



**LEBANON PLANNING BOARD
OCTOBER 12, 2021 - 6:30 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

-
- 1. Call to Order**
 - 2. Notice of Regional Impact**
 - 3. Public Hearing Items**
 - A. Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD:** Request for Site Plan Review to construct a 15,000 sq. ft. addition to an existing warehouse building. PB2021-13-SPR - Continued from September 13, 2021
 - B. Michaels Student Living, LLC (applicant) and Trustees of Dartmouth College (property owner), 401 Mount Support Road (Tax Map 24, Lot 2), zoned R-1, R-3 and RL-3:** A 309-unit multi-family development is currently under construction pursuant to an approved Major Subdivision and Site Plan (PB2020-07-SPR & PB2020-29-SPA). The applicant requests a modification to the conditions of approval in order to allow two of the four proposed residential buildings to be occupied prior to the completion of all site improvements. PB2021-30-SPA
 - C. Alice Peck Day Memorial Hospital, 10 Alice Peck Day Drive (Tax Map 90, Lot 59), zoned R-3:** Request for Site Plan Review to construct a +/- 5,590 sq. ft. addition to the hospital, together with associated site work including a new loading dock, renovated sidewalks, and an expanded courtyard. PB2021-28-SPR
 - D. XYZ Dairy, LLC, River Park Drive (Tax Map 44, Lots 3 & 7 & Tax Map 58, Lot 27), zoned CBD, IND-L and R-3:** Applicant requests an extension of the timelines set forth in the Planning Board Notice of Action dated September 9, 2019 (PB2018-34-SPA) for the commencement of construction and completion of the River Park development. PB2021-29-EXT
 - E.** The Lebanon Planning Board, pursuant to Section 213.5.C of the Zoning Ordinance, will be conducting a Public Hearing for the purpose of taking public input and considering adoption of the "City of Lebanon Impact Fee Update 2021" report dated August 30, 2021, and a revised Impact Fee Schedule for collecting fees associated with development in the City.
 - 4. Other Business**
 - 5. Approval of Minutes**
 - A.** September 13, 2021
 - 6. Adjournment**

The order of agenda items is subject to change.

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

**Agenda
Planning Board
October 12, 2021**

**Agenda Item #3A
Public Hearing Items**

**Mason Storage, LLC,
38 Spencer Street
(Tax Map 78, Lot 39),
Zoned LD
PB2021-13-SPR**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 12, 2021 Meeting

Staff Memorandum – PB2021-13-SPR – *continued from 9/13/21*

APPLICATION INFORMATION

Agenda Item: 3.A

Application ID: PB2021-13-SPR

Application Type:

Site Plan Review for a proposed addition to an existing warehouse building

Property Location & Tax Map:

38 Spencer Street (Tax Map 78, Lot 39)

Applicant/Property Owner:

Mason Storage, LLC

Zoning District: Lebanon

Downtown (LD) District

Future Land Use Map:

Central Business District

Property Size:

+/-1.2 acres (+/-52,272 sq. ft.)

Existing Use & Improvements:

+/-13,000 sq. ft. industrial building constructed in 1984, per the City Assessor's records (a non-conforming use in the LD District per §306.2)

Proposed Use:

Construct a +/-15,000 sq. ft. building expansion; non-conforming warehouse use to continue

Overlay Districts: Floodplain

District

LEGAL NOTICE

Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD: Request for Site Plan Review to construct a 15,000 sq. ft. addition to an existing warehouse building. PB2021-13-SPR

NEW APPLICATION DOCUMENTS

- ▶ Letter dated September 27, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (3 pages)
- ▶ Revised Application for Waivers dated September 27, 2021 (3 pages)
- ▶ Memo from Corey Mack, PE, of WCG, dated September 23, 2021 (vehicle paths; 2 pages plus 4 page attachment)
- ▶ Letter dated September 27, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (drainage report; 1 page plus 11-page attachment)
- ▶ Revised plan set titled "Mason Storage, LLC" prepared by Daniel A. Nash, PE, dated April 11, 2021, last revised September 27, 2021, PN: 19-003 (15 Sheets)

WAIVER REQUESTS

Pursuant to Section 7.1 ("Waiver of Regulations"), the applicant has requested waivers from certain provisions of Article VI ("Design and Construction Requirements") of the Site Plan Review Regulations as set forth in the attached Application for Waivers and as listed below (*note that the waivers are identified in this memo in the order that they appear in the applicant's Application for Waivers*):

- **Section 6.10.B.9** (misidentified as "Section 6.10.A.9" on the applicant's Application for Waivers) – requiring that a minimum percentage of the building's façade is comprised of windows or glass doors, as follows:
 - "At a minimum, 35 percent of the building's façade (at the street level story) shall be comprised of transparent windows or glass doors that allow views and/or daylight between interior and exterior spaces." 6.10.B.9.b.i(b)
 - "For non-residential uses [...] windows or glass doors or both that allow views out of the interior building space shall comprise a minimum of 25 percent of the building façade between the floor level of each story above the street-level story." 6.10.B.9.c.i.

- **Section 6.10.C.2.b** – requiring that, “[w]here a front yard is provided for a commercial use, it must foster a safe and inviting pedestrian environment, as follows:
 - The front yard shall be improved with an extended sidewalk area, outdoor dining patio areas, plazas, or similar usable open space that can be readily-occupied by building occupants or visitors;
 - Pedestrian areas shall incorporate design features that offer function, visual interest, and are complementary to the building design, use, and surrounding context. Examples include soft- and hard-surface landscaping, planters, pocket parks, decorative surface treatments, shading like pergolas or patio umbrellas, vertical trellises or wall plantings, bike racks, artwork and attractive design elements, pedestrian-scale lighting, and public seating; and
 - Service areas, equipment storage, utility boxes, fuel storage, waste enclosures, and similar functions shall not be located in the front yard.”
- **Section 6.5.B.5** – “Minimum access requirements shall include a 50-foot turning radius and 22-foot fire lanes at the rear of the buildings.”
- **Partial Waiver of Section 6.2.D.1** – “Landscaping around buildings shall be provided to a minimum width of 10 feet and planted with trees, shrubs, and ground cover appropriate to the architecture in order to buffer parking areas, define entrances, provide foundation planting, and soften large expanses of walls or long roof lines.”
 - Note that with respect to the western façade of the existing building, note that Section 7.2.A of the Site Plan Review Regulations provides that, “Waivers from landscaping requirements shall not be considered in cases where adequate parking areas cannot be provided due to landscaping requirements. In such cases, the development shall be scaled down so that landscaping requirements can be met.” **Consequently, the plans will need to be amended to provide landscaping 10 ft. in width along the western side of the existing building where currently landscaping only 4 ft. in width is provided.**
- **Section 6.2.E.1** – 30% parking shading requirement and parking area screening requirement.
- **Section 6.2.B.3** – requiring understory trees to be provided in landscaped areas.
- **Section 6.10.B.3** – “Areas of opaque or blank wall without windows or doors shall extend no more than 20 feet horizontally on or along any building facade that faces a public way, park, or plaza and shall be mitigated by design strategies like varied materials, contrasting textures or depths, decorative reliefs, green walls, murals, or other architectural and landscaping strategies.”
- **Section 6.2.B.10** – establishing design requirements for roofs as follows:
 - a. Roofs may be flat or sloped as most appropriate to the use of the building, site features, and the context of neighboring buildings, and with consideration to solar potential and to directing snow/runoff to appropriate facilities to prioritize safety.
 - b. The roof edge must be articulated and offer visual interest through features such as a cornice, parapet, soffit, or overhang. The design emphasis shall be on the building’s street-facing facades, with consideration to the overall profile and character of the downtown Lebanon skyline from gateway approaches and high-volume pedestrian routes.

- c. Decorative features including cupolas, finials, dormers, chimneys or weather vanes, and/or cresting should also be considered as part of an overall roof treatment, particularly as a part of prominent buildings and where such details are complementary to surrounding neighborhoods.*
- d. Roof space may be utilized to accommodate building HVAC and similar systems, with screening where necessary, and to incorporate sustainability features such as passive solar orientation, rainwater or snowmelt capture, and/or installation of renewable energy equipment. Usable open spaces provided as part of features such as roof decks and green roofs are also appropriate.”*
- **Section 6.10.B.8** – *requiring trees along the front of the property, spaced no more than 40 ft. apart.*
 - **Section 6.5.B.6** (misidentified as “Section 6.5.B.5” on the applicant’s Application for Waivers) – *“Entrance walks must provide direct access between the primary public pedestrian corridor and at least one primary building entrance.”*

Pursuant to Section 7.1 of the Site Plan Review Regulations, the Board may grant a waiver of any part of the Regulations if it finds, by majority vote, that either:

- A. Strict conformity would pose an unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and intent of the regulations; or
- B. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.

The applicant’s basis for each waiver request is described in the attached Application for Waivers. Note that the granting of a waiver from a design requirement does not relieve an applicant from making the improvements that are depicted on the approved site plan, even if the depicted improvement would have been covered by the waiver had it not been included on the approved site plan.

STAFF COMMENTS

PLANNING

I. SITE PLAN REVIEW REGULATIONS:

Staff recommends that the Planning Board evaluate whether the plans for the proposed development satisfy the following design requirements:

- **Section 6.5.B.1** – *“The public streets providing access to the site shall be sufficient and have adequate capacity and features for the safety of vehicles, pedestrians and bicycles. This will include the main traffic arteries that must be utilized for travel to and from the site. The Board shall not approve a proposed site plan without such sufficient and adequate access capacity and features.”*
- **Section 6.5.B.2** – *“The traffic patterns on, at, and around the site shall be coordinated so as to compose a safe and efficient system for vehicles, pedestrians, and bicyclists, in support of complete streets, including alignment with the City of Lebanon’s Complete Streets Policy (2017).”*

There shall be proper arrangement of roadways, loading areas, and parking areas within and around the site, in relation to existing and planned streets, so the proposed development of the site shall not endanger the safety or welfare of vehicles, pedestrians, or bicyclists. There shall be adequate traffic access to and from City streets to ensure the safety of vehicles, pedestrians, and bicyclists."

- **Section 6.5.C.6** – “All loading areas shall be designed so as not to interfere with other planned circulation on the site and so as to provide adequate space and facilities.”
- **Section 6.10.C.4 and C.4.a** – LD District buffer requirement for the screening of parking areas and buffer design requirements:

“4. Screening of Parking Areas. Parking areas shall be screened to ensure that they do not detract from downtown appearance or walkability. Off-street parking shall be designed to have a minimal presence, if any, along streets and other public spaces.

- a. Accessory Parking Areas. For parking areas located on the same lot as a building containing the principal use, a landscaped buffer of at least 5 feet shall be provided along the frontage of any primary street or secondary street, as defined above. The buffer shall be designed to create an attractive streetscape and shall be provided through an appropriate combination of plantings, planters, benches, fences, public art, pedestrian-scale lighting, and low walls under four feet in height.”*

II. ZONING ORDINANCE:

Conditional Use Permit per Section 307.9.B to Allow Parking in the Front Yard:

Section 307.9.B of the Zoning Ordinance provides as follows:

No parking area or circulation area for vehicles shall be located in the front yard. For improved surfaces in existence as of January 20, 2021, the Planning Board may waive these requirements by conditional use permit pursuant to Section 302.4 if the Board find that there is no other location on the lot to provide parking.

The applicant has submitted the attached Application for Conditional Use Permit Support Statement addressing the Section 302.4.D criteria. However, as staff has previously noted, it does not appear that the applicant has addressed the specific requirement set forth in Section 307.9.B providing that a Conditional Use Permit may only be granted when it is demonstrated that “there is no other location on the lot to provide parking”.

ENGINEERING/PUBLIC WORKS

- Given the building configuration, equipment access to the south of the building will likely be difficult. Consequently, the Department of Public Works recommends that, prior to making a determination on the site plan, the applicant should demonstrate to the Planning Board that the proposed building/building foundation can be constructed without impacting the abutting properties.
- The Applicant should further demonstrate that the proposed infiltration practice construction detail, shown on Sheet C-3, provides a minimum of 1 foot vertical separation from estimated

seasonal high water table (SHWT). In addition, the drainage report should address saturated hydraulic conductivity of the existing receiving soils, and include stormwater modeling of each proposed infiltration practice. Finally, the drainage report should include a discussion of the proposed vegetative filter strips, and the plans should also show or articulate the locations, lengths, and grading of these proposed pre-treatment practices. The proposed infiltration practices may require re-sizing depending on the actual saturated hydraulic conductivity of the receiving soils. Given that the overall stormwater runoff is reduced off of the site in the proposed conditions, these above-described stormwater management and treatment details may be addressed as a condition of approval.

- The Department of Public Works recommends that the stormwater leaving 38 Spencer Street to the west be controlled using the above-described infiltration practices. Pending future development of the abutting 20 Spencer Street property may impact stormwater entering onto it from the 38 Spencer Street lot, so stormwater flow crossing the property line should be minimized by adding two properly-sized infiltration systems west of the proposed parking area and west of the proposed building addition. Given that the overall stormwater runoff is reduced off of the site in the proposed conditions, this may be addressed as a condition of approval.

STAFF RECOMMENDATIONS

If the Planning Board moves to approve this request, then based on the information reviewed by City staff, the Planning and Development Department recommends that the Planning Board approve the application with the conditions noted below:

Conditions to be Satisfied Prior to Application for a Building Permit

1. The applicant shall obtain a Floodplain Permit from the Floodplain Administrator pursuant to Chapter 74 of the City Code.
2. Address the following comments of the City Engineer to the satisfaction of the City Engineer:
 - a) Demonstrate that the proposed infiltration practice construction detail provides a minimum of 1 foot vertical separation from estimated seasonal high water table (SHWT). In addition:
 - i. Revise the drainage report to (i) address saturated hydraulic conductivity of the existing receiving soils, (ii) include stormwater modeling of each proposed infiltration practice, and (iii) include a discussion of the proposed vegetative filter strips; and
 - ii. Revise the plans to show or articulate the locations, lengths, and grading of these proposed pre-treatment practices.
 - b) The stormwater leaving 38 Spencer Street to the west shall be controlled using the above-described infiltration practices. Stormwater flow crossing the property line shall be minimized by adding two properly-sized infiltration systems west of the proposed parking area and west of the proposed building addition.
3. The applicant shall make the following revisions to the plan set to the satisfaction of the Planning and Development Department and the City Engineer:
 - a) Incorporate any changes made pursuant to condition of approval #1.
 - b) Amend the cover sheet to:

- i. Provide description of plan revisions (5.1.E.4.d).
- ii. Note that the plan was approved to the Site Plan Review Regulations adopted May 13, 1991, last revised March 23, 2021.
- c) Add note to plan addressing the requirements of Section 6.10.B.5, consistent with representations made in the application materials.
- d) As required by Section 5.1.E.10, the plan shall indicate of all proposed driveways.
- e) Amend the lighting plan to:
 - i. Add Sections 6.7.2.c and 6.7.2.d of the Site Plan Review Regulations as plan notes.

The applicant shall provide the Planning and Development Department with one (1) full size copy of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for archival purposes.

- 4. The applicant shall schedule and hold a pre-building permit application meeting with the Planning and Development Department, City Building Inspectors, City Engineer/Department of Public Works, and Fire Department, in order to help streamline the building permit review process and to review applicable code requirements.
- 5. The applicant shall obtain approval from the City Council or the City Manager's office for any additional water and/or sewer flows in accordance with the applicable Chapter 136 and 182 of the City Code.
- 6. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations.

Conditions to be Satisfied Prior to the Issuance of a Building Permit

- 7. The development shall be subject to City of Lebanon Impact Fees, pursuant to Section 213 of the Zoning Ordinance. The Impact Fee shall be calculated at the time of Building Permit issuance based on the Impact Fee Schedule adopted on August 13, 2018. In accordance with RSA 674:39, the approved site plan shall be exempt from any future changes in impact fees and methodology for five years from the date of approval; however, any building permits which are issued after the end of that five-year period shall be fully subject to whatever impact fees and methodology are in effect at the time of building permit issuance.
- 8. All water and sewer fees shall be paid as set forth in City Code Chapter 68.
- 9. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required State approvals including, but not limited to, the following:
 - a) NHDES Sewer Connection Permit, if necessary

Conditions to be Satisfied Prior to the Issuance of a Certificate of Occupancy

- 10. The impact fee calculated pursuant to Condition of Approval #7 shall be paid.
- 11. All improvements depicted on the plan shall be completed, and shall be constructed as depicted on the approved plan, including any modifications to the plan as may be approved by the Planning Board in accordance with the Site Plan Review Regulations.

General Conditions

12. The applicant shall obtain an Excavation Permit from the Department of Public Works for any site work in the public right-of-way prior to any work in the right-of-way.
13. All required landscape plantings shall meet the minimum size requirements for such plantings set forth in Section 6.2.B of the Site Plan Review Regulations at the time of installation.
14. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.
15. The property owner is responsible for the maintenance and operation of the stormwater management system in accord with the O&M plan, and such responsibility shall run with the land. (Section 6.6.H.2.b of the Site Plan Review Regulations).

cc: Shawn Mason, Mason Storage, LLC (via e-mail)
Daniel Nash, PE, of Advanced Geomatics & Design (via e-mail)
File



27 September 2021

Tim Corwin, Planning Office
City of Lebanon
51 North Park Street
Lebanon, NH 03766

Re: Site Plan Lot 78-39
38 Spencer Street

Dear Mr. Corwin:

Mason Storage has attached revised plans. We believe we have addressed your additional concerns outlined in your 13Sep21 Staff memo to the Board. Responses are attached.

Item 2. The limits of the flood plain, per the city's flood maps have been put on the plans, Sheet X-1. As mentioned at our 14Sep21 meeting, the city map does not show the extent of the flood plain on the property; the flood plain actually extends up to the embankment of the rail trail. However, we have revised the flood information to show the city information, as you requested.

Item 6&13. Spot grades are shown on sheet X-1. We request the ultimate resolution of the drainage issue be a condition of approval.

Item 8. According to the described reference, infiltration is allowed with one foot to the water table. For surfaces requiring treatment (parking areas), pre-treatment is required. Vegetated filter strips are considered treatment. Our proposed ample landscape areas are considered vegetated filters. In addition, it is important to note, that the proposed site plan removes over 10% of impervious area. Even without the infiltration practices, the site reduces runoff after construction. We believe our proposal meets the spirit and intent of the stormwater regulations.

Item 18.

Section 6.2.B.10. We understood this item to be covered under the Conditional Use Application we submitted dated 7Jul21. However, we have added a partial waiver request.

Section 6.5.B.6. An entry walk exists at the front of the building. It is now shown as a striped walk on Sheet C-1. Therefore, a waiver should not be needed.

Section 6.5.C.7. There are no new parking spaces in the front of the property. Parking space numbers have been added to sheet X-1 for clarity. Therefore, a waiver should not be needed.

Section 6.10.B.8. We have added this waiver to the list. See attached waiver request.

Section 6.10.C.1.b. As mentioned above in Item 6.5.B.6, a pedestrian access is provided.

Item 19c.

-The orientation of the landscape plan has been corrected.

-A current boundary survey, with a surveyor's stamp is on file with the city.

Item 25. The plan includes the floor being elevated above the flood to eliminate a flood hazard. All utility systems will be included within the building, thereby preventing the risk of flood damage.

Item 7. The preparer of the turning analysis has provided additional information per requests by staff.

Item 9. The plan does identify water service pipes. The requirement to provide a curb stop at the ROW has been complied with.

Item 12. An erosion control detail sheet has been added.

Item 19.d. A screening detail has been added to the landscape sheet.

Item 19.f.i. Additional clarifying notes have been added to the Landscape plan.

Item 28. Lighting plan has been revised to indicate CCT of 3000.

Item 32. All of the mentioned items, if used, will be located within the building.

Item 18.

Section 6.5.C.6. We believe the site has proper loading areas with adequate circulation.

Section 6.10.C.4&4a. We believe the parking areas are adequately screened. Where a 5' landscape buffer from the sidewalk is required, we have provided areas 15' or greater in depth.

Item 19.e.i&ii. The plans are clear. Items required to be shown are shown. We are not aware of extraneous lines.

Item 22. The public street serving the site is sufficient. It is being made even more so with the Spencer Street Improvement Project underway by the City.

Item 24. The proposed site development does not endanger the safety or welfare of vehicles, pedestrians, or bicyclists.

Item 34. We have reviewed the renderings with the architect. The elevations have notes describing the textures and finishes.

Item a. We believe we have complied with the spirit of the opaque surfaces requirement to the extent possible. As we have consistently maintained, extensive windows are not appropriate on a self-storage type building. Of note, we have included windows on the stairwells to provide some transparency on the building.

Item b. Revisions are noted in the upper right-hand corner of each plan sheet, as required.

Item c. Hatching for pavement to be removed has been added, along with a note, Sheet X-1.

Item d.

- i. Dimensions are indicated in Notes on Sheet C-1.
- ii. Snow storage has been moved.

Item e.

- i. orientation changed.
- ii. Orientation changed.
- iii. Lines removed.
- iv. Schedule issue resolved.
- v. Plants will be planted adjacent to tank. No issue.

Item f. crosswalk indicated as pedestrian access from SW to front of building.

Please let us know if you need any additional materials to support this request.

Sincerely,

Daniel A. Nash, PE
Principal

Attachments:

- 1-Updated Plan set dated 9/27/21
- 2-Updated Turning movement memo
- 3-Updated waiver requests
- 4-Updated drainage report

CC: Shawn Mason
Barrett Architecture
Mara Landscape Design



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Mason Storage, LLC
Project Name: Mason Storage
Project Address: 38 Spencer Street

WAIVER REGULATIONS

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

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

OR

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

WAIVER REQUEST(S)

I (we) hereby request a Waiver from:

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

1. Section 302.4 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The parking and loading areas are existing and have been for many years. They are necessary to support the functions of the existing portion of the building.

2. Section 6.10.A.9 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The existing building is a warehouse. Windows, except minimal ones needed for the office areas are not needed or recommended for a warehouse use.

3. Section **6.10.C.2.B** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The parking and loading areas in the front of the building are existing and have been for many years. They are necessary to support the functions of the existing portion of the building. This existing use precludes the front yard landscaping.

4. Section **6.5.B.5** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The proposed building is proposed to be sprinklered. the site does not lend itself to providing such a fire lane, and the fire lane should not be necessary. It is important to note the site abuts the rail trail which is accessible by fire vehicles.

5. Section **6.2.D.1** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The parking and loading areas in the front of the building support the functions of the existing portion of the building. This existing use precludes the 10' foundation landscaping. On the west side, the narrowness of the lot prevents the full 10' width; 5' have been provided.

6. Section **6.2.E.1** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

As noted above, a landscaped bed of sufficient width to support trees is not possible on the east side of new parking. The site does not have double rows of parking to take advantage of the "internal planting" shading calculation.

7. Section **6.2.B.3** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The site already has plentiful proposed landscaping in a zone that allows 100% lot coverage and no landscaping. Applicant has proposed some understory trees, but cannot practically plant all that are required.

8. Section **6.10.B.3** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The proposed building is a warehouse. It is not practical or reasonable to provide windows on this type of building.

3. Section **6.2.B.10** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

We request a partial waiver of this item. Large areas of pavement have been removed and landscaped with trees on either side of the driveway to the addition and in the area of the removed loading dock. Trees cannot be placed in the 90' of frontage of existing pavement.

4. Section **6.10.B.8** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The proposed building is a pre-engineered metal structure. As such, it is not conducive to the types of roof edge treatments used in timber or brick construction.

5. Section **6.5.B.5** (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

The proposed site plan provides pedestrian access from the soon to be completed Spencer St sidewalk to the building. there is no dedicated access path to the addition because this area is only accessible with vehicles accessing the fenced in area for retrieving or dropping off items to be stored.

6. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

7. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

8. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

SIGNATURE

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

Signature of Applicant: _____ Date: **27Sep21**

Date: September 23, 2021
To: Dan Nash, PE, Project Manager, Advanced Geomatics & Design
From: Corey Mack, PE, Transportation Engineer
Subject: Mason Storage Vehicle Paths

WCG has reviewed the vehicle paths for access to the loading docks and firetruck turnaround for the proposed addition to Mason Storage on Spencer Street in Lebanon NH. This memorandum documents the methodology, vehicles, and results of the tracking path analysis.

Software

To evaluate vehicle turning paths, WCG used AutoTURN¹ swept path analysis software, a product of Transoft Solutions. AutoTURN software is an industry standard software package that runs as an application within CAD software, (such as AutoCAD) or through an online interface. The software uses scaled models of the site plan, vehicle body, wheelbase, and steering characteristics of standard or customized design vehicles to illustrate vehicle tracking during various maneuvers.

Assumptions

WCG evaluated the turning paths of two design vehicles:

- AASHTO SU-30, or a 30-foot-long single unit box truck, similar to a standard delivery vehicle, and
- Ladder Firetruck to illustrate the largest typical emergency response vehicle.

Both vehicles were modeled to reverse into the parking loading dock area and exit in the forward direction in a standard three-point turn. This would be consistent with how a SU-30 vehicle would approach the loading docks, or how an emergency response vehicle would turn around following a call.

Discussion

As shown in the Mason Storage Truck Access figures from 8/23/21, both design vehicles were modeled to be able to reverse into the loading and parking areas and exit in the forward direction in a standard three-point turn. The vehicles were modeled to track over the curbed and sidewalk island areas in front of the site.

The front end of the vehicles is observed to swing into opposing lanes during the turning maneuvers; this is common and expected for vehicle access along narrow, urban, and low

¹ <https://www.transoftsolutions.com/vehicle-swept-path/autoturn-select/autoturn/>

speed roads. The driver of the vehicle is expected to wait for an appropriate break in traffic to safely execute the turning maneuver.

Conclusions

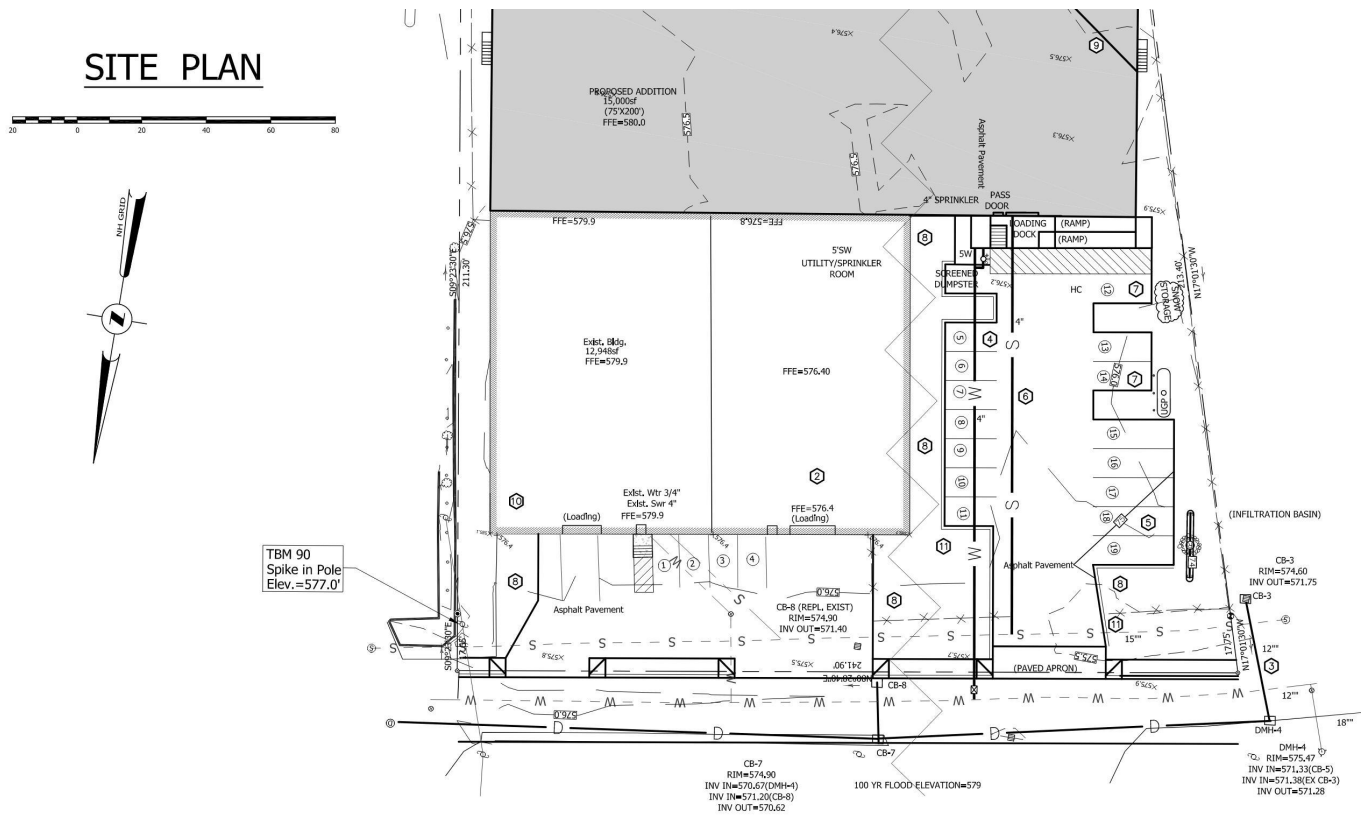
The proposed site will be adequate for the design vehicles to safely execute a reverse entry and forward exit three-point turn maneuver.

WCG recommends the sidewalk and curb islands through the drives are mountable curbs, and the concrete sidewalks should be 8" thick to withstand vehicle loading. We further recommend that parking is restricted along the sidewalk and curbed islands in front of the parking and loading areas through the illustrated vehicle paths.

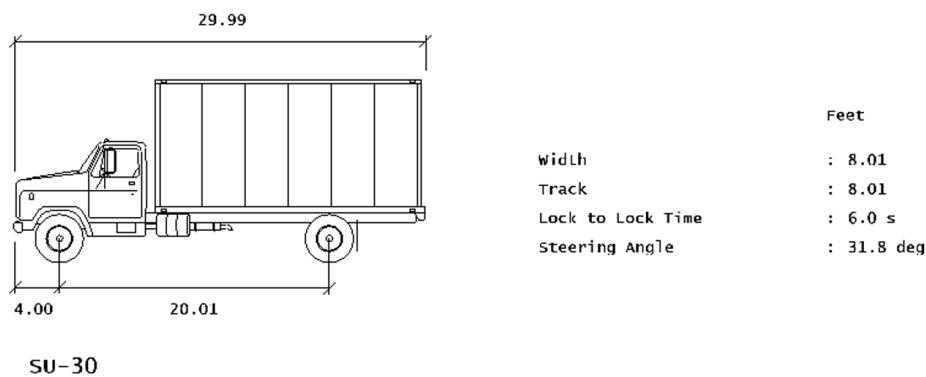
Attachments

Mason Storage Truck Access Vehicle Tracking Paths, dated 8/23/21

Mason Storage site plan, dated 8/13/2021

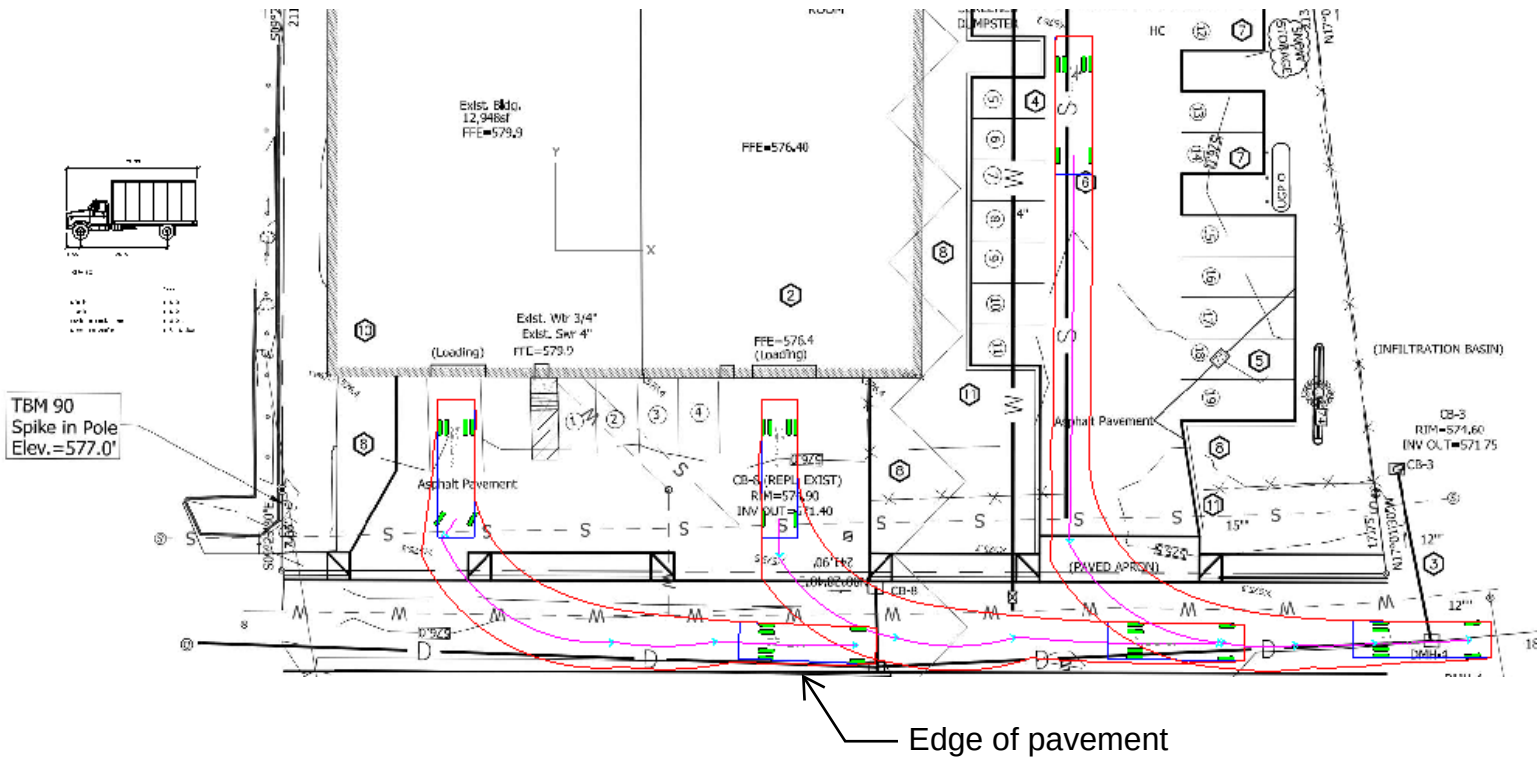


Design vehicle SU-30

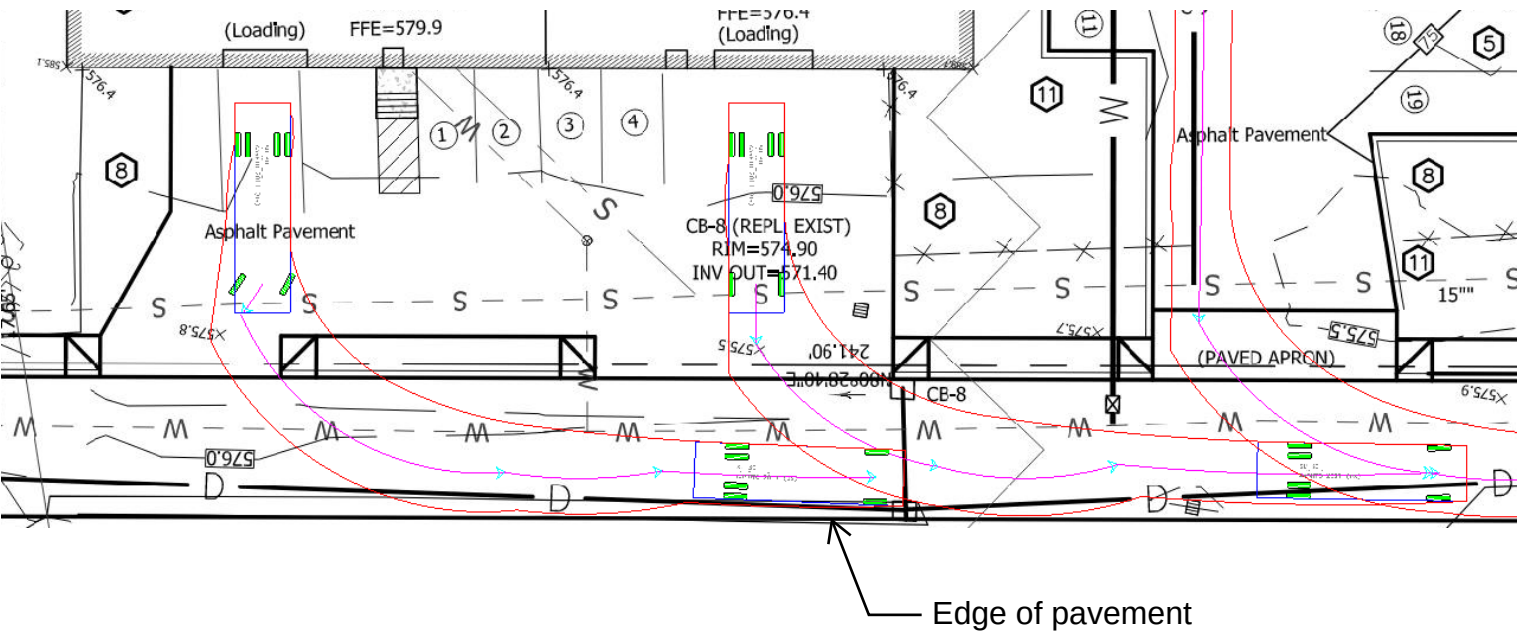




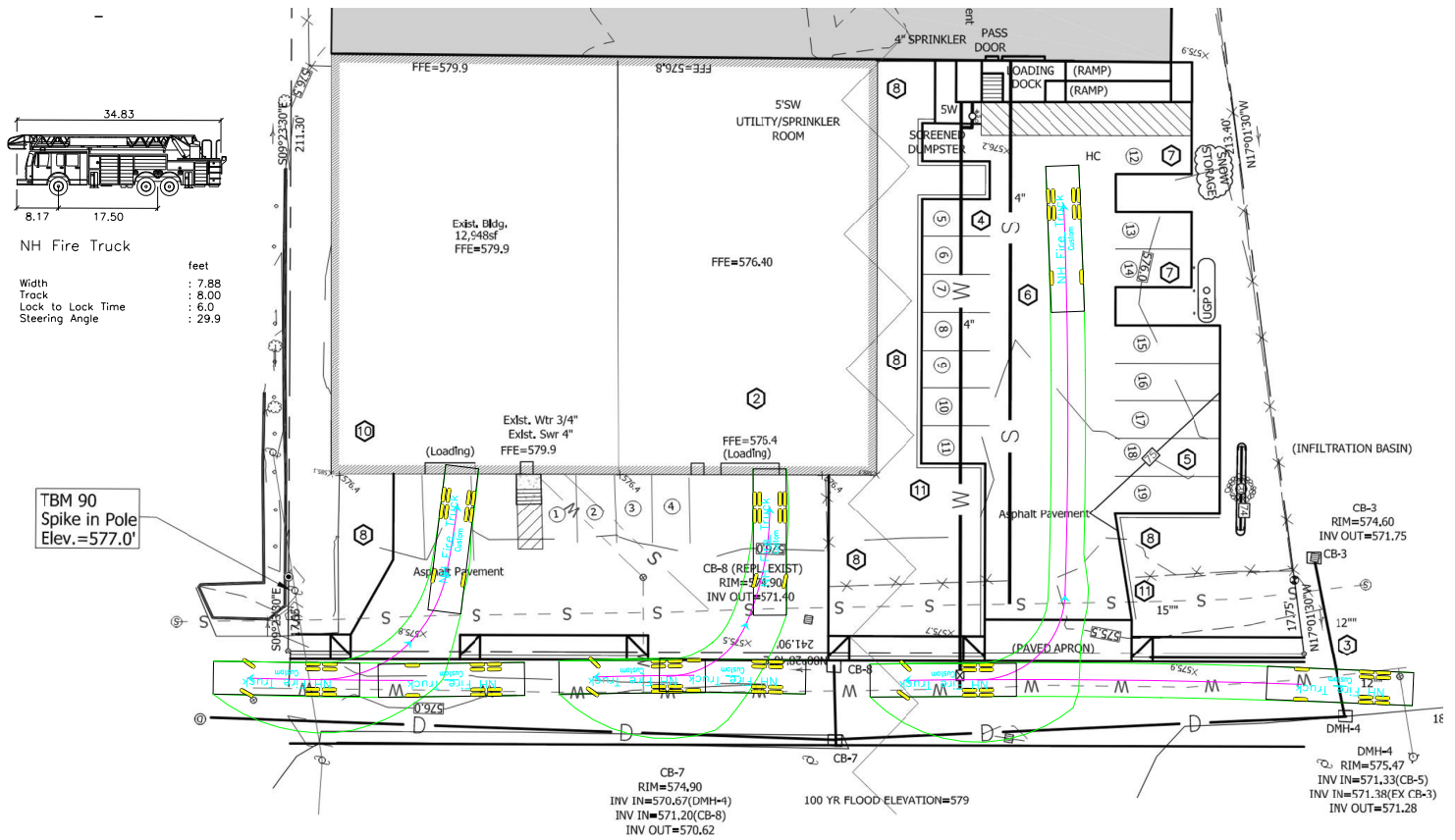
SU-30 Loading Exits: All Loading Docks



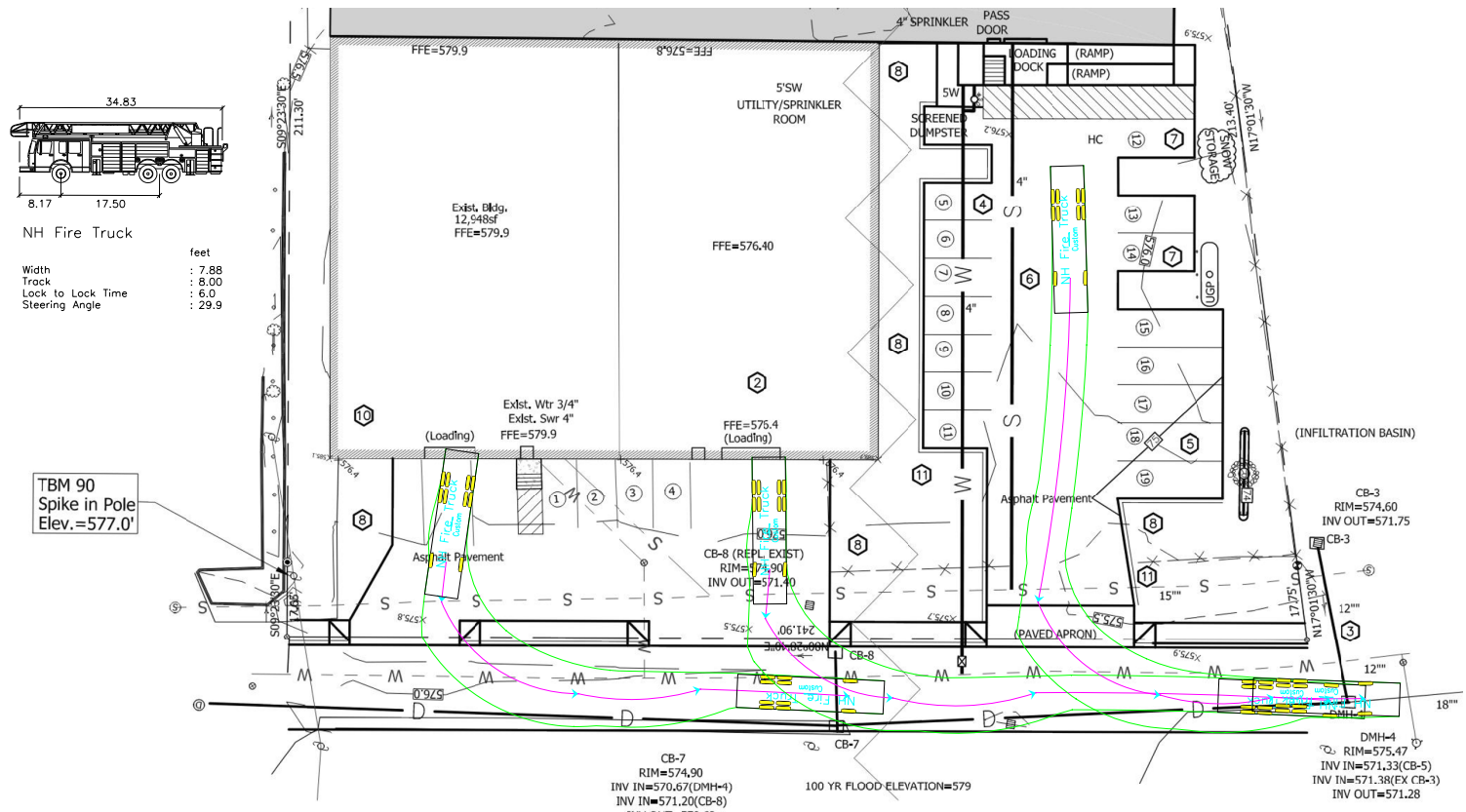
SU-30 Loading Exits: All Loading Docks - Detail



Firetruck Reverse Enters



Firetruck Exits





Brian Vincent, PE, City Engineer
City of Lebanon
51 North Park Street
Lebanon, NH 03766

4 May 2021
rev. 27Sep2021

Re: Drainage Report
Mason Storage
38 Spencer Street

Dear Mr. Vincent:

Attached are our drainage calculations for the Mason Storage facility on Spencer Street. The site has two discharge points. Discharge point 1 is an existing CB on or near the property line with DPW property. Discharge point 2 is an existing CB, in front of the existing site, in the parking lot. The discharge points are shown on Sheets DR-1 & 2.

The city is pursuing and improvement project for Spencer street. The CB at DP#1 will be replaced where it is. The CB at DP#2 will be replaced and relocated to the street edge.

The new building will be constructed over the existing fabrication yard, which is an impervious area. Some of the existing pavement will be removed and landscape areas created. The project results in a net decrease in impervious area of approximately 2,500sf (now 3,983sf).

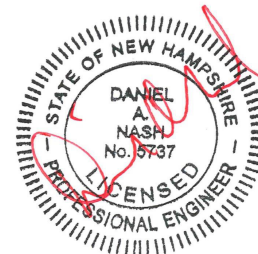
This summary is followed by a comparison sheet. The Sheet compares the 2, 10, 25, 50, and 100 year storms. The project provides a modest overall decrease. The existing paved areas will remain. Since the site impervious is decreasing, stormwater control or treatment measures should not be necessary.

