE BUILDING PAD
10. BEGIN VERTICAL CONSTRUCTION OF BUILDING ADDITION CONCURRENT WITH WATER AND SEWER UTILITIES.
11. CONSTRUCT STORMWATER SYSTEM.
12. INSTALL STORMWATER PIPING AND STRUCTURES
13. BACKFILL AND SUBGRADE PREP FOR NEW PARKING AND SIDEWALK AREAS
14. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
15. INSTALL LIGHT POLES.
16. PAVE BASE COURSE.
17. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, REPAIR AND REESTABLISH ALL DISTURBED VEGETATED/LAWN AREAS, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
18. PAVE WEARING COURSE.
19. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY.
20. ANTICIPATED FINAL COMPLETION DATE SUMMER/FALL 2024.

EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES. HAY PRODUCTS SHALL NOT BE USED.

TEMPORARY INLET PROTECTION – STONE COLLARS AND/OR INLET SOCKS. INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS ≤ 1/2 DEPTH OF STONE. REMOVE ALL SEDIMENT COLLECTED IN STRUCTURE OR SOCK AS SOON AS POSSIBLE.

STONE CHECK DAM
THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

PERMANENT EROSION CONTROL NETTING
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE SEEDED AND MULCHED.

TEMPORARY SEDIMENT BASIN
THIS STRUCTURAL MEASURE INVOLVES CONSTRUCTING TEMPORARY SEDIMENT BASINS IN THE LOCATION OF PROPOSED STORMWATER PONDS. GENERALLY THE STORMWATER PONDS CAN BE CONSTRUCTED AS SHOWN ON THE PLANS HOWEVER ORIFICE ON THE OUTLET STRUCTURES SHALL BE OMITTED UNTIL THE SITE IS STABILIZED TO IMPOUND RUNOFF AND ALLOW FOR SETTLING OF SUSPENDED FINES. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE THE SITE IS STABILIZED, SEDIMENT SHALL BE REMOVED FROM THE BASINS AND THE OUTLET ORIFICE SHALL BE DRILLED INTO THE OUTLET STRUCTURE AS NOTED ON THE PLANS.

TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE NON-SOIL, NON-ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.

TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SILT FENCING AROUND THE DOWN GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.

TEMPORARY SILT FENCING
THIS STRUCTURAL MEASURE IS A TEMPORARY BARRIER OF GEOTEXTILE FABRIC USED TO INTERCEPT SEDIMENT LADEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE FILL SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, INSTALL CONSTRUCTION FENCE BEHIND THE SILT FENCE. SILT FENCING IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ONTO ADJACENT AREAS. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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414 Union Street, Schenectady, NY 12305 • 518-830-9614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Erosion Prevention and Sediment Control Plan

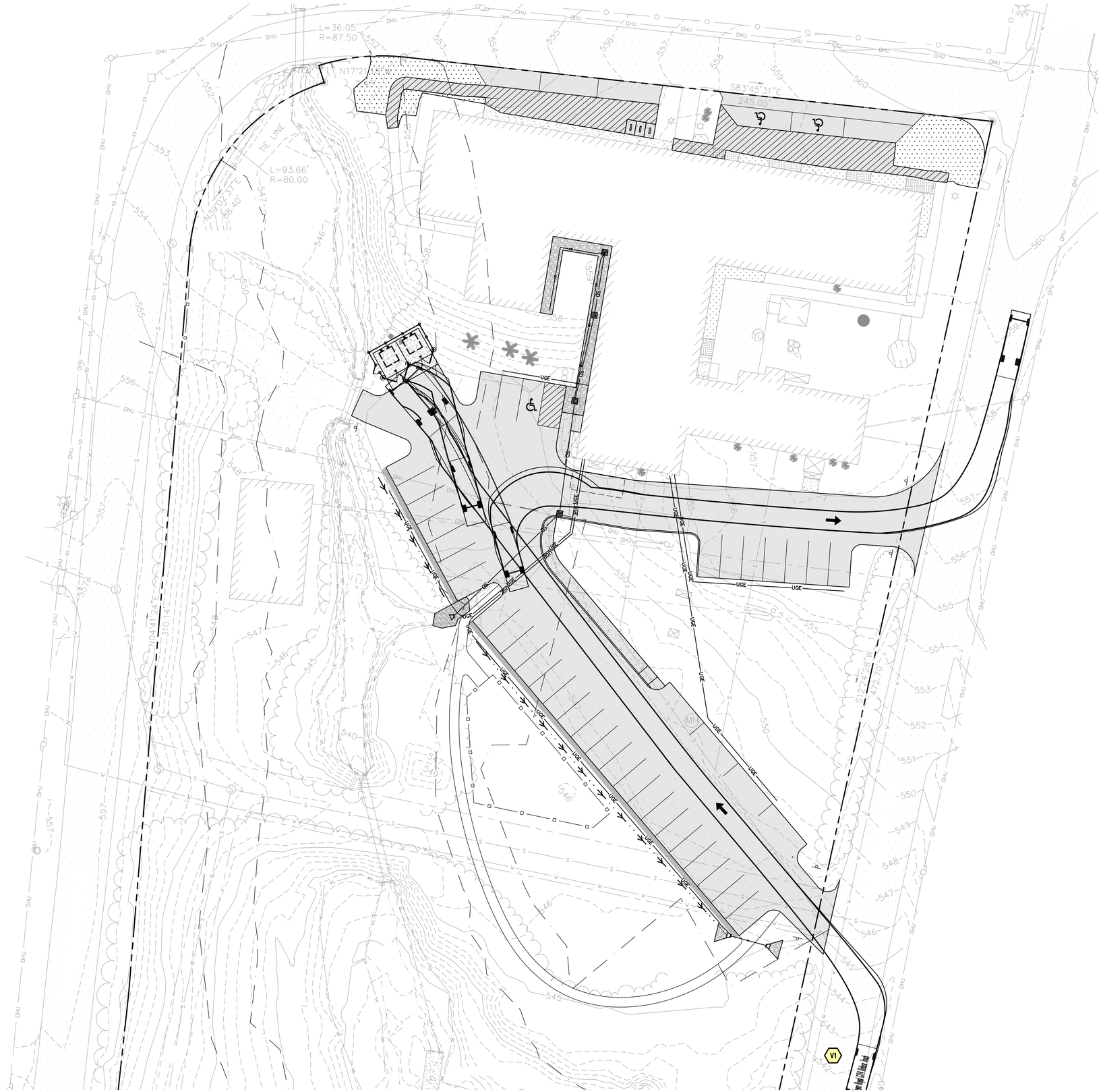
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.1

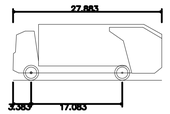
S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C1.1 EPSC PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM



VEHICLE TURNING NOTES

V1 GARBAGE TRUCK



Hino 338 M + Wayne Royal GT14 Refuse Truck	
Overall Length	27.883ft
Overall Width	8.042ft
Overall Body Height	10.488ft
Min Body Ground Clearance	1.318ft
Track Width	8.042ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	27.400ft

GRAPHIC SCALE

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414 Union Street, Schenectady, NY 12305 • 518-830-3614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Garbage Truck Turning Plan

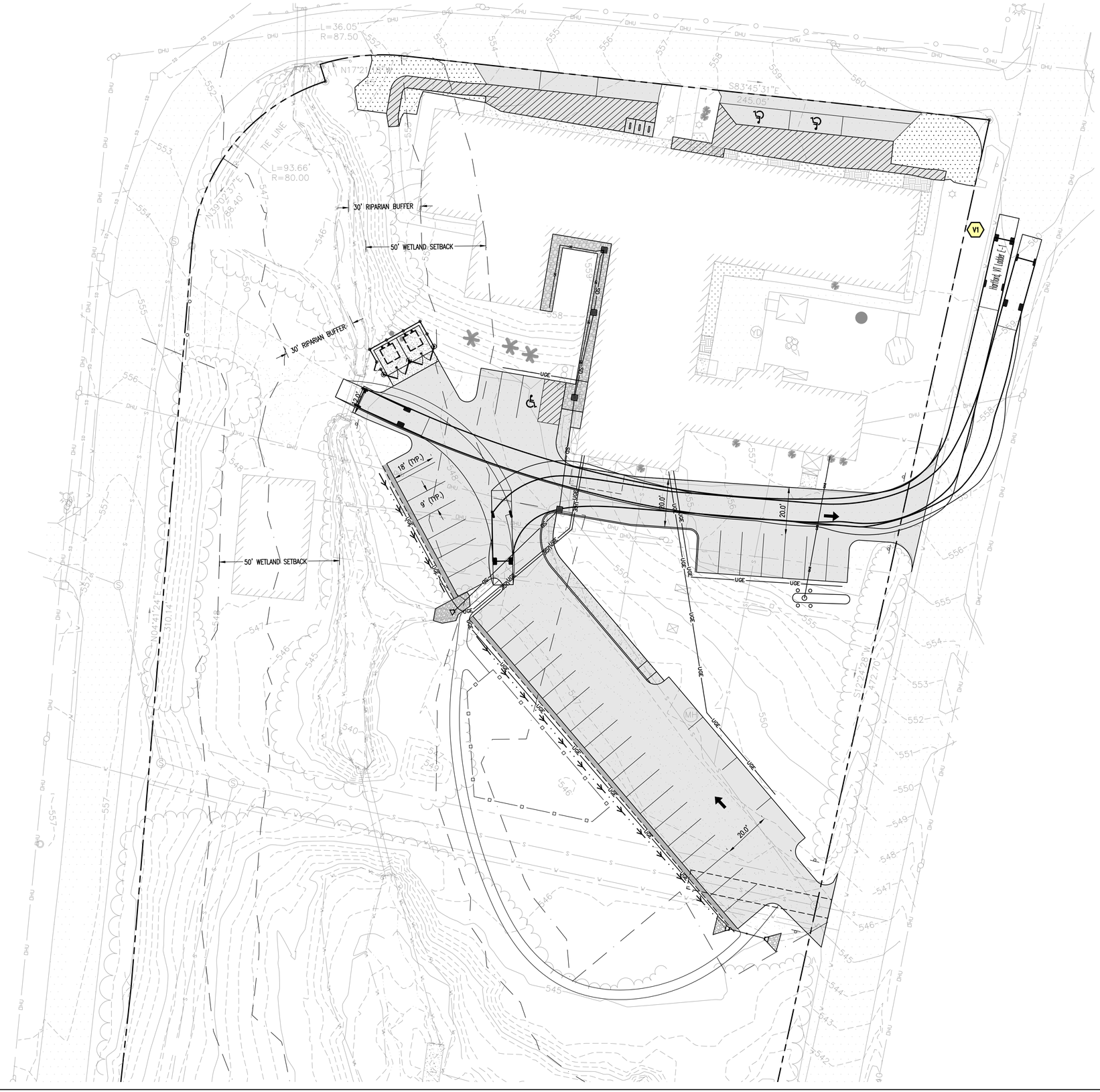
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.2

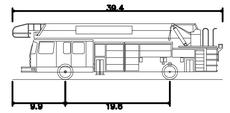
S:\PROJECTS\2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM



VEHICLE TURNING NOTES

V1 HARTFORD LADDER TRUCK



Hartford, VT Ladder E-1	
Overall Length	39.400ft
Overall Width	8.300ft
Overall Body Height	10.484ft
Min Body Ground Clearance	0.915ft
Track Width	8.300ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	35.100ft

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

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Sheet Title: Fire Truck Turning Plan

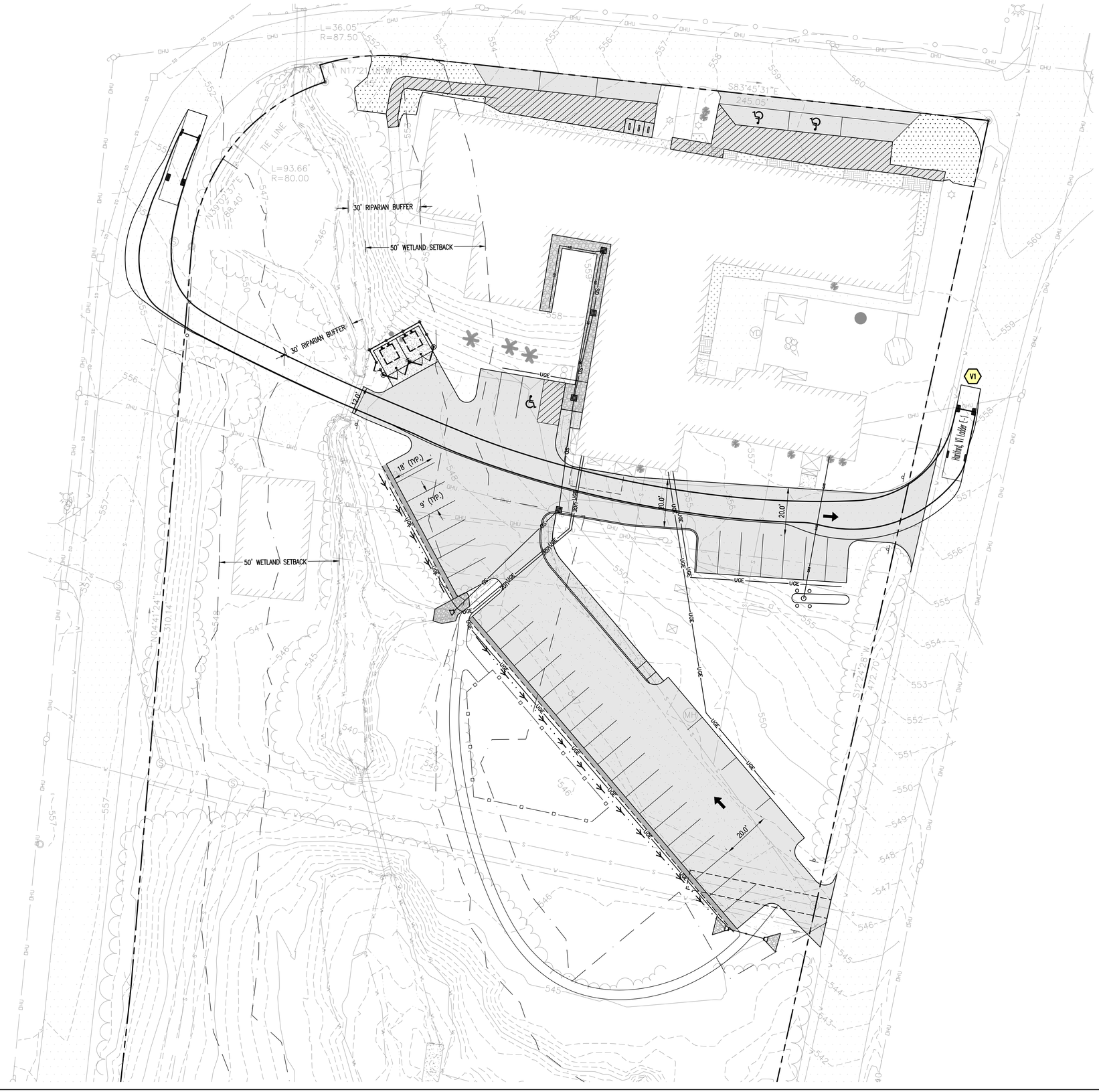
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.3

S:\PROJECTS\0-2024\24085 BROOKSIDE APARTMENTS\WIP\SHEET FILES\24085 BROOKSIDE C2.3 SITE PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM



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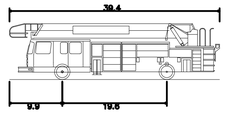
VEHICLE TURNING NOTES

V1 HARTFORD LADDER TRUCK



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603-727-9024

Sheet Title: Fire Truck Turning Plan (2)

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.4

S:\PROJECTS\2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 4:26 PM

N

ROBERT RODGERS
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TO ROUTE 5

~ CHANDLER ROAD ~
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1187 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-79

~ APPLE LANE ~

~ BROOKSIDE DRIVE ~

CHRISTIAN STREET

30' RIPARIAN BUFFER

50' WETLAND SETBACK

L=36.05'
R=87.50

L=93.66'
R=80.00

N17°21'31"W 245.05'

S83°45'31"E 245.05'

N39°02'31"E 88.40'

N04°41'24"E 310.14'

S12°24'28"W 472.70'

TBM = IRON SPIKE IN UP
ELEVATION: 554.44'

SLAB EL: 559.33'

SLAB EL: 549.98'

SLAB EL: 548.16'

ASPHALT

DECK

FLAG POLE

LPG TANK'S

GAZEBO

BUILDING

GARAGE

LPG TANK

SHED

GENERATOR

CPP

GRAVEL PARKING

AREA
0.5 ACRES

WOODED

OPEN

BROOK

RAMP

TREE LINE

24" CMP

18" CMP

12" CMP

36" CMP

18" (TYP.)

9' (TYP.)

20' UGE

UGE

DRIVEWAY

CONCRETE

ELECTRICAL NOTES

E1 ELECTRICAL CONDUIT FOR FUTURE EV CHARGERS

DRAINAGE NOTES

D1 CATCH BASIN (TYP.)

D2 12" HDPE

D3 FLARED END SECTION WITH STONE APRON

D4 STONE DRIP EDGE WITH UNDERDRAIN

D5 (12) CULTEC 902HD UNDERGROUND CHAMBERS

D6 GRASS SWALE

SEWER NOTE

S1 4" OF 60 PSI EXTRUDED POLYSTYRENE RIGID FOAM INSULATION OVER EXISTING SEWER MAIN AND UNDER PARKING LOT GRAVEL SECTION.

SITE NOTES

C1 EMERGENCY AND MAINTENANCE ACCESS GATE WITH KNOX BOX LOCK. COPIES OF KNOX KEY TO BE FURNISHED TO HARTFORD FIRE DEPARTMENT AND OWNER.

C2 EXISTING BUILDING TO BE RENOVATED TO CREATE 38 APARTMENTS.

C3 OIL TANK, PUMP HOUSE AND BURIED OIL LINES TO BE REMOVED AND DISPOSED OF PER LOCAL, STATE AND FEDERAL REQUIREMENTS. COORDINATE WITH MEP ENGINEER, AND ENVIRONMENTAL FIRM AS REQUIRED DURING DECOMISSIONING.

C4 1,990 GALLON UNDERGROUND PROPANE TANK. COORDINATE LOCATION AND OTHER REQUIREMENTS WITH PROPANE COMPANY. (4) BOLLARDS.

C5 PARKING LOT TO BE PAVED

C6 REMOVE EXISTING ADA PARKING

C7 2 VAN ACCESSIBLE ADA PARKING SPACES AND ACCESS AISLE

C8 5' WIDE ACCESSIBLE WALKWAY

C9 DUMPSTER

C10 1 VAN ACCESSIBLE ADA PARKING SPACES AND ACCESS AISLE

C11 ONE WAY SIGN

C12 ONE WAY DO NOT ENTER SIGN

C13 DO NOT ENTER, AUTHORIZED PERSONNEL ONLY SIGN

C14 6" OF TOPSOIL AND BARK MULCH

C15 DELIVERY TRUCK AREA

C16 DIRECTION OF TRAVEL

C17 DOG PARK/ACCESS PATH REFER TO LANDSCAPE PLAN FOR DETAILS

C18 SNOW STORAGE

C19 STAPLE BIKE RACK

C20 STRIPE HATCHED PAVEMENT

C21 VERTICAL CURB

C22 2' GRAVEL SHOULDER

C23 PRIMARY ENTRANCE

PARKING NOTES:
1. 46 PARKING SPACES PROVIDED
2. ONE PARKING SPACE WILL BE ASSIGNED TO 38 TENANTS
3. 8 VISITOR PARKING SPACES

GRAPHIC SCALE
20 0 10 20 40 80
1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Site, Grading and Drainage Plan

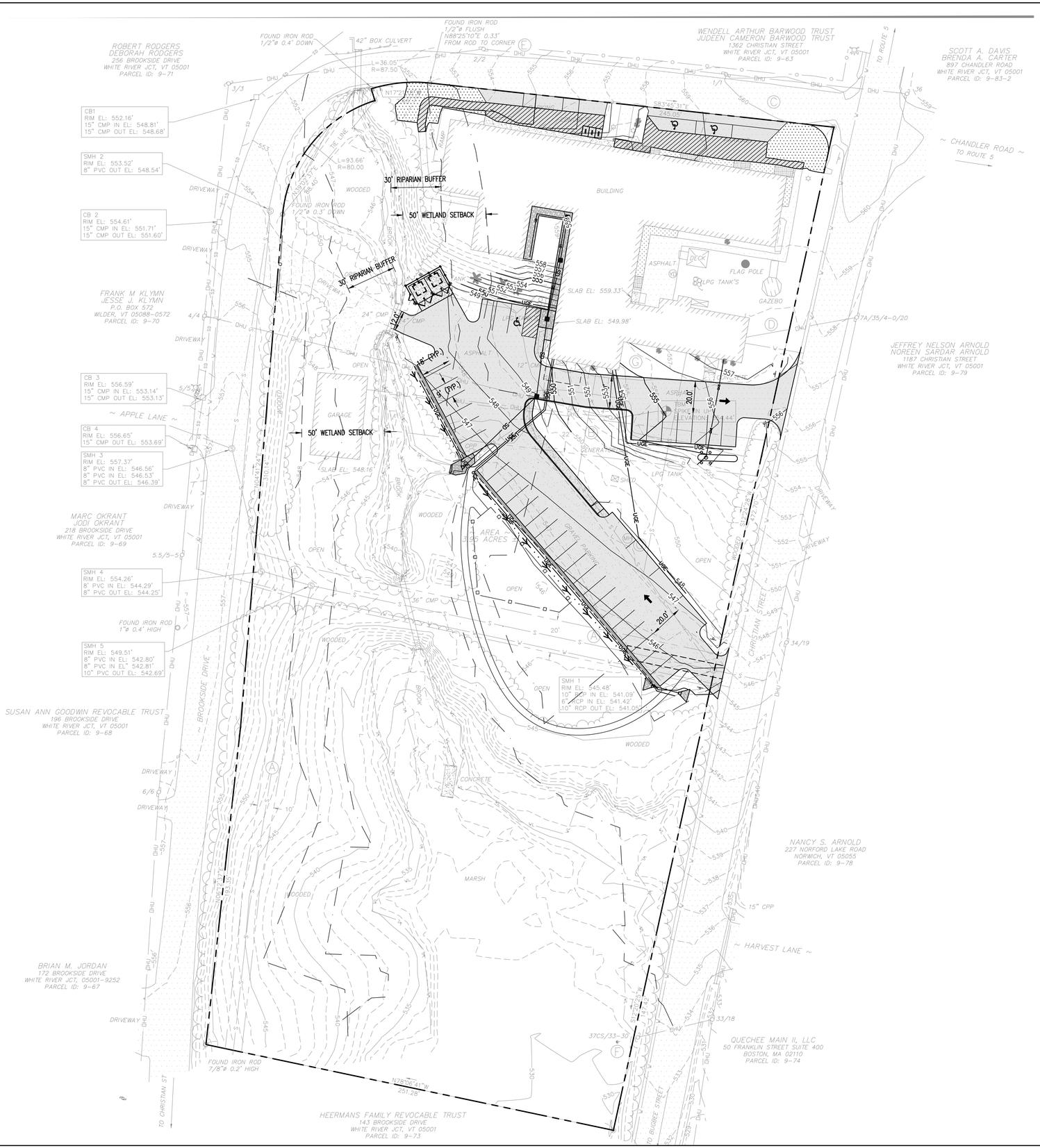
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C2.1

X:\PROJECTS\X-2024\24085 BROOKSIDE APARTMENTS\WORKSHEET FILES\ADBS BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 8:18 AM



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Lebanon, New Hampshire
603-727-9024

Sheet Title: Site Plan Overall

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 30'
Date:	7/8/2024

C2.0

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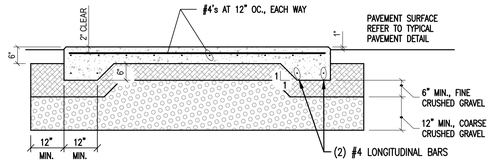
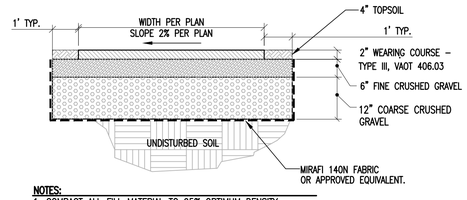


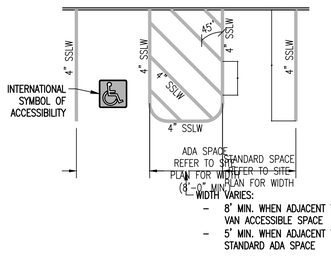
NOTES:
1. CONCRETE TO BE 4,500psi WITH 5-7% AIR ENTRAINMENT.
2. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUIVALENT.
3. REFER TO LAYOUT PLAN FOR SIZE AND LOCATION.

CONCRETE DUMPSTER PAD 1
NOT TO SCALE

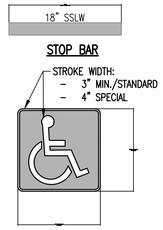


NOTES:
1. COMPACT ALL FILL MATERIAL TO 95% OPTIMUM DENSITY.

ASPHALT SIDEWALK DETAIL 2
NOT TO SCALE



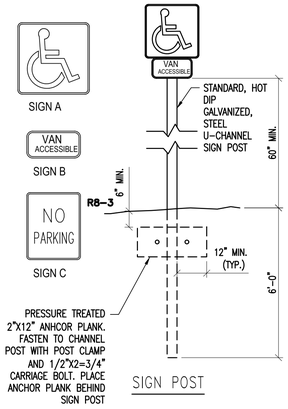
PARKING LOT STRIPING



STOP BAR

INTERNATIONAL SYMBOL OF ACCESSIBILITY

ADA PAVEMENT MARKINGS 3
NOT TO SCALE

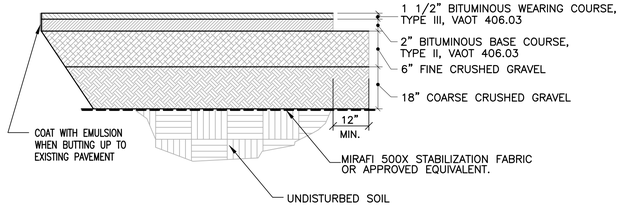


SIGN POST

SIGN KEY:

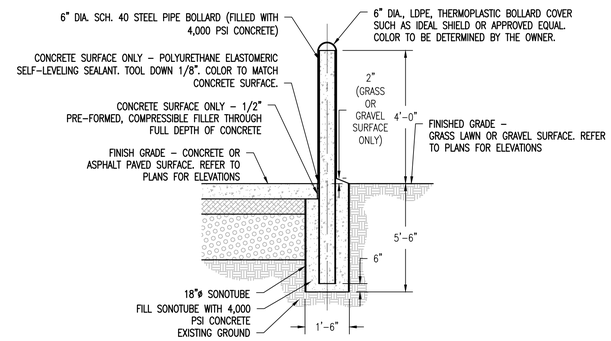
SIGN	MUTCD DESIGNATIONS	COMMON NAME	SIZE
A	D9-6	HANDICAPPED	24" x 24"
B	D9-6P	VAN ACCESSIBLE (PLAQUE)	18" x 9"

ADA SIGNS AND POST 4
NOT TO SCALE

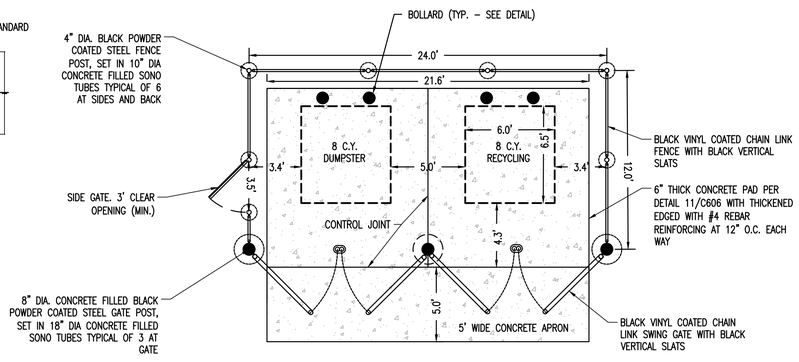


PAVEMENT PATCHING NOTES:
1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

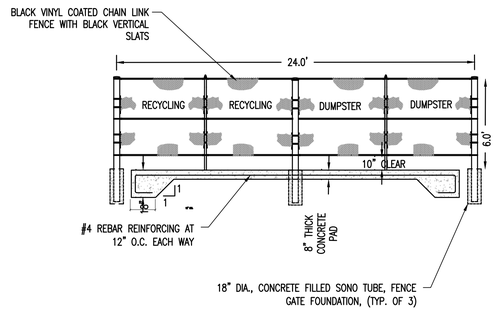
PAVEMENT SECTION 5
NOT TO SCALE



TYPICAL BOLLARD DETAIL 6
NOT TO SCALE



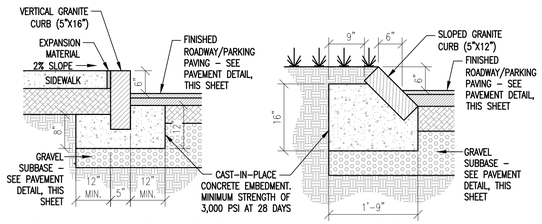
PLAN VIEW



SECTION VIEW

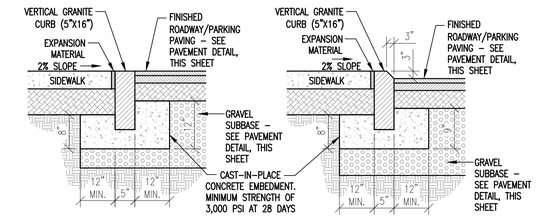
NOTES:
1. CONCRETE TO BE 4000psi WITH 5-7% AIR ENTRAINMENT.
2. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUIVALENT.
3. CONTROL JOINT SHALL BE A 1/8" WIDE JOINT AT LEAST 1/3 OF THE DEPTH OF THE PAD.

DUMPSTER PAD WITH FENCE ENCLOSURE 7
NOT TO SCALE



DETAIL A - VERTICAL CURB

DETAIL C - SLOPED CURB

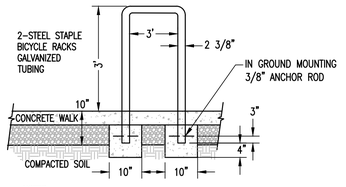


DETAIL B - FLUSH CURB

DETAIL D - MOUNTABLE CURB

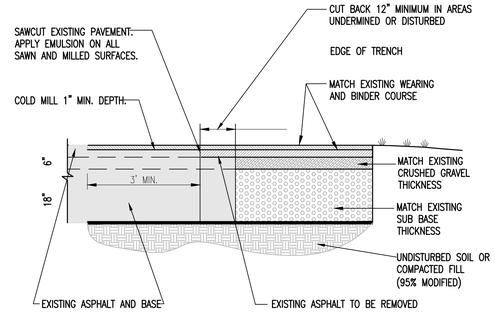
VERTICAL GRANITE CURB NOTES:
1. GRANITE CURBS SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT AND STATE SPECIFICATIONS
2. WHERE CURB IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, CURB SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" O.C. (PORTION OF DOWEL IN CURB TO BE GREASED).
3. WHERE CURB IS ADJACENT TO SIDEWALK, BOLLARD, LIGHT BASE OR OTHER HARD FEATURES, 1/2" EXPANSION MATERIAL (FULL DEPTH OF CURB), SHALL BE INSTALLED BETWEEN FEATURE & CURB.

GRANITE CURB DETAILS 8
NOT TO SCALE



NOTES:
1. ONE RACK HAS THE CAPACITY TO HOLD 2 BIKES.
2. MAINTAIN 3' MINIMUM SPACING BETWEEN RACKS AND 4' TO EXTERIOR WALL.
3. U-STYLE RACKS NOT ACCEPTABLE.

STAPLE BIKE RACK 9
NOT TO SCALE



ASPHALT PAVEMENT TRENCH PATCH 10
NOT TO SCALE

S:\PROJECTS\A-2024\24085 BROOKSIDE APARTMENTS\HSW\SHEET FILES\24085 BROOKSIDE DETAILS.DWG

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Sheet Title: Site Details

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
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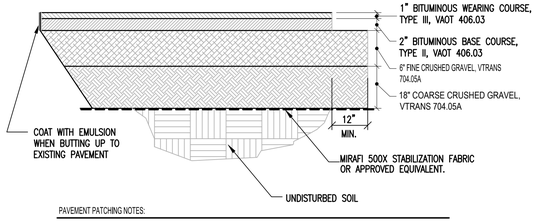
PLOTTED: 7/8/2024 8:26 AM

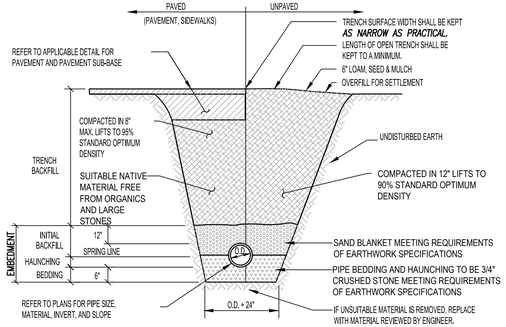


PAVEMENT PATCHING NOTES:

1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

PAVEMENT TYPICAL SECTION

NOT TO SCALE 1

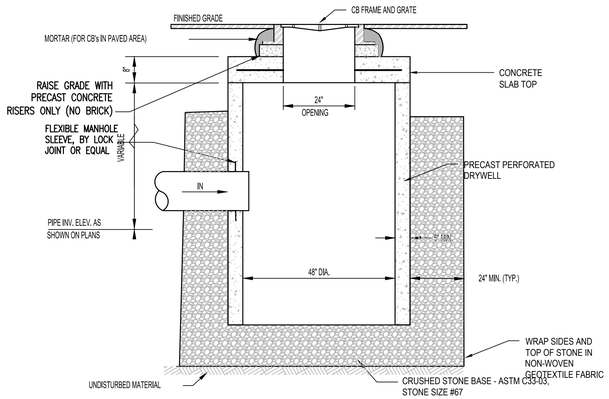


STORM DRAIN TRENCH NOTES

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM , STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
3. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW STORM DRAIN SYSTEM DURING CONSTRUCTION.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
5. PROVIDE 6' OF COVER OVER PIPE IN PAVED AREAS AND 5' OF COVER OVER PIPE IN UNPAVED AREAS. REFER TO INSULATION DETAIL FOR AREAS WHERE PROPER COVER CAN NOT BE ACHIEVED.

DRAINGE TRENCH DETAIL

NOT TO SCALE 4

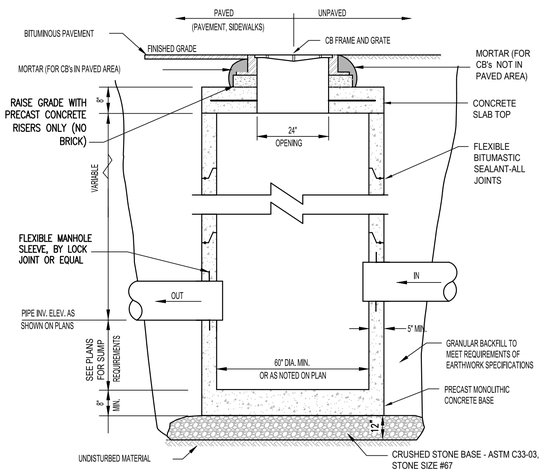


NOTES

1. IN PAVEMENT AREAS, PROVIDE A LEBARON 24"X24" TYPE E OR EQUAL, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS. IN GRASS AERAS, PROVIDE A 24" ROUND GRATE.
2. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.

DRY WELL DETAIL

NOT TO SCALE 2

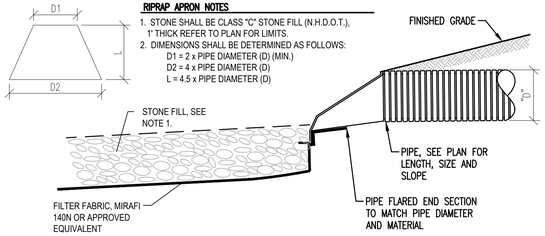


CATCH BASIN NOTES

1. IF DEPTH OF CATCH BASIN IS 7 FEET OR LESS FROM RIM TO CENTERLINE INVERT THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF CATCH BASIN FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 FEET THEN A CONICAL TOP WILL BE INSTALLED.
2. IN PAVEMENT AREAS, PROVIDE A LEBARON 24"X24" TYPE E OR EQUAL, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS. IN GRASS AERAS, PROVIDE A 24" ROUND GRATE.
3. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.

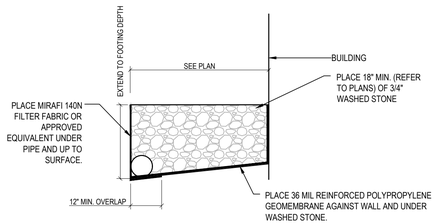
CATCH BASIN DETAIL

NOT TO SCALE 3



FLARED END SECTION W/STONE APRON

NOT TO SCALE 5



TYPICAL DRIP EDGE

NOT TO SCALE 6

SITE/EARTHWORK SPECIFICATIONS

1. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, AND PROJECT ENGINEER TO REVIEW PROCEDURES, IDENTIFY RESPONSIBILITIES. UNLESS STATED OTHERWISE, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE VTRANS SPECIFICATIONS.
2. CLEARING AND GRUBBING– SITE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING DRIVEWAYS, STONE WALLS, AND GRASS AREAS. THE DRIVEWAY SUB-GRADE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVING.
3. COMPACTION OF ALL MATERIALS SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY ASTM D2922 AND SHALL NOT BE LESS THAN THE REQUIRED AMOUNT AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
4. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 1000 SQUARE FEET OF AREA.
5. PAVEMENT SHALL MEET THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS PUBLISHED BY VTRANS.
6. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO THE COMPLETION OF ROLLING. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.
7. ALL REMAINING DISTURBED AREAS SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS FOR EROSION CONTROL.
8. THE SEEDING OF 10% OR GREATER SLOPES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.
9. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL. REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLES:

A. SAND BLANKET/BEDDING: VTRANS 703.03A

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1-1/2 INCHES	90 – 100
1/2 INCH	70 – 100
NO. 4	60 – 100
NO. 100	0 – 20
NO. 200	0 – 8

B. 3/4" CRUSHED STONE: VTRANS 704.02B

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 INCH	100
3/4 INCHES	90 – 100
3/8 INCH	20 – 55
NO. 4	0 – 10
NO. 8	0 – 5

C. 1-1/2" CRUSHED STONE: VTRANS 704.02C

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCH	100
1-1/2 INCH	95 – 100
3/4 INCH	35 – 70
3/8 INCH	10 – 30
NO. 4	0 – 5

D. COARSE CRUSHED GRAVEL: VTRANS 704.05A (COARSE)

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
4 INCHES	95 – 100
NO. 4	25 – 50
NO. 100	0 – 12
NO. 200	0 – 6

E. FINE CRUSHED GRAVEL: VTRANS 704.05A (FINE)

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1-1/2 INCHES	90 – 100
NO. 4	30 – 60
NO. 100	0 – 12
NO. 200	0 – 6

F. GRANULAR BACKFILL: VTRANS 704.08A

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 INCHES	100
NO. 4	45 – 75
NO. 100	0 – 12
NO. 200	0 – 6

G. TYPE I STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF FOUR INCHES.

H. TYPE II STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM TWO INCHES TO 36 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

I. TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS:
1. THE pH OF THE MATERIAL SHALL BE BETWEEN 5.5 AND 7.6.
2. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 2% NOR MORE THAN 20%.
3. GRADATION:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1 INCH	85 – 100
1/4 INCH	65 – 100
NO. 200	20 – 80

THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHODS TO MEET THE ABOVE SPECIFICATIONS.

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Sheet Title: Drainage Details

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Hartford, Windsor County, Vermont

EV Project #	24085
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C3.1

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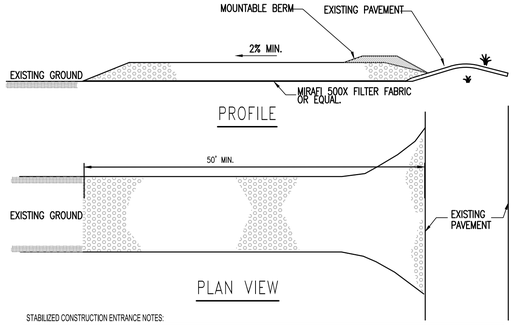
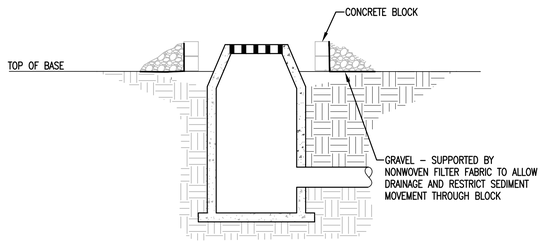


STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: USE 1–1/2" CRUSHED STONE.
2. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT–OF–WAYS MUST BE REMOVED IMMEDIATELY.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
5. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONSTRUCTION ENTRANCE DETAIL

SCALE: NONE (1)

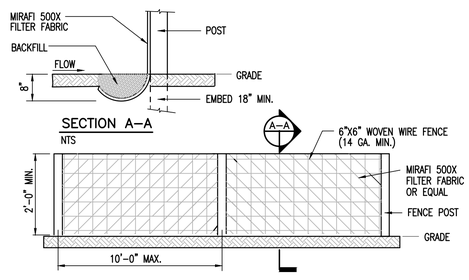


CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER FLOW.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, REMOVE GRAVEL AND BLOCK AND STABILIZE SURROUNDING AREA PER PLAN.
4. GRAVEL BAGS, GRATE GUARDS, FILTREXX OR SEDIGUARD INLET PROTECTION DEVICES MAY BE USED. SUBMIT PRODUCT INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE VT EPSC STANDARDS AND SPECIFICATIONS.

STONE AND BLOCK CATCH BASIN PROTECTION DETAIL

SCALE: NONE (2)

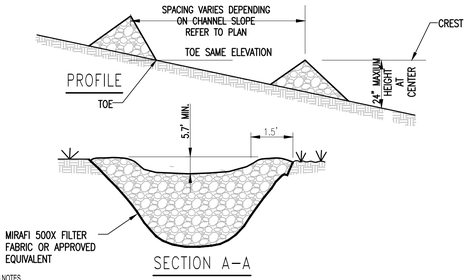


SILT FENCE NOTES:

1. SILT FENCE SHALL BE PRE–FABRICATED EROSION CONTROL FENCE BY MIRAFI OR EQUAL, OR CONSTRUCTED IN PLACE AS SPECIFIED HEREIN.
2. CONSTRUCTED IN PLACE SILT FENCE:
   A. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
   B. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE TIES SPACED EVERY 24" AT TOP OF MID SECTION.
   C. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
3. INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL). MAINTENANCE SHALL BE PER–FORMED AS NEEDED, AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

SILT FENCE DETAIL

SCALE: NONE (3)

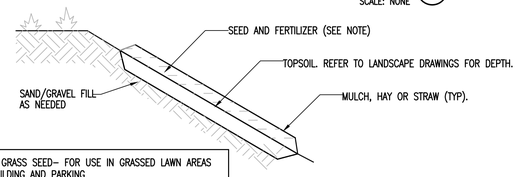


CHECK DAM NOTES

1. TYPE I STONE FILL WILL BE PLACED ON A FILTER FABRIC FOUNDATION AT THE GRADES AND LOCATIONS AS DESCRIBED HEREIN, AND TO MEET THE ABOVE DETAIL IN AREAS SHOWN ON PLANS
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM FOR A MINIMUM OF 100' DOWNSTREAM OF DISTRUBED EARTH.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED WEEKLY (EVERY 7 DAYS) AND WITHIN 24 HOURS AFTER EACH RAIN.
6. REMOVE SEDIMENT COLLECTED BEHIND EACH DAM WHEN DEPTH OF SEDIMENT IS ONE HALF THE HEIGHT OF THE DAM.

STONE CHECK DAM DETAIL

SCALE: NONE (4)



URBAN MIX GRASS SEED– FOR USE IN GRASSED LAWN AREAS AROUND BUILDING AND PARKING		
% BY WEIGHT	LBS. LIVE SEED BY ACRE	TYPE OF SEED
44.44	20.0	CREEPING RED FESCUE
44.44	20.0	KENTUCKY BLUEGRASS
11.11	5.0	RYEGRASS
100	45.0 # LIVE SEED/ ACRE	

CONSERVATION MIX GRASS SEED– FOR USE IN ALL OTHER AREAS		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
50	15.0	SMOOTH BROMEGRASS
16.67	5.0	RYEGRASS
33.33	10.0	BIRDSFOOT TREFOIL
100	30.0 # LIVE SEED/ACRE	

FERTILIZER– 40 LBS. PER 1000S.F.
USE STANDARD 10–20–20 WHEN NO SOIL TEST DATA IS AVAILABLE
SPRING SEEDING
FALL SEEDING

LIME– 100 LBS. PER 1000S.F.
DOLOMITIC GROUND LIMESTONE
NOT LESS THAN 85% OF THE TOTAL CARBONATE

TOP SOIL
6" MINIMUM TOPSOIL

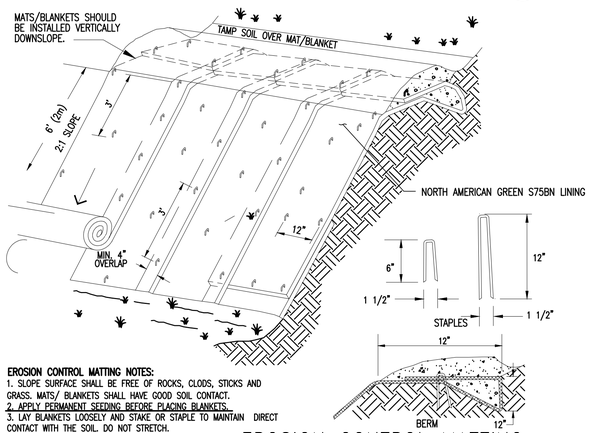
HAY OR STRAW MULCH– 90–100LBS PER 1000S.F. APPLY BINDER OR NETTING AS NEEDED

NOTES FOR SEEDED AND MULCHED AREAS

1. ALL DISTURBED SURFACES SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED WITHIN 7 DAYS OF DISTURBANCE.
2. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.
3. MULCH: TYPICALLY HAY OR STRAW MAY BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 90–100 LBS/1,000 SF. MULCH SHALL NOT BE PLACED ON SLOPES OF GREATER THAN 3:1. SEED IMPREGNATED EROSION CONTROL NETTING SHALL BE USED IN ITS PLACE.
4. SEED: SEEDING SHALL OCCUR AFTER APRIL 15 AND PRIOR TO SEPTEMBER 15TH IN ORDER TO ESTABLISH A STAND OF GRASS PRIOR TO GROUND FREEZING. SEED SHALL BE IN ACCORDANCE WITH SEED SPECIFICATION ON THIS SHEET.
5. COVER SEED WITH ¼ INCH SOIL UNLESS A HYDROSEEDER IS USED.
6. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
7. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.

SEEDED AND MULCHED AREAS DETAIL

SCALE: NONE (5)

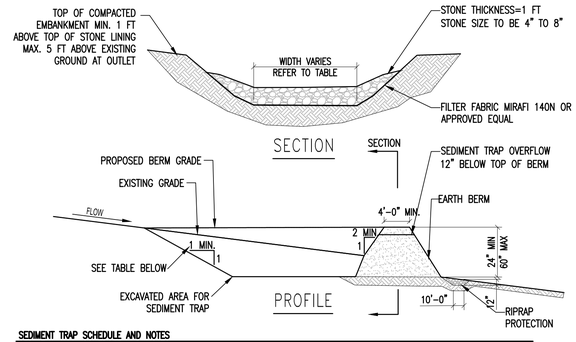


EROSION CONTROL MATTING NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. MATTING SHALL BE NATURAL FIBER.

EROSION CONTROL MATTING

SCALE: NONE (6)



SEDIMENT TRAP SCHEDULE AND NOTES

TRAP	DRAINAGE AREA IN ACRES	REQUIRED VOLUME OF SEDIMENT TRAP*	VOLUME PROVIDED	OVERFLOW WEIR ELEVATION	WEIR WIDTH	BOTTOM OF TRAP	TOP OF TRAP	SIDE SLOPE
TST–1	0.5	1800 CF	TBD	TBD	4'	TBD	TBD	2:1

* SEE NOTE 5 BELOW

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.

2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONE, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET, MEASURED AT CENTERLINE OF EMBANKMENT.

3. ANY EXCAVATED PORTION OF SEDIMENT TRAP SHALL HAVE 2:1 SLOPES OR FLATTER.

4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF EMBANKMENT.

5. THE VOLUME OF SEDIMENT STORAGE SHALL BE 3,600 CF PER ACRE OF CONTRIBUTORY DRAINAGE. MINIMUM VOLUMES AND OUTLET SIZES FOR EACH TRAP ARE LISTED IN THE SEDIMENT TRAP SCHEDULE SHOWN ABOVE.

6. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACE ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.

7. STONE USED IN THE OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCH RIP–RAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACE ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.

8. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE–HALF OF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.

9. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.

10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.

11. THE STRUCTURE SHALL BE REMOVED AND AREA BROUGHT TO FINAL GRADE AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

12. DRAINAGE AREA FOR THIS PRACTICE IS LIMITED TO 15 ACRES OR LESS.

13. SEDIMENT TRAPS SHALL MEET THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE (7)

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-630-9614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Erosion Prevention and Sediment Control Details (1)

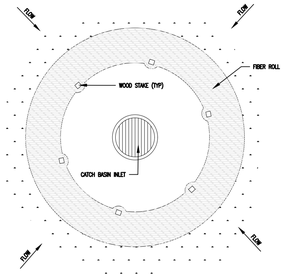
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	NTS
Date:	7/8/2024

C3.2

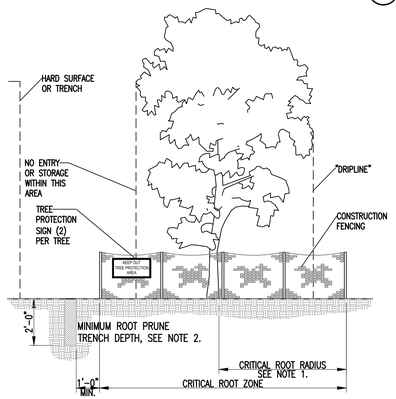
S:\PROJECTS\0-2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE DETAILS.DWG

PLOTTED: 7/8/2024 9:26 AM



FIBER ROLL INLET PROTECTION DETAIL

1

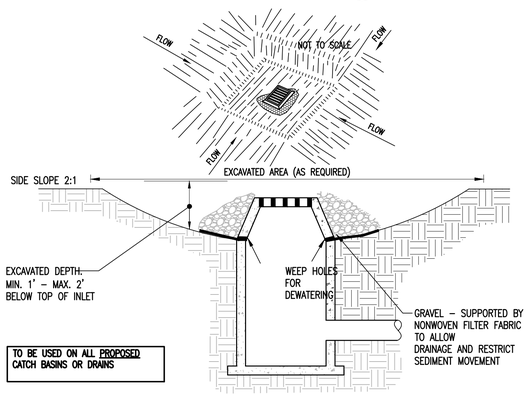


TREE PROTECTION NOTES:

1. TO CALCULATE THE CRITICAL ROOT RADIUS, ESTIMATE THE TREE'S HEIGHT AND MULTIPLE BY 40 PERCENT (0.40). THE RESULT IS THE APPROXIMATE DISTANCE FROM THE TREE TRUNK TO THE EDGE OF THE CONSTRUCTION FENCING.
2. FENCE SPECIMEN TREES AND GROUPS OF TREES. WHERE ROOF LOSS WILL OCCUR, ROOT PRUNE ONE FOOT BEYOND THE CONSTRUCTION FENCE USING A VIBRATING KNIFE OR NARROW TRENCHER – ALWAYS WITH SHARP BLADES TO MAKE CLEAN CUTS. BACKFILL IMMEDIATELY AND COVER WITH 3 INCHES OF MULCH.
3. INSTALL SILT FENCE ON THE INTERIOR OF THE CONSTRUCTION FENCING TO KEEP SOIL FROM DISTURBED AREAS OUT OF THE ROOT ZONES OF TREES TO BE SAVED.
4. FERTILIZE, WATER, AERATE AND OTHERWISE AID TREE HEALTH.
5. COORDINATE THE FINAL LOCATION OF THE CONSTRUCTION FENCING AND ROOT PRUNING WITH THE OWNER.

TREE PROTECTION DETAIL

2



TO BE USED ON ALL PROPOSED CATCH BASINS OR DRAINS

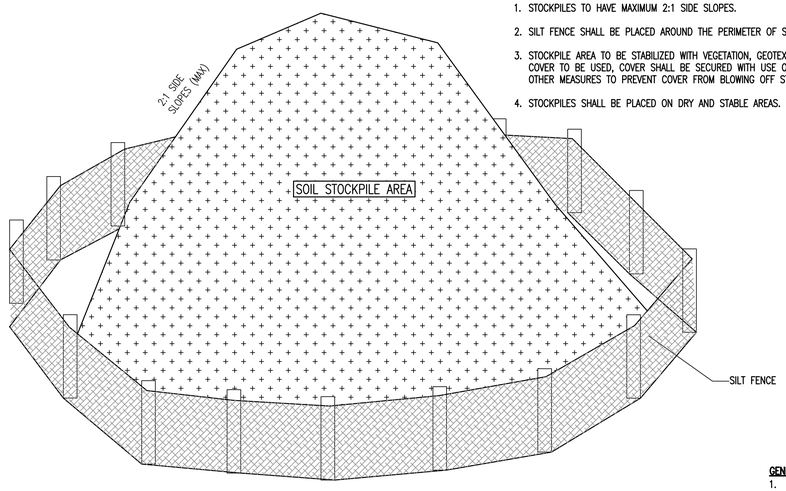
CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
5. GRAVEL BAGS, GRATE GUARDS, FILTREXX OR SEDIGUARD INLET PROTECTION DEVICES MAY BE USED. SUBMIT PRODUCT INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE VT EPSC STANDARDS AND SPECIFICATIONS.

EXCAVATED STORM DRAIN INLET PROTECTION DETAIL

NOT TO SCALE

3



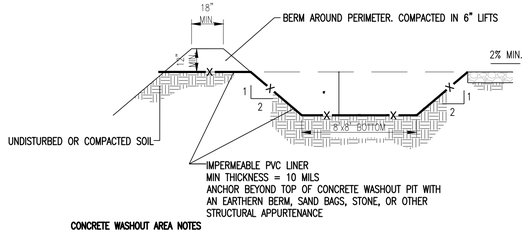
STOCKPILE NOTES

1. STOCKPILES TO HAVE MAXIMUM 2:1 SIDE SLOPES.
2. SILT FENCE SHALL BE PLACED AROUND THE PERIMETER OF STOCKPILE AREA.
3. STOCKPILE AREA TO BE STABILIZED WITH VEGETATION, GEOTEXTILE, OR COVER. IF COVER TO BE USED, COVER SHALL BE SECURED WITH USE OF SAND BAGS OR OTHER MEASURES TO PREVENT COVER FROM BLOWING OFF STOCKPILE.
4. STOCKPILES SHALL BE PLACED ON DRY AND STABLE AREAS.

TEMPORARY SOIL STOCKPILE AREA DETAIL

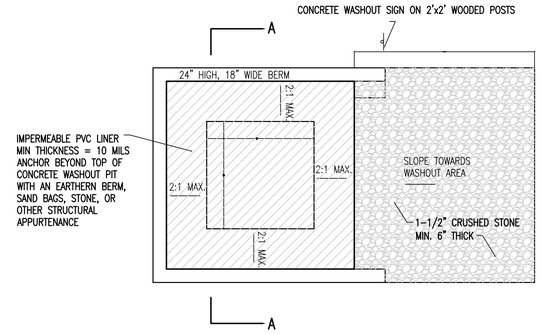
SCALE: NONE

4



CONCRETE WASHOUT AREA NOTES

1. ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED/REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHOULD BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP.
2. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF-SITE.
3. DISPOSE OF THE HARDENED MATERIAL OFF-SITE IN AN APPROPRIATE FACILITY. ON-SITE DISPOSAL MAY BE ALLOWED IF THIS HAS BEEN APPROVED AND ACCEPTED AS PART OF THE PROJECTS SWPPP. IN THAT CASE, THE MATERIAL SHALL BE RECYCLED AS SPECIFIED, OR BURIED AND COVERED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED EARTHFILL THAT IS PERMANENTLY STABILIZED TO PREVENT EROSION.
4. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
5. INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS.
6. IN LIEU OF CONCRETE WASHOUT AREA, A PRE-FABRICATED WASHOUT MAY BE USED. CONTRACTOR SHALL SUBMIT SHOP DRAWING OF SUCH PRE-FABRICATERD WASHOUT AREA TO DESIGN ENGINEER FOR REVIEW AND APPROVAL.



CONCRETE TRUCK WASHOUT AREA

SCALE: NONE

5

WINTER EROSION CONTROL NOTES

WINTER CONSTRUCTION PROCEDURES

1. DURING WINTER CONSTRUCTION, INSPECTIONS BY THE ON-SITE PLAN COORDINATOR SHALL OCCUR DAILY WHEN AREAS ARE UN-STABLE, AND WEEKLY PRIOR TO ANY FORECASTED RAIN, THAW OR SPRING MELT WHEN TEMPORARY STABILIZATION IS IN PLACE.

2. IN AREAS TO BE STABILIZED BY VEGETATION, ALL SEEDING MUST BE COMPLETED BY SEPTEMBER 15 TO ALLOW GROWTH TO OCCUR PRIOR TO THE GROUND FREEZING. STABILIZATION OF ALL OTHER DISTURBED AREAS SHALL BE COMPLETED BY OCTOBER 15.

3. ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING SHALL BE INSTALLED.

4. LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.

5. SNOW WILL NOT BE PILED WITHIN 25 FEET OF PERIMETER CONTROLS (SUCH AS SILT FENCE) TO ALLOW FOR CLEARING AND MAINTENANCE. SNOW IS TO BE REMOVED FROM ALL STRUCTURAL EROSION PREVENTION AND SEDIMENTATION CONTROL MEASURES FOLLOWING EACH SIGNIFICANT SNOWFALL. NO SNOW STORAGE UP-GRADIENT OF DISTURBANCE. NO SNOW DISPOSAL IN SEDIMENT PONDS/BASINS. IF NECESSARY, SNOW/ICE MUST BE REMOVED PRIOR TO STABILIZATION OF DISTURBED AREAS. ACCESS POINTS SHALL BE ENLARGED AND STABILIZED TO ALLOW FOR SNOW STOCKPILING.

6. IN AREAS OF DISTURBANCE WITHIN 100 FT OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.

7. DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.

8. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TO BE IN PLACE BY OCTOBER 15, OR IF NOT POSSIBLE, THEN PRIOR TO GROUND FREEZE.

9. MULCH IS TO BE APPLIED AT THE END OF EACH WORKDAY TO ALL EXPOSED AREAS THAT HAVE NOT YET REACHED FINAL GRADE AT TWICE THE RATE INDICATED IN THE SEEDING AND MULCHING DETAIL FOR THE REGULAR CONSTRUCTION SEASON. MULCH SHALL BE TRACKED IN OR STABILIZED WITH NETTING.

10. TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
    A) IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
    B) DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS HOUSE FOUNDATIONS OR OPEN UTILITY TRENCHES.

11. SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1" THICKNESS PRIOR TO STABILIZATION.

12. STONE STABILIZATION, 10 TO 20 FT WIDE IN AREAS SUCH AS THE PERIMETER OF BUILDINGS UNDER CONSTRUCTION WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED SHALL BE INSTALLED.

GENERAL EROSION CONTROL NOTES

1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON-SITE FROM DAY-TO-DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS DISTURBED, THE DISTURBANCE SHALL BE KEPT TO THE SHORTEST PRACTICAL DURATION AS APPROVED BY THE OWNER'S REP.
3. DUST SHALL BE CONTROLLED WITH WATER DISTRIBUTED BY A TRUCK MOUNTED SPRAY BAR. CALCIUM CHLORIDE(AASHTO M 144) OR SODIUM CHLORIDE (AASHTO M 143) SHALL BE USED AS DIRECTED BY THE OWNER'S REP.
4. ALL EROSION AND STORMWATER CONTROL SYSTEMS SHALL BE INSPECTED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE OCCURRENCE OF A STORM EVENT OF 0.5" OR GREATER. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS THEY ACCUMULATE AND PLACED IN AREAS WHERE FURTHER EROSION IS UNLIKELY.
5. A REPORT, STAMPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, SHALL BE WRITTEN WITHIN 24 HOURS OF EACH INSPECTION THAT:
    A) DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;
    B) IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND
    C) INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT; AND
6. RETAIN A COPY OF THE REPORT PREPARED PURSUANT TO (5), ABOVE, ON-SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL, STATE, AND LOCAL OFFICIALS
7. ALL PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
8. DETENTION BASINS AND SWALES SHALL BE INSTALLED PRIOR TO ROUGH GRADING THE SITE.
9. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
10. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    – BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
    – A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    – A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
    – EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
13. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
14. THE APPLICANT SHALL NOTIFY IN WRITING DES WETLANDS BUREAU AND THE LEBANON CONSERVATION COMMISSION OF THEIR INTENTION TO COMMENCE CONSTRUCTION NO LESS THAN FIVE (5) BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
15. APPROPRIATE SILTATION/EROSION/TURBIDITY CONTROLS SHALL BE IN PLACE PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND REMAIN IN PLACE UNTIL THE AREA IS STABILIZED. SILT FENCE(S) MUST BE REMOVED ONCE THE AREA IS STABILIZED.
16. DISCHARGE FROM DEWATERING OF WORK AREAS SHALL BE TO SEDIMENT BASINS THAT ARE:
    A) LOCATED IN UPLANDS;
    B) LINED WITH HAY BALES OR OTHER ACCEPTABLE SEDIMENT TRAPPING LINERS;
    C) SET BACK AS FAR AS POSSIBLE FROM WETLANDS AND SURFACE WATERS, IN ALL CASES WITH A MINIMUM OF 20 FEET OF UNDISTURBED VEGETATED BUFFER.
17. WITHIN THREE DAYS OF FINAL GRADING, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED BY SEEDING AND MULCHING DURING THE GROWING SEASON, OR IF NOT WITHIN THE GROWING SEASON, BY MULCHING WITH TACK OR NETTING AND PINNING ON SLOPES STEEPER THAN 3:1.
18. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED WITHIN THE GROWING SEASON, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY SEEDING AND MULCHING.
19. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED OUTSIDE THE GROWING SEASON, ALL EXPOSED AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY MULCHING AND TACK. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED BY MATTING AND PINNING.
20. PROPER HEADWALLS SHALL BE CONSTRUCTED WITHIN SEVEN DAYS OF CULVERT INSTALLATION.

EROSION CONTROL CONSTRUCTION SEQUENCE:

1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON SITE FROM DAY TO DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. HOLD PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION, WITH THE CONTRACTOR, OWNER, AND ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL EROSION CONTROL MEASURES DELINEATED ON THE PLANS AND ANY ADDITIONAL MEASURES THAT ARE NECESSARY TO MINIMIZE EROSION. THE CONTRACTOR SHALL HAVE EROSION CONTROL MATERIALS AND INSTALLATION EQUIPMENT ON SITE AT ALL TIMES.
3. IF POSSIBLE, ALL TEMPORARY EROSION CONTROL MEASURES REQUIRED FOR WORK PROPOSED DURING THE WINTER (BETWEEN OCTOBER 15 AND MAY 1), SHALL BE INSTALLED PRIOR TO OCTOBER 1.
4. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
5. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
6. INSTALL INLET PROTECTION ON EXISTING AND NEW CATCH BASINS.
7. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
8. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
9. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
10. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

TEMPORARY/CONSTRUCTION EROSION CONTROL MEASURES:

1. SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE PLANS. THESE SHALL REMAIN IN PLACE UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
2. INSTALL STONE CHECK DAMS IN GRASS-LINED SWALES 50 FEET ON CENTER TO PREVENT SILT FROM WASHING INTO THE DRAINAGE SYSTEM DURING CONSTRUCTION. SEDIMENT SHALL BE REMOVED FROM BEHIND THE DAMS WHEN IT BECOMES 6 INCHES DEEP. STONE CHECK DAMS SHALL BE REMOVED WHEN VEGETATION IS ESTABLISHED.
3. DROP INLET PROTECTION SHALL BE PROVIDED AROUND ALL EXISTING AND PROPOSED CATCH BASINS. PROTECTION SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. SEDIMENT SHALL BE REMOVED FROM DROP INLET PROTECTION WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN IT NO LONGER DRAINS PROPERLY.
4. EXCAVATED MATERIAL FROM EARTH EXCAVATION AND DITCH DIGGING SHALL BE DISPOSED OF OFFSITE OR USED FOR PROJECT FILL MATERIAL IF DETERMINED SUITABLE BY THE OWNER'S REPRESENTATIVE.
5. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC.) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.

PERMANENT EROSION CONTROL MEASURES:

1. GRASS LINED SWALES SHALL BE TOP SOILED, SODDED AND FERTILIZED AREAS WHICH EXHIBIT SIGNS OF EROSION SHALL BE RE-SODDED IMMEDIATELY AND MAINTAINED UNTIL SOD HAS PERMANENT HOLD AND IS HEALTHY.
2. WHEN CONSTRUCTION IS COMPLETED IN AN AREA, IT SHALL BE IMMEDIATELY TOP SOILED, SEEDED, FERTILIZED AND MULCHED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF ALL DISTURBED AREAS, INCLUDING WATERING, UNTIL THE AREA IS INSPECTED AND ACCEPTED BY THE OWNER OR ENGINEER.
4. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
5. RE-SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STRAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE CONTAINS A VERDUROUS STAND OF GRASS. AREAS THAT, IN THE OPINION OF THE ENGINEER, ARE PREDOMINATELY WEEDS SHALL BE PLOWED UP, FINE GRADED, FERTILIZED AND RE-SEEDED IN THE MANNER SPECIFIED PREVIOUSLY, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-630-9614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Erosion Prevention and Sediment Control Details (2)

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	NTS
Date:	7/8/2024

C3.3

S:\PROJECTS\0-2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE DETAILS.DWG

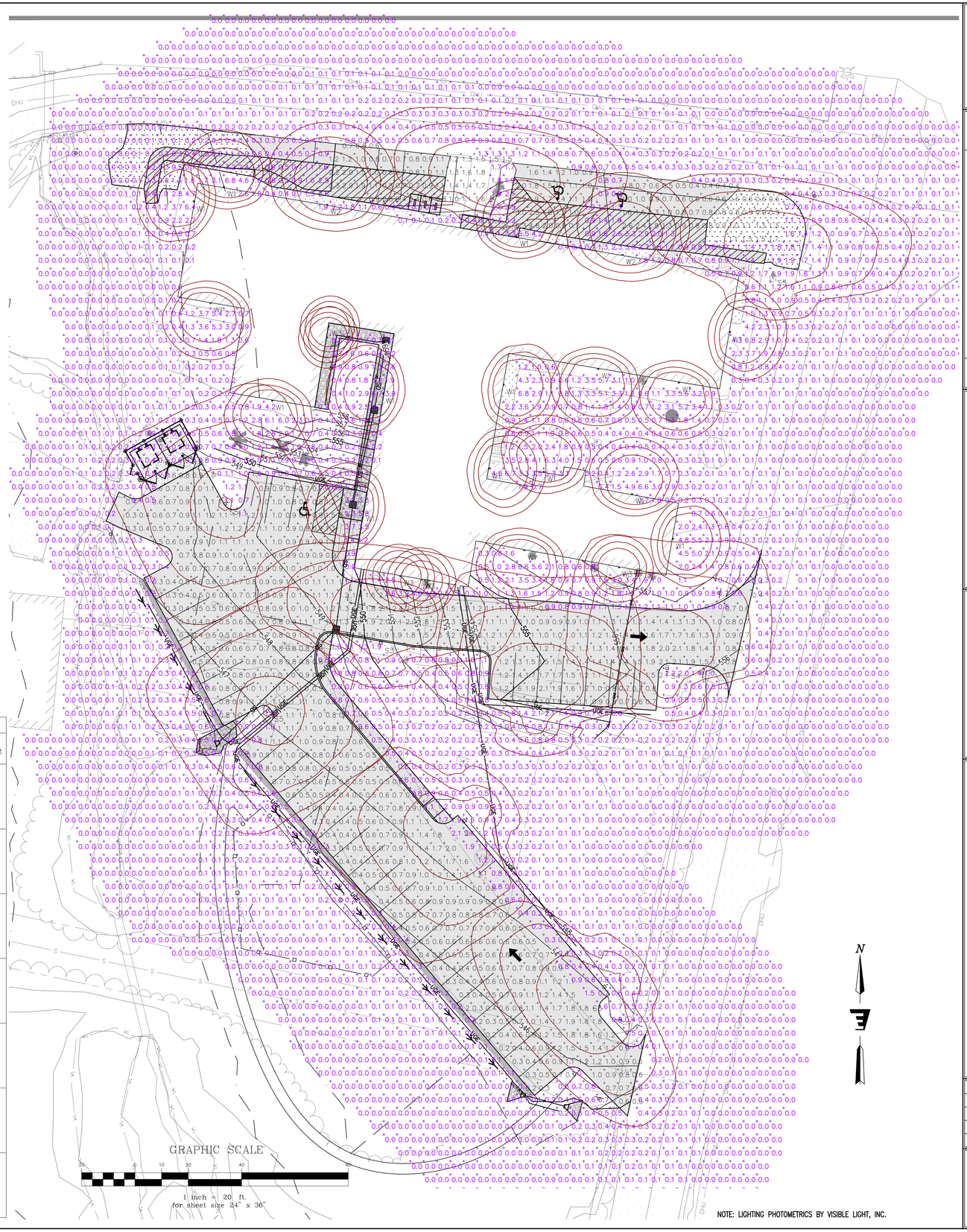
PLOTTED: 7/8/2024 8:19 AM

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Large Parking Lot	+	0.9 fc	3.4 fc	0.2 fc	17.0:1	4.5:1
Outside of Parking Lots	+	0.4 fc	8.8 fc	0.0 fc	N/A	N/A
Small Parking Lot	+	1.2 fc	6.3 fc	0.4 fc	15.8:1	3.0:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens per Lamp	LLF	Wattage	Distribution	Polar Plot
	S2	1	Lithonia Lighting	DSX0 LED P1 30K 80CRI T2M MVOLT HS SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 2 Medium Houseside Shield; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_T2M_HS.ies	3580	0.9	33.21	TYPE III, MEDIUM, BUG RATING: B1 – U0 – G2	
	S3	3	Lithonia Lighting	DSX0 LED P1 30K 80CRI T3M MVOLT HS SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 3 Medium; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_T3M.ies	4173	0.9	33.21	TYPE IV, MEDIUM, BUG RATING: B1 – U0 – G2	
	S4	3	Lithonia Lighting	DSX0 LED P1 30K 80CRI TFTM MVOLT SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Forward Throw; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_TFTM.ies	4265	0.9	33.21	TYPE IV, SHORT, BUG RATING: B1 – U0 – G2	
	S5	2	Lithonia Lighting	DSX0 LED P1 30K 80CRI T5M MVOLT SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 5 Medium; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_T5M.ies	4358	0.9	33.21	TYPE VS, BUG RATING: B3 – U0 – G1	
	W1	16	Lithonia Lighting	ARC1 LED P1 30K MVOLT DDBXD	ARC1 LED WITH P1 – PERFORMANCE PACKAGE, 3000K; mounted at 8ft	LED	ARC1_LED_P1_30K.ies	1376	0.9	10.8751	TYPE III, VERY SHORT, BUG RATING: B0 – U0 – G0	
	W2	2	Lithonia Lighting	ARC1 LED P2 30K MVOLT DDBXD	ARC1 LED WITH P2 – PERFORMANCE PACKAGE, 3000K; mounted at 14ft	LED	ARC1_LED_P2_30K.ies	2035	0.9	16.7843	TYPE III, VERY SHORT, BUG RATING: B1 – U0 – G1	
	W3	5	Brownlee Lighting Inc	7317 BZ B06 WHA 30K	Shore Sconce; mounted at 7ft	LED	7317-B12-CLA-35K.ies	1607	0.4	6		



NOTE: LIGHTING PHOTOMETRICS BY VISIBLE LIGHT, INC.

Stamp

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Sheet Title: Site Photometrics Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

PH1

S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE PHOTOMETRICS.DWG

DRAFT

20' 10' 0' 20' 40'

SCALE: 1" = 20FT

NORTH

REMOVE PORTIONS OF EXISTING ASPHALT PARKING (SEE CIVIL PLANS)

2 SPIRAEA SHRUBS TO REMAIN

REMOVE EXISTING EVERGREEN TAXUS FOUNDATION SHRUBS

EXISTING ASPHALT WALKWAYS TO REMAIN TYP. (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING OF EXISTING TREES TO REMAIN

EXISTING CONCRETE RAMPWAY TO REMAIN (SEE ARCHITECTURAL PLANS)

EXISTING CONCRETE WALKWAY TO REMAIN (SEE CIVIL PLANS)

REMOVE EXISTING (OVERGROWN) JUNIPER SHRUBS TYPICAL

EXISTING PROPOANE TANKS REMOVED (SEE CIVIL PLANS)

EXISTING DRIVEWAY TO REMAIN (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING OF EXISTING TREES TO REMAIN

EXISTING SIGN TO BE REMOVED

EXISTING DECK TO BE REMOVED

EXISTING FLAGPOLE TO REMAIN

EXISTING LADDER

REMOVE EXISTING EVERGREEN TAXUS FOUNDATION SHRUBS

EXISTING PROPOANE TANKS REMOVED (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING OF EXISTING TREES TO REMAIN

REMOVE PORTIONS OF EXISTING ASPHALT PARKING (SEE CIVIL PLANS)

EXISTING ASPHALT WALKWAY TO REMAIN

SITE LIGHTING TO REMAIN SEE CIVIL PLANS FOR SITE LIGHTING UPGRADES

REMOVE EXISTING EVERGREEN TAXUS FOUNDATION SHRUBS

EXISTING PERENNIAL PLANTINGS TO REMAIN

EXISTING WALKWAY AND RAMP TO REMAIN (SEE CIVIL PLANS)

EXISTING GAZEBO TO REMAIN

EXISTING PROPANE TANKS TO BE REMOVED (SEE CIVIL PLANS)

EXISTING FOUNDATION SHRUBS TO REMAIN AND/OR TRANSPLANTED

EXISTING PROPANE TANKS REMOVED (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING FOR EXISTING TREES TO REMAIN

SEE CIVIL PLANS FOR REPAVING AND LAYOUT OF PARKING AREA

Stamp

Rev. No.	Description	Chkd.

ParkArchitecture.com
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Tel: 603-643-3400 Mobile: 617-905-0487
Email: parkarchitecture@gmail.com

Client:
12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Existing Conditions & Site Preparation Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L1.0

EXISTING LANDSCAPING FEATURES TO REMAIN:

EXISTING GAZEBO AND FLAGPOLE (TO REMAIN)

BUILDING FOUNDATION LANDSCAPING ADDED (SEE L2.0)

EXISTING PERENNIAL PLANTINGS (TO REMAIN)

EXISTING PERIMETER TREES AND PLANTINGS (TO REMAIN)

OVERGROWN JUNIPER PLANTINGS (TO BE REMOVED)

ENTRY PARKING AND LANDSCAPING RENOVATED (SEE L2.0)

Stamp

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Client:
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603-727-9024

Sheet Title: Existing Conditions

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
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Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L1.1

DRAFT

20' 10' 0' 20' 40'

SCALE: 1" = 20FT

NORTH

LAWN AREA
4 BLACK-EYED SUSAN
1 MULCH BED
1 ARMSTRONG MAPLE
LAWN AREA
1 WINTERBERRY
LAWN AREA
STEEL EDGING AND MULCHED BED
2 EXISTING SPIREA SHRUBS TO REMAIN
LAWN AREA
4 BLACK-EYED SUSAN
5 INKBERRY SHRUBS
7 PURPLE CONEFLOWER
3 WITCH HAZEL
3 ELDERBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
ASPHALT WALKWAY (SEE CIVIL PLANS)
2 HIGHBUSH BLUEBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
1 HEMLOCK
1 MAPLELEAF VIBURNUM
NE WILDFLOWER MIXTURE 700 SF
1 MAPLELEAF VIBURNUM
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
2 HEMLOCK
4 SPICE BUSH
2 ARMSTRONG MAPLE
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
5 RED CHOKEBERRY
1 WINTERBERRY
2 CLUMP RIVER BIRCH
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
4 ELDERBERRY
1 STRAIGHT DOG TUNNEL
INCLUDE PERVIOUS PEASTONE GRAVEL MIX WITHIN ENTIRE DOG RUN AREA ± 2000SF
2 LILAC
3 REDTWIG DOGWOOD
2 OCTOBER GLORY MAPLE
4FT WIDE STONEDUST PATH
LAWN AREA
5 BLACK-EYED SUSAN
EXISTING RAMP
5 RED TWIG DOGWOOD
3 WHITE CEDARS
5 PJM RHODODENDRON
MULCH BED AREA
2 MUGO PINE SHRUBS
ENTRY
3 MUGO PINE SHRUBS
9 PURPLE CONEFLOWER
6 PURPLE CONEFLOWER
16 DWARF FOUNTAIN GRASS
3 MUGO PINES
2 EXISTING RUGOSA ROSE TO REMAIN
9 DWARF FOUNTAIN GRASS
14 BLACK-EYED SUSAN
9 DWARF FOUNTAIN GRASS
BBQ GRILL (SEE DETAIL)
LAWN AREA
EXISTING QUINCE SHRUB TO REMAIN
4 DWARF FOUNTAIN GRASS
PROPOSED LAWN AREA
EXISTING SPIRAEA SHRUB TO REMAIN
2 WTCH HAZEL
NE WILDFLOWER MIXTURE 1600 SF
BUILDING
2 MAPLELEAF VIBURNUM
6 FORSYTHIA
9 BLACK-EYED SUSAN
ENTRY
5 PJM RHODO
CONC. WALK (SEE CIVIL PLANS)
PARKING
LAWN AREA
3 AMERICAN WITCH HAZEL
7 DWARF FOUNTAIN GRASS
1 ARMSTRONG MAPLE
12 DWARF FOUNTAIN GRASS
EXIT
BUILDING
4FT WIDE STONE DUST PATH
PET WASTE STATION
CONC. WALK (SEE CIVIL PLANS)
4FT WIDE GATES TYP.
SEATING BENCH
1 DOG A-FRAME (SEE DETAILS)
LAWN AREA
1 CURVED DOG TUNNEL (SEE DETAILS)
4FT HIGH BLACK VINYL CHAIN LINK FENCE
LAWN AREA
SWALE (SEE CIVIL PLANS)
2 OAKLEAF HYDRANGEA
ENTRY
MULTI-PURPOSE LAWN AREA FOR ACTIVE AND PASSIVE PARK USE
STEEL EDGING AND MULCHED BED
PROPOSED LAWN AREA (SEE CIVIL PLANS)
EXISTING ASPHALT WALKWAY (SEE CIVIL PLANS)
3 FORSYTHIA
EXISTING PERENNIAL PLANTINGS TO REMAIN
1 OCTOBER GLORY MAPLE
EXISTING FLAGPOLE TO REMAIN
EXISTING GAZEBO STRUCTURE TO REMAIN
4 WINTERBERRY HOLLY
STEEL EDGING AND MULCHED BED WITH CLEAR ACCESS TO BUILDING UTILITIES
4 COMPACT INKBERRY SHRUBS
1 OCTOBER GLORY MAPLE
LAWN AREA
3 HIGHBUSH BLUEBERRY
NE WILDFLOWER MIXTURE 1800 SF
1 STAR MAGNOLIA TREE
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
3 OCTOBER GLORY MAPLE
LAWN AREA
3 FORSYTHIA
1 RIVER BIRCH
3 FORSYTHIA
1 LILAC
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES

Stamp

Rev. No.	Description	Chkd.

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Client:
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603-727-9024

Sheet Title: Site Landscape Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L2.0

DRAFT

20' 10' 0' 20' 40'

SCALE: 1" = 20FT

NORTH

LAWN AREA
4 BLACK-EYED SUSAN
1 MULCH BED
1 ARMSTRONG MAPLE
LAWN AREA
1 WINTERBERRY
LAWN AREA
STEEL EDGING AND MULCHED BED
2 EXISTING SPIREA SHRUBS TO REMAIN
LAWN AREA
4 BLACK-EYED SUSAN
5 INKBERRY SHRUBS
7 PURPLE CONEFLOWER

3 WITCH HAZEL
3 ELDERBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
ASPHALT WALKWAY (SEE CIVIL PLANS)
2 HIGHBUSH BLUEBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
1 HEMLOCK
1 MAPLELEAF VIBURNUM
NE WILDFLOWER MIXTURE 700 SF
1 MAPLELEAF VIBURNUM
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
2 HEMLOCK
4 SPICE BUSH
2 ARMSTRONG MAPLE

STEEL EDGING AND MULCHED BED
PROPOSED LAWN AREA (SEE CIVIL PLANS)
EXISTING ASPHALT WALKWAY (SEE CIVIL PLANS)
3 FORSYTHIA
EXISTING PERENNIAL PLANTINGS TO REMAIN
1 OCTOBER GLORY MAPLE
EXISTING FLAGPOLE TO REMAIN
EXISTING GAZEBO STRUCTURE TO REMAIN
4 WINTERBERRY HOLLY
STEEL EDGING AND MULCHED BED WITH CLEAR ACCESS TO BUILDING UTILITIES
4 COMPACT INKBERRY SHRUBS
1 OCTOBER GLORY MAPLE
LAWN AREA

LAWN AREA
5 BLACK-EYED SUSAN
EXISTING RAMP
5 RED TWIG DOGWOOD
3 WHITE CEDARS
5 PJM RHODODENDRON
MULCH BED AREA
2 MUGO PINE SHRUBS
ENTRY
9 PURPLE CONEFLOWER
3 MUGO PINE SHRUBS
6 PURPLE CONEFLOWER
16 DWARF FOUNTAIN GRASS
3 MUGO PINES
2 EXISTING RUGOSA ROSE TO REMAIN
9 DWARF FOUNTAIN GRASS
14 BLACK-EYED SUSAN
9 DWARF FOUNTAIN GRASS
BBQ GRILL (SEE DETAIL)
LAWN AREA
EXISTING QUINCE SHRUB TO REMAIN
4 DWARF FOUNTAIN GRASS
PROPOSED LAWN AREA
EXISTING SPIRAEA SHRUB TO REMAIN
2 WTCH HAZEL
NE WILDFLOWER MIXTURE 1600 SF
BUILDING
LAWN AREA
2 MAPLELEAF VIBURNUM
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9 BLACK-EYED SUSAN
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CONC. WALK (SEE CIVIL PLANS)
PARKING
LAWN AREA
3 AMERICAN WITCH HAZEL
7 DWARF FOUNTAIN GRASS
1 ARMSTRONG MAPLE
12 DWARF FOUNTAIN GRASS
EXIT
BUILDING

PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
5 RED CHOKEBERRY
1 WINTERBERRY
2 CLUMP RIVER BIRCH
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
4 ELDERBERRY
1 STRAIGHT DOG TUNNEL
INCLUDE PERVIOUS PEASTONE GRAVEL MIX WITHIN ENTIRE DOG RUN AREA ± 2000SF
2 LILAC
3 REDTWIG DOGWOOD
2 OCTOBER GLORY MAPLE
4FT WIDE STONEDUST PATH

3 HIGHBUSH BLUEBERRY
NE WILDFLOWER MIXTURE 1800 SF
1 STAR MAGNOLIA TREE
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
3 OCTOBER GLORY MAPLE
LAWN AREA
3 FORSYTHIA
1 RIVER BIRCH
3 FORSYTHIA
1 LILAC
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES

4FT WIDE STONE DUST PATH
PET WASTE STATION
CONC. WALK (SEE CIVIL PLANS)
4FT WIDE GATES TYP.
SEATING BENCH
1 DOG A-FRAME (SEE DETAILS)
LAWN AREA
1 CURVED DOG TUNNEL (SEE DETAILS)
4FT HIGH BLACK VINYL CHAIN LINK FENCE
SWALE (SEE CIVIL PLANS)
LAWN AREA
2 OAKLEAF HYDRANGEA
MULTI-PURPOSE LAWN AREA FOR ACTIVE AND PASSIVE PARK USE
ENTRY

Stamp

Rev. No.	Description	Chkd.