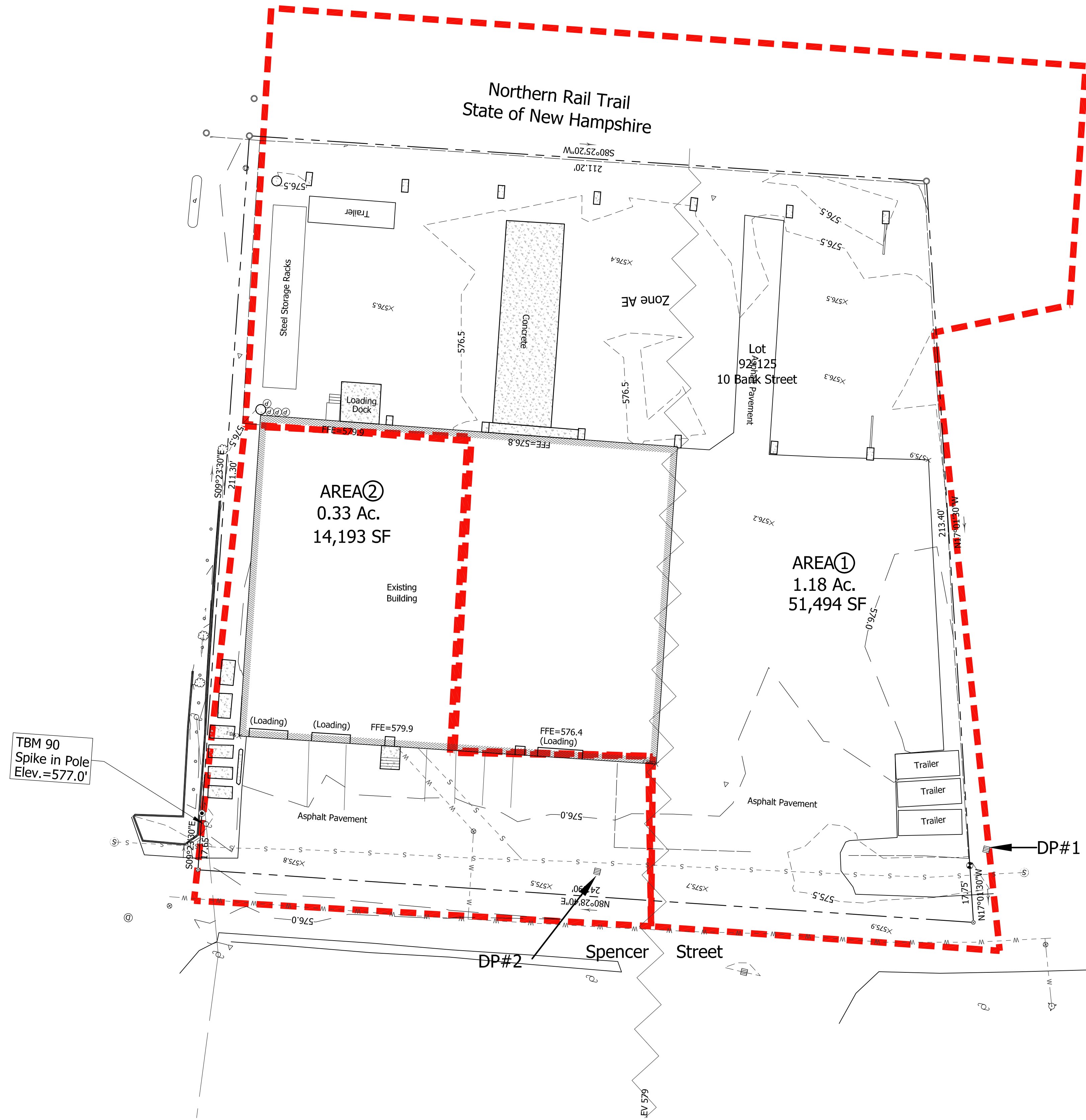
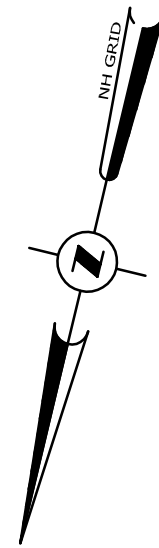
Please let us know if you need any additional materials or information to support this report.

Sincerely,

Daniel A. Nash, PE
Principal

CC: Shawn Mason
M:\2019_projects\19-003\drainage\SPENCER_drain_4MAY2021.doc

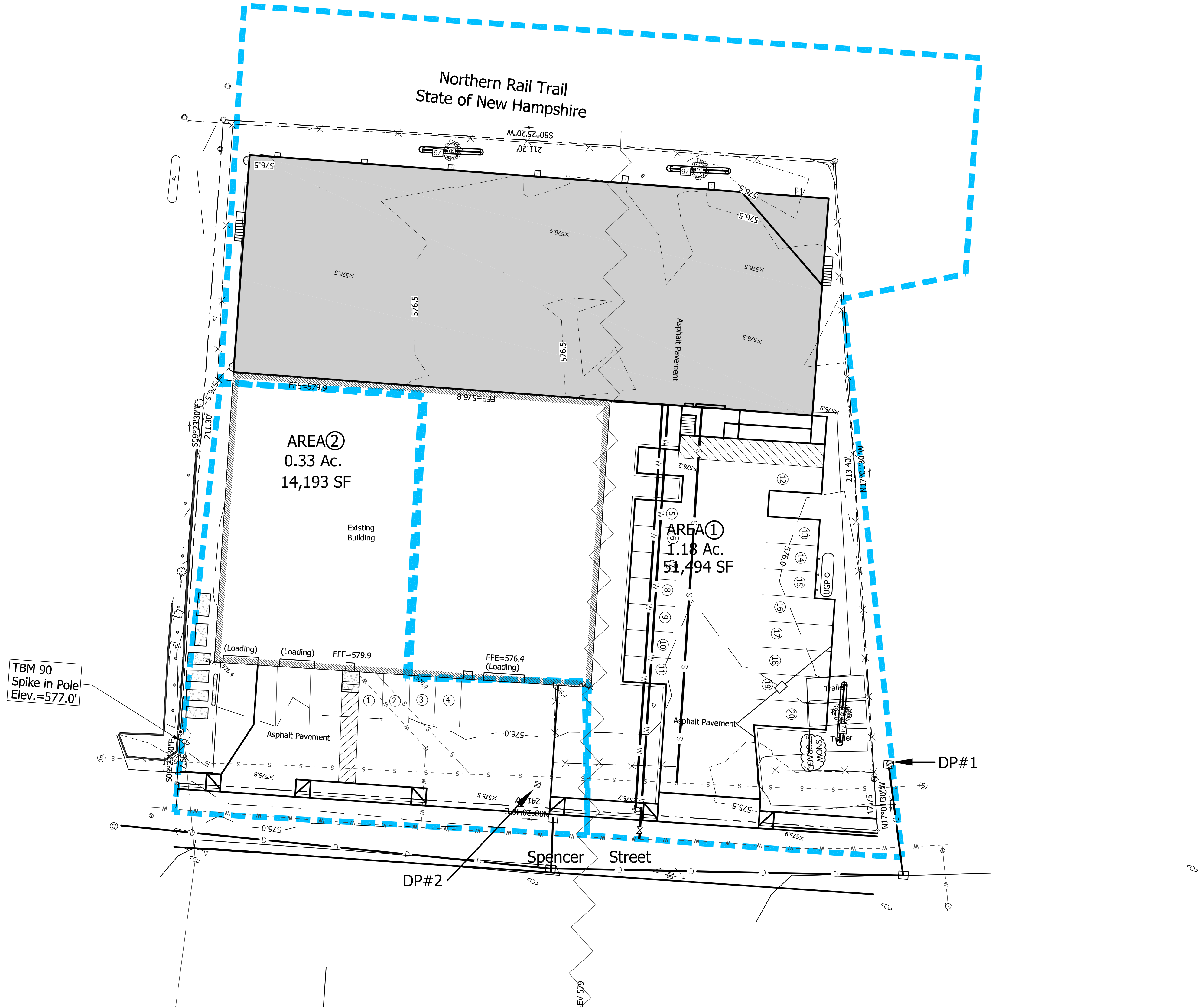
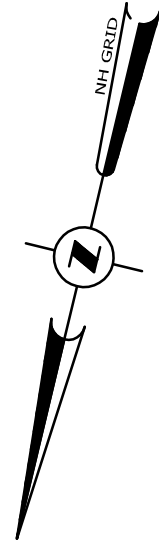




KEY
→ FLOW ARROW



ADVANCED GEOMATICS & DESIGN		PRE DRAINAGE PLAN		FOR		MASON STORAGE		IN		LEBANON, NEW HAMPSHIRE		#		REVISIONS		DATE	
SURVEYED: VTGEO, GIS		DESIGNED: DAN		DRAWN: DAN		CHECKED: DAN		DATE: 05/04/2021		MASON STORAGE		PRE DRAINAGE PLAN		DR-1		© 2021	
105 BANK STREET - PO BOX 512		LEBANON, NEW HAMPSHIRE 03766		PHONE: (603) 448 6295		E-MAIL: advancedgeomatrics@comcast.net											
ADVANCED GEOMATICS & DESIGN		DWG: 19003\19003-DR															



POST DRAINAGE PLAN
FOR
MASON STORAGE
IN
LEBANON, NEW HAMPSHIRE

ADVANCED GEOMATICS & DESIGN
105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766
PHONE: (603) 448 6295
E-MAIL: advancedgeomatrics@comcast.net

SURVEYED: VTGEO, GIS
DESIGNED: DAN
DRAWN: DAN
CHECKED: DAN
DATE: 05/04/2021

MASON
STORAGE

POST
DRAINAGE PLAN

DR-2

© 2021
ADVANCED GEOMATICS & DESIGN
DWG: 19003\19003-DR

#	REVISIONS	DATE

MASON STORAGE										
38 SPENCER STREET										
LEBANON, NH										
PRE/POST COMPARISONS										
		(W/O DET)		(W/O DET)		(W/O DET)		(W/O DET)		(W/O DET)
DISCHARGE POINT	PRE Q-2	POST Q-2	PRE Q-10	POST Q-10	PRE Q-25	POST Q-25	PRE Q-50	POST Q-50	PRE Q-100	POST Q-100
-TO DP #1 (CB ON DPW PROPERTY)	2.4	2.3	4.0	3.8	4.6	4.4	5.4	5.1	5.6	5.4
-TO DP #2 (CB APX CENTER OF PROPERTY)	0.8	0.8	1.3	1.3	1.5	1.5	1.75	1.71	1.83	1.80
TOTAL FLOW	3.2	3.1	5.3	5.1	6.2	5.9	7.1	6.8	7.5	7.2

MASON STORAGE														
38 SPENCER STREET														
LEBANON, NH														
<u>PRE DEVELOPMENT CALCULATIONS</u>														
<u>RUNOFF COEFFICIENT</u>														
-TO DP #1 (CB ON DPW PROPERTY)														
AREA	AREA	AREA	AREA	AREA	AREA	AREA	weighted							
DESIGNATION	c=.9	c=.6	c=.3	c=.21	c=.19	TOTAL	"C"							
AREA 1	0.90	0.00	0.28			1.18	0.76							
sub-totals by type=	0.90	0.00	0.28	0.00	0.00	1.18								
			Overall land area total=			1.18	Ac							
			Overall weighted "c"=				0.76							
<u>RUNOFF COEFFICIENT</u>														
-TO DP #2 (CB APX CENTER OF PROPERTY)														
AREA	AREA	AREA	AREA	AREA	AREA	AREA	weighted							
DESIGNATION	c=.9	c=.6	c=.3	c=.21	c=.19	TOTAL	"C"							
AREA 2	0.32	0.00	0.01			0.33	0.88							
sub-totals by type=	0.32	0.00	0.01	0.00	0.00	0.33								
			Overall land area total=			0.33	Ac							
			Overall weighted "c"=				0.88							
<u>RUNOFF CALCULATIONS</u>														
	Area (Ac)	t-C	i-2	i-10	i-25	i-50	i-100	"c"	<u>Q-2</u>	<u>Q-10</u>	<u>Q-25</u>	<u>Q-50</u>	<u>Q-100</u>	
-TO DP #1 (CB ON DPW PROPERTY)	1.18	10	2.7					0.76	2.41	cfs				
	1.18			4.5				0.76		4.02	cfs			
	1.18				5.2			0.76			4.65	cfs		
	1.18					6.0		0.76				5.36	cfs	
	1.18						6.3	0.76					5.63	cfs
-TO DP #2 (CB APX CENTER OF PROPERTY)	0.33	10	2.7					0.88	0.79	cfs				
	0.33			4.5				0.88		1.31	cfs			
	0.33				5.2			0.88			1.51	cfs		
	0.33					6.0		0.88				1.75	cfs	
	0.33						6.3	0.88					1.83	cfs

MASON STORAGE																	
38 SPENCER STREET																	
LEBANON, NH																	
POST DEVELOPMENT CALCULATIONS																	
RUNOFF COEFFICIENT																	
-TO DP #1 (CB ON DPW PROPERTY)																	
AREA	AREA	AREA	AREA	AREA	AREA	AREA	AREA	weighted									
DESIGNATION	c=.9	c=.6	c=.3	c=.21	c=.01	TOTAL	"C"										
AREA 1	0.830		0.350			1.180	0.72										
sub-totals by type=	0.830		0.350			1.180											
			Overall land area total=			1.180	Ac										
			Overall weighted "c"=				0.72										
RUNOFF COEFFICIENT																	
-TO DP #2 (CB APX CENTER OF PROPERTY)																	
AREA	AREA	AREA	AREA	AREA	AREA	AREA	weighted										
DESIGNATION	c=.9	c=.6	c=.3	c=.21	c=.19	TOTAL	"C"										
AREA 2	0.310		0.020			0.330	0.86										
sub-totals by type=	0.310	0.000	0.020	0.000	0.000	0.330											
			Overall land area total=			0.330	Ac										
			Overall weighted "c"=				0.86										
RUNOFF CALCULATIONS (WITHOUT DETENTION)																	
								weighted									
	Area (Ac)	t-C	i-2	i-10	i-25	i-50	i-100	"c"	Q-2	Q-10	Q-25	Q-50	Q-100				
-TO DP #1 (CB ON DPW PROPERTY)	1.18	10	2.7					0.72	2.30	cfs							
	1.18			4.5				0.72			3.83	cfs					
	1.18				5.2			0.72				4.43	cfs				
	1.18					6.0		0.72					5.11	cfs			
	1.18						6.3	0.72							5.37	cfs	
-TO DP #2 (CB APX CENTER OF PROPERTY)	0.33	10	2.7					0.86	0.77	cfs							
	0.33			4.5				0.86			1.28	cfs					
	0.33				5.2			0.86				1.48	cfs				
	0.33					6.0		0.86					1.71	cfs			
	0.33						6.3	0.86							1.80	cfs	

**38 Spencer Street
Lebanon, NH
Operations and Maintenance Plan (OMP)
27 July 2021**

Goal:

This manual was developed by Advanced Geomatics and Design, LLC (A) to assist owners in their regulatory inspections and maintenance (OMP) activities for the stormwater measures implemented at 38 Spencer Street.

Site Location and Description:

This project is located on Spencer Street in Lebanon, New Hampshire. The site is a compilation of an existing warehouse building and a 12,000sf addition.

Owner and Operator:

BMP Owner..... Mason Storage

I&M Responsible Party..... Mason Storage
(Reporting, inspection, and maintenance activities)

Introduction:

The scope of this manual encompasses the parking and loading areas and infiltration basins.

First Few Months Post Construction Activity:

Following construction commencement, the site will need to be inspected after every major storm event for the following three months. Once the infil basins have become more established, less frequent inspections are required.

Key Inspection Check Points (first three months following construction)

- Inspect drainage:
 - Runoff should be seen to infiltrate after a rain event. Standing high water for long periods of time could indicate sediment inundation or functionality issues.
- Inspect vegetation:
 - Vegetation should be flourishing. If this is not the case consider watering, removing dead or unhealthy plants, or replanting areas that are poorly established.
- Inspect for erosion or short circuiting:
 - If erosion or short circuiting is occurring in the wetland soils, fill the area with more soil, compact lightly, and re-seed to prevent further erosion.
- Inspect inlets and outlets for proper function:

- Clean out debris or leaf litter when necessary.

See Attachment 2 for further detailed instructions and reference.

Post construction Activity:

As the infil basins become established less frequent inspections are necessary. Inspection of the infil basins should be performed biannually for two years after implementation and checked after any major storm events to maintain a productive system. If the infil basins show signs of healthy establishment after two years, inspection frequency can decrease to annually.

Key Inspection Check Points (post-construction)

- Inspect drainage:
 - Runoff should be seen to infiltrate after a rain event. Standing high water for long periods of time could indicate sediment inundation or functionality issues.
- Inspect vegetation:
 - Vegetation should be forming a dense root mate and becoming will established. If this is not the case consider watering, removing decaying or unhealthy vegetation, or preforming reinforcement panting to develop robust coverage throughout the system.
 - Every three years the vegetation within the rain gardens should be cut back.
- Inspect for erosion or short circuiting:
 - If erosion or short circuiting is occurring in the rain gardens soils, fill the area with more soil, compact lightly, and re-seed to prevent further erosion.
 - Look for animal burrowing that could also short circuit the system, burrowing would also need to be filled and re-seeded.
- Inspect inlets and outlets for proper function:
 - Clean out debris or leaf litter when necessary.
 - If there is any evidence of structural damage or deterioration, parts should be replaced.
- Inspect for sediment buildup:
 - Sediment buildup should be removed properly and when needed from the rain gardens.

Inspections Sheets and Documentation:

Upon the completion of construction activities that direct stormwater to the rain gardens, I&M activities will be initiated. MS may choose to contract with outside parties to perform I&M on site, but will be responsible for long-term effectiveness of the rain gardens.

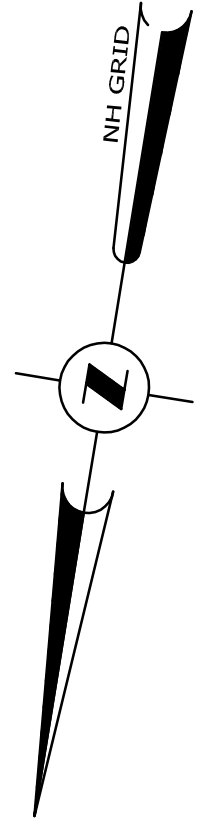
The inspection checklist that is provided as Attachment 3 is made by the University of New Hampshire Stormwater Center, this sheet will be used at to perform each inspection. An I&M Log will also need to be kept up to date and on file to clearly document the dates of each inspection and maintenance required.

All of the record will need to be kept up to date and maintained by the party responsible and be made available to the department upon request.

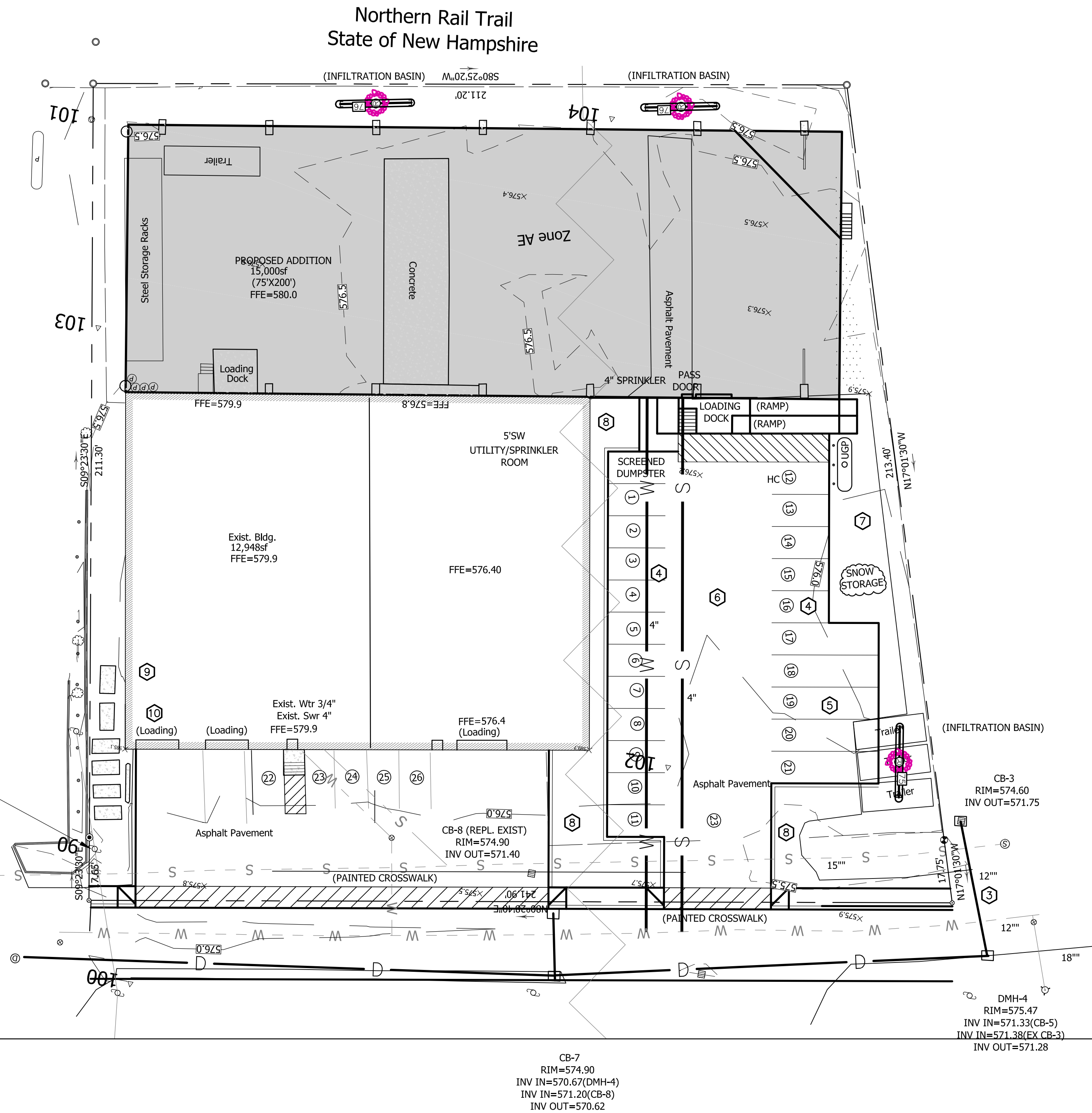
Appendix:

Attachment 1 Sheet C-1, site plan.

Attachment 2 I&M Log



TBM 90
Spike in Pole
Elev.=577.0'



SITE PLAN

NOTES:

- 1 FLOOD PLAIN COVERS ENTIRE SITE. BASE FLOOD ELEVATION=579. ADDITION TO BE AT ELEVATION 580.00 FOR FLOOD PROTECTION.
- 2 LOWER PORTION OF EXISTING BUILDING TO BE FLOODPROOFED OR ELEVATED FOR FLOOD PROTECTION.
- 3 PROPOSED DRAINAGE TO BE INSTALLED AS PART OF SPENCER STREET IMPROVEMENT PROJECT BY CITY OF LEBANON.
- 4 VEHICLE PARKING SPACES 9X16 TYPICAL
- 5 (5) TRUCK & TRAILER PARKING SPACES (9X30)
- 6 30' AISLE
- 7 PAVEMENT TO BE REMOVED.
- 8 LANDSCAPE AREA. PAVEMENT TO BE REMOVED.
- 9 (6) CONCRETE PADS TO BE REMOVED.
- 10 LOADING DOCK TO BE CLOSED/REMOVED.

ADVANCED GEOMATICS & DESIGN		SITE PLAN		FOR		MASON STORAGE, LLC		IN		LEBANON, NH		REVISIONS		DATE	
105 BANK STREET - PO BOX 512 LEBANON, NEW HAMPSHIRE 03766 PHONE: (603) 448 6295 E-MAIL: advancedgeomatics@comcast.net												2 UPDATE		06/28/21	
												1 UPDATE		05/04/2021	
												#		#	
SURVEYED: VLG		DESIGNED: DAN		DRAWN: DAN		CHECKED: DAN		DATE: 04/01/21		MASON STORAGE		SITE PLAN		C-1	
© 2021		ADVANCED GEOMATICS & DESIGN		DWG: C-1											

38 Spencer Street

Inspection and Maintenance (I&M)

38 Spencer Street

Lebanon, NH

Inspections and Maintenance (I&M) Log

Facility Name:	Mason Storage
Address:	38 Spencer Street Lebanon, NH 03766
Begin Date:	

Date of Inspection	Inspected By	Comments and Actions Taken	Other Notes

38 Spencer Street

Inspection and Maintenance (I&M)

Date of Inspection	Inspected By	Comments and Actions Taken	Other Notes

MASON STORAGE, LLC

LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

SITE PLAN

OWNER/APPLICANT

MASON STORAGE, LLC
29 SHAW STREET
LEBANON, NH 03766

CONSULTANTS

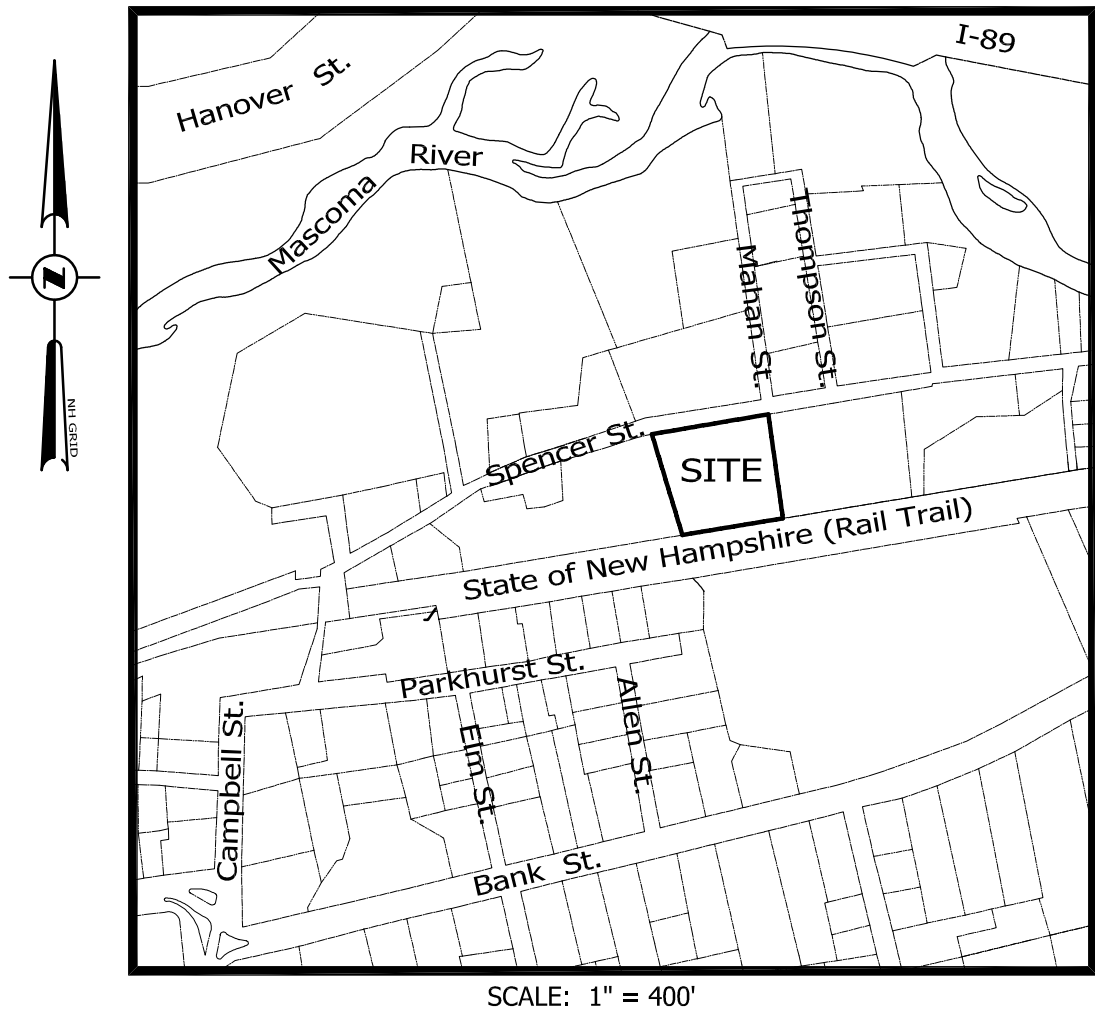
CIVIL ENGINEER
DANIEL A. NASH, PE
ADVANCED GEOMATICS AND DESIGN
PO BOX 512
105 BANK STREET
LEBANON, NH 03766
advancedgeomatrics@comcast.net

ARCHITECT
FRANK J. BARRETT, JR. A.I.A.
BARRETT ARCHITECTURE, PC
PO BOX 55
WHITE RIVER JUNCTION, VT 05001
frank.j.barrett@myfairpoint.net

LANDSCAPE DESIGNER
MARA LANDSCAPE DESIGN, LLC
16 MYRTLE AVE
NEWBURYPORT, MA 01950

LIGHTING DESIGN
TRAVIS BOUCHER
DEFIANCE ELECTRIC
86 CHOSEN VALE LANE, SUITE 202
ENFIELD, NH 03748

SURVEYOR
RON TABER, LLS
VIVE LIBRE GEOMATICS
PO BOX 1093
LEBANON, NH 03766



ZONING COMPARISON - LD DISTRICT			
	EXISTING	PROPOSED	REQUIRED
LOT SIZE	51,893sf	51,893sf	3,000 s.f.
FRONTAGE:			
SPENCER STREET	242'	242'	40'
FRONT YARD:	43'	43'	NONE
REAR YARD:	87'	19'	10'
SIDE YARD:			
EAST	11'	9'	NONE
WEST	83'	2'	NONE
BUILDING FOOTPRINT (s.f.):	12,948 s.f.	27,948 s.f.	
-FIRST FLOOR (s.f.):	12,948 s.f.	27,948 s.f.	
-SECOND FLOOR (s.f.):	-	15,000 s.f.	
BLDG.COVERAGE (sf)	12,948 s.f.	27,948 s.f.	
% BLDG.COVERAGE	25%	54%	NONE
IMPERVIOUS COV. (sf)	42,252 s.f.	37,228 s.f.	
% IMPERVIOUS COV.	82.0%	71.7%	NONE
HEIGHT	35'	35'	55' max.
USE:	STORAGE		
PARKING (REG./HC.)	4	19/1	N/A
LOADING SPACES	3	3	

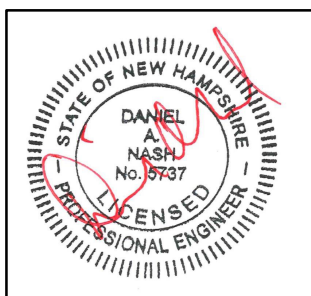
NOTES:

1. THIS PARCEL IS SHOWN AS LOT 78-39 ON THE LEBANON TAX MAPS.
2. THIS PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
3. THIS PARCEL IS NOT SUBJECT TO THE WETLANDS OVERLAY DISTRICT.
4. THIS PARCEL IS SUBJECT TO THE FLOOD OVERLAY DISTRICT.
5. THIS PARCEL IS NOT IN THE HISTORIC DISTRICT.
6. SUBJECT PARCEL IS ZONED LD.

SHEET
NUMBER

TABLE OF CONTENTS

2	LEGEND	G-1
3	EXISTING CONDITIONS/DEMO PLAN	X-1
4	SITE PLAN	C-1
5	FLOOR PLAN	A-1
6,7	ELEVATIONS	A-2,3
8	LANDSCAPE PLAN	L-1
9	SITE LIGHTING PLAN	L-2
10	DETAILED GRADING PLAN	C-2
11	EROSION CONTROL PLAN	C-3
12	SITE DETAILS	D-1
13	SEWER DETAILS	D-2
14	WATER DETAILS	D-3
15	EROSION CONTROL DETAILS	D-5



EXISTING LEGEND

○	Boundary Corner	X 66.9
⊙	Iron Pipe (Found)	-----
●	Rebar (Found)	-----
□	Stone Monument (Found)	-----
△	Survey Traverse Point	- - - 760 - - -
⊗	Survey Control Disk	-----
☼	Shrub	-----
☼	Hardwood Tree	-----
☼	Softwood Tree	-----
○ c.o.	Cleanout	-----
⌚	Utility Pole	○ ——— OET ———
☼	Light Pole	——— OHE ———
⊗	Bollard Light	——— OHT ———
⬅	Light	——— UETC ———
→	Utility Pole Anchor	—————
⌚	U.g. Electric Junction Box	-----
⌚	U.g. Electric Transformer	-----
⌚	U.g. Telephone Box	-----
⌚	U.g. Cable Tv Box	-----
⊗	Curb Stop	-----
⊗	Gate Valve	——— □ ——— □ ——— □ ——— □ ———
☼	Fire Hydrant	——— D ———
⊗	Drilled Well	——— UD ———
⊗	Monitor Well	——— W ———
⌚	Catch Basin	——— S ———
⊗	Drain Manhole	——— FM ———
⊗	Sewer Manhole	——— UGE ——— ——— E ———
⊗	Riser	——— UGT ———
⊗	Telephone Manhole	-----
⊗	Electric Manhole	=====
⊗	Communication Manhole	——— UGP ———
⊗	Propane Tank	////
⊗	Sign	———

EXISTING LEGEND(CONT.)

●	Spot Elevation	●
○ c.o.	Approximate Boundary Line	○ c.o.
⌚	Approximate Rlght-Of-Way Line	⌚
→	Existing 1'/2' Contour	→
☼	Existing 5'/10' Contour	☼
⬅	Curb	⬅
⊗	Edge Of Pavement	⊗
⊗	Edge Of Gravel	⊗
⊗	Painted White Line	⊗
⊗	Painted Yellow Line	⊗
⌚	Overhead Electric/Telephone	⌚
☼	Overhead Electric	☼
⊗	Overhead Telephone	⊗
→	U.g. Electric/Telephone/Cable	→
⌚	Edge Of Brook/River	⌚
⌚	Edge Of Wetland	⌚
⌚	Guard Rail	⌚
⌚	Stonewall	⌚
⌚	Wire Fence	⌚
⊗	Chainlink Fence	⊗
⊗	Rail Fence	⊗
☼	Drain Line	☼
⊗	Underdrain Line	⊗
⊗	Water Line	⊗
⌚	Sewer Line	⌚
⊗	Sewer Forcemain	⊗
⊗	U.g. Electric	⊗
⊗	U.g. Telephone	⊗
⊗	Edge Of Woods	⊗
⊗	Retaining Wall	⊗
⊗	U.g. Propane	⊗
⊗	Edge Of building	⊗

- NOTES:
1.

Lower case text on all plan sheets indicates existing data.
2.

UPPER CASE TEXT ON ALL PLAN SHEETS INDICATES PROPOSED DATA.

PROPOSED LEGEND

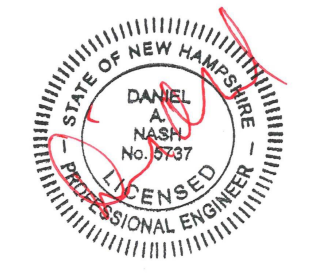
●	BOLLARD	●
○ c.o.	CLEANOUT	○ c.o.
⌚	UTILITY POLE	⌚
→	UTILITY POLE ANCHOR	→
☼	LIGHT POLE	☼
⬅	LIGHT	⬅
⊗	SEWER MANHOLE	⊗
⊗	DRAIN MANHOLE	⊗
⊗	RISER	⊗
⌚	CATCH BASIN	⌚
⌚	YARD DRAIN	⌚
⊗	ELECTRIC MANHOLE	⊗
⊗	TELEPHONE MANHOLE	⊗
⊗	COMMUNICATION MANHOLE	⊗
⊗	PROPANE TANK	⊗
⌚	U.G. TELEPHONE BOX	⌚
⌚	U.G. CABLE TV BOX	⌚
⌚	U.G. ELECTRIC JUNCTION BOX	⌚
⌚	U.G. ELECTRIC TRANSFORMER	⌚
⊗	GATE VALVE	⊗
☼	CURB STOP	☼
☼	FIRE HYDRANT	☼
⊗	DRILLED WELL	⊗
⊗	SIGN	⊗
⊗	PARKING SPACE NUMBER	⊗
⊗	HANDICAP PARKING SPACE	⊗
⊗	STORM WATER TREATMENT DEVICE	⊗
⊗	DETECTABLE SURFACE (TRUNCATED DOME)	⊗
⊗	SPOT ELEVATION	⊗
⊗	UNDERDRAIN	⊗
⊗	DUMPSTER	⊗
⊗	BIKE RACK	⊗

PROPOSED LEGEND(CONT.)

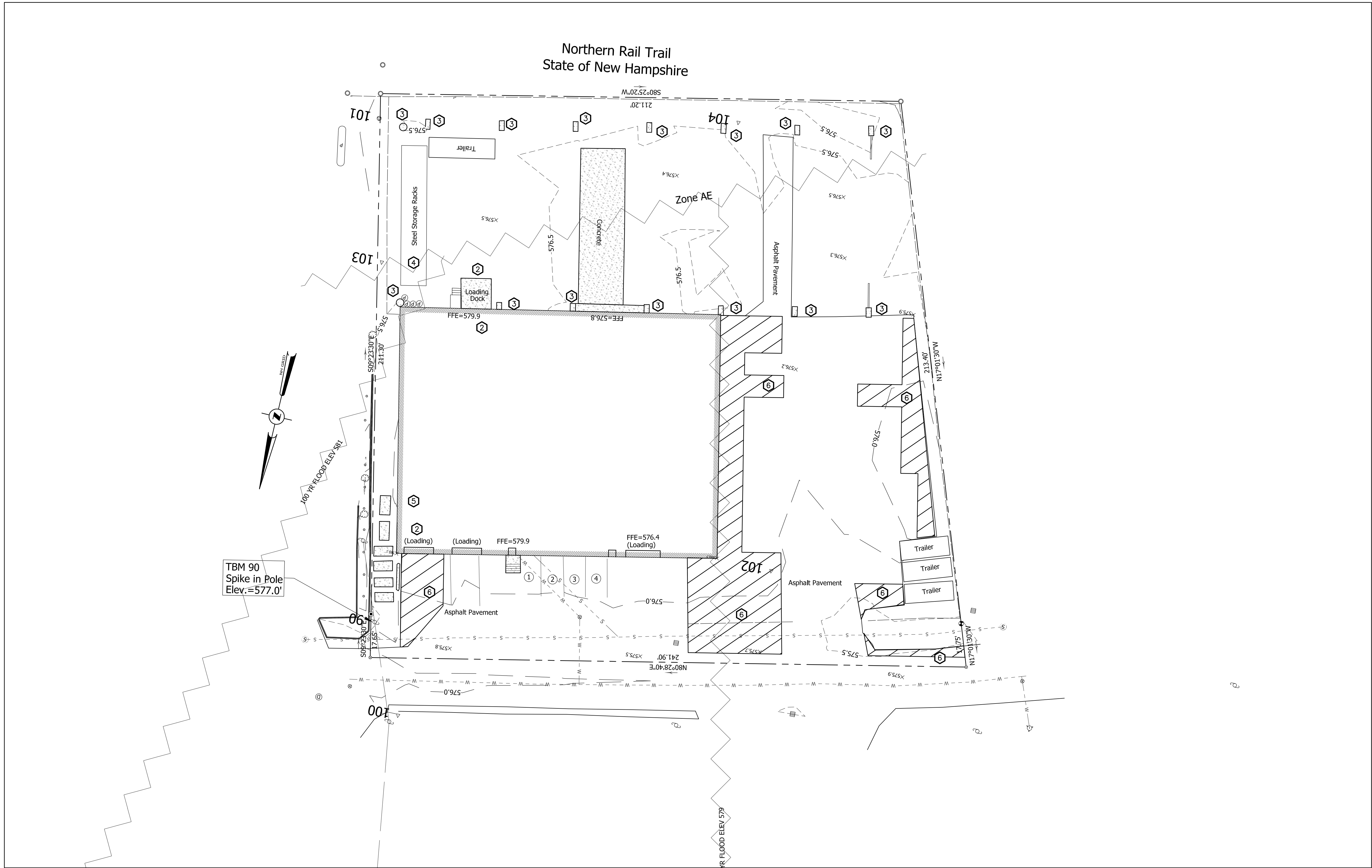
⊗	DUMPSTER FENCE	⊗
⊗	PAINTED/NO PARKING	⊗
⊗	2' CONTOUR	⊗
⊗	10' CONTOUR	⊗
⊗	GAS LINE	⊗
⊗	DRAIN LINE	⊗
⊗	UNDERDRAIN LINE	⊗
⊗	WATER LINE	⊗
⊗	SEWER LINE	⊗
⊗	SEWER FORCEMAIN	⊗
⊗	U.G. ELECTRIC	⊗
⊗	U.G. TELEPHONE	⊗
⊗	U.G. ELECTRIC/TELEPHONE	⊗
⊗	U.G. ELECTRIC/TELEPHONE/CABLE	⊗
⊗	RETAINING WALL	⊗
⊗	REDI-ROK RETAINING WALL	⊗
⊗	CENTERLINE ROAD	⊗
⊗	CURB	⊗
⊗	EDGE OF WOODS	⊗
⊗	LIMIT OF DISTURBED	⊗
⊗	BARRIER FENCE	⊗
⊗	UNDERGROUND PROPANE TANK	⊗
⊗	BUILDING ADDITION	⊗
⊗	TOP OF WALL ELEVATION	⊗
⊗	GREASE TRAP/GRIT-OIL SEPARATOR	⊗

LEGEND
FOR
MASON STORAGE
IN
LEBANON, NEW HAMPSHIRE

ADVANCED GEOMATICS & DESIGN
105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766
PHONE: (603) 448 6295
E-MAIL: advancedgeomatcs@comcast.net



SURVEYED:
DESIGNED:
DRAWN: DAN
CHECKED: DAN
DATE: 6/28/21
MASON STORAGE
LEGEND
G-1
© 2021
ADVANCED GEOMATICS & DESIGN
DWG: 19903\LEGEND



EXISTING CONDITIONS/DEMOLITION PLAN

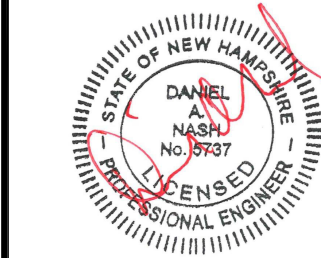


NOTES:

- SURVEY OF SUBJECT PARCEL PROVIDED BY VIVE LIBRE GEOMATICS, LLC, AS SHOWN ON PLAN ENTITLED "EXISTING CONDITIONS PLAN FOR MASON STORAGE, LLC, DATED 12/28/20. TOPOGRAPHY OUTSIDE SUBJECT PARCEL FROM LEBANON CITY GIS.
- LOADING DOCK/DOOR TO BE REMOVED.
- OVERHEAD GANTRY SYSTEM TO BE REMOVED.
- STEEL STORAGE RACK TO BE REMOVED.
- CONCRETE PADS TO BE REMOVED.
- PAVEMENT TO BE REMOVED.