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Client:
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603-727-9024

Sheet Title: Site Landscape Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L2.0
(color version)

PROPOSED PLANT MATERIAL IMAGES:

RED CHOKEBERRY

ELDERBERRY

ELDERBERRY

WITCHHAZEL

PURPLE LILAC

M. VIBURNUM

HIGHBUSH BLUEBERRY

SPICEBUSH

BLACK-EYED SUSAN

OAKLEAF HYDRANGEA

INKBERRY SHRUB

PJM RHODODENDRON

WINTERBERRY

WINTERBERRY

RED TWIG DOGWOOD

RED TWIG DOGWOOD

FORSYTHIA

MUGHO PINE

DWARF FOUNTAIN GRASS

LANDSCAPE NOTES

1. THE NUMBER OF EACH INDIVIDUAL PLANT TYPE AND SIZE IS PROVIDED IN THE PLANT LIST FOR CONTRACTORS CONVENIENCE ONLY. IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS ON THE LIST AND THE NUMBER SHOWN ON THE DRAWING, THE GREATER NUMBER SHALL APPLY.

2. THE CONTRACTOR SHALL SUPPLY PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN.

3. ALL PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE PRIOR TO ARRIVAL ON SITE.

4. ALL PLANT BEDS WILL BE TOP-DRESSED WITH 3" SHREDDED BARK MULCH.

5. THE CONTRACTOR SHALL LOCATE AND MARK ALL UTILITIES PRIOR TO PLANTING. ANY CONFLICTS BETWEEN PLANTING AND UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE OWNER SO THAT ALTERNATIVE PLANTING LOCATIONS CAN BE DETERMINED.

7. NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER OR LANDSCAPE ARCHITECT.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTS AGAINST DAMAGE FROM ON-GOING CONSTRUCTION. PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL FORMAL ACCEPTANCE OF ALL PLANTINGS.

9. ALL OTHER DISTURBED AREAS NOT OTHERWISE INDICATED SHALL BE LOAMED AND SEEDED.

10. CONTRACTOR SHALL PRESERVE EXISTING TREES AND EXISTING PLANTINGS WHERE INDICATED.

11. CONTRACTOR SHALL PROVIDE A 2-YEAR GUARANTEE ON ALL INSTALLED PLANT MATERIAL.

12. ALL PROPOSED TREES SHALL BE PLACED A MINIMUM OF 10FT FROM EXISTING AND PROPOSED UTILITIES.

13. ALL TREES SPECIFIED WILL BE OF GOOD QUALITY AND IN COMPLIANCE WITH THE MOST RECENT EDITION OF ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORT.

14. SPECIAL ATTENTION SHALL BE PAID TO THE SITE PREPARATION AND SOILS FOR ALL PLANTING AREAS TO ENSURE THE HEALTH AND VIGOROUS GROWTH OF PLANTINGS (ESPECIALLY TREES AND SHRUBS). CONTRACTOR SHALL PROVIDE ADEQUATE SOIL VOLUME AS DEPICTED IN THE TREE AND SHRUB PLANTING DETAILS HEREIN.

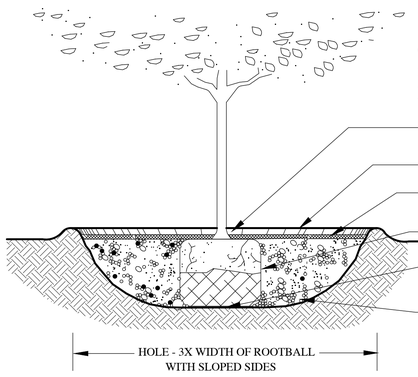
15. SEE CIVIL PLANS FOR LOCATION OF SNOW STORAGE AREAS

LANDSCAPE PLANTING SCHEDULE

QTY	BOTANICAL NAME	COMMON NAME	SIZE	RIPARIAN VARIETY
DECIDUOUS TREES				
7	ACER RUBRUM OCTOBER GLORY	*OCTOBER GLORY RED MAPLE*	2.5" – 3" CALIPER	X
4	ACER X FREEMANII 'ARMSTRONG'	*COLUMNAR RED MAPLE*	2.5" – 3" CALIPER	X
3	BETULA NIGRA	*CLUMP RIVER BIRCH*	CLUMP 10'–12' HT.	X
1	MAGNOLIA STELLATA	*STAR MAGNOLIA*	60"–72" HT, B&B	
EVERGREEN TREES				
3	THUJA CANADENSIS	*CANADIAN HEMLOCK*	8'–10' HT. B&B	X
3	THUJA OCCIDENTALIS	*NORTHERN WHITE CEDAR*	8'–10' HT. B&B	X
SHRUBS				
8	HAMAMELIS VIRGINIANA	*AMERICAN WITCH HAZEL*	30"–36" HT, 7 GAL	X
4	VIBURNUM ACERIFOLIUM	*MAPLELEAF VIBURNUM*	30"–36" HT, 7 GAL	X
5	VACCINIUM CORYMBOSUM	*HIGHBUSH BLUEBERRY*	30"–36" HT, 7 GAL	X
4	LINDERA BENZOIN	*SPICEBUSH*	24"–30" HT, 5 GAL	X
6	ILEX VERTICILLATA 'WINTER RED'	*WINTER RED WINTERBERRY*	24"–30" HT, 5 GAL	X
8	CORNUS SERICEA	*RED TWIG DOGWOOD*	24"–30" HT, 5 GAL	X
7	SAMBUCUS CANADENSIS	*ELDERBERRY*	24"–30" HT, 5 GAL	X
5	ARONIA ARBUTIFOLIA	*RED CHOKEBERRY*	24"–30" HT, 5 GAL	X
2	HYDRANGEA QUERCIFOLIA	*OAKLEAF HYDRANGEA*	30"–36" HT, 7 GAL	
10	RHODODENDRON 'PJM ELITE'	*PJM RHODODENDRON*	24"–30" HT, 5 GAL	
9	ILEX GLABRA 'COMPACTA'	*COMPACT INKBERRY*	24"–30" HT, 5 GAL	
3	SYRINGA VULGARIS	*COMMON PURPLE LILAC*	30"–36" HT, 7 GAL	
15	FORSYTHIA X INTERMEDIA	*FORSYTHIA*	24"–30" HT, 5 GAL	
8	PINUS MUGO	*MUGO PINE*	18"–24" HT, 7 GAL	
PERENNIALS				
57	PENNISETUM ALOPECUROIDES	*DWARF FOUNTAIN GRASS*	12"–18" HT, 2 GAL	
27	RUDBECKIA FULGIDA	*BLACK EYED SUSAN*	12"–18" HT, 2 GAL	
22	ECHINACEA PURPUREA	*PURPLE CONEFLOWER*	12"–18" HT, 2 GAL	

TREE PLANTING DETAIL

NOT TO SCALE



LANDSCAPE CONTRACTOR TO PROVIDE A 2 YEAR GUARANTEE ON ALL TREE AND SHRUB PLANTINGS.

GUARANTEE PERIOD BEGINS FOLLOWING 100% COMPLETION OF THE WORK AND FINAL SIGN-OFF BY THE LANDSCAPE ARCHITECT DURING THE CONSTRUCTION ADMINISTRATION PHASE.

TRUNK FLARE - PLANT 1 - 2" ABOVE EXISTING OR FINISHED GRADE

MIN. 6" SAUCER

3" SHREDDED BARK MULCH

REMOVE BURLAP FROM TOP HALF OFF ROOTBALL

ROOTBALL SITS DIRECTLY ON UNDISTURBED SOIL

PLANTING SOIL MIXTURE

NOTE:
REMOVE BURLAP ROPE AND WIRE FROM TOP & SIDES OF ALL BALLS. ADD MULCH AS SHOWN ON PLAN

NE WILDFLOWER SEED MIX SPECS

NORTHEAST NATIVE WILDFLOWER SEED MIXTURE PLANTED IN AREAS SHOWN ON LANDSCAPE PLAN

NORTHEAST WILDFLOWER SEED MIXTURE TO CONTAIN A MAJORITY OF > 67% PERENNIAL VARIETIES TO INSURE GROWTH OF WILDFLOWER VEGETATION IN SUCCESSIVE YEARS.

NEWP.COM/SEED-MIXES OR APPROVED EQUAL

SLOPE PLANTING TYPE	QTY	SIZE
Custom Blend of Northeast Native Wildflower Mixture	± 5,000 SF	SEED MIX

NE WILDFLOWER MIXTURE

PROPOSED TREES:

NOT TO SCALE

OCTOBER GLORY

FREEMAN MAPLE

CLUMP RIVER BIRCH

WHITE CEDAR

CANADIAN HEMLOCK

STAR MAGNOLIA

Stamp

Rev. No.	Description	Chkd.

ParkArchitecture.com
3 School House Lane, Suite #1 Etna NH 03750
Tel: 603-643-3400 Mobile: 617-905-0497
Email: parkarchitecture@gmail.com

Client:
12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Landscape Details

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
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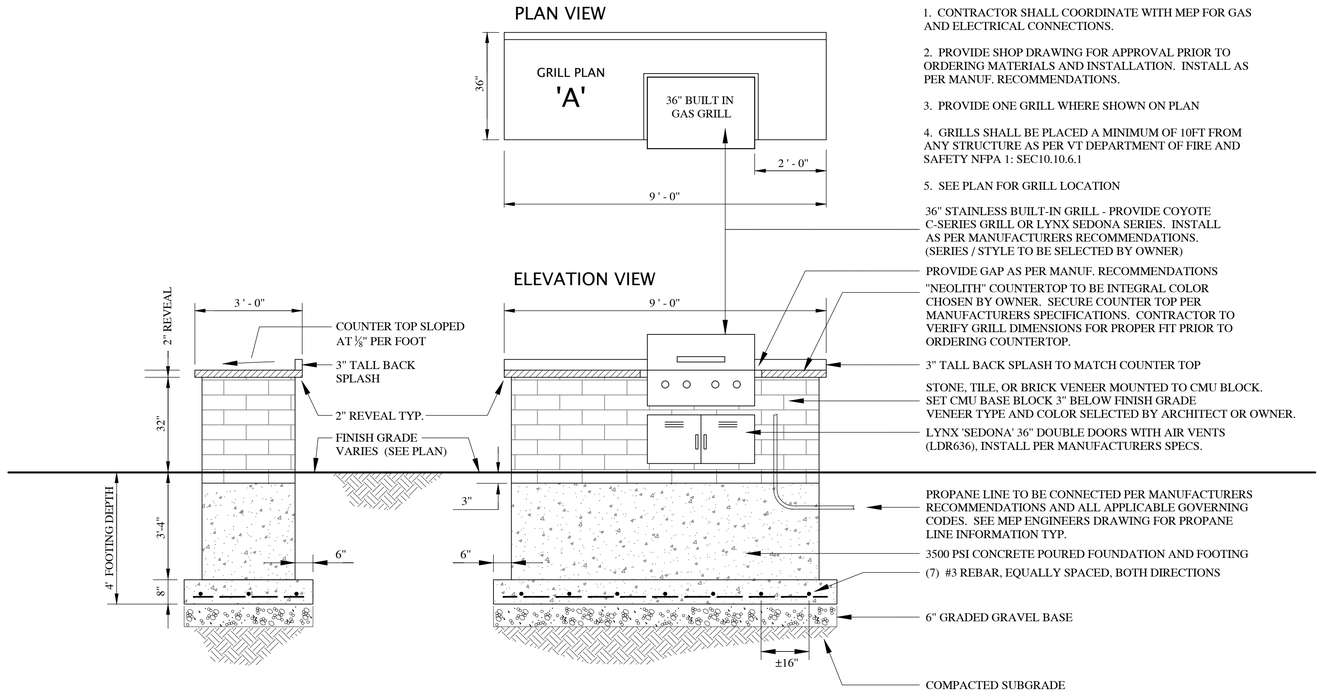
L3.0

BBQ – GRILL COUNTER

NOT TO SCALE



GENERAL NOTES:

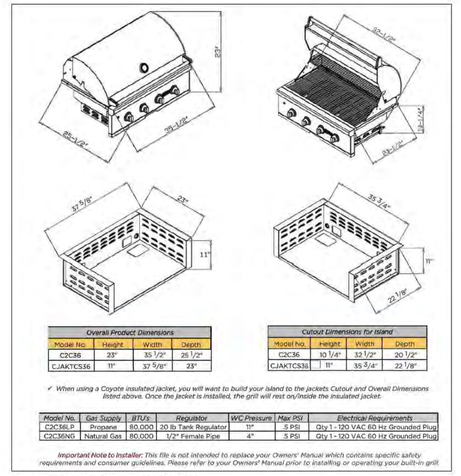
1. CONTRACTOR SHALL COORDINATE WITH MEP FOR GAS AND ELECTRICAL CONNECTIONS.

2. PROVIDE SHOP DRAWING FOR APPROVAL PRIOR TO ORDERING MATERIALS AND INSTALLATION. INSTALL AS PER MANUF. RECOMMENDATIONS.

3. PROVIDE ONE GRILL WHERE SHOWN ON PLAN

4. GRILLS SHALL BE PLACED A MINIMUM OF 10FT FROM ANY STRUCTURE AS PER VT DEPARTMENT OF FIRE AND SAFETY NFPA 1: SEC10.10.6.1

5. SEE PLAN FOR GRILL LOCATION



1. Install per manufacturer's specifications

COYOTE C-SERIES 4 BURNER GAS GRILL

Coyote C Series 36" Built In Gas Grill - C2C36

Overall Dimensions: 23" H x 35 ½" W x 25 ½" D
Cutout Dimensions: 10 ¼" H x 32 ½" W x 20 ½" D

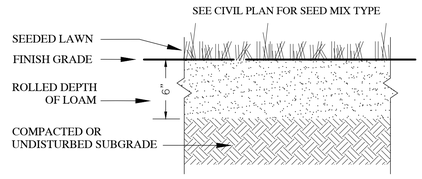
Features:

- Premium 304 Stainless Steel Construction
- (4) high-performance Coyote Infinity Burners™
- 875 square inches of cooking area
- Up to 80,000 BTU of output
- LED interior lighting

INSTALL COYOTE GRILL MODEL# CJAKTCS36 WITH INSULATED JACKET

TURF PLANTING DETAIL

NOT TO SCALE



NOTES:

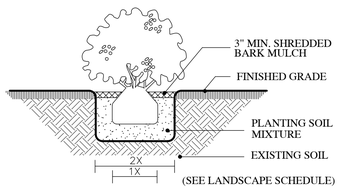
SEED ALL IDENTIFIED AREAS FOR LAWN AND ALL DISTURBED AREAS WITHIN 48 HOURS OF FINAL GRADING. SEED AFTER APRIL 15TH AND BEFORE SEPTEMBER 15TH IN ORDER TO ESTABLISH BEFORE FREEZING TEMPERATURES.

CONTRACTOR IS RESPONSIBLE TO WATER AND ESTABLISH SEEDED LAWN AREAS. WARRANTY SHALL BE 9 WEEKS FOLLOWING INSTALLATION PERIOD.

CONTRACTOR TO INCLUDE NECESSARY TOUCH-UP / RESEEDING FOR ANY AREAS WHERE GRASS SEED DOES NOT GERMINATE DURING THE WARRANTY PERIOD.

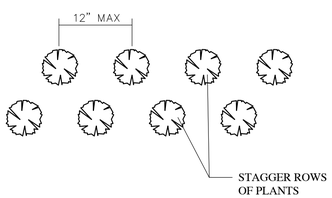
SHRUB PLANTING DETAIL

NOT TO SCALE



GROUNDCOVER SPACING

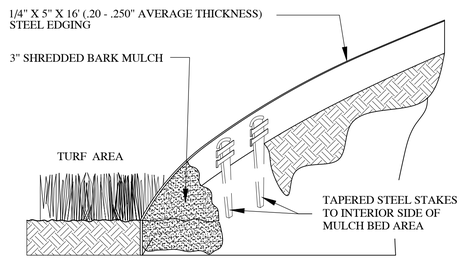
NOT TO SCALE



STEEL LANDSCAPE EDGING

NOT TO SCALE

STEEL LANDSCAPE EDGING AS MANUFACTURED BY:
SURE-LOC ALUMINUM EDGING CORPORATION - HOLLAND MI
TEL: 1-800-787-3562 OR APPROVED EQUAL



NOTES:

INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SEE LANDSCAPE PLAN FOR LOCATION OF LAWN VS. MULCHED BED AREAS AND PLACEMENT OF STEEL EDGING.

CONTRACTOR TO PROVIDE SHOP DRAWING TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO MATERIALS ORDERING AND INSTALLATION.

6FT LONG SEATING BENCH

SCALE: NTS

NOTES:

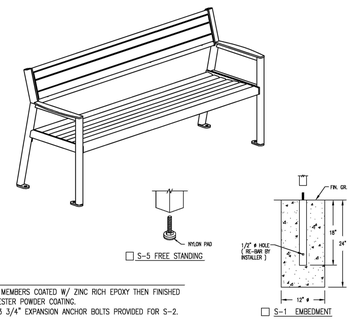
1. INSTALL MODEL 500-60HS 6FT STEEL BENCH WITH STEEL SEAT. WITH BLACK POWDER COATED FINISH.

2. SEE PLAN FOR LOCATION OF BENCHES

3. MANUFACTURER SHALL BE DUMOR OR APPROVED EQUAL.

4. CONTRACTOR SHALL INSTALL / SECURE BENCH WITH EMBEDED FOOTING AS PER MANUFACTURER SPECIFICATIONS.

5. CONTRACTOR TO PROVIDE SHOP DRAWING TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIALS AND INSTALLATION.



Stamp

Chkd.

Description

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77 Bank Street
Lebanon, New Hampshire
603-727-9024

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Hartford, Windsor County, Vermont

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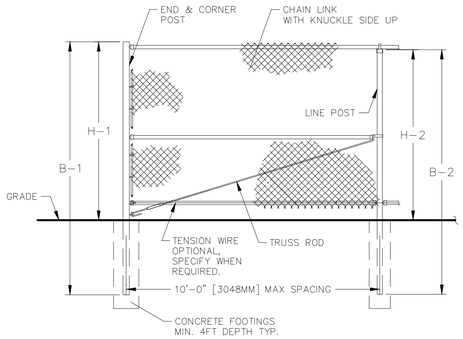
L3.1

BLACK VINYL CLF INSTALLATION DETAIL

NOT TO SCALE

SEE LANDSCAPE AND CIVIL PLANS FOR LOCATIONS OF 4' CLF AND 6' CLF



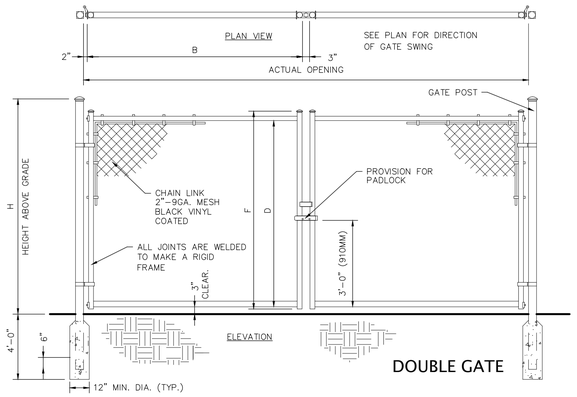
NOTES:

1. SEE PLAN FOR LOCATION AND LENGTH OF PROPOSED FENCING. (BEGIN / END CLF LABELS)
2. ALL CHAIN LINK FABRIC SHALL BE BLACK VINYL COATED.
3. ALL POSTS, BARS, RODS & HARDWARE SHALL BE BLACK POWDER COATED STEEL FENCE.
4. CONTRACTOR SHALL INCLUDE TOP AND BOTTOM RAILS ON ALL FENCING.
5. MANUFACTURER SHALL BE ANCHOR FENCE OR APPROVED EQUAL.
6. INSTALL FABRIC WITH KNUCKLE SIDE UP AND POINTED END DOWN.
7. CONTRACTOR TO PROVIDE SHOP DRAWING TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIALS AND INSTALLATION.

FENCE HEIGHT	END & CORNER POSTS		LINE POSTS	
NOMINAL HEIGHT	B-1 BAR LENGTH	H-1 HEIGHT ABOVE GRADE	B-2 BAR LENGTH	H-2 HEIGHT ABOVE GRADE
4'-0" [1219MM]	6'-0" [1829MM]	4'-0 5/8" [1219MM]	8'-8" [2642MM]	3'-8 7/8" [1117MM]
6'-0" [1829MM]	9'-0" [2743MM]	6'-0 5/8" [1845MM]	8'-8" [2642MM]	5'-8 7/8" [1749MM]

CHAIN LINK FENCE GATE DETAIL

NOT TO SCALE



DOUBLE GATE

QTY	GATE TYPE	NOMINAL HEIGHT (H)	ACTUAL (F)	ACTUAL (D)	OPENING (B)
2	SINGLE	4'-0"	3'-10"	3'-8 1/2"	4'-0"
0	DOUBLE	4'-0"	3'-10"	3'-8 1/2"	6'-0"

ALL POSTS, TUBULAR STEEL INCLUDING RAILS, HARDWARE AND LOCKING MECHANISM SHALL BE POWDER COATED STEEL, PAINTED BLACK (TWO COATS).

ALL GATES SHALL INCLUDE HINGES AND LATCH HARDWARE

FABRIC SURROUNDING PERIMETER OF DOG RUN AREA SHALL BE BLACK 9GA. MESH BLACK VINYL COATED WITH TOP AND BOTTOM RAILS THROUGHOUT.

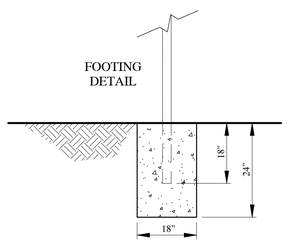
SEE PLAN FOR 4FT WIDE GATE LOCATIONS.

TOP OF CONC. SONOTUBE FOOTINGS SHALL BE RECESSED 4 TO 6 INCHES FROM FINISHED GRADE.

PROVIDE SHOP DRAWING FOR APPROVAL FOR ALL PRODUCT MANUF. MATERIALS AND CONSTRUCTION DETAILS PRIOR TO ORDERING AND INSTALLATION.

DOG PARK WASTE STATION

NOT TO SCALE

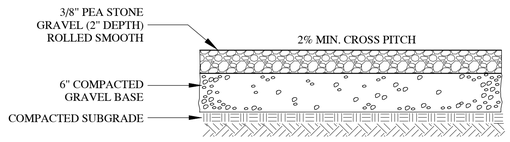


NOTES:

1. ADMIRAL DOG WASTE STATION. OR APPROVED EQUAL.
2. COLOR: GREEN; DISPENSER TYPE: ROLL
3. TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
4. SEE PLAN FOR LOCATION OF PROPOSED WASTE STATIONS.

PEA STONE GRAVEL (IN DOG RUN AREA)

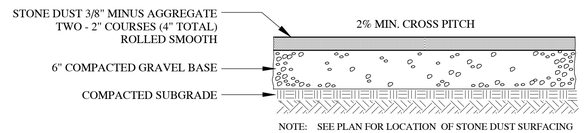
NOT TO SCALE



NOTE: SEE PLAN FOR LOCATION OF PEA STONE GRAVEL

STONE DUST PAVEMENT

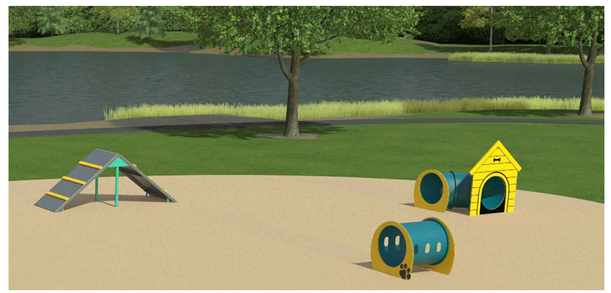
NOT TO SCALE



NOTE: SEE PLAN FOR LOCATION OF STONE DUST SURFACING

DOG RUN EQUIPMENT

NOT TO SCALE



NOTES:

1. PROVIDE ONE A-FRAME STRUCTURE, ONE CURVED DOG TUNNEL AND ONE STRAIGHT TUNNEL. (3 DOG PARK COMPONENTS IN TOTAL) BY LANDSCAPE STRUCTURES OR APPROVED EQUAL.
2. COLORS: TO BE SELECTED BY OWNER
3. TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
4. SEE PLAN FOR LOCATION OF PROPOSED DOG PARK ITEMS.
5. PROVIDE SHOP DRAWING TO OWNER & LANDSCAPE ARCHITECT FOR REVIEW & APPROVALS
6. WEBSITE: WWW.SHAPEDBYPLAY.COM

Stamp

Rev. No.	Description	Chkd.

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PA Project #	2423
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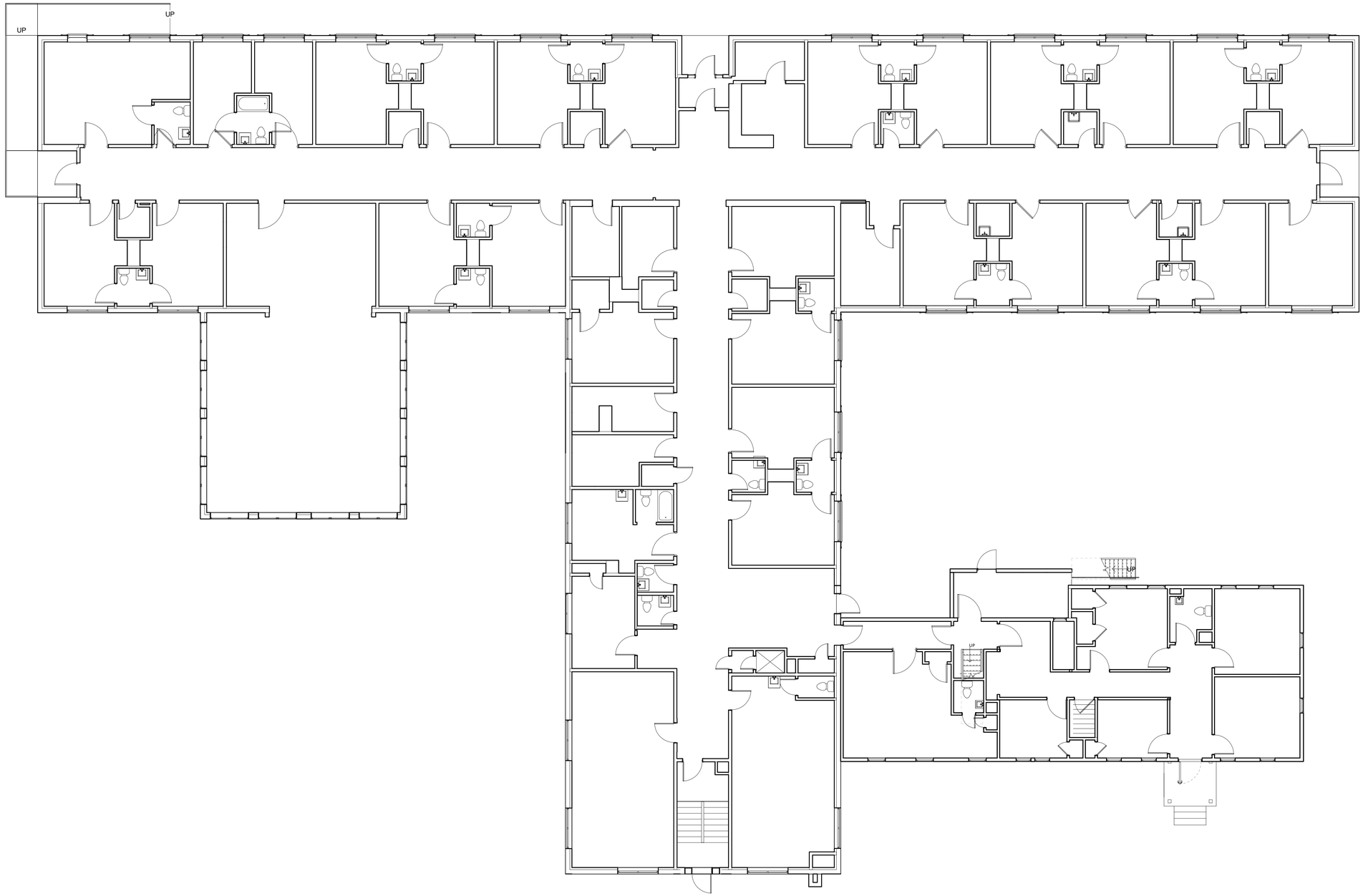
L3.2



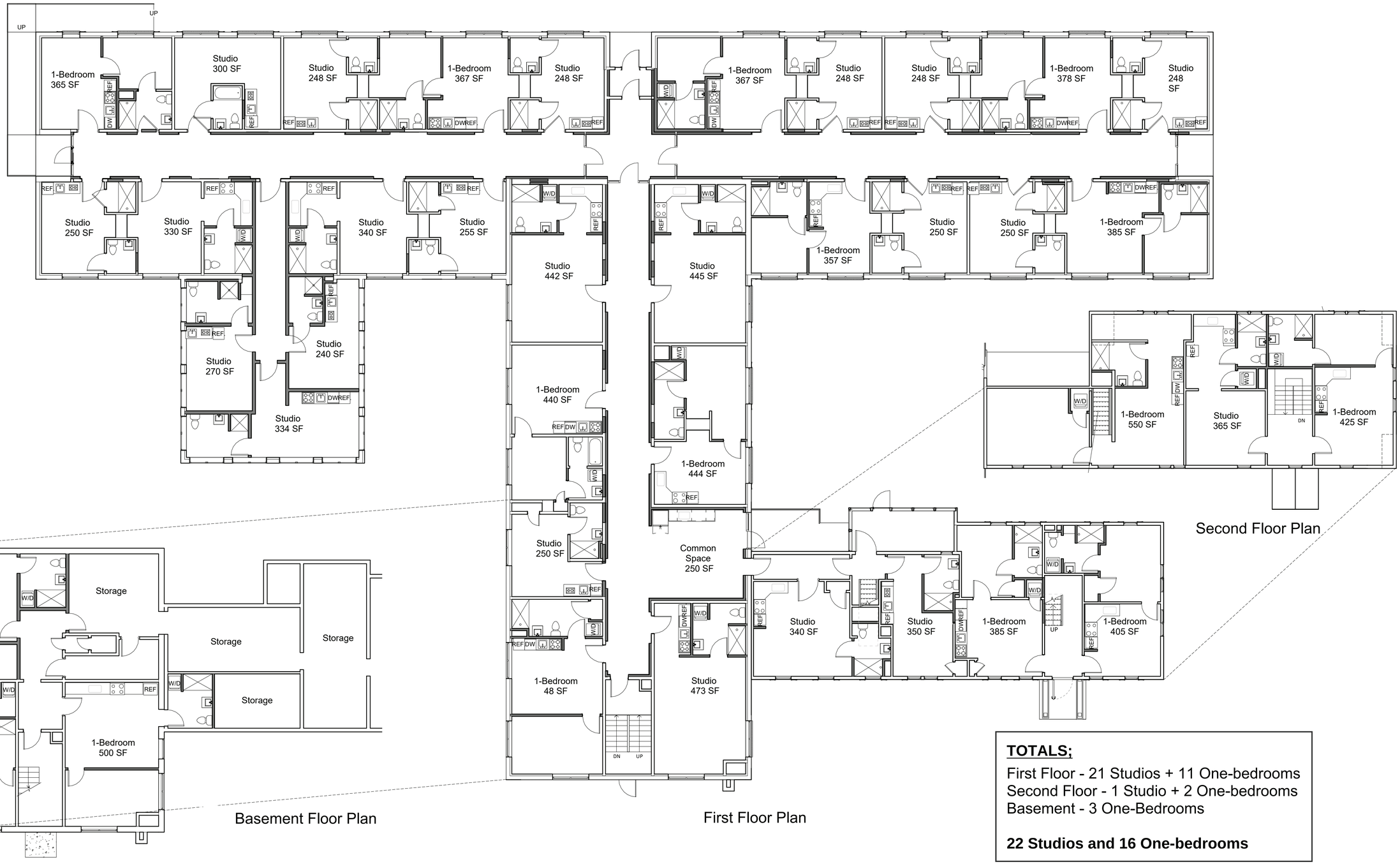
STUDIO NEXUS
ARCHITECTS + PLANNERS
PO Box 275, White River Junction VT 05001
802 275 5110 | www.studionexusarch.com

12 Tremont Street, LLC
Brookside Apartments

PROJECT NORTH

0' 4' 8'

Existing Floor Plan
SD1
June 24, 2024
1/8" = 1'-0"



TOTALS;

First Floor - 21 Studios + 11 One-bedrooms
Second Floor - 1 Studio + 2 One-bedrooms
Basement - 3 One-Bedrooms

22 Studios and 16 One-bedrooms

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12 Tremont Street, LLC
Brookside Apartments

PROJECT NORTH

0' 4' 8'

Proposed Floor Plans

SD2

June 24, 2024

1/8" = 1'-0"

View from Christian Street

View from Christian Street

View from Christian Street

Community Space

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12 Tremont Street, LLC
Brookside Apartments

Renderings
SD3
June 24, 2024

DRAFT
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND DECISION

HARTFORD PLANNING COMMISSION

Application #24-12 by 12 Tremont Street, LLC and Tim Sidore
for Site Development Plan Approval
to convert an existing structure into a Multi-Unit Dwelling
lot 09-0072-000, 1200 Christian Street, Hartford, in a Planned Development

This decision pertains to application #24-12 by 12 Tremont Street, LLC (owner) and Tim Sidore (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations to convert an existing structure into a Multi-Unit Dwelling, lot 09-0072-000, 1200 Christian Street, Hartford, in a Planned Development.

FINDINGS OF FACT

Based upon the information contained in the exhibits for this application (see attached list) and the evidence adduced at the Planning Commission meeting of July 29, 2024 the Planning Commission makes the following Findings of Fact:

General Information

1. The owner of record of lot 09-0072-000 is 12 Tremont Street, LLC, who acquired the lot on 08-17-23. The deed is recorded in volume 614, page 623 of the Hartford Land Records.

2. The lot is developed with the former “Brookside Nursing Home” including a garage.

3. The lot is approximately 3.95 acres.

4. The lot is located at 1200 Christian Street.

5. The lot abuts Christian Street on one side and Brookside Drive on two sides.

6. The lot is class one (1), municipal water and wastewater.

This Application

7. The applicant proposes to convert the existing building to 38 dwelling units comprised of 22 studio units and 16 one-bedroom units. The existing garage is proposed to be used for maintenance associated with the property.

   According to the applicant, "the building itself will feature generous 8' wide, skylit hallways; near the main south entry a small community lounge space looks out onto the courtyard. The apartments, though small, will be well appointed with quality materials and fixtures. The walls, with their concrete block structure, minimize sound transmission and will keep the apartments quiet. Laundry facilities will be provided in some apartments and in publicly accessed laundry rooms. The high-ceiling basement will provide additional tenant storage and depending on demand, could be repurposed to provide exercise and game room space." (See exhibit #6)

8. The lot is in an R-3 zoning district. Multi-unit dwellings are not allowed in the R-3 zoning district.

   The Zoning Regulations allow the Planning Commission to approve multi-unit dwelling as a Planned Development.

   In May of 2024, the applicant obtained preliminary approval of a Planned Development. The applicant has applied for final approval of the Planned Development (application #24-11).

   This application (#24-12) is conditioned on the approval of the Planned Development by the Planning Commission.

9. The Planning Commission has the authority to grant a density bonus under 260-47 (C) of the Zoning for Planned Developments so long as the total number of such dwelling units does not exceed one hundred twenty-five (125) percent of the permitted number of units.

   22 dwelling units are possible based on the density calculation in the R-3 zoning district (172,062/8,000= 21.5)[1]

   28 dwelling units are possible with a density bonus under 260-47 C. (22 X 1.25 = 27.5)

   In 2023, the Vermont Legislature enacted Act 47 "An act relating to housing opportunities made for everyone."

[1] Hartford Zoning Regulations, § 260-18, Dwelling unit density**.** In every case, the Administrative Officer shall determine the maximum number of dwelling units permitted on any lot by dividing the lot size, provided by a survey (furnished by the owner and sealed by a Vermont registered land surveyor), by the minimum area per dwelling unit. standards for the district in which the lot is located. In all cases such determination shall be rounded to the nearest whole number.

24 V.SA. 4412 (13) states:

In any area served by municipal sewer and water infrastructure that allows residential development, bylaws shall permit any Affordable Housing Development, as defined in subdivision 4303(2) of this title, including mixed-use development, to exceed density limitations for residential developments by an additional 40 percent, which shall include exceeding maximum height limitations by one floor, provided that the structure complies with the Vermont Fire and Building Safety Code.

24 V.S.A. § 4303 (2) defines Affordable Housing Development as a housing development of which at least 20 percent of the units or a minimum of five units, whichever is greater, are affordable housing units. Affordable units shall be subject to covenants or restrictions that preserve their affordability for a minimum of 15 years or longer as provided in municipal bylaws.

24 V.S.A. 4303 (B) defines Affordable Housing Units as:

Rental housing for which the total annual cost of renting, including rent, utilities, and condominium association fees, does not exceed 30 percent of the gross annual income of a household at 80 percent of the highest of the following:
(i) the county median income, as defined by the U.S. Department of Housing and Urban Development;
(ii) the standard metropolitan statistical area median income if the municipality is located in such an area, as defined by the U.S. Department of Housing and Urban Development; or
(iii) the statewide median income, as defined by the U.S. Department of Housing and Urban Development.

The applicant seeks to develop Affordable Housing Development, meeting the requirements outlined above. Therefore, 39 units are possible (28 x 0.40=11.2)
(28+11=39)

According to the applicant, they "pledge to designate 40% of the units as 'affordable/workforce housing,' based on 24 V.S.A. 4412 (13) , 24 V.S.A. § 4303 (2), and 24 V.S.A. 4303 (B)." Given this, 15 of the units will be "Affordable" as defined above. (38 x 0.40=15.2)

10. As outlined in the Master Plan for the Planned Development, "Greater than 50% of the development will remain in open space, as defined by Hartford Zoning Regulations for public and or common usage."

11. Project Access

Christian Street

The applicant proposes to continue use of the curb cuts on Christian Street for access.

The applicant proposes to restrict use of the southern curb cut on Christian Street to an entrance only and restrict use of the northern curb cut on Christian Street to an exit only.

Brookside Drive

The applicant proposes to restrict use of the existing curb cut on the west side of the lot from Brookside Drive to maintenance and emergency vehicles. A gate will be installed to prevent access from this curb cut to the remainer of the lot.

The applicant will coordinate access to the gate with the Hartford Fire Department.

The applicant understands that the curb cuts/driveway entrances need to be improved to meet the Hartford Transportation Ordinance.

(See exhibit #2)

12. According to the applicant, they have reached out to Advance Transit regarding a bus stop near the project. To date, they have not received a response.

13. Section 260-25 B of the Zoning Regulations, Protection of Surface waters states:

> A riparian buffer shall be maintained for a minimum of 100 feet from the top of the bank of the Connecticut, Ottauquechee and White Rivers, or for a minimum of 30 feet from the edge of a stream or any other surface water identified on the most recent edition of the Hartford G.I.S. Natural Resources Map. The riparian buffer also includes the area between the river and the top of the bank. No development, excavation, filling, clearing or grading shall occur within the buffer without conditional use approval from the Zoning Board of Adjustment except as specified in Subsections D and E.

There is a stream on the lot is identified on the most recent edition of the Hartford G.I.S. Natural Resources Map.

The riparian buffer will be managed in accordance with sections 260-25 D and 260-25 E of the Zoning Regulations.

The applicant proposes to install a dumpster pad and stormwater management in the riparian buffer.

According to the applicant, "the dumpster pad encroaches by approximately 280 sf +/-, all other disturbed areas within the riparian buffer are part of existing parking areas to be maintained as parking and minor disturbances for stormwater management, a VT ANR wetland permit will be required for this and other work in the wetland buffer.

The dumpster pad will be made of concrete and is sloped so that the run-off runs away from the wetlands to a stabilized outfall.

The location of the dumpster is the best possible location given the site constraints and proximity to existing parking areas. Other locations on the site would constrain emergency vehicle access and reduce parking. Disturbed areas will be replanted with dense native vegetation, steep slopes will be stabilized with riprap and or biodegradable erosion control netting and restored with native vegetation. The erosion prevention and sediment control plan will be followed during construction in accordance with the VTDEC EPSC Handbook."

14. There are wetlands on the property. The wetlands and a 50' wetland buffer as required the State are shown on the plans.

According to the applicant, they "are in discussion with the Department of Environmental Services and will be applying for a wetlands permit if the project is approved. We agree in that DES will likely want minimal management of the forest here because of the nature of wetlands on this property. We have included riparian native VT species to add around the perimeter of the developed portion of the landscape as a measure to go back toward a natural environment within the wetland buffer areas. An additional column on the LA plan set was added to the plant list to indicate the riparian varieties."

15. According to the applicant, site amenities include "the natural beauty of the site with its brook, a pond, generous lawn and thick woods, as well as a small courtyard with a gazebo and outdoor cooking facilities. Existing trees and shrubs will be selectively pruned; a wide variety of new trees and shrubs and 3,400 SF of wildflowers will be planted. We would like to add a small, fenced-in area at the south end of the property, near to the culvert, creating a dog friendly park. The dog park will have a pea stone surface and a 6" gravel base to filter and contain dog waste." (See exhibit #2, landscape detail on L3.2)

16. The applicant has not submitted a professional traffic study.

According to the applicant, "Under our proposal, we are reducing density from the

previous 68 bed nursing home. Fewer people living onsite, and without all of the employees, caregivers and vendors, the parking and use of municipal resources will be significantly less. We usually have .8 cars/studio unit parked each night at our other all studio buildings, including our 69- unit apartment building at 132 S. Main Street in WRJ and our 43-unit building at 75 Bank Street—the former Lebanon Junior High.

Assuming a full occupancy at all times with 38 persons and no staff, the 8th Edition of the ITE Trip Generation Report calculates the project would generate **126 daily trips**.

According to that same ITE report, the prior 68-bed nursing home—with 12 staff on site at any one time-- would generate **209 daily trips**. The total of 12 staff is based on Federal rules issued 4/2024 that requires 3.48 hours of nursing/aide care per patient. This translates to 10 health staff *on average* on site at any one time for full occupancy; assuming an additional 2 maintenance staff, the total comes to 12 coming and going on 3 shifts per day, 7 days per week. (Note, according to the 2001 Federal Report on Staffing Standards, https://nursinghome411.org/federal-staffing-standard/, staffing for nurses and aides should total 4.1 hours per resident per day *to meet the bare minimum* for resident safety.)"

17. The Zoning Regulations require two parking spaces per unit, which results in a requirement of 76 parking spaces. (38 x 2 = 76)

The applicant is requesting that the Planning Commission approve a permanent reduction in the required parking spaces for the project from 76 to 46 including 3 accessible parking spaces.

Electrical conduit for future electric vehicle charging stations will be installed for forty parking spaces.

Section 260-24(9)(e) allows for modifications in the number of required parking spaces as follows to be approved by the Planning Commission as follows:

If, in site plan approval proceedings or at any time in the future after a duly warned hearing, the Planning Commission determines that unique usage or special conditions exist which warrant increasing or reducing the need for parking, it may require the provision of off-street parking spaces up to 50% more or less than the requirements in Subsection C(9)(a) above. In the Central Business District, the parking may be reduced beyond 50%. When approving an increase or reduction in any zoning district, the Planning Commission shall consider the following:

> [a] Is the site located on or within 1,000 feet of a transit route?
> [b] Are there shared parking facilities with abutting businesses which are sufficient to meet parking demand?

[c] For mixed-use projects, do the proposed uses have staggered business hours with minimal overlap?
[d] Does the type of business proposed generate substantial pedestrian traffic and are adequate pedestrian facilities present?
[e] Does an employer-sponsored "transit pass" program, or vanpool, carpool or rideshare program exist, or can one be established (as a condition of the approval) to substantially reduce the need for on-site parking?
[f] Is safe and adequate on-street parking available?
[g] Is parking in municipal parking lots available?
[h] Does the Institute of Traffic Engineers, American Planning Association or other professional source show parking demand requirements for the proposed use(s) that are different than the standards specified in these regulations?
[i] Is there other information that justifies a change in the parking requirements?

According to the applicant, the reduction request is based on the following:

- The applicant will provide an electric vehicle for shared use by tenants.

- This project will include more than one parking space per unit. Lease agreements will limit the number of parking spaces to one space per unit, and one vehicle per unit will be allowed to park onsite.

- Each dwelling units will have an assigned parking space.

- 24 V.S.A. ss. 4414 (4) (effective December 2024), states

  Parking and loading facilities. A municipality may adopt provisions setting forth standards for permitted and required facilities for off-street parking and loading, which may vary by district and by uses within each district. In any district that is served by municipal sewer and water infrastructure that allows residential uses, a municipality shall not require more than one parking space per dwelling unit. However, a municipality may require 1.5 parking spaces for duplexes and multiunit dwellings in areas not served by sewer and water and in areas that are located more than one-quarter mile away from public parking rounded up to the nearest whole number when calculating the total number of spaces. These bylaws may also include provisions covering the location, size, design, access, landscaping, and screening of those facilities. In determining the number of parking spaces for nonresidential uses and size of parking spaces required under these regulations, the appropriate municipal panel may take into account the existence or availability of employer “transit pass” and rideshare programs, public transit routes, and public parking spaces in the vicinity of the development.

18. According to the applicant, “We are providing 3 accessible parking spaces (2 by the accessible entrance on the north side and 1 for the units at the basement level) directly adjacent to the entries they serve. A nearly continuous walk is provided around the north, west and east sides of the building, continuing into the courtyard/gazebo/BBQ/deck area. In addition, a 5’ wide accessible pathway leads to the southernmost parking. A stonedust path leads to and around the dog park, the open and wooded areas to its south and the southeasternmost tip of the parking lot. As shown on the photometric plan, all seven building entries are well lit, including the primary entry on the south, and the courtyard on the east. Adequate but neighborhood sensitive lighting has been provided for the parking and drive aisles. There is parking for 6 bikes located adjacent to the north entry.”

19. The applicant proposes to delineate a loading/unloading area for delivery vehicles adjacent to the primary entrance to the building.

20. The applicant proposes to install bike racks on the north side of the building to accommodate six bikes.

21. The applicant provided a landscape plan.

    According to the applicant, “the project plans include a 2-year guarantee on all proposed landscape plantings. In addition, all varieties specified are VT native and hardy varieties that will thrive on their own once established. The owner has an in-house maintenance team that will provide regular landscape maintenance including mowing lawn areas, pruning, mulching beds annually, etc.”

    (See exhibit #2)

22. The applicant has provided a photometric plan.

    According to the applicant, “all fixtures will be dark- sky compatible.”

    The applicant understands that lighting must not create excessive off-site or sky glow. If the Zoning Administrative Officer determines that lighting does not meet this condition, the applicant will be required to comply.

    (See exhibit #2)

23. The applicant submitted turning movement plans. (See exhibit #2)

24. The applicant proposes to install a gate to restrict access from Brookside Drive to maintenance personnel and emergency vehicles.

25. According to the applicant, “a portion of stormwater runoff will be infiltrated into the ground and another portion will be treated in the grass swale with check dams along the

south edge of the parking area. Along Brookside Drive in front of the building overall impervious surface has been reduced.

Overall site impervious is expected to be increased by approximately 2,600 sf. Stormwater attenuation will be provided with underground stormwater detention chambers and infiltration. A curb will be provided along the south edge of pavement at the upper driveway off Christian St. to collect and treat runoff in the underground detention system. In addition, a portion of rooftop surfaces will also be collected in the same underground chamber system. Post development stormwater runoff rates are expected to be reduced upon completion of the stormwater management plan."

26. Section 260-27 C of the Hartford Zoning Regulations states:

C. Grading and drainage. The following provisions shall apply to any changes which affect drainage of water to or from a property:

(1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.
(2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development. When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.
(3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

According to the applicant, "Pursuant to section 260-27, part C of the Town of Hartford Zoning Regulations, the site grading has been designed so that runoff is directed to established drainage swales and curbing and will not cause ponding or flooding of other properties or exceed the capacity of downstream drainage facilities. The drainage system will be designed so that water runoff existing prior to site development will not be increased after development. All changes in grade will be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil."

27. The applicant proposes to connect to municipal water and sewer in accordance with Hartford's Water and Wastewater Rules and Regulations.

28. Snow will be stored on site and will be removed as needed. Snow will not be stored in such a manner as to create a hazard.

29. The applicant proposes to install a fenced dumpster area.

30. The applicant will schedule a preconstruction meeting with the DPW to review project schedule, design, and construction issues at least two weeks before actual site work commences.

31. The applicant understands that a permit from the DPW must be obtained before any work is done within the Town ROW.

32. During construction of the proposed project erosion and sediment control measures as specified in the most current edition of the *Low-Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed.

33. According to the applicant, the building will meet applicable Vermont Energy Code Standards. An Energy Code Certificate will be recorded in Hartford's Land Records before a Certificate of Occupancy will be issued.

34. Stockpiling of materials related to the construction of the project will be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary.

35. Construction trailers may be used on the condition that they are placed a minimum of ten feet from any property line, are placed only when there is an effective zoning permit for the project, and are removed before a Certificate of Occupancy is requested. No construction trailer may be placed in such a way that it obstructs sight distance along the traveled way, at any intersection or driveway. Any construction trailer found to obstruct sight distance will be required to be relocated immediately.

36. The applicant understands that no structure, signage, parking spaces or plantings may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any signs, parking spaces or plantings found to obstruct sight distance will be required to be relocated.

37. Construction of the project will comply with Section 260-31 B of the Hartford Zoning Regulations, which states:

> *Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations.*

38. The applicant understands that they retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.

39. The applicant understands that all activities authorized by the issuance of the zoning permit shall be started within six (6) months and completed within two (2) years of its date of issue, or the zoning permit shall become null and void and reapplication to complete any activities shall be required. Any activities not completed within the above

permit period shall be subject to any ordinance in effect at the time of reapplication. One six (6) month extension to both time periods may be granted by the Planning Commission.

40. The applicant understands that they must obtain a Certificate of Occupancy from the Zoning Administrative Officer upon completion of the project and before the site may be occupied. The applicant understands that a Certificate of Occupancy will not be issued if the project is not in compliance with these Findings, Plans and any conditions placed on the decision.

CONCLUSIONS OF LAW

Based upon the foregoing Findings of Fact, the Hartford Planning Commission concludes that the proposed site plan provides, as required by **§260-45 C** of the Hartford Zoning Regulations:

(1) Maximum safety of **traffic circulation between the site and the street network** and integration with the overall traffic pattern, including provisions for auxiliary roadways connecting with adjacent properties where appropriate. Included in this evaluation shall be the location, number and width of access points, curve radii at access points, acceleration or deceleration lanes on adjacent public streets, sight distances, lighting, location of sidewalks and other walkways, and the overall relationship of the proposed development with existing traffic conditions in the area. All modes of transportation shall be taken into account, including pedestrian, bicycle, handicapped, delivery and emergency vehicles and public transportation.

(2) Adequacy of **on site circulation, parking, and loading facilities,** with particular attention to safety. Included in this evaluation shall be traffic movement patterns, drive and aisle widths, directional signs, location of loading docks and parking areas, number and size of parking spaces, and provision for lighting, drainage, snow removal and access for emergency vehicles and public transportation.

(3) Adequacy of **landscaping, screening, and setbacks** in achieving maximum compatibility with and protection of adjacent properties by screening from them any glare produced by interior or exterior lights and unsightly areas such as storage areas, and parking lots; assurance that landscape materials will not interfere with visibility or safety and that they are of a type that can survive and be maintained as proposed.

(4) Adequacy of **provision for safety and convenience of pedestrians, bicyclists, and handicapped persons**. Included in this evaluation shall be lighting of walks and entrances, design and placement of walks and crosswalks, pick-up points for public transportation and provision of bicycle racks.

(5) **Protection of renewable energy resources,** including a finding that the proposed development does not adversely affect the ability of adjacent properties to use this form of energy.

(6) **Compliance with other provisions of these regulations** including § 260-27, Landscaping, and § 260-31, Land use performance standards.

(7) **Other** factors that are directly related to the above aspects of site plan review.

DECISION

The Hartford Planning Commission, based upon the forgoing Findings of Fact and Conclusions of Law, hereby approves application #24-12 by 12 Tremont Street, LLC (owner) and Tim Sidore (applicant) for Site Development Plan Approval under section 260-45 of the Hartford Zoning Regulations to convert an existing structure into a Multi-Unit Dwelling, lot 09-0072-000, 1200 Christian Street, Hartford, in a Planned Development **on the condition that:**

1. **Before a zoning permit is issued:**

   - **The applicant obtains final approval of the Planned Development from the Planning Commission and obtains a Zoning Permit to finalize the approval.**

   - **The applicant submits covenants/restrictions outlining compliance with 24 V.S.A. § 4303 (2) for review and approval by the Chair. The information must include a process for the applicant to demonstrate compliance on an annual basis, and include any guidance on compliance provided by the State. Once approved, the applicant must record the document in Hartford's Land Records and provide a copy to the Zoning Administrator.**

   - **The plans are amended to include a defined access route from the parallel parking spaces adjacent to Brookside Drive to the building's entrance for review and approval by the Chair.**

   - **The landscape plan is amended to correctly identify the location of the "mulch bed area" located on the western side of the building along Brookside Drive.**

   - **The applicant submits a copy of their water and wastewater Allocation from the DPW.**

   - **The plans are amended to include the charging station for the shared electric vehicle.**

   - **The applicant provides information from Advance Transit regarding their ability to add a bus stop near the project.**

   - **A final set of plans is submitted to the Zoning Administrator accompanied by verification from the applicant's Engineer, Landscape Architect, and Architect confirming that changes to the plans approved were limited to those required by the Zoning Board of Adjustment.**

2. **Before a Certificate of Occupancy is issued, the applicant submits to the Zoning Administrator:**

    - **Written verification from the Fire Department that the applicant has coordinated access to the gate with the Department.**

    - **Written verification from a Professional Engineer licensed by the State of Vermont certifying that the project was constructed in compliance with the approved civil plans and Findings of Fact.**

    - **Written verification from their Landscape Architect certifying that the plantings and amenities were installed in compliance with the approved plans and Findings of Fact.**

    - **Written verification from their Architect certifying that the building was constructed in compliance with the approved architectural plans and Findings of Fact.**

    - **Written documentation that the water and sewer have been approved by the DPW.**

    - **Written verification from the DPW confirming that they have received acceptable record drawings.**

    - **An electronic copy of the record drawings.**

    - **A copy of the Energy Code Certificate as recorded in Hartford's Land Records.**

This decision is also subject to the condition that no modification or expansion shall be made to the project as described and limited in the above Findings of Fact and Conclusions of Law without the written approval of the Hartford Zoning Board of Adjustment and/or the Hartford Planning Commission. This decision may be revoked, and a new application or permit required if conditions and findings are violated or modified without written approval.

The applicant is responsible for insuring compliance with all applicable State and Federal regulations pertaining to this application.

Those in favor:

Those in opposition:

Those not participating:

Dated at Hartford, Vermont this ____ day of July 2024.

HARTFORD PLANNING COMMISSION

By:_____
Chairperson/Vice-Chairperson

Appeal Rights: An interested person who has participated in the proceeding related to this decision has the right to appeal this decision to the Vermont Environmental Court, pursuant to 24 V.S.A. s. 4471 and V.R.E.C.P.5, in writing, within 30 days of the date of this decision. If you fail to appeal this decision, your right to challenge this decision at some future time may be lost because you waited too long. You will be bound by this decision, pursuant to 24 V.S.A. s. 4472 (d) (exclusivity of remedy; finality).

EXHIBIT LIST

1. Application #24-12

2. Set of Plans including

- Survey prepared by DiBernardo Associated, LLC

- Civil Plans prepared by Engineering Ventures including:

  - C1.0 Demolition Plan
  - C1.1 Erosion Prevention and Sediment Control plan
  - C1.2 Garbage Truck Turning Plan
  - C1.3 Fire Truck Turning Plan
  - C1.4 Fire Truck Turning Plan (2)
  - C2.0 Site Plan Overall
  - C2.1 Site grading and Drainage Plan
  - C3.0 Site Details
  - C3.1 Drainage Details
  - C3.2 Erosion Prevention and Sediment Control Details (1)
  - C3.3 Erosion Prevention and Sediment Control Details (2)
  - PH1 Site Photometrics Plan

- Landscape Plans prepared by Park Architecture including:

  - L1.0 Existing Conditions & Site Preparation Plan
  - L1.1 Existing Conditions
  - L2.0 Site Landscape Plan
  - L2.0 Site Landscape Plan (color version)
  - L3.0 Landscape Details
  - L3.1 Landscape Details

- L3.2 Landscape Details

- Architectural Plans prepared by Studio Nexus including:

  - SD1 Existing Floor Plan
  - SD2 Proposed Floor Plans
  - SD3 Renderings

3. Letter from Jesse Klymn, Anika Gilbert, Frank Klymn, Jessica and Jay McDonough, Carey O'Neil, John O'Neil, Emily and Dillon Owens, Benjamin Davis, Susan Goodwin, Deborah Rodgers, Jeff Arnold, Hilde Ojibway, Michael and Dorothea Barton, Jenny Horn, Jeni and Jeff Frechette, Mark and Kathy Detzer, Marie Wesson, Ann Kerigan, Susan Loskutoff, and John and Kathy Wetzel dated July 8, 2024

4. Letter from Michael and LeeAnne Heeremans dated July 8, 2024

5. Memo from Jo-Ann Ells dated July 2, 2024 with applicant's response of July 8, 2024

6. Project Narrative dated June 24, 2024, updated July 7, 2024

Town of Hartford

Planning Commission App # _____
Zoning Board of Adjustment App # _____

APPLICATION TO
PLANNING COMMISSION &/OR ZONING BOARD OF ADJUSTMENT

PLEASE COMPLETE ALL ITEMS APPLICABLE AND PROVIDE THE CORRECT NUMBER OF COPIES OF THIS APPLICATION AND THE SITE PLAN OR SUBDIVISION PLAT. ABUTTING LANDOWNERS WILL BE NOTIFIED BY THE PLANNING/ZONING OFFICE.

1. **NAME & ADDRESS OF RECORD OWNER(S)** 12 Tremont Street, LLC
   77 Bank Street, Lebanon, NH 03766
   Deed Recorded Book 9 Page 72 (Available at Town Clerk's Office)
   Telephone: Work (603) 322-3260 Cell same Email Address: tim@ledgeworks.com
2. **NAME & ADDRESS OF APPLICANTS(S)** Tim Sidore
   77 Bank Street, Lebanon, NH 03766
   Telephone: Work _____ Cell _____ Email Address: mike@ledgeworks.com
3. **NAME & ADDRESS OF APPLICANTS' CONSULTANT** Jim Wasser, Studio Nexus Architects & Planners
   PO Box 275, WRJ, VT 05001
   Telephone: Work (802) 275-5110 Cell _____ Email Address: jimw@studionexusarch.com
4. **PROJECT LOCATION** 1200 Christian Street
5. **PRESENT USE OF PROPERTY** nursing home
6. **BRIEFLY DESCRIBE PROJECT** (in addition, a detailed narrative must be submitted)
   Convert nursing home to planned unit development with 38 residential apartments. The existing building footprint will remain as is, but with interior and exterior improvements.
7. **PROJECT SIZE IN SQ. FT OR ACREAGE** 3.95 acres
   Lot Width _____ Lot Depth _____
8. **IS PROJECT ON TOWN WATER/SEWER?** Yes X No _____ If Yes, estimated
   Water Consumption/day _____ Amount of Sewer Flow Projected _____
   Size of Closest Lines Above (water) _____ (sewer) _____
9. **DESCRIBE LANDSCAPING PLAN** See attached. New landscaping will be added throughout and much of the existing landscape will be preserved.
10. **IF A BUSINESS** - Present # of Employees _____
    Proposed Days & Hours of Operation _____
    Will you use the landfill & recycling center? Yes _____ No _____
    The main waste by-product of your business is: _____

11. **IF A RESTAURANT** - Present seating _____ Proposed _____

12. **PARKING SPACES** - Number to be provided 46

13. **SIGNAGE** - Free Standing _____ Attached _____

14. **FENCING** – Location _____ Height _____

15. **NEAREST WATER SUPPLY FOR FIRE PROTECTION** on site (sprinkler service)

16. **ESTIMATED VALUE OF PROPOSED WORK** $1,800,000

17. **IS THERE AN EXISTING DRIVEWAY?** yes

18. **IF A SUBDIVISION** - Number of New Lots to be Created _____

    Do you request that the Town consider taking over maintenance of – Roads no

    Or Park/Open Space _____

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED ON THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. (This certification must be signed by lot owners and applicants).

Timothy P Sydore 21 June 2024

Applicant's Signature Date

Timothy P Sydore 21 June 2024

Lot Owner's Signature Date

_____

Co-Applicant's Signature Date

_____

Co-Owner's Signature Date

The applicant retains the obligation to identify, apply for, and obtain any relevant local or state permits before any construction may commence. Please call 802-282-6488 to speak with the State Permit Specialist.

For Office Use Only		
Map/Lot #		
Fee Paid $:		Receipt #:
PC: Site Plan	Min. Sub.	Maj. Sub.
PD	PD Amend.	Other
ZBA: Conditional Use	Variance	Appeal
Other		
Zoning District (s)		Date Filed:
Official Submittal Date:		

EXECUSUITE LLC

Bringing new life to our historic downtowns

Brookside Apartments, 1200 Christian Street, Narrative

June 24, 2024; Updated: July 7, 2024

Formerly known as the Brookside Nursing Home, the existing facility is located on the busy Christian Street corridor with access to major routes including route 5, route 4, I-89 and I-91. The 19,500 sq. ft. facility sits on 3.95+/- acres and includes the original 2-story facility built in 1925, the primary one-story building constructed in the early 70's and a remote maintenance garage constructed in 1980. Inside features include the original nursing home rooms (some with baths), a large activity center room, a separate wing of office spaces and a commercial style kitchen in the basement. Outside there are paved parking spaces on both sides of the building, a delivery entrance and a 1500+/- sq. ft. garage/outbuilding.

Our preference is to convert the existing facility to a multi-unit dwelling. The site is zoned R-3, which requires a minimum of 8,000 SF per unit. With a PUD and a density bonus of 25%, Brookside's 3.95 acre lot would allow 3.95 acres x 43,560 SF/acre/8,000 SF/unit = 22 units x 1.25 = 28 units. With a 40% affordable housing bonus, the total allowable is 39 units. The density bonus as described in 260.47 (B-C) is appropriate given this project's merits and the housing needs for the Hartford community. Specifically, 76% of all households in Hartford consist of 1-2 persons as detailed in a 2020 survey conducted by *American Community Survey* (Tables S2504 and S2501) and referenced in Hartford's 2023 *draft* housing chapter of the Town Plan. That same study notes that only 18.7% of Hartford's current housing stock is 0-1 bedroom. The Brookside redevelopment utilizes the existing facility while preserving the natural beauty of its surroundings, both on the property and in the neighborhood. The efficient use of resources, both natural and constructed, promotes the harmonious use of property while preserving the existing topography, tree cover and geology.

Working entirely within the existing building footprint, we envision a redevelopment that creates 38 smaller studio and one-bedroom apartments. We anticipate our residents will be 50% area professionals and graduate students and 50% service industry, support/administrative and trades workers. 40% of units will be offered at below market, affordable rents, in line with Twin Pines Housing rent levels. Easy cycling opportunities and a shared electric vehicle powered by on site solar generation will reduce parking/trips/carbon footprint.

Site amenities at the redeveloped facility include the natural beauty of the site with its brook, a pond, generous lawn and thick woods, as well as a small courtyard with a gazebo and outdoor cooking facilities. Existing trees and shrubs will be selectively pruned; a wide variety of new trees and shrubs and 3,400 SF of wildflowers will be planted. We would like to add a small, fenced-in area at the south end of the property, near to the culvert, creating a dog friendly park.

We are providing 3 accessible parking spaces (2 by the accessible entrance on the north side and 1 for the units at the basement level) directly adjacent to the entries they serve. A nearly continuous walk is provided around the north, west and east sides of the building, continuing into the courtyard/gazebo/ BBQ/deck area. In addition, a 5'; wide accessible pathway leads to the southernmost parking. A stonedust path leads to and around the dog park, the open and wooded areas to its south and the southeasternmost tip of the parking lot. As shown on the photometric plan, all seven building entries are well lit, including the primary entry on the south, and the courtyard on the east. Adequate but neighborhood sensitive lighting has been provided for the parking and drive aisles. There is parking for 6 bikes located adjacent to the north entry.

Under our proposal, we are reducing density from the previous 68 bed nursing home. Fewer people living onsite, and without all of the employees, caregivers and vendors, the parking and use of municipal resources will be significantly less. We are providing 46 parking spaces, a reduction of approximately 7 spaces from what was there previously. 40 of those spots will be EV Capable Spaces. We added 4 parking spots along Brookside Drive from what was approved for the PUD. They are necessary to provide some additional accommodation for folks with limited mobility (the southern entry is not accessible) and because the bulk of the housing units (21) are located in the northern portion of the building.

We usually have .8 cars/studio unit parked each night at our other all studio buildings, including our 69-unit apartment building at 132 S. Main Street in WRJ and our 43-unit building at 75 Bank Street—the former Lebanon Junior High. However, assuming a full occupancy at all times with 38 persons and no staff, the 8th Edition of the ITE Trip Generation Report calculates the project would generate **126 daily trips**. According to that same ITE report, the prior 68-bed nursing home—with 12 staff on site at any one time--would generate **209 daily trips**. The total of 12 staff is based on Federal rules issued 4/2024 that requires 3.48 hours of nursing/aide care per patient. This translates to 10 health staff *on average* on site at any one time for full occupancy; assuming an additional 2 maintenance staff, the total comes to 12 coming and going on 3 shifts per day, 7 days per week. (Note, according to the 2001 Federal Report on Staffing Standards, https://nursinghome411.org/federal-staffing-standard/, staffing for nurses and aides should total 4.1 hours per resident per day *to meet the bare minimum* for resident safety.)

The building itself will feature generous 8' wide, skylit hallways; near the main south entry a small community lounge space looks out onto the courtyard. The apartments, though small, will be well appointed with quality materials and fixtures. The walls, with their concrete block structure, minimize sound transmission and will keep the apartments quiet. Laundry facilities will be provided in some apartments and in publicly accessed laundry rooms. The high-ceiling basement will provide additional tenant storage and depending on demand, could be repurposed to provide exercise and game room space.

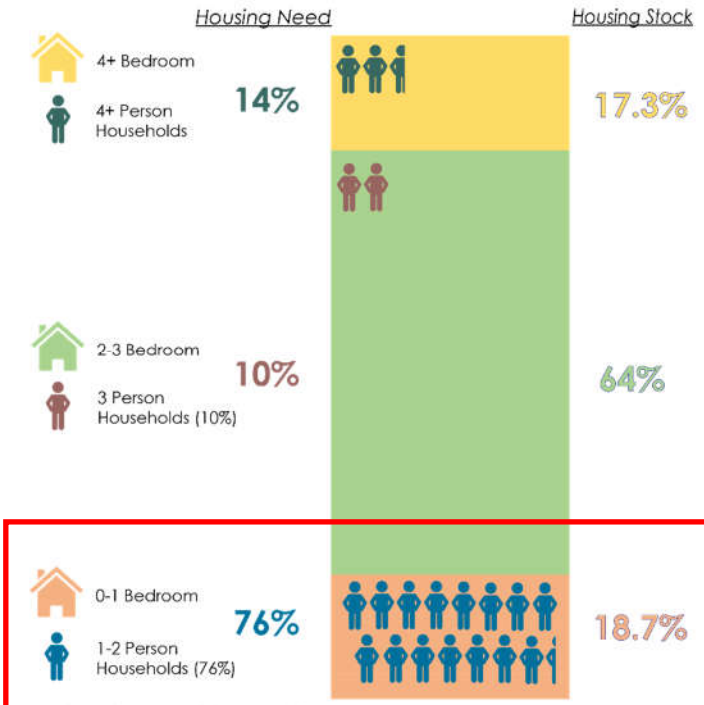
This project can be completed quickly, providing critically needed housing units to the area inventory; in turn existing multi-bedroom housing stock will open up for families and those seeking larger housing options.

This data shows that housing supply is not increasing in any significant way, especially when compared to the 1970s and 1980s. This along with low vacancy rates across Vermont at just over 3%, and increasing costs for homes and rental units, means that would-be homeowners and renters are struggling to find adequate housing. This creates an economic burden on residents struggling to live in Hartford.

Demographics and Housing

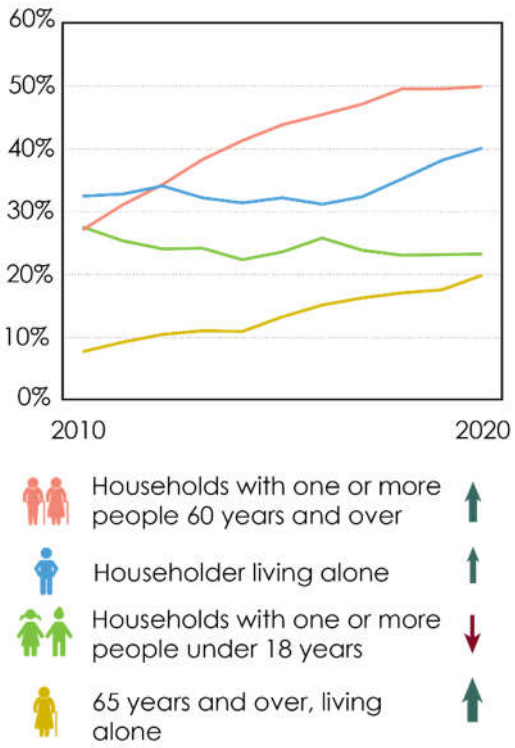
The physical housing itself is not the only important factor when determining housing need. Understanding the population, the age of residents, size of households, and current trends can indicate what types of homes are needed and whether the current housing stock meets the needs of residents. The chart on the right shows the percent of housing units by size (bar graph), while the people indicate the percent of households that would likely fit into each home size category. While there is likely some overlap between the 1-2 person households and the 2–3-bedroom homes, there is clear indication that most households are quite small, and that the housing units available are larger than what is needed or desired, especially for small families looking to buy a home for the first time, or for older adults who may be looking to downsize. Many more adequate starter homes, along with smaller units near public transit and public services, would help ensure the needs of these groups are met.

Does our housing stock match our household need?
Hartford, VT



American Community Survey, 2020
Tables S2504, S2501

How are our households changing?
Hartford, VT



* *American Community Survey*
Table S1101

Changes in households over time can also provide some insight into what our families will look like in the future. The graph on the left shows the percentage of specific household types in Town. It is estimated that nearly 50% of households have one or more people over the age of 60. This is up from just under 30% in 2010. Other crucial indicators, householders living alone regardless of age and those over 65 who are living alone, have both increased by about 10% since 2010. Finally, households with children have declined marginally during that same period. This

Memorandum

To: Tim Sidore

Cc: Jim Wasser, Adam Morse, Paul Simon, Tom Peltier, Dana Clawson, and Chris Holzwarth

From: Jo-Ann Ells

Date: July 2, 2024; Response July 8, 2024

Re: 1200 Christian Street- Multi-Unit Dwelling

Please submit a response to the following comments/questions on your application for a multi-unit dwelling before **9:00 a.m., Tuesday, July 9, 2024.** If you are unable to meet this deadline, please contact me as soon as possible to discuss the deadline to have your application considered at the next round of Public Hearings.

Prior to the Zoning Board and Planning Commission Hearings, you will receive an agenda, draft Findings of Fact, and additional staff comments if there are any. Please feel free to contact me at any time during this process.

1. Please confirm that you understand that you retain the obligation to identify, apply for, and obtain any relevant local and state permits for this project.
   Understood.

   To determine what State Environmental Permits may be required for your project, The Vermont Agency of Natural Resources (ANR) recommends that you use ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website Welcome to DEC | Department of Environmental Conservation (vermont.gov) and going to the "Permit Navigator Tool" Permit Navigator (force.com)

   If further assistance is needed, please contact the Community Assistance Specialist for our area:

   Jeff McMahon, Community Assistance Specialist

   Jeff.McMahon@Vermont.gov

802-477-2241

2. Please confirm you have contacted the Fire Marshal, Tom Peltier, to discuss obtaining a Public Building permit. tpeltier@hartford-vt.org (802-299-7013). Confirmed.

3. Any approval will include a condition that your engineer certify that no changes, other than those required by the Planning Commission/Zoning Board, were made to the final plans that are submitted for the Zoning Permit. Please confirm your understanding. Understood.

4. Any approval will include a condition that, in addition to the required hard copies, the final approved plans are emailed to the Zoning Administrator. Please confirm your understanding. Understood.

5. If you have not done so already, I encourage you to talk to Hartford's Environmental Sustainability Coordinator, Dana Clawson, about energy efficiency and new State rules pertaining to Commercial Building Energy Standards. (dclawson@hartford-vt.org) Understood. We talked with Dana.

6. Please confirm that your application complies with the new State rules regarding EV charging stations or amend the plans, as necessary. (Dana Clawson can assist you with this item if needed.) Confirmed. Per Table C405.13.1 and equation 4-11 of the newest Vermont Commercial Energy Code we will be providing 40 EV Capable Spaces per the following requirement:
    - line diagrams on drawing C2.1 showing pathways for future Level 2 EVSE electric vehicle charging

7. Preliminary approval of the Planned Development required that the Application for Final Approval includes:

    - Additional justification for a density bonus under section 260-47 C of the Zoning Regulations.

        - Applicant's Response: The density bonus as described in 260.47 (B-C) is appropriate given this project's merits. Specifically, single-occupant units are called for by 76% of the respondents in Hartford's 2019 survey. The Brookside redevelopment utilizes the existing facility while preserving the natural beauty of its surroundings, both on the property and in the neighborhood. The efficient use of resources, both

natural and constructed, promotes the harmonious use of property while preserving the existing topography, tree cover and geology.

Comment: Can you please provide information regarding the survey you are referring to? Please see updated Narrative. The survey we are referring to is the 2020 survey conducted by American Community Survey as referenced by you below.

The 2023 *draft* Housing Chapter (attached) identifies the need for smaller units. See Demographics and Housing on page 4 attached.

- A current survey meeting the requirements of the Subdivision and Zoning Regulations.
    - Applicant's Response: Included in drawing set.

      Comment: Please amend the survey to include the following signature block on the survey: Amended and attached.

      This Plat is approved subject to the Findings of Fact, Conclusions of Law, and Decision for this subdivision, a copy of which is on file in the Hartford Department of Planning and Development Services.
      Approval #____ Hartford Planning Commission
      Date _____ By_____
      Hartford Planning Commission Chair/Vice Chair

- Information regarding the proximity of the proposed dumpster enclosure and dog park to the stream/wetland buffer.
    - Applicant's Response: The dumpster pad will be made of concrete and is sloped so that the run-off runs away from the wetlands to a stabilized outfall. The dog park will have a pea stone surface and a 6" gravel base to filter and contain dog waste (see landscape detail on L3.2)

      Comment: There is a stream on the property that is identified on Hartford's G.I.S. Natural Resources Map.

      Section 260-25 B of the Zoning Regulations, Protection of Surface waters states:

A riparian buffer shall be maintained for a minimum of 100 feet from the top of the bank of the Connecticut, Ottauquechee and White Rivers, or for a minimum of 30 feet from the edge of a stream or any other surface water identified on the most recent edition of the Hartford G.I.S. Natural Resources Map. The riparian buffer also includes the area between the river and the top of the bank. No development, excavation, filling, clearing or grading shall occur within the buffer without conditional use approval from the Zoning Board of Adjustment except as specified in Subsections D and E.

It would be helpful if you could provide a plan that highlights the location of the riparian buffer as required by the Zoning Regulations and wetland buffer as required by the State and a narrative description of any activities proposed in the buffer areas. Shown with a long, bold dashed lines on all the C1 and C2 sheets.

In addition, please provide answers to sections 260-25 D, E, and F of the Zoning Regulations and information regarding any State permits required for activity in the wetland buffer.
260-25D: The dumpster pad encroaches by approximately 280 sf +/-, all other disturbed areas within the riparian buffer are part of existing parking areas to be maintained as parking and minor disturbances for stormwater management, a VT ANR wetland permit will be required for this and other work in the wetland buffer.
260-25E: The existing riparian buffer will be managed in accordance with Part E with the exception of the above dumpster enclosure and stormwater management encroachments.
260-25F: It is noted that a conditional use permit from the ZBA is required for the above outlined encroachments, the permit will be filed with the ZBA in accordance with 260-25-part F, section 1- and 2-. The location of the dumpster is the best possible location given the site constraints and proximity to existing parking areas. Other locations on the site would constrain emergency vehicle access and reduce parking. Disturbed areas will be replanted with dense native vegetation, steep slopes will be stabilized with riprap and or biodegradable erosion control netting and restored with native vegetation. The erosion prevention and sediment control plan will be followed during construction in accordance with the VTDEC EPSC Handbook.

- Updated information regarding the number of parking spaces/Information regarding visitor parking.

    - Applicant's Response: 46 parking spaces are proposed comprised of 38 parking spaces assigned to units and 8 visitor parking spaces.

      Comment: Please confirm/correct if your justification for reduced parking is the same/has changed since Preliminary approval of the Planned Development. The justification remains the same.

- Confirmation that the applicant has contacted Advance Transit regarding providing a bus stop and the results of the discussion.

  Applicant's Response: They were contacted by Tim Sidore several weeks ago (copy of email can be provided), however they have not yet responded

  Comment: Suggested contact is Adams Carroll, Executive Director ACarroll@advancetransit.com 802 295-1824 ext. 202

  Please provide an update. Updates to follow.

- Details regarding proposed indoor and outdoor amenities.

    - Applicant's Response: Site amenities at the redeveloped facility include the natural beauty of the site with its brook, a pond, generous lawn and thick woods, as well as a small courtyard with a gazebo and outdoor cooking facilities. Existing trees and shrubs will be selectively pruned; a wide variety of new trees and shrubs and 3,400 SF of wildflowers will be planted. We would like to add a small, fenced-in area at the south end of the property, near to the culvert, creating a dog friendly park.

      The building itself will feature generous 8' wide, skylit hallways; near the main south entry a small community lounge space looks out onto the courtyard. The apartments, though small, will be well appointed with quality materials and fixtures. The walls, with their concrete block structure, minimize sound transmission and will keep the apartments quiet. Laundry facilities will be provided in some apartments and in publicly accessed laundry rooms. The high-ceiling

basement will provide additional tenant storage and depending on demand, could be repurposed to provide exercise and game room space.

No comment.

- An open space management plan including protection of the wetlands and stream.
    - Applicant's Response: We are in discussion with the Department of Environmental Services and will be applying for a wetlands permit if the project is approved, however for landscape of this type which includes wetlands, DES will want minimal management and the forest left wild.

      Comment: Please provide an update. We agree in that DES will likely want minimal management of the forest here because of the nature of wetlands on this property. We have included riparian native VT species to add around the perimeter of the developed portion of the landscape as a measure to go back toward a natural environment within the wetland buffer areas. An additional column on the LA plan set was added to the plant list to indicate the riparian varieties.

- An Updated Master Plan:
    - Including the correct number of studio and one-bedroom apartments.

      Applicant's Response: Done

      No comment.

    - Including the removal of "Zoning R-3" from item #2.

      Applicant's Response: Done

      No comment.

    - Including setbacks for a corner lot.

      Applicant's Response: Done.

No comment.

New comment- Please remove "Maximum lot coverage 65%" from the Master Plan. Removed.

- Updated Project Narrative
    - Including correction of the gsf of the housing space in item #1

      Applicant's Response: Done

      Comment: Please confirm the gsf is correct under item #1, Objective in the Master Plan for the dwelling units and common area and in the project narrative. Confirmed at 19,500 GSF.

    - Removal of "Common Community Room" from item #2

      Applicant's Response: Done

      No comment.

- Updated Plans including:
    - A demolition plan

      Applicant's Response: Provided.

      No comment.

    - A landscape plan

      Applicant's Response: Provided.

      No comment.

    - Delineation of the stream, wetlands and their associated buffers.

      Applicant's Response: Delineated

Comment: See comments above regarding riparian and wetland buffers. This has now been reflagged by a wetland scientist and as stated earlier, native VT riparian species have been included in the buffer areas of the project.