ADVANCED GEOMATICS & DESIGN

105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766
PHONE: (603) 448 6295
E-MAIL: advancedgeomatics@comcast.net



SURVEYED: VLG, GIS
DESIGNED:
DRAWN: KH
CHECKED: DAN
DATE: 6/28/21

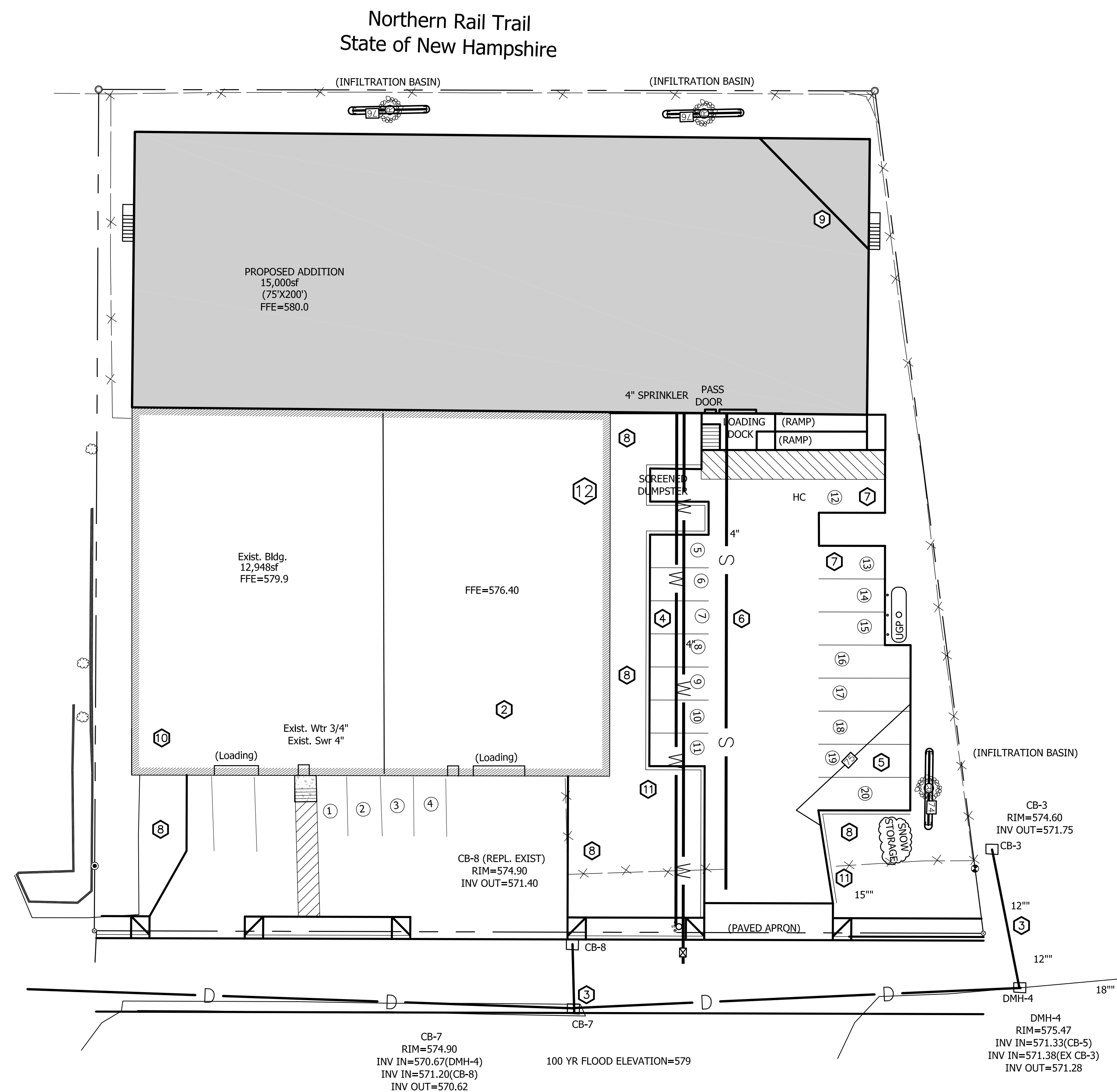
MASON
STORAGE
EXISTING
CONDITIONS

X-1

© 2021
ADVANCED GEOMATICS & DESIGN
DWG: 19003\19003-XCOND

EXISTING CONDITIONS/DEMO PLAN
FOR
MASON STORAGE
IN
LEBANON, NEW HAMPSHIRE

#	REVISIONS	DATE
1	UPDATE	9/27/21

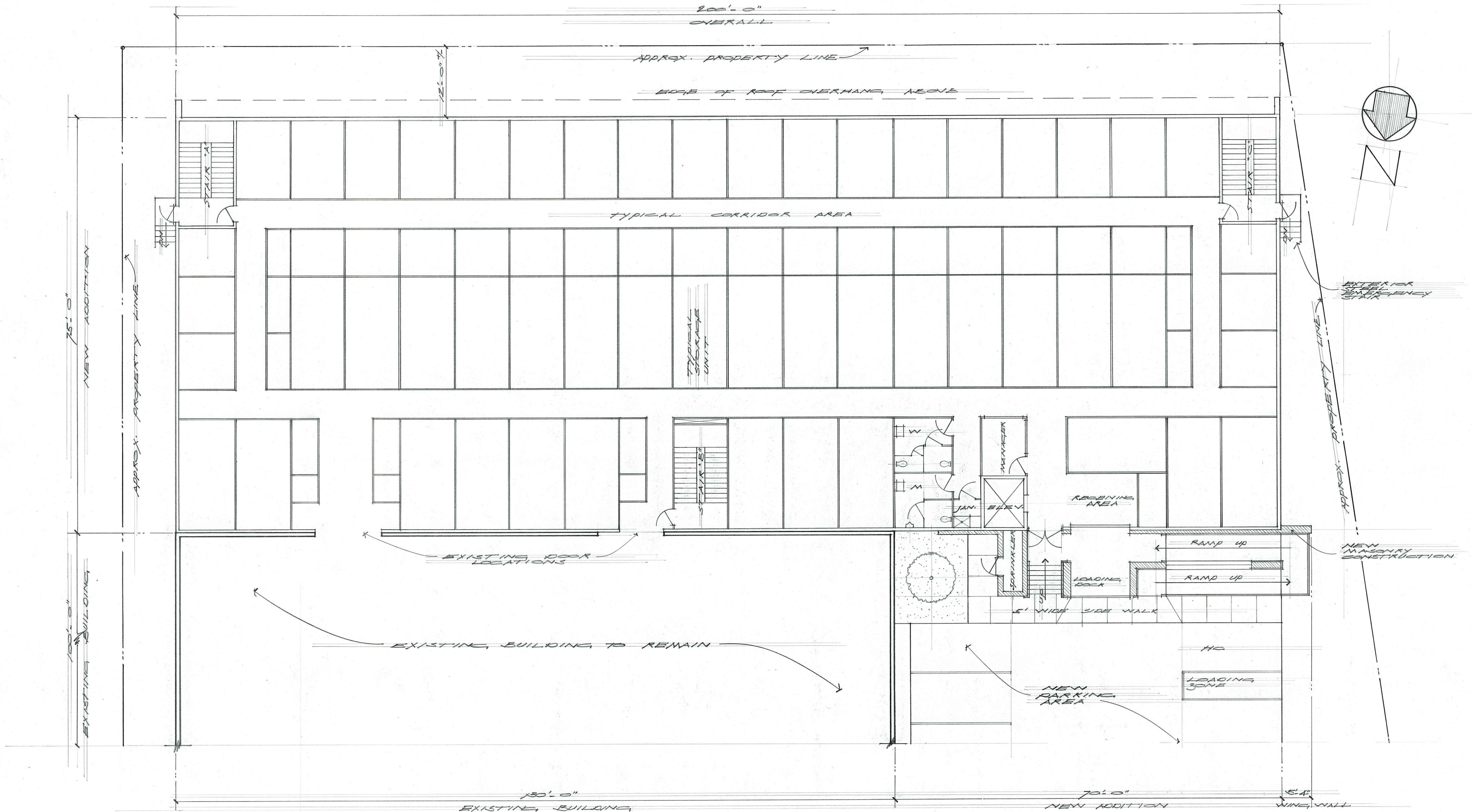


SITE PLAN

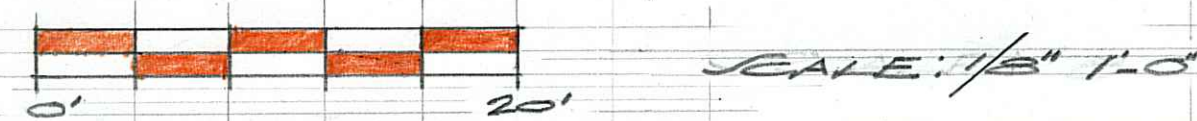


NOTES:

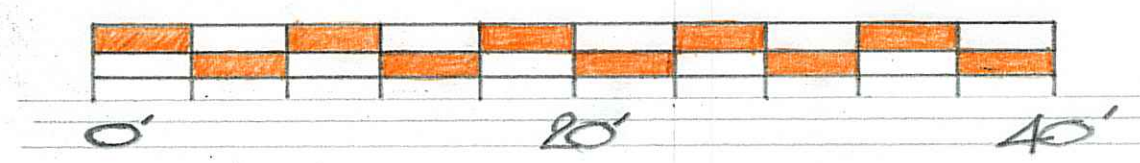
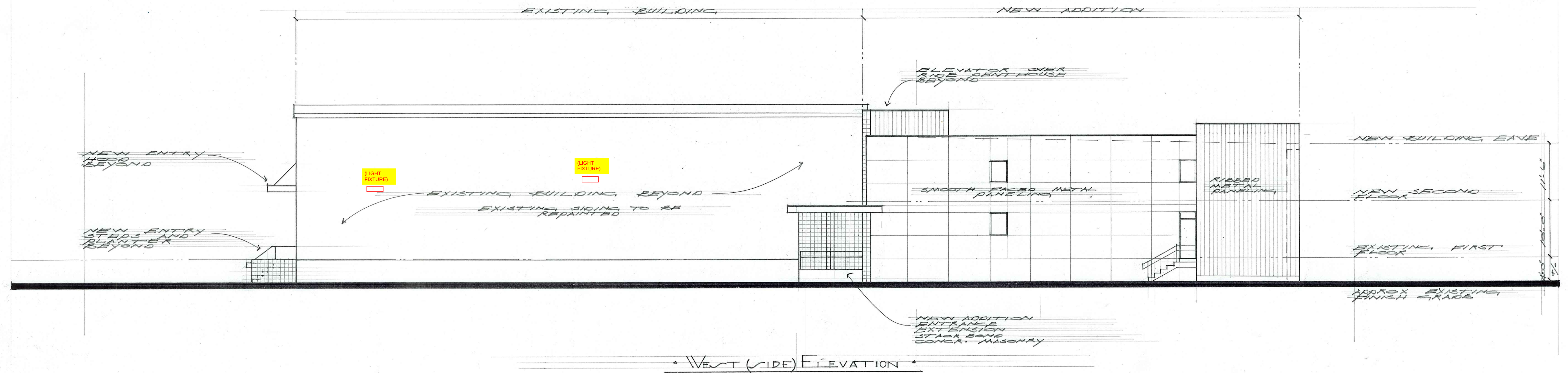
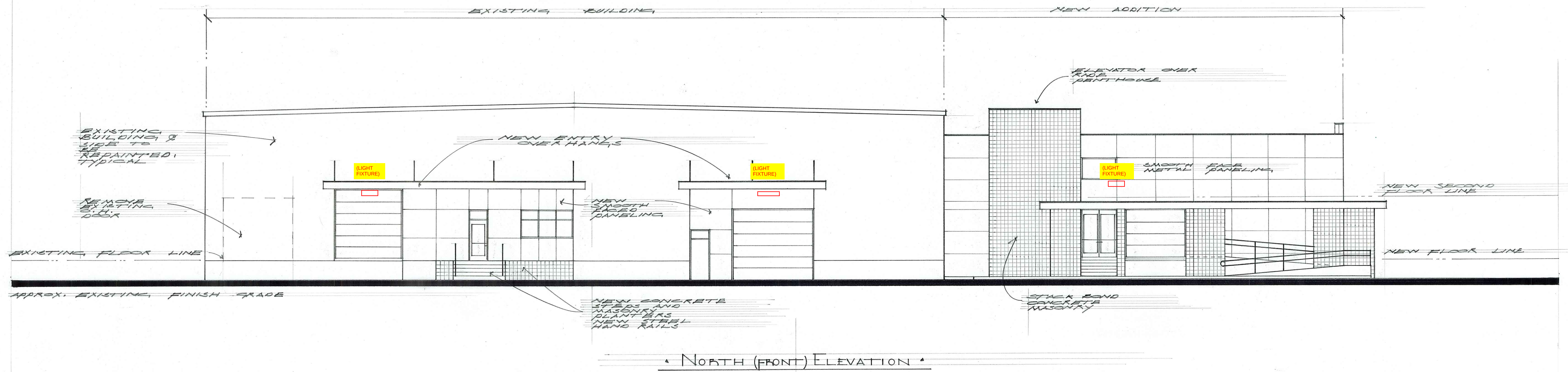
1. FLOOD PLAIN COVERS ENTIRE SITE. BASE FLOOD ELEVATION=579. ADDITIONAL TO BE AT ELEVATION 580.00 FOR FLOOD PROTECTION.
2. LOWER PORTION OF EXISTING BUILDING TO BE FLOODPROOFED OR ELEVATED FOR FLOOD PROTECTION.
3. PROPOSED DRAINAGE TO BE INSTALLED AS PART OF SPENCER STREET IMPROVEMENT PROJECT BY CITY OF LEBANON.
4. VEHICLE PARKING SPACES 9X16 TYPICAL
5. (5) TRUCK & TRAILER PARKING SPACES (9X25)
6. 30' AISLE
7. VEHICLE PARKING SPACES 9X18 TYPICAL.
8. LANDSCAPE AREA. PAVEMENT TO BE REMOVED.
9. PROPOSED 15" CULVERT. L=43'. INV-IN=576.50, INV OUT=576.10
10. LOADING DOCK TO BE CLOSED/REMOVED.
11. CURBING SHALL BE SLOPED GRANITE.
12. DUMPSTER SHALL BE SCREENED WITH 6' WOODEN STOCKADE OR PRIVACY CHAIN LINK FENCING.
13. WATER SERVICE. 12X4TS&GV, 4"DI, 3/4" COPPER DOMESTICE SERVICE WITH CURB STOP.



SCHEMATIC FLOOR PLAN



SHEET 5 OF 15

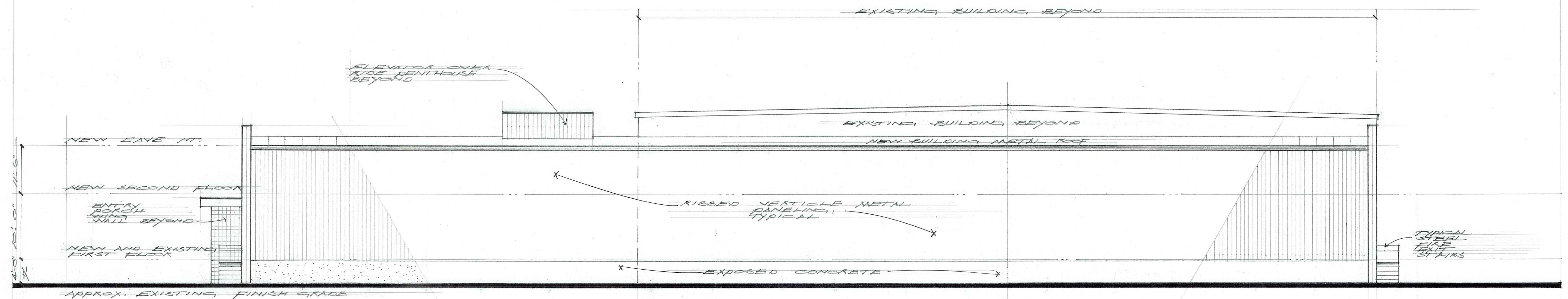


ba barrett architecture
 FRANK J. BARRETT JR., AIA
 P.O. Box 55 ■ White River Junction, Vermont 05001
 (802) 296-0004 ■ frank.j.barrett@myfairpoint.net

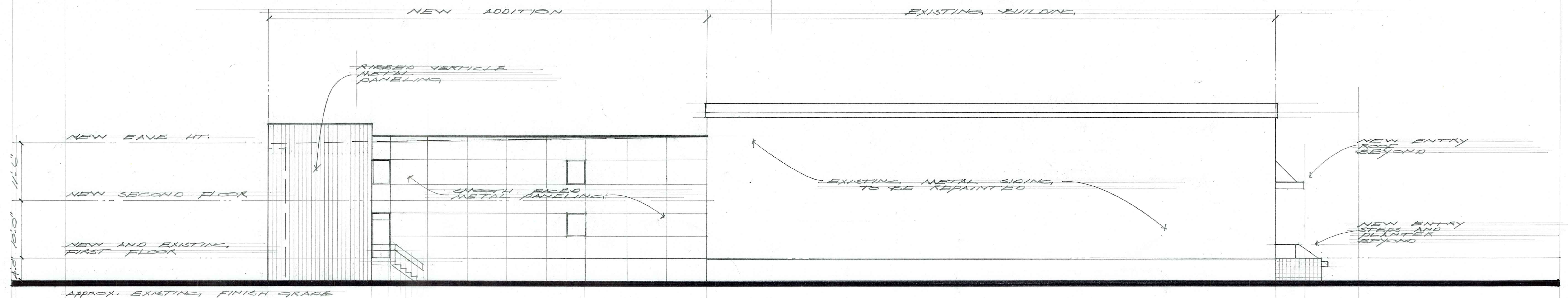
ADDITION TO
MASON STORAGE
 LEBANON • NEW HAMPSHIRE

BUILDING
 ELEVATION
 SCALE: 1/8" = 1'-0"
 JUNE 18, 2021

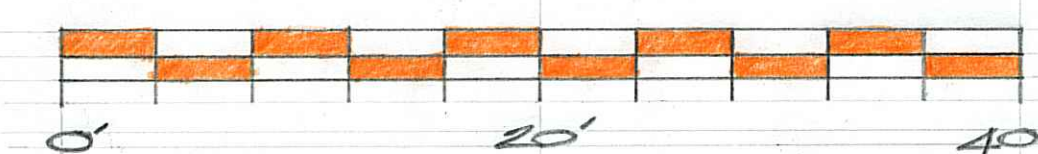
2 OF 3
A2



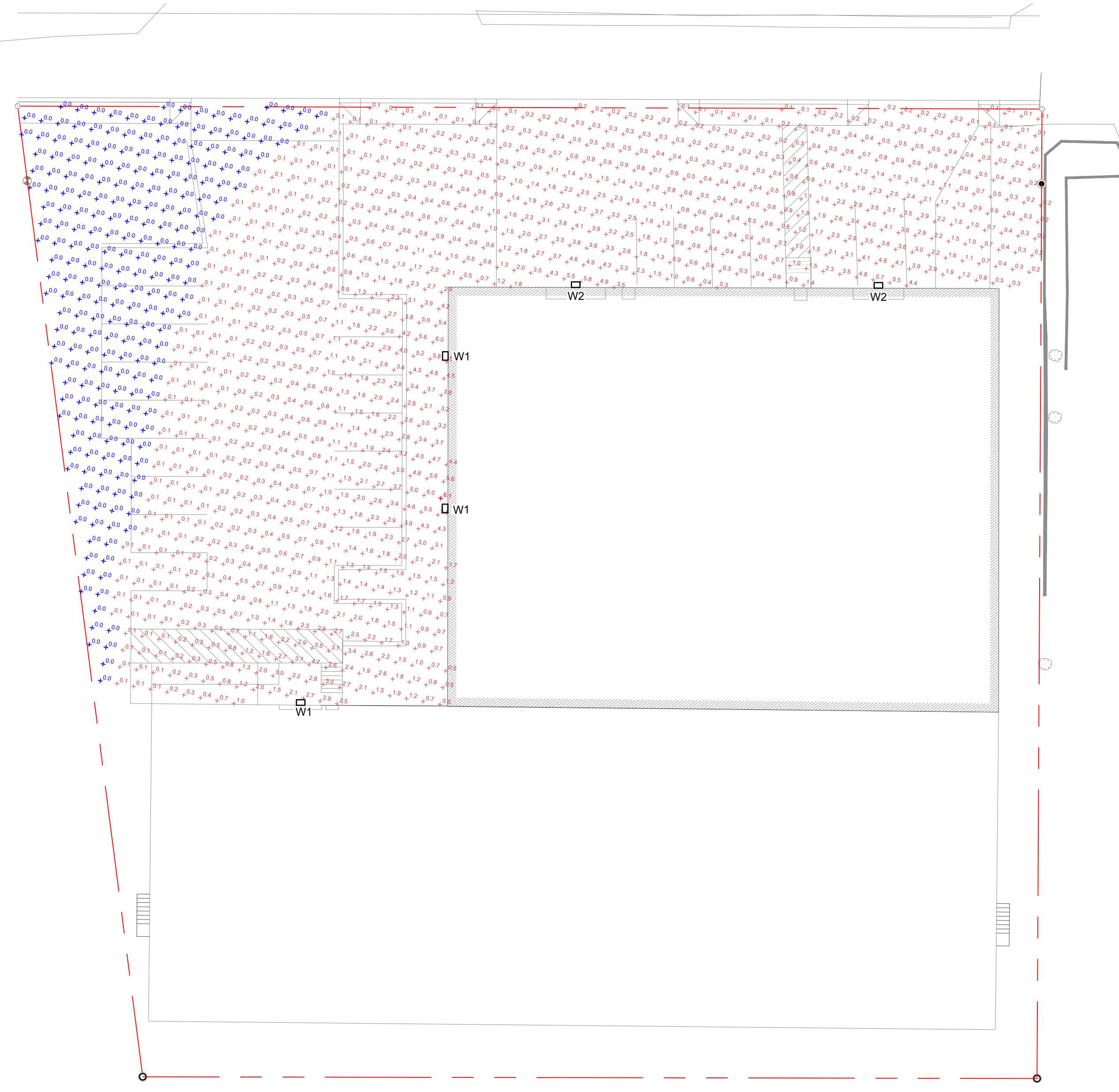
SOUTH (REAR) ELEVATION



EAST (SIDE) ELEVATION



SHEET 7 OF 15



1 CALCULATED LIGHTING LEVELS IN FOOTCANDLES (FC)
SCALE: 1" = 20'-0"

EXTERIOR CALCULATED FOOTCANDLES						
DESCRIPTION	SYMBOL	AVG	MAX	MIN	*MAX/MIN	*AVG/MIN
LIGHTING LEVELS @ GRADE	+	0.9 fc	6.1 fc	0.0 fc	N/A	N/A

*UNIFORMITY RATIOS ARE N/A WHEN SHOWING 0.0 FC

EXTERIOR FIXTURE SCHEDULE					
LABEL	QTY	DESCRIPTION	MANUFACTURER PRODUCT LINE	LUMENS	WATTS
W2	2	LED WALL MOUNTED LED FIXTURE WITH VISUAL COMFORT OPTICS AND "WIDE" DISTRIBUTION, P4 PERFORMANCE, 30K 80CRI	LITHONIA LIGHTING WDGE2 LED	4400	35W
W1	3	LED WALL MOUNTED LED FIXTURE WITH VISUAL COMFORT OPTICS AND "FORWARD" DISTRIBUTION, P4 PERFORMANCE, 30K 80CRI	LITHONIA LIGHTING WDGE2 LED	4400	35W



WDGE2 LED

Architectural Wall Sconce

DLC **DLC** **UL** **Buy American**

Catalog Number: WDGE2 LED P4 30K 80CRI VF*/VW MVOLT PBBW PE DBLXD

Notes: CCT REVISED 9.24.21 TO 30K

Type: W1 & W2

100 lumen per foot candle

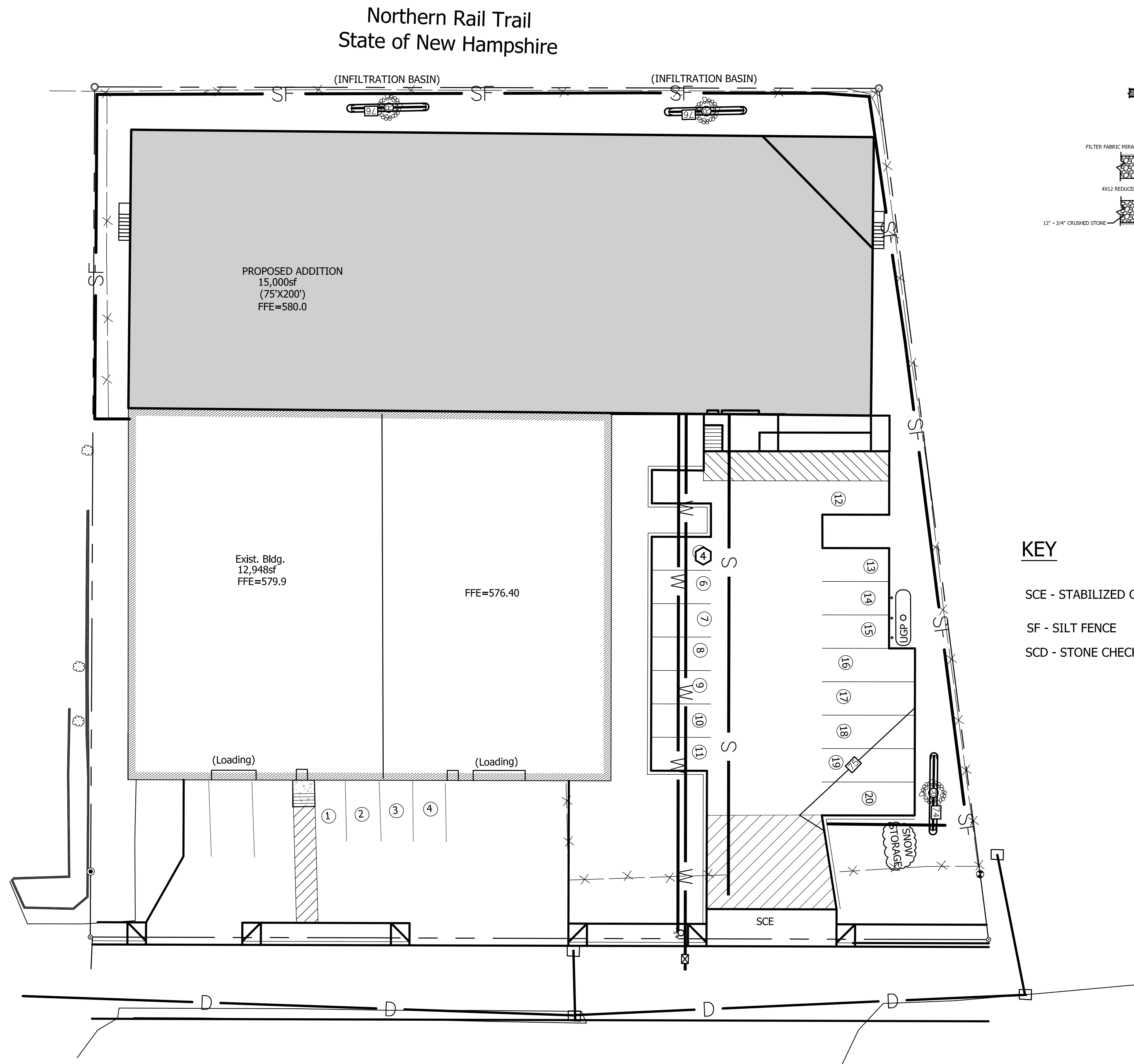
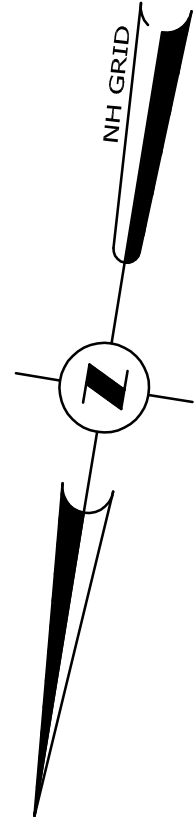
Specifications

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

TYPE W1 - WDGE2 LED P4 30K 80CRI VF MVOLT PBBW PE DBLXD
TYPE W2 - WDGE2 LED P4 30K 80CRI VW MVOLT PBBW PE DBLXD

WDGE LED Family Overview									
Luminaire	Standard EM, 0 °C	Cold EM, 20 °C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WDGE2 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information									
WDGE2 LED P4		30K	80CRI	VF*/VW	MVOLT	PBBW	EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD		
Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting			
WDGE2 LED	P1*	P15W	27K 2700K	80CRI	VF	Visual comfort forward throw	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Water bracket (dry camp locations only)	Shipped separately AWS 30inch Architectural wall spacer PBBW 3 surface-mounted back box (top, left, right, bottom entry). Use when there is a junction box available.	
	P2*	P25W	30K 3000K	90CRI	VW	Visual comfort wide			
	P3*	P35W	35K 3500K	90CRI	MVOLT	480*			
	P4*	40W with wall washer (see page 3 for more details)	40K 4000K						
	P5*	48W with wall washer	50K* 5000K						
							DBLXD		
Options							Finish		
E4WH							Emergency battery backup, Certified in CA Title 20 MAEBS (4W, 0°C min)		
E10WH							Emergency battery backup, Certified in CA Title 20 MAEBS (10W, 0°C min)		
E20WC							Emergency battery backup, Certified in CA Title 20 MAEBS (20W, 0°C min)		
P4*							Photo-cell, Button Type		
DS*							Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)		
DMG*							0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)		
BCE							Bottom conduit entry for back box (PBBW). Total of 4 entry points.		
							Standalone Sensors/Controls (only available with P15W, P25W & P35W)		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		
							PIR		



- KEY**
- SCE - STABILIZED CONSTRUCTION ENTRANCE
 - SF - SILT FENCE
 - SCD - STONE CHECK DAM

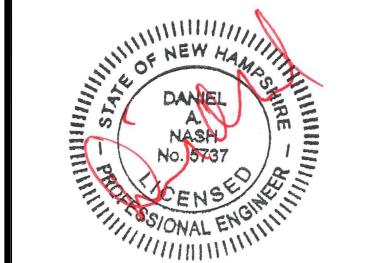
EROSION CONTROL PLAN



#	REVISIONS	DATE
4	UPDATE	09/27/21
3	UPDATE	08/23/21
2	UPDATE	07/26/21
1	UPDATE	05/04/2021

EROSION CONTROL PLAN
FOR
MASON STORAGE, LLC
IN
LEBANON, NH

ADVANCED GEOMATICS & DESIGN
105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766
PHONE: (603) 448 6295
E-MAIL: advancedgeomatics@comcast.net

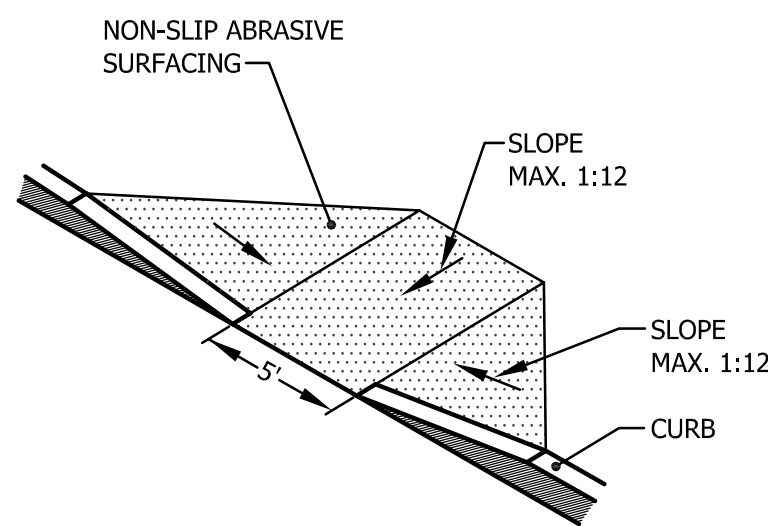


SURVEYED: VLG
DESIGNED: DAN
DRAWN: DAN
CHECKED: DAN
DATE: 08/13/21

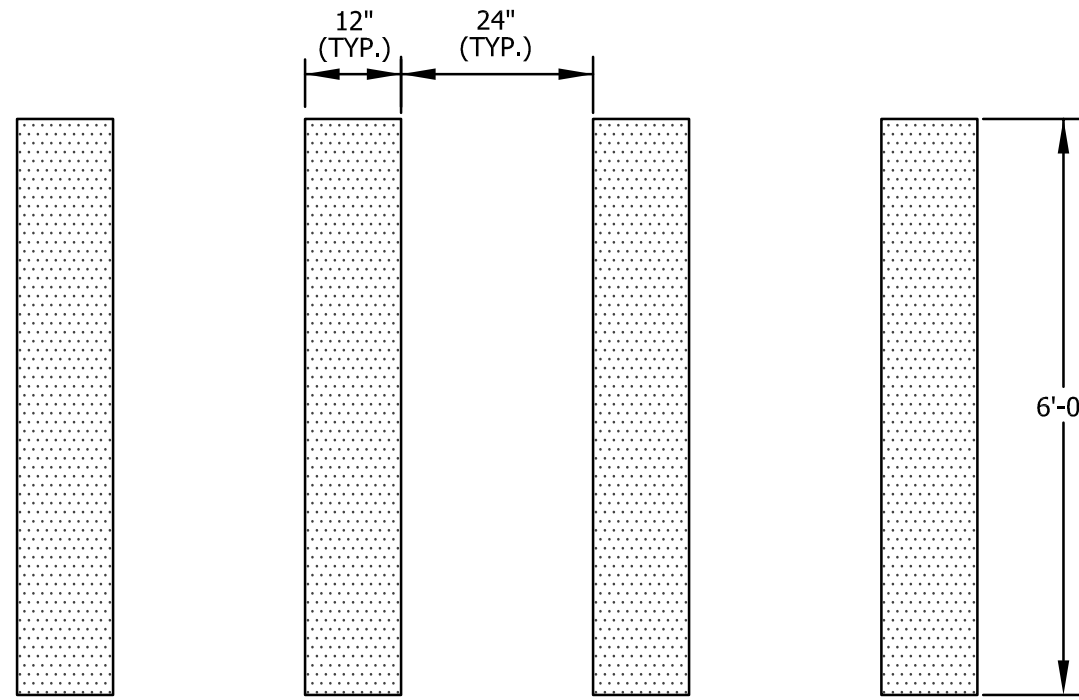
**MASON
STORAGE**
**EROSION
CONTROL PLAN**

C-3

© 2021
ADVANCED GEOMATICS & DESIGN
DWG: C-3



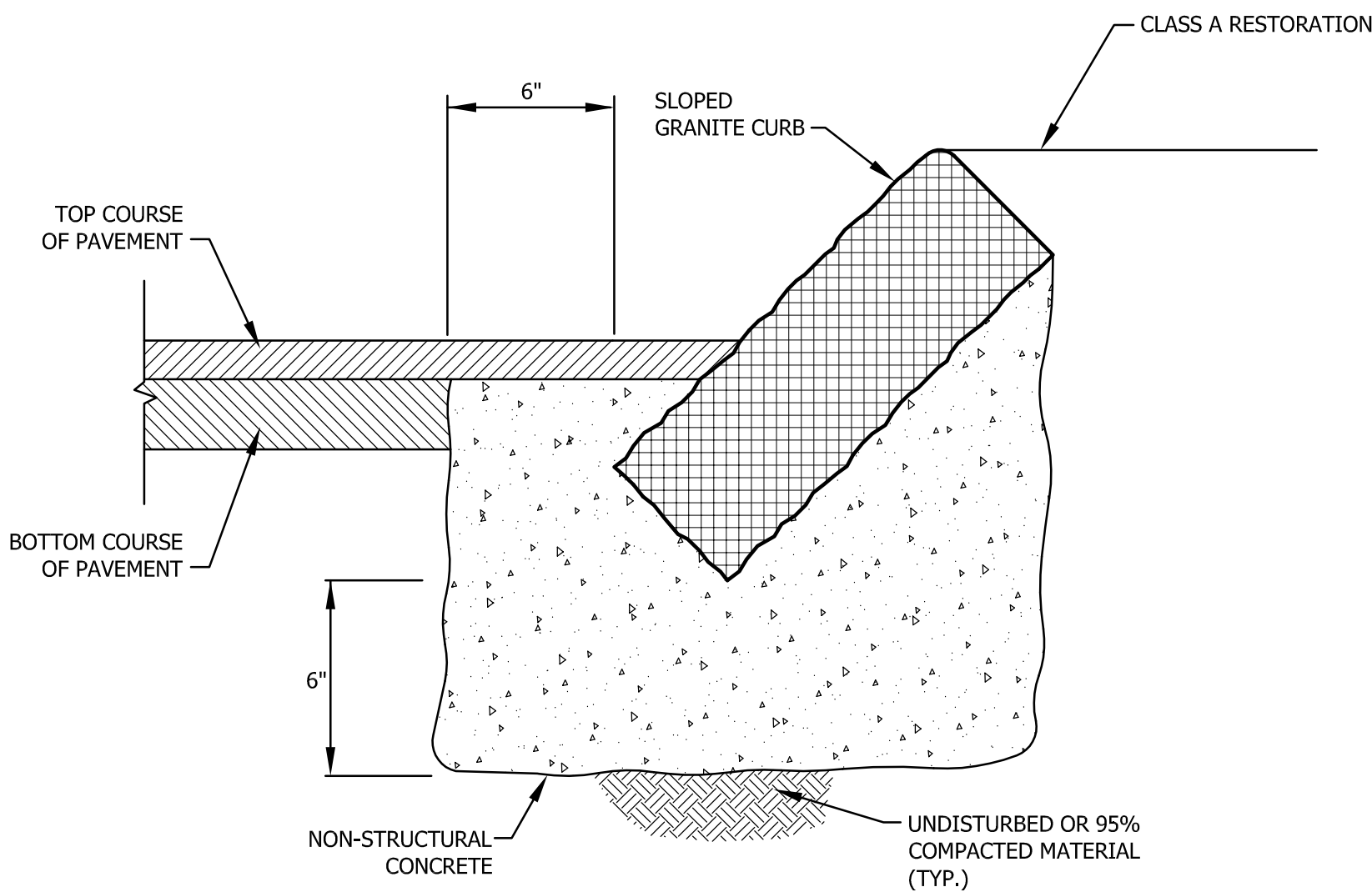
CURB RAMP
N.T.S.



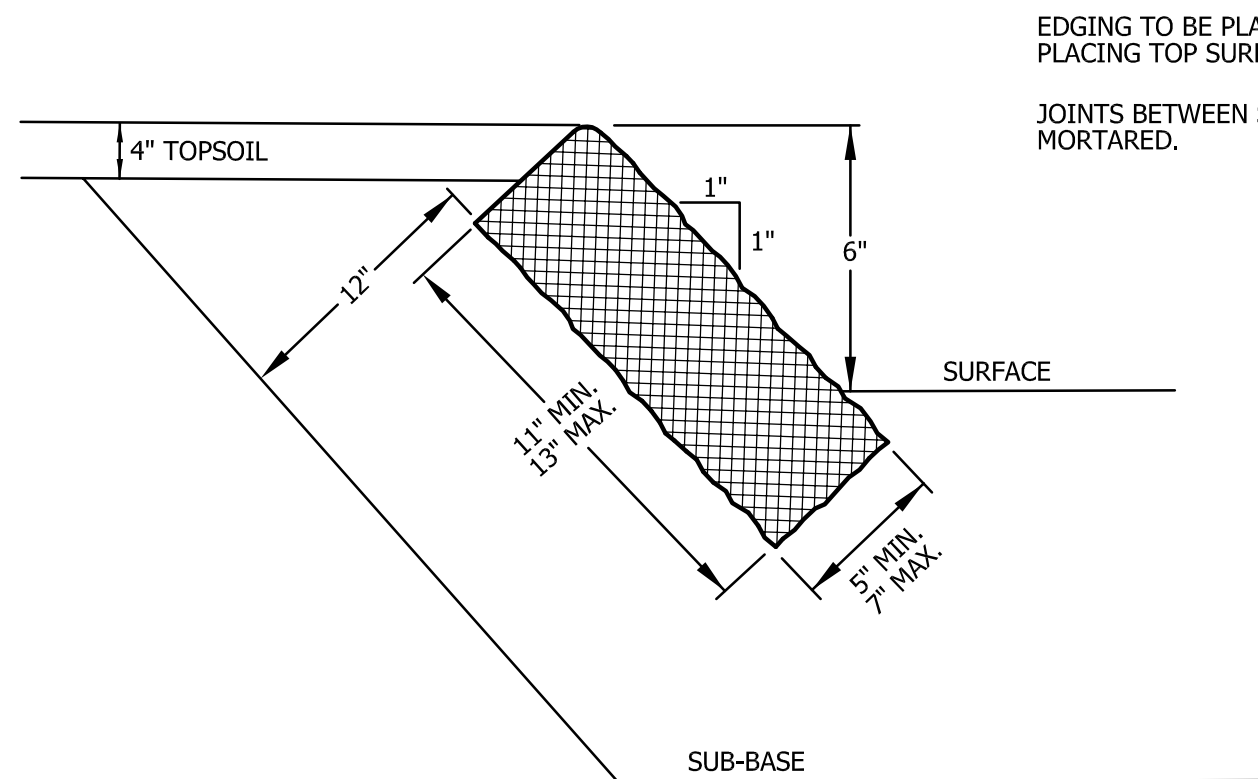
PAINTED CROSSWALK DETAIL (IN PARKING AREAS)
N.T.S.

GENERAL NOTES:

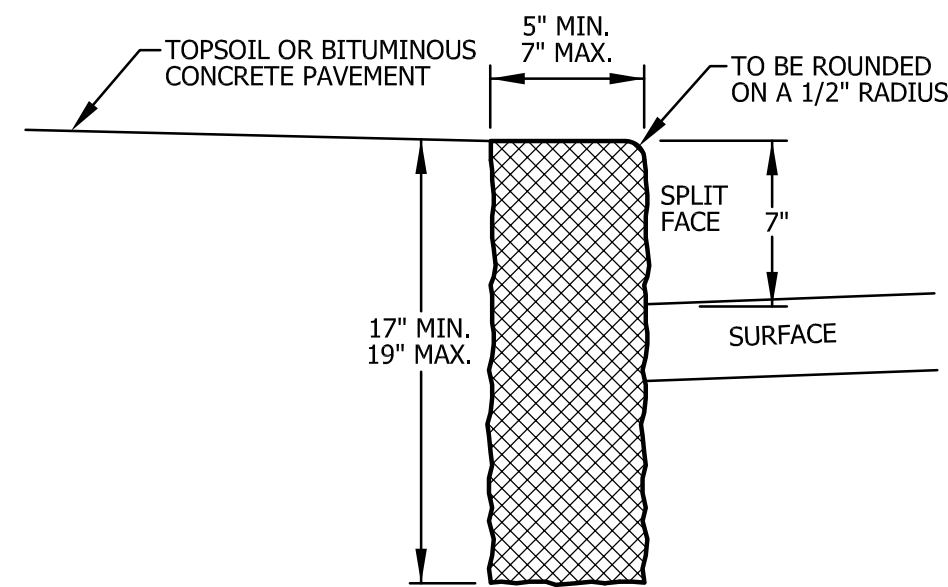
- 1) ROADWAY CONSTRUCTION SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2016 AND CITY OF LEBANON SUBDIVISION REGULATIONS.
- 2) GUARD RAIL SHALL BE USED WHERE SIDESLOPES EXCEED 3' HORIZONTAL AND 1' VERTICAL.
- 3) DESIGN SPEED = 15 M.P.H.
- 4) UNDERDRAIN REQUIRED WHERE GROUNDWATER WILL BE LESS THAN 4 FEET BELOW FINISHED GRADE. LOCATIONS TO BE DETERMINED IN THE FIELD.
- 5) THE DESIGN INTENT IS FOR CATCH BASIN RIMS TO BE SET 0.1 FOOT BELOW THE FINISH GRADE OF ADJACENT PAVEMENT.



CURB SETTING DETAIL
N.T.S.

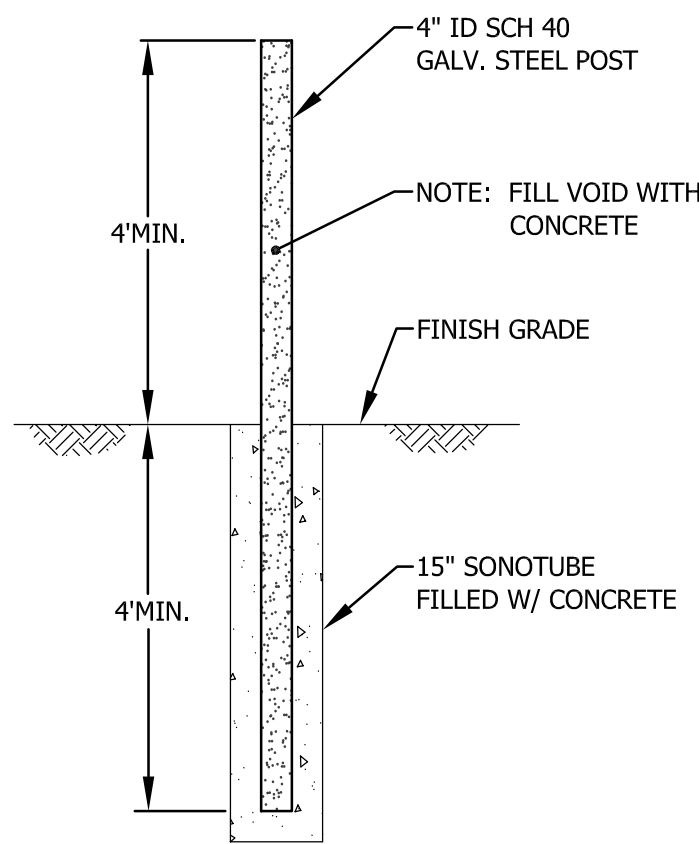


SLOPED GRANITE CURB
N.T.S.



VERTICAL GRANITE CURB
N.T.S.

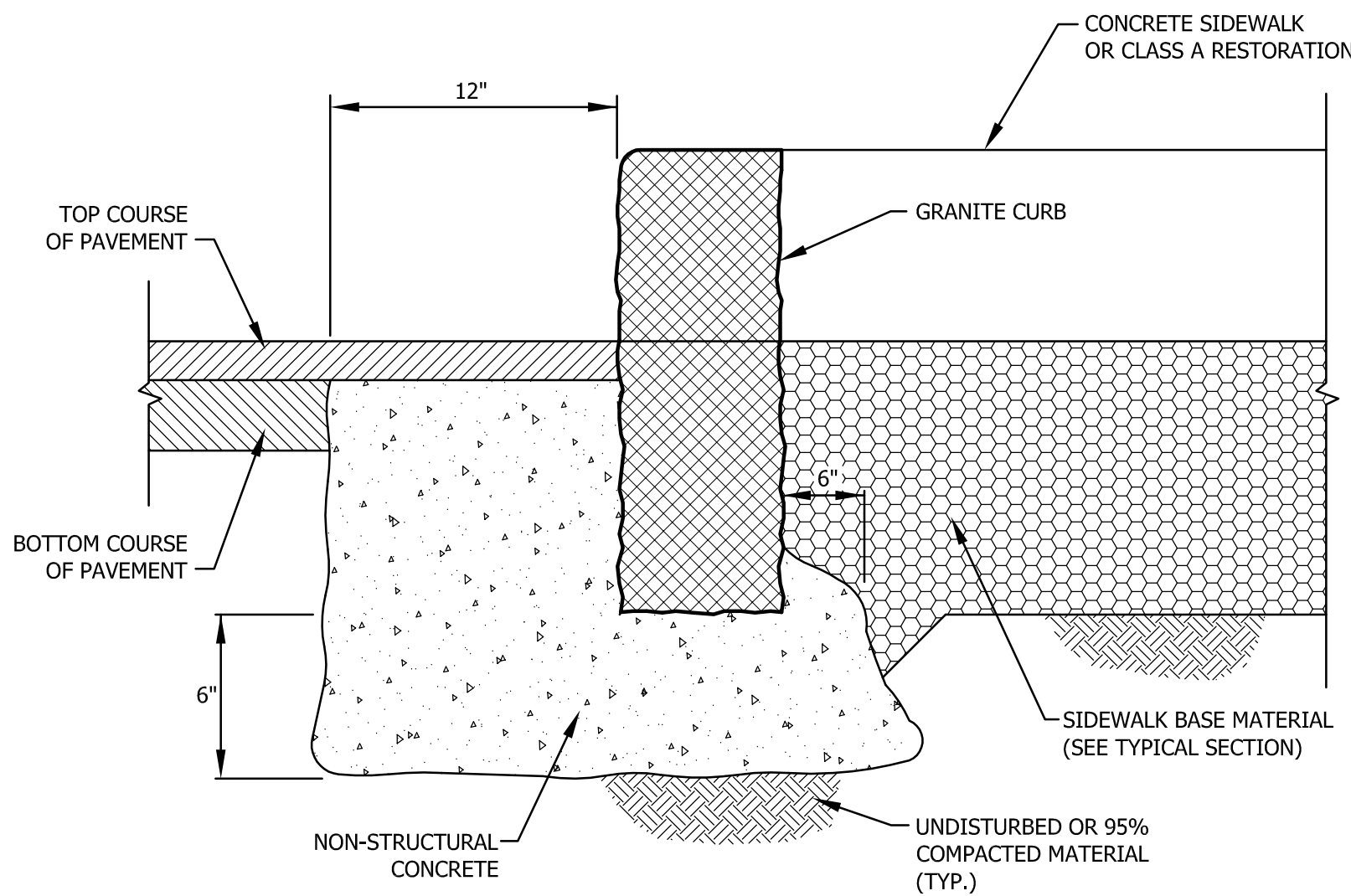
- TO BE USED WHERE SIDEWALK ABUTS ROADWAY.



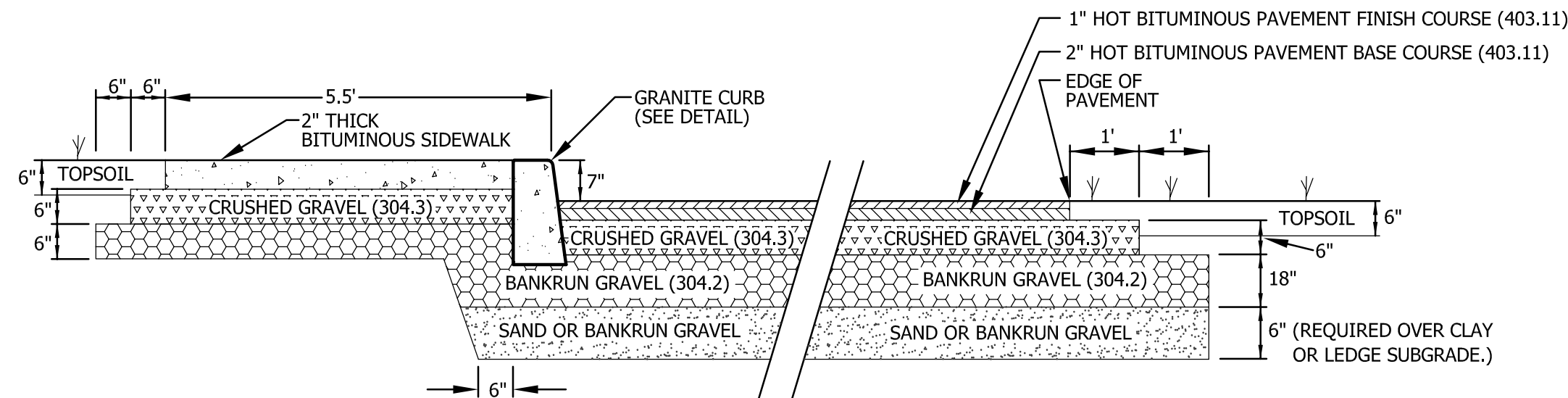
BOLLARD DETAIL
N.T.S.

NOTES:

1. BOLLARDS SHALL BE MINIMUM 4" DIAMETER, CONCRETE FILLED.
2. SPACING SHALL NOT EXCEED 4' ON CENTER.
3. BOLLARDS SHALL BE SET IN BASES OF AT LEAST 15" DIAMETER, AND AT LEAST 4' DEEP.
4. BOLLARDS SHALL EXTEND A MINIMUM 4' ABOVE FINISHED GRADE.
5. BOLLARDS SHALL BE PLACED A MINIMUM OF 3' FROM THE PROTECTED ITEM (DOMES).