- An updated photometric plan portraying the proposed site plan

  Applicant's Response: Provided, although one fixture along Brookside Drive will need to be eliminated.

  Comment: Please update the plan such that the proposed site plan is used as a base and remove the fixture you noted above. The plan has been updated and the fixture removed.

  Please note that the proposed lights must conform with section 260-31 E of the Hartford Zoning Regulations which states:

  > Illumination from lighting fixtures or other light sources shall be shielded or of such low intensity as not to cause undue glare, reflected glare, sky glow, or a nuisance to traffic or abutting properties. Lights used to illuminate parking areas and drives shall be so arranged and designed as to deflect light downward and away from adjacent residential areas and public highways. Lights shall be of a "downshield luminaire" type where the light source is not visible from any public highway or from adjacent properties. Only fixtures which are shielded to not expose a light source, and which do not allow light to "flood" the property, are permitted to be attached to buildings. Searchlights are not permitted. Noted. All fixtures will be dark-sky compatible.

- A turning movement plan for Emergency Vehicles approved by the Fire Marshal.

  Applicant's Response: Provided.

  Comment: Please submit confirmation from the Fire Marshal verifying they have approved the plan. Please provide information regarding why you did not indicate that the fire truck would exit on to Brookside Drive. A fire truck can exit onto Brookside Drive and we have added

sheet C1.4 to illustrate this (a gate and knox box will be provided), however it also has the capability of performing a hammerhead turn and exiting back onto Christian Street. We have been in discussion with the Fire Marshal concerning our plans, and a final copy of the proposed has been submitted to him, but as of 7/8 no response has been received.

- A turning movement plan for passenger vehicles

  Applicant's Response: This is similar to the garbage truck turning movement plan.

  No comment.

- A parking space and a turning movement plan for delivery vehicles (i.e., UPS/Fed Ex)

  Applicant's Response: Shown by dash lines at the primary entry. The turning movement is again similar to the garbage truck moving plan.

  No comment.

- Stormwater Management plan

  Applicant's Response: An erosion control plan and stormwater details have been provided in the civil drawings.

  Comment: Please provide a narrative description of the stormwater plan.
  A portion of stormwater runoff will be infiltrated into the ground and another portion will be treated in the grass swale with check dams along the south edge of the parking area. Along Brookside Drive in front of the building overall impervious surface has been reduced. Overall site impervious is expected to be increased by approximately 2,600 sf. Stormwater attenuation will be provided with underground stormwater detention chambers and infiltration. A curb will be provided along the south edge of pavement at the upper driveway off Christian St. to collect and treat runoff in the underground detention system. In addition, a portion of rooftop surfaces will also be collected in the same underground chamber system. Post development

stormwater runoff rates are expected to be reduced upon completion of the stormwater management plan.

- A note indicating that each dwelling units will have an assigned parking space
  .
  Applicant's Response: Noted on C2.0.

  No comment.

- Identification of the main entrance to the building and lobby

  Applicant's Response: Identified on C2.0.

  No comment:

- Inclusion of areas for snow storage

  Applicant's Response: Noted on C2.1.

  Comment: Please clarify for all parking areas. Snow storage remains in the location to the northeast of the lower (southernmost) parking lot, as this location is away from the riparian buffer and is relatively level. Snow removed in other locations on the site will be trucked here.

- Applicable directional signage for vehicles

  Applicant's Response: Shown on Civil set.

  No comment.

- Parking spaces on Brookside Drive are limited to two accessible parking spaces as approved by the DPW.

  Applicant's Response: In addition to the 2 handicapped spaces, which by code are required to be head-on we are providing 8 parallel parking spaces.

  DPW Comment: The parking layout along Brookside Drive is

not acceptable to DPW as there are many conflicting turning movements and blind maneuvers required of motorists utilizing the accessible parking spaces.

The architect indicates that on street parallel handicap parking is not allowed. This is true where an aisle cannot be provided, and the handicap person would be entering and exiting within the roadway. There appears to be adequate room to establish the necessary improvements to allow parallel parking for handicap individuals. As a note, exceptions are allowed for historic sites with space limitations such as White River Junction and Hartford Village.

Please contact the DPW and amend the plans (and any applicable application materials) such that they are approved by the DPW and comply with the Zoning Regulations. Chris Holzwarth was contacted. Our plan for parking along Brookside (north of the building) now conforms to the sketch be provided for us with 6 parallel parking spaces, two of which are accessible. The additional 4 spots (from what was approved for the PUD) are necessary to provide some additional accommodation for folks with limited mobility (the southern entry is ***not*** accessible) and because the bulk of the housing units (21) are located in the northern portion of the building. At the southernmost parking lot we added 4 additional parallel parking spaces to maintain our total of 46. We did not provide head-on parking at the southern lot per his sketch as it would require a wider access road and a retaining wall into the hill.

- Identification of all outdoor and indoor amenities

  Applicant's Response: Identified on drawings.

  Comment: Please review the civil, landscape and architectural plans for consistency and update, as necessary. The landscape plans are provided and demonstrate a change in what was provided between the preliminary submission and the final permit plan set. The outdoor amenities include several outdoor gathering areas, a gazebo, outdoor dining with a BBQ station, multi-purpose open space area, a nature

walk (stonedust walk) along the forest perimeter, and an enclosed dog run area with equipment.

8. Please update the number of proposed parking spaces on the application form. Updated.

9. Please update the project narrative to reflect the density calculation as described in Findings 14 &15 of the preliminary approval of the Planning Development. Updated.

10. I have an email stating that the gate is no longer proposed, however, it is shown on sheet C2.1. This gate is referred to in Findings #13 and #18 of the Preliminary approval of the Planned Development. That email was a mistake and the gate and a knox box will be installed per C2.1, note C1 and approved by Tom Peltier.

    Please clarify and amend the plans, as necessary.

11. Please respond to the following concerns of the DPW.

    The 10" sewer line at the projects entrance was developed before the unpermitted/lower parking lot was established. The main only has 4' of cover which is fine in cross country and unpaved situations. The line should be inspected and rated for the necessary structural cover and insulation requirements. The engineer should provide an acceptable plan to provide some combination of moving parking spaces, providing cover, insulation, or replacement of pipe to conform to the town and state standards.
    We have specified 4 inches of XPS insulation over the existing sewer line within the paved parking area. The insulation would be placed at the bottom of the parking lot engineered fill section. The added insulation will bring the sewer line into compliance with Section 1-1002(g) 2(B) of the VT Wastewater System and Potable Water Supply Rules.

12. Please submit additional details regarding how you calculated your anticipated traffic volume and the traffic volume for the former nursing home. Details have been provided (and updated) in the narrative utilizing the most recent ITE Trip Generation Report (8th Edition) calculator.

13. Please provide a description of how the site plan provides for the safety and convenience of pedestrians, bicyclists, and handicapped persons including lighting of walkways and entrances, design and placement of walks and crosswalks, pick-up points for public transportation if offered, and bike racks. (Please consider providing additional bike racks.) We are providing 3 accessible parking spaces (2 by the accessible entrance on the north side and 1 for the units at the basement level) directly adjacent to the entries they serve. A nearly continuous walk is provided around the north, west and east sides of the building, continuing into the courtyard/gazebo/BBQ/deck area. In addition, a 5'; wide accessible pathway leads to the southernmost parking. A stonedust path leads to and around the dog park, the open and wooded areas to its south and the southeasternmost tip of the parking lot. As shown on the photometric plan, all seven building entries are well lit, including the primary entry on the south, and the courtyard on the east. Adequate but neighborhood sensitive lighting has been provided for the parking and drive aisles. There is parking for 6 bikes located adjacent to the north entry.

14. What will be done to ensure that the landscaping is maintained in a healthy condition? The project plans include a 2-year guarantee on all proposed landscape plantings. In addition, all varieties specified are VT native and hardy varieties that will thrive on their own once established. The owner has an in-house maintenance team that will provide regular landscape maintenance including mowing lawn areas, pruning, mulching beds annually, etc.

15. Please outline how the application conforms with section 260-27 C of the Hartford Zoning Regulations which states: Adam

    C. **Grading and drainage.** The following provisions shall apply to any changes which affect drainage of water to or from a property:
    (1) Any changes in grading shall be made so that runoff is directed to established drainage courses and will not cause ponding or flooding of other properties, or exceed the capacity of downstream drainage facilities.
    (2) When possible, drainage systems shall be designed so that water runoff existing prior to site development shall not be increased after development.
    (3) All changes in grade shall be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.
    Pursuant to section 260-27, part C of the Town of Hartford Zoning Regulations, the site grading has been designed so that runoff is directed to established drainage swales and curbing and will not cause ponding or flooding of other properties or exceed the capacity of downstream drainage facilities. The

drainage system will be designed so that water runoff existing prior to site development will not be increased after development. All changes in grade will be controlled so as not to cause a nuisance or damage to other properties or erosion of topsoil.

16. Please acknowledge that during construction erosion and sediment control measures as specified in the most current edition of the *Low Risk Site Handbook for Erosion Prevention and Sediment Control* published by the Vermont Department of Environmental Conservation will be followed. Acknowledged.

17. Any approval will include a requirement that no structure, including construction/office trailers, signage, parking spaces or plantings may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any signs, parking spaces or plantings found to obstruct sight distance will be required to be relocated. Please confirm that you understand this requirement and that all proposed structures and plantings meet this requirement or amend the plan accordingly. Understood.

18. Please acknowledge that you understand that once the project is complete and before I can issue a Certificate of Occupancy you need to:

    - Submit written verification from your Professional Engineer certifying that the project was constructed in compliance with the approved plans and Findings of Fact
    - Submit written verification from your Architect certifying that the project was constructed in compliance with the approved architectural plans and Findings of Fact.
    - Submit written verification from your Landscape Architect certifying that the project was constructed in compliance with the approved architectural plans and Findings of Fact.
    - Submit verification that the water and sewer have been inspected and approved by the Department of Public Works.
    - Submit a record drawing to the Department of Public Works with swing ties for the water and wastewater lines.
    - Submit a PDF of the record drawing to me.
    - Record an Energy Code Certificate in the Land Records.

    Please acknowledge that you understand these requirements. Acknowledged.

19. Please acknowledge that you understand that construction of the project must comply with Section 260-31 B of the Hartford Zoning Regulations, which states:

    Earth moving and hauling, rock drilling or crushing, jack hammer and similar excessively loud equipment shall not be operated on Sundays or between the hours of 5:30 p.m. and 7:00 a.m. except in emergency situations. Understood.

20. Please acknowledge that you understand that any stockpiling of materials related to the construction of the project must be located twice the distance of the height of the stockpiled materials from any public or private right-of-way or property boundary. Understood.

21. The Hartford Zoning Regulations provide that "Construction trailers may be used at construction sites for office and laboratory use on the condition that they are placed a minimum of ten feet from any property line, are used for a project with a valid zoning permit and are removed before a certificate of occupancy is requested. No construction trailer may be placed in such a way that obstructs sight distance along the traveled way, at any intersection or driveway. Any construction trailer found to obstruct sight distance will be required to be relocated immediately."

    Please acknowledge that you understand these requirements. Understood.

22. The project requires 3 approvals:

    - Final Approval from the Planning Commission for the Planned Development
    - Site Plan Approval from the Planning Commission
    - Conditional Use Approval from the Zoning Board of Adjustment

    The materials for Site Plan and Conditional Use approval are the same.

23. Please send me two separate emails for these applications including:

    Planned Development: Application form, Master Plan, Narrative, response to this memo, survey, and the revised plan set.

    Site Plan/Conditional Use Approval: Application form, Narrative, response to this memo and the revised plan set.

24. Please submit:

    Eight (8) hard copies of the application materials listed above for the Planned Development. Please fold the plans.

    Fourteen (14) hard copies of the application materials listed above for Site Plan/Conditional Use Approval. Please fold the plans.

    (The plans submitted were a little difficult to read. Please consider providing larger plans)

143 Brookside Drive

White River Junction, VT 05001-9259

July 8, 2024

Re: Proposed Brookside Apartments, 1200 Christian Street, Hartford, VT

Dear Hartford Zoning and Planning Commissions,

As the south abutter of the proposed Brookside Apartments on 1200 Christian Street, we believe this project could well serve our community.

Having built our house 40 years ago, we have seen changes in our little neighborhood- the development of Apple Lane off of Brookside Drive, the addition of apartments on Brookside Drive and Christian Street, and the closure of the Brookside Nursing Home which directly affected the housing and care of a parent. Change is often unsettling.

However, we have carefully considered and studied the Brookside Apartment proposal details and find that we are in support of this project. Housing is a major barrier to the local economy. This repurposing/recycling of the Brookside Nursing Home into apartments can provide the opportunity for hard-working people to have a place to live closer to where they work.

Sincerely,

Michael & LeeAnne Heeremans

July 11, 2024

Dear Hartford Zoning Board and Planning Commission,

We are representing a group of 18 property owners who live next to, and near the proposed development of the former Brookside Nursing Home at 1200 Christian Street. We are submitting this letter to be part of the pre-meeting materials to be reviewed by the upcoming July Zoning Board and Planning Commission meetings where Final Approval of the Brookside Nursing Home Development Project is being sought.

We have appreciated the improvements that the Developer has made to the building and grounds to date. There are, however, a number of serious concerns that remain regarding this project, as summarized below:

1. We are asking for a formal presentation to be done by the Developer at the July Zoning and Planning Commission meetings when the Final Approval application is being reviewed.
2. The Brookside project land is mostly surrounded by single family homes. The Developers refer to apartments nearby to suggest their plan "fits" the neighborhood, however these were pre-planned apartment complexes which were proposed as fully-equipped apartments and built for that purpose. The Developer also makes several comparisons to "in-town/downtown" buildings they have developed in Lebanon and White River Junction. These, however, are not appropriate comparisons since the location of this property is not in the downtown area.

   Given the above, we are requesting that both the Zoning and Planning boards each do a site visit/review to actually see "the lay of the land" – the majority of which, again, is surrounded by single family homes. **We ask that all abutters and neighbors to the Brookside property are invited to join that review.**

3. a) The extremely small size of the proposed units is of great concern. Eighteen of the units are Studio apartments with a size of 250-350 sq ft, and 7 of the 1-bedroom apartments are less than 385 sq ft in size. In total, 25 of the 38 units are less than 385 sq ft. These units do not provide enough space to include a stove/oven, washer/dryer, closets and dressers, and places to sleep, while housing 2 adults, a child under 2 years old, and a pet dog. **We would like to note that the US Housing and Urban Development lists these size ranges for public housing: Studio: 500 sq ft, 1 bedroom 700 sq ft, 2 bedroom 900 sq feet (HUD.gov), sizes well above the current proposal.**
   b) Clearly the Developer would want to maximize each square foot of building for occupancy, but the proposed density is not ideal for either the residents or the broader

community. When such small apartments are in areas with nearby amenities (laundry, transportation, stores, restaurants, public parks), it may make it easier for people to have a reasonable quality of life with limited space in individual apartments. **But that is not the case with this site; it actually feels like a proposal for high density urban apartments in what is basically rural/suburban area.**

4. Since it seems unlikely there is room for washer/dryer in the studios, and we do not see a laundry room on the final project proposal, it appears residents will have to travel to a local laundromat (the closest one is in a building on Hartford Ave, currently 1 mile away and is currently for sale).
5. We, the abutters, and neighbors, have been very clear to the Developer and the Planning Commission that we feel that the density of this project, at 38 units, is too high. There seems to be a rush to squeeze in as many units as possible. It is also important to note that the Planning and Zoning commissions just approved the Sykes avenue project which will be adding 250 rental units to the Town of Hartford. Trying to squeeze 10 more 250 sq ft studio apartments into this property, and project, does not fit the existing building and neighborhood.
6. To get to 38 units, the Developer is applying for a density bonus. Unless there is a mechanism to ensure that affordability requirements are maintained, what is the guarantee, that if granted by the town, these additional units will serve the intended purpose of increasing affordable housing for the required term?

   We suggest that if a density bonus is granted, that it be conditional upon annual town/third party compliance monitoring, paid for by the developer in accordance with a compliance monitoring plan/covenant to be approved by the town, reviewed by town legal counsel, and agreed to by the developer.

7. The present plan of 38 units, some housing more than one person, will more than double the total number of people who are living in the neighborhood, that includes the new 1200 Christian Street residents and existing abutters and neighbors on Christian Street, Brookside Drive, and Apple Lane. We would expect an increase in Hartford police presence.
8. **We are extremely concerned that there has been no required traffic study by Town.** The traffic on Christian street has increased greatly since the nursing home was originally built. The Developer's comments comparing traffic flow between the original nursing home and this development was called "absurd" by one neighbor.

   Rarely did nursing home residents travel when residing at Brookside Nursing Home, and few, unfortunately, had visitors. Staff who worked at Brookside commuted during shifts

across their 24-hour operating hours. Comparing the 66 nursing home residents living at this property, vs. 38 dwellings is an inappropriate comparison, as some of the new studio and one-bedroom units will house more than one resident.

The Developer is significantly underestimating the traffic involved in the future apartment dwellers commuting, their outside visitors, deliveries of meals, FedEx, UPS, US Mail coming in and out of the parking area.

9. Individuals without a vehicle will have difficulty living in this development.
   a) **The closest Advanced Transit/AT stop is one mile way**. We see that in the final proposal there have been unsuccessful attempts by the Developer to contact Advanced Transit. Without a commitment of Advanced Transit to have Brookside Drive/1200 Christian Street as part of their route, it will make commuting very difficult for renters without a working vehicle. According to Google Maps it is a 20-minute walk from Brookside Drive, along Christian and Bugbee streets, walking on the side of the road with no sidewalks, making this especially challenging and dangerous, especially in winter.
   b) The idea of a shared car available is good in theory…but who will manage that? Does the Developer have experience in their other properties offering this type of service? It seems likely that residents without a vehicle may well feel "trapped." How will the Town hold the Developer accountable to provide and maintain this auto service?
   c) There is reference to a bicycle rack in the final proposal. Traffic, weather, and lack of bike lanes on Christian Street and Bugbee make bicycle riding as a form of transportation very unsafe, and unlikely.
10. Reference has been made to a gazebo onsite as a gathering spot for residents. The existing open air wooden structure is only usable when weather allows. There are **no indoor spaces** in the final plans designated for resident gatherings to allow residents of the 38 units to connect with each other.
11. We see a commitment to landscape design in the final proposal. Will the proposed parking lot provide landscaping of trees/shrubs that will help screen it from Brookside Drive and Christian Street views--- with the exception of clear eyesight for entering/exiting the complex from Christian Street?
12. What is the policy regarding residents and visitors who smoke? Will smoking be allowed in the apartments, or in designated smoking areas on the grounds?

13. **We believe the Developer has overstated their efforts at preservation of the natural setting of the brook, trees etc.** We continue to have questions regarding this:
    - **a)** Does the 50% "open space" include the paved parking lot?
    - **b)** Will the mature black locust trees opposite 1187 Christian Street be preserved?
    - **c)** The Developer refers to "a pond" but is that actually something that exists on the current property? Or does the ecosystem have to be altered to create that?
    - **d)** How would a "dog park" enhance that aspect of the property, and is that really needed? It is likely to actually increase traffic to and from the development. In addition, the Town of Hartford's Watson Dog Park, and Kilowatt Field are within a very close distance.

    We do not understand why the Planning Commission ignored our previous concerns regarding the impact on the natural resources on this site. We need to note, again, that the State of Vermont has identified Brookside creek as a nesting area for deer. The Town of Hartford Natural Resource map talks about protection of surface water and wildlife habitat. We see deer frequently emerge from the woods and drink from the stream that runs through the 1200 Christian Street property. We have also observed countless other animals using the wooded property onsite, including birds, woodchucks, rabbits, etc. We strongly recommend that the natural habitat, in particular the stream and wooded areas, not be disturbed by the new development.

    We ask that the Hartford Conservation Commission be consulted on this project regarding how to preserve the integrity of the natural resources of this property.

14. It was good to see more specifics regarding parking lot and outdoor lighting in the final proposal. It is key to limit the negative impact of the project on the existing neighbors, most of whom are in single family homes on Brookside/Christian Street. We strongly support the careful selection, review and adjustment of the lights themselves, and landscaping that helps keep lighting for parking and not shining into the abutters and neighbors' homes.

15. We want to again confirm there is a solid commitment by the Developer, and Town, to lock the Brookside Drive entrance and that this will be rigorously enforced. Our preference is that it be closed completely.

a) The Rogers and Klymn families, abutters whose home driveways are directly across from that are especially concerned that this entrance be rarely (if ever) used.

b) As part of the previously requested traffic study, we also want to note that the road on the north bend of Brookside Drive next to the nursing home is eroding which is a dangerous situation. It is also a blind corner, flanked by guard rails, which creates

significant issues for emergency vehicles including fire trucks and ambulance. The guard rails have been severely damaged several times by large vehicles failing to make the turn slowly and safely. This has required the Town of Hartford Public Works team to repeatedly come out and do extensive repairs.

c) One suggestion is to name the Development "Christian Street Apartments" to support the above.

16. What is the existing track record of the Developer regarding keeping up their other properties, and what is the longer-term commitment regarding that for the Brookside project?

17. Neighbors attending the 5.20.24 Planning Commission meeting believe the Planning Commission moved too quickly to grant preliminarily approval for this project, despite the significant r54 concerns expressed to the Planning Commission in writing before, and verbally during the meeting.

We witnessed a great deal of interest/support for the Developer and their wants/needs, but very little acknowledgement of our previous letter to the Commission at that meeting – which included input from many of the neighbors and abutters to this project. It is of utmost importance that both Zoning and Planning Boards are careful in their review and decision making about this project.

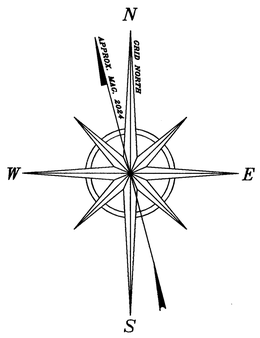
We look forward to your serious consideration of these important concerns regarding this Project, and the discussion of them at the upcoming July Zoning and Planning Commission meetings.

Respectfully,

Jesse Klymn, 246 A Brookside Drive
Anika Gilbert, 246 B Brookside Drive

Written with input and strong support from these 17 Hartford property owners, all abutters, and neighbors to this project:
Frank Klymn, 246 Brookside Drive
Jessica and Jay McDonough, 50 Brookside Drive
Carey O'Neil, John O'Neil, 88 Brookside Drive
Emily and Dillon Owens, 110 Brookside Drive
Benjamin Davis, 136 Brookside Drive
Susan Goodwin, 196 Brookside Drive
Deborah Rodgers, 256 Brookside Drive
Jeff Arnold, 1187 Christian Street
Hilde Ojibway, 1285 Christian Street
Michael and Dorothea Barton, 35 Apple Lane

Jenny Horn, 36 Apple Lane
Jeni and Jeff Frechette, 50 Apple Lane
Mark and Kathy Detzer, 59 Apple Lane
Marie Wesson, 80 Apple Lane
Ann Kerrigan, 98 Apple Lane
Susan Loskutoff, 143 Apple Lane
John and Kathy Wetzel, 157 Apple Lane



~ NOTES ~

1. METHOD OF SURVEY: LEICA TS16 TOTAL STATION & STONEX S900 GPS.
2. BEARINGS ARE REFERENCED TO THE VERMONT STATE PLANE COORDINATE SYSTEM NORTH AMERICAN DATUM (NAD83) GRID NORTH.
3. DIBERNARDO ASSOCIATES IS NOT RESPONSIBLE FOR PROPERTY DESCRIPTIONS PREPARED BY OTHER PERSONS FOR CONVEYANCE OF THE PROPERTY SHOWN HEREON.
4. THIS PLAN WAS PREPARED FOR THE SOLE USE OF 12 TREMONT STREET, LLC AND IS NOT INTENDED TO BE USED BY ANY OTHER INDIVIDUAL OR BUSINESS WITHOUT THE CONSENT OF SAID PARTIES AND DIBERNARDO ASSOCIATES, LLC.
5. PROPERTY SHOW HEREON IN LOCATED IN THE RESIDENTIAL THREE (R-3) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:

   MINIMUM LOT AREA PER DWELLING UNIT: 8,000 SQFT CLASS 1, 1 ACRE CLASS 2-3
   MINIMUM LOT AREA PER LOT: 12,000 SQFT CLASS 1, 1 ACRE CLASS 2-3
   LOT WIDTH: 80' CLASS 1, 125' CLASS 2-3
   LOT DEPTH: 100' CLASS 1, 100' CLASS 2-3
   FRONT BUILDING SETBACK: 25' CLASS 1, 25' CLASS 2-3
   SIDE BUILDING SETBACK: 15' CLASS 1, 15' CLASS 2-3
   REAR BUILDING SETBACK: 20' CLASS 1, 20' CLASS 2-3
6. WETLANDS SHOWN HEREON WERE DELINEATED BY AUDRA L. KLUMB OF A&D ENVIRONMENTAL, LLC. P.O. BOX 155 CANTERBURY, NH 03224. (603)-746-5065.
7. WATER LINES SHOWN HEREON ARE TRACED FROM REFERENCE PLAN A. SHOWN FOR REFERENCE ONLY.
8. ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND SHOWN FOR REFERENCE ONLY. NO UNDERGROUND EXPLORATION WAS DONE BY THIS FIRM. PRIOR TO CONSTRUCTION CALL DIG SAFE AT 811.

~ REFERENCE PLANS ~

A. PLAN ENTITLED "ALTASCM LAND TITLE SURVEY IN HARTFORD WINDSOR COUNTY VERMONT FOR BROOKSIDE NURSING HOME" PREPARED BY BRUNO ASSOCIATES INC. P.C. ON DECEMBER 7, 1999.

~ REFERENCE DEEDS ~

RECORDED AT THE TOWN OF HARTFORD LAND RECORDS

1. DEED FROM GRANADA AND WILLIAMS LOANS, LLC TO 12 TREMONT STREET, LLC. RECORDED IN BOOK 614 AT PAGE 623 ON AUGUST 17, 2023.

~ EASEMENTS ~

A. SEWER & WATER EASEMENT – BROOKSIDE NURSING HOME, INC. TO NORWICH ASSOCIATES, DATED NOVEMBER 7, 1974. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 73 PAGE 476.

A. SEWER EASEMENT – BROOKSIDE NURSING HOME, INC. TO NORWICH ASSOCIATES, DATED DECEMBER 28, 1981. SEWER LINE EXTENDING ALONG WESTERLY BOUNDARY AS SHOWN ON PLAT #2. RECORDED IN THE HARTFORD LAND RECORDS BOOK 100 PAGE 505.

A. SEWER EASEMENT – NORWICH ASSOCIATES TO BROOKSIDE NURSING HOME, INC., DATED DECEMBER 29, 1981. SEWER LINE EXTENDING ALONG WESTERLY BOUNDARY AS SHOWN ON PLAT # 2 RESERVED BY NORWICH ASSOCIATES. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 100 PAGE 508.

B. RIGHT OF WAY – NORWICH ASSOCIATES TO BROOKSIDE NURSING HOME, INC. 22 FEET WIDE BY 200 FEET RIGHT OF WAY CONVEYED. RECORDED 200 FEET LONG RESERVED FOR A ROAD OR STREET. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 56, PAGE 441.

B. RIGHT OF WAY – NORWICH ASSOCIATES TO BROOKSIDE NURSING HOME, INC. 22 FEET WIDE BY 200 FEET RIGHT OF WAY CONVEYED. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 73, PAGE 478.

C. RIGHT OF WAY – ARTHUR W. STONE & ANNA M. STONE TO IRVING J. & BARBARA TROMBLEY, DATED JANUARY 12, 1952. 25 FOOT WIDE EASEMENT FOR ROAD, DITCHES, AND UTILITIES RESERVED. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 54, PAGE 271.

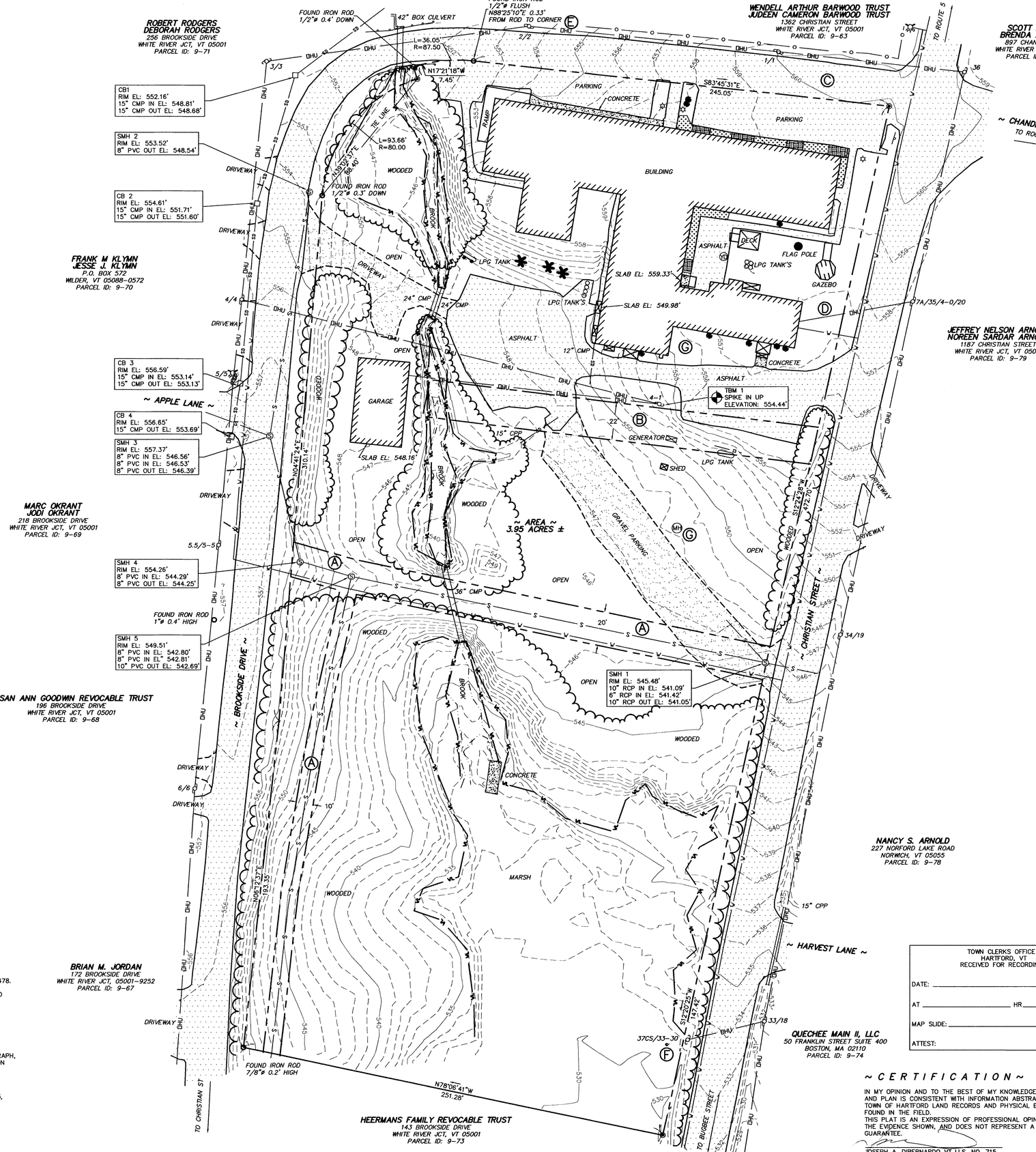
C. RIGHT OF WAY – ARTHUR W. STONE & ANNA M. STONE TO THE TOWN TOWN OF HARTFORD, DATED MAY 29, 1958. FROM CHRISTIAN STREET WESTERLY R.O.W. – 25 FEET WIDE 296 FEET LONG AND 40 FEET WIDE 600.8 FEET LONG. – RECORDED IN THE HARTFORD LAND RECORDS – BOOK 57, PAGE 364.

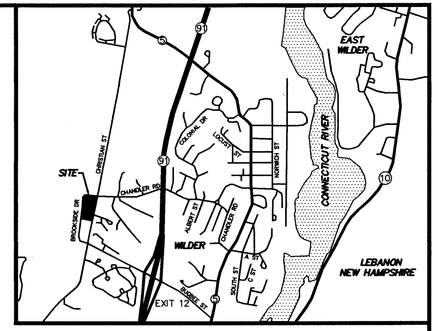
D. UTILITY EASEMENT – ARTHUR W. STONE & ANNA M. STONE TO NEW ENGLAND TELEPHONE & TELEGRAPH, DATED JUNE 19, 1947. 50 FEET WIDE UNDERGROUND & OVERHEAD TELEPHONE EASEMENT, LOCATION UNCERTAIN. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 51, PAGE 587.

E. UTILITY EASEMENT – NORWICH ASSOCIATES TO GREEN MOUNTAIN POWER CORPORATION, DATED OCTOBER 11, 1967. 20 FEET WIDE OVERHEAD OVERHEAD ELECTRIC & TELEPHONE EASEMENT FROM CHRISTIAN STREET TO BROOKSIDE DRIVE. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 63, PAGE 16.

F. GUY & ANCHOR EASEMENT – NORWICH ASSOCIATES TO GREEN MOUNTAIN POWER CORPORATION, DATED JANUARY 12, 1978. 10 FEET WIDE GUY ANCHOR EASEMENT. RECORDED IN THE HARTFORD LAND RECORDS – BOOK 83, PAGE 152.

G. NOTICE OF UNDERGROUND STORAGE TANKS, DATED NOVEMBER 17, 1987. RECORDED IN THE HARTFORD LAND RECORDS – BOX 135, PAGE 206.





~ LOCATION MAP ~

~ LEGEND ~

- PROPERTY LINE
- RIGHT OF WAY LINE
- DELINEATED WETLANDS
- IRON PIN FOUND
- 5/8" ø IRON ROD SET
- YARD DRAIN
- SEWER MANHOLE
- STOCK FENCE
- POST AND RAIL FENCE
- UTILITY POLE
- BROOK
- CATCH BASIN
- FIRE HYDRANT
- BENCH MARK
- BOLLARD
- LIGHT POLE
- STORM DRAIN
- SEWER LINE
- WATER LINE
- MAN HOLE UNKNOWN
- GUY WIRE
- EASEMENT TABLE IDENTIFIER
- STOP SIGN
- PLANT
- BUSH
- OVERHEAD UTILITY
- HEDGE
- GARDEN
- TREE LINE
- GUARD RAIL

THIS PLAT IS APPROVED BY THE PLANNING COMMISSION SUBJECT TO THE FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION FOR THIS PLANNED DEVELOPMENT, A COPY OF WHICH IS ON FILE IN THE DEPARTMENT OF PLANNING AND DEVELOPMENT SERVICES.

APPROVAL NO. _____ HARTFORD PLANNING COMMISSION

DATE: _____ BY: _____ CHAIRPERSON

~ REVISIONS ~

NO.	DATE	DESCRIPTION	BY
1.	7-3-24	ADDED PC SIGNATURE BLOCK AND RECORDING BLOCK.	JAD

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

TOWN CLERKS OFFICE
HARTFORD, VT
RECEIVED FOR RECORDING

DATE: _____

AT _____ HR _____ MIN AM/PM

MAP SLIDE: _____

ATTEST: _____

~ CERTIFICATION ~

IN MY OPINION AND TO THE BEST OF MY KNOWLEDGE THIS SURVEY AND PLAN IS CONSISTENT WITH INFORMATION ABSTRACTED FROM THE TOWN OF HARTFORD LAND RECORDS AND PHYSICAL EVIDENCE FOUND IN THE FIELD.
THIS PLAT IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE EVIDENCE SHOWN, AND DOES NOT REPRESENT A WARRANTY OR A GUARANTEE.

JOSEPH A. DIBERNARDO VT LLS. NO. 715

TOPOGRAPHIC PLAN OF PROPERTY OF

12 TREMONT STREET, LLC

77 BANK STREET
LEBANON, NH 03766
PARCEL ID: 9-72

~ BROOK SIDE DRIVE & CHRISTIAN STREET ~
~ WINDSOR COUNTY ~ VILLAGE OF WILDER ~ TOWN OF HARTFORD, VERMONT ~

DIBERNARDO ASSOCIATES, LLC
VT NH
LICENSED LAND SURVEYORS
P.O. BOX 52
BELLOWS FALLS, VT 05101
802-463-3031 ~ 603-358-5509

STATE OF VERMONT
JOSEPH A. DIBERNARDO NO. 715
LICENSED LAND SURVEYOR

DATE	MAY 16, 2024	SCALE	1"=30'
DRAWN BY	JW	CK'D BY	JAD
SURVEYED BY	BG, JD		
DWG.NO.	3577		

© COPYRIGHT 2024 DIBERNARDO ASSOCIATES, LLC.

PLOTTED: 7/8/2024 9:26 AM

N

ROBERT RODGERS
DEBORAH RODGERS
256 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-71

FOUND IRON ROD
1/2"ø 0.4' DOWN

42" BOX CULVERT

1/2"ø FLUSH
N88°25'10"E 0.33'
FROM ROD TO CORNER

WENDELL ARTHUR BARWOOD TRUST
JUDEEN CAMERON BARWOOD TRUST
1362 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-63

SCOTT A. DAVIS
BRENDA A. CARTER
897 CHANDLER ROAD
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-83-2

TO ROUTE 5

~ CHANDLER ROAD ~
TO ROUTE 5

CB1
RIM EL: 552.16'
15" CMP IN EL: 548.81'
15" CMP OUT EL: 548.68'

SMH 2
RIM EL: 553.52'
8" PVC OUT EL: 548.54'

CB 2
RIM EL: 554.61'
15" CMP IN EL: 551.71'
15" CMP OUT EL: 551.60'

CB 3
RIM EL: 556.59'
15" CMP IN EL: 553.14'
15" CMP OUT EL: 553.13'

~ APPLE LANE ~

CB 4
RIM EL: 556.65'
15" CMP OUT EL: 553.69'

SMH 3
RIM EL: 557.37'
8" PVC IN EL: 546.56'
8" PVC IN EL: 546.53'
8" PVC OUT EL: 546.39'

MARC OKRANT
JODI OKRANT
218 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-69

SMH 4
RIM EL: 554.26'
8" PVC IN EL: 544.29'
8" PVC OUT EL: 544.25'

FOUND IRON ROD
1"ø 0.4' HIGH

SMH 5
RIM EL: 549.51'
8" PVC IN EL: 542.80'
8" PVC IN EL" 542.81'
10" PVC OUT EL: 542.69'

ANN GOODWIN REVOCABLE TRUST
196 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-68

~ BROOKSIDE DRIVE ~

FRANK M KLYMN
JESSE J. KLYMN
P.O. BOX 572
WILDER, VT 05088-0572
PARCEL ID: 9-70

L=36.05'
R=87.50
N17°21'18"W
7.45'

TIE LINE
L=93.66'
R=80.00
N39°02'31"E
88.40'

S83°45'31"E
245.05'

S12°24'28"W
412.70'

N04°41'24"E
310.14'

50' WETLAND SETBACK

50' WETLAND SETBACK

DRIVEWAY

WOODED

OPEN

GARAGE

BUILDING

PARKING

CONCRETE

RAMP

ASPHALT

DECK

FLAG POLE

GAZEBO

LPG TANK

LPG TANK'S

SLAB EL: 559.33'

SLAB EL: 549.98'

SLAB EL: 548.16'

24" CMP

12" CMP

15" CPP

36" CMP

20'

BROOK

GENERATOR

SHED

GRAVEL PARKING

~ AREA ~
3.95 ACRES ±

CHRISTIAN STREET

JEFFREY NELSON ARNOLD
NOREEN SARDAR ARNOLD
1187 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-79

TBM 1
SPIKE IN UP
ELEVATION: 554.44'

SMH 1
RIM EL: 545.48'
10" RCP IN EL: 541.09'
6" RCP IN EL: 541.42'
10" RCP OUT EL: 541.05'

X1 REMOVE OIL TANK, PIPING AND PUPMP HOUSE
X2 REMOVE PAVEMENT
X3 REMOVE LPG TANKS
X4 REMOVE LIGHT
X5 REMOVE PIPE

DEMOLITION NOTES

GRAPHIC SCALE
20 0 10 20 40 80
1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-530-9614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Demolition Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.0

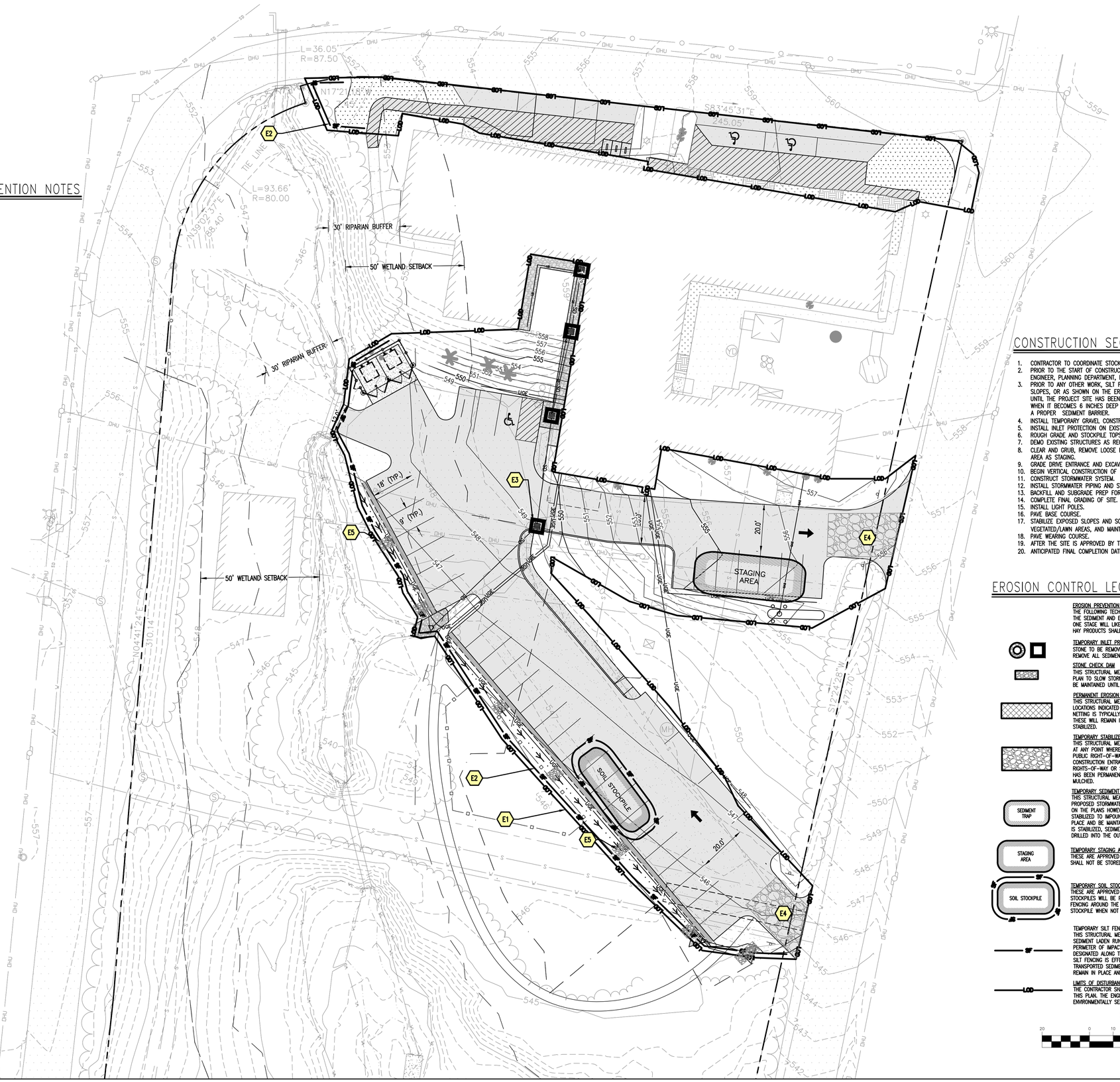
S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C1.0 DEMOLITION PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM

N

STORMWATER POLUTION PREVENTION NOTES

- E1 LIMIT OF DISTURBANCE
- E2 SILT FENCE
- E3 INLET PROTECTION (TYP.)
- E4 STABILIZED CONSTRUCTION ENTRANCE
- E5 STONE CHECK DAM (TYP.)



CONSTRUCTION SEQUENCE

1. CONTRACTOR TO COORDINATE STOCKPILE AND STAGING AREAS WITH THE OWNER.
2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL HOST A PRECONSTRUCTION MEETING WITH OWNER, ENGINEER, PLANNING DEPARTMENT, POLICE, FIRE, AND PUBLIC WORKS STAFF.
3. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
5. INSTALL INLET PROTECTION ON EXISTING CATCH BASINS AFFECTED DURING CONSTRUCTION.
6. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
7. DEMO EXISTING STRUCTURES AS REQUIRED.
8. CLEAR AND GRUB, REMOVE LOOSE PAVING/DEMO PAVING AS REQUIRED AND HAUL OFF SITE USING EXISTING PARKING AREA AS STAGING.
9. GRADE DRIVE ENTRANCE AND EXCAVATE BUILDING PAD
10. BEGIN VERTICAL CONSTRUCTION OF BUILDING ADDITION CONCURRENT WITH WATER AND SEWER UTILITIES.
11. CONSTRUCT STORMWATER SYSTEM.
12. INSTALL STORMWATER PIPING AND STRUCTURES
13. BACKFILL AND SUBGRADE PREP FOR NEW PARKING AND SIDEWALK AREAS
14. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
15. INSTALL LIGHT POLES.
16. PAVE BASE COURSE.
17. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, REPAIR AND REESTABLISH ALL DISTURBED VEGETATED/LAWN AREAS, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
18. PAVE WEARING COURSE.
19. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY.
20. ANTICIPATED FINAL COMPLETION DATE SUMMER/FALL 2024.

EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES. HAY PRODUCTS SHALL NOT BE USED.

TEMPORARY INLET PROTECTION – STONE COLLARS AND/OR INLET SOCKS. INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS ≤ 1/2 DEPTH OF STONE. REMOVE ALL SEDIMENT COLLECTED IN STRUCTURE OR SOCK AS SOON AS POSSIBLE.

STONE CHECK DAM
THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

PERMANENT EROSION CONTROL NETTING
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE SEEDED AND MULCHED.

TEMPORARY SEDIMENT BASIN
THIS STRUCTURAL MEASURE INVOLVES CONSTRUCTING TEMPORARY SEDIMENT BASINS IN THE LOCATION OF PROPOSED STORMWATER PONDS. GENERALLY THE STORMWATER PONDS CAN BE CONSTRUCTED AS SHOWN ON THE PLANS HOWEVER ORIFICE ON THE OUTLET STRUCTURES SHALL BE OMITTED UNTIL THE SITE IS STABILIZED TO IMPOUND RUNOFF AND ALLOW FOR SETTLING OF SUSPENDED FINES. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE THE SITE IS STABILIZED, SEDIMENT SHALL BE REMOVED FROM THE BASINS AND THE OUTLET ORIFICE SHALL BE DRILLED INTO THE OUTLET STRUCTURE AS NOTED ON THE PLANS.

TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE NON-SOIL, NON-ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.

TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SILT FENCING AROUND THE DOWN GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.

TEMPORARY SILT FENCING
THIS STRUCTURAL MEASURE IS A TEMPORARY BARRIER OF GEOTEXTILE FABRIC USED TO INTERCEPT SEDIMENT LADEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE FILL SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, INSTALL CONSTRUCTION FENCE BEHIND THE SILT FENCE. SILT FENCING IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ONTO ADJACENT AREAS. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Erosion Prevention and Sediment Control Plan

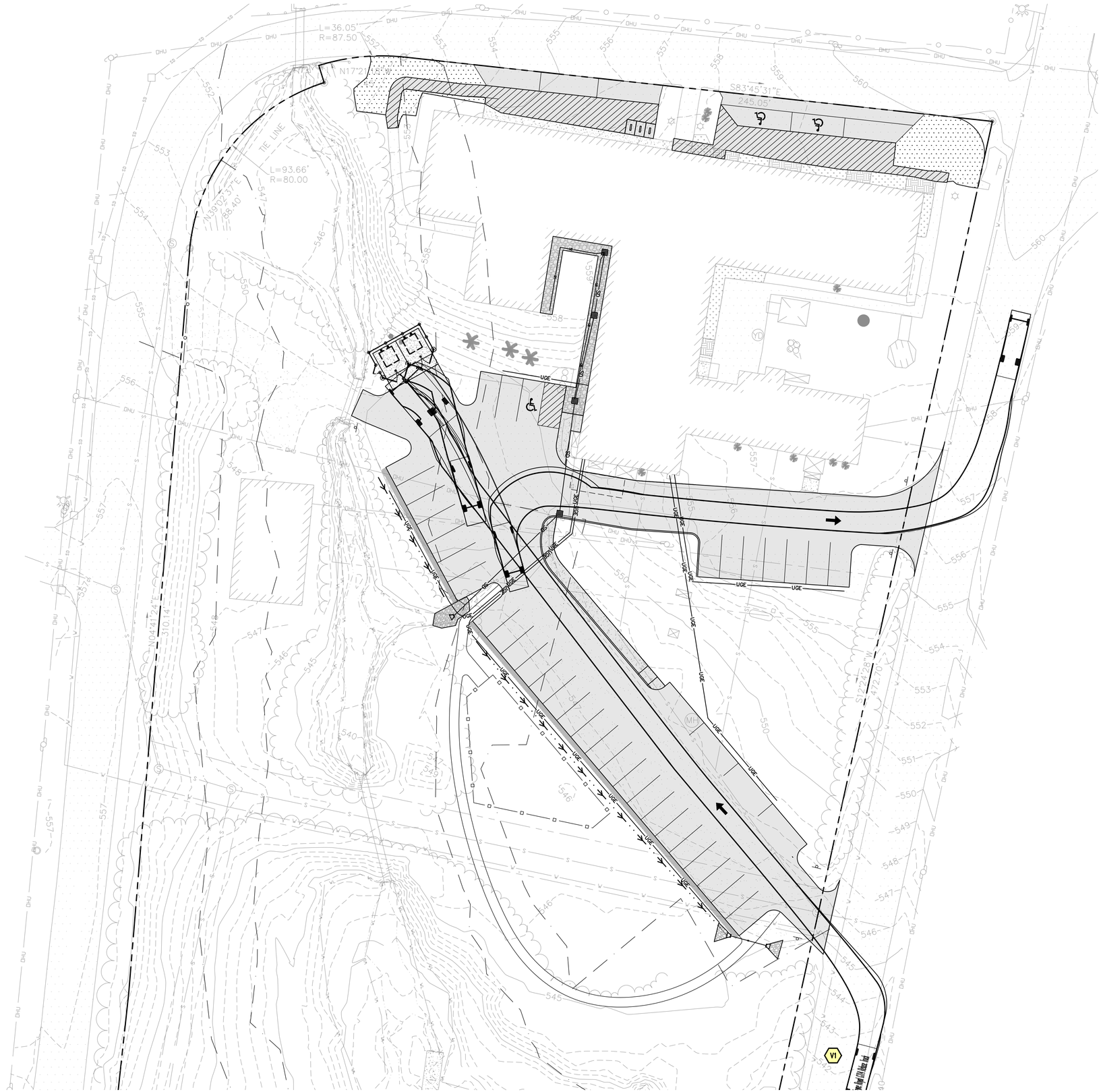
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.1

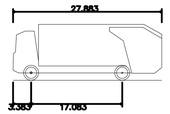
S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C1.1 EPSC PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM



VEHICLE TURNING NOTES

V1 GARBAGE TRUCK



Hino 338 M + Wayne Royal GT14 Refuse Truck	
Overall Length	27.883ft
Overall Width	8.042ft
Overall Body Height	10.488ft
Min Body Ground Clearance	1.318ft
Track Width	8.042ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	27.400ft

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Garbage Truck Turning Plan

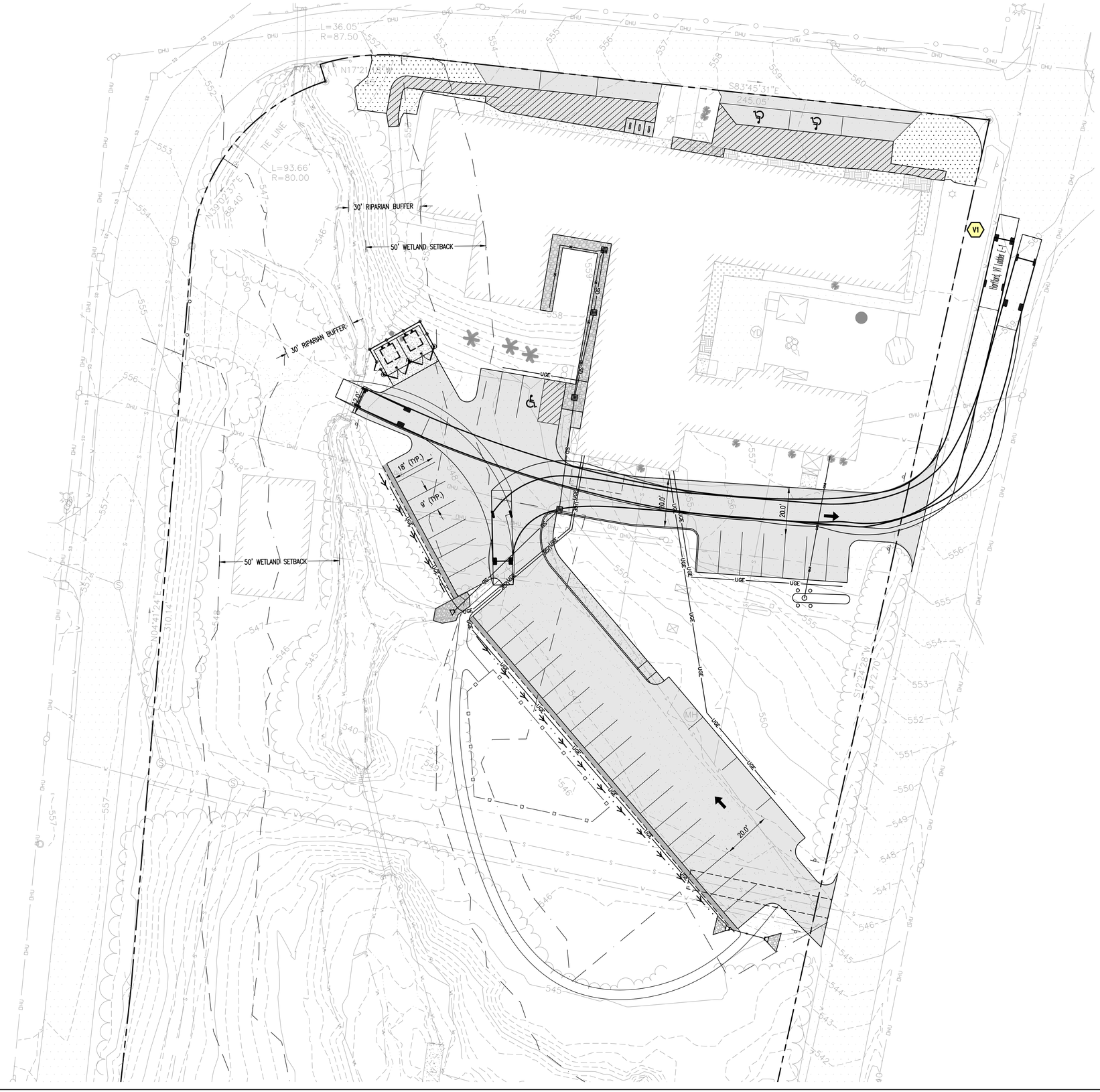
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.2

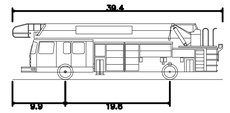
S:\PROJECTS\2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 8:19 AM



VEHICLE TURNING NOTES

V1 HARTFORD LADDER TRUCK



Hartford, VT Ladder E-1	
Overall Length	39.400ft
Overall Width	8.300ft
Overall Body Height	10.484ft
Min Body Ground Clearance	0.915ft
Track Width	8.300ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	35.100ft

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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Lebanon, New Hampshire
603-727-9024

Sheet Title: Fire Truck Turning Plan

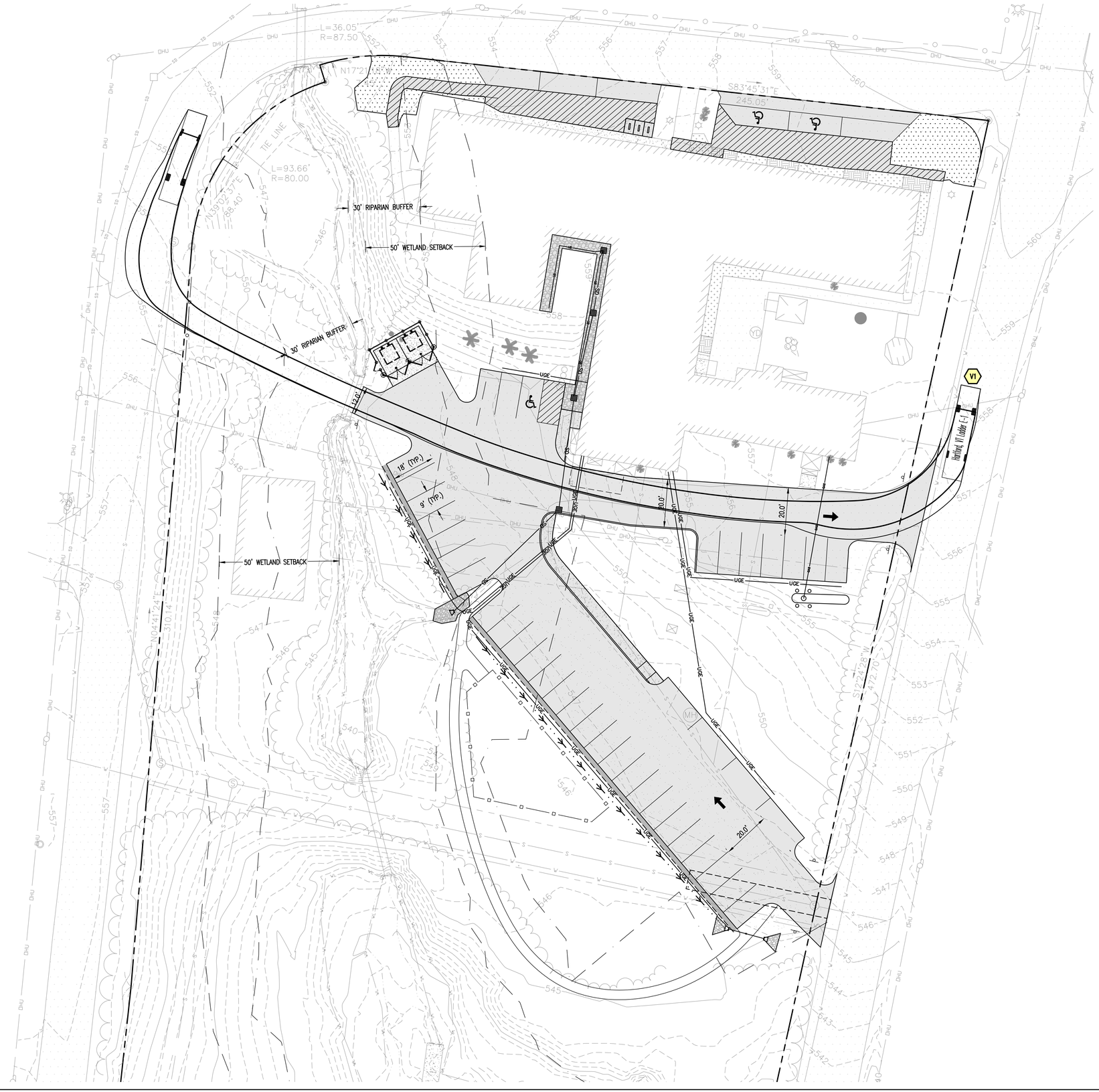
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.3

S:\PROJECTS\0-2024\24085 BROOKSIDE APARTMENTS\WIP\SHEET FILES\24085 BROOKSIDE C2.3 SITE PLAN.DWG

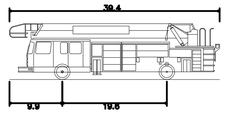
PLOTTED: 7/8/2024 8:19 AM



N

VEHICLE TURNING NOTES

V1 HARTFORD LADDER TRUCK



Hartford, VT Ladder E-1	
Overall Length	39.400ft
Overall Width	8.300ft
Overall Body Height	10.484ft
Min Body Ground Clearance	0.915ft
Track Width	8.300ft
Lock-to-Lock time	4.00s
Curb to Curb Turning Radius	35.100ft

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Fire Truck Turning Plan (2)

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C1.4

S:\PROJECTS\2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 4:26 PM

N

ROBERT RODGERS
DEBORAH RODGERS
256 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-71

FOUND IRON ROD
1/2"ø 0.4' DOWN

42" BOX CULVERT

1/2"ø FLUSH
N88°25'10"E 0.33'
FROM ROD TO CORNER

WENDELL ARTHUR BARWOOD TRUST
JUDEEN CAMERON BARWOOD TRUST
1362 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-63

SCOTT A. DAVIS
BRENDA A. CARTER
897 CHANDLER ROAD
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-83-2

TO ROUTE 5

~ CHANDLER ROAD ~
TO ROUTE 5

CB1
RIM EL: 552.16'
15" CMP IN EL: 548.81'
15" CMP OUT EL: 548.68'

SMH 2
RIM EL: 553.52'
8" PVC OUT EL: 548.54'

CB 2
RIM EL: 554.61'
15" CMP IN EL: 551.71'
15" CMP OUT EL: 551.60'

CB 3
RIM EL: 556.59'
15" CMP IN EL: 553.14'
15" CMP OUT EL: 553.13'

CB 4
RIM EL: 556.65'
15" CMP OUT EL: 553.69'

SMH 3
RIM EL: 557.37'
8" PVC IN EL: 546.56'
8" PVC IN EL: 546.53'
8" PVC OUT EL: 546.39'

SMH 4
RIM EL: 554.26'
8" PVC IN EL: 544.29'
8" PVC OUT EL: 544.25'

SMH 5
RIM EL: 549.51'
8" PVC IN EL: 542.80'
8" PVC IN EL" 542.81'
10" PVC OUT EL: 542.69'

SMH 1
RIM EL: 545.48'
10" RCP IN EL: 541.09'
6" RCP IN EL: 541.42'
10" RCP OUT EL: 541.05'

FRANK M KLYMN
JESSE J. KLYMN
P.O. BOX 572
WILDER, VT 05088-0572
PARCEL ID: 9-70

MARC OKRANT
JODI OKRANT
218 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-69

ANN GOODWIN REVOCABLE TRUST
196 BROOKSIDE DRIVE
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-68

JEFFREY NELSON ARNOLD
NOREEN SARDAR ARNOLD
1187 CHRISTIAN STREET
WHITE RIVER JCT, VT 05001
PARCEL ID: 9-79

~ APPLE LANE ~

~ BROOKSIDE DRIVE ~

CHRISTIAN STREET

30' RIPARIAN BUFFER

50' WETLAND SETBACK

L=36.05'
R=87.50

L=93.66'
R=80.00

N17°21'31"W 245.05'

S83°45'31"E 245.05'

N39°02'31"E 88.40'

N04°41'24"E 310.14'

S12°24'28"W 472.70'

TBM = IRON SPIKE IN UP
ELEVATION: 554.44'

SLAB EL: 559.33'

SLAB EL: 549.98'

SLAB EL: 548.16'

ASPHALT

DECK

FLAG POLE

LPG TANK'S

GAZEBO

BUILDING

GARAGE

LPG TANK

SHED

GENERATOR

CPP

GRAVEL PARKING

AREA
0.5 ACRES

WOODED

OPEN

BROOK

RAMP

TREE LINE

24" CMP

18" CMP

12" CMP

36" CMP

18" (TYP.)

9' (TYP.)

20' UGE

UGE

DRIVEWAY

CONCRETE

ELECTRICAL NOTES

E1 ELECTRICAL CONDUIT FOR FUTURE EV CHARGERS

DRAINAGE NOTES

D1 CATCH BASIN (TYP.)

D2 12" HDPE

D3 FLARED END SECTION WITH STONE APRON

D4 STONE DRIP EDGE WITH UNDERDRAIN

D5 (12) CULTEC 902HD UNDERGROUND CHAMBERS

D6 GRASS SWALE

SEWER NOTE

S1 4" OF 60 PSI EXTRUDED POLYSTYRENE RIGID FOAM INSULATION OVER EXISTING SEWER MAIN AND UNDER PARKING LOT GRAVEL SECTION.

SITE NOTES

C1 EMERGENCY AND MAINTENANCE ACCESS GATE WITH KNOX BOX LOCK. COPIES OF KNOX KEY TO BE FURNISHED TO HARTFORD FIRE DEPARTMENT AND OWNER.

C2 EXISTING BUILDING TO BE RENOVATED TO CREATE 38 APARTMENTS.

C3 OIL TANK, PUMP HOUSE AND BURIED OIL LINES TO BE REMOVED AND DISPOSED OF PER LOCAL, STATE AND FEDERAL REQUIREMENTS. COORDINATE WITH MEP ENGINEER, AND ENVIRONMENTAL FIRM AS REQUIRED DURING DECOMISSIONING.

C4 1,990 GALLON UNDERGROUND PROPANE TANK. COORDINATE LOCATION AND OTHER REQUIREMENTS WITH PROPANE COMPANY. (4) BOLLARDS.

C5 PARKING LOT TO BE PAVED

C6 REMOVE EXISTING ADA PARKING

C7 2 VAN ACCESSIBLE ADA PARKING SPACES AND ACCESS AISLE

C8 5' WIDE ACCESSIBLE WALKWAY

C9 DUMPSTER

C10 1 VAN ACCESSIBLE ADA PARKING SPACES AND ACCESS AISLE

C11 ONE WAY SIGN

C12 ONE WAY DO NOT ENTER SIGN

C13 DO NOT ENTER, AUTHORIZED PERSONNEL ONLY SIGN

C14 6" OF TOPSOIL AND BARK MULCH

C15 DELIVERY TRUCK AREA

C16 DIRECTION OF TRAVEL

C17 DOG PARK/ACCESS PATH REFER TO LANDSCAPE PLAN FOR DETAILS

C18 SNOW STORAGE

C19 STAPLE BIKE RACK

C20 STRIPE HATCHED PAVEMENT

C21 VERTICAL CURB

C22 2' GRAVEL SHOULDER

C23 PRIMARY ENTRANCE

PARKING NOTES:
1. 46 PARKING SPACES PROVIDED
2. ONE PARKING SPACE WILL BE ASSIGNED TO 38 TENANTS
3. 8 VISITOR PARKING SPACES

GRAPHIC SCALE
20 0 10 20 40 80
1 inch = 20 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Site, Grading and Drainage Plan

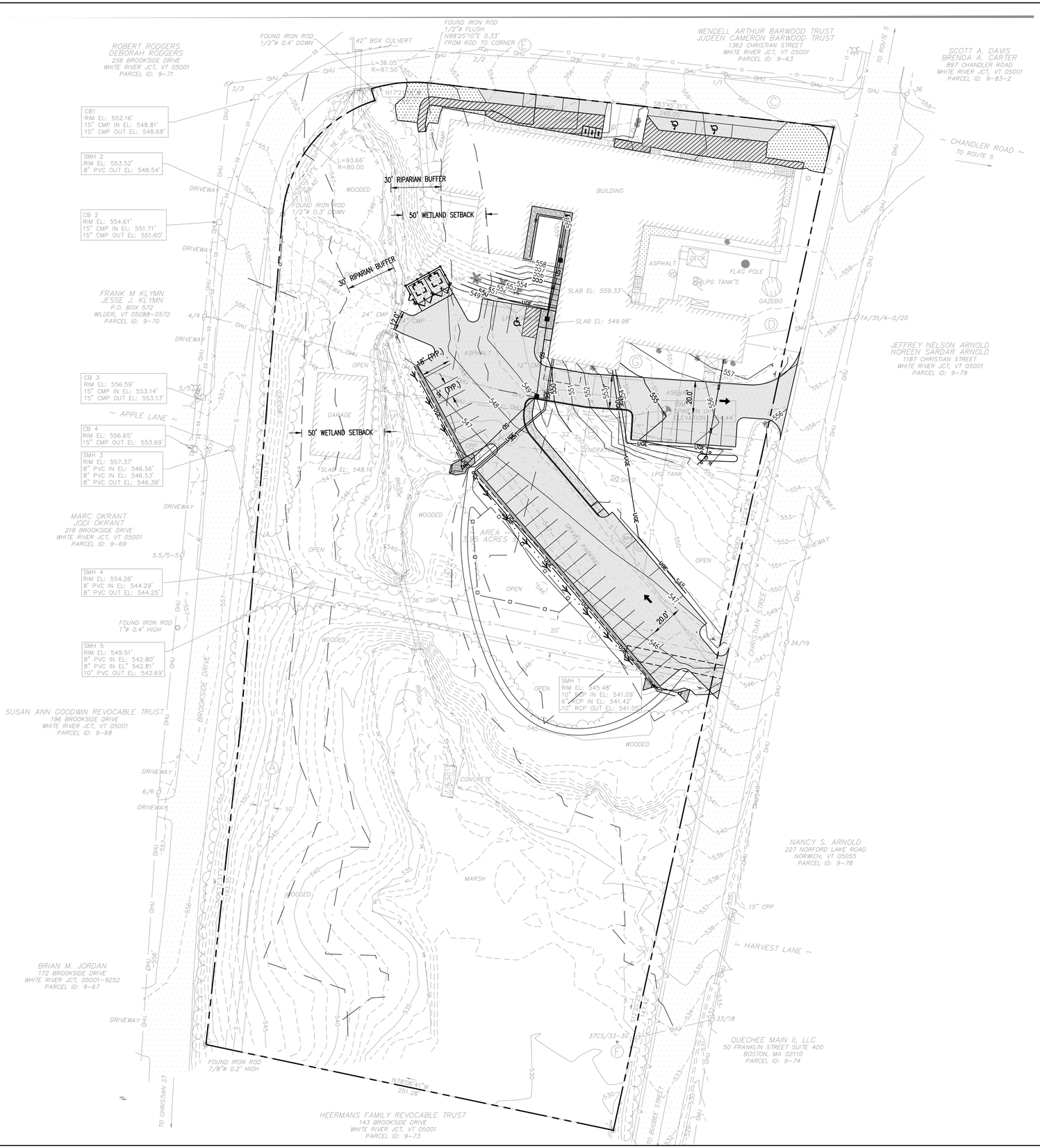
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

C2.1

X:\PROJECTS\X-2024\24085 BROOKSIDE APARTMENTS\WORKSHEET FILES\ADBS BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 8:18 AM



GRAPHIC SCALE

30 0 15 30 60 120

1 inch = 30 ft.
for sheet size 24" x 36"

Stamp

No.	Description	Date

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12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Site Plan Overall

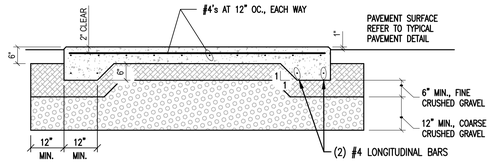
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 30'
Date:	7/8/2024

C2.0

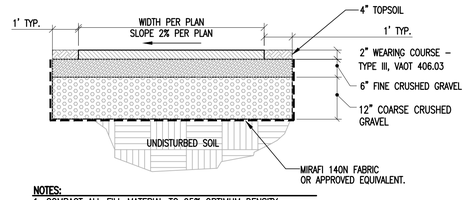
S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE C2.0 SITE PLAN.DWG

PLOTTED: 7/8/2024 8:26 AM



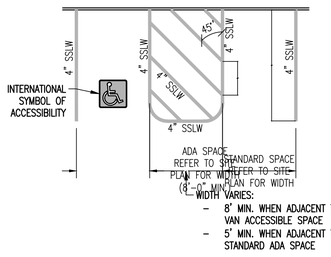
NOTES:
1. CONCRETE TO BE 4,500psi WITH 5-7% AIR ENTRAINMENT.
2. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUIVALENT.
3. REFER TO LAYOUT PLAN FOR SIZE AND LOCATION.

CONCRETE DUMPSTER PAD 1
NOT TO SCALE

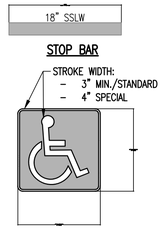


NOTES:
1. COMPACT ALL FILL MATERIAL TO 95% OPTIMUM DENSITY.

ASPHALT SIDEWALK DETAIL 2
NOT TO SCALE



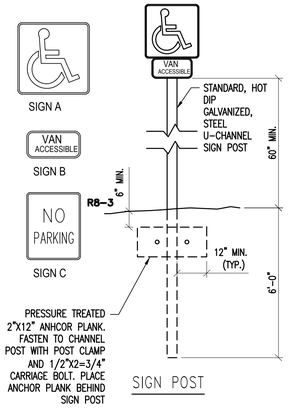
PARKING LOT STRIPING



STOP BAR

INTERNATIONAL SYMBOL OF ACCESSIBILITY

ADA PAVEMENT MARKINGS 3
NOT TO SCALE

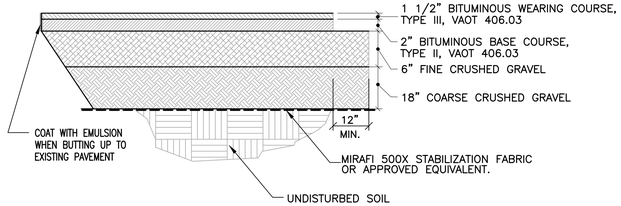


SIGN POST

SIGN KEY:

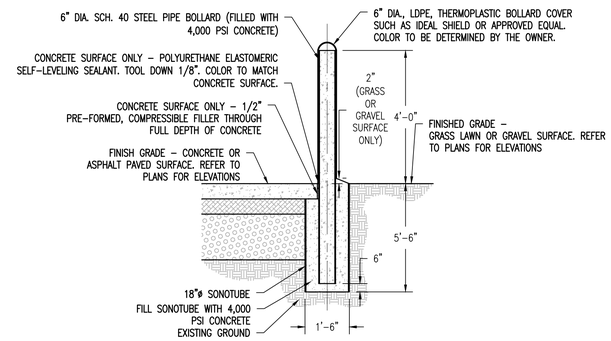
SIGN	MUTCD DESIGNATIONS	COMMON NAME	SIZE
A	D9-6	HANDICAPPED	24" x 24"
B	D9-6P	VAN ACCESSIBLE (PLAQUE)	18" x 9"

ADA SIGNS AND POST 4
NOT TO SCALE

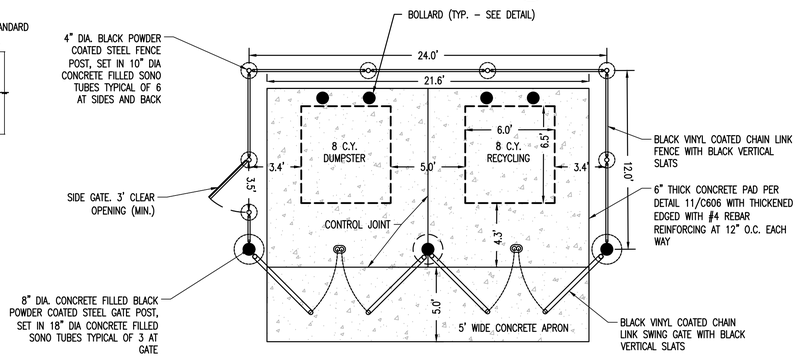


PAVEMENT PATCHING NOTES:
1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

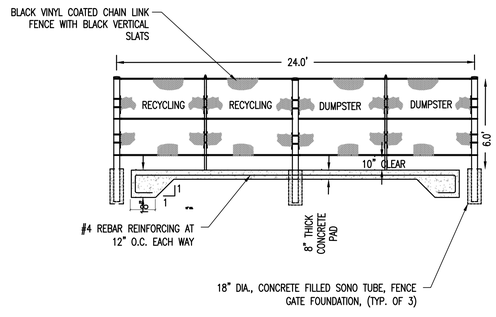
PAVEMENT SECTION 5
NOT TO SCALE



TYPICAL BOLLARD DETAIL 6
NOT TO SCALE



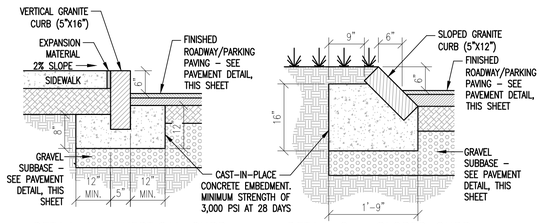
PLAN VIEW



SECTION VIEW

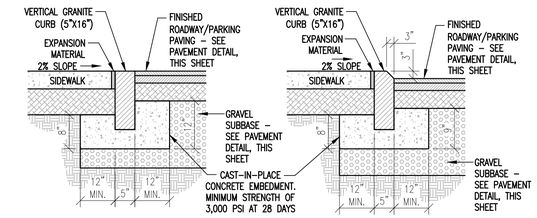
NOTES:
1. CONCRETE TO BE 4000psi WITH 5-7% AIR ENTRAINMENT.
2. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUIVALENT.
3. CONTROL JOINT SHALL BE A 1/8" WIDE JOINT AT LEAST 1/3 OF THE DEPTH OF THE PAD.

DUMPSTER PAD WITH FENCE ENCLOSURE 7
NOT TO SCALE



DETAIL A - VERTICAL CURB

DETAIL C - SLOPED CURB

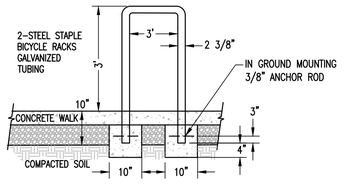


DETAIL B - FLUSH CURB

DETAIL D - MOUNTABLE CURB

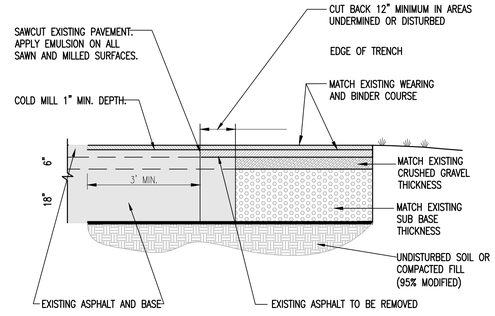
VERTICAL GRANITE CURB NOTES:
1. GRANITE CURBS SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT AND STATE SPECIFICATIONS
2. WHERE CURB IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, CURB SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" O.C. (PORTION OF DOWEL IN CURB TO BE GREASED).
3. WHERE CURB IS ADJACENT TO SIDEWALK, BOLLARD, LIGHT BASE OR OTHER HARD FEATURES, 1/2" EXPANSION MATERIAL (FULL DEPTH OF CURB), SHALL BE INSTALLED BETWEEN FEATURE & CURB.

GRANITE CURB DETAILS 8
NOT TO SCALE



NOTES:
1. ONE RACK HAS THE CAPACITY TO HOLD 2 BIKES.
2. MAINTAIN 3' MINIMUM SPACING BETWEEN RACKS AND 4' TO EXTERIOR WALL.
3. U-STYLE RACKS NOT ACCEPTABLE.

STAPLE BIKE RACK 9
NOT TO SCALE



ASPHALT PAVEMENT TRENCH PATCH 10
NOT TO SCALE

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Sheet Title: Site Details

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
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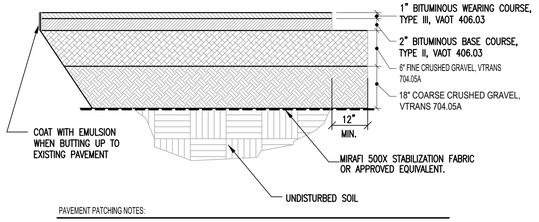
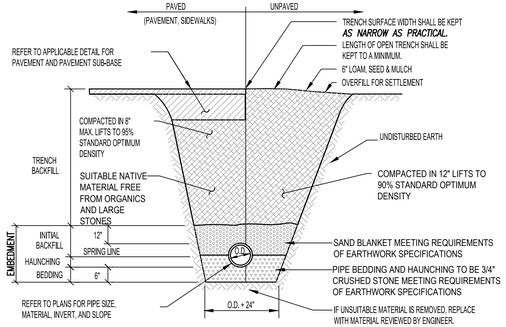


PAVEMENT PATCHING NOTES:

1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR

PAVEMENT TYPICAL SECTION

NOT TO SCALE 1

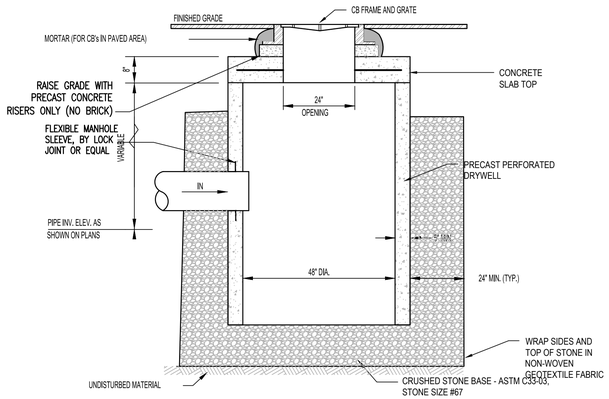


STORM DRAIN TRENCH NOTES

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM , STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
3. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW STORM DRAIN SYSTEM DURING CONSTRUCTION.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
5. PROVIDE 6' OF COVER OVER PIPE IN PAVED AREAS AND 5' OF COVER OVER PIPE IN UNPAVED AREAS. REFER TO INSULATION DETAIL FOR AREAS WHERE PROPER COVER CAN NOT BE ACHIEVED.

DRAINGE TRENCH DETAIL

NOT TO SCALE 4

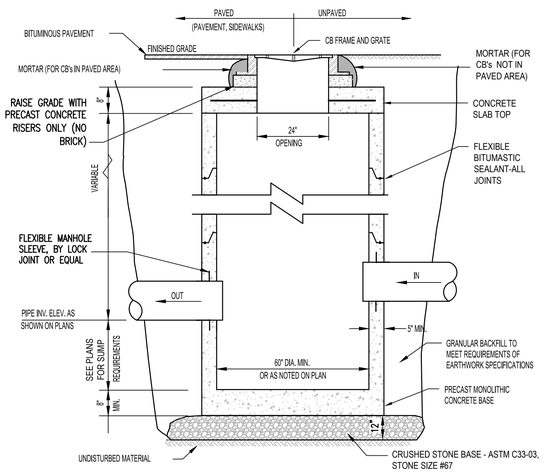


NOTES

1. IN PAVEMENT AREAS, PROVIDE A LEBARON 24"X24" TYPE E OR EQUAL, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS. IN GRASS AERAS, PROVIDE A 24" ROUND GRATE.
2. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.