CURB SETTING DETAIL
N.T.S.



NOTES:

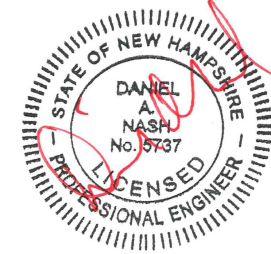
- 1.) ALL GRAVEL AND SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR.
- 2.) ALL MATERIAL USED SHALL COMPLY WITH NHDOT STANDARDS FOR HIGHWAY CONSTRUCTION.
- 3.) UNDERDRAIN SHALL BE REQUIRED WHEREVER GROUNDWATER SURFACE IS WITHIN 4' OF FINISH GRADE.

TYPICAL PAVEMENT/SIDEWALK/CURB SECTION
N.T.S.

SITE DETAILS
FOR
MASON STORAGE, LLC
IN
LEBANON, NH

ADVANCED GEOMATICS & DESIGN

105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766
PHONE: (603) 448 6295
E-MAIL: advancedgeomatcs@comcast.net



SURVEYED: N/A
DESIGNED: DAN
DRAWN: KH
CHECKED: DAN

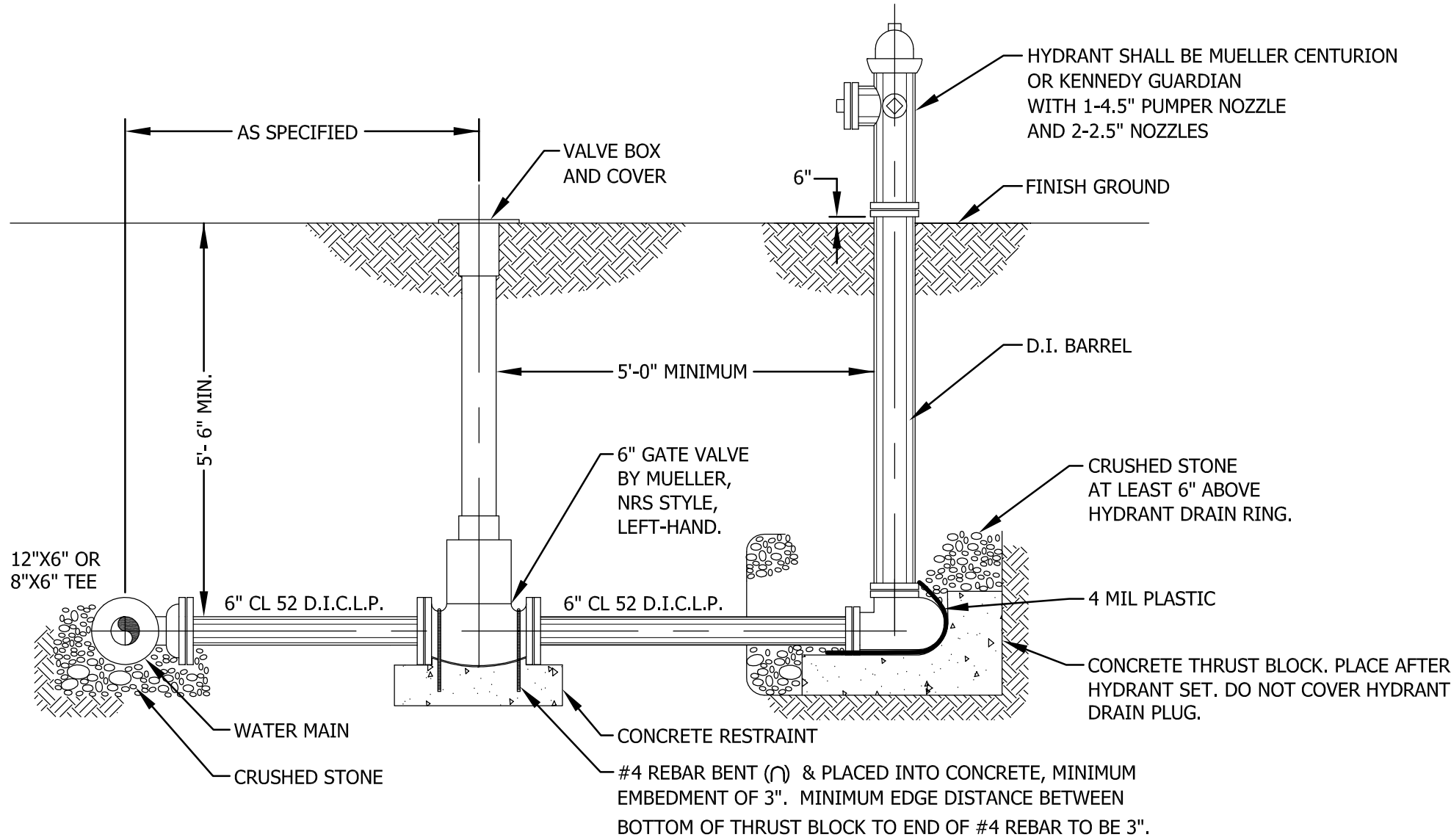
DATE: 04/12/2021

MASON
STORAGE

SITE
DETAILS

D-1

© 2021
ADVANCED GEOMATICS & DESIGN
DWG: 19003\19003-DET

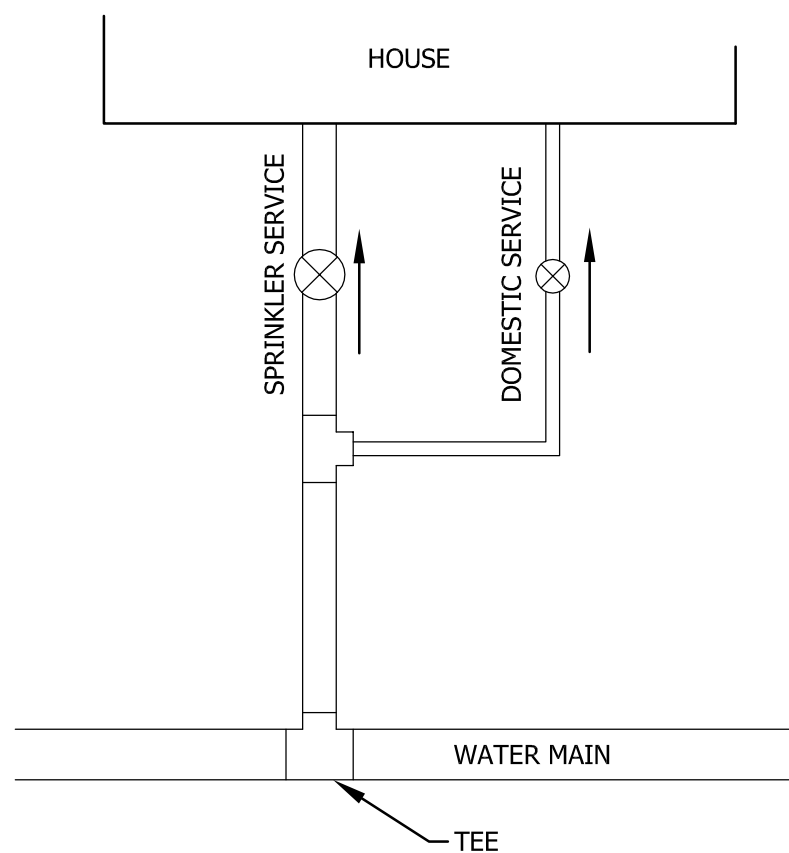


NOTES:

- USE RESTRAINING JOINTS BETWEEN WATER MAIN TEE, GATE VALVE AND HYDRANT ELBOW.
- IF GROUNDWATER IS ENCOUNTERED DURING HYDRANT INSTALLATION, CONTRACTOR SHALL COORDINATE WITH ENGINEER AND DETERMINE WHETHER TO PROVIDE POSITIVE DRAINAGE (PREFERRED) OR PLUG HYDRANT DRAIN.
- SIZE OF THRUST BLOCK FOR VALVE BASED ON 90° ELBOW. SEE "BEARING CHART FOR THRUST BLOCKS" THIS SHEET.

HYDRANT CONNECTION DETAIL

N.T.S.

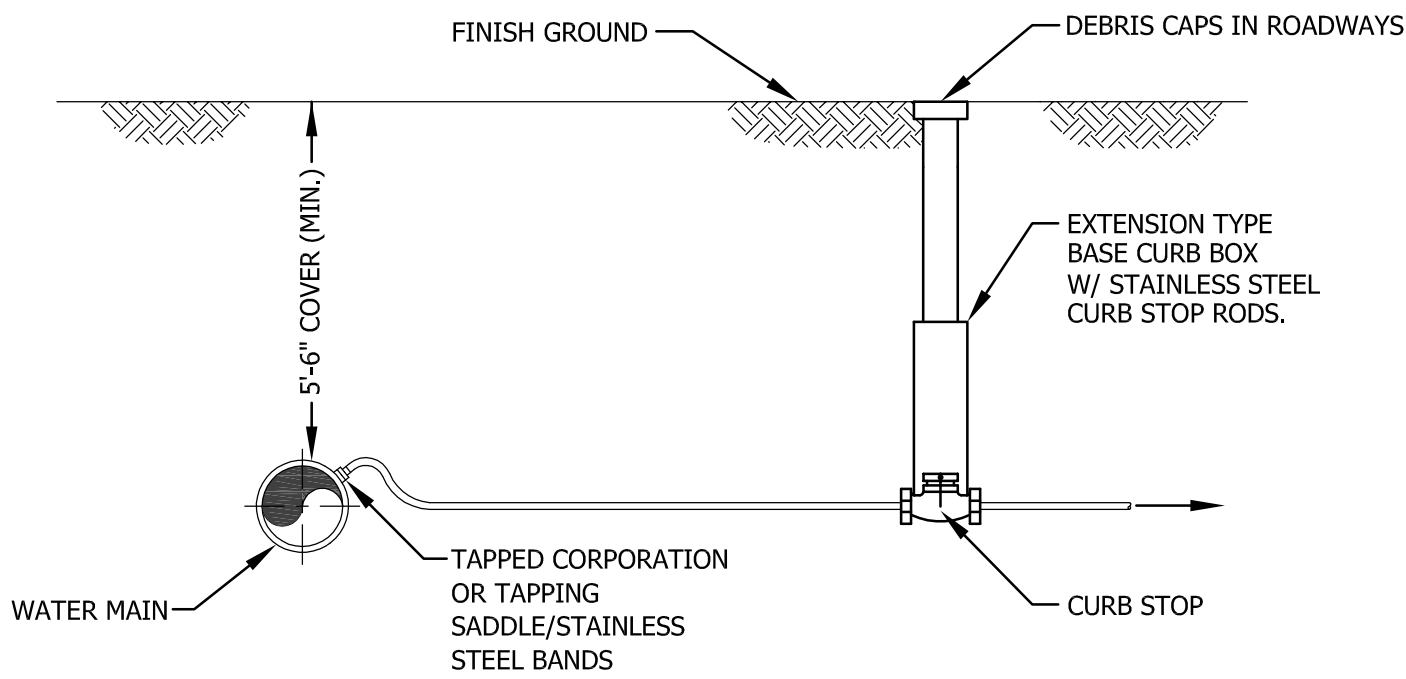


TYPICAL SERVICE SCHEMATIC

N.T.S.

NOTE:

VALVES MUST BE PLACED A MINIMUM OF 5' AWAY FROM BUILDING.

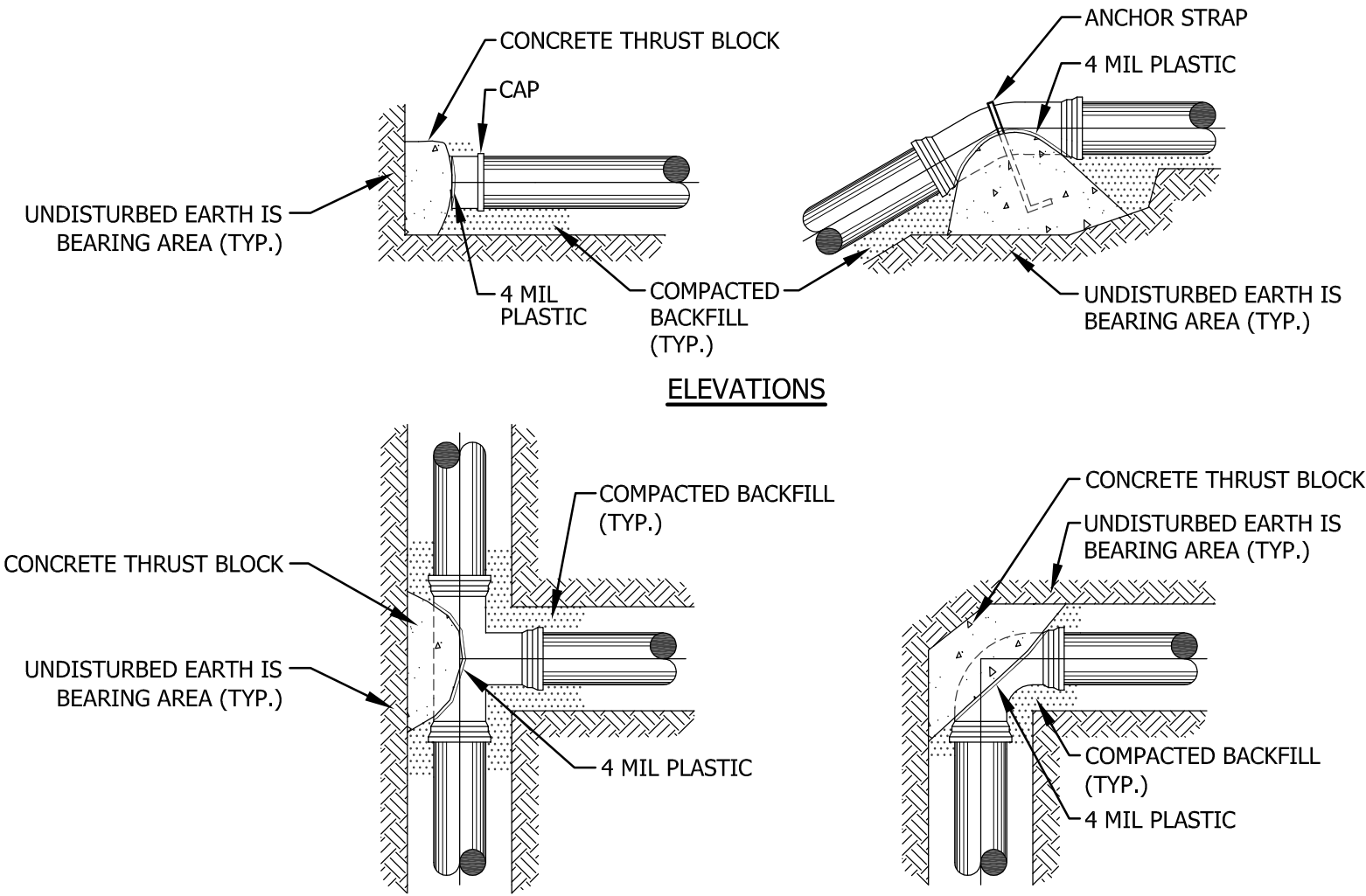


NOTES:

- SERVICE SIZE DEPENDENT ON FIXTURE UNIT ANALYSIS (BY OTHERS) AND SPRINKLER DESIGN (BY OTHERS).
- CONTRACTOR SHALL INSTALL MAGNETIC TRACER TAPE 6" ABOVE THE SERVICE LATERAL, FROM THE TAP TO THE POINT OF ENTRY TO THE STRUCTURES.
- CONTRACTOR TO PROVIDE & INSTALL THE FOLLOWING FOR EACH SERVICE LATERAL. FIXTURE UNIT ANALYSIS (BY OTHERS).
 - BACK FLOW PREVENTOR - PER CITY OF LEBANON REQUIREMENTS.
 - PRESSURE REDUCING VALVE WATTS USB, AS REQUIRED.

TYPICAL WATER SERVICE CONNECTION

N.T.S.



NOTES:

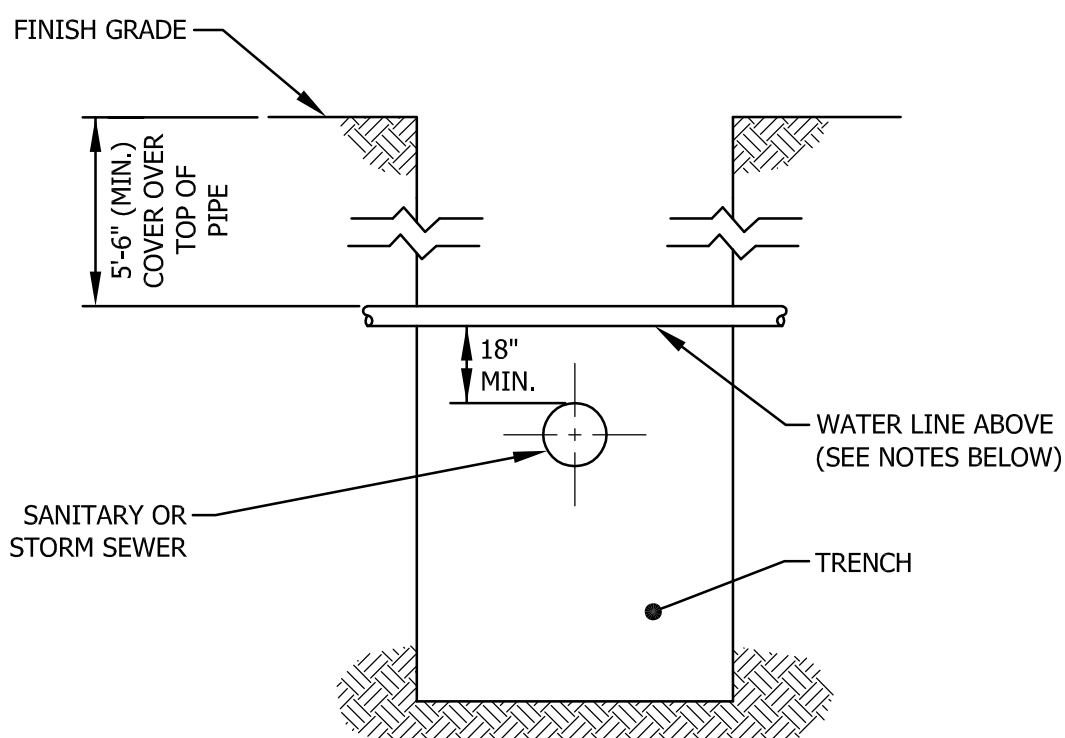
- SEE "MINIMUM AREA OF BEARING SURFACE OF CONCRETE THRUST BLOCKS" FOR REQUIRED AREAS IN SQUARE FEET FOR EACH TYPE OF THRUST BLOCK.
- MECHANICAL JOINT RESTRAINT, SUCH AS EBBA IRON "MEGA-LUG", MAY BE USED IN LIEU OF THRUST BLOCKS.

THRUST BLOCKS

N.T.S.

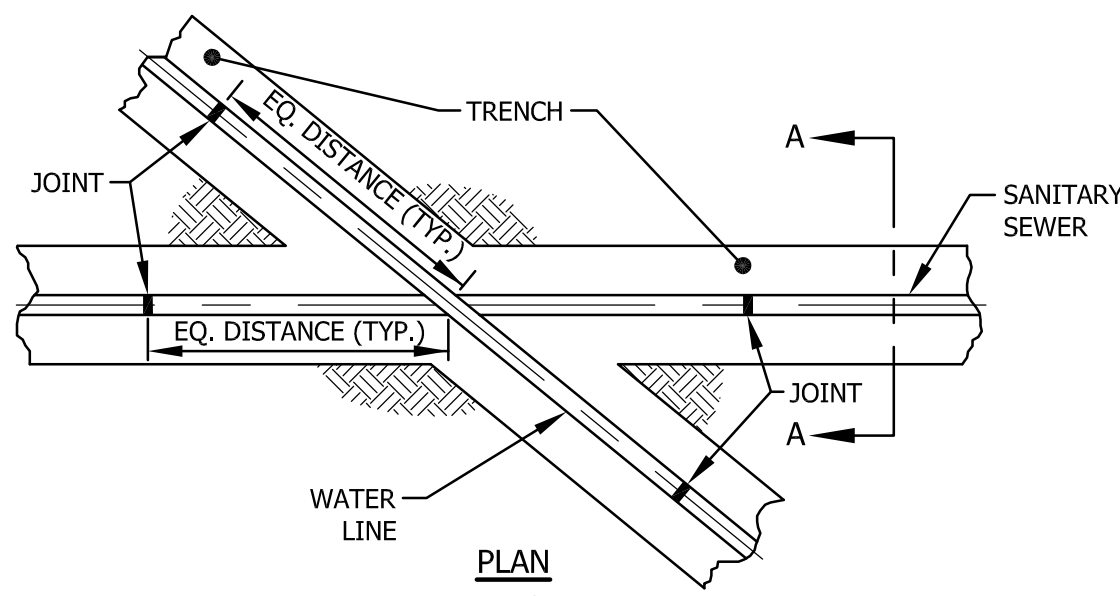
	4"			6"			8"			10"			12"		
	TEES	90°	45°	TEES	90°	45°	TEES	90°	45°	TEES	90°	45°	TEES	90°	45°
SOFT CLAY	3	4	2.5	6	8	5	10.5	14.5	8.5	16	22.4	13	23	32	18.5
SAND	1.5	2	1.5	3	4	2.5	5.5	7.5	4.5	8	11.35	6.5	11.5	16	9.5
SAND & GRAVEL	1	1.5	1	2	3	2	3.5	5	3	5.5	7.5	4.5	8	11	6.5
SAND/GRAVEL W/CLAY	1	1	1	1.5	2	1.5	3	4	2.5	4	6	3.5	6	8	5.
SAND/GRAVEL CEMENTED W/CLAY	.5	.5	.5	1	1	1	1.5	2	1.5	2	3	2	3	4	2.5
HARD SHALE	.5	.5	.5	1	1	1	1.5	1.5	1	2	2.5	1.5	2.5	3.5	2

BEARING CHART FOR THRUST BLOCKS



SECTION A-A

N.T.S.



WATER-SEWER CROSSING DETAIL

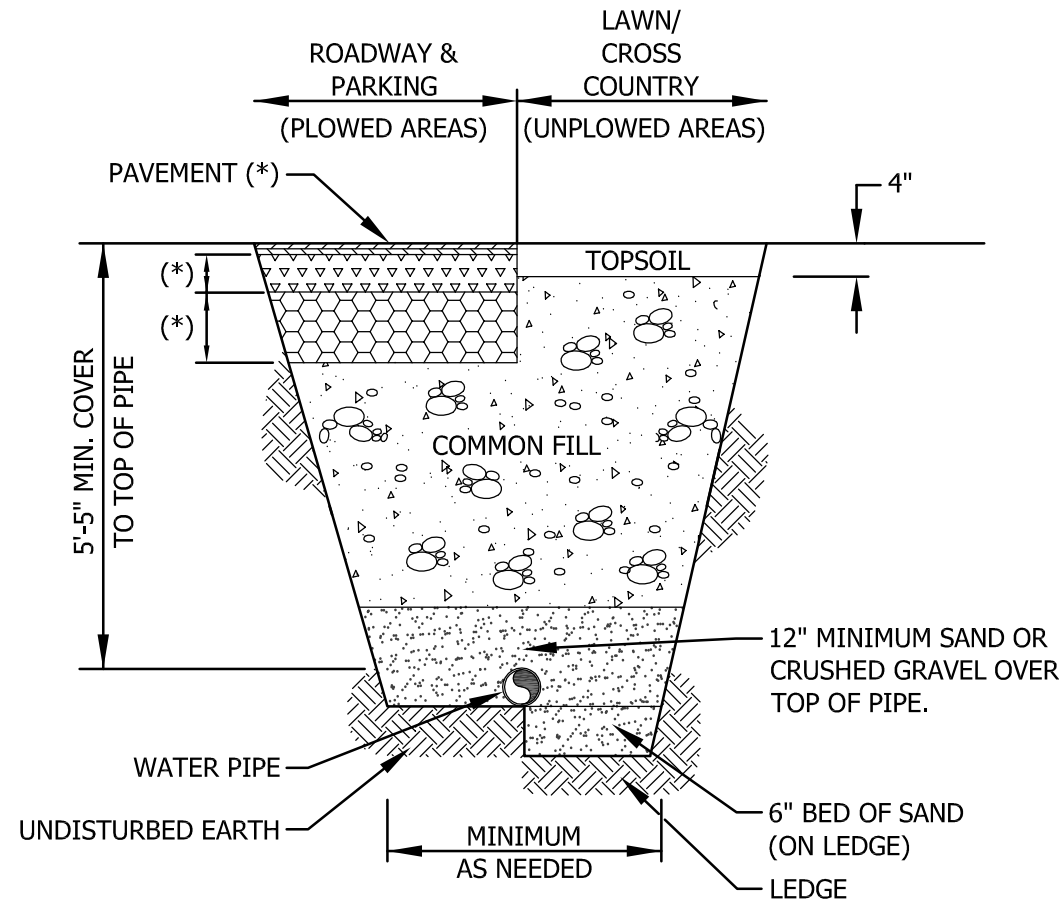
N.T.S.

ALL WATER MAIN/SERVICE CROSSINGS WITH SANITARY SEWERS SHALL BE CONSTRUCTED TO THESE STANDARDS.

CROSSING NOTES:

CROSSINGS: SEWERS CROSSING WATER LINES SHALL BE LAID BENEATH THE WATER LINE WITH AT LEAST 18 INCHES VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER LINE. THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS.

THE PROJECT ENGINEER MUST BE NOTIFIED WHEN IT IS IMPOSSIBLE TO MAINTAIN THE 18" VERTICAL CLEARANCE.



(*) SEE ROADWAY TYPICAL CROSS SECTION

COMMON FILL- SHALL CONTAIN NO STONES, ROCKS, CONCRETE, OR OTHER RUBBLE LARGER THAN 10 INCHES IN DIAMETER. FILL TO BE PLACED IN 12" LIFTS & COMPACTED TO 95% STANDARD PROCTOR.

BR GRAVEL - SHALL BE 12" BANK RUN GRAVEL PLACED IN 6" LIFTS, COMPACTED TO 95% STANDARD PROCTOR.

CRUSHED GRAVEL - SHALL BE 6" CRUSHED GRAVEL SURFACE COURSE COMPACTED TO 95% STANDARD PROCTOR.

SAND - SHALL BE OF CLEAN MINERAL AGGREGATE AND SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO USE. SAND TO BE PLACED IN 6" LIFTS & COMPACTED TO 95% STANDARD PROCTOR.

NOTE: CONSTRUCTION MATERIALS SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS.

DUCTILE IRON

WATER LINE TRENCH DETAIL

N.T.S.

LEAKAGE TESTING OF WATER LINES

ALL TYPES OF INSTALLED PIPE SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C-600.

DISINFECTION OF WATER LINES

A) BASIC DISINFECTION PROCEDURE CONSISTS OF:

- PREVENTING CONTAMINATING MATERIALS FROM ENTERING THE WATER LINE DURING CONSTRUCTION OR REPAIR.
- REMOVING BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER LINE.
- CHLORINATING ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSHING THE CHLORINATED WATER.
- DETERMINING THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
- COMPLY WITH ALL PERTINENT PROCEDURES AND REQUIREMENTS OF THE LATEST EDITION OF AWWA C651, FEDERAL, STATE AND LOCAL LAWS, REGULATIONS AND ORDINANCES.

B) DISINFECTION PROCEDURE:

- CLOSE THE SERVICE VALVES AND FILL THE WATER LINE WITH CHLORINATED WATER.
- LEAVE THE CHLORINATED WATER IN THE WATER LINE FOR AT LEAST 24 HOURS.
- AT THE END OF THIS PERIOD, THE CHLORINATED WATER SHALL BE SAMPLED AND HAVE A FREE CHLORINE RESIDUAL OF AT LEAST 10 mg/L. IF NOT, THE PROCEDURE SHALL BE REPEATED UNTIL THE RESIDUAL REQUIREMENT IS MET.
- THOROUGHLY FLUSH THE WATER LINE ASSURING NO OFFENSIVE ODOR EXISTS DUE TO CHLORINE REACTIONS OR EXCESS CHLORINE RESIDUAL.
- FLUSHING VELOCITY SHALL NOT BE LESS THAN 2.5 FT/SEC.
- REPEAT DISINFECTION PROCESS ON LINES THAT BECOME OR MAY HAVE BECOME RECONTAMINATED AND ALL LINES IN WHICH COLIFORM BACTERIA WERE FOUND.
- THE TABLET METHOD IS NOT ACCEPTABLE.

NOTE:

CONTRACTOR SHALL CONTACT LEBANON DPW PRIOR TO ANY WATER OR SEWER RELATED CONSTRUCTION. (603) 298-5190.

WATER DETAILS

FOR

BANK STREET APARTMENTS

IN

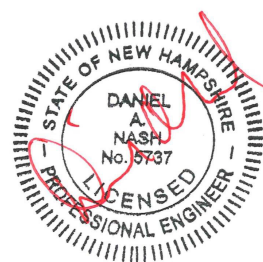
TOWN, STATE

ADVANCED GEOMATICS & DESIGN

105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766

PHONE: (603) 448 6295

E-MAIL: advancedgeomatcs@comcast.net



SURVEYED: N/A

DRAWN: KH

CHECKED: DAN

DATE: 04/12/2021

MASON STORAGE

WATER DETAILS

D-3

© 2021

ADVANCED GEOMATICS & DESIGN

DWG: 19003/19003-DET

DESIGN BASIS

THE MAJORITY OF THE SOIL TO BE DISTURBED DURING THE PROGRESS OF CONSTRUCTION ON THIS SITE WILL RESULT DURING THE ROAD, PARKING, BUILDING AND UTILITY CONSTRUCTION. CERTAIN CONSIDERATIONS HAVE BEEN MADE AND INCORPORATED IN THE CONSTRUCTION PLAN TO INSURE THAT A RETURN TO THE NATURAL STATE WILL BE EXPEDITIOUS AND RESULT IN PERMANENT CONTROL AGAINST SOIL EROSION AFTER THE PROJECT IS COMPLETE.

SITE PREPARATION

THE ENTIRE CONSTRUCTION SITE MAY BE CLEARED (TREES CUT) ALL AT ONCE BUT STOPPING AND/OR GRUBBING SHALL BE UNDERTAKEN IN A PHASED MANNER ALLOWING FOR COMPLETION WITHIN A REASONABLE TIME PERIOD, USUALLY NOT MORE THAN TWO WEEKS.

- 1) ALL NECESSARY AND REQUIRED EROSION CONTROL WILL NEED TO BE INSTALLED AND IN PLACE PRIOR TO ANY CLEARING AND GRUBBING.
- 2) ONCE THE TEMPORARY EROSION CONTROL MEASURES, AS DESCRIBED ON THE PLAN AND AS REQUIRED IN THE FIELD, ARE IN PLACE; GRUBBING, GRADING AND EARTHWORK MAY BEGIN IN PHASES. EACH PHASE, FROM THE BEGINNING OF CLEARING TO FINAL STABILIZATION OF SEEDING AND MULCHING, SHOULD BE ACCOMPLISHED WITHIN A REASONABLE PERIOD OF TIME, USUALLY TWO WEEKS. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF DISTURBANCE THROUGH THE APPLICATION OF TEMPORARY OR PERMANENT EROSION CONTROL MEASURES DESCRIBED HEREIN. IN NO CASE SHALL A DISTURBED AREA REMAIN UNSTABILIZED FOR ANY MORE THAN 45 DAYS.
- 3) ALL BLASTING WILL BE COMPLETED UNDER BLAST MATS OR EARTH OVERBURDEN IN ORDER TO PREVENT UNCONTROLLED EJECTION OF ROCK FRAGMENTS. BLASTING SHALL ALSO CONFORM TO ALL STATE AND FEDERAL STANDARDS.
- 4) SLOPES WILL BE BROUGHT TO FINAL GRADE AS RAPIDLY AS POSSIBLE. AT THE END OF EACH DAY'S OPERATION, THE SEGMENT OF THE SLOPE UNDER CONSTRUCTION WILL EITHER BE SEEDED AND MULCHED UPON COMPLETION OF FINAL GRADE, OR ALL EROSION CONTROL MEASURES INSPECTED TO INSURE THAT THEY WOULD FUNCTION PROPERLY IN THE EVENT OF A RAIN DURING THE NON-WORKING PERIODS.
- 5) AREAS GRUBBED AND NOT GRADED SHALL BE MULCHED AND TRACKED IN WITH A BULLDOZER OR ROLLER WITHIN 7 DAYS. ANY GRADED AREAS NOT BEING WORKED (ROADWAYS, BUILDING PADS) SHALL BE MULCHED AND TRACKED IN WITHIN 7 DAYS OF DISTURBANCE.
- 6) THE DISTURBED AREA SHALL BE KEPT TO THE SMALLEST AREA PRACTICABLE. IN NO CASE SHALL UNSTABILIZED DISTURBED AREA EXCEED 5 ACRES.

THE BASIS OF DESIGN TO INSURE A MINIMUM OF SOIL EROSION DURING CONSTRUCTION IS AS FOLLOWS:

- 1) TEMPORARY EROSION CONTROL.

ALL FINISH GRADED AREAS SHALL BE MULCHED AND SEEDED EXPEDITIOUSLY AS SOON AS THEY ARE SO GRADED. IT SHOULD BE POSSIBLE TO PLACE SEED AND MULCH WITHIN ONE WEEK OF FINISH GRADING. ALL DITCHES, SWALES, AND THE TREATMENT SWALE SHALL BE STABILIZED PRIOR TO DIRECTING FLOW INTO THEM.

PROBLEM AREAS SUCH AS WET SITE AND INTERMITTENT WATER COURSES WILL BE GIVEN PRELIMINARY SEED AND MULCH COATS PRIOR TO FINAL PLANTING AS AN EXTRA PRECAUTION.

TOP SOIL STOCKPILED FOR FUTURE USE IS TO BE PROTECTED FROM EROSION. IF TOPSOIL IS TO BE STOCKPILED, IT SHALL ONLY BE DONE OUTSIDE ANY DRAINAGE WAYS OR WATER COURSES. A SWALE NOT LESS THAN TWELVE INCHES DEEP SHALL BE CONSTRUCTED AROUND THE PERIMETER OF THE STOCKPILE AND A SILT FENCE SHALL BE CONSTRUCTED AROUND THE SWALE, ON THE DOWNSTREAM HALF OF THE PILE. IF THE STOCKPILE IS TO REMAIN IN POSITION FOR MORE THAN ONE MONTH IT WILL BE SEEDED AND MULCHED. (SEE STOCKPILE TREATMENT DETAIL)

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 RIPRAP HAS BEEN INSTALLED; OR
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

- 2) TEMPORARY SEEDING AND MULCHING

ALL ESSENTIAL GRADING AND ALL TEMPORARY STRUCTURES, SUCH AS DIVERSIONS, DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION SHOULD BE COMPLETED PRIOR TO SEEDING. REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER POSSIBLE. FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING INCORPORATED INTO THE SOIL. A MINIMUM OF 300 POUNDS PER ACRE (7 POUNDS PER 1,000 SQUARE FEET) OF 10-10-10 FERTILIZER, OR ITS EQUIVALENT, SHOULD BE APPLIED. SEED AND SEEDING RATES MAY BE SELECTED FROM THE TABLE BELOW. THE SELECTION WILL BE BASED ON THE TIME OF YEAR THE SEEDING IS TO BE MADE AND THE LENGTH OF TIME THE VEGETATION IS TO AFFORD THE PROTECTION. THE SEED SHOULD BE SPREAD UNIFORMLY OVER THE AREA. AFTER SEEDING, THE SOIL SHOULD BE FIRMED BY ROLLING OR PACKING. WHERE ROLLING OR PACKING IS NOT FEASIBLE, THE SEED SHOULD BE COVERED LIGHTLY BY RAKING, DISKING, OR DRAGGING. WHERE IT IS IMPRACTICABLE TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEEDBED AREA SHOULD BE MULCHED TO FACILITATE GERMINATION.

SPECIES	PER ACRE	PER 1000 SQ.FT.	REMARKS
WINTER RYE	2 BU. OR 112 LBS.	2.5 LBS.	BEST FOR ALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 5 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	2.5 BU. OR 80 LBS.	2 LBS.	BEST FOR SPRING SEEDINGS. SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40 LBS.	1 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. COVER THE SEED WITH NO MORE THAN 0.25 INCHES OF SOIL.
PERENNIAL RYEGRASS	30 LBS.	0.7 LBS.	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1 AND JUNE 1 AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

- 3) ROADWAY

THE ROADWAY IS A TYPICAL CUT/FILL OPERATION. IN AREAS WHERE SOILS MAY BE SATURATED BY SEASONAL OR PERMANENT WATER TABLES, IT MAY BE NECESSARY TO PROVIDE ARTIFICIAL SLOPE STABILIZATION BY UNDERDRAIN MEASURES TAKEN AS THEY ARE UNCOVERED DURING CONSTRUCTION. WHERE SATURATED SOILS ARE OBVIOUS WITHOUT EXPLORATION, CUT SECTIONS HAVE BEEN AVOIDED IN AS MUCH AS IS PRACTICAL.

- 4) CLEARING AND GRUBBING STUMPS ARE TO BE CHIPPED IN PLACE AND ALLOWED TO DECOMPOSE, PLACED IN NON STRUCTURAL FILL SECTIONS OR SHALL BE REMOVED TO AN APPROVED STUMP DUMP.

- 5) SEEDING AND MULCHING

ALL AREAS WHERE THE NATURAL GROUND SURFACE HAS BEEN DISTURBED AND NATURAL VEGETATION REMOVED OR DESTROYED ARE TO BE SEEDED, FERTILIZED AND MULCHED WITHIN THE WORK PERIOD SPECIFIED TO AVOID SOIL DISPLACEMENT BY EROSION BOTH DURING AND AFTER CONSTRUCTION. STANDARD SOIL CONSERVATION SEED MIX IS TO BE APPLIED AT A RATE OF 60 LBS. PER ACRE (TALL FESCUE - 24 LBS., RED FESCUE - 20 LBS., RED TOP - 2 LBS., AND BIRDSFOOT TREFOIL- 4 LBS.). 10-10-10 FERTILIZER IS TO BE WORKED INTO THE TOP 3 OR 4 INCHES OF SOIL (HYDRAULIC APPLICATION PREFERRED) AT A RATE OF 1,000 LBS. PER ACRE. MULCH CONSISTING OF RIPE SEED CARRYING HAY SHALL BE APPLIED OVER SEEDED AND FERTILIZED AREAS AT A RATE OF 2 TONS PER ACRE.

- 6) EROSION CONTROL DURING BUILDING CONSTRUCTION

ALL PLACES WHERE NATURAL VEGETATION IS REMOVED OR DESTROYED DURING CONSTRUCTION WILL BE SEEDED AND MULCHED SO AS TO PREVENT DISPLACEMENT OF SOIL BY EROSION. WORK TO BE PERFORMED IN THESE PHASES OF CONSTRUCTION WILL BE SCHEDULED IN SUCH A WAY TO INSURE EROSION WILL BE EFFECTIVELY CONTROLLED.

IN CASES OF PROLONGED INCLEMENT WEATHER LEADING TO RUNOFF, EXPOSURE OF NEW SOIL WILL BE TEMPORARILY HALTED; AND ANY AREAS WHERE SOIL DISPLACEMENT BY EROSION IS OCCURRING WILL BE PROTECTED BY METHODS SUCH AS MULCHING, HAY BALES, DIVERSION DITCHES, ETC.

- 7) COMMENCEMENT AND COMPLETION

ALL WORK INVOLVING EARTHWORK, LANDSCAPING OR ANY OTHER DISTURBANCES OF THE GROUND SURFACE RESULTING IN THE REMOVAL OR DESTRUCTION OF NATURAL GROUND COVER SHALL NOT BE COMMENCED UNTIL APRIL 1 AND ALL AREAS SO DISTURBED SHALL BE FINISH GRADED, SEEDED AND MULCHED OR TEMPORARILY SEEDED AND MULCHED PRIOR TO NOVEMBER 15. SHOULD THERE BE A NEED TO EXTEND BEYOND THIS DATE, EXTRAORDINARY EROSION CONTROL MEASURES WILL BE INSTITUTED, SUBJECT TO THE REVIEW AND APPROVAL FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES AND OTHER APPLICABLE PERMITTING AGENCIES. PROCESSES SUCH AS THE PLACEMENT OF GRAVEL, PAVING, PLACEMENT OF STONE FILL, CONSTRUCTION OF HEADWALLS, ETC., MAY BE ACCOMPLISHED OUTSIDE OF THESE INCLUSIVE DATES.

- 8) DUST CONTROL

THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL WITHIN THE PROJECT LIMITS.

CALCIUM CHLORIDE OR WATER WILL BE USED AS NEEDED TO CONTROL DUST.

AT THE END OF EACH DAY OR PRIOR TO CONSTRUCTION SHUTDOWNS FOR WEEKENDS OR FOR LONG PERIODS, ALL EROSION CONTROL MEASURES WILL BE INSPECTED AND WHATEVER MAINTENANCE THAT WOULD BE REQUIRED, BE PERFORMED IN ORDER TO INSURE THAT THE ENTIRE EROSION CONTROL SYSTEM WOULD FUNCTION PROPERLY DURING A RAINFALL EVENT.

WINTER CONSTRUCTION NOTES:

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

EROSION CONTROL CHART

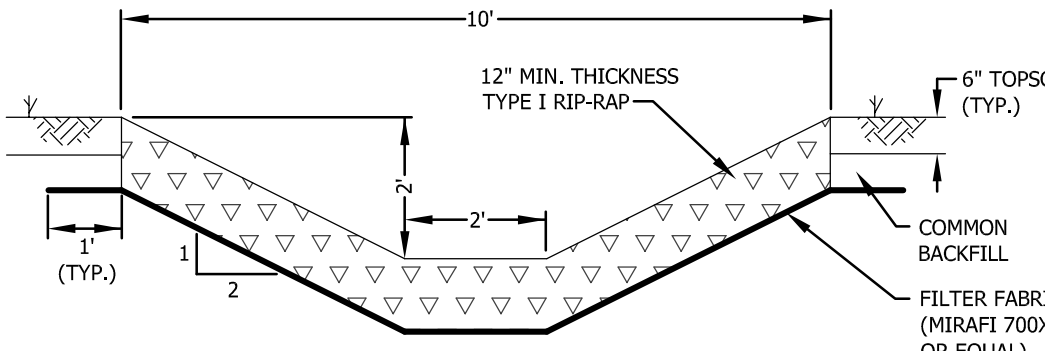
ACTIVITY:	TYPE OF CONTROL:	MAINTENANCE (*):
1) CLEARING AND GRUBBING	SILT FENCE	B
2) ACCESS ROADS AND PARKING	STACKED HAY BALES	B
	GRASS SEED AND MULCH	A
	SILT FENCE	B
3) DRAINAGE STRUCTURES	STACKED HAY BALES	B
	GRASS SEED AND MULCH	A
4) HOUSE SITES	SILT FENCE	B
	STACKED HAY BALES	B
	GRASS SEED AND MULCH	A
5) UTILITIES	GRASS SEED AND MULCH	A

MAINTENANCE INDEX

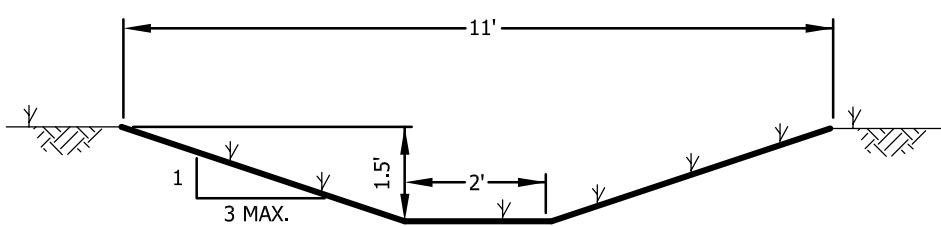
*) DAMAGED EROSION CONTROL MEASURES WILL BE REPAIRED AND/OR REPLACED AS SOON AS POSSIBLE. DAMAGE TO ANY EROSION CONTROL MEASURE AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED IMMEDIATELY. EROSION CONTROL MEASURES THAT TRAP SEDIMENT WILL BE EMPTIED WHEN HALF FULL. SEE EROSION CONTROL TEXT FOR IMPLEMENTATION OF THESE EROSION CONTROL MEASURES.

A) TO BE INSPECTED DAILY.

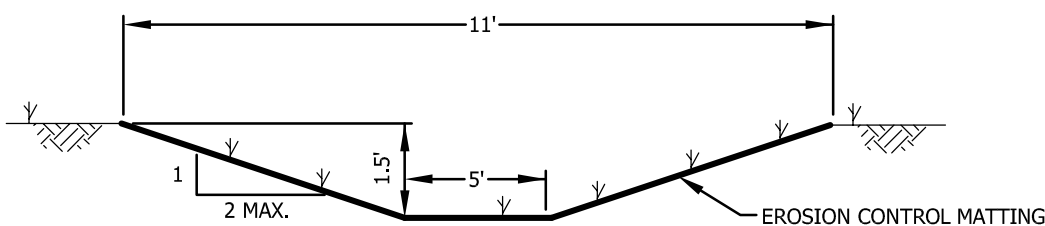
B) TO BE INSPECTED ONCE A WEEK AND AFTER RUNOFF OF 0.5" OR GREATER. REPAIRS SHALL BE MADE WITHIN 24 HOURS OF INSPECTION.



STONE LINED DITCH
(AS NOTED AND ON ROAD DITCHES > 5%)



GRASS LINED DITCH



GRASS LINED DITCH

STONE FOR RIP-RAP

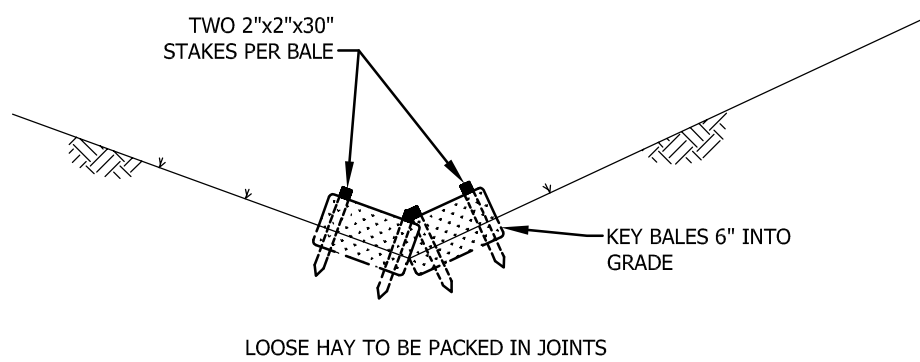
STONE FOR RIP-RAP SHALL BE APPROVED, HARD, BLASTED ANGULAR ROCK OTHER THAN SERPENTINE ROCK CONTAINING THE FIBROUS VARIETY CHRYSOTILE (ASBESTOS). THE LEAST DIMENSION OF THE STONE SHALL BE GREATER THAN 1/3 OF THE LONGEST DIMENSION. THE STONE FILL SHALL BE REASONABLY WELL GRADED FROM THE SMALLEST TO THE MAXIMUM SIZE STONE SPECIFIED SO AS TO FORM A COMPACT MASS WHEN IN PLACE.

- (A) TYPE I. THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME SHALL HAVE A LEAST DIMENSION OF 4 INCHES.
- (B) TYPE II. THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 2 INCHES TO 36 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

TYPICAL DRAINAGE DITCH SECTIONS

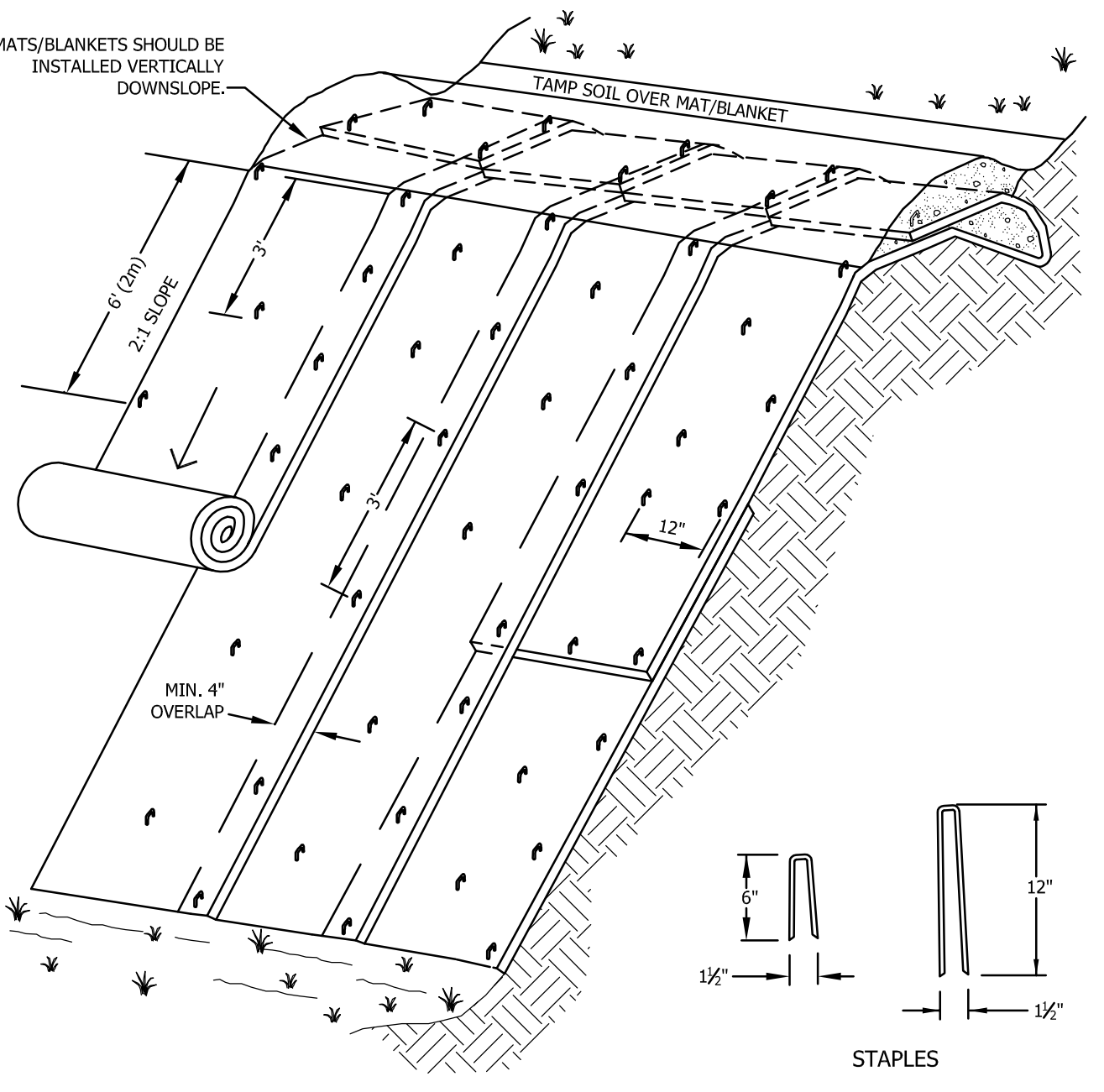
N.T.S.

IN THE EVENT THAT AN UNUSUAL RAINFALL EVENT OCCURS DURING NON-WORKING HOURS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT THE EROSION CONTROL MEASURES (WHILE IT IS RAINING) AND TAKE WHATEVER MEASURES THAT ARE NECESSARY WHERE EROSION CONTROL MEASURES ARE NOT FUNCTIONING PROPERLY.



STAKED HAY BALES (BMP-SHB)

N.T.S.

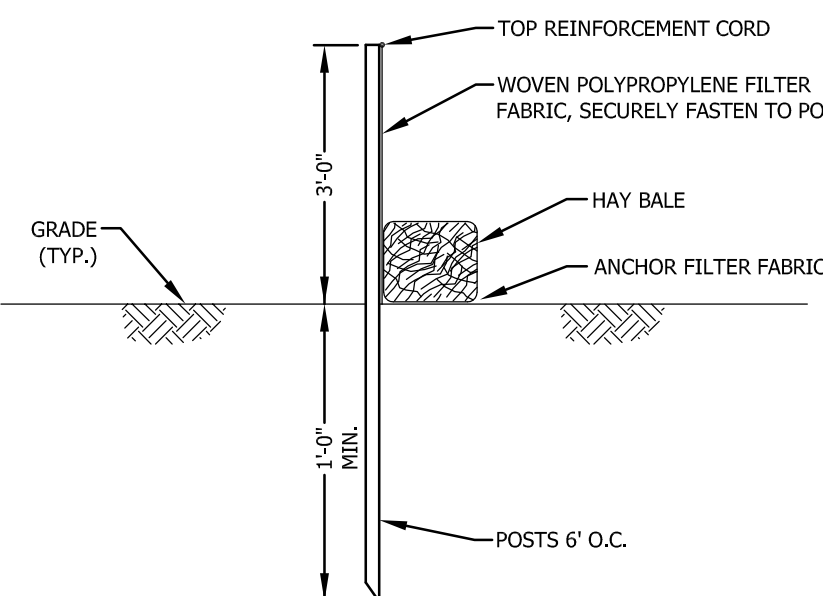


NOTES:

- 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.

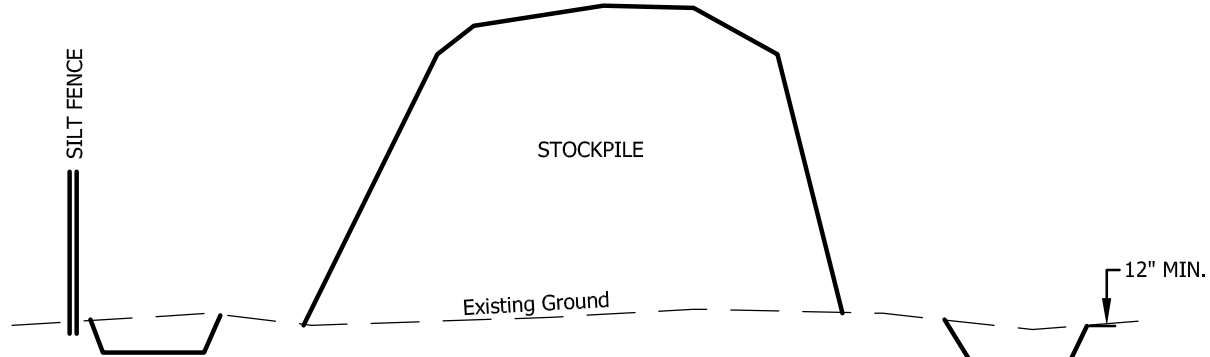
EROSION CONTROL MATTING

N.T.S.



SILT FENCE DETAIL (BMP-SF)

N.T.S.

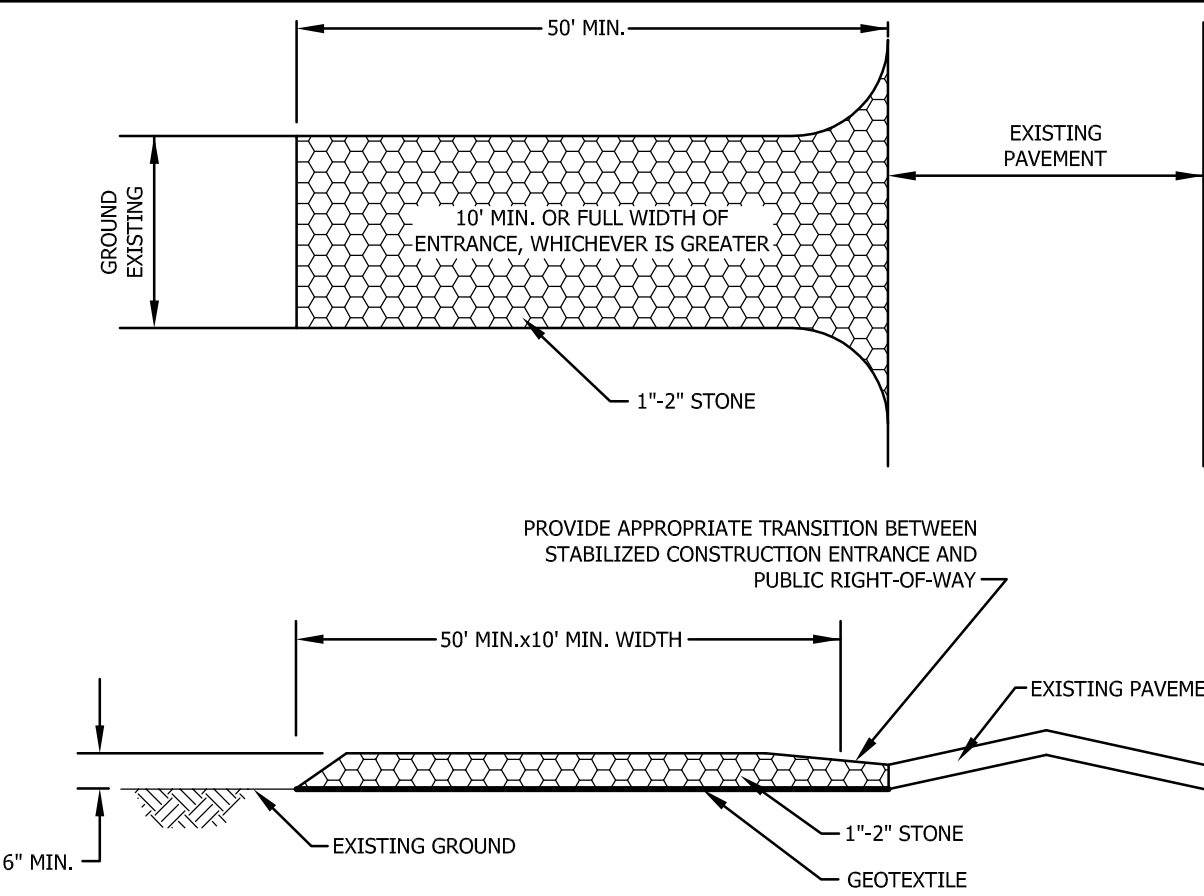


STOCKPILE TREATMENT DETAIL

N.T.S.

NOTES:

- 1) SWALE AROUND ENTIRE STOCKPILE, MINIMUM 12" DEEP.
- 2) SILT FENCE AROUND SWALE ON DOWNSTREAM HALF OF PILE.
- 3) STOCKPILE LEFT OVER 30 DAYS SHALL BE SEEDED AND MULCHED.

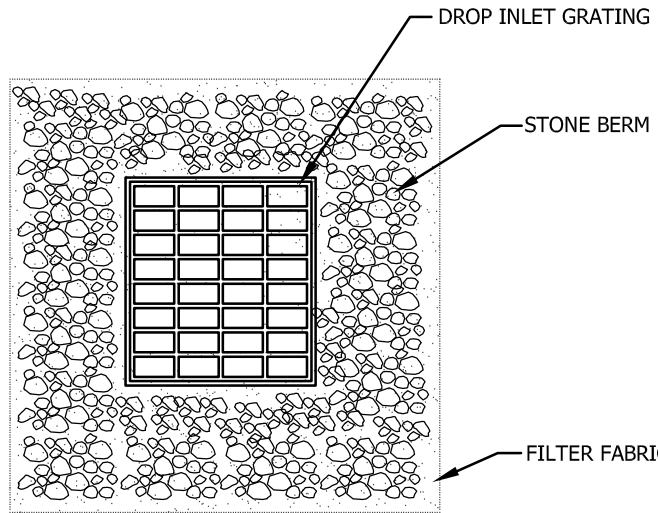


STABILIZED CONSTRUCTION ENTRANCE (BMP-SCE)

N.T.S.

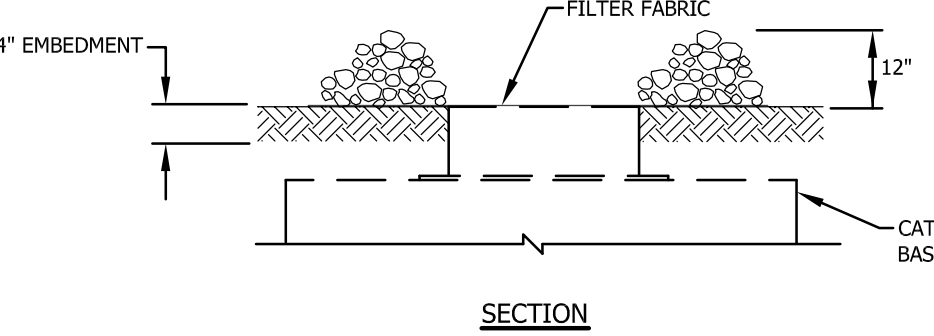
NOTES:

- 1) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING, WASHING, OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAY.
- 2) ALL SEDIMENT SPILLED, DROPPED, TRACKED OR WASHED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.



PLAN VIEW

NOTE: PLACE STONE BERM AROUND GRATING AS SHOWN ON EROSION CONTROL PLAN

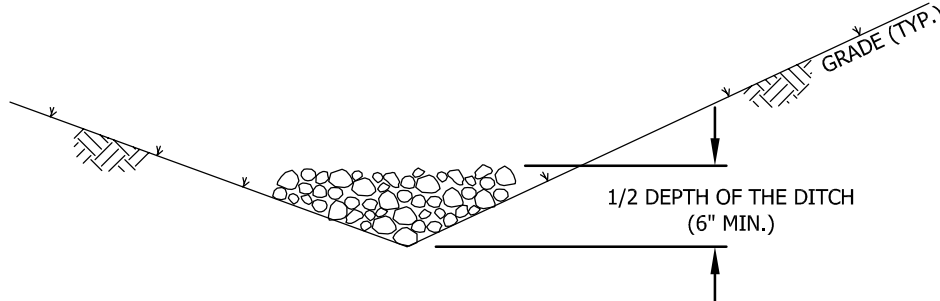


SECTION

TEMPORARY STONE INLET PROTECTION (BMP-SIP)

N.T.S.

*NOTE: TO BE USED AT ALL CATCH BASINS



STONE CHECK DAMS (BMP - SCD)

N.T.S.

EROSION CONTROL DETAILS

FOR MASON STORAGE

IN LEBANON, NH

ADVANCED GEOMATICS & DESIGN

105 BANK STREET - PO BOX 512
LEBANON, NEW HAMPSHIRE 03766

PHONE: (603) 448-6295

E-MAIL: advancedgeomatics@comcast.net

SURVEYED: N/A
DESIGNED: DAN
DRAWN: KH
CHECKED: DAN
DATE: 09/27/21

MASON STORAGE
EROSION CONTROL
DETAILS

D-5

© 2021
ADVANCED GEOMATICS & DESIGN
DWG: 19003\19003-DET

**Agenda
Planning Board
October 12, 2021**

**Agenda Item #3B
Public Hearing Items**

**Michaels Student Living, LLC
(applicant) and
Trustees of Dartmouth
College (property owner),
401 Mount Support Road
(Tax Map 24, Lot 2),
zoned R-1, R-3 and RL-3
PB2021-30-SPA**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 12, 2021 Meeting

Staff Memorandum – PB2021-30-SPA

APPLICATION INFORMATION

Agenda Item: 3.B

Application ID#: PB2021-30-SPA

Application Type: Amendment to a Site Plan and Major Subdivision approved on June 22, 2020 (PB2020-07-SPR)

Property Location & Tax Map:
401 Mount Support Road (24-2)

Property Owner:
Trustees of Dartmouth College

Applicant:
Michaels Student Living, LLC

Property Size (per City Assessor):
+/-53.3 acres

Zoning District: R-1, R-3, and RL-3

Zoning Overlay Districts:
Wetlands Conservation District

LEGAL NOTICE

Michaels Student Living, LLC (applicant) and Trustees of Dartmouth College (property owner), 401 Mount Support Road (Tax Map 24, Lot 2), zoned R-1, R-3 and RL-3: A 309-unit multi-family development is currently under construction pursuant to an approved Major Subdivision and Site Plan (PB2020-07-SPR & PB2020-29-SPA). The applicant requests a modification to the conditions of approval in order to allow two of the four proposed residential buildings to be occupied prior to the completion of all site improvements. PB2021-30-SPA

APPLICATION MATERIALS

- ▶ Application form
- ▶ Letter from Philip Hastings, Esq., of Cleveland, Waters and Bass, P.A. dated September 13, 2021 (3 pages)
- ▶ Plan sheet titled, "Overall Site Plan," dated February 10, 2020, prepared by VHB, Project No. 52621.01

COMPLETENESS REVIEW

This application has been reviewed in accordance with the Lebanon Site Plan Review Regulations and Subdivision Regulations. The Planning and Development Department recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

APPLICATION OVERVIEW

On June 22, 2020, the Planning Board granted Final Major Subdivision and Site Plan Review approval for a proposed multi-family dwelling complex consisting of 309 units in four buildings to be constructed at 401 Mount Support Road (#PB2020-07-SPR) ("Development"). The Development also includes a clubhouse building and maintenance building. A plan amendment was approved by the Planning Board on October 13, 2020 (PB2020-34-SPA) (the amendment revised conditions of approval #10 and #19).

As described in the attached letter dated September 13, 2021, from Philip Hastings, Esq., the applicant/developer, Michaels Student Living, LLC, now requests an amendment to allow two of the four residential buildings to be occupied prior to completion of all required site improvements.

STAFF COMMENTS

Section 8.1 of the Site Plan Review Regulations requires that, “[t]he Applicant shall construct and complete all design and construction requirements in accordance with Article VI and any other applicable section of these Regulations, as required in the Notice of Action, prior to the issuance of the Certificate of Occupancy.” As part of the original approval for the Development, the Planning Board granted a waiver from Section 8.1 to allow the occupancy of the clubhouse building prior to occupancy of the other buildings with the Development.¹

Utilizing the waiver that the Planning Board has granted from Section 8.1, the applicant now requests that the Board allow occupancy of Buildings 2 and 2 (as shown on the attached plan sheet) prior to the completion of Buildings 1 and 4, and prior to the completion of all remaining site improvements outside of the area outlined in red on the attached plan sheet. If the Board approves the request, all improvements within the area outlined in red will need to be completed prior to the issuance of temporary certificates of occupancy for Buildings 2 and 3.

Subject to the recommended conditions of approval set forth below, staff has no concerns with the applicant’s request.

STAFF RECOMMENDATIONS

If the Planning Board moves to approve this request, then based on the information reviewed by City staff, the Planning and Development Department recommends that the Planning Board approve the application with the conditions noted below.

1. Pursuant to the granting of a partial waiver on June 22, 2020, from the requirements of Section 8.1 of the Site Plan Review Regulations, the Planning Board’s Notice of Action dated June 22, 2020 (PB2020-07-SPR), as modified by the Planning Board’s Notice of Action dated October 13, 2020 (PB2020-34-SPA), is hereby further modified to allow a temporary certificate of occupancy for Buildings 2 and 3 (as identified on the plan sheet submitted to the Planning Board for application PB2021-30-SPA (“Plan Sheet”)) to be issued prior to the completion of all site improvements, provided that at least all improvements identified within the area outlined in red on the Plan Sheet are complete by the time of the issuance of the temporary certificate of occupancy and have been constructed per the approved plan and all applicable regulations to the satisfaction of the Planning and Development Department and the Department of Public Works, and provided that all life safety improvements are complete to the satisfaction of the Building Inspector and the Fire Department.
2. Within 30 days of the Planning Board’s approval, the applicant shall make the following revisions to the Plan Sheet to the satisfaction of the Planning and Development Department:
 - a) Provide a revised date and a description of the revision as required by Section 5.1.E.4.d of the Site Plan Review Regulations.

¹ See Condition 19 (“Pursuant to the granting of a partial waiver from the requirements of Section 8.1 of the Site Plan Review Regulations, a temporary certificate of occupancy for the clubhouse may be issued prior to the completion of all site improvements, provided that at least all improvements identified on the revised plan set as being complete by the time of the issuance of the temporary certificate of occupancy have been constructed per the approved plan and all applicable regulations to the satisfaction of the Planning & Development Department and the Department of Public Works, and provided that all life safety improvements are complete to the satisfaction of the Building Inspector and the Fire Department.”)

- b) Revise the title of the Plan Sheet to reflect the purpose of the plan which is to depict the area of improvements to be constructed prior to the issuance of temporary certificates of occupancy for Buildings 2 and 3.
- 3. Prior to the issuance of temporary certificates of occupancy for Buildings 2 and 3 (as identified on the Plan Sheet), the applicant shall provide a hard copy and PDF of the plan set for the Development which shall incorporate all approved changes to date, including but not limited to adding the Plan Sheet as revised per condition of approval #2 above as an additional plan sheet and revising the Table of Contents and plan set pagination accordingly.
- 4. The applicant shall ensure that the Development's center access drive and the easternmost drive aisle of the parking area located to the west of Building 3 remain at all times (a) clear of obstacles including but not limited to construction equipment, vehicles and material, and (b) accessible to emergency vehicles.

Attachments

cc: Michaels Student Living, LLC c/o Kristina Vagen (via e-mail)
Trustees of Dartmouth College c/o Daniel Justynski (via e-mail)
Philip Hastings, Esq., Cleveland, Waters and Pass, P.A. (via e-mail)
File

**CITY OF LEBANON
APPLICATION FOR**

SPECIAL EXCEPTION	☐	☐	SITE PLAN REVIEW
VARIANCE	☐	☐	SUBDIVISION
MOTION FOR REHEARING	☐	☐	LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☐	CONDITIONAL USE PERMIT

☒ **OTHER** Site Plan Review Amendment

PROPERTY OWNER (APPLICANT):

NAME: Trustees of Dartmouth College c/o Daniel Justynski TEL.#: 603.646.2654

MAILING ADDRESS: 4 Currier Place, Suite 305, Hanover, NH 03755

E-MAIL ADDRESS: daniel.j.justynski@dartmouth.edu

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Michaels Student Living, LLC, c/o Kristina Vagen TEL.#: 856.341.4401

MAILING ADDRESS: P.O. Box 90708, Camden, NJ 08101

E-MAIL ADDRESS: kvagen@lmo.com

PROJECT LOCATION:

TAX MAP #: 24 LOT#: 2 PLOT #: ZONE: R-1/R-3/RL-3

STREET ADDRESS OF PROJECT: 401 Mount Support Road

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☐ NO **HISTORIC DISTRICT** ☐ YES ☐ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

Michaels Student Living proposes a minor amendment to the conditions of a previously approved site plan for a multi-family complex

TYPE OF OCCUPANCY:

EXISTING ☒ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL
PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL
IF USE IS COMMERCIAL OR INDUSTRIAL, PLEASE NOTE **SPECIFIC** USE: _____

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on October 12, 2021, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: Daniel Justynski, Director of Real Estate DATE: 9/13/21

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: Daniel Justynski, Director of Real Estate DATE: 9/13/21

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #
9/13/21	24/2	PB2021-30-SPF	\$330.50	9-14-21	18421

(Last Revised 4/04/18)



CLEVELAND, WATERS AND BASS, P.A.
ATTORNEYS AT LAW

PHILIP M. HASTINGS, ESQUIRE
(603) 224-7761 EXT. 1069
(603) 224-6457 FACSIMILE
HASTINGSP@CWBPA.COM

TWO CAPITAL PLAZA, P.O. BOX 1137
CONCORD, NEW HAMPSHIRE 03302-1137

ALSO ADMITTED IN MASSACHUSETTS

September 13, 2021

Lebanon Planning Board
City of Lebanon
51 North Park Street
Lebanon, NH 03766

**Re: Trustees of Dartmouth College/Michaels Student Living, LLC
401 Mount Support Road, Lebanon, N.H.
Tax Map 24, Lot 2
#PB2020-07-SPR
Request to Amend Site Plan Approval**

Dear Planning Board:

This letter is written on behalf of Michaels Student Living, LLC (the "Applicant") in support of the Applicant's request to amend the site plan approved by the Planning Board on June 22, 2020, as modified, to permit the accelerated construction and occupancy of Buildings 2 and 3. Specifically, the Applicant requests that the Planning Board approve the amended site plan Sheet C-3.0 and Condition of Approval #19 to permit the issuance of temporary certificates of occupancy for the clubhouse, Building 2 and Building 3 prior to the completion of all site improvements. The proposed amendment to Condition #19 is reflected below:

- "19. Pursuant to the granting of a partial waiver from the requirements of Section 8.1 of the Site Plan Review Regulations, ~~a~~-temporary certificates of occupancy for the clubhouse, Building 2 and Building 3 may be issued prior to the completion of all site improvements, provided that (a) at least all improvements identified on the revised plan set as being complete by the time of the issuance of the temporary certificate of occupancy have been constructed per the approved plan and all applicable regulations to the satisfaction of the Planning & Development Department and the Department of Public Works, (b) the applicant has obtained a NHDES

Sewer Connection Permit and completed the sewer connection work to the satisfaction of the City's third-party inspector, and (c) all life safety improvements are complete to the satisfaction of the Building Inspector and the Fire Department."

The purpose of the proposed amendment is to expedite the construction and re-sequence the occupancy of Buildings 2 and 3 to meet the urgent housing needs of Dartmouth College. With the expected delivery of these units in March 2022, we will be in the position to house 324 students in 157 new residential units. The proposed new temporary occupancy that the Applicant requests the Planning Board support for is delineated in the attached updated site plan sheet provided by VHB. The requested amendments therefore are reasonable and will not be detrimental to the public interest in any way.

Great progress has been made on the construction of these buildings and the team is confident that they will be ready for inspection by March 1, 2022, the latest. As of last week's Owner site visit, the City's building inspector has approved the MEP rough-ins on one wing of the 4th floor of Building 3 and insulation and drywall installation had begun. In this building and Building 2, the inspector will be back each week to inspect one wing of the building, per floor. At Building 3, the installation of the elevator was on schedule to commence today and priming for painting is expected to commence on September 17. On the exterior, exterior painting is set to begin this week and permanent roofing will be completed within two weeks.

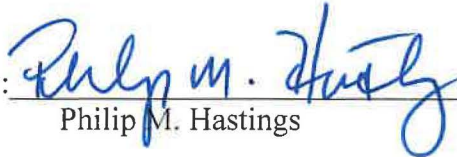
The Building Inspector will be ready to inspect the 1st wing of the 4th floor on September 29, with weekly inspections scheduled to be completed for each wing here as well. Elevator work in this building will commence approximately 6 weeks from today, after work is completed in Building 3, and the permanent roofing is schedule to commence in early October. The vapor barrier currently installed on the roof has provided "water-tightness" for mechanical rough-ins to be complete. On the exterior, the siding is currently being installed and expect the majority of the work to be completed by the third week of October, before the winter weather begins.

The construction team will pave the remaining parking lot near building 3 on September 27 and also has begun prepping for the sidewalk and curbing installation near these two buildings, as is shown on the updated site plan. The development team is also working with Advanced Transit to secure a new Blue Line bus stop near the entrance to the site. An offer has been provided to it to help subsidize this route, and its desired new 15 minutes service, which they currently have under consideration. Provided Advanced Transit, and the neighboring developer (Braverman) agree to begin this service by the spring, the Applicant intends to relocate one of the two initial on-site covered bus stop pavilions to the area across Mount Support Road.

Lebanon Planning Board
September 13, 2021
Page 3

Please let me know if you have any questions or need further information.

Respectfully Submitted,
MICHAELS STUDENT LIVING, LLC
By Its Attorneys,
CLEVELAND, WATERS AND BASS, P.A.

By: 
Philip M. Hastings

PMH/mr

cc: Ms. Kristina Vagen (by email)
Mr. David Fenstermacher (by email)
Mr. Daniel Justynski (by email)

4813-9245-6442, v. 1

APARTMENT BUILDING UNITS	
GROSS SQUARE FOOTAGE	
BUILDING 1	SF
FIRST FLOOR	18,065
SECOND FLOOR	18,279
THIRD FLOOR	18,279
FOURTH FLOOR	18,279
TOTAL	72,902
BUILDING 2	SF
GROUND FLOOR	5,822
FIRST FLOOR	18,149
SECOND FLOOR	18,279
THIRD FLOOR	18,279
FOURTH FLOOR	18,279
TOTAL	78,808
BUILDING 3	SF
FIRST FLOOR	18,094
SECOND FLOOR	18,307
THIRD FLOOR	18,307
FOURTH FLOOR	18,307
TOTAL	73,015
BUILDING 4	SF
FIRST FLOOR	18,065
SECOND FLOOR	18,279
THIRD FLOOR	18,279
FOURTH FLOOR	18,279
TOTAL	72,902
TOTAL SQUARE FOOTAGE	297,627

DARTMOUTH UNIT MIX

BUILDING 1		
UNIT	SF	QUANTITY
1 BEDROOM	515	16
1 BEDROOM - SMALL	513	2
2 BEDROOM	759	10
2 BEDROOM - BUMPOUT	773	36
3 BEDROOM	830	1
4 BEDROOM - ENDCAP	1,166	8
4 BEDROOM - CORNER	1,241	3

TOTAL/BUILDING

BUILDING 2		
UNIT	SF	QUANTITY
1 BEDROOM	515	16
1 BEDROOM - SMALL	513	2
1 BEDROOM - END	600	1
2 BEDROOM	759	10
2 BEDROOM - BUMPOUT	773	40
4 BEDROOM - ENDCAP	1,166	8
4 BEDROOM - CORNER	1,241	4

TOTAL/BUILDING

BUILDING 3		
UNIT	SF	QUANTITY
1 BEDROOM	515	16
1 BEDROOM - SMALL	513	2
2 BEDROOM	759	10
2 BEDROOM - BUMPOUT	773	36
3 BEDROOM	830	1
4 BEDROOM - ENDCAP	1,166	8
4 BEDROOM - CORNER	1,241	3

TOTAL/BUILDING

BUILDING 4		
UNIT	SF	QUANTITY
1 BEDROOM	515	16
1 BEDROOM - SMALL	513	2
2 BEDROOM	759	10
2 BEDROOM - BUMPOUT	773	36
3 BEDROOM	830	1
4 BEDROOM - ENDCAP	1,166	8
4 BEDROOM - CORNER	1,241	3

TOTAL/BUILDING

TOTAL UNITS



Sign Summary

M.U.T.C.D. Number	Specification Width	Height	Desc.
R1-1	30"	30"	STOP
R5-1	30"	30"	DO NOT ENTER
R7-1	12"	18"	NO PARKING ANY TIME
R7-8	12"	18"	RESERVED PARKING
R7-8A	12"	6"	VAN ACCESSIBLE
W11-2	36"	36"	PEDESTRIAN CROSSING
W16-7P	24"	12"	VEHICLE AHEAD
W16-9P	24"	12"	VEHICLE AHEAD
W11-2 WITH SOLAR FLASHING LED BEACON	30"	30"	PEDESTRIAN CROSSING
W11-2 WITH RECTANGULAR RAPID FLASH BEACON	30"	30"	PEDESTRIAN CROSSING
W16-7P	24"	12"	VEHICLE AHEAD
W16-9P	24"	12"	VEHICLE AHEAD
SP-1	12"	24"	EMERGENCY VEHICLES ONLY
SP-2	12"	24"	TRAIL HEAD PARKING ONLY
SP-3	12"	24"	CLUBHOUSE PARKING ONLY

NOTES:
PEDESTRIAN DETECTION CROSSWALK SYSTEM SHOULD BE "TAPCO RECTANGULAR RAPID FLASH BEACON W11-2 WITH PUSH BUTTON ACTIVATION" OR APPROVED EQUIVALENT.
SOLAR FLASHING LED BEACON SHALL BE "TAPCO BUNKERBEACON SOLAR FLASHING LED BEACON" OR APPROVED EQUIVALENT. BEACON WILL HAVE WIRELESS COMMUNICATION WITH PEDESTRIAN DETECTION CROSSWALK SYSTEM.

vhb

2 Bedford Farms Drive
Suite 200
Bedford, NH 03110
603.391.3900

NOTE:
1) NO FENCE SHALL BE INSTALLED IN THE DOCUMENTED WILDLIFE CORRIDOR AS IDENTIFIED IN THE "LEBANON WILDLIFE CORRIDORS" STUDY, PREPARED BY ROCK-VAN DE POLL, PH.D, DATED NOVEMBER 2016.
2) FINAL ADDRESS AND STREET NAME PENDING FINAL REVIEW BY POLICE DEPARTMENT.

SNOW STORAGE CALCULATION:
220,087 SF PAVEMENT ASSUMING 1" OF SNOWFALL = 220,087 SF X 1" = 220,087 CF OF SNOW TO BE STORED
ASSUMING A 5:1 COMPACTION OF SNOW PILES - 220,087 CF / 5 = 44,017 CF OF SNOW PILES
ASSUMING THE PILE HEIGHT WILL BE 5', 44,017 CF / 5' = 8,803 SF OF SNOW STORAGE NEEDED
16,000 SF IDENTIFIED ON THE PLAN FOR SNOW STORAGE



Proposed Multi-Family Housing Project
401 Mount Support Road
Lebanon, New Hampshire

No.	Revision	Date	Appr.

Designed by SJH	Checked by DHF
Issued for	Date
Permitting	February 10, 2020

Not Approved for Construction

Drawing Title

Overall Site Plan

**Agenda
Planning Board
October 12, 2021**

**Agenda Item #3C
Public Hearing Items**

**Alice Peck Day
Memorial Hospital,
10 Alice Peck Day Drive
(Tax Map 90, Lot 59),
zoned R-3
PB2021-28-SPR**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 12, 2021 Meeting

Staff Memorandum – PB2021-28-SPR

APPLICATION INFORMATION

Agenda Item: 3.C

Application ID: PB2021-28-SPR

Application Type:

Site Plan Review for a proposed building addition to the APD hospital

Property Location & Tax Map:

10 Alice Peck Day Drive (Tax Map 90, Lot 59)

Applicant / Property Owner:

Alice Peck Day Memorial Hospital

Property Size:

+/-21.37 acres (per City Assessor's records)

Existing Use & Improvements:

Hospital (a conforming use in the R-3 District per Section 310.2 of the Zoning Ordinance)

Proposed Use:

Construct a +/-5,500 sq. ft. building expansion; existing hospital use to continue

Zoning District:

Residential Three (R-3)

Overlay Districts:

Wetlands Conservation District

Future Land Use Map:

Medical Office

LEGAL NOTICE

Alice Peck Day Memorial Hospital, 10 Alice Peck Day Drive (Tax Map 90, Lot 59), zoned R-3: Request for Site Plan Review to construct a +/- 5,590 sq. ft. addition to the hospital, together with associated site work including a new loading dock, renovated sidewalks, and an expanded courtyard. PB2021-28-SPR

PLANS AND APPLICATION MATERIALS

- ▶ Application form
- ▶ Letter from Nicholas Fiore, P.E., of Engineering Ventures, PC, dated September 27, 2021 (project description; 1 page)
- ▶ Application for Waivers (2 pages)
- ▶ Site Plan Review Regulations Technical Checklist (10 pages)
- ▶ Memo from Nicholas Fiore, P.E., of Engineering Ventures, PC, dated September 27, 2021 (response to staff comments; 8 pages)
- ▶ Plan set titled "Alice Peck Day Memorial Hospital Central Sterile Reprocessing (CSR) Addition," prepared by Engineering Ventures, PC, dated September 13, 2021, last revised September 27, 2021, Project Number: EV 21284 (16 Sheets) ("Plan Set")

On-line only (not included with Planning Board hard copy agenda packets):

- ▶ Lighting Specifications by Cooper Lighting Solutions for Lumark XTOR Crosstour LED wall pack and McGraw-Edison Impact Elite LED wall mount luminaire, and by Lithonia Lighting for D-Series DSXF2 LED floodlight (13 pages)
- ▶ Drainage plans, analysis, and calculations (19 pages); and Stormwater Appurtenance Inspection and Maintenance Manual (6 pages)

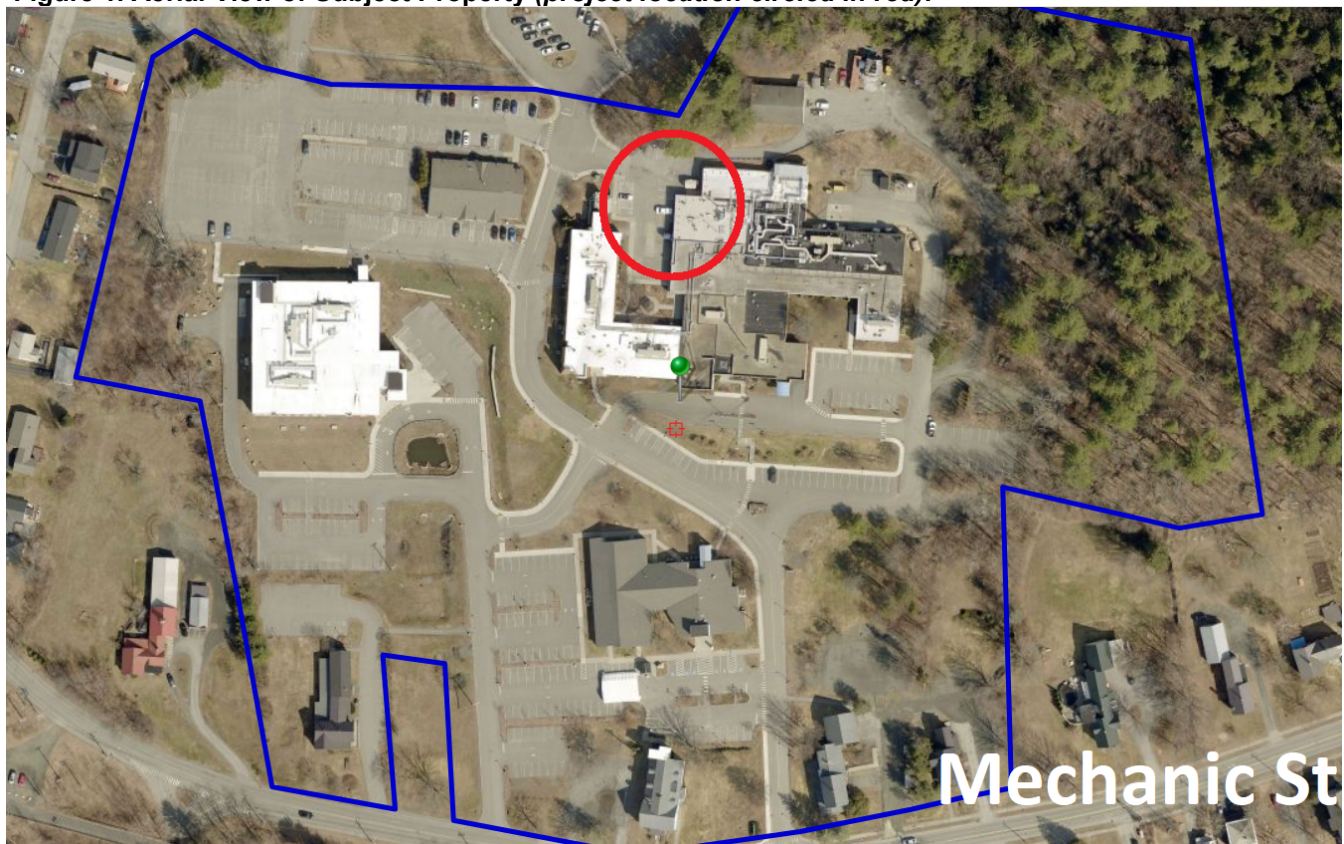
COMPLETENESS REVIEW

In order to accept jurisdiction and commence review of the applicant's proposal, the Planning Board must first determine that the application is complete as required by NH RSA 676:4, I(c)(1). The Planning and Development Department has reviewed the application for compliance with the Site Plan Review Regulations and recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

The applicant has requested waivers from certain submission requirements set forth in Article V, and from certain design requirements set forth in Article VI, as described in the attached Application for Waivers. Pursuant to Section 4.7.D, staff has made a preliminary determination that the requested waivers meet the standards of Section 7.1 ("Waiver of Regulations"). Prior to making a completeness determination, however, staff recommends that the Board first consider the applicant's waiver requests from the submission requirements of Article V of the Site Plan Review Regulations. *If the Board is inclined to deny any such waiver request, a finding that the application is incomplete would then be appropriate.* The Article V requirements that the applicant has requested waivers from include:

- 5.1.E.5 (current survey),
- 5.1.E.7 (requiring information relating to properties, buildings, and features within 200 ft. of the site),
- 5.1.E.8 (requiring depiction of natural features including delineation of wetlands),
- 5.1.E.16 (requiring a landscaping plan), and
- 5.1.E.17 and 18 (stormwater data and design requirements).

Figure 1. Aerial View of Subject Property (project location circled in red).



©2021 Eagleview

APPLICATION OVERVIEW

The subject property is a +/-21.08 acre parcel owned by the applicant, which currently houses the Alice Peck Day Memorial Hospital and related facilities. As described in the attached letter from Nicholas Fiore, P.E., of Engineering Ventures, PC, dated September 27, 2021, the applicant is proposing to construct a +/- 5,590 sq. ft. addition to the west side of the main hospital in order to install a new loading dock and to create space to centralize the hospital's central sterile reprocessing facilities. The approximate area of the proposed expansion is circled in red in Figure 2 below.

Mr. Fiore's letter further describes the project as follows:

"The addition will replace asphalt and concrete parking and loading spaces. The parking spaces are rarely if ever used due to the delivery actives in this area. Additional site work will include revised sidewalks, reclaiming asphalt to create new lawn space, replacing 4 dumpsters with 2 compactors, and creating a loading dock and a dedicated secondary delivery/loading zone. In total the project will result in a 2,280 square foot reduction in impervious surfaces. Building mounted lighting will be added to property illuminate new doorways and the loading dock.

All water and sewer services will connect to existing lines in the hospital building. One stormwater line will be replaced where it will exist under the addition. With the reduction in impervious surfaces, no new stormwater features are included with this project."

Figure 2. Bird's Eye View of Project Area (looking east).



©2021 Eagleview (image taken 4/4/2021)

STAFF COMMENTS

PLANNING

I. SITE PLAN REVIEW REGULATIONS:

Planning Board approval of the proposed project is required pursuant to Section 3.1.C of the Site Plan Review Regulations which requires site plan review for the construction of building additions of 1,000 gross sq. ft. or more.

Waiver Requests

Pursuant to Section 7.1 ("Waiver of Regulations"), the applicant has requested several waivers from the Article V submission requirements, as noted above under Completeness Review. In addition, the applicant requests waivers from certain provisions of Article VI ("Design and Construction Requirements") of the Site Plan Review Regulations as set forth in the attached Application for Waivers and as listed below:

- **Partial Waiver of Article VI design requirements** – The project only encompasses are relatively small portion of the property. However, the Site Plan Review Regulations apply to the entire lot and not just the portion of the property that the applicant proposes to redevelop. Therefore, the applicant is requesting a general waiver from having to comply with any of the Article VI design requirements outside of the specific area of the lot proposed to be redeveloped.
- **Section 6.2** – *landscaping design requirements*
- **Section 6.6** – *stormwater management and design requirements*

Pursuant to Section 7.1 of the Site Plan Review Regulations, the Board may grant a waiver of any part of the Regulations if it finds, by majority vote, that either:

- A. Strict conformity would pose an unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and intent of the regulations; or
- B. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.

The applicant's basis for each waiver request is described in the attached Application for Waivers. Note that the granting of a waiver from a design requirement does not relieve an applicant from making the improvements that are depicted on the approved site plan, even if the depicted improvement would have been covered by the waiver had it not been included on the approved site plan.

SECTION 5 –SUBMISSION REQUIREMENTS

5.1 (Drawings and Other Submittals): The applicant has provided the attached materials in accordance with the submission requirements of Section 5.1 of the Site Plan Review Regulations. Please see the attached letter from Engineering Ventures, PC, dated September 27, 2021, for a discussion of the project, and the Application for Waivers for an explanation of the requested waivers.

SECTION 6 – DESIGN AND CONSTRUCTION REQUIREMENTS

6.1 (General Requirements): The site is zoned Residential Three (R-3) and is located in a residential neighborhood. A portion of the site along the western side of the property directly abuts a residential neighborhood, though a 50 ft. utility easement along that portion of the site provides a buffer between the structures. A hospital use is permitted in the R-3 district, which includes any subsidiary structures located on the same lot as the primary facility, including clinics, medical offices, laboratories, and support buildings.

6.2 (Landscaping Standards): As shown on Sheet 9 (“Surface Changes Exhibit”), the applicant proposes to install shrubs on the north side of the compactors (although actual installation will depend on whether this area has ledge), and the area currently occupied by a driveway to the west of the compactors will be seeded following removal of the driveway pavement. The applicant has otherwise requested a waiver from the requirement to submit a landscaping plan (Section 5.1.E.16) and from the landscaping design requirements (Section 6.2).

6.4 (Fees and Assessments in Effect at time of Connection): New construction will be subject to the City’s Impact Fee Ordinance and fee schedule adopted by the Board on August 13, 2018.

6.5 (Coordination of Roads, Parking, Loading, Recreation, and Safety): The project will result in a net loss of 9 parking spaces; however, as shown on the Parking Summary table on the cover sheet of the Plan Set, the number of on-site parking will still exceed the minimum required per Section 607 of the Zoning Ordinance.

6.6 (Stormwater Management): A portion of the existing access drive to the north of the hospital will be removed. Overall, the project will result in a net decrease of +/-2,280 sq. ft. of impervious coverage. The applicant has provided drainage calculations but otherwise requests a waiver from the stormwater management and design requirements (Sections 5.1.E.16 & 17 and Section 6.6). Staff is not opposed to the waiver request.

6.7 (Lighting): The applicant has submitted a lighting plan in accordance with Section 5.1.E.12 of the Site Plan Review Regulations and the lighting design standards set forth in Section 6.7 (except as noted below). The type and location of lighting fixtures are shown on the lighting plan (which is Sheet 14 of the Plan Set). However, it is not clear whether the lighting fixtures depicted are all new or whether any are existing. Staff recommends that the Lighting Fixture Schedule is revised to identify the number of proposed lighting fixtures by type and to make any other necessary notations to clarify whether any of the lighting fixtures depicted are already installed.

The Lighting Fixture Schedule should also be amended to identify the mounting height and color correlated temperature (CCT) as required by Section 5.1.E.13. With respect to CCT, the lighting specifications provided with the application materials indicate that each lighting fixture will have a CCT of 4,000 K or higher. Staff recommends that the applicant submit new lighting specifications demonstrating that all proposed outdoor lighting will have a color correlated temperature (CCT) of 3000 Kelvin (K) or less as required by Section 6.7.B.9.