DRY WELL DETAIL

NOT TO SCALE 2

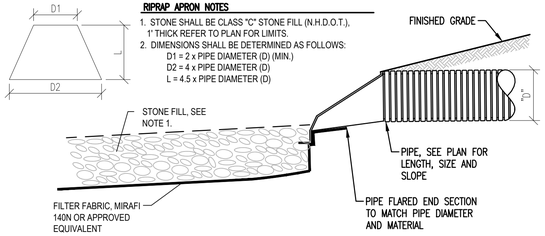


CATCH BASIN NOTES

1. IF DEPTH OF CATCH BASIN IS 7 FEET OR LESS FROM RIM TO CENTERLINE INVERT THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF CATCH BASIN FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 FEET THEN A CONICAL TOP WILL BE INSTALLED.
2. IN PAVEMENT AREAS, PROVIDE A LEBARON 24"X24" TYPE E OR EQUAL, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS. IN GRASS AERAS, PROVIDE A 24" ROUND GRATE.
3. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.

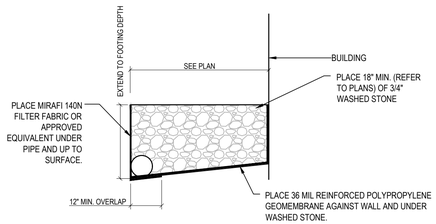
CATCH BASIN DETAIL

NOT TO SCALE 3



FLARED END SECTION W/STONE APRON

NOT TO SCALE 5



TYPICAL DRIP EDGE

NOT TO SCALE 6

SITE/EARTHWORK SPECIFICATIONS

1. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, AND PROJECT ENGINEER TO REVIEW PROCEDURES, IDENTIFY RESPONSIBILITIES. UNLESS STATED OTHERWISE, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE VTRANS SPECIFICATIONS.
2. CLEARING AND GRUBBING– SITE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING DRIVEWAYS, STONE WALLS, AND GRASS AREAS. THE DRIVEWAY SUB-GRADE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVING.
3. COMPACTION OF ALL MATERIALS SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY ASTM D2922 AND SHALL NOT BE LESS THAN THE REQUIRED AMOUNT AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
4. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 1000 SQUARE FEET OF AREA.
5. PAVEMENT SHALL MEET THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS PUBLISHED BY VTRANS.
6. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO THE COMPLETION OF ROLLING. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.
7. ALL REMAINING DISTURBED AREAS SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS FOR EROSION CONTROL.
8. THE SEEDING OF 10% OR GREATER SLOPES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.
9. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL. REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLES:

A. SAND BLANKET/BEDDING: VTRANS 703.03A

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1-1/2 INCHES	90 – 100
1/2 INCH	70 – 100
NO. 4	60 – 100
NO. 100	0 – 20
NO. 200	0 – 8

B. 3/4" CRUSHED STONE: VTRANS 704.02B

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 INCH	100
3/4 INCHES	90 – 100
3/8 INCH	20 – 55
NO. 4	0 – 10
NO. 8	0 – 5

C. 1-1/2" CRUSHED STONE: VTRANS 704.02C

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCH	100
1-1/2 INCH	95 – 100
3/4 INCH	35 – 70
3/8 INCH	10 – 30
NO. 4	0 – 5

D. COARSE CRUSHED GRAVEL: VTRANS 704.05A (COARSE)

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
4 INCHES	95 – 100
NO. 4	25 – 50
NO. 100	0 – 12
NO. 200	0 – 6

E. FINE CRUSHED GRAVEL: VTRANS 704.05A (FINE)

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1-1/2 INCHES	90 – 100
NO. 4	30 – 60
NO. 100	0 – 12
NO. 200	0 – 6

F. GRANULAR BACKFILL: VTRANS 704.08A

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 INCHES	100
NO. 4	45 – 75
NO. 100	0 – 12
NO. 200	0 – 6

G. TYPE I STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF FOUR INCHES.

H. TYPE II STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM TWO INCHES TO 36 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

I. TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS:
1. THE pH OF THE MATERIAL SHALL BE BETWEEN 5.5 AND 7.6.
2. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 2% NOR MORE THAN 20%.
3. GRADATION:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1 INCH	85 – 100
1/4 INCH	65 – 100
NO. 200	20 – 80

THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHODS TO MEET THE ABOVE SPECIFICATIONS.

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Sheet Title: Drainage Details

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

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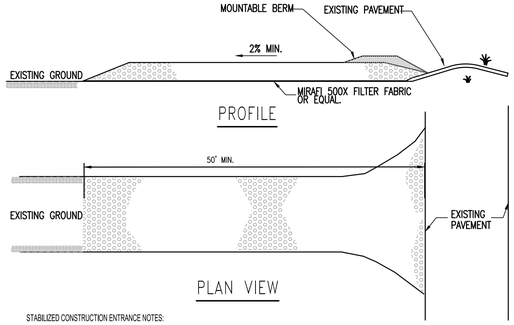
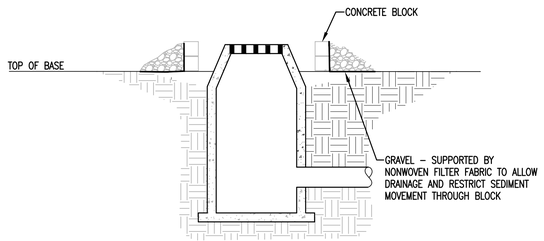


STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: USE 1–1/2" CRUSHED STONE.
2. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT–OF–WAYS MUST BE REMOVED IMMEDIATELY.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
5. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONSTRUCTION ENTRANCE DETAIL

SCALE: NONE (1)

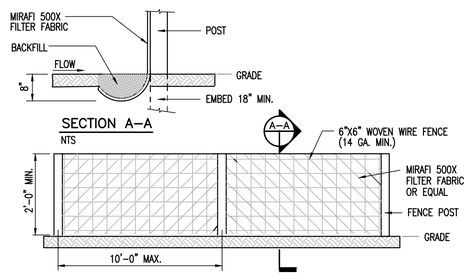


CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER FLOW.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, REMOVE GRAVEL AND BLOCK AND STABILIZE SURROUNDING AREA PER PLAN.
4. GRAVEL BAGS, GRATE GUARDS, FILTREXX OR SEDIGUARD INLET PROTECTION DEVICES MAY BE USED. SUBMIT PRODUCT INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE VT EPSC STANDARDS AND SPECIFICATIONS.

STONE AND BLOCK CATCH BASIN PROTECTION DETAIL

SCALE: NONE (2)

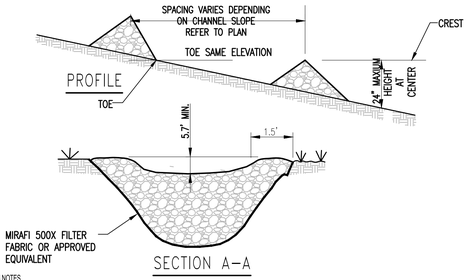


SILT FENCE NOTES:

1. SILT FENCE SHALL BE PRE–FABRICATED EROSION CONTROL FENCE BY MIRAFI OR EQUAL, OR CONSTRUCTED IN PLACE AS SPECIFIED HEREIN.
2. CONSTRUCTED IN PLACE SILT FENCE:
   A. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
   B. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE TIES SPACED EVERY 24" AT TOP OF MID SECTION.
   C. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
3. INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL). MAINTENANCE SHALL BE PER–FORMED AS NEEDED, AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

SILT FENCE DETAIL

SCALE: NONE (3)

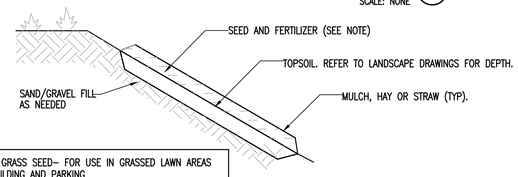


CHECK DAM NOTES

1. TYPE I STONE FILL WILL BE PLACED ON A FILTER FABRIC FOUNDATION AT THE GRADES AND LOCATIONS AS DESCRIBED HEREIN, AND TO MEET THE ABOVE DETAIL IN AREAS SHOWN ON PLANS
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM FOR A MINIMUM OF 100' DOWNSTREAM OF DISTRUBED EARTH.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED WEEKLY (EVERY 7 DAYS) AND WITHIN 24 HOURS AFTER EACH RAIN.
6. REMOVE SEDIMENT COLLECTED BEHIND EACH DAM WHEN DEPTH OF SEDIMENT IS ONE HALF THE HEIGHT OF THE DAM.

STONE CHECK DAM DETAIL

SCALE: NONE (4)



URBAN MIX GRASS SEED– FOR USE IN GRASSED LAWN AREAS AROUND BUILDING AND PARKING		
% BY WEIGHT	LBS. LIVE SEED BY ACRE	TYPE OF SEED
44.44	20.0	CREEPING RED FESCUE
44.44	20.0	KENTUCKY BLUEGRASS
11.11	5.0	RYEGRASS
100	45.0 # LIVE SEED/ ACRE	

CONSERVATION MIX GRASS SEED– FOR USE IN ALL OTHER AREAS		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
50	15.0	SMOOTH BROMEGRASS
16.67	5.0	RYEGRASS
33.33	10.0	BIRDSFOOT TREFOIL
100	30.0 # LIVE SEED/ACRE	

FERTILIZER– 40 LBS. PER 1000S.F.
USE STANDARD 10–20–20 WHEN NO SOIL TEST DATA IS AVAILABLE
SPRING SEEDING
FALL SEEDING

LIME– 100 LBS. PER 1000S.F.
DOLOMITIC GROUND LIMESTONE
NOT LESS THAN 85% OF THE TOTAL CARBONATE

TOP SOIL
6" MINIMUM TOPSOIL

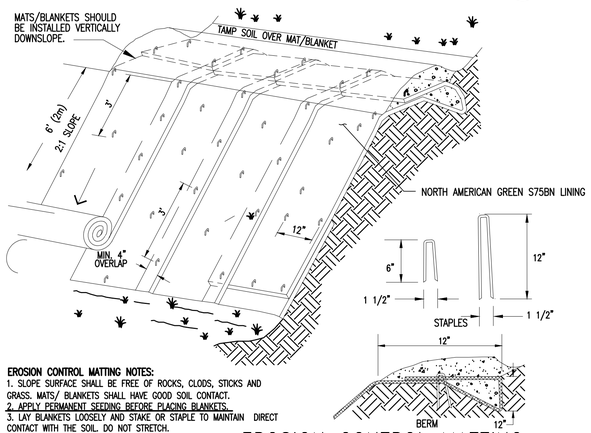
HAY OR STRAW MULCH– 90–100LBS PER 1000S.F. APPLY BINDER OR NETTING AS NEEDED

NOTES FOR SEEDED AND MULCHED AREAS

1. ALL DISTURBED SURFACES SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED WITHIN 7 DAYS OF DISTURBANCE.
2. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.
3. MULCH: TYPICALLY HAY OR STRAW MAY BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 90–100 LBS/1,000 SF. MULCH SHALL NOT BE PLACED ON SLOPES OF GREATER THAN 3:1. SEED IMPREGNATED EROSION CONTROL NETTING SHALL BE USED IN ITS PLACE.
4. SEED: SEEDING SHALL OCCUR AFTER APRIL 15 AND PRIOR TO SEPTEMBER 15TH IN ORDER TO ESTABLISH A STAND OF GRASS PRIOR TO GROUND FREEZING. SEED SHALL BE IN ACCORDANCE WITH SEED SPECIFICATION ON THIS SHEET.
5. COVER SEED WITH ¼ INCH SOIL UNLESS A HYDROSEEDER IS USED.
6. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
7. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.

SEEDED AND MULCHED AREAS DETAIL

SCALE: NONE (5)

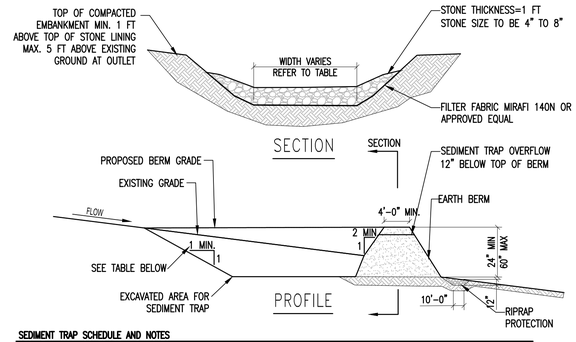


EROSION CONTROL MATTING NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. MATTING SHALL BE NATURAL FIBER.

EROSION CONTROL MATTING

SCALE: NONE (6)



SEDIMENT TRAP SCHEDULE AND NOTES

TRAP	DRAINAGE AREA IN ACRES	REQUIRED VOLUME OF SEDIMENT TRAP*	VOLUME PROVIDED	OVERFLOW WEIR ELEVATION	WEIR WIDTH	BOTTOM OF TRAP	TOP OF TRAP	SIDE SLOPE
TST–1	0.5	1800 CF	TBD	TBD	4'	TBD	TBD	2:1

* SEE NOTE 5 BELOW

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.

2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONE, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET, MEASURED AT CENTERLINE OF EMBANKMENT.

3. ANY EXCAVATED PORTION OF SEDIMENT TRAP SHALL HAVE 2:1 SLOPES OR FLATTER.

4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF EMBANKMENT.

5. THE VOLUME OF SEDIMENT STORAGE SHALL BE 3,600 CF PER ACRE OF CONTRIBUTORY DRAINAGE. MINIMUM VOLUMES AND OUTLET SIZES FOR EACH TRAP ARE LISTED IN THE SEDIMENT TRAP SCHEDULE SHOWN ABOVE.

6. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACE ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.

7. STONE USED IN THE OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCH RIP–RAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACE ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.

8. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE–HALF OF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.

9. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.

10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.

11. THE STRUCTURE SHALL BE REMOVED AND AREA BROUGHT TO FINAL GRADE AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

12. DRAINAGE AREA FOR THIS PRACTICE IS LIMITED TO 15 ACRES OR LESS.

13. SEDIMENT TRAPS SHALL MEET THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE (7)

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333
414 Union Street, Schenectady, NY 12305 • 518-630-9614
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12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Erosion Prevention and Sediment Control Details (1)

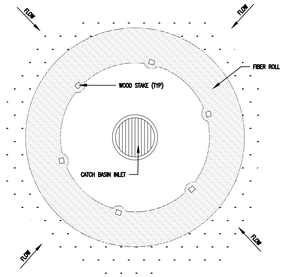
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	NTS
Date:	7/8/2024

C3.2

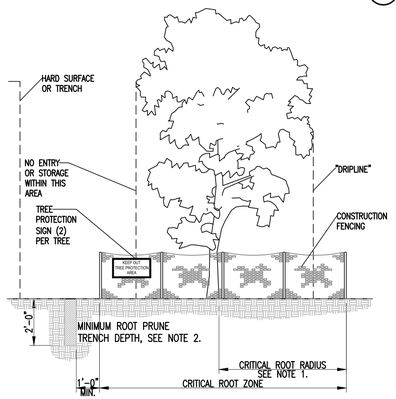
S:\PROJECTS\0-2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE DETAILS.DWG

PLOTTED: 7/8/2024 9:26 AM



FIBER ROLL INLET PROTECTION DETAIL

1

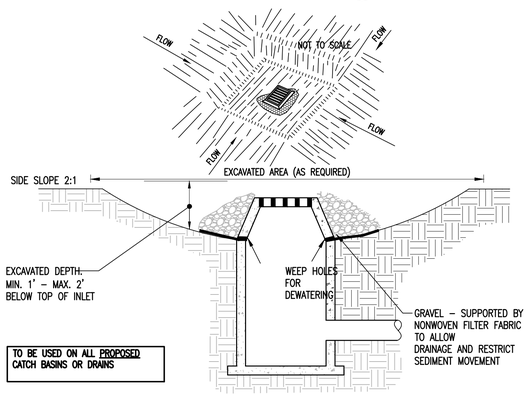


TREE PROTECTION NOTES:

1. TO CALCULATE THE CRITICAL ROOT RADIUS, ESTIMATE THE TREE'S HEIGHT AND MULTIPLE BY 40 PERCENT (0.40). THE RESULT IS THE APPROXIMATE DISTANCE FROM THE TREE TRUNK TO THE EDGE OF THE CONSTRUCTION FENCING.
2. FENCE SPECIMEN TREES AND GROUPS OF TREES. WHERE ROOF LOSS WILL OCCUR, ROOT PRUNE ONE FOOT BEYOND THE CONSTRUCTION FENCE USING A VIBRATING KNIFE OR NARROW TRENCHER – ALWAYS WITH SHARP BLADES TO MAKE CLEAN CUTS. BACKFILL IMMEDIATELY AND COVER WITH 3 INCHES OF MULCH.
3. INSTALL SILT FENCE ON THE INTERIOR OF THE CONSTRUCTION FENCING TO KEEP SOIL FROM DISTURBED AREAS OUT OF THE ROOT ZONES OF TREES TO BE SAVED.
4. FERTILIZE, WATER, AERATE AND OTHERWISE AID TREE HEALTH.
5. COORDINATE THE FINAL LOCATION OF THE CONSTRUCTION FENCING AND ROOT PRUNING WITH THE OWNER.

TREE PROTECTION DETAIL

2



TO BE USED ON ALL PROPOSED CATCH BASINS OR DRAINS

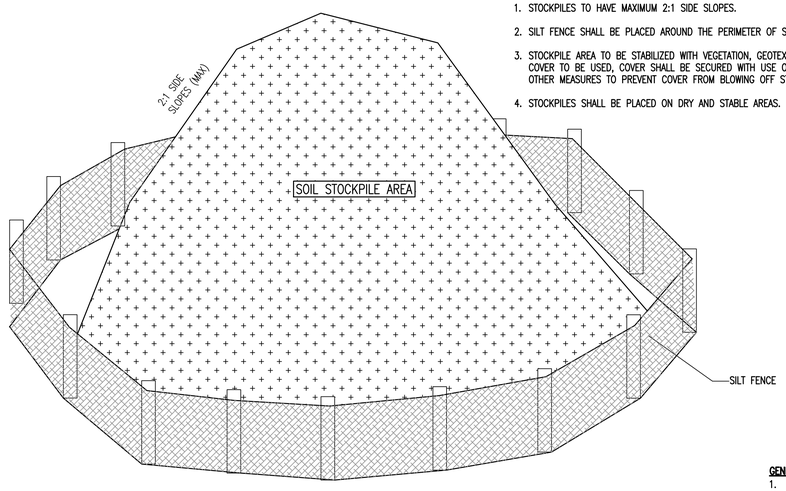
CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
5. GRAVEL BAGS, GRATE GUARDS, FILTREXX OR SEDIGUARD INLET PROTECTION DEVICES MAY BE USED. SUBMIT PRODUCT INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE VT EPSC STANDARDS AND SPECIFICATIONS.

EXCAVATED STORM DRAIN INLET PROTECTION DETAIL

NOT TO SCALE

3



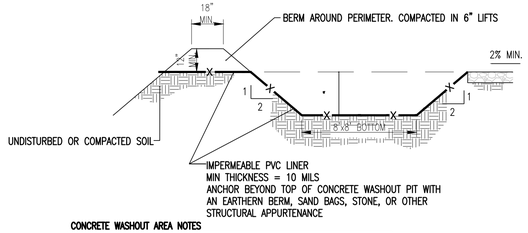
STOCKPILE NOTES

1. STOCKPILES TO HAVE MAXIMUM 2:1 SIDE SLOPES.
2. SILT FENCE SHALL BE PLACED AROUND THE PERIMETER OF STOCKPILE AREA.
3. STOCKPILE AREA TO BE STABILIZED WITH VEGETATION, GEOTEXTILE, OR COVER. IF COVER TO BE USED, COVER SHALL BE SECURED WITH USE OF SAND BAGS OR OTHER MEASURES TO PREVENT COVER FROM BLOWING OFF STOCKPILE.
4. STOCKPILES SHALL BE PLACED ON DRY AND STABLE AREAS.

TEMPORARY SOIL STOCKPILE AREA DETAIL

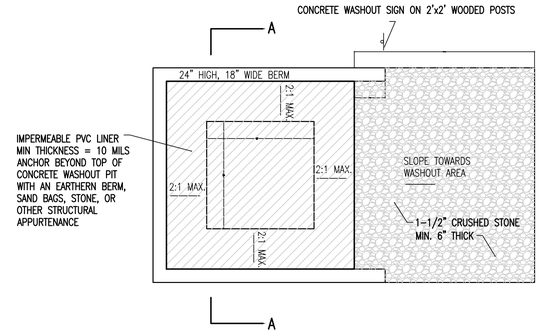
SCALE: NONE

4



CONCRETE WASHOUT AREA NOTES

1. ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED/REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHOULD BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP.
2. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF-SITE.
3. DISPOSE OF THE HARDENED MATERIAL OFF-SITE IN AN APPROPRIATE FACILITY. ON-SITE DISPOSAL MAY BE ALLOWED IF THIS HAS BEEN APPROVED AND ACCEPTED AS PART OF THE PROJECTS SWPPP. IN THAT CASE, THE MATERIAL SHALL BE RECYCLED AS SPECIFIED, OR BURIED AND COVERED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED EARTHFILL THAT IS PERMANENTLY STABILIZED TO PREVENT EROSION.
4. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
5. INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS.
6. IN LIEU OF CONCRETE WASHOUT AREA, A PRE-FABRICATED WASHOUT MAY BE USED. CONTRACTOR SHALL SUBMIT SHOP DRAWING OF SUCH PRE-FABRICATERD WASHOUT AREA TO DESIGN ENGINEER FOR REVIEW AND APPROVAL.



CONCRETE TRUCK WASHOUT AREA

SCALE: NONE

5

WINTER EROSION CONTROL NOTES

WINTER CONSTRUCTION PROCEDURES

1. DURING WINTER CONSTRUCTION, INSPECTIONS BY THE ON-SITE PLAN COORDINATOR SHALL OCCUR DAILY WHEN AREAS ARE UN-STABLE, AND WEEKLY PRIOR TO ANY FORECASTED RAIN, THAW OR SPRING MELT WHEN TEMPORARY STABILIZATION IS IN PLACE.

2. IN AREAS TO BE STABILIZED BY VEGETATION, ALL SEEDING MUST BE COMPLETED BY SEPTEMBER 15 TO ALLOW GROWTH TO OCCUR PRIOR TO THE GROUND FREEZING. STABILIZATION OF ALL OTHER DISTURBED AREAS SHALL BE COMPLETED BY OCTOBER 15.

3. ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING SHALL BE INSTALLED.

4. LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.

5. SNOW WILL NOT BE PILED WITHIN 25 FEET OF PERIMETER CONTROLS (SUCH AS SILT FENCE) TO ALLOW FOR CLEARING AND MAINTENANCE. SNOW IS TO BE REMOVED FROM ALL STRUCTURAL EROSION PREVENTION AND SEDIMENTATION CONTROL MEASURES FOLLOWING EACH SIGNIFICANT SNOWFALL. NO SNOW STORAGE UP-GRADIENT OF DISTURBANCE. NO SNOW DISPOSAL IN SEDIMENT PONDS/BASINS. IF NECESSARY, SNOW/ICE MUST BE REMOVED PRIOR TO STABILIZATION OF DISTURBED AREAS. ACCESS POINTS SHALL BE ENLARGED AND STABILIZED TO ALLOW FOR SNOW STOCKPILING.

6. IN AREAS OF DISTURBANCE WITHIN 100 FT OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.

7. DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.

8. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TO BE IN PLACE BY OCTOBER 15, OR IF NOT POSSIBLE, THEN PRIOR TO GROUND FREEZE.

9. MULCH IS TO BE APPLIED AT THE END OF EACH WORKDAY TO ALL EXPOSED AREAS THAT HAVE NOT YET REACHED FINAL GRADE AT TWICE THE RATE INDICATED IN THE SEEDING AND MULCHING DETAIL FOR THE REGULAR CONSTRUCTION SEASON. MULCH SHALL BE TRACKED IN OR STABILIZED WITH NETTING.

10. TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
    A) IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
    B) DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS HOUSE FOUNDATIONS OR OPEN UTILITY TRENCHES.

11. SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1" THICKNESS PRIOR TO STABILIZATION.

12. STONE STABILIZATION, 10 TO 20 FT WIDE IN AREAS SUCH AS THE PERIMETER OF BUILDINGS UNDER CONSTRUCTION WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED SHALL BE INSTALLED.

GENERAL EROSION CONTROL NOTES

1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON-SITE FROM DAY-TO-DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS DISTURBED, THE DISTURBANCE SHALL BE KEPT TO THE SHORTEST PRACTICAL DURATION AS APPROVED BY THE OWNER'S REP.
3. DUST SHALL BE CONTROLLED WITH WATER DISTRIBUTED BY A TRUCK MOUNTED SPRAY BAR. CALCIUM CHLORIDE(AASHTO M 144) OR SODIUM CHLORIDE (AASHTO M 143) SHALL BE USED AS DIRECTED BY THE OWNER'S REP.
4. ALL EROSION AND STORMWATER CONTROL SYSTEMS SHALL BE INSPECTED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE OCCURRENCE OF A STORM EVENT OF 0.5" OR GREATER. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS THEY ACCUMULATE AND PLACED IN AREAS WHERE FURTHER EROSION IS UNLIKELY.
5. A REPORT, STAMPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, SHALL BE WRITTEN WITHIN 24 HOURS OF EACH INSPECTION THAT:
    A) DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;
    B) IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND
    C) INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT; AND
6. RETAIN A COPY OF THE REPORT PREPARED PURSUANT TO (5), ABOVE, ON-SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL, STATE, AND LOCAL OFFICIALS
7. ALL PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
8. DETENTION BASINS AND SWALES SHALL BE INSTALLED PRIOR TO ROUGH GRADING THE SITE.
9. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
10. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    – BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
    – A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    – A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
    – EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
13. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
14. THE APPLICANT SHALL NOTIFY IN WRITING DES WETLANDS BUREAU AND THE LEBANON CONSERVATION COMMISSION OF THEIR INTENTION TO COMMENCE CONSTRUCTION NO LESS THAN FIVE (5) BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
15. APPROPRIATE SILTATION/EROSION/TURBIDITY CONTROLS SHALL BE IN PLACE PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND REMAIN IN PLACE UNTIL THE AREA IS STABILIZED. SILT FENCE(S) MUST BE REMOVED ONCE THE AREA IS STABILIZED.
16. DISCHARGE FROM DEWATERING OF WORK AREAS SHALL BE TO SEDIMENT BASINS THAT ARE:
    A) LOCATED IN UPLANDS;
    B) LINED WITH HAY BALES OR OTHER ACCEPTABLE SEDIMENT TRAPPING LINERS;
    C) SET BACK AS FAR AS POSSIBLE FROM WETLANDS AND SURFACE WATERS, IN ALL CASES WITH A MINIMUM OF 20 FEET OF UNDISTURBED VEGETATED BUFFER.
17. WITHIN THREE DAYS OF FINAL GRADING, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED BY SEEDING AND MULCHING DURING THE GROWING SEASON, OR IF NOT WITHIN THE GROWING SEASON, BY MULCHING WITH TACK OR NETTING AND PINNING ON SLOPES STEEPER THAN 3:1.
18. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED WITHIN THE GROWING SEASON, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY SEEDING AND MULCHING.
19. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED OUTSIDE THE GROWING SEASON, ALL EXPOSED AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY MULCHING AND TACK. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED BY MATTING AND PINNING.
20. PROPER HEADWALLS SHALL BE CONSTRUCTED WITHIN SEVEN DAYS OF CULVERT INSTALLATION.

EROSION CONTROL CONSTRUCTION SEQUENCE:

1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON SITE FROM DAY TO DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. HOLD PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION, WITH THE CONTRACTOR, OWNER, AND ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL EROSION CONTROL MEASURES DELINEATED ON THE PLANS AND ANY ADDITIONAL MEASURES THAT ARE NECESSARY TO MINIMIZE EROSION. THE CONTRACTOR SHALL HAVE EROSION CONTROL MATERIALS AND INSTALLATION EQUIPMENT ON SITE AT ALL TIMES.
3. IF POSSIBLE, ALL TEMPORARY EROSION CONTROL MEASURES REQUIRED FOR WORK PROPOSED DURING THE WINTER (BETWEEN OCTOBER 15 AND MAY 1), SHALL BE INSTALLED PRIOR TO OCTOBER 1.
4. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
5. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
6. INSTALL INLET PROTECTION ON EXISTING AND NEW CATCH BASINS.
7. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
8. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
9. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
10. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

TEMPORARY/CONSTRUCTION EROSION CONTROL MEASURES:

1. SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE PLANS. THESE SHALL REMAIN IN PLACE UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
2. INSTALL STONE CHECK DAMS IN GRASS-LINED SWALES 50 FEET ON CENTER TO PREVENT SILT FROM WASHING INTO THE DRAINAGE SYSTEM DURING CONSTRUCTION. SEDIMENT SHALL BE REMOVED FROM BEHIND THE DAMS WHEN IT BECOMES 6 INCHES DEEP. STONE CHECK DAMS SHALL BE REMOVED WHEN VEGETATION IS ESTABLISHED.
3. DROP INLET PROTECTION SHALL BE PROVIDED AROUND ALL EXISTING AND PROPOSED CATCH BASINS. PROTECTION SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. SEDIMENT SHALL BE REMOVED FROM DROP INLET PROTECTION WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN IT NO LONGER DRAINS PROPERLY.
4. EXCAVATED MATERIAL FROM EARTH EXCAVATION AND DITCH DIGGING SHALL BE DISPOSED OF OFFSITE OR USED FOR PROJECT FILL MATERIAL IF DETERMINED SUITABLE BY THE OWNER'S REPRESENTATIVE.
5. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC.) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.

PERMANENT EROSION CONTROL MEASURES:

1. GRASS LINED SWALES SHALL BE TOP SOILED, SODDED AND FERTILIZED AREAS WHICH EXHIBIT SIGNS OF EROSION SHALL BE RE-SODDED IMMEDIATELY AND MAINTAINED UNTIL SOD HAS PERMANENT HOLD AND IS HEALTHY.
2. WHEN CONSTRUCTION IS COMPLETED IN AN AREA, IT SHALL BE IMMEDIATELY TOP SOILED, SEEDED, FERTILIZED AND MULCHED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF ALL DISTURBED AREAS, INCLUDING WATERING, UNTIL THE AREA IS INSPECTED AND ACCEPTED BY THE OWNER OR ENGINEER.
4. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
5. RE-SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STRAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE CONTAINS A VERDUROUS STAND OF GRASS. AREAS THAT, IN THE OPINION OF THE ENGINEER, ARE PREDOMINATELY WEEDS SHALL BE PLOWED UP, FINE GRADED, FERTILIZED AND RE-SEEDED IN THE MANNER SPECIFIED PREVIOUSLY, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
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Sheet Title: Erosion Prevention and Sediment Control Details (2)

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	NTS
Date:	7/8/2024

C3.3

S:\PROJECTS\0-2024\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE DETAILS.DWG

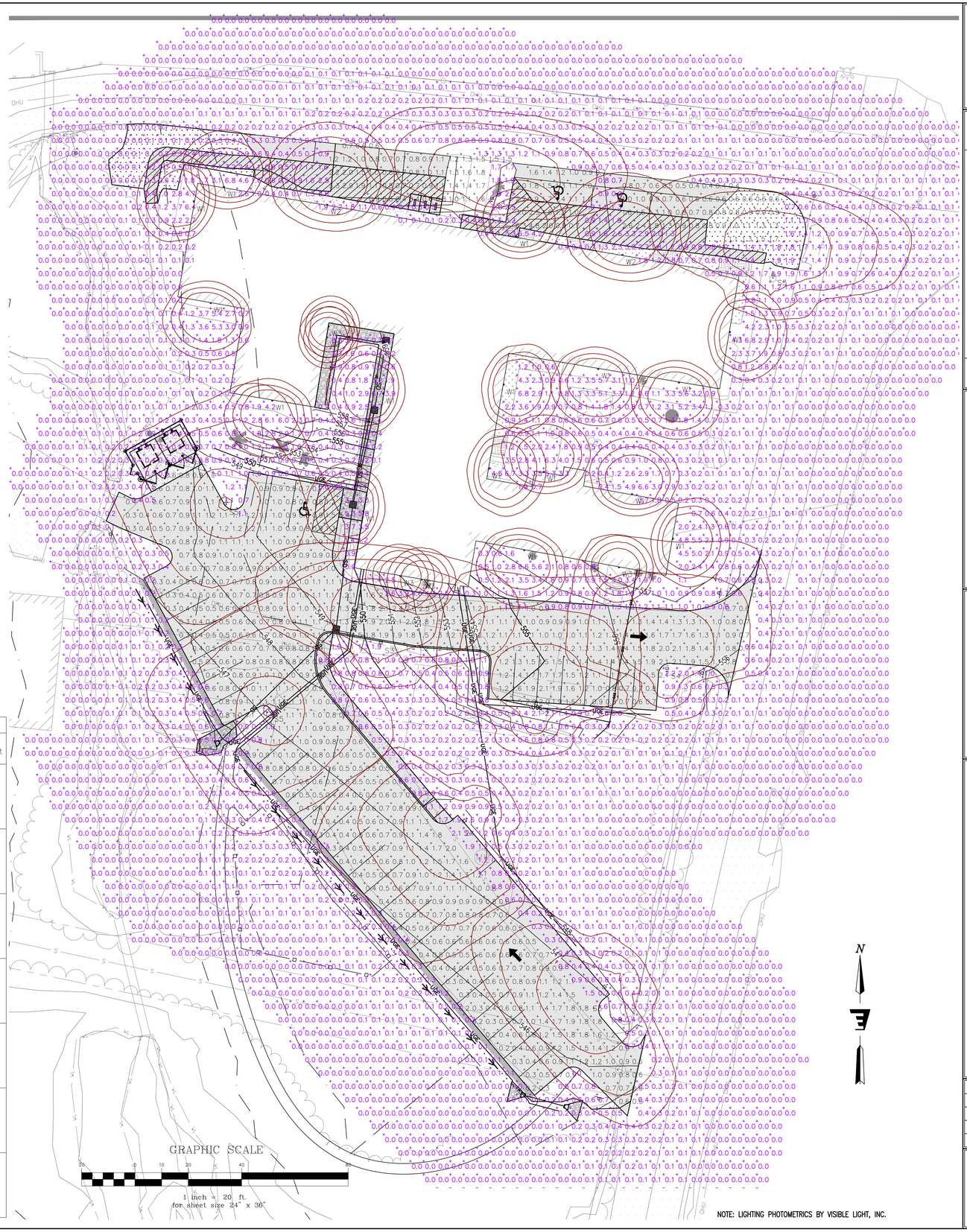
PLOTTED: 7/8/2024 8:19 AM

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Large Parking Lot	+	0.9 fc	3.4 fc	0.2 fc	17.0:1	4.5:1
Outside of Parking Lots	+	0.4 fc	8.8 fc	0.0 fc	N/A	N/A
Small Parking Lot	+	1.2 fc	6.3 fc	0.4 fc	15.8:1	3.0:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens per Lamp	LLF	Wattage	Distribution	Polar Plot
	S2	1	Lithonia Lighting	DSX0 LED P1 30K 80CRI T2M MVOLT HS SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 2 Medium Houseside Shield; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_T2M_HS.ies	3580	0.9	33.21	TYPE III, MEDIUM, BUG RATING: B1 – U0 – G2	
	S3	3	Lithonia Lighting	DSX0 LED P1 30K 80CRI T3M MVOLT HS SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 3 Medium; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_T3M.ies	4173	0.9	33.21	TYPE IV, MEDIUM, BUG RATING: B1 – U0 – G2	
	S4	3	Lithonia Lighting	DSX0 LED P1 30K 80CRI TFTM MVOLT SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Forward Throw; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_TFTM.ies	4265	0.9	33.21	TYPE IV, SHORT, BUG RATING: B1 – U0 – G2	
	S5	2	Lithonia Lighting	DSX0 LED P1 30K 80CRI T5M MVOLT SPA DDBXD with SSS 12 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 5 Medium; mounted at 14ft (12ft pole on 2ft base)	LED	DSX0_LED_P1_30K_80CRI_T5M.ies	4358	0.9	33.21	TYPE VS, BUG RATING: B3 – U0 – G1	
	W1	16	Lithonia Lighting	ARC1 LED P1 30K MVOLT DDBXD	ARC1 LED WITH P1 – PERFORMANCE PACKAGE, 3000K; mounted at 8ft	LED	ARC1_LED_P1_30K.ies	1376	0.9	10.8751	TYPE III, VERY SHORT, BUG RATING: B0 – U0 – G0	
	W2	2	Lithonia Lighting	ARC1 LED P2 30K MVOLT DDBXD	ARC1 LED WITH P2 – PERFORMANCE PACKAGE, 3000K; mounted at 14ft	LED	ARC1_LED_P2_30K.ies	2035	0.9	16.7843	TYPE III, VERY SHORT, BUG RATING: B1 – U0 – G1	
	W3	5	Brownlee Lighting Inc	7317 BZ B06 WHA 30K	Shore Sconce; mounted at 7ft	LED	7317-B12-CLA-35K.ies	1607	0.4	6		



NOTE: LIGHTING PHOTOMETRICS BY VISIBLE LIGHT, INC.

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-8225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-5933
414 Union Street, Schenectady, NY 12305 • 518-830-9614
www.engineeringventures.com

12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Site Photometrics Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

EV Project #	24085
Drawn By:	AM
Checked By:	AM
Scale:	1" = 20'
Date:	7/8/2024

PH1

S:\PROJECTS\24\24085 BROOKSIDE APARTMENTS\DWG\SHEET FILES\24085 BROOKSIDE PHOTOMETRICS.DWG

DRAFT

20' 10' 0' 20' 40'

SCALE: 1" = 20FT

NORTH

REMOVE PORTIONS OF EXISTING ASPHALT PARKING (SEE CIVIL PLANS)

2 SPIRAEA SHRUBS TO REMAIN

REMOVE EXISTING EVERGREEN TAXUS FOUNDATION SHRUBS

EXISTING ASPHALT WALKWAYS TO REMAIN TYP. (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING OF EXISTING TREES TO REMAIN

EXISTING CONCRETE RAMPWAY TO REMAIN (SEE ARCHITECTURAL PLANS)

EXISTING CONCRETE WALKWAY TO REMAIN (SEE CIVIL PLANS)

REMOVE EXISTING (OVERGROWN) JUNIPER SHRUBS TYPICAL

EXISTING PROPOANE TANKS REMOVED (SEE CIVIL PLANS)

EXISTING DRIVEWAY TO REMAIN (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING OF EXISTING TREES TO REMAIN

EXISTING SIGN TO BE REMOVED

EXISTING DECK TO BE REMOVED

EXISTING FLAGPOLE TO REMAIN

EXISTING LADDER

REMOVE EXISTING EVERGREEN TAXUS FOUNDATION SHRUBS

EXISTING PROPOANE TANKS REMOVED (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING OF EXISTING TREES TO REMAIN

REMOVE PORTIONS OF EXISTING ASPHALT PARKING (SEE CIVIL PLANS)

EXISTING ASPHALT WALKWAY TO REMAIN

SITE LIGHTING TO REMAIN SEE CIVIL PLANS FOR SITE LIGHTING UPGRADES

REMOVE EXISTING EVERGREEN TAXUS FOUNDATION SHRUBS

EXISTING PERENNIAL PLANTINGS TO REMAIN

EXISTING WALKWAY AND RAMP TO REMAIN (SEE CIVIL PLANS)

EXISTING GAZEBO TO REMAIN

EXISTING PROPANE TANKS TO BE REMOVED (SEE CIVIL PLANS)

EXISTING FOUNDATION SHRUBS TO REMAIN AND/OR TRANSPLANTED

EXISTING PROPANE TANKS REMOVED (SEE CIVIL PLANS)

PROVIDE SELECTIVE PRUNING FOR EXISTING TREES TO REMAIN

SEE CIVIL PLANS FOR REPAVING AND LAYOUT OF PARKING AREA

Stamp

Rev. No.	Description	Chkd.