6.8 (Off-Site Improvements): The applicant does not propose any off-site improvements.

6.9 (Premature and Scattered Development): This section provides that the Planning Board “may disapprove a site plan application that proposes development that is scattered or premature, so as to involve danger or injury to health, safety, or prosperity of the community. For purposes of this section, a development shall be considered scattered or premature if it will cause, or poses an undue risk of causing, a substantial or appreciable adverse impact upon any of the factors or parameters set forth in the General or Specific Purposes of Site Plan Review, as outlined in Sections 1.4 and 1.5 of these Regulations.” Staff does not recommend a finding that the development is scattered and premature as such a finding would appear to be without basis.

6.10 (Additional Regulations for the Lebanon Downtown District): Not applicable.

II. ZONING ORDINANCE:

The proposed use of the site complies with the zoning regulations of the Residential Three (R-3) District.

CITY ASSESSOR

No comment at this time.

BUILDING INSPECTOR

No comment at this time.

ENGINEERING/PUBLIC WORKS

No comment at this time.

FIRE DEPARTMENT

No comment at this time.

POLICE DEPARTMENT

No comment at this time.

STAFF RECOMMENDATIONS

If the Planning Board moves to approve this request, then based on the information reviewed by City staff, the Planning and Development Department recommends that the Planning Board approve the application with the conditions noted below.

Conditions to be Satisfied Prior to Application for a Building Permit

1. Prior to the start of any construction activities on the property, the applicant shall provide two (2) revised plans sets depicting the following revisions to the satisfaction of the Planning & Development Department and the City Engineer, as follows:
 - a) Revise the Lighting Fixture Schedule on the lighting plan to identify (i) the number of new lighting fixtures by type of lighting fixture, (ii) the mounting height of each fixture, and (iii) the CCT for each lighting fixture in conformance with the standards set forth in Section 6.7.B.9.
 - b) Remove architectural renderings and update table of contents on cover sheet and the plan set pagination.

The applicant shall provide the Planning and Development Department with one (1) full size copy of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for archival purposes.

2. The applicant shall submit new lighting specifications demonstrating that all proposed outdoor lighting will have a color correlated temperature (CCT) of 3000 Kelvin (K) or less. (6.7.B.9).
3. The applicant shall obtain approval from the City Council or the City Manager's office for any additional water and/or sewer flows in accordance with the applicable Chapter 136 and 182 of the City Code.

4. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Subdivision Regulations.
5. The applicant shall schedule and hold a pre-building permit application meeting with the Planning and Development Department, City Building Inspectors, City Engineer/Department of Public Works, and Fire Department, in order to help streamline the building permit review process and to review applicable code requirements.

Conditions to be Satisfied Prior to the Issuance of a Building Permit

6. The development shall be subject to City of Lebanon Impact Fees, pursuant to Section 213 of the Zoning Ordinance. The Impact Fee shall be calculated at the time of Building Permit issuance based on the Impact Fee Schedule adopted on August 13, 2018. In accordance with RSA 674:39, the approved site plan shall be exempt from any future changes in impact fees and methodology for five years from the date of approval; however, any building permits which are issued after the end of that five-year period shall be fully subject to whatever impact fees and methodology are in effect at the time of building permit issuance.
7. All water and sewer fees shall be paid.
8. All water and sewer fees shall be paid as set forth in City Code Chapter 68.
9. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required State approvals.

Conditions to be Satisfied Prior to the Issuance of a Certificate of Occupancy

10. The impact fee calculated pursuant to Condition of Approval #6 shall be paid.
11. All improvements depicted on the plan shall be completed, and shall be constructed as depicted on the approved plan, including any modifications to the plan as may be approved by the Planning Board in accordance with the Site Plan Review Regulations.

General Conditions

12. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.

Attachments

cc: Shawn Courtemanche, Alice Peck Day Memorial Hospital (via e-mail)
Nicholas Fiore, P.E., Engineering Ventures, PC (via e-mail)
File

**CITY OF LEBANON
APPLICATION FOR**

SPECIAL EXCEPTION	☐	☒ SITE PLAN REVIEW
VARIANCE	☐	☐ SUBDIVISION
MOTION FOR REHEARING	☐	☐ LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☐ CONDITIONAL USE PERMIT

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: ALICE PECK DAY MEM HOSPITAL TEL.#: 603-308-0235

MAILING ADDRESS: 10 ALICE PECK DAY DR LEBANON, NH 03766

E-MAIL ADDRESS: SHAWN D. COURTEMANCHE <courtemanches@apdmh.org>

CO-APPLICANT, AGENT, OR LESSEE:

NAME: ENGINEERING VENTURES, PC TEL.#: 603-727-7029

MAILING ADDRESS: 85 MECHANIC ST, SUITE E2-3, LEBANON, NH 03766

E-MAIL ADDRESS: NICHOLAS A. FIORE, PE <nikf@engineeringventures.com>

PROJECT LOCATION:

TAX MAP #: 90 LOT#: 59 PLOT #: ZONE: R3

STREET ADDRESS OF PROJECT: 10 ALICE PECK DAY DR LEBANON, NH 03766

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

A 5,590+/- SF ADDITION TO THE HOSPITAL'S NORTHWEST CORNER, PLUS INTERIOR RETROFITS.

SITE WORK INCLUDES A NEW LOADING DOCK, RENOVATED SIDEWALKS AND AN EXPANDED COURT YARD.

TYPE OF OCCUPANCY:

EXISTING ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
IF USE IS **COMMERCIAL** OR **INDUSTRIAL**, PLEASE NOTE **SPECIFIC**
USE: MEDICAL CENTER

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on _____, 20____, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: Alice E Mooney DATE: 9/13/21

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: Alice E Mooney DATE: 9/13/21

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #

September 27, 2021

City of Lebanon Planning Board
Attn: Tim Corwin, Senior Planner and Zoning Administrator
51 North Park St
Lebanon, NH 03766

RE: Site Plan Review Application
Alice Peck Day Memorial Hospital CSR Addition
Tax Map 90 Lot 59

Dear Chair Garland and the City of Lebanon Planning Board,

On behalf of Alice Peck Day Memorial Hospital (APD), Engineering Ventures (EV) is pleased to submit the enclose Site Plan Review application package for APD's Central Sterile Reprocessing (CSR) addition. The project is located near the northwest corner of the existing main hospital building and is infill work in that portion of the site. The 1-story addition is approximately 5,590 square and will include a new loading dock in addition the centralizing the hospitals CSR facilities. The project will not result in any new employee, and therefore will generate no new traffic. Construction is scheduled to commence in the Fall of 2021 and be substantially complete in the Summer of 2022.

The addition will replace asphalt and concrete parking and loading spaces. The parking spaces are rarely if ever used due to the delivery actives in this area. Additional site work will include revised sidewalks, reclaiming asphalt to create new lawn space, replacing 4 dumpsters with 2 compactors, and creating a loading dock and a dedicated secondary delivery/loading zone. In total the project will result in a 2,280 square foot reduction in impervious surfaces. Building mounted lighting will be added to property illuminate new doorways and the loading dock.

All water and sewer services will connect to existing lines in the hospital building. One stormwater line will be replaced where it will exist under the addition. With the reduction in impervious surfaces, no new stormwater features are included with this project.

We look forward to review this project with you and the City staff on September 20. In the meantime, please do not hesitate to call or email if you have any questions or need additional information.

Sincerely,
ENGINEERING VENTURES, PC



Nicholas A. Fiore, PE
Project Manager/Principal
Direct: (603) 727-7029

Enc: Application Form, Certified Notification List, Application for Waivers, Technical Checklist, witten responses to staff comments, Lumark lighting spec sheet, McGraw-Edison lighting spec sheet, Lithonia lighting spec sheet, HydroCAD report for rain garden, Stormwater maintenance manual.



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Alice Peck Day Memorial Hospital

Project Name: CSR Addition

Project Address: 10 Alice Peck Day Drive, Lebanon, NH 03756

WAIVER REGULATIONS

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

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

OR

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

WAIVER REQUEST(S)

I (we) hereby request a Waiver from:

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

5.1.E(5)

1. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

This request is for a waiver from the certified boundary information of this Section. A field survey of the property was conducted in 2010 and updated in 2015, however the surveyor did not provide a certified boundary survey at that time. The provided boundary information was from prior surveys. This project is on a very small portion of the entire property and is well within the setbacks. Conducting a boundary survey would require a significant portion of the project's budget and yield no discernible difference on the project plans. The project will have no effect of any rights-of-way, easements, or boundaries on the property.

5.1.E(7)

2. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

This request is for the portion of the Section requesting the shape, size, height, and locations of all buildings within 200 feet of the site. The shape and location of the building nearest the project limits, Harvest Hills, is provided. The property next-nearest the project work is over 500 feet from the project's limits. The project work is well within the scale of existing site features and is not visible from any other building within 200 feet of the work.

- 5.1.E(8)
3. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____
- This request is from the wetland scientists' seal and signature on the plans and the US Army Corps documentation. Wetlands do exist on the property, but not within 200 foot of the project area. The wetlands were delineated by NH certified wetland scientists, but for other projects paid for by other budgets. Tracking down and providing seals and signatures and the US Army Corps documentation would be a financial burden to the project and yield no discernible difference on the plans.
- 5.1.E(9)
4. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____
- The requested information is provided for the properties and rights-of-way abutting the subject lot. Properties that are non-abutting but within 200 feet of the subject property are over 600 feet from the project's limits. The project work is well within the limits and scale of existing site features and is not visible from properties and rights-of-way surrounding the site..
- 5.1.E(16) / Section 6.2
5. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____
- The project site is bounded on three sides by buildings, parking, driveways, and walkways so there is limited space for landscaping. Some plantings will be added along the norther edge of the project limits. No perimeter landscaping will be impacted.
- 5.1.E(17)
6. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____
- The requested information is provided for the subject property, but the project will have no physical or measurable effects on City storm drainage facilities adjacent to of within 200 feet of the subject property.
- 5.1.E(18) / Section 6.6
7. Section ____ of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____
- Most of the requested stormwater management information is provided. The total site work is 12,844+/- sf. The project will convert 3,085 sf from asphalt/concrete to landscaping and a new rain garden will provide treatment for another 2,196 sf of impervious surface for a total of 41% of the sites impervious areas. This meets Section 6.6.G.2.(a). The project reduces the sites impervious area by 2,280 sf but the total site work is only 1.32% of the entire property. The combination ensures that run-off rates from the site will not increase, but the difference will be so small it is not measurable by stormwater modeling methods.
8. Section All of the (circle one) **Site Plan Review** / Subdivision Regulations. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____
- This project is limited to a relatively small portion of a large property. The Applicant request a general waiver from having to satisfy the Site Plan Review Regulations outside the portion of the property that is proposed to be redeveloped.

SIGNATURE

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

Signature of Applicant:  Date: 09/27/2021

CITY OF LEBANON, NH SITE PLAN REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: ALICE PECK DAY CSR ADDITION	
APPLICANT: ALICE PECK DAY MEM HOSPITAL	DATE: 09/13/2021
GENERAL SUBMISSION REQUIREMENTS:	

All applications to the Planning Board for Site Plan Review must be submitted by 12:00 Noon on the day of the filing cutoff. [§4.7.B] Submissions must be accompanied by the following information or review of the application may be delayed:

A properly completed and signed Application Form *(available at www.lebanonnh.gov)*. [§5.1.A]

The appropriate filing fees. [§5.1.B]

A written project description. [§5.1.C]

A list of the names and mailing addresses of all persons to be notified, by certified mail, of the public hearing. [§5.1.D]

A completed and signed Application for Waivers *(available at www.lebanonnh.gov)* [§5.1.G.3]

A completed and signed Technical Checklist *(available at www.lebanonnh.gov)*. [§4.7.B]
[Applicants must complete the entire checklist to ensure that all necessary information and materials have been provided with the application or that written requests for waivers have been properly provided in accordance with Article VII of the Site Plan Review Regulations, as appropriate.]

Two (2) full-size sets of the Site Plan set. [§5.1.E]

A digital copy of the Site Plan set in .PDF format. [§5.1.F]

NOTE: Applications shall contain sufficient information to enable the City Staff and the Planning Board to evaluate the proposed development for compliance with the Zoning Ordinance, the Planning Board's Regulations, and other applicable City Codes, and for the Planning Board to make an informed decision.

All required application materials shall be submitted as a single inclusive package, including any appropriate waiver requests as permitted by the Regulations. Submission of a complete application package ensures that the review process by City Staff is as efficient and effective as possible.

The purpose of the filing deadline is to provide adequate time for City review of the proposal. Submission of any altered, additional, or substitute application materials required by Article V of these Regulations, subsequent to the filing deadline, other than as directed by City Staff, shall cause the application to be deemed untimely filed, and such application shall not be heard until a subsequent month.

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

PLAN SUBMITTAL TECHNICAL CHECKLIST:

NOTE: Site plan drawings shall include the information described below pursuant to Article V of the Lebanon Site Plan Review Regulations. Plans shall be submitted on sheets no larger than 24" x 36". Plan sets with multiple sheets shall include sheets of uniform size and be bound on the left edge. When more than three (3) sheets are required, an additional cover sheet shall be attached including a table of contents. A scale of not smaller than one (1) inch equals 40 feet is suggested. All lettering shall be of a size and type that is legible.

In order to facilitate the use of the City's Geographic Information System (GIS) for planning purposes, all surveys and engineered plans submitted for Site Plan Review shall utilize the NH State Plane Coordinate system and shall reference the North American Vertical Datum of 1988 (NAVD 88), unless prior approval to use an alternate coordinate system and/or vertical datum is granted by the Planning & Development Department.

A written request for waiver shall be required, pursuant to Article VII of the Site Plan Review Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§5.1.G(4)] NOTE: The submission requirements described in paragraphs 5.1.E(1) through 5.1.E(4) shall not be waivable under the procedures of Article VII of the Site Plan Review Regulations. [§5.1.E]

[Checklist begins on following page]

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

[illegible]

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(6) - Existing and proposed grades, including topographic contours with spot elevations, (referenced to USGS or FEMA Flood Insurance Rate Map datums, as appropriate) prepared by a professional engineer or land surveyor licensed in NH. (Where grades are less than 20%, contours shall be at 2 ft. intervals; otherwise they shall be at 5 ft. intervals.)	☒	☐
5.1.E(7) - Shape, size, height, and location of all existing structures located on site and within 200 feet of site.	☐	☒
5.1.E(7) - Elevation views indicating shape, size, height, and location of all proposed structures, including expansions of or additions to existing buildings. Such elevation views shall provide sufficient detail to allow for review by the Board and City staff of the adequacy of proposed access and egress points, walkways, lighting, and other site-related improvements.	☒	☐
5.1.E(8) - Location of existing natural features such as streams, marshes, lakes, ponds, wetlands, rock outcrops, or wooded areas, and existing man-made features such as roads and structures. Indicate those natural and man-made features that are to be removed, retained, or altered.	☒	☐
5.1.E(8) - Wetlands on the property, if any, shall be delineated by a NH Certified Wetlands Scientist, whose seal and signature shall appear on the plan. Documentation in the form of U.S. Army Corps of Engineers New England District Wetlands Delineation Data Sheets and/or other field notes and materials concerning the delineation shall be submitted.	☐	☒
5.1.E(9) - Zoning District, Tax Map and Lot number, and use of abutting properties within 200 feet of property.	☐	☒
5.1.E(9) - Location of streets, pedestrian paths/trails, and bicycle routes within 200 feet of the site boundary; and the location of curb cuts and vehicle accesses within 200 feet of the site boundary.	☐	☒
5.1.E(10) - Proposed streets, driveways, emergency vehicle accesses, parking spaces, and sidewalks, with indication of dimensions and direction of travel. Show required sight distances at curb cuts and dimensions for the inside radii of all curves.	☒	☐
5.1.E(10) - Vehicle and bicycle parking spaces shall be numbered.	☒	☐
5.1.E(10) - Loading spaces and facilities used in connection with any structures on the site shall be shown	☒	☐
5.1.E(10) - Total square footage and percentage of the lot covered by impervious cover shall be shown.	☒	☐
5.1.E(11) - Parking area safety measures including raised crosswalks/speed tables, signage, walkway lighting, striping and similar markings such as dedicated pedestrian/bicycle crossings and lanes through parking areas, fire lanes, compact and/or electric vehicle parking/charging, parking wayfinding, ADA signage and access aisles.	☒	☐
5.1.E(12) - Size and location of all existing and proposed public and private utilities. <i>(Note: the applicant is encouraged to submit a Sewer Use Permit Application and obtain a Notice of Permitted Allocation, and to obtain a Water Use Permit prior to submission of the Site Plan Review application.)</i>	☒	☐

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(13) - Plan for outdoor lighting showing proposed location, mounting height, fixture type, lamp type, color correlated temperature (CCT), and wattage of all exterior free-standing lighting or building-mounted fixtures.	☒	☐
5.1.E(13) - Analyses and illuminance-level diagrams, to include average and minimum foot-candle measurements, showing that proposed installation conforms to the lighting-level standards in Site Plan Review Regulations.	☒	☐
5.1.E(13) - Manufacturer's specification information for each proposed light fixture and lamp (NOTE: This information may be provided on the plan or as a separate attachment).	☒	☐
5.1.E(13) - Drawings of all relevant building elevations showing location and height of all building-mounted fixtures, illumination levels of walls or architectural features, and aiming points for any remote light fixtures.	☒	☐
5.1.E(14) - Plan for location of free-standing or building-mounted signs, including location, mounting, aiming, and shielding of any remote light fixtures for externally-lit signs.	N/A	☐
5.1.E(14) - For internally-lit signs, relevant information concerning the method of illumination and the opacity of the sign background, showing that the proposed installation conforms to the requirements of the Regulations.	N/A	☐
5.1.E(15) - 100-yr flood elevation, floodway, and floodplain limits, where relevant.	N/A	☐
5.1.E(16) - Landscaping plan showing proposed new plantings to be installed and existing natural vegetation to be retained. Plan shall show in detail the number, size (height and/or caliper), and species (botanical and common names) of all proposed shrubs and trees.	☐	☒
5.1.E(16) - Existing trees over 12 inches in diameter (measured 4.5 feet above ground surface) within 25 feet of the disturbed area, must be counted and shown on the plan, if included towards fulfilling landscaping requirements.	N/A	☐
5.1.E(16) - Calculations for square footage of perimeter landscaping.	☐	☒
5.1.E(16) - Parking lot shading calculations shall be provided by depicting new trees and shrubs at 10-year crown size.	☐	☒
5.1.E(17) - Existing and proposed surface and subsurface storm drainage facilities, including City storm drainage facilities located within 200' of site.	☒	☐
5.1.E(17) - Plans for retention, detention, slow release, and treatment of storm water shall be provided, where necessary.	☐	☒
5.1.E(17) - Drainage plans prepared by a professional engineer registered in NH, whose seal and signature shall appear on plan(s).	☐	☒
5.1.E(18) - Section 6.6. Stormwater Management submission requirements.	See Stormwater Checklist	
5.1.E(19) - Plans for snow removal and storage.	☒	☐
5.1.E(20) - A plan for the development showing provisions for automobile, transit, bicyclist, and pedestrian access and circulation. Such plan shall show both existing and proposed means of access to the site including connections with, public streets, sidewalks, transit stops, and formal paths/trails. Plans shall include any traffic calming and traffic control devices necessary in conjunction with the site development, as well as the location of all existing transit routes and transit stops located or passing within 1/4 mile (1,320 feet) of the property.	☒	☐

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(21) - Construction detail drawings including, but not limited to, pavements, walks, steps, curbing, drainage structures, water and/or sewer utilities, ground-mounted signage (e.g., fire lanes, ADA parking, commercial), surface treatments, transit shelters, energy generation units (e.g., solar), bike rack style, electric vehicle charging, outdoor lighting, outdoor furniture, retaining walls, tree boxes and other site systems or structures. Accompanying specifications and cutsheets may be required.	☒	☐
5.1.E(21) - Where applicable, roadway, drainage, water and sewer utility profile drawings shall be provided at a scale of 1"=40 feet (horizontal) and 1"=4 feet (vertical) and typical cross-section drawings shall be provided at a scale of 1"=5 feet (horizontal and vertical), unless prior approval is granted by the City Engineer.	N/A	☐
5.1.E(22) - Depict any current and proposed easements, rights-of-way, and deed restrictions including those related to sewer, electrical utility, shared access, etc.	☒	☐
5.1.E(23) - For multi-family structures, plans for on-site recreational facilities.	N/A	☐
5.1.E(24) - Plans for fire protection including emergency vehicle turn radius diagrams, if requested by the Lebanon Fire Department.	☐	☐
Supporting Documents and Information, Where Applicable	Info. Provided	Not Applicable
5.1.G(1) - An estimated timetable, to include phasing schedules, for construction and completion of buildings, parking, facilities, landscaping, and other required improvements.	☒	☐
5.1.G(2) - Any development estimated to generate a net increase of 100 peak hour trips or 1,000 average daily trips (based upon the most current edition of the ITE Trip Generation Manual) shall prepare and submit a Traffic Impact Study in accordance with standard traffic analysis conventions as set forth by the NHDOT. The Board may, at its discretion, require the submission of a Traffic Impact Study for developments estimated to generate less than 100 peak hour trips or 1,000 average daily trips if the Board has reason to believe such development could adversely affect levels of service or have other adverse impacts.	☐	☒
5.1.G(3) - Written requests for waivers from all applicable provisions of these Regulations shall be provided pursuant to Article VII - "Waiver Procedure". (note: use <i>Application for Waivers</i> form).	☒	☐
5.1.G(4) - For multi-family dwelling developments and mixed-use developments resulting in a net increase of 50 dwelling units or more, the application shall include the information and impact statements identified in Section 6.9.B.	☐	☒

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO ARTICLE V OF THE SITE PLAN REVIEW REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: Nicholas A. Fiore - Engineering Ventures

(Last Revised 4/19/2021)

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

CITY OF LEBANON, NH STORMWATER REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME:	
APPLICANT:	DATE:

NOTE: Stormwater plans shall include the information described below pursuant to Article VI of the Lebanon Site Plan Review Regulations. Plans shall be submitted on sheets no larger than 24" x 36". Plan sets with multiple sheets shall include sheets of uniform size and be bound on the left edge. When more than three (3) sheets are required, an additional cover sheet shall be attached including a table of contents. A scale of not smaller than one (1) inch equals 40 feet is suggested. All lettering shall be of a size and type that is legible.

In order to facilitate the use of the City's Geographic Information System (GIS) for planning purposes, all surveys and engineered plans submitted shall utilize the NH State Plane Coordinate system and shall reference the North American Vertical Datum of 1988 (NAVD 88), unless prior approval to use an alternate coordinate system and/or vertical datum is granted by the Planning Office.

A written request for waiver shall be required, pursuant to Article VII of the Site Plan Review Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§6.6.I]

[Stormwater checklist begins on following page]

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

[illegible]

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
g. Plan references and notes (including sequence of soil disturbance) h. Proposed and existing public and private utilities i. Proposed project components to become property of or the responsibility of the City shall be labeled as such j. Existing and proposed impervious cover, with areas used to calculate effective impervious cover (EIC, as defined herein) clearly identified and the square footage of each type identified and labeled. k. Test Pit(s) locations and data where stormwater practices are proposed, as appropriate. l. Details of individual design elements shown on separate plan sheets following the Proposed Conditions SMP. The Existing Conditions SMP & the Proposed Conditions SMP shall be provided on sheets no larger than 24" x 36", at a scale of one (1) inch = 20 feet for urban areas, and one (1) inch = 40 feet for non-urban areas. The City Engineer will make the final determination as to the appropriate scale, ensuring that all important site and hydrologic features are easily recognized. If plan shall encompass more than two (2) sheets, at the required 1:40 or 1:20 scale, a separate large scale representation plan sheet (e.g. 1:100) is required to be provided, so as to show entirety of site, as well as off-site contributing areas.	☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐
6.6.C.2 - In addition to the above described SMP plan sheets, the following SMP supplemental information is required: 1. A drainage analysis that includes calculations comparing pre- and post-development stormwater runoff rates (cubic feet per minute) and volumes (cubic feet) based on a 1-inch rainstorm, and the 2-year, 25-year, 50-year, and 100-year, 24-hour frequency storms. Calculations shall include, but not be limited to, the sizing of all structures and BMPs, including sizing of emergency overflow structures based on the 50-year 24-hour frequency storm discharge rate, with 1-foot of free-board. Storm rates shall be based on current design depths from the Northeast Regional Climate Center - http://precip.eas.cornell.edu. <i>Any site that was primarily wooded in the last five years shall be considered undisturbed woods Any site from which wooded vegetation has been removed within 5 years prior to the first submission to the planning board with respect to a proposed development, or upon which, at some earlier time, clearing has occurred in anticipation of development, shall be treated as undisturbed woodland for purposes of calculating pre-development runoff volumes. For purposes of this paragraph any tree cutting which occurred without leaving stands of healthy, growing trees within areas near waters and highways, as required by RSA 227-J:9, I, shall be presumed to have occurred in anticipation of development</i>	☐	☐

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

Plan Requirements (cont.)	Info. Provided	Waiver Sought
2. A drainage analysis results summary tabulated (pre & post) for each proposed outfall or catchment outlet point including runoff rates and volumes for each storm event analyzed above.	☐	☐
3. An Erosion and Sediment Control Plan for all proposed construction activities in accordance with the NH Stormwater Management Manual Volume 3, (December 2008 or current revision; downloadable from the website)	☐	☐
4. A comprehensive Operation and Maintenance Plan for long-term maintenance of all proposed stormwater management elements and BMPs including the proposed schedule of inspections and anticipated maintenance (see section H.2 Operations & Maintenance Plan for detailed requirements).	☐	☐
<u>6.6.D</u> - Phased Development: For phased developments, the plans and calculation requirements under this section (6.6) shall apply as though the development of the entire parcel were being proposed in one single application. The review and approval process for phased development applications is provided in section 4.9 of the Lebanon Site Plan Regulations.	☐	☐

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO ARTICLE VI OF THE SITE PLAN REVIEW REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: _____

(Last Revised 04/19/2021)

Planning office Use Only:

Date Received ___/___/___ Checklist Complete YES or NO Checked by: _____

208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • Tel: 802-863-6225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • Tel: 603-442-9333
414 Union Street, Schenectady, NY 12305 • Tel: 518-630-9614

Date: September 27, 2021

To: Tim Corwin, City of Lebanon Senior Planner and Zoning Administrator

From: Nicholas A. Fiore, PE

Re: 10 Alice Peck Day Dr - PB2021-28-SPR - Staff Comments

Tim,

Thank you for providing written comments on the Alice Peck Day CSR site plan review application. Responses are presented below. In general, staff comments are in *italics* and EV's responses follow in [blue](#). I would be more than happy to discuss any of these items with you in more detail if you so desire.

A. Engineering Comments

1. *Please clarify what impacts, if any, the project will have on the existing concrete duct bank located within the proposed building footprint. Will there be a need to relocate or provide additional protection associated with the proposed building construction/building foundation construction?*

The duct bank will stay in place as is. Test pits were dug to determine the exact location and dimensions of the duct bank and the building and its foundation is designed around the duct bank.

2. *Please show on the site plan how the roof drainage/stormwater runoff will be managed and/or conveyed.*

Roof drainage will be provided via roof drains plumbed to storm pipe D2 on sheet C-202 Grading and Drainage Plan.

3. *The Applicant should demonstrate and provide any required written documents, calculations, memos or descriptions to ensure the Planning Board and City staff that the requirements of Section 6.6.G and H are satisfied with the proposed project.*

The project is seeking a waiver from Sections 6.6. Most of the requested stormwater management information is provided. The total site work is 12,844+/- sf. The project will convert 3,085 sf from asphalt/concrete to landscaping and a new rain garden will provide treatment for another 2,196 sf of impervious surface for a total of 41% of the sites impervious areas. This meets Section 6.6.G.2.(a). The project reduces the sites impervious area by 2,280 sf but the total site work is only 1.32% of the entire property. The combination ensures that run-off rates from the site will not increase, but the difference will be so small it is not measurable by stormwater modeling methods.

An exhibit sheet C-SK1 is included in the plan set and depicts the various changes in surfaces the project will bring; i.e. asphalt changed to landscaping, asphalt changed to building, etc.

A HydroCAD model of the rain garden is included with these revised submittal materials to show that it does not overtop in a 100-year event.

A Stormwater Appurtenances Inspection and Maintenance Manual is included with these revised submittal materials.

4. *Is the design intent that the concrete pad for the compactors be constructed in accordance with the concrete sidewalk details? If not, construction details for the compactor pad should be included within the plan set.*

Detail 1/C-301 notes that sidewalk paving is to be 4" thick and the compactor pad is to be 6" thick. All other elements of their construction will share the same specifications.

5. *The plan set includes a detail for a yard drain, however, there does not appear to be a yard drain called out on the site plan. In addition, the site plan calls for a catch basin, but there does not appear to be a catch basin detail included within the plan set. Please address.*

Call out D1 on C-201 was misidentified as a catch basin. It will be a yard drain and the call out is corrected on C-202.

B. Planning Comments

General

1. *Please remove Section 5.1.G.1 from the Application for Waivers (5.1.G.1 now requires a construction timeline whereas it formerly related to drainage/stormwater management requirements).*

Section 5.1.G.1 has been removed from the Application for Waivers.

2. In addition to the waivers you've already identified on the Application for Waivers, it appears a waiver or partial waiver is also required from the following requirements of the Site Plan Review Regulations:

- a. *5.1.E.7 – Requiring the plans to depict the size and height all existing structures within 200 feet of the site.*

The revised Application for Waivers includes this waiver request.

- b. *5.1.E.9 - Requiring the plans to indicate the use of abutting properties within 200 feet of the site boundary; the locations of streets, pedestrian paths/trails, and bicycle routes within 200 feet of the site boundary; and the location of curb cuts and vehicle accesses within 200 feet of the site boundary.*

The revised Application for Waivers includes this waiver request.

- c. *5.1.E.15 - Requiring the plans to show the location and boundaries of any Overlay Districts established pursuant to Article IV of the Zoning Ordinance, including the Wetlands Conservation District (I would recommend adding this to your 5.1.E.8 waiver request).*

5.1.E.15 states “The 100-year flood elevation, floodway, and flood plain limits, where relevant.” None of these features exist on the site so they are not relevant and do not require a waiver.

5.1.E.4.e.(14) requests the listing of “... any City Overlay Districts pursuant to Article IV of the Zoning Ordinance ...” in the Zoning Table, and such information is provided as requested.

- d. *5.1.E.20 – Requiring plan for the development showing provisions for automobile, transit, bicyclist, and pedestrian access and circulation. Such plan shall show both existing and proposed means of access to the site including connections with, public streets, sidewalks, transit stops, and formal paths/trails. Plans shall include any traffic calming and traffic control devices necessary in conjunction with the site development, as well as the location of all existing transit routes and transit stops located or passing within 1/4 mile (1,320 feet) of the property.*

The Advance Transit Red Line route and its stops within 1/4 miles of APD is now included on the “Lebanon GIS Map” vicinity map on sheet C-000. It is EV’s understanding that with this addition 5.1.e.20 is satisfied and a waiver is not required.

- e. *6.2 – landscaping requirements (I would recommend adding this to your 5.1.E.16 waiver request).*

The revised Application for Waivers includes this waiver request.

- f. *Any other requirements identified in the comments below that remain unaddressed. Please provide an updated Application for Waivers.*

This resubmittal package includes a revised Application for Waivers

3. *Please identify how the project complies with Section 6.5.E of the Site Plan Review Regulations (groundwater protection).*

This project will comply with Section 6.5.E and protect groundwater in two primary ways:

- a. The project will not introduce any new uses or increased traffic to the site, therefore no new contaminants will be brought to the site.
- b. The project will result in a decrease of impervious surfaces which will result in additional infiltration and groundwater recharge.

4. Staff recommends providing vehicle turning movement diagrams, or adding them to the plan, as we discussed at our meeting today.

The revised plan set now includes sheet C-203 Vehicle Staging Exhibits to show how vehicle will access the various elements of the site.

5. *Provide an estimated timetable for construction and completion of buildings, parking facilities, landscaping, and other required improvements, and briefly address impact on traffic/trip generation (5.1.G.1 and 5.1.G.2)*

Construction is scheduled to commence in the Fall of 2021 and be substantially complete in the Summer of 2022. The project will not result in any new employee, and therefore will generate no new traffic. These statements are included in the revised cover letter accompanying the application materials.

6. *Staff recommends separating the utilities and grading from the site plan (Sheet 7) and providing a separate utilities and grading plan.*

The revised plan set moves the utility and grading information on to a new sheet C-202.

7. *Please review the site layout with the Building Inspector to confirm that applicable ADA accessibility standards and requirements are satisfied.*

The project team is attempting to setup a meeting with the Building Inspector with the goal of getting any ADA accessibility standards and requirements are satisfied prior to the 10/12 PM meeting.

8. *Staff recommends including an exhibit showing an outline of the proposed addition overlaid onto an aerial photography. This can also, or instead, be part of the applicant's presentation at the 10/12 PB meeting.*

The suggestion is well taken and we shall strive to accommodate it at the 10/12 PB meeting.

9. *For greater legibility and ease of use, please increase the font size of the "Page ___ of 14" text in the bottom right hand of corner of each plan sheet.*

The font size is doubled and the position improved on the revised plan set.

10. *Please remove Sheets 12 and 13 (ES-3 and A-101) and include as separate exhibits instead (and update that table of contents on the cover sheet accordingly). Consider noting that these plans are conceptual only.*

ES-3 is removed from the revised plan set. A-101 is still included but noted as conceptual only. We did not want to present A-101 as a separate smaller plan in order to maintain its legibility.

Plan Set Comments

Sheet 1 / C-000

11. *Please add the "Parking Calculations" table that was included on Sheet 2 of the approved site plan set for the APD multi-specialty clinic (PB2015-23-SPR), also prepared by Engineering Ventures.*

- a. *Please note that in addition to updating the table to take into account the current project, the table should also be updated to identify the maximum allowed parking per Section 607.3.A of the Zoning Ordinance. (5.1.E.4.e(5))*

A parking calculations table is included on the revised C-000. With multiple buildings and parking lots on site, and the parking lots not assigned to buildings, the table associates parking with buildings simply on proximity. The maximum allowed parking is presented on the whole for the property in a note to the table. Due to the disassociation of parking and buildings, it did not seem prudent to list a maximum for each building.

12. *Regarding the "Zoning Chart" table:*

- a. *Please add the following information as required by Section 5.1.E.4.e:*
- *5.1.E(4)(e)(6) Number of existing & proposed short- & long-term bicycle storage spaces*

Bicycle parking spaces is now presented on the 21st line of the Zoning Chart of the revised C-000.

- 5.1.E.4.e(12) and 5.1.E.10 - The total square footage (in addition to percentage) of existing and proposed lot/impervious coverage

The was presented in the 13th line of the Zoning Chart on the original plans and is in the 22nd line of the Zoning Chart of the revised C-000.

- b. Please identify the following information for (1) the hospital building and (2) collectively for all other buildings on the property:

- Building footprint (5.1.E.4.e(12))
- Gross floor area (5.1.E.4.e(4))
- For the hospital building, provide gross floor area for each story
- Building height (5.1.E(4)(e)(8))
- Number of stories (5.1.E(4)(e)(9))

The revised Zoning Table is rearranged to reflect this request.

- c. Change use from “medical center” (which is not a permitted use in the R-3 District) to “hospital”

The Zoning Chart has been changed accordingly.

Sheet 2 / C-001

13. Please try to clarify Survey Notes 1 and 2 and Map References 1 and 2, as well as the information provided on the Application for Waivers with respect to the requested waiver from Section 5.1.E.5. It's not clear if a survey is being used or not to prepare the plan, and if so, what that survey is. Is the “field survey” different from the “record mapping”, and are they different than the “current boundary survey” noted in the Application for Waivers, and are these different than the survey identified in Map Reference?

- a. In addition, please add more identifying information to the survey being used including date of preparation, or for example, Pathways Consulting project no. for map reference 2.

These notes are presented as they were written by the surveyor. EV does not feel it is our place to changes them. A “field survey” is a survey of the physical features on the site; curbs, catch basins, parking lots, buildings, etc., plus ground shots to get elevations the topographic information to create contours on the maps. A “boundary survey” is a survey of a site's property lines. In order to be called a “Boundary Survey” it must adhere to certain standards set fourth by State of New Hampshire. “Record mapping” is a map recorded in the Grafton Registry of Deeds. It could be a Boundary Survey, or an ALTA Survey (which requires more than a Boundary Survey), or easement mapping.

A field survey of the property was conducted in 2010 and updated in 2015, and the site designs are based on that.

14. Ideally, a customized legend would be included with each plan sheet. However, if using a general legend, please remove symbols that do not appear anywhere in the plan set.

A master legend near the front of the plan set is an architecture and engineering industry standard. Providing customized legends for each sheet would require a large amount of time to get 100% correct, far more time than any benefit it may provide. It would also consume a large portion of the plan sheets, too much to leave room for the plan in some cases.

15. *Please confirm that the abutters information is current and accurate.*

The abutters information on the revised plans is accurate as coordinated with City Planning Department staff.

Sheet 3 / C-100

16. The notation used to mark the setback lines does not appear to match the legend on Sheet 2.

The setback lines on the revised plans match the legend on C-001.

17. *Please be sure that all easements on the property are identified and that the name and mailing address of the easement holder is identified. (5.1.E.2). Please note that this requirement is non-waivable. It appears, therefore, that Survey Note 7 on Sheet 2 of the plan set should be removed.*

All known easements on the property are shown and labeled C-100. The names and mailing addresses of the easement holders are included in the revised Abutters List on C-001. Survey Note 7 on C-001 is very much applicable and it is best for it to stay in place.

18. A waiver has been requested from the wetland delineation requirement, however, some (or all?) of the wetlands on the property are identified. Please identify/add a note indicating the source of the wetlands delineations and whether – to the best of the plan preparer’s knowledge – if they are accurate and comprehensive.

The waiver request is for a wetland scientists’ seal and signature on the plans and the US Army Corps documentation. The wetlands were delineated by NH certified wetland scientists, but for other projects paid for by other budgets.

A note stating the delineations are accurate and comprehensive, to the best of our knowledge, is included on sheet C-100.

19. *Are contours referenced to USGS datum? (5.1.E.6)*

It is EV’s understanding that the survey is referenced to NAVD 1988.

Sheet 4 / C-101

20. *Please consider adding color to some of the layers to help with legibility.*

This suggestion is well taken, but it will take some time and iterations to get a color scheme that helps with legibility but doesn’t go so far as to cause added confusion.

Additionally, the plans approved by the Planning Board should be the same as the ones used by contractors in the field. Plotting full size sheets in color is very expensive and not a cost owners or contractors will likely be willing to incur. Selecting a color scheme that plots equally well in color and black-and-white adds to the challenge. Relying on changing color schemes depending on the audience only invites opportunities for errors.

We will work towards this for future submissions, or possibly the 10/12 PB meeting. The removal of underground utilities from the revised plan should do well to help with legibility.

Sheet 6 / C-200

21. *The notation used to mark the setback lines does not appear to match the legend on Sheet 2.*

The setback lines on the revised plans match the legend on C-001.

Sheet 7 / C-201

22. *As we discussed, please consider removing utilities and grading information (contours and spot grades) to a separate sheet. For the benefit of the Planning Board members and the site plan review process, it is helpful to have an easy-to-read site plan sheet that primarily shows the above-ground proposed physical improvements in the context of the surrounding improvements that aren't proposed to change.*

Utility and grading information is removed from C-201 and now presented on a new C-202. C-202 of the originally submitted plans is now C-204.

23. Consider showing/indicating/describing more clearly how the loading area will function.

The revised plan set now includes sheet C-203 Vehicle Staging Exhibits to show how vehicle will access the various elements of the site.

24. *The existing driveway to the rear of the building will be blocked by the proposed compactors. Consider removing as much asphalt from the dead-end driveway as possible.*

- a. Consider landscaping; add notes on vegetation.

The plans are revised to remove as much asphalt as practical. Some of the driveway is left in place to provide access to air handling units on the hospital's roof. The area will be seeded with a wildlife/conservation mix and 3 trees will be added.

25. *Please show, as best as possible and as applicable, proposed driveways, emergency vehicle accesses, parking spaces, and sidewalks, with indication of dimensions and direction of travel. (5.1.E.10)*

The revised plan set now includes sheet C-203 Vehicle Staging Exhibits to show how vehicle will access the various elements of the site. Additional dimensions have been added to the plans, as have direction of travel arrows.

26. *Please consider adding landscaping to area proposed to be regraded, identified as "C5".*

Some shrubs have been added to this area near the toe of the slope. The plan do note that they will be omitted if the presence of ledge precludes planting them. We felt the toe has the best chance of being ledge free.

27. *Please consider providing a customized legend on this page so that Board members do not have to go back and forth between this sheet and the legend on Sheet 2. Please be sure to identify all lines so that it's clear what is being proposed.*

Please refer to item #14.

28. *Show dimensions for the inside radii of all curves. (5.1.E.10)*

Dimensions are now shown.

29. *Site Schedule note "C6" and Stormwater Schedule note "D6" do not appear on the site plan.*

The revised plan is corrected on both accounts.

30. Note "M2" is not included in the MEP Schedule.

- a. Consider removing feature identified by M2 and adding to separate drainage and utility plan.

The M2 tag and callout are included on the new sheet C-202

31. Please add notes relative to the planting and seeding of disturbed areas.

This information is provided at C-201 Site Note 5, C-201 tag and callout C3, C-301 Detail 13, C-301 Detail 16.

32. Please add the following sections of the Site Plan Review Regulations as plan notes:

- a. 6.2.F.1
- b. 6.2.F.2

The above 2 sections are noted on sheets C-204 and C-301 along with additional erosion control measures.

- c. 6.2.H.1 (first sentence)

This section is included in the revised plan as General Note 17.

- d. 6.2.K

This section is included in the revised plan as General Note 18.

Sheet 10 / ES-1 & Sheet 11 / ES-1

Written responses from the electrical engineer are pending.

e4h
ENVIRONMENTS
FOR HEALTH
ARCHITECTURE

868.781.8441 817.225.1917 1250 E. Cosper Rd., Suite 500, Arlington, TX 76011
©2019 E4H - Environments For Health, LLC e4harchitecture.com



	Zoning Limits	Existing	Proposed Work	Proposed Total	Notes
Zoning District		R3		R3	
Tax Map / Lot #		90 / 59		90 / 59	
Use		Hospital		Hospital	
Area of Lot (acres)	10,000 sf min.	22.4		22.4	1
Building Information					
Footprint - Hospital (sf)		57,801	5,590	63,391	2, 3
Footprint - All Others (sf)		58,275	0	58,275	
Footprint - Total (sf)		116,076	5,590	121,666	
Gross Floor Area - Hospital Level 1 (sf)		57,102	5,590	62,692	2, 3
Gross Floor Area - Hospital Basement (sf)		14,185		14,185	
Gross Floor Area - All Others (sf)		97,684	0	97,684	
Gross Floor Area - Total (sf)		168,971	5,590	174,561	
Building Height - Hospital (sf)	35' max.		17.2'		2
Building Height - All Others	35' max.	Varies. Up to 30'±		Varies. Up to 30'±	
Number of Stories - Hospital		2	1	2	
Number of Stories - All Others		1, 2, & 3		1, 2, & 3	
Building Coverage - Total	25% max.	11.90%	0.57%	12.47%	
Parking Spaces Provided		487	-9	478	4
Parking Spaces Required	554	461	0	461	
Loading Spaces		4 & 1	1 & 1	4 & 2	5
Bicycle Spaces - Short-Term / Long Term		13 / 0	0 / 0	13 / 0	
Impervious Area (sf)		442,283	-2,280	440,003	
Impervious Area (% of lot)		45.3%	-0.23%	45.09%	
Setbacks (ft)					
Front	20'	23'+/-	672'+/-	23'+/-	6
Rear	20'	55'+/-	57'+/-	55'+/-	
Side	15'	51'+/-	567'+/-	51'+/-	
City Overlay Districts		Wetlands	NA	Wetlands	7
NHDES Shoreland Jurisdiction		NA	NA	NA	

1. AREA OF LOT PER 2010 & 2015 SURVEYS BY CHA.
2. PROPOSED BUILDING AREA AND HEIGHT PER E4H ARCHITECTS.
3. EXISTING BUILDING AREAS PER APD.
4. SEE PARKING SUMMARY TABLE FOR ADDITIONAL PARKING TALLY INFORMATION.
5. PRESENTED AS "PATIENT AND DELIVERIES LOADING AND UNLOADING" & "AMBULANCE PARKING SPACES". EXISTING CONDITIONS INCLUDE A PARKING SPACE SHARED BY DELIVERIES AND AMBULANCE. THIS PROJECT WILL FORMALIZE SEPARATE SPACES FOR EACH.
6. EXISTING AND PROPOSED TOTAL SETBACKS ARE TO BUILDINGS NEAREST PROPERTY LINES. PROPOSED WORK SETBACKS ARE FROM CSR ADDITION TO PROPERTY LINES.
7. WETLANDS SUBJECT TO THE CITY'S WETLANDS CONSERVATION DISTRICT EXIST ON THE SUBJECT PROPERTY, BUT NOT WITHIN 200' OF THE PROPOSED WORK.

Use	Independent Variable	Independent Variable Value	Spaces Required	Existing Spaces	Proposed Spaces
Hospital	0.33/bed & 0.33/empl	25 beds & 250 emp	91	99	90
Multi-Specialty Clinic	1/250 sf	44, 734	179	51	51
Medical Office Building	1/250 sf	11, 100	45	175	175
Community Care Center	1/250 sf	15, 300	62	95	95
Women's Care Center	1/250 sf	5, 700	23	24	24
Homestead House	1/250 sf	11, 750	47	13	13
Lacross House	1/250 sf	4, 000	0	13	13
North House	1/250 sf	2, 700	11	10	10
Maintenance Barn	1/1,000 sf	2, 400	3	7	7
		168,971	461	487	478

1. SPACE ALLOCATION IS BASED ON PARKING LOTS CLOSEST TO SPECIFIED BUILDING. PARKING LOTS ARE NOT DESIGNATED OR ASSIGNED TO PARTICULAR BUILDING.
2. HOSPITAL SQUARE FOOTAGE = 71,287SF. PARKING CALCULATIONS ARE BASED ON BEDS AND EMPLOYEES FOR HOSPITALS PER SECTION 607.7 OF THE LEBANON ZONING ORDINANCE.
3. THE MAXIMUM NUMBER OF SPACES PERMITTED = 120% OF THE REQUIRED SPACES.
 $461 \text{ SPACES} \times 120\% = 554 \text{ SPACES}$

TAX MAP 90 LOT 59
CITY OF LEBANON
GRAFTON COUNTY
NEW HAMPSHIRE, 03766

PROPERTY OWNER:
ALICE PECK DAY MEMORIAL HOSPITAL
SHAWN COURTEMANCHE, DIRECTOR OF PLANT OPERATIONS
10 ALICE PECK DAY DRIVE
LEBANON, NH 03766
(603) 308-0325

CIVIL ENGINEER:
ENGINEERING VENTURES, PC
NICHOLAS A. FIORE, PE
85 MECHANIC ST. SUITE B2-2
LEBANON, NH 03766
(603) 442-9333

ARCHITECT:
E4H ENVIRONMENTS FOR HEALTH ARCHITECTS
DEVIN BUSHEY, AIA, NCARB
185 TALCOTT ROAD
WILLISTON, VERMONT 05495
(802) 878-8841

TOPOGRAPHIC SURVEY:
CLOUGH HARBOUR & ASSOCIATES
DAVID STANDING, SURVEYOR
11 KING COURT
KEENE, NH 03431
(603) 357-2445

ELECTRICAL ENGINEER:
RFS ENGINEERING
PHIL CARTER
71 WATER STREET
LACONIA, NH 03246
(603) 524-4647

SHEET	TITLE	CONSULTANT
C-000	COVER SHEET	ENGINEERING VENTURES (1 OF 16)
C-001	SITE LEGEND AND NOTES	ENGINEERING VENTURES (2 OF 16)
C-100	EXISTING CONDITIONS OVERVIEW PLAN	CHAYENGINEERING VENTURES (3 OF 16)
C-101	EXISTING CONDITIONS PLAN	CHAYENGINEERING VENTURES (4 OF 16)
C-102	SITE DEMOLITION PLAN	ENGINEERING VENTURES (5 OF 16)
C-200	SITE OVERVIEW PLAN	ENGINEERING VENTURES (6 OF 16)
C-201	SITE PLAN	ENGINEERING VENTURES (7 OF 16)
C-202	GRADING AND DRAINAGE PLAN	ENGINEERING VENTURES (8 OF 16)
C-SK1	SURFACE CHANGES EXHIBIT	ENGINEERING VENTURES (9 OF 16)
C-203	VEHICLE STAGING EXHIBIT	ENGINEERING VENTURES (10 OF 16)
C-204	EROSION PREVENTION AND SEDIMENT CONTROL PLAN	ENGINEERING VENTURES (11 OF 16)
C-302	SITE DETAILS	ENGINEERING VENTURES (12 OF 16)
C-301	CONSTRUCTION DETAILS	ENGINEERING VENTURES (13 OF 16)
ES-1	SITE LIGHTING CALCULATION	RFS ENGINEERING (14 OF 16)
A-101	CONCEPTUAL FLOOR PLAN	E4H ENVIRONMENTS FOR HEATH (15 OF 16)
A-200	EXTERIOR ELEVATIONS	E4H ENVIRONMENTS FOR HEATH (16 OF 16)

**ALICE PECK DAY MEMORIAL HOSPITAL
CSR ADDITION**

LEBANON, NH

[illegible]

SEAL:	
PROJECT NUMBER:	EV 21284
DATE:	09/13/2021
SHEET TITLE AND NUMBER:	

SITE PLAN REVIEW
-FINAL-
09/13/2021

C-000
Page 1 of 16
COVER SHEET

BENCHMARK	BM	END OF VERTICAL CURVE ELEVATION	EVCE	LIMITS OF CONSTRUCTION	LOC	REINFORCED CONCRETE PIPE	RCP
BEGINNING OF VERTICAL CURVE ELEVATION	BVCE	END OF VERTICAL CURVE STATION	EVCS	LIMITS OF DISTURBANCE	LOD	RIGHT-OF-WAY	ROW
BEGINNING OF VERTICAL CURVE STATION	BVCS	EXISTING	EX	MAXIMUM	MAX	SANITARY	SAN
CAST-IN-PLACE	CIP	EXISTING GRADE/GROUND	EG	MINIMUM	MIN	SANITARY MANHOLE	SMH
CAST IRON	CI	FINISHED FLOOR	FF	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	MUTCD	SEPTIC TANK	ST
CATCH BASIN	CB	FINISHED GRADE/GROUND	FG	MONITORING WELL	MW	SILT FENCE	SF
CENTERLINE	CL	FIELD INLET	FI	MONUMENT	MON	SLOPE	S=
CLEAN OUT	C/O	CENTER	CE	STATION	STA	STATION	STA
CORRUGATED METAL PIPE	CMP	FIELD INLET	FI	NOT IN CONTRACT	NIC	STORM MANHOLE	DMH
CUBIC FEET	CF	FLARED END SECTION	FES	NOT TO SCALE	NTS	TANGENT	TAN
CUBIC FEET PER SECOND	CFS	FOOT, FEET	FT	POINT OF CURVATURE	PC	TANGENT TO CURVE	TC
CUBIC YARD	CY	FOOTING	FTG	POINT OF INTERSECTION	PI	TAPPING SLEEVE AND VALVE	TS&V
DIAMETER	DIA	FUNDATION	FND	POLYETHYLENE, PROFESSIONAL ENGINEER	PE	TEMPORARY BENCHMARK	TBM
DISTRIBUTION BOX	D-BOX	GALLONS PER MINUTE	GPM	PROPERTY LINE	PL	TEST PIT	TP
DUCTILE IRON	DI	GATE VALVE	GV	PERC TEST, POINT OF TANGENCY	PT	TOP OF BANK	TGB
EDGE OF CONCRETE	EOC	HEADWALL	HW	POLYVINYL CHLORIDE	PVC	TOP OF CURB	TOC
EDGE OF GRAVEL	EOG	HEADWALL	HW	POINT OF VERTICAL INTERSECTION	PVI	TOP OF WALL	TOW
EDGE OF PAVEMENT	EOP	HYDRANT	HYD	POND	PND	TYPICAL	TYT
ELECTRIC	ELEC	INTERSECTION	INT	QUANTITY	QTY	VERIFY IN FIELD	VIF
ELECTRIC MANHOLE	EMH	INVERT	INV	QUALITY ASSURANCE	QA	WATER VALVE	WV
ELEVATION	ELEV	IRON PIN	IP	QUALITY CONTROL	QC		
		IRON PIPE SIZE	IPS				
		LENGTH	L=	RADIUS	R=		

PROPOSED FEATURES	EXISTING FEATURES
BOUND	BOUND
BENCHMARK	BENCHMARK
DRILL HOLE	DRILL HOLE
SURVEY POINT	SURVEY POINT
IRON PIN	IRON PIN
TP1	TP1
TEST PIT	TEST PIT
B1	B1
BORING	BORING
P1	P1
PERC TEST	PERC TEST
CATCH BASIN (SQUARE)	CATCH BASIN (SQUARE)
CATCH BASIN (ROUND)	CATCH BASIN (ROUND)
HEADWALL	HEADWALL
FLARED END SECTION	FLARED END SECTION
STONE APRON	STONE APRON
DRAIN MANHOLE (DMH)	DRAIN MANHOLE (DMH)
DRAINAGE CLEAN OUT	DRAINAGE CLEAN OUT
C/O	C/O
SANITARY SEWER MANHOLE (SMH)	SANITARY SEWER MANHOLE (SMH)
C/O	C/O
SANITARY CLEAN OUT	SANITARY CLEAN OUT
HYDRANT	HYDRANT
WATER SHUTOFF	WATER SHUTOFF
TAPPING SLEEVE & VALVE	TAPPING SLEEVE & VALVE
GATE VALVE	GATE VALVE
WELL	WELL
UTILITY POLE	UTILITY POLE
GUY POLE	GUY POLE
ELECTRICAL MANHOLE	ELECTRICAL MANHOLE
FLOOD LIGHT	FLOOD LIGHT
LIGHT POST	LIGHT POST
TELEPHONE MANHOLE	TELEPHONE MANHOLE
NATURAL GAS MANHOLE	NATURAL GAS MANHOLE
COMMUNICATION MANHOLE	COMMUNICATION MANHOLE
BOLLARD	BOLLARD
SINGLE POLE SIGN	SINGLE POLE SIGN
DOUBLE POLE SIGN	DOUBLE POLE SIGN
SPOT ELEVATION	SPOT ELEVATION
ACCESSIBLE PARKING STALL	ACCESSIBLE PARKING STALL
DRAINAGE FLOW	DRAINAGE FLOW
DECIDUOUS TREE	DECIDUOUS TREE
CONIFEROUS TREE	CONIFEROUS TREE

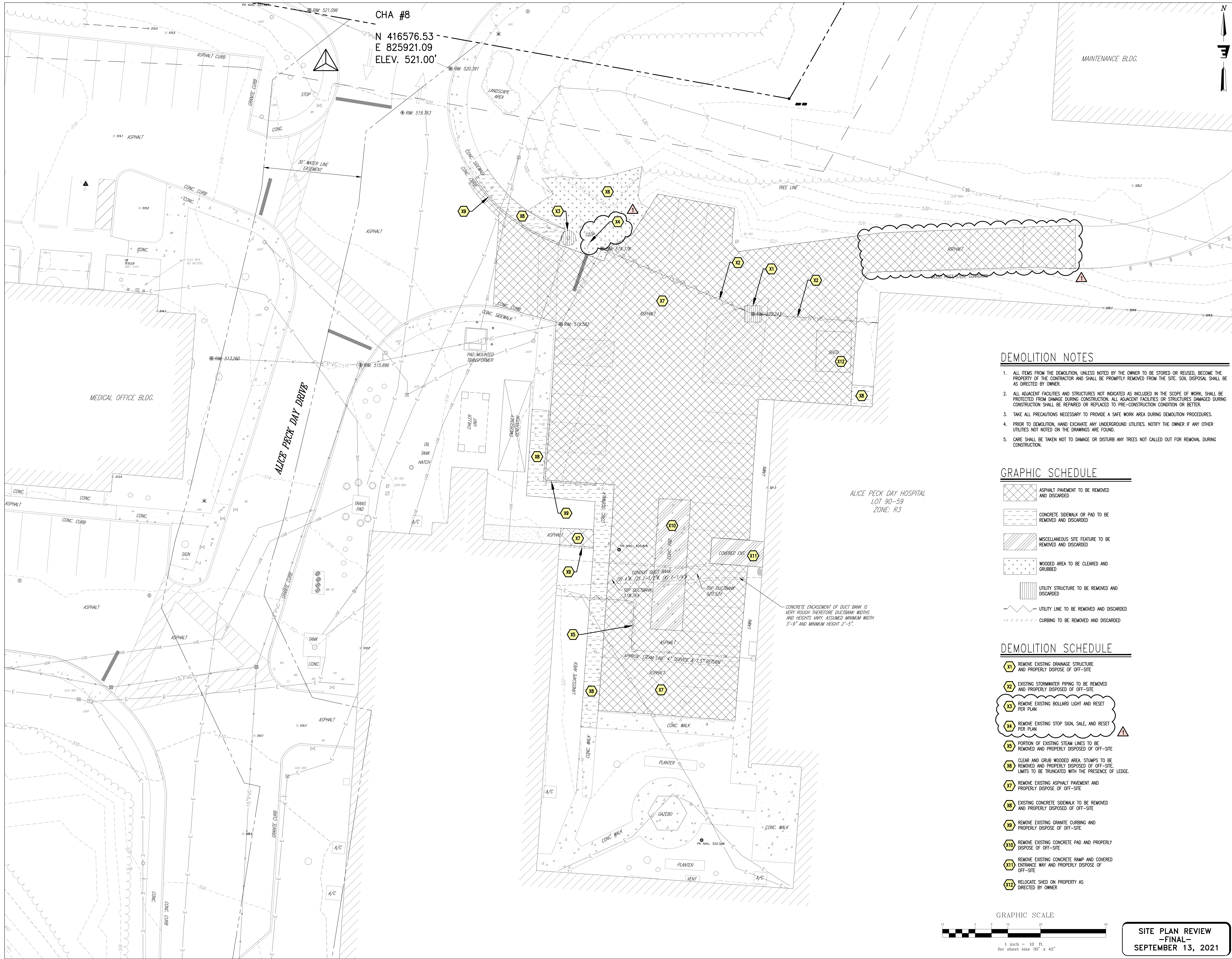
PROPOSED FEATURES	EXISTING FEATURES
100 MAJOR CONTOUR	100 MAJOR CONTOUR
98 MINOR CONTOUR	98 MINOR CONTOUR
EDGE OF RIVER	EDGE OF RIVER
EDGE OF POND	EDGE OF POND
FLOOD PLAIN	FLOOD PLAIN
PROPERTY LINE	PROPERTY LINE
RIGHT OF WAY	RIGHT OF WAY
SETBACK	SETBACK
EASEMENT	EASEMENT
LIMIT OF CONSTRUCTION	LIMIT OF CONSTRUCTION
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
SILT FENCE	SILT FENCE
DEMOLITION WORK	DEMOLITION WORK
CENTERLINE	CENTERLINE
EDGE OF PAVEMENT	EDGE OF PAVEMENT
EDGE OF GRAVEL	EDGE OF GRAVEL
EDGE OF CONCRETE	EDGE OF CONCRETE
CURB	CURB
FENCE (BARBED WIRE)	FENCE (BARBED WIRE)
FENCE (CHAIN LINK)	FENCE (CHAIN LINK)
FENCE (WOODEN)	FENCE (WOODEN)
GUARD RAIL	GUARD RAIL
TREE LINE	TREE LINE
EDGE OF WETLANDS - DELINEATED	EDGE OF WETLANDS - DELINEATED
EDGE OF WETLANDS - APPROXIMATE	EDGE OF WETLANDS - APPROXIMATE
STONE WALL	STONE WALL
SANITARY SEWER	SANITARY SEWER
SANITARY SEWER APPROX.	SANITARY SEWER APPROX.
SEWER FORCEMAIN	SEWER FORCEMAIN
SEWER SERVICE	SEWER SERVICE
DISPOSAL AREA LATERAL	DISPOSAL AREA LATERAL
STORM LINE	STORM LINE
STORM LINE APPROX.	STORM LINE APPROX.
UNDER DRAIN	UNDER DRAIN
FOUNDATION DRAIN	FOUNDATION DRAIN
ROOF DRAIN	ROOF DRAIN
DITCH/SWALE	DITCH/SWALE
TELECOMM	TELECOMM
TELECOMM APPROX.	TELECOMM APPROX.
UNDERGROUND TELECOMM	UNDERGROUND TELECOMM
OVERHEAD TELECOMM	OVERHEAD TELECOMM
ELECTRIC LINE	ELECTRIC LINE
ELECTRIC APPROX.	ELECTRIC APPROX.
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC	OVERHEAD ELECTRIC
ELECTRICAL SITE LIGHTING	ELECTRICAL SITE LIGHTING
WATER LINE	WATER LINE
WATER APPROX.	WATER APPROX.
WATER SERVICE	WATER SERVICE
GAS LINE	GAS LINE
GAS APPROX.	GAS APPROX.
CABLE TV	CABLE TV
UNDERGROUND CABLE TV	UNDERGROUND CABLE TV
OVERHEAD CABLE TV	OVERHEAD CABLE TV
STEAM LINE	STEAM LINE
LOW PRESSURE STEAM	LOW PRESSURE STEAM
HIGH PRESSURE STEAM	HIGH PRESSURE STEAM
HOT WATER	HOT WATER
CHILLED WATER	CHILLED WATER

1. EXACT OBJECT LOCATIONS MAY DIFFER FROM THAT AS SHOWN, AND ADDITIONAL SUB-SURFACE AND SURFACE UTILITIES AND STRUCTURES MAY EXIST. THE CONTRACTOR IS TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK AND TO CALL GIVE SAFE 72 HOURS PRIOR TO ANY DIGGING, DRILLING OR BLASTING.
2. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL FROM THE ENGINEER.
3. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
4. THE CONTRACTOR SHALL REMOVE LAWNS, DRIVEWAYS, CULVERTS, SIONS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR EXPOSED TO EXISTING CONDITIONS OR BETTER AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
6. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, AND CERTIFICATES.
7. THE CONTRACTOR WILL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW HAMPSHIRE STATE LICENSED LAND SURVEYOR.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
10. ALL TRENCH EXCAVATION AND ANY REQUIRED SHELTERING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS FOR CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR Dewatering and the MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
13. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
14. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, MONITORING, MAINTENANCE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AND TAKING PRECAUTIONARY STEPS TO AVOID ANY SEDIMENT TRAP TO NEIGHBORING SITES OR WATERS OF THE STATE.
17. FOLLOWING ANY WARRANTY PERIOD, THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING; TO INCLUDE GRASS AND MULCH, IN GOOD, HEALTHY CONDITION SO AS TO PRESENT A NEAT AND ORDERLY APPEARANCE.
18. AFTER THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE STORAGE, DISPLAY, OR PARKING OF MOTOR VEHICLES, BOATS, MOBILE HOMES, TRAILERS, OR CONSTRUCTION EQUIPMENT WITHIN LANDSCAPED AREAS, BUFFERS, OR SCREENS, SUCH AS SUCH ON THE APPROVED LANDSCAPE PLAN, IS EXPRESSLY PROHIBITED AND A VIOLATION OF THE NOTICE OF ACTION.

1. BASE MAPPING PREPARED BY CHA FROM A JANUARY/MARCH 2010 FIELD SURVEY AND UPDATED FROM A MAY 2015 FIELD SURVEY.
2. PROPERTY LINES SHOWN HEREON ARE FROM RECORD MAPPING AS OVERLaid ON ANY MONUMENTATION OR OTHER EVIDENCE THAT MAY HAVE BEEN LOCATED DURING THE TOPOGRAPHIC SURVEY. A PROPERTY SURVEY WAS NOT PERFORMED BY CHA AND AS A RESULT THE PROPERTY LINES SHOWN ARE APPROXIMATE AND DO NOT DEPICT A PROPERTY/BOUNDARY OPINION.
3. NORTH ORIENTATION IS BASED ON MAP REFERENCE NUMBER 1.
4. ELEVATIONS SHOWN BASED ON THE FINISH FLOOR ELEVATION OF THE COMMUNITY CARE CENTER AS SHOWN ON MAP REFERENCE NUMBER 2.
5. UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES HAVE BEEN SHOWN FROM SURFACE LOCATIONS AND MEASUREMENTS OBTAINED FROM A FIELD SURVEY, AND LOCATIONS OF MARKINGS LEFT BY HENRY CUNNINGHAM UTILITY LOCATION SERVICES, LLC
6. SUBJECT TO ANY FACTS THAT ACTUAL BOUNDARY SURVEY AND/OR ANY STATEMENT OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.
7. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTIONS OF RECORD.

1. MAP ENTITLED "SURVEY PLAT FOR ALICE PECK DAY HOSPITAL" AS PREPARED BY PATHWAYS CONSULTING, LLC.
2. MAP ENTITLED "TOPOGRAPHIC PLAN FOR ALICE PECK DAY MEMORIAL HOSPITAL - COMMUNITY CARE CENTER" AS PREPARED BY PATHWAYS CONSULTING, LLC AND DATED JUNE 10, 2003.

ID	Site Address	Owner Name	Owner Address	Owner City	Owner State	Owner Zip
105-17	149 MASCOMA ST	KILBURN, BARBARA F TTEE	149 MASCOMA ST	LEBANON	NH	03766
105-22	116 MASCOMA ST	HARDENBERG, MARK J & PATRICIA	116 MASCOMA ST	LEBANON	NH	03766
105-23	0 MASCOMA ST	ALICE PECK DAY MEM HOSPITAL	10 ALICE PECK DAY DR	LEBANON	NH	03766
105-26	0 MASCOMA ST	CITY OF LEBANON	51 NORTH PARK ST	LEBANON	NH	03766
106-77	110 MASCOMA ST	WADLINGER, GREGORY D & TRISHA	110 MASCOMA ST	LEBANON	NH	03766
106-78	112 MASCOMA ST	TIN, SARIN & YI, LAI	49 MASCOMA ST	LEBANON	NH	03766
106-80	103 MASCOMA ST	DMINICO, HEIDI LEE &	103 MASCOMA ST	LEBANON	NH	03766
106-81	95 MASCOMA ST	ROBERTS, DENISE K	149 MASCOMA ST	LEBANON	NH	03766
106-82	91 MASCOMA ST	BILLIN, DANIEL H & JANICE A	91 MASCOMA ST	LEBANON	NH	03766
76-4	23 ALICE PECK DAY DR	ALICE PECK DAY LIFE CARE CTR	30 ALICE PECK DAY DR	LEBANON	NH	03766
76-5	0 WORTHEN ST	LEBANON SCHOOL DISTRICT	20 SEMINARY HILL	WEST LEBANON	NH	03784
90-42	14 BOMHOWER ST	JENSSENS INC	27777 FRANKLIN RD #200	SOUTHFIELD	MI	48034
90-42-100	1 MICHAEL ST	MOULTON, BEAU MATTHEW	1 MICHAEL ST	LEBANON	NH	03766
90-42-200	2 MICHAEL ST	FILLEBROWN, KENNETH & LUCILLE	2 MICHAEL ST	LEBANON	NH	03766
90-53	25 PEABODY ST	BOSKIND, JAMESINA L	25 PEABODY ST	LEBANON	NH	03766
90-54	23B PEABODY ST	HAMMOND, ERIC	23B PEABODY ST	LEBANON	NH	03766
90-54-100	23A PEABODY ST	TRUMAN, HEIDI M	23A PEABODY ST	LEBANON	NH	03766
90-55	19 PEABODY ST	MILLER, RODNEY & KAREN	19 PEABODY ST	LEBANON	NH	03766
90-56	15 PEABODY ST	KARKOWSKI, KATIE A	15 PEABODY ST	LEBANON	NH	03766
90-59-70100	117 MASCOMA ST	ALICE PECK DAY MEM HOSPITAL	10 ALICE PECK DAY DR	LEBANON	NH	03766
UTILITY EASEMENT		LIBERTY UTILITIES	407 MIRCUAL MILE	LEBANON	NH	03766
WATER LINE EASEMENT		CITY OF LEBANON PUBLIC WORKS	193 DARTMOUTH COLLEGE HWY	LEBANON	NH	03766



DEMOLITION NOTES

1. ALL ITEMS FROM THE DEMOLITION, UNLESS NOTED BY THE OWNER TO BE STORED OR REUSED, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. SOIL DISPOSAL SHALL BE AS DIRECTED BY OWNER.
2. ALL ADJACENT FACILITIES AND STRUCTURES NOT INDICATED AS INCLUDED IN THE SCOPE OF WORK, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. ALL ADJACENT FACILITIES OR STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO PRE-CONSTRUCTION CONDITION OR BETTER.
3. TAKE ALL PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK AREA DURING DEMOLITION PROCEDURES.
4. PRIOR TO DEMOLITION, HAND EXCAVATE ANY UNDERGROUND UTILITIES. NOTIFY THE OWNER IF ANY OTHER UTILITIES NOT NOTED ON THE DRAWINGS ARE FOUND.
5. CARE SHALL BE TAKEN NOT TO DAMAGE OR DISTURB ANY TREES NOT CALLED OUT FOR REMOVAL DURING CONSTRUCTION.

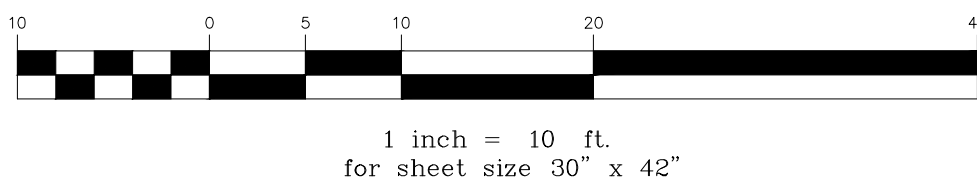
GRAPHIC SCHEDULE

- ASPHALT PAVEMENT TO BE REMOVED AND DISCARDED
- CONCRETE SIDEWALK OR PAD TO BE REMOVED AND DISCARDED
- MISCELLANEOUS SITE FEATURE TO BE REMOVED AND DISCARDED
- WOODED AREA TO BE CLEARED AND GRUBBED
- UTILITY STRUCTURE TO BE REMOVED AND DISCARDED
- UTILITY LINE TO BE REMOVED AND DISCARDED
- CURBING TO BE REMOVED AND DISCARDED

DEMOLITION SCHEDULE

- X1 REMOVE EXISTING DRAINAGE STRUCTURE AND PROPERLY DISPOSE OF OFF-SITE
- X2 EXISTING STORMWATER PIPING TO BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE
- X3 REMOVE EXISTING BOLLARD LIGHT AND RESET PER PLAN
- X4 REMOVE EXISTING STOP SIGN, SALE, AND RESET PER PLAN
- X5 PORTION OF EXISTING STEAM LINES TO BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE
- X6 CLEAR AND GRUB WOODED AREA. STUMPS TO BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE. LIMITS TO BE TRUNCATED WITH THE PRESENCE OF LEDGE.
- X7 REMOVE EXISTING ASPHALT PAVEMENT AND PROPERLY DISPOSE OF OFF-SITE
- X8 EXISTING CONCRETE SIDEWALK TO BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE
- X9 REMOVE EXISTING GRANITE CURBING AND PROPERLY DISPOSE OF OFF-SITE
- X10 REMOVE EXISTING CONCRETE PAD AND PROPERLY DISPOSE OF OFF-SITE
- X11 REMOVE EXISTING CONCRETE RAMP AND COVERED ENTRANCE WAY AND PROPERLY DISPOSE OF OFF-SITE
- X12 RELOCATE SHED ON PROPERTY AS DIRECTED BY OWNER

GRAPHIC SCALE



SITE PLAN REVIEW
-FINAL-
SEPTEMBER 13, 2021

ENVIRONMENTS
FOR HEALTH
ARCHITECTURE

e4h

880 7th Main, 817 228 1917 1901 E. Cooper Rd. Suite 200, Arlington, TX 76010
© 2019 E4H - Environments For Health, LLC e4harchitect.com

ALICE PECK DAY
MEMORIAL HOSPITAL
A Dartmouth-Hitchcock Affiliate

RFS
Engineering

ENGINEERING
VENTURES INC

100 New Street, Suite 100, Lebanon, NH 03756
Tel: 603.443.0300
info@rfs-engineering.com

ALICE PECK DAY MEMORIAL HOSPITAL
CSR ADDITION

LEBANON, NH

REV	DESCRIPTION	DATE
1	SPR STAFF COMMENTS	09/27/2021

SEAL:

PROJECT NUMBER: EV 21284

DATE: 09/13/2021

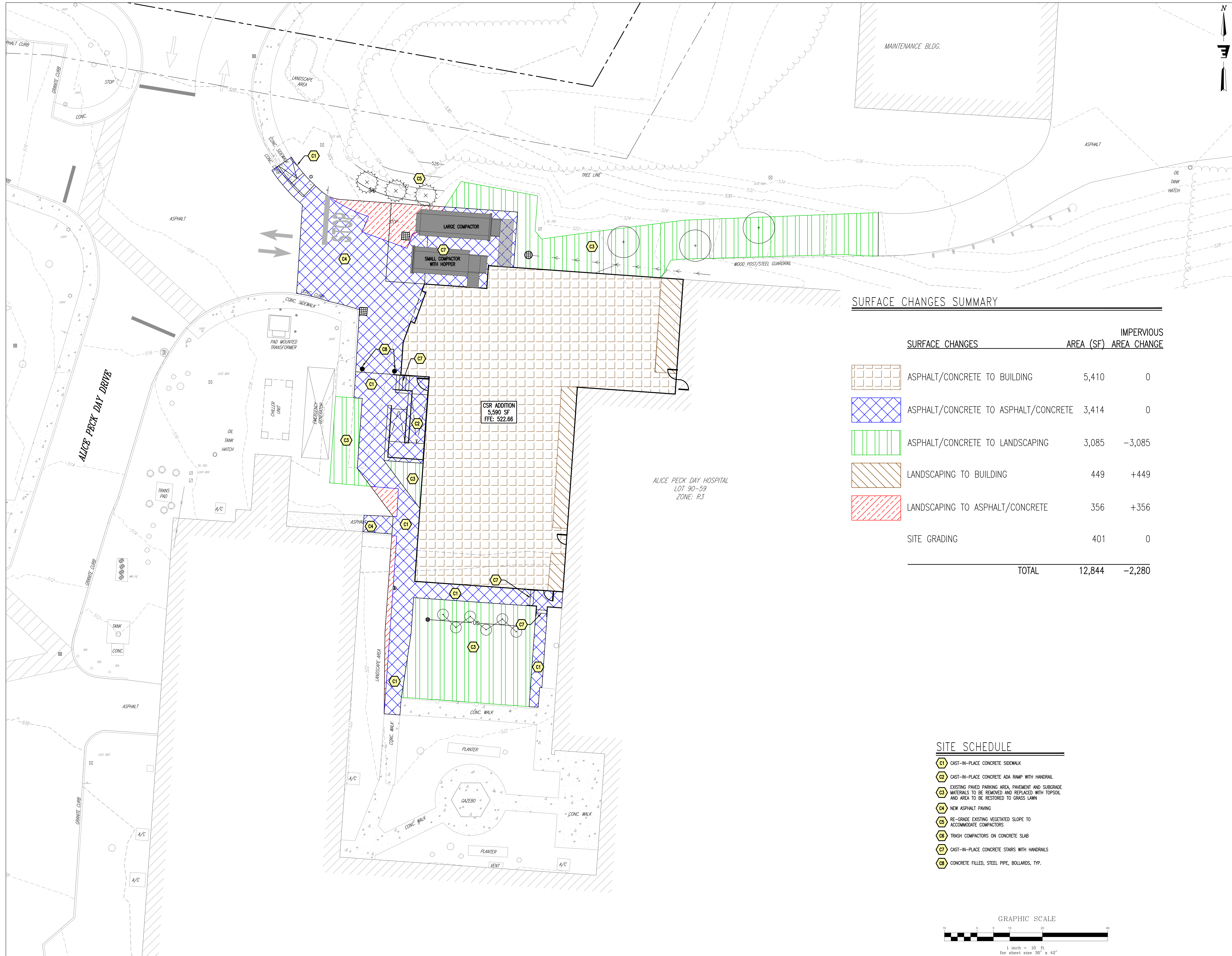
SHEET TITLE AND NUMBER:

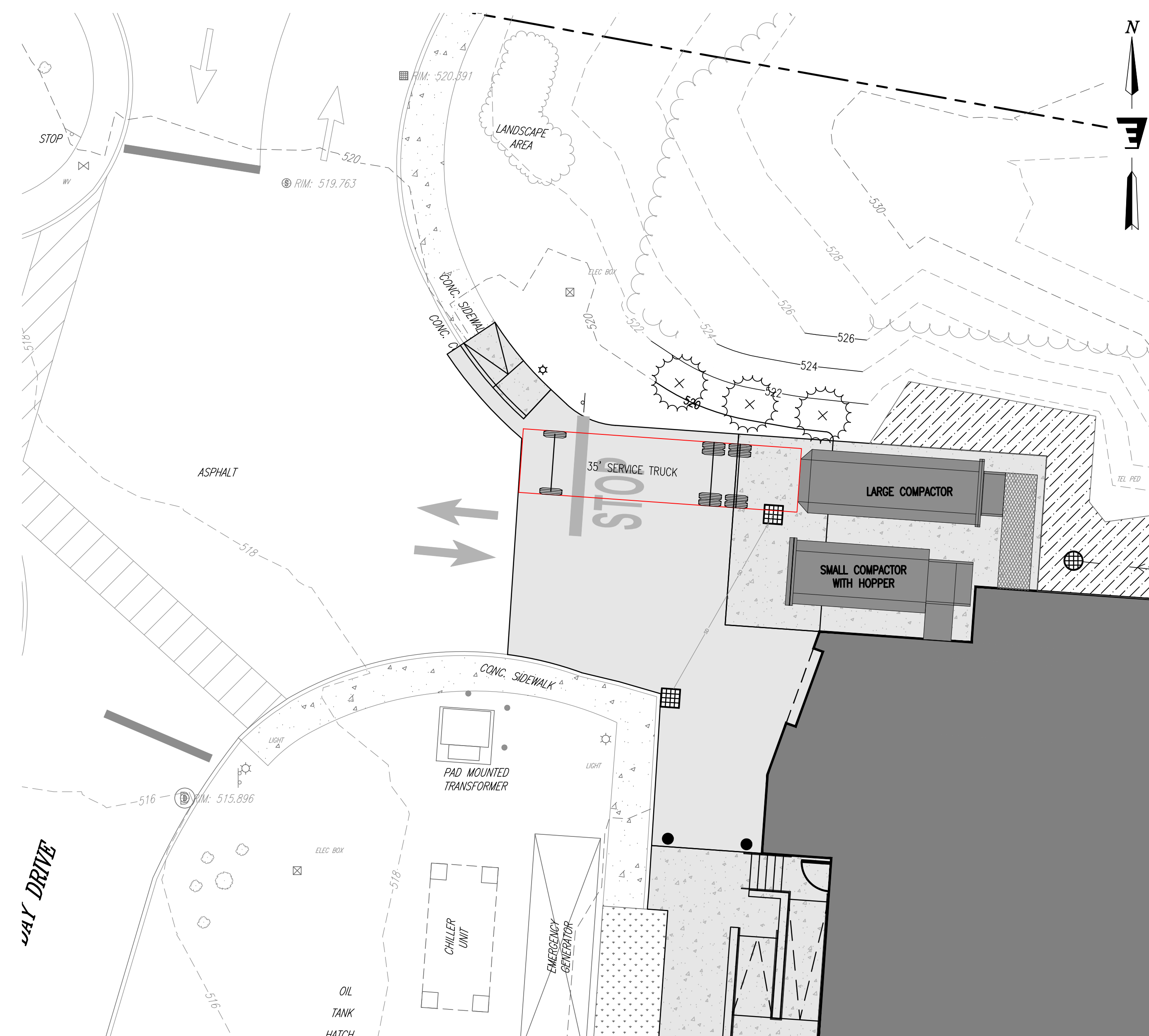
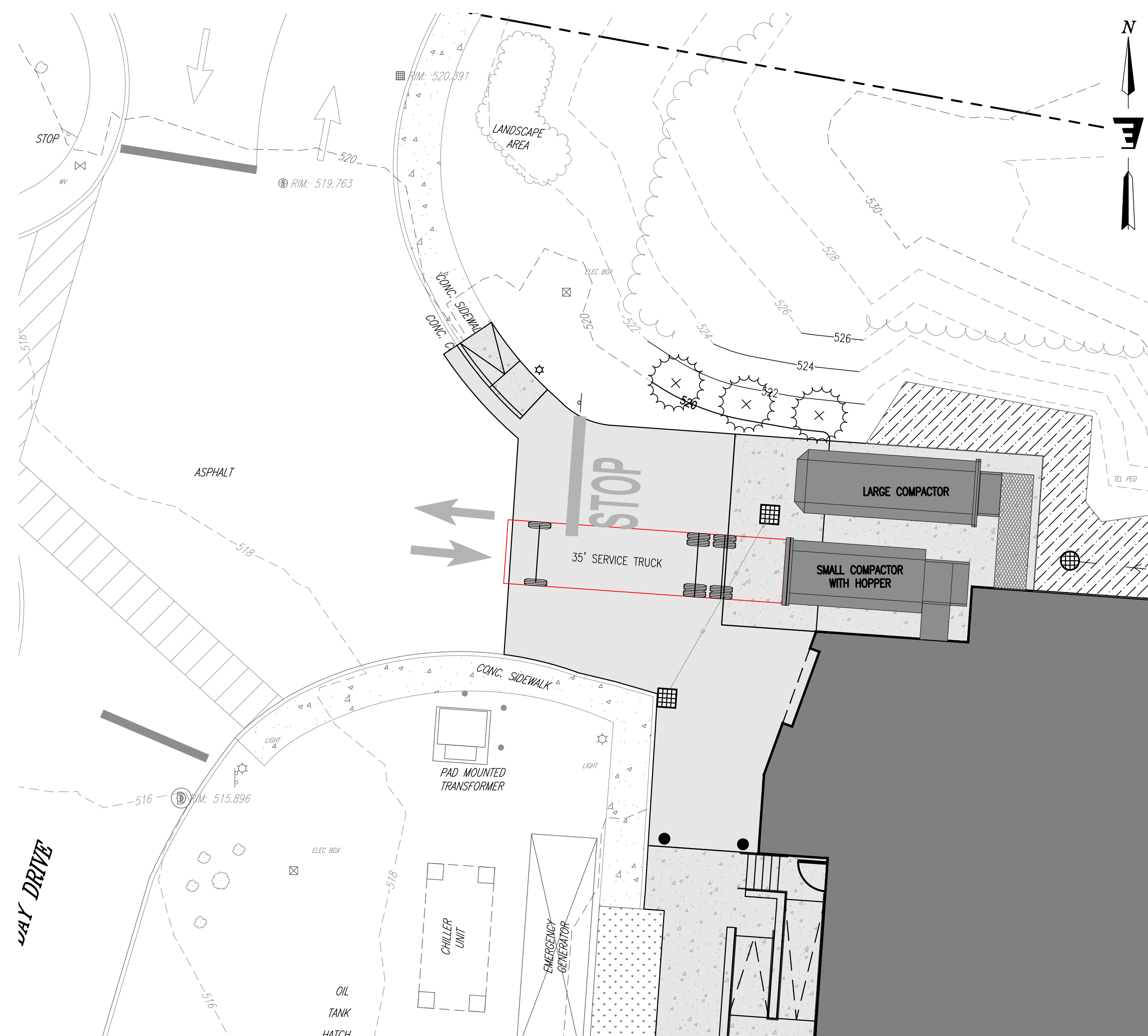
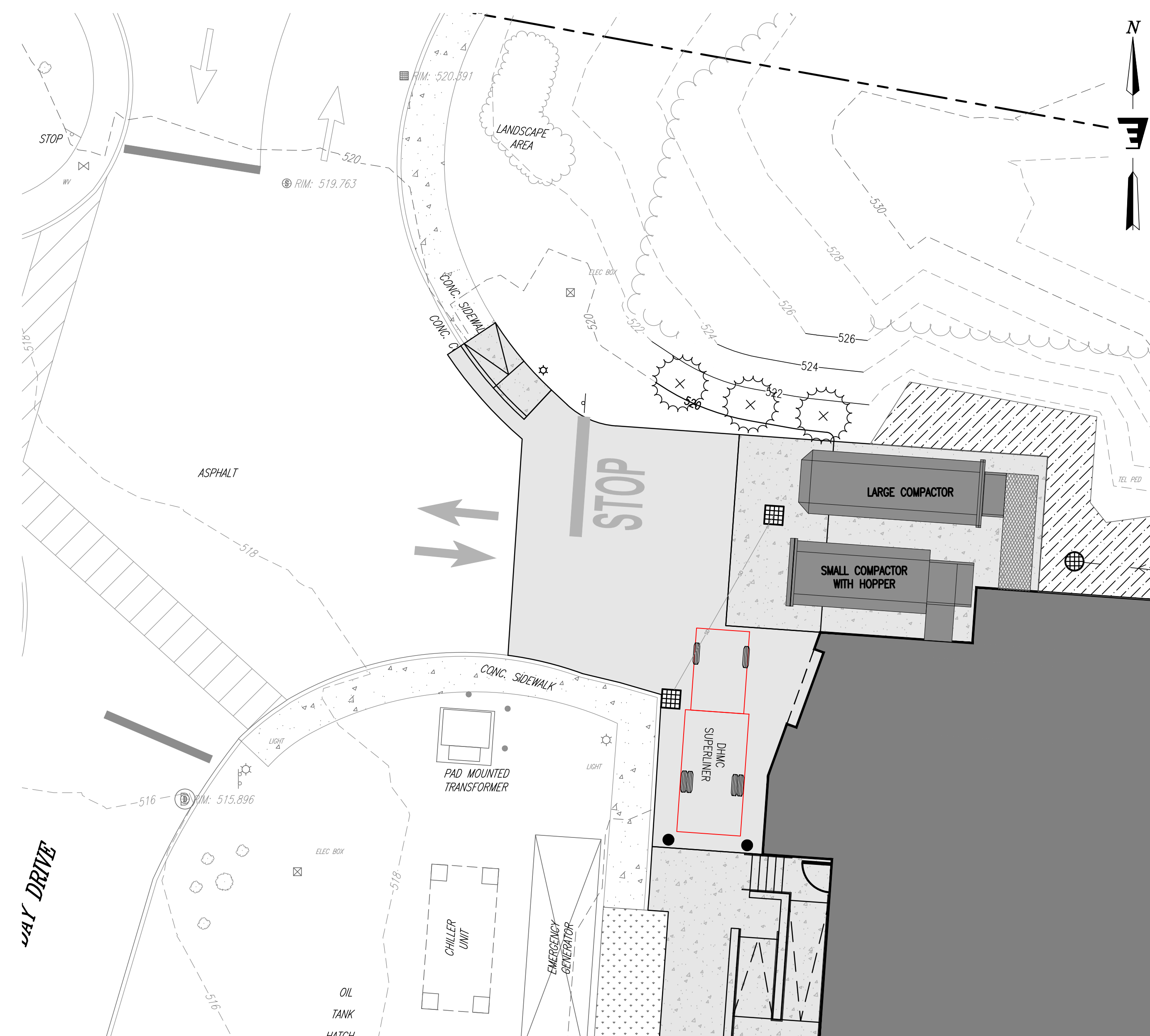
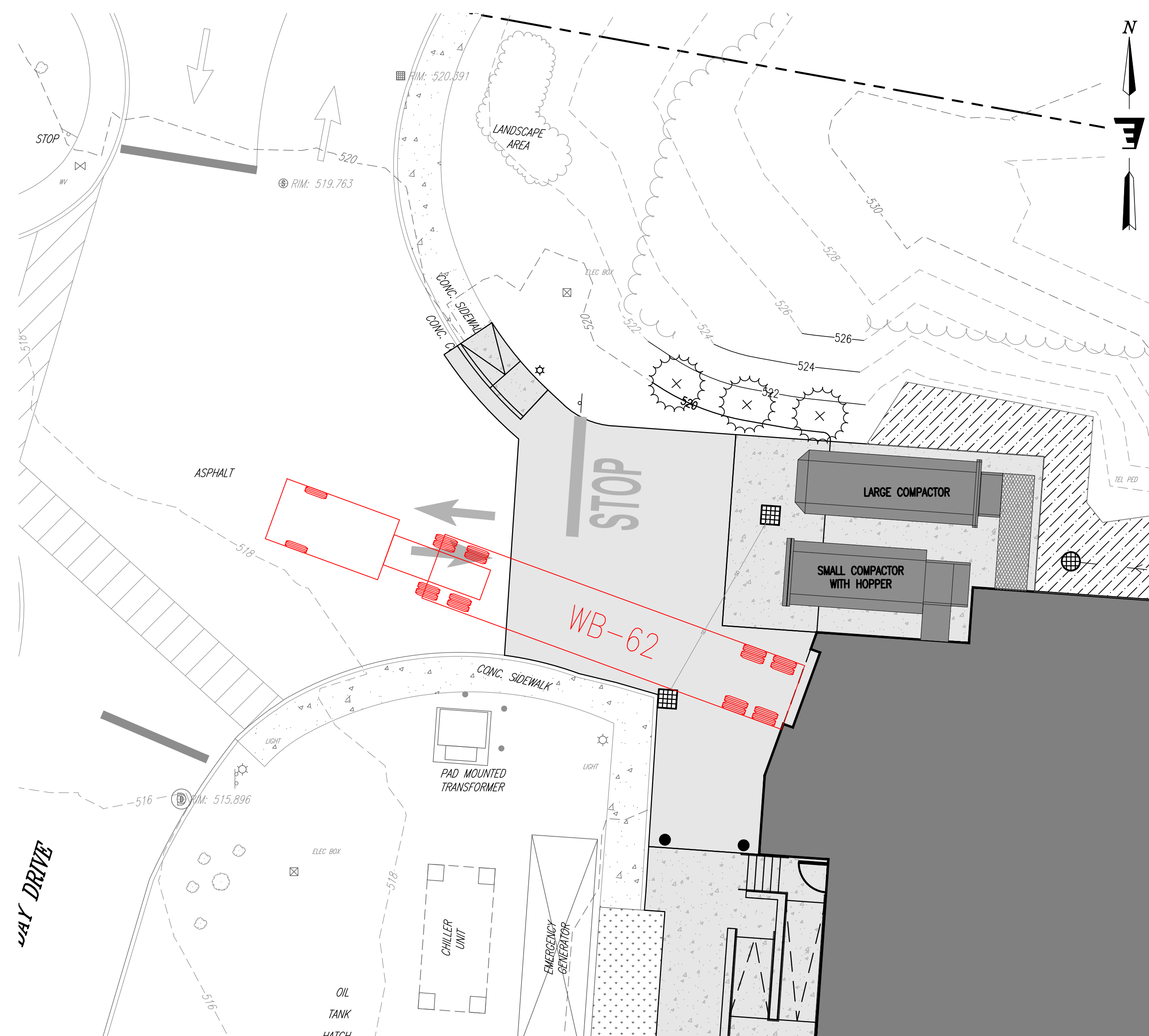
C-102
Page 5 of 16
SITE DEMOLITION PLAN

STATE OF NEW HAMPSHIRE
Professional Engineer
No. 13286
LICENSED

SEAL

Page 93 of 161



[illegible]



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.

TEMPORARY INLET PROTECTION - INSTALL AS INDICATED ON PLANS. FILTER FABRIC TO BE REMOVED AND REPLACED WITH FABRIC WHEN SEDIMENT IS $\leq 1/2$ DEPTH. REMOVE ALL SEDIMENT IF COLLECTED IN STRUCTURE AS SOON AS POSSIBLE.

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

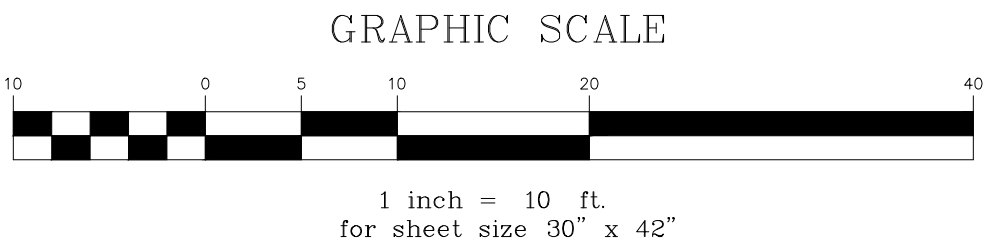
TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF 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 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 STRAW FIBER ROLL
THIS STRUCTURAL MEASURE IS A TEMPORARY BARRIER OF STRAW FIBER ROLL USED TO INTERCEPT SEDIMENT LAIDEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE SLOPE SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, INSTALL CONSTRUCTION FENCE BEHIND THE STRAW FIBER ROLL. THIS MEASURE IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ON ADJACENT AREAS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

LIMITS OF CONSTRUCTION
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.



SITE PLAN REVIEW
-FINAL-
SEPTEMBER 13, 2021

e4h

**ENVIRONMENTS
FOR HEALTH
ARCHITECTURE**

888.781.8441 817.226.1917
2019 E4H - Environments For Health, LLC
1250 E. Coppeland Rd. Suite 500, Arlington, TX 78011
e4h-architecture.com



**ALICE PECK DAY
MEMORIAL HOSPITAL**
A Dartmouth-Hitchcock Affiliate

E **ENGINEERING
VENTURES INC**
280 Ryan Avenue Suite 2A, Burlington, VT 05401
tel. 802.653.0325
fax 802.653.0306
engineering@eiv.com

RFS *engineering*

Ried Food Shrinkage Engineering, P.C.
NH: 71 Water St., Laconia, NH 03246
P: 603.524.4847
MA: 50 Main St., 16th Floor | Boston, MA 02109
P: 617.484.1484
Fax: 617.484.1485
www.rfseengineering.com
RFS Project #: 9918.001

ALICE PECK DAY MEMORIAL HOSPITAL
East Wing Renovation
LEBANON, NH

[illegible]

**NOT FOR
CONSTRUCTION**

SEAL:

PROJECT NUMBER: 202009

DATE: 09/03/21

SHEET TITLE AND NUMBER:

ES-1
Page 14 of 16
SITE LIGHTING CALCULATION



Page 103 of 181



DESCRIPTION

The patented Lumark Crosstour™ LED Wall Pack Series of luminaires provides an architectural style with super bright, energy efficient LEDs. The low-profile, rugged die-cast aluminum construction, universal back box, stainless steel hardware along with a sealed and gasketed optical compartment make the Crosstour impervious to contaminants. The Crosstour wall luminaire is ideal for wall/surface, inverted mount for façade/canopy illumination, post/bollard, site lighting, floodlight and low level pathway illumination including stairs. Typical applications include building entrances, multi-use facilities, apartment buildings, institutions, schools, stairways and loading docks test.