ParkArchitecture.com
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Email: parkarchitecture@gmail.com

Client:
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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Existing Conditions & Site Preparation Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L1.0

EXISTING LANDSCAPING FEATURES TO REMAIN:

EXISTING GAZEBO AND FLAGPOLE (TO REMAIN)

BUILDING FOUNDATION LANDSCAPING ADDED (SEE L2.0)

EXISTING PERENNIAL PLANTINGS (TO REMAIN)

EXISTING PERIMETER TREES AND PLANTINGS (TO REMAIN)

OVERGROWN JUNIPER PLANTINGS (TO BE REMOVED)

ENTRY PARKING AND LANDSCAPING RENOVATED (SEE L2.0)

Stamp

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Client:
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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Existing Conditions

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L1.1

DRAFT

20' 10' 0' 20' 40'

SCALE: 1" = 20FT

NORTH

LAWN AREA
4 BLACK-EYED SUSAN
1 MULCH BED
1 ARMSTRONG MAPLE
LAWN AREA
1 WINTERBERRY
LAWN AREA
STEEL EDGING AND MULCHED BED
2 EXISTING SPIREA SHRUBS TO REMAIN
LAWN AREA
4 BLACK-EYED SUSAN
5 INKBERRY SHRUBS
7 PURPLE CONEFLOWER
3 WITCH HAZEL
3 ELDERBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
ASPHALT WALKWAY (SEE CIVIL PLANS)
2 HIGHBUSH BLUEBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
1 HEMLOCK
1 MAPLELEAF VIBURNUM
NE WILDFLOWER MIXTURE 700 SF
1 MAPLELEAF VIBURNUM
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
2 HEMLOCK
4 SPICE BUSH
2 ARMSTRONG MAPLE
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
5 RED CHOKEBERRY
1 WINTERBERRY
2 CLUMP RIVER BIRCH
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
4 ELDERBERRY
1 STRAIGHT DOG TUNNEL
INCLUDE PERVIOUS PEASTONE GRAVEL MIX WITHIN ENTIRE DOG RUN AREA ± 2000SF
2 LILAC
3 REDTWIG DOGWOOD
2 OCTOBER GLORY MAPLE
4FT WIDE STONEDUST PATH
LAWN AREA
5 BLACK-EYED SUSAN
EXISTING RAMP
5 RED TWIG DOGWOOD
3 WHITE CEDARS
5 PJM RHODODENDRON
MULCH BED AREA
2 MUGO PINE SHRUBS
ENTRY
3 MUGO PINE SHRUBS
9 PURPLE CONEFLOWER
6 PURPLE CONEFLOWER
16 DWARF FOUNTAIN GRASS
3 MUGO PINES
2 EXISTING RUGOSA ROSE TO REMAIN
9 DWARF FOUNTAIN GRASS
14 BLACK-EYED SUSAN
9 DWARF FOUNTAIN GRASS
BBQ GRILL (SEE DETAIL)
LAWN AREA
EXISTING QUINCE SHRUB TO REMAIN
4 DWARF FOUNTAIN GRASS
PROPOSED LAWN AREA
EXISTING SPIRAEA SHRUB TO REMAIN
2 WTCH HAZEL
NE WILDFLOWER MIXTURE 1600 SF
BUILDING
2 MAPLELEAF VIBURNUM
6 FORSYTHIA
9 BLACK-EYED SUSAN
ENTRY
5 PJM RHODO
CONC. WALK (SEE CIVIL PLANS)
PARKING
LAWN AREA
3 AMERICAN WITCH HAZEL
7 DWARF FOUNTAIN GRASS
1 ARMSTRONG MAPLE
12 DWARF FOUNTAIN GRASS
EXIT
BUILDING
4FT WIDE STONE DUST PATH
PET WASTE STATION
CONC. WALK (SEE CIVIL PLANS)
4FT WIDE GATES TYP.
SEATING BENCH
1 DOG A-FRAME (SEE DETAILS)
LAWN AREA
1 CURVED DOG TUNNEL (SEE DETAILS)
4FT HIGH BLACK VINYL CHAIN LINK FENCE
LAWN AREA
SWALE (SEE CIVIL PLANS)
2 OAKLEAF HYDRANGEA
ENTRY
MULTI-PURPOSE LAWN AREA FOR ACTIVE AND PASSIVE PARK USE
STEEL EDGING AND MULCHED BED
PROPOSED LAWN AREA (SEE CIVIL PLANS)
EXISTING ASPHALT WALKWAY (SEE CIVIL PLANS)
3 FORSYTHIA
EXISTING PERENNIAL PLANTINGS TO REMAIN
1 OCTOBER GLORY MAPLE
EXISTING FLAGPOLE TO REMAIN
EXISTING GAZEBO STRUCTURE TO REMAIN
4 WINTERBERRY HOLLY
STEEL EDGING AND MULCHED BED WITH CLEAR ACCESS TO BUILDING UTILITIES
4 COMPACT INKBERRY SHRUBS
1 OCTOBER GLORY MAPLE
LAWN AREA
3 HIGHBUSH BLUEBERRY
NE WILDFLOWER MIXTURE 1800 SF
1 STAR MAGNOLIA TREE
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
3 OCTOBER GLORY MAPLE
LAWN AREA
3 FORSYTHIA
1 RIVER BIRCH
3 FORSYTHIA
1 LILAC
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES

Stamp

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Client:
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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Site Landscape Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L2.0

DRAFT

20' 10' 0' 20' 40'

SCALE: 1" = 20FT

NORTH

LAWN AREA
4 BLACK-EYED SUSAN
1 MULCH BED
1 ARMSTRONG MAPLE
LAWN AREA
1 WINTERBERRY
LAWN AREA
STEEL EDGING AND MULCHED BED
2 EXISTING SPIREA SHRUBS TO REMAIN
LAWN AREA
4 BLACK-EYED SUSAN
5 INKBERRY SHRUBS
7 PURPLE CONEFLOWER

3 WITCH HAZEL
3 ELDERBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
ASPHALT WALKWAY (SEE CIVIL PLANS)
2 HIGHBUSH BLUEBERRY
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
1 HEMLOCK
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NE WILDFLOWER MIXTURE 700 SF
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PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
2 HEMLOCK
4 SPICE BUSH
2 ARMSTRONG MAPLE

STEEL EDGING AND MULCHED BED
PROPOSED LAWN AREA (SEE CIVIL PLANS)
EXISTING ASPHALT WALKWAY (SEE CIVIL PLANS)
3 FORSYTHIA
EXISTING PERENNIAL PLANTINGS TO REMAIN
1 OCTOBER GLORY MAPLE
EXISTING FLAGPOLE TO REMAIN
EXISTING GAZEBO STRUCTURE TO REMAIN
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STEEL EDGING AND MULCHED BED WITH CLEAR ACCESS TO BUILDING UTILITIES
4 COMPACT INKBERRY SHRUBS
1 OCTOBER GLORY MAPLE
LAWN AREA

LAWN AREA
5 BLACK-EYED SUSAN
EXISTING RAMP
5 RED TWIG DOGWOOD
3 WHITE CEDARS
5 PJM RHODODENDRON
MULCH BED AREA
2 MUGO PINE SHRUBS
ENTRY
9 PURPLE CONEFLOWER
3 MUGO PINE SHRUBS
6 PURPLE CONEFLOWER
16 DWARF FOUNTAIN GRASS
3 MUGO PINES
2 EXISTING RUGOSA ROSE TO REMAIN
9 DWARF FOUNTAIN GRASS
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BBQ GRILL (SEE DETAIL)
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EXISTING QUINCE SHRUB TO REMAIN
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BUILDING
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5 PJM RHODO
CONC. WALK (SEE CIVIL PLANS)
PARKING
LAWN AREA
3 AMERICAN WITCH HAZEL
7 DWARF FOUNTAIN GRASS
1 ARMSTRONG MAPLE
12 DWARF FOUNTAIN GRASS
EXIT
BUILDING

PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
5 RED CHOKEBERRY
1 WINTERBERRY
2 CLUMP RIVER BIRCH
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
4 ELDERBERRY
1 STRAIGHT DOG TUNNEL
INCLUDE PERVIOUS PEASTONE GRAVEL MIX WITHIN ENTIRE DOG RUN AREA ± 2000SF
2 LILAC
3 REDTWIG DOGWOOD
2 OCTOBER GLORY MAPLE
4FT WIDE STONEDUST PATH

3 HIGHBUSH BLUEBERRY
NE WILDFLOWER MIXTURE 1800 SF
1 STAR MAGNOLIA TREE
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES
3 OCTOBER GLORY MAPLE
LAWN AREA
3 FORSYTHIA
1 RIVER BIRCH
3 FORSYTHIA
1 LILAC
PROVIDE SELECTIVE PRUNING FOR EXISTING TREES

4FT WIDE STONE DUST PATH
PET WASTE STATION
CONC. WALK (SEE CIVIL PLANS)
4FT WIDE GATES TYP.
SEATING BENCH
1 DOG A-FRAME (SEE DETAILS)
LAWN AREA
1 CURVED DOG TUNNEL (SEE DETAILS)
4FT HIGH BLACK VINYL CHAIN LINK FENCE
SWALE (SEE CIVIL PLANS)
LAWN AREA
2 OAKLEAF HYDRANGEA
MULTI-PURPOSE LAWN AREA FOR ACTIVE AND PASSIVE PARK USE
ENTRY

Stamp

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77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Site Landscape Plan

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L2.0
(color version)

PROPOSED PLANT MATERIAL IMAGES:

RED CHOKEBERRY

ELDERBERRY

ELDERBERRY

WITCHHAZEL

PURPLE LILAC

M. VIBURNUM

HIGHBUSH BLUEBERRY

SPICEBUSH

BLACK-EYED SUSAN

OAKLEAF HYDRANGEA

INKBERRY SHRUB

PJM RHODODENDRON

WINTERBERRY

WINTERBERRY

RED TWIG DOGWOOD

RED TWIG DOGWOOD

FORSYTHIA

MUGHO PINE

DWARF FOUNTAIN GRASS

LANDSCAPE NOTES

1. THE NUMBER OF EACH INDIVIDUAL PLANT TYPE AND SIZE IS PROVIDED IN THE PLANT LIST FOR CONTRACTORS CONVENIENCE ONLY. IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS ON THE LIST AND THE NUMBER SHOWN ON THE DRAWING, THE GREATER NUMBER SHALL APPLY.

2. THE CONTRACTOR SHALL SUPPLY PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN.

3. ALL PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE PRIOR TO ARRIVAL ON SITE.

4. ALL PLANT BEDS WILL BE TOP-DRESSED WITH 3" SHREDDED BARK MULCH.

5. THE CONTRACTOR SHALL LOCATE AND MARK ALL UTILITIES PRIOR TO PLANTING. ANY CONFLICTS BETWEEN PLANTING AND UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE OWNER SO THAT ALTERNATIVE PLANTING LOCATIONS CAN BE DETERMINED.

7. NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER OR LANDSCAPE ARCHITECT.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTS AGAINST DAMAGE FROM ON-GOING CONSTRUCTION. PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL FORMAL ACCEPTANCE OF ALL PLANTINGS.

9. ALL OTHER DISTURBED AREAS NOT OTHERWISE INDICATED SHALL BE LOAMED AND SEEDED.

10. CONTRACTOR SHALL PRESERVE EXISTING TREES AND EXISTING PLANTINGS WHERE INDICATED.

11. CONTRACTOR SHALL PROVIDE A 2-YEAR GUARANTEE ON ALL INSTALLED PLANT MATERIAL.

12. ALL PROPOSED TREES SHALL BE PLACED A MINIMUM OF 10FT FROM EXISTING AND PROPOSED UTILITIES.

13. ALL TREES SPECIFIED WILL BE OF GOOD QUALITY AND IN COMPLIANCE WITH THE MOST RECENT EDITION OF ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORT.

14. SPECIAL ATTENTION SHALL BE PAID TO THE SITE PREPARATION AND SOILS FOR ALL PLANTING AREAS TO ENSURE THE HEALTH AND VIGOROUS GROWTH OF PLANTINGS (ESPECIALLY TREES AND SHRUBS). CONTRACTOR SHALL PROVIDE ADEQUATE SOIL VOLUME AS DEPICTED IN THE TREE AND SHRUB PLANTING DETAILS HEREIN.

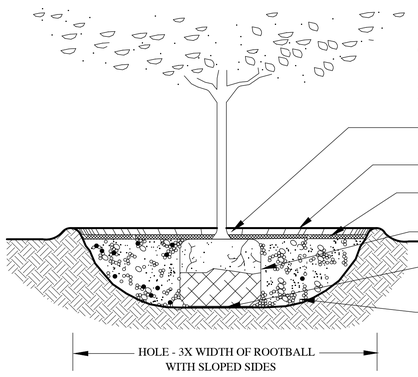
15. SEE CIVIL PLANS FOR LOCATION OF SNOW STORAGE AREAS

LANDSCAPE PLANTING SCHEDULE

QTY	BOTANICAL NAME	COMMON NAME	SIZE	RIPARIAN VARIETY
DECIDUOUS TREES				
7	ACER RUBRUM OCTOBER GLORY	*OCTOBER GLORY RED MAPLE*	2.5" – 3" CALIPER	X
4	ACER X FREEMANII 'ARMSTRONG'	*COLUMNAR RED MAPLE*	2.5" – 3" CALIPER	X
3	BETULA NIGRA	*CLUMP RIVER BIRCH*	CLUMP 10'–12' HT.	X
1	MAGNOLIA STELLATA	*STAR MAGNOLIA*	60"–72" HT, B&B	
EVERGREEN TREES				
3	THUJA CANADENSIS	*CANADIAN HEMLOCK*	8'–10' HT. B&B	X
3	THUJA OCCIDENTALIS	*NORTHERN WHITE CEDAR*	8'–10' HT. B&B	X
SHRUBS				
8	HAMAMELIS VIRGINIANA	*AMERICAN WITCH HAZEL*	30"–36" HT, 7 GAL	X
4	VIBURNUM ACERIFOLIUM	*MAPLELEAF VIBURNUM*	30"–36" HT, 7 GAL	X
5	VACCINIUM CORYMBOSUM	*HIGHBUSH BLUEBERRY*	30"–36" HT, 7 GAL	X
4	LINDERA BENZOIN	*SPICEBUSH*	24"–30" HT, 5 GAL	X
6	ILEX VERTICILLATA 'WINTER RED'	*WINTER RED WINTERBERRY*	24"–30" HT, 5 GAL	X
8	CORNUS SERICEA	*RED TWIG DOGWOOD*	24"–30" HT, 5 GAL	X
7	SAMBUCUS CANADENSIS	*ELDERBERRY*	24"–30" HT, 5 GAL	X
5	ARONIA ARBUTIFOLIA	*RED CHOKEBERRY*	24"–30" HT, 5 GAL	X
2	HYDRANGEA QUERCIFOLIA	*OAKLEAF HYDRANGEA*	30"–36" HT, 7 GAL	
10	RHODODENDRON 'PJM ELITE'	*PJM RHODODENDRON*	24"–30" HT, 5 GAL	
9	ILEX GLABRA 'COMPACTA'	*COMPACT INKBERRY*	24"–30" HT, 5 GAL	
3	SYRINGA VULGARIS	*COMMON PURPLE LILAC*	30"–36" HT, 7 GAL	
15	FORSYTHIA X INTERMEDIA	*FORSYTHIA*	24"–30" HT, 5 GAL	
8	PINUS MUGO	*MUGO PINE*	18"–24" HT, 7 GAL	
PERENNIALS				
57	PENNISETUM ALOPECUROIDES	*DWARF FOUNTAIN GRASS*	12"–18" HT, 2 GAL	
27	RUDBECKIA FULGIDA	*BLACK EYED SUSAN*	12"–18" HT, 2 GAL	
22	ECHINACEA PURPUREA	*PURPLE CONEFLOWER*	12"–18" HT, 2 GAL	

TREE PLANTING DETAIL

NOT TO SCALE



LANDSCAPE CONTRACTOR TO PROVIDE A 2 YEAR GUARANTEE ON ALL TREE AND SHRUB PLANTINGS.

GUARANTEE PERIOD BEGINS FOLLOWING 100% COMPLETION OF THE WORK AND FINAL SIGN-OFF BY THE LANDSCAPE ARCHITECT DURING THE CONSTRUCTION ADMINISTRATION PHASE.

TRUNK FLARE - PLANT 1 - 2" ABOVE EXISTING OR FINISHED GRADE

MIN. 6" SAUCER

3" SHREDDED BARK MULCH

REMOVE BURLAP FROM TOP HALF OFF ROOTBALL

ROOTBALL SITS DIRECTLY ON UNDISTURBED SOIL

PLANTING SOIL MIXTURE

NOTE:
REMOVE BURLAP ROPE AND WIRE FROM TOP & SIDES OF ALL BALLS. ADD MULCH AS SHOWN ON PLAN

NE WILDFLOWER SEED MIX SPECS

NORTHEAST NATIVE WILDFLOWER SEED MIXTURE PLANTED IN AREAS SHOWN ON LANDSCAPE PLAN

NORTHEAST WILDFLOWER SEED MIXTURE TO CONTAIN A MAJORITY OF > 67% PERENNIAL VARIETIES TO INSURE GROWTH OF WILDFLOWER VEGETATION IN SUCCESSIVE YEARS.

NEWP.COM/SEED-MIXES OR APPROVED EQUAL

SLOPE PLANTING TYPE	QTY	SIZE
Custom Blend of Northeast Native Wildflower Mixture	± 5,000 SF	SEED MIX

NE WILDFLOWER MIXTURE

PROPOSED TREES:

NOT TO SCALE

OCTOBER GLORY

FREEMAN MAPLE

CLUMP RIVER BIRCH

WHITE CEDAR

CANADIAN HEMLOCK

STAR MAGNOLIA

Stamp

Rev. No.	Description	Chkd.

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603-727-9024

Sheet Title: Landscape Details

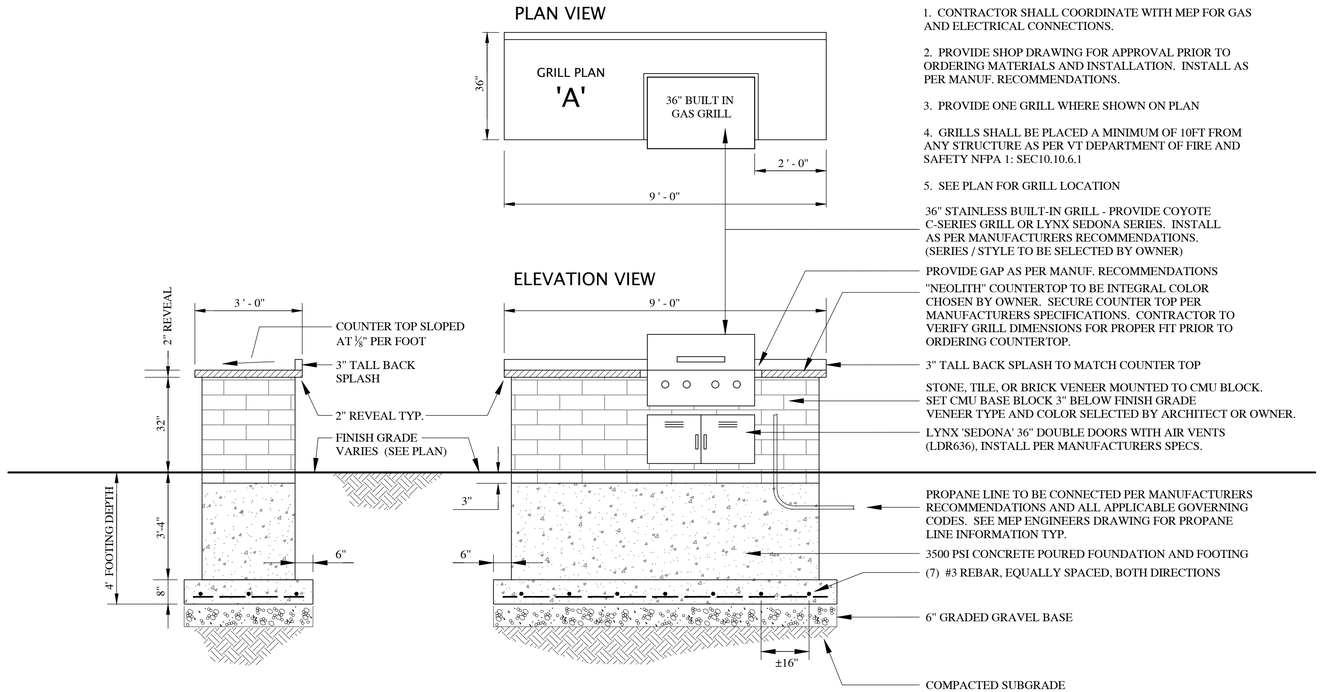
Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
Drawn By:	PS
Scale:	1"=20'
Date:	07-08-2024

L3.0

BBQ – GRILL COUNTER

NOT TO SCALE



GENERAL NOTES:

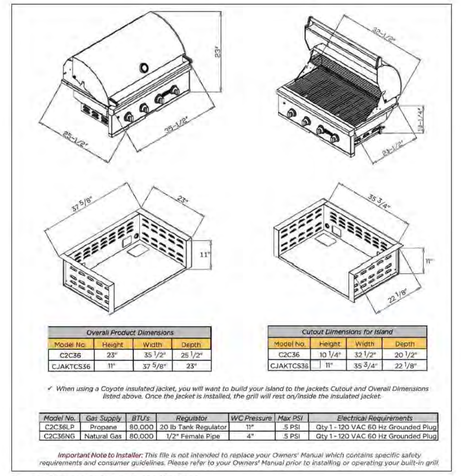
1. CONTRACTOR SHALL COORDINATE WITH MEP FOR GAS AND ELECTRICAL CONNECTIONS.

2. PROVIDE SHOP DRAWING FOR APPROVAL PRIOR TO ORDERING MATERIALS AND INSTALLATION. INSTALL AS PER MANUF. RECOMMENDATIONS.

3. PROVIDE ONE GRILL WHERE SHOWN ON PLAN

4. GRILLS SHALL BE PLACED A MINIMUM OF 10FT FROM ANY STRUCTURE AS PER VT DEPARTMENT OF FIRE AND SAFETY NFPA 1: SEC10.10.6.1

5. SEE PLAN FOR GRILL LOCATION



1. Install per manufacturer's specifications

COYOTE C-SERIES 4 BURNER GAS GRILL

Coyote C Series 36" Built In Gas Grill - C2C36

Overall Dimensions: 23" H x 35 ½" W x 25 ½" D
Cutout Dimensions: 10 ¼" H x 32 ½" W x 20 ½" D

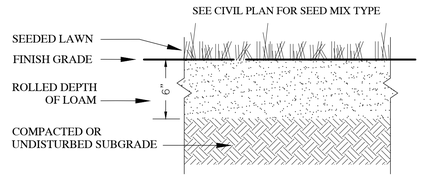
Features:

- Premium 304 Stainless Steel Construction
- (4) high-performance Coyote Infinity Burners™
- 875 square inches of cooking area
- Up to 80,000 BTU of output
- LED interior lighting

INSTALL COYOTE GRILL MODEL# CJAKTCS36 WITH INSULATED JACKET

TURF PLANTING DETAIL

NOT TO SCALE



NOTES:

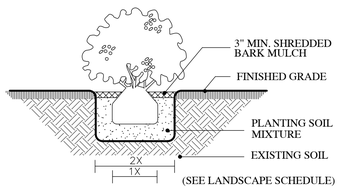
SEED ALL IDENTIFIED AREAS FOR LAWN AND ALL DISTURBED AREAS WITHIN 48 HOURS OF FINAL GRADING. SEED AFTER APRIL 15TH AND BEFORE SEPTEMBER 15TH IN ORDER TO ESTABLISH BEFORE FREEZING TEMPERATURES.

CONTRACTOR IS RESPONSIBLE TO WATER AND ESTABLISH SEEDED LAWN AREAS. WARRANTY SHALL BE 9 WEEKS FOLLOWING INSTALLATION PERIOD.

CONTRACTOR TO INCLUDE NECESSARY TOUCH-UP / RESEEDING FOR ANY AREAS WHERE GRASS SEED DOES NOT GERMINATE DURING THE WARRANTY PERIOD.

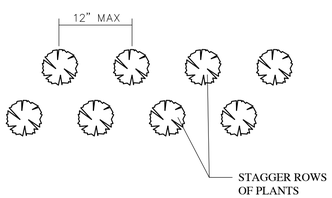
SHRUB PLANTING DETAIL

NOT TO SCALE



GROUNDCOVER SPACING

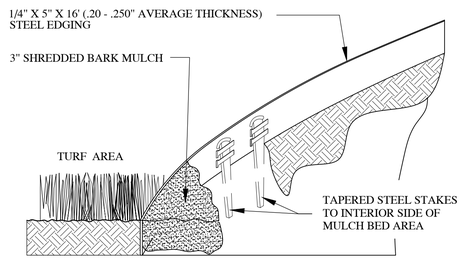
NOT TO SCALE



STEEL LANDSCAPE EDGING

NOT TO SCALE

STEEL LANDSCAPE EDGING AS MANUFACTURED BY:
SURE-LOC ALUMINUM EDGING CORPORATION - HOLLAND MI
TEL: 1-800-787-3562 OR APPROVED EQUAL



NOTES:

INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SEE LANDSCAPE PLAN FOR LOCATION OF LAWN VS. MULCHED BED AREAS AND PLACEMENT OF STEEL EDGING.

CONTRACTOR TO PROVIDE SHOP DRAWING TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO MATERIALS ORDERING AND INSTALLATION.

6FT LONG SEATING BENCH

SCALE: NTS

NOTES:

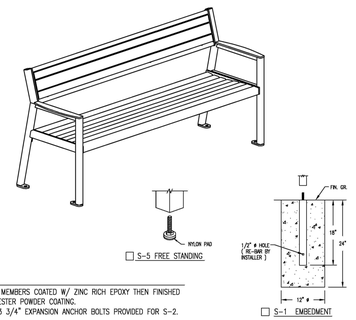
1. INSTALL MODEL 500-60HS 6FT STEEL BENCH WITH STEEL SEAT. WITH BLACK POWDER COATED FINISH.

2. SEE PLAN FOR LOCATION OF BENCHES

3. MANUFACTURER SHALL BE DUMOR OR APPROVED EQUAL.

4. CONTRACTOR SHALL INSTALL / SECURE BENCH WITH EMBEDED FOOTING AS PER MANUFACTURER SPECIFICATIONS.

5. CONTRACTOR TO PROVIDE SHOP DRAWING TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIALS AND INSTALLATION.



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Rev. No.	Description	Chkd.

ParkArchitecture.com
3 School House Lane, Suite #1 Etna NH 03750
Tel: 603-643-3400 Mobile: 617-905-0487
Email: parkarchitecture@gmail.com

Client:
12 Tremont Street, LLC
77 Bank Street
Lebanon, New Hampshire
603-727-9024

Sheet Title: Landscape Details

Project Title: Brookside Apartments
Hartford, Windsor County, Vermont

PA Project #	2423
Checked By:	PS
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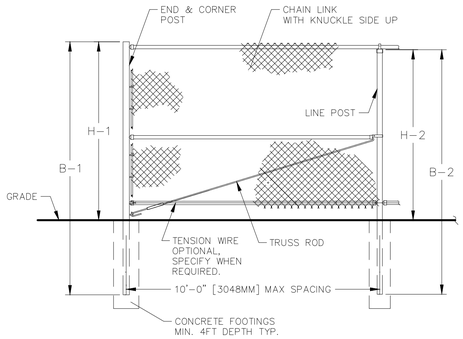
Scale:	1"=20'
Date:	07-08-2024

L3.1

BLACK VINYL CLF INSTALLATION DETAIL

NOT TO SCALE

SEE LANDSCAPE AND CIVIL PLANS FOR LOCATIONS OF 4' CLF AND 6' CLF



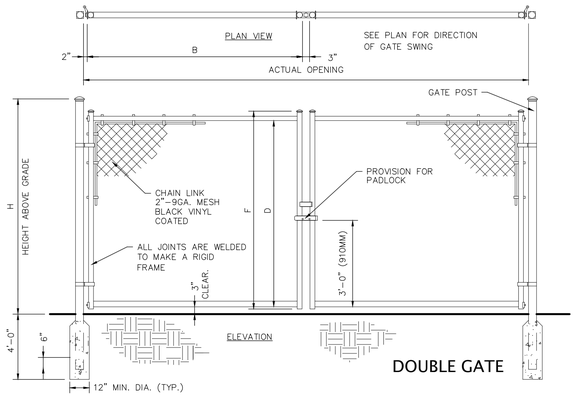
NOTES:

1. SEE PLAN FOR LOCATION AND LENGTH OF PROPOSED FENCING. (BEGIN / END CLF LABELS)
2. ALL CHAIN LINK FABRIC SHALL BE BLACK VINYL COATED.
3. ALL POSTS, BARS, RODS & HARDWARE SHALL BE BLACK POWDER COATED STEEL FENCE.
4. CONTRACTOR SHALL INCLUDE TOP AND BOTTOM RAILS ON ALL FENCING.
5. MANUFACTURER SHALL BE ANCHOR FENCE OR APPROVED EQUAL.
6. INSTALL FABRIC WITH KNUCKLE SIDE UP AND POINTED END DOWN.
7. CONTRACTOR TO PROVIDE SHOP DRAWING TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIALS AND INSTALLATION.

FENCE HEIGHT	END & CORNER POSTS		LINE POSTS	
NOMINAL HEIGHT	B-1 BAR LENGTH	H-1 HEIGHT ABOVE GRADE	B-2 BAR LENGTH	H-2 HEIGHT ABOVE GRADE
4'-0" [1219MM]	6'-0" [1829MM]	4'-0 5/8" [1219MM]	8'-8" [2642MM]	3'-8 7/8" [1117MM]
6'-0" [1829MM]	9'-0" [2743MM]	6'-0 5/8" [1845MM]	8'-8" [2642MM]	5'-8 7/8" [1749MM]

CHAIN LINK FENCE GATE DETAIL

NOT TO SCALE



DOUBLE GATE

QTY	GATE TYPE	NOMINAL HEIGHT (H)	ACTUAL (F)	ACTUAL (D)	OPENING (B)
2	SINGLE	4'-0"	3'-10"	3'-8 1/2"	4'-0"
0	DOUBLE	4'-0"	3'-10"	3'-8 1/2"	6'-0"

ALL POSTS, TUBULAR STEEL INCLUDING RAILS, HARDWARE AND LOCKING MECHANISM SHALL BE POWDER COATED STEEL, PAINTED BLACK (TWO COATS).

ALL GATES SHALL INCLUDE HINGES AND LATCH HARDWARE

FABRIC SURROUNDING PERIMETER OF DOG RUN AREA SHALL BE BLACK 9GA. MESH BLACK VINYL COATED WITH TOP AND BOTTOM RAILS THROUGHOUT.

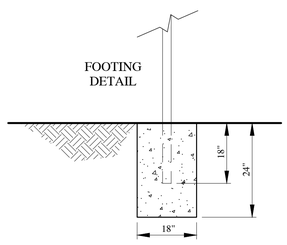
SEE PLAN FOR 4FT WIDE GATE LOCATIONS.

TOP OF CONC. SONOTUBE FOOTINGS SHALL BE RECESSED 4 TO 6 INCHES FROM FINISHED GRADE.

PROVIDE SHOP DRAWING FOR APPROVAL FOR ALL PRODUCT MANUF. MATERIALS AND CONSTRUCTION DETAILS PRIOR TO ORDERING AND INSTALLATION.

DOG PARK WASTE STATION

NOT TO SCALE

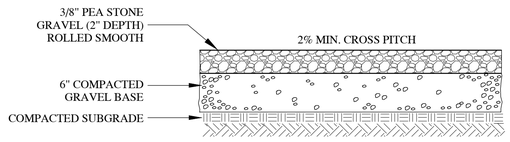


NOTES:

1. ADMIRAL DOG WASTE STATION. OR APPROVED EQUAL.
2. COLOR: GREEN; DISPENSER TYPE: ROLL
3. TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
4. SEE PLAN FOR LOCATION OF PROPOSED WASTE STATIONS.

PEA STONE GRAVEL (IN DOG RUN AREA)

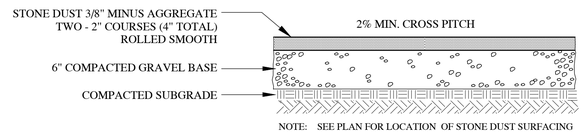
NOT TO SCALE



NOTE: SEE PLAN FOR LOCATION OF PEA STONE GRAVEL

STONE DUST PAVEMENT

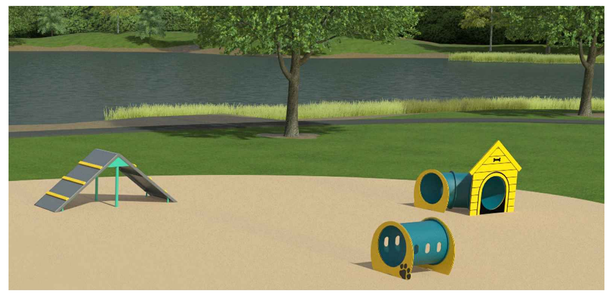
NOT TO SCALE



NOTE: SEE PLAN FOR LOCATION OF STONE DUST SURFACING

DOG RUN EQUIPMENT

NOT TO SCALE



NOTES:

1. PROVIDE ONE A-FRAME STRUCTURE, ONE CURVED DOG TUNNEL AND ONE STRAIGHT TUNNEL. (3 DOG PARK COMPONENTS IN TOTAL) BY LANDSCAPE STRUCTURES OR APPROVED EQUAL.
2. COLORS: TO BE SELECTED BY OWNER
3. TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
4. SEE PLAN FOR LOCATION OF PROPOSED DOG PARK ITEMS.
5. PROVIDE SHOP DRAWING TO OWNER & LANDSCAPE ARCHITECT FOR REVIEW & APPROVALS
6. WEBSITE: WWW.SHAPEDBYPLAY.COM

Stamp

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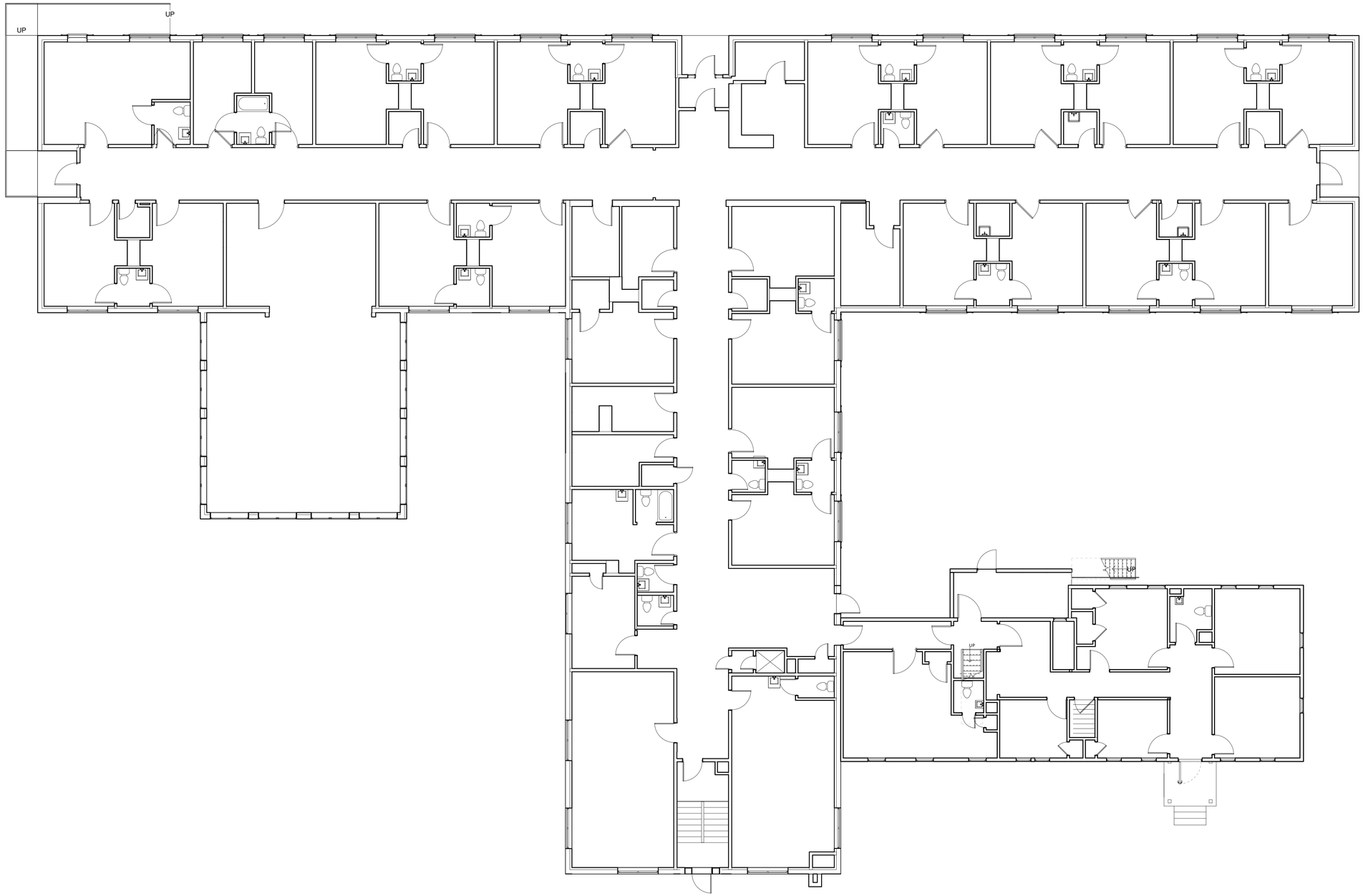
L3.2



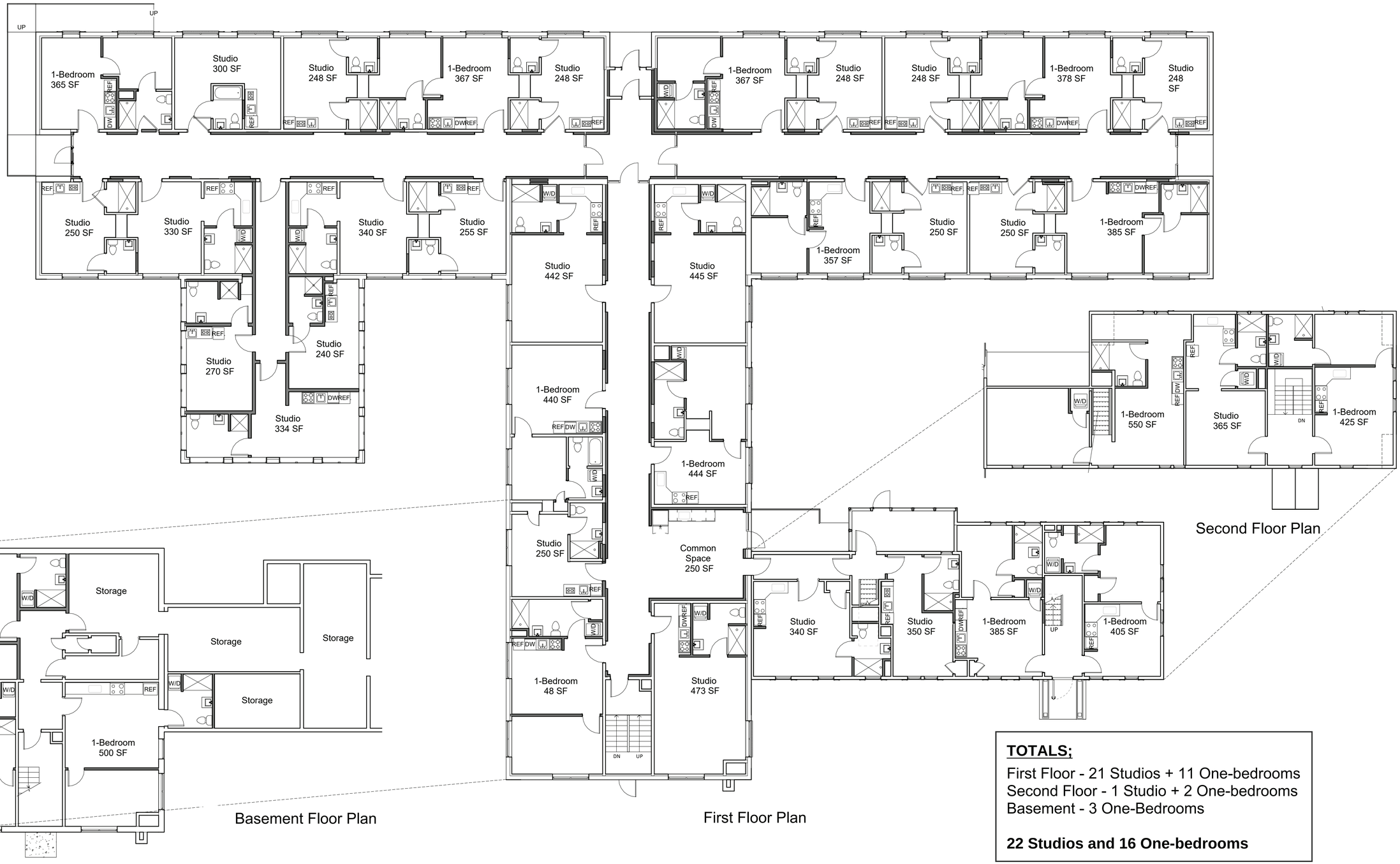
STUDIO NEXUS
ARCHITECTS + PLANNERS
PO Box 275, White River Junction VT 05001
802 275 5110 | www.studionexusarch.com

12 Tremont Street, LLC
Brookside Apartments

PROJECT NORTH

0' 4' 8'

Existing Floor Plan
SD1
June 24, 2024
1/8" = 1'-0"



TOTALS;

First Floor - 21 Studios + 11 One-bedrooms
Second Floor - 1 Studio + 2 One-bedrooms
Basement - 3 One-Bedrooms

22 Studios and 16 One-bedrooms

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12 Tremont Street, LLC
Brookside Apartments

PROJECT NORTH

0' 4' 8'

Proposed Floor Plans

SD2

June 24, 2024

1/8" = 1'-0"

View from Christian Street

View from Christian Street

View from Christian Street

Community Space

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12 Tremont Street, LLC
Brookside Apartments

Renderings
SD3
June 24, 2024