SPECIFICATION FEATURES

Construction

Slim, low-profile LED design with rugged one-piece, die-cast aluminum hinged removable door and back box. Matching housing styles incorporate both a small and medium design. The small housing is available in 12W, 18W and 26W. The medium housing is available in the 38W model. Patented secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes three half-inch, NPT threaded conduit entry points. The universal back box supports both the small and medium forms and mounts to standard 3-1/2" to 4" round and octagonal, 4" square, single gang and masonry junction boxes. Key hole gasket allows for adaptation to junction box or wall. External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Minimum 5" wide pole for site lighting application. Not recommended for car wash applications.

Optical

Silicone sealed optical LED chamber incorporates a custom engineered mirrored anodized reflector providing high-efficiency illumination. Optical assembly includes impact-resistant tempered glass and meets IESNA requirements for full cutoff compliance. Available in seven lumen packages; 5000K, 4000K and 3000K CCT.

Electrical

LED driver is mounted to the die-cast housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 12W, 18W, 26W and 38W series operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C models available. Crosstour luminaires maintain greater than 89% of initial light output after 72,000 hours of operation. Three half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized

electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz or 347V 60Hz models.

Finish

Crosstour is protected with a Super durable TGIC carbon bronze or summit white polyester powder coat paint. Super durable TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty

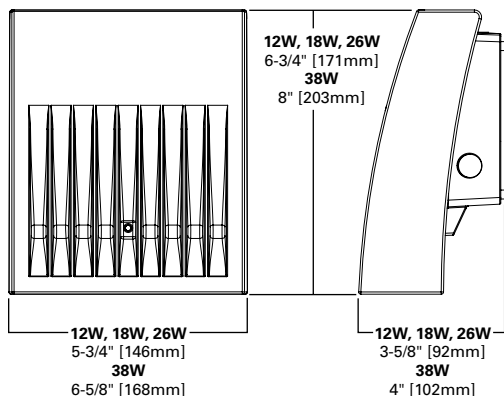
Five-year warranty.



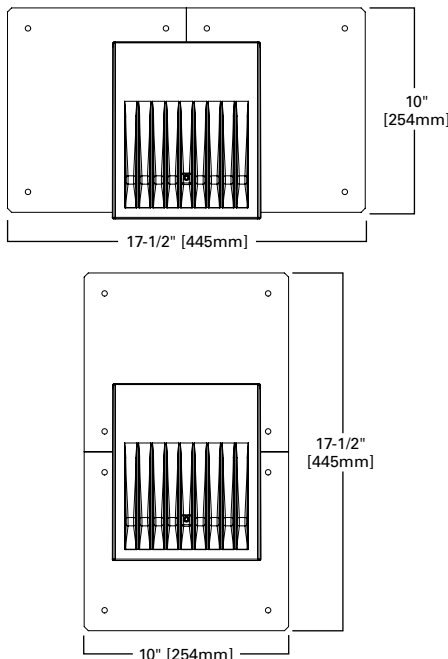
XTOR CROSSTOUR LED

APPLICATIONS:
WALL / SURFACE
POST / BOLLARD
LOW LEVEL
FLOODLIGHT
INVERTED
SITE LIGHTING

DIMENSIONS



ESCUTCHEON PLATES



CERTIFICATION DATA

Dark Sky Approved (Fixed mount, Full cutoff, and 3000K CCT only)
UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
ADA Compliant
NOM Compliant Models
IP66 Ingress Protection Rated
Title 24 Compliant
DesignLights Consortium® Qualified*

TECHNICAL DATA

40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum

EPA

Effective Projected Area (Sq. Ft.):
XTOR1B, XTOR2B, XTOR3B=0.34
XTOR4B=0.45

SHIPPING DATA:

Approximate Net Weight:
3.7 – 5.25 lbs. [1.7 – 2.4 kgs.]

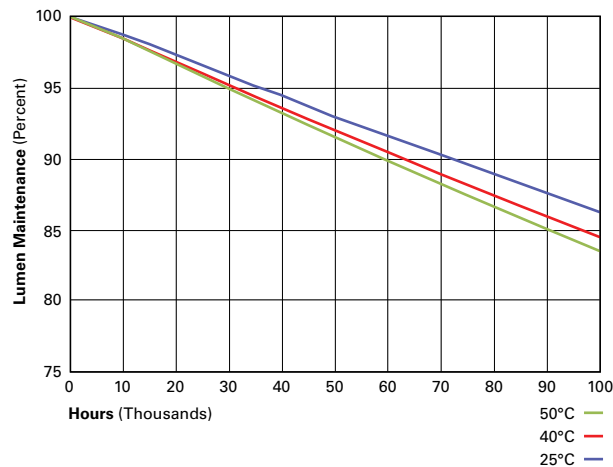
POWER AND LUMENS BY FIXTURE MODEL

LED Information	XTOR1B	XTOR1B-W	XTOR1B-Y	XTOR2B	XTOR2B-W	XTOR2B-Y	XTOR3B	XTOR3B-W	XTOR3B-Y	XTOR4B	XTOR4B-W	XTOR4B-Y
Delivered Lumens (Wall Mount)	1,418	1,396	1,327	2,135	2,103	1,997	2,751	2,710	2,575	4,269	4,205	3,995
Delivered Lumens (With Flood Accessory Kit) ¹	1,005	990	940	1,495	1,472	1,399	2,099	2,068	1,965	3,168	3,121	2,965
B.U.G. Rating ²	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B1-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0
CCT (Kelvin)	5,000	4,000	3,000	5,000	4,000	3,000	5,000	4,000	3,000	5,000	4,000	3,000
CRI (Color Rendering Index)	70	70	70	70	70	70	70	70	70	70	70	70
Power Consumption (Watts)	12W	12W	12W	18W	18W	18W	26W	26W	26W	38W	38W	38W

NOTES: 1 Includes shield and visor. 2 B.U.G. Rating does not apply to floodlighting.

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)	Theoretical L70 (Hours)
XTOR1B Model		
25°C	> 90%	255,000
40°C	> 89%	234,000
50°C	> 88%	215,000
XTOR2B Model		
25°C	> 89%	240,000
40°C	> 88%	212,000
50°C	> 87%	196,000
XTOR3B Model		
25°C	> 89%	240,000
40°C	> 88%	212,000
50°C	> 87%	196,000
XTOR4B Model		
25°C	> 89%	222,000
40°C	> 87%	198,000
50°C	> 87%	184,000



CURRENT DRAW

Voltage	Model Series			
	XTOR1B	XTOR2B	XTOR3B	XTOR4B
120V	0.103A	0.15A	0.22A	0.34A
208V	0.060A	0.09A	0.13A	0.17A
240V	0.053A	0.08A	0.11A	0.17A
277V	0.048A	0.07A	0.10A	0.15A
347V	0.039A	0.06A	0.082A	0.12A

ORDERING INFORMATION

Sample Number: XTOR2B-W-WT-PC1

Series ¹	LED Kelvin Color	Housing Color	Options (Add as Suffix)	Accessories (Order Separately)
XTOR1B =Small Door, 12W XTOR2B =Small Door, 18W XTOR3B =Small Door, 26W XTOR4B =Medium Door, 38W	[Blank] =Bright White (Standard), 5000K W =Neutral White, 4000K Y =Warm White, 3000K	[Blank] =Carbon Bronze (Standard) WT =Summit White BK =Black BZ =Bronze AP =Grey GM =Graphite Metallic DP =Dark Platinum	PC1 =Photocontrol 120V ² PC2 =Photocontrol 208-277V ^{2,3} 347V =347V ⁴ HA =50°C High Ambient ⁴	WG/XTOR =Wire Guard ⁵ XTORFLD-KNC =Knuckle Floodlight Kit ⁶ XTORFLD-TRN =Trunnion Floodlight Kit ⁶ XTORFLD-KNC-WT =Knuckle Floodlight Kit, Summit White ⁶ XTORFLD-TRN-WT =Trunnion Floodlight Kit, Summit White ⁶ EWP/XTOR =Escutcheon Wall Plate, Carbon Bronze EWP/XTOR-WT =Escutcheon Wall Plate, Summit White

NOTES:

- DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
- Photocontrols are factory installed.
- Order PC2 for 347V models.
- Thru-branch wiring not available with HA option or with 347V. XTOR3B not available with HA and 347V or 120V combination.
- Wire guard for wall/surface mount. Not for use with floodlight kit accessory.
- Floodlight kit accessory supplied with knuckle (KNC) or trunnion (TRN) base, small and large top visors and small and large impact shields.

STOCK ORDERING INFORMATION

12W Series	18W Series	26W Series	38W Series
XTOR1B =12W, 5000K, Carbon Bronze	XTOR2B =18W, 5000K, Carbon Bronze	XTOR3B =26W, 5000K, Carbon Bronze	XTOR4B =38W, 5000K, Carbon Bronze
XTOR1B-WT =12W, 5000K, Summit White	XTOR2B-W =18W, 4000K, Carbon Bronze	XTOR3B-W =26W, 4000K, Carbon Bronze	XTOR4B-W =38W, 4000K, Carbon Bronze
XTOR1B-PC1 =12W, 5000K, 120V PC, Carbon Bronze	XTOR2B-WT =18W, 5000K, Summit White	XTOR3B-WT =26W, 5000K, Summit White	XTOR4B-WT =38W, 5000K, Summit White
XTOR1B-W =12W, 4000K, Carbon Bronze	XTOR2B-PC1 =18W, 5000K, 120V PC, Carbon Bronze	XTOR3B-PC1 =26W, 5000K, 120V PC, Carbon Bronze	XTOR4B-PC1 =38W, 5000K, 120V PC, Carbon Bronze
	XTOR2B-W-PC1 =18W, 4000K, 120V PC, Carbon Bronze	XTOR3B-W-PC1 =26W, 4000K, 120V PC, Carbon Bronze	XTOR4B-W-PC1 =38W, 4000K, 120V PC, Carbon Bronze
	XTOR2B-347V =18W, 5000K, Carbon Bronze, 347V	XTOR3B-347V =26W, 5000K, Carbon Bronze, 347V	XTOR4B-347V =38W, 5000K, Carbon Bronze, 347V
	XTOR2B-WT-PC1 =18W, 5000K, 120V PC, Summit White	XTOR3B-PC2 =26W, 5000K, 208-277V PC, Carbon Bronze	

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

Impact Elite LED

Wall Mount Luminaire

Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Energy and Performance Data [page 3](#)
- Control Options [page 4](#)

Product Certifications



Quick Facts

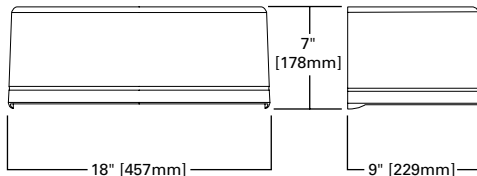
- 10 Optical Distributions
- Lumen packages range from 2,459 to 8,123 (20W - 66W)
- Efficacy up to 143 lumens per watt

Connected Systems

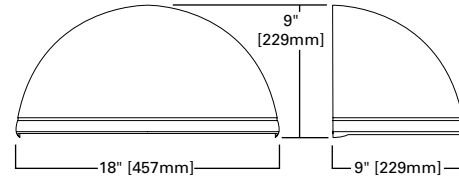
- WaveLinx
- Enlighted

Dimensional Details

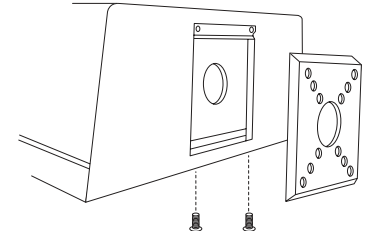
Cylinder



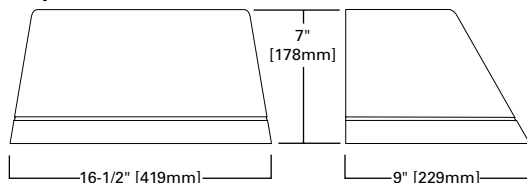
Quarter Sphere



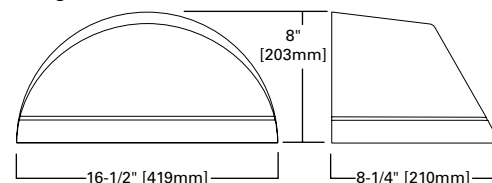
Hook - n - Lock



Trapezoid



Wedge



Ordering Information

SAMPLE NUMBER: ISC-SA1F-740-U-T3-BZ

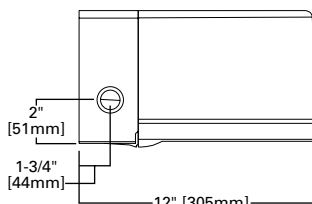
Product Family ¹	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
ISC=Impact Elite LED Small Cylinder ISS=Impact Elite LED Small Quarter Sphere IST=Impact Elite LED Small Trapezoid ISW=Impact Elite LED Small Wedge	SA1=1 Square	A=350mA B=450mA C=600mA D=800mA E=1000mA F=1200mA ²	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 760=70CRI, 6000K 827=80CRI, 2700K 830=80CRI, 3000K AMB=Amber, 590nm ^{3, 4}	U=120-277V 1=120V 2=208V 3=240V 4=277V 8=480V ^{2, 5} 9=347V ²	T2=Type II T3=Type III T4FT=Type IV Forward Throw T4W=Type IV Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)			Accessories (Order Separately)		
HA=50°C High Ambient ⁸ AHD145=After Hours Dim, 5 Hours, 50% ⁹ AHD245=After Hours Dim, 6 Hours, 50% ⁹ AHD255=After Hours Dim, 7 Hours, 50% ⁹ AHD355=After Hours Dim, 8 Hours, 50% ⁹ CBP=Battery Pack with Back Box, Cold Weather Rated ^{13, 15} CBP-CEC=Battery Pack with Back Box, Cold Weather Rated, CEC compliant ¹³ LCF=Light Square Trim Plate Painted to Match Housing HSS=Factory Installed House Side Shield ¹⁶ ULG=Uplight Glow ^{6, 7} CC=Coastal Construction ²² TR=Tamper Resistant Hardware X=Driver Surge Protection (6kV) Only ¹⁷ 20K=Series 20kV UL 1449 Surge Protective Device	BPC=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle ^{2, 6, 7} SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ^{12, 23} SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ^{12, 23} SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ^{12, 23} MSR/DIM-LXX=Motion Sensor for Dimming Operation ^{7, 10, 11, 12} LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height ^{6, 12, 13} LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height ^{6, 12, 13} ZW=WaveLinX-Enabled Module and 4-PIN Receptacle ⁷ ZD=WaveLinX-Enabled Module with DALI Driver and 4-PIN Receptacle ⁷ ZW-SWPD4XX=WaveLinX Control Module and Wireless Sensor - 7'-15' ^{7, 18, 20} ZW-SWPD5XX=WaveLinX Control Module and Wireless Sensor - 15'-40' ^{7, 18, 20} ZW-WOBXX=WaveLinX Control Module and LC Bluetooth Sensor - 7'-15' ^{7, 18, 20} ZW-WOFXX=WaveLinX Control Module and LC Bluetooth Sensor - 15'-40' ^{7, 18, 20} ZD-SWPD4XX=WaveLinX with DALI Driver and Wireless Sensor - 7'-15' ^{7, 18, 20} ZD-SWPD5XX=WaveLinX with DALI Driver and Wireless Sensor - 15'-40' ^{7, 18, 20} ZD-WOBXX=WaveLinX with DALI Driver and LC Bluetooth Sensor - 7'-15' ^{7, 18, 20} ZD-WOFXX=WaveLinX with DALI Driver and LC Bluetooth Sensor - 15'-40' ^{7, 18, 20}			MA1253=10kV Circuit Module Replacement MA1254-XX=Thruway Back Box - Impact Elite Trapezoid MA1255-XX=Thruway Back Box - Impact Elite Cylinder MA1256-XX=Thruway Back Box - Impact Elite Quarter Sphere MA1257-XX=Thruway Back Box - Impact Elite Wedge FSIR-100=Wireless Configuration Tool for Occupancy Sensor WOLC-7P-10A=WaveLinX Outdoor Control Module (7-pin) ^{7, 19} SWPD4-XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height ^{7, 18, 20, 21} SWPD5-XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height ^{7, 18, 20, 21}		

NOTES:

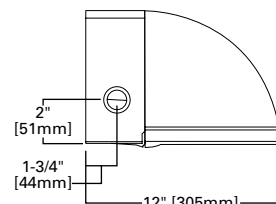
- DesignLight Consortium® Qualified. Refer to www.designlights.org, Qualified Products List under Family Models for details.
- Not available with ULG option.
- Choose Drive Current "B" for Amber 590nm, which is provided at 500mA only
- Narrow-band 590nm +/- 5nm for wildlife and observatory use.
- 480V must use Wye system only. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- Not available with ISS or ISW.
- Cannot be used in conjunction with other control options.
- Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1000mA or less.
- Requires the use of photocontrol. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information.
- Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting.)
- The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
- Includes integral photocell.
- Enlighted wireless sensors are factory installed and require network components in appropriate quantities.
- Battery pack operating temperature of -20C to +40C. Operates downlight for 90-minutes.
- Must specify 120V or 277V.
- Not for use with 5WQ, 5WQ or RW optics. A black trim plate is used when HSS is selected.
- Removes additional surge module.
- Replace XX with sensor color (WH, BZ, or BK).
- Requires PR7.
- For WaveLinX applications, WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Gateway not required for WaveLinX Lite Commercial (LC) applications.
- Requires ZW or ZD receptacle.
- Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
- Smart device with mobile application required to change system defaults. See controls section for details.

Thruway Back Box

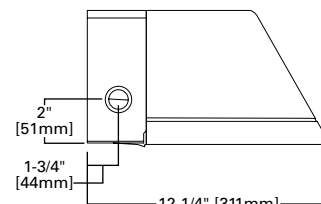
Cylinder



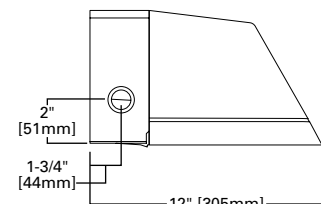
Quarter Sphere



Trapezoid



Wedge



Product Specifications

Construction

- Heavy-wall, die-cast aluminum housing and removable hinged door frame
- Optional tamper-resistant fasteners offer vandal resistant access

Optics

- High-efficiency injection-molded AccuLED optics technology
- 10 optical distributions
- IDA Certified (3000K CCT and warmer only)

Electrical

- Standard with 0-10V dimming
- Standard with Cooper Lighting Solutions proprietary circuit module designed to withstand 10kV of transient line surge

- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration.

Mounting

- Utilizes "Hook-N-Lock" mounting mechanism, securing to a gasketed and zinc plated mounting attachment
- Two black oxide coated Allen set screws concealed but accessible from below

Finish

- Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- RAL and custom color matches available
- Coastal Construction (CC) option available

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

1 Light Squares (AF)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120-277V	20.1	25.4	34.2	45.2	58.2	66.0	20.1	25.4	34.2	45.2	58.2	66.0
Current (A)	120	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics (4000K, 70 CRI)													
T2	Lumens	2,802	3,500	4,618	5,778	7,231	7,895	2,772	3,475	4,576	5,733	7,175	7,834
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	139	138	135	128	124	120	138	137	134	127	123	119
T3	Lumens	2,778	3,470	4,578	5,729	7,169	7,827	2,731	3,424	4,508	5,648	7,069	7,718
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	121	117
T4FT	Lumens	2,751	3,436	4,534	5,673	7,099	7,751	2,762	3,462	4,559	5,712	7,149	7,805
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	133	126	122	117	137	136	133	126	123	118
T4W	Lumens	2,780	3,473	4,582	5,733	7,174	7,833	2,739	3,434	4,522	5,665	7,089	7,740
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	138	137	134	127	123	119	136	135	132	125	122	117
SL2	Lumens	2,763	3,451	4,554	5,698	7,130	7,785	2,730	3,422	4,507	5,646	7,066	7,715
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens Per Watt	137	136	133	126	123	118	136	135	132	125	121	117
SL3	Lumens	2,745	3,429	4,524	5,660	7,084	7,734	2,709	3,396	4,472	5,603	7,012	7,655
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	137	135	132	125	122	117	135	134	131	124	120	116
SL4	Lumens	2,680	3,348	4,417	5,526	6,916	7,551	2,666	3,342	4,401	5,514	6,900	7,534
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	133	132	129	122	119	114	133	132	129	122	119	114
SLL	Lumens	2,447	3,057	4,033	5,046	6,315	6,895	2,459	3,083	4,059	5,086	6,365	6,949
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens Per Watt	122	120	118	112	109	104	122	121	119	113	109	105
RW	Lumens	2,883	3,601	4,751	5,945	7,440	8,123	2,818	3,533	4,652	5,828	7,294	7,964
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
	Lumens Per Watt	143	142	139	132	128	123	140	139	136	129	125	121

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

* Supported by IES TM-21 standards

** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

 View Impact Elite IES files

Control Options

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC and PR7)

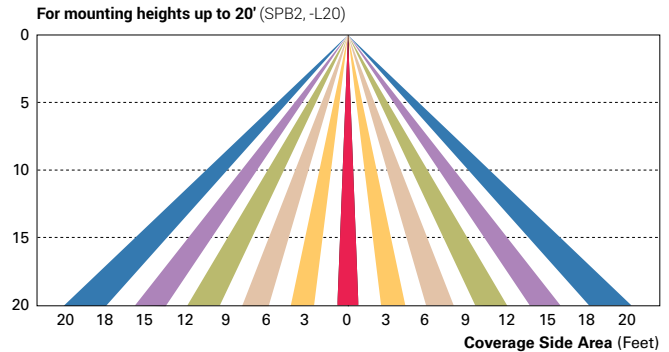
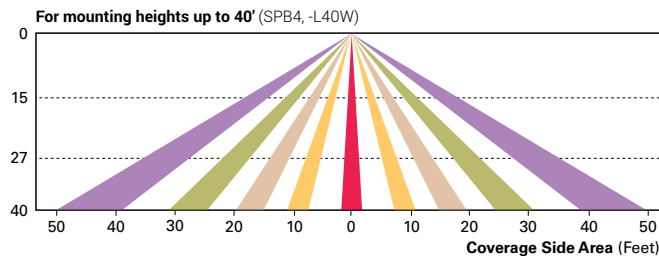
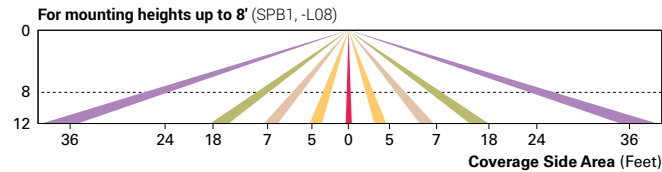
Optional button-type photocontrol provides a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels.

After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

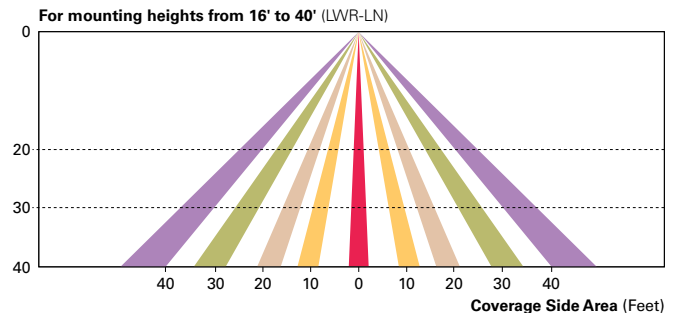
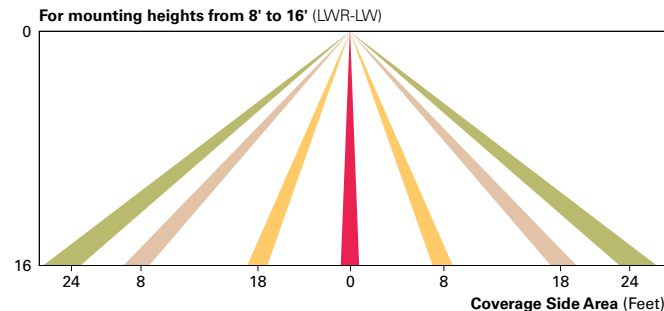
Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX)

These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)

Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



WaveLinX Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinX to control outdoor area, site and flood lighting. WaveLinX controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.



d"series

D-Series DSXF2 LED Floodlight



Catalog Number

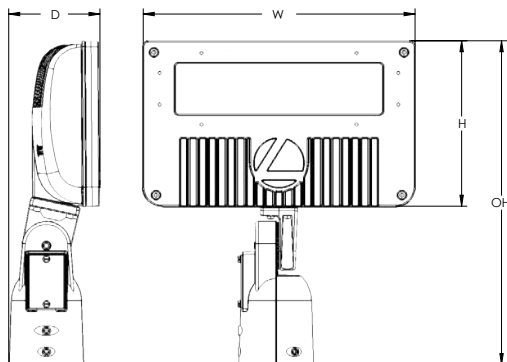
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA @ 90°:	0.8 ft ² (0.07 m ²)
Depth:	4.32" (11.0 cm)
Width:	12.87" (32.7 cm)
Height:	7.83" (19.9 cm)
Overall Height	15.33" (39.0 cm)
Weight:	12.0 lbs (5.4 kg)



Introduction

The D-Series floodlights feature a site-wide offering to meet specifier's every floodlighting need in application. The D-Series flood offers three sizes delivering 3,000 to 27,000 lumens. Available with seven precision optics, three mountings and three color temperatures, D-Series floodlights offer vast design capabilities while delivering significant energy savings and long life.

The DSXF2 delivers 7,000 to 17,000 lumens, meeting a large breadth of illumination requirements for design and renovation when replacing 175W, 250W and 400W HID floodlights. All configurations are assembled in the USA allowing for quick delivery.

Ordering Information

EXAMPLE: DSXF2 LED P1 40K 70CRI MSP MVOLT THK DDBXD

DSXF2 LED						
Series	Performance Package	Color Temperature	CRI	Distribution	Voltage	Mounting
DSXF2 LED	P1 P2 P3 P4 ¹	30K 3000K 40K 4000K 50K 5000K	70CRI	WFL Wide flood (6X6) FL Flood (5X5) MFL Medium flood (4X4) WFR Wide flood, rectangular (6X5) HMF Horizontal flood (6X4) MSP Medium spot (4X4) NSP Narrow spot (3X3)	MVOLT² 347 480	Shipped included THK Knuckle with 1/2" NPT threaded pipe YKC62 Yoke with 2ft 16-3 SO cord IS Integral slipfitter (fits 2-3/8" O.D. tenon)

Options	Finish (required)
Shipped installed	
PE Photocontrol, button style (MVOLT or 347V) ³	DDBXD Dark bronze
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)	DBLXD Black
SPD10KV Separate surge protection	DNAXD Natural aluminum
	DWHXD White
Shipped separately⁴	
UBV Upper/bottom visor (universal)	
FV Full visor	
VG Vandal guard	

Accessories⁴

Ordered and shipped separately.

DSXF1/2TS DDBXD U	Slipfitter for 1-1/4" to 2-3/8" OD tenons; 1/2" THK required (specify finish)
FTS CG6 DDBXD U	Slipfitter for 2-3/8" to 2-7/8" OD tenons; YKC62 required (specify finish)
FRWB DDBXD U	Radius wall bracket, 2-3/8" OD tenon (specify finish)
FSPB DDBXD U	Steel square pole bracket, 2-3/8" OD tenon (specify finish)
DSXF2UBV DDBXD U	Upper/bottom visor accessory (specify finish)
DSXF2FV DDBXD U	Full visor accessory (specify finish)
DSXF2VG U	Vandal guard accessory

For more mounting options, visit our [Floodlighting Accessories](#) pages.

Stock configurations are offered for shorter lead times:

Standard Part Number	Stock Part Number	CI Code
DSXF2 LED P1 40K 70CRI WFL MVOLT THK DDBXD	DSXF2 LED P1 40K	*240TJ9
DSXF2 LED P1 50K 70CRI WFL MVOLT THK DDBXD	DSXF2 LED P1 50K	*240TJ8
DSXF2 LED P2 40K 70CRI WFL MVOLT THK DDBXD	DSXF2 LED P2 40K	*240THT
DSXF2 LED P2 50K 70CRI WFL MVOLT THK DDBXD	DSXF2 LED P2 50K	*240TJC
DSXF2 LED P4 40K 70CRI WFL MVOLT IS DDBXD	DSXF2 LED P4 40K IS	*273R72
DSXF2 LED P4 50K 70CRI WFL MVOLT IS DDBXD	DSXF2 LED P4 50K IS	*273R79
DSXF2 LED P4 40K 70CRI WFL MVOLT YKC62 DDBXD	DSXF2 LED P4 40K YK	*273R7F
DSXF2 LED P4 50K 70CRI WFL MVOLT YKC62 DDBXD	DSXF2 LED P4 50K YK	*273R7M
DSXF1/2 Slip-fitter Tenon Accessory DDBXD	DSXF1/2TS DDBXD U	*216G5K

NOTES

- Performance package P4 is not available with HMF, MFL, MSP and NSP optics.
- MVOLT driver operates on line voltage from 120-277V.
- Requires MVOLT or 347V (Not available in 480V).
- Also available as separate accessories; see Accessories information at left.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
© 2012-2021 Acuity Brands Lighting, Inc. All rights reserved.

DSXF2-LED
Rev. 05/25/21
Page 1 of 6

Mountings



IS – Adjustable Slipfitter
(Fits 2-3/8" O.D. tenon)



YKC62 - Yoke with 16-3
SO cord, 2ft



THK - Threaded Knuckle with
1/2" NPT threaded pipe

External Shields



UBV Visor
Top Mounted



UBV Visor
Bottom Mounted



FV - Full Visor

Accessories



VG - Vandal Guard



DSXF1/2TS - THK
Slipfitter Accessory

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown within applicable tolerances. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist.Type	NEMA Type	Field Angle		Beam Angle		30K (3000K, 70 CRI)			40K (4000K, 70 CRI)			50K (5000K, 70 CRI)		
				°H	°V	°H	°V	Lumens	LPW	Max Cd	Lumens	LPW	Max Cd	Lumens	LPW	Max Cd
P1	52	WFL	6 X 6	109	106	83	87	7,353	140	3,777	7,489	143	3,847	7,625	145	3,917
		FL	5 X 5	94	93	68	69	7,290	139	5,804	7,426	142	5,912	7,561	144	6,019
		WFR	6 X 5	108	93	84	69	7,375	141	4,722	7,512	143	4,810	7,648	146	4,897
	64	HMF	6 X 4	125	65	96	54	7,576	119	6,204	7,850	123	6,428	7,774	122	6,365
		MFL	4 X 4	61	60	46	46	7,915	124	12,766	8,201	128	13,228	8,121	127	13,099
		MSP	4 X 4	51	52	27	30	8,138	128	29,618	8,433	132	30,690	8,351	131	30,391
P2	75	WFL	6 X 6	109	106	83	87	8,248	129	47,865	8,546	134	49,597	8,463	133	49,114
		FL	5 X 5	94	93	68	69	10,161	135	5,219	10,349	138	5,316	10,538	140	5,142
		WFR	6 X 5	108	93	84	69	10,192	136	6,526	10,262	137	8,169	10,448	139	8,318
	80	HMF	6 X 4	125	65	96	54	10,075	134	8,021	10,381	138	6,646	10,570	141	6,767
		MFL	4 X 4	61	60	46	46	8,963	113	7,340	9,288	117	7,605	9,197	115	7,531
		MSP	4 X 4	51	52	27	30	9,364	118	15,104	9,703	122	15,651	9,609	121	15,498
P3	93	WFL	6 X 6	109	106	83	87	9,629	121	35,043	9,977	125	36,310	9,880	124	35,957
		FL	5 X 5	94	93	68	69	9,758	122	56,632	10,111	127	58,681	10,013	126	58,109
		WFR	6 X 5	108	93	84	69	12,054	130	6,191	12,278	132	6,306	12,501	135	6,421
	100	HMF	6 X 4	125	65	96	54	11,952	129	9,515	12,173	131	9,691	12,395	133	9,868
		MFL	4 X 4	61	60	46	46	12,091	130	7,741	12,315	133	7,885	12,539	135	8,028
		MSP	4 X 4	51	52	27	30	10,487	105	8,588	10,867	109	8,898	10,761	108	8,812
P4	145	WFL	6 X 6	109	106	83	87	10,956	110	17,672	11,353	114	18,311	11,242	113	18,133
		FL	5 X 5	94	93	68	69	11,417	114	66,260	11,830	119	68,657	11,715	117	67,988
		WFR	6 X 5	108	93	84	69	17,104	118	8,785	17,421	120	8,948	17,738	123	9,110
P4	145	FL	5 X 5	94	93	68	69	16,959	117	13,501	17,273	119	13,751	17,587	122	14,001
		WFR	6 X 5	108	93	84	69	17,156	119	10,984	17,473	121	11,188	17,791	123	11,391

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient Temperature		Lumen Multiplier (Optics WFL, FL, WFR)	Lumen Multiplier (Optics HMF, MFL, MSP, NSP)
0°C	32°F	1.04	1.06
5°C	41°F	1.04	1.05
10°C	50°F	1.03	1.04
15°C	59°F	1.02	1.03
20°C	68°F	1.01	1.01
25°C	77°F	1.00	1.00
30°C	86°F	0.99	0.99
35°C	95°F	0.98	0.97
40°C	104°F	0.97	0.96

Reported LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient and hours of LED testing (tested per IESNA LM-80-08 and reported per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

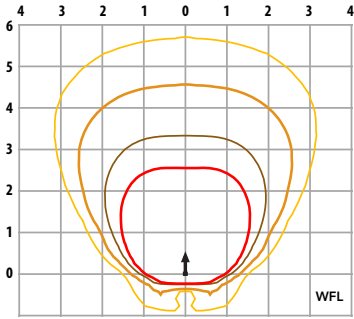
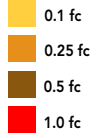
Optic Type	Performance Package	TM-21 Percent Lumen Maintenance at 60,000 hrs
WFL, FL, WFR	P1 / P2 / P3 / P4	85%
MFL, HMF, MSP, NSP	P1 / P2 / P3	88%

Electrical Load

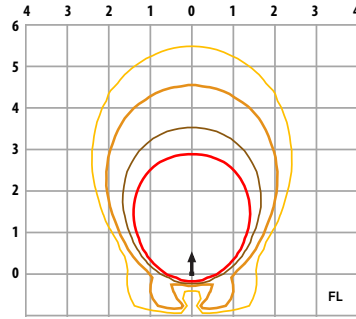
	Performance Package	System Watts (W)	Current (A)					
			120V	208V	240V	277V	347V	480V
Optic Type WFL, FL, WFR	P1	52	0.45	0.26	0.23	0.20	0.16	0.12
	P2	75	0.63	0.36	0.31	0.27	0.22	0.16
	P3	93	0.77	0.45	0.38	0.33	0.27	0.20
	P4	145	1.18	0.68	0.59	0.51	0.41	0.30
Optic Type HMF, MFL, MSP, NSP	P1	64	0.54	0.31	0.27	0.23	0.19	0.14
	P2	80	0.67	0.39	0.34	0.29	0.24	0.17
	P3	100	0.85	0.49	0.42	0.36	0.29	0.21

Isofootcandle plots for DSXF2. Distances are in units of mounting height (20ft).

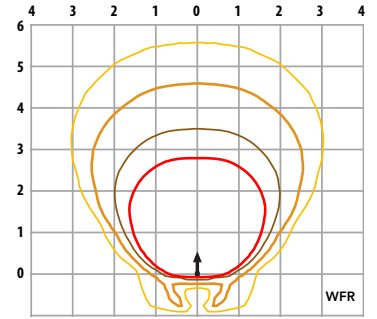
LEGEND



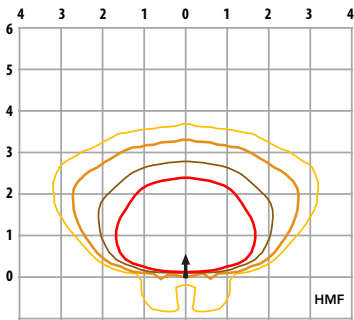
DSXF2 LED P4 40K - Tilted at 45°



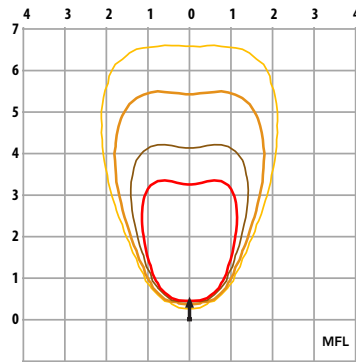
DSXF2 LED P4 40K - Tilted at 45



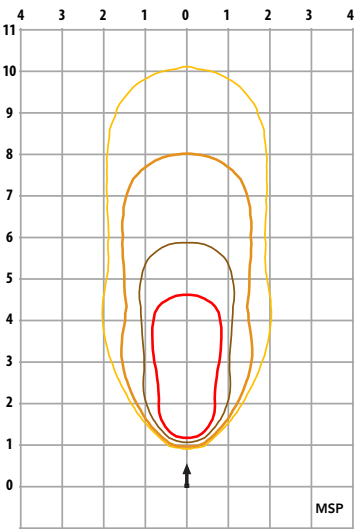
DSXF2 LED P4 40K - Tilted at 45



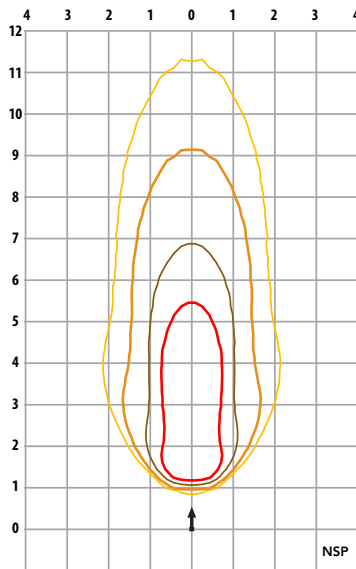
DSXF2 LED P3 40K - Tilted at 45



DSXF2 LED P3 40K - Tilted at 60



DSXF2 LED P3 40K - Tilted at 80

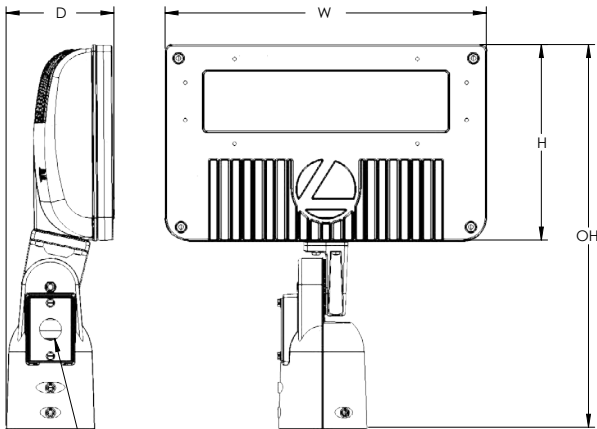


DSXF2 LED P3 40K - Tilted at 80

MH = 20ft
Grid = 20ft x 20ft

Dimensions

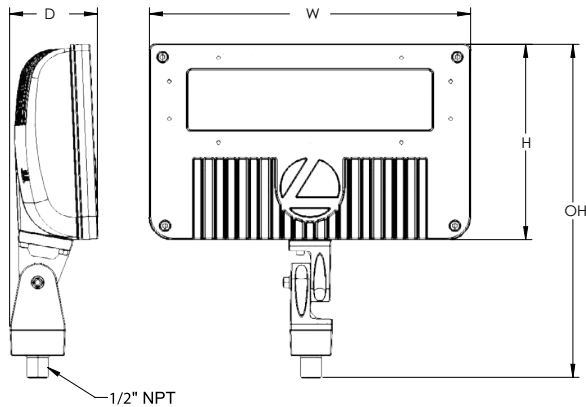
Adjustable Slipfitter (IS)



Width: 12.87" (32.7 cm)
 Depth: 4.32" (11.0 cm)
 Height: 7.83" (19.9 cm) main body
 Overall: 15.33" (39.0 cm) with arm
 Weight: 12 lbs

Qty (2) - splice covers included (includes one with 7/8" thru-hole allowing conduit from exterior)

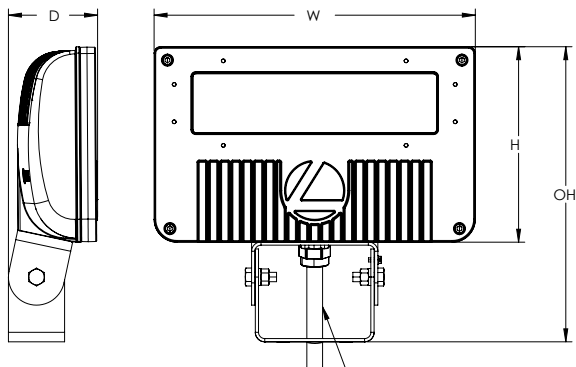
Threaded Knuckle (THK)



Width: 12.87" (32.7 cm)
 Depth: 3.52" (8.9 cm)
 Height: 7.83" (19.9 cm) main body
 Overall: 13.34" (33.9 cm) with arm
 Weight: 10.5 lbs

1/2" NPT

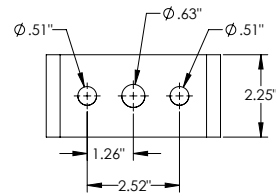
Yoke (YKC62)



Width: 12.87" (32.7 cm)
 Depth: 3.57" (9.0 cm)
 Height: 7.83" (19.9 cm) main body
 Overall: 11.82" (30.0 cm) with arm
 Weight: 10.5 lbs

Note: Standard cord is 16-3 wire, 2 ft cord. Other lengths can be specified.
 Ex: YKC62
 YK = Yoke Mount
 C6 = 16 gage, 3 wire cord
 2 = 2 feet (5 = 5ft, 6 = 6ft, etc.)

Yoke (YK) Mounting Detail



Accessories including bullhorns, cross arms and other adapters are available. For the complete line of accessories available, visit the accessories tab at Lithonia's Outdoor Poles and Arms product page. [Click here to visit Accessories.](#)

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek and compact design of the D-Series floodlights reflects the embedded high performance LED technology while offering a clean aesthetic suitable for specification and general purpose floodlighting applications. Three sizes are available with seven precision optics allowing for maximum design versatility. DSXF2 delivers 7,000 to 17,000 lumens and is ideal for commercial lighting applications including new construction and replacing 175W, 250w and 400W HID floodlights. DSXF2 is ideal for area, security, facade, flagpole and signage lighting applications.

CONSTRUCTION

The DSXF2 LED floodlight features rugged die-cast aluminum construction with integral heat sink fins that optimize thermal management through conductive and convective cooling. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. The housing and lens frame are completely sealed against moisture and environmental contaminants providing an IP66 rating. Low EPA (0.8 ft2) for optimized wind loading. DSXF2 is 1.5G vibration rated per ANSI C136.31.

FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, and white. Available in textured and non-textured finishes.

OPTICS

Seven unique precision-molded vacuum-metalized specular reflectors are engineered for superior field-to-beam ratios, uniformity and spacing. Light engines are available in 3000K, 4000K or 5000K (minimum 70 CRI) configurations. Optional visors offer additional versatility when shielding is required.

ELECTRICAL

Light engines consist of chip-on-board (COB) LEDs directly coupled to the housing to maximize heat dissipation and promote long life. LED lumen maintenance is L85/60,000 hours for WFL, FL and WFR optics and L88/60,000 hours for HMF, MFL, MSP and NSP optics. Class 1 electronic 0-10V continuous dimmable drivers ensure system power factor. 90% and THD <20%. Optional 10kV surge protection device meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

INSTALLATION

The die-cast integral "IS" mount features an adjustable slipfitter that mounts on a 2 3/8" OD tenon. Includes integral splice compartment offering easy installation and wiring. An extra cover plate with 7/8" through hole is provided to accommodate 1/2" water-tight fitting for power run from outside of the tenon. The "THK" adjustable knuckle mount includes a 1/2-14 NPT pipe thread. A steel yoke "YK" mount is available and includes a water tight cord grip and cord. DSXF2 features a glass lens enclosure that is protected to IP66 and is rated for lighting aimed up above 90°. Suitable for mounting within 4 feet of ground.

CONTROLS

DSXF2 features MVOLT (120-277V) and 347V button photocontrol.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

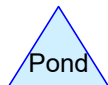
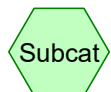
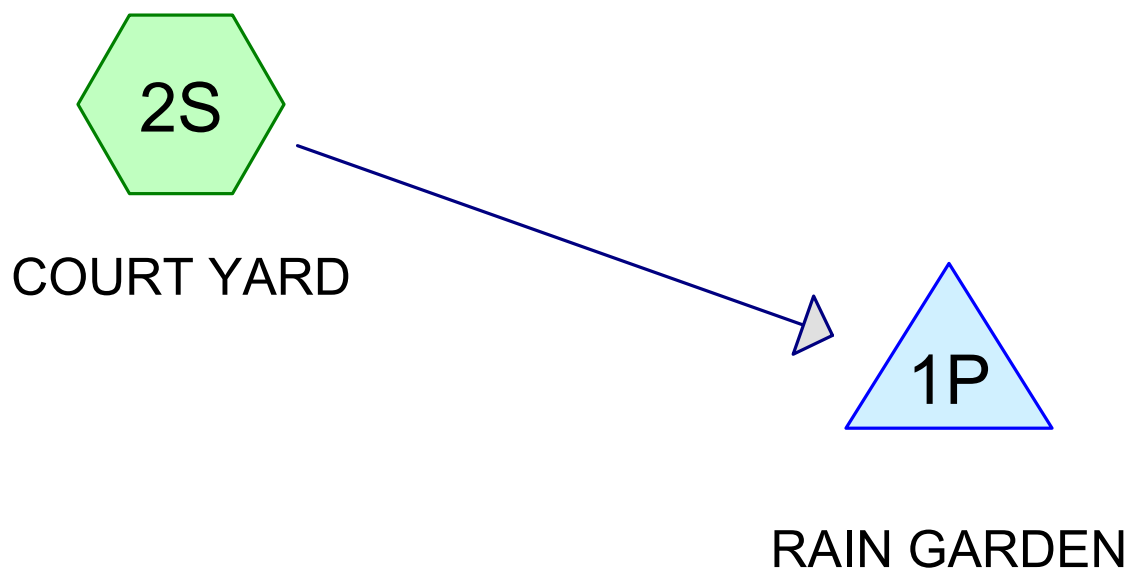
BUY AMERICAN

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Routing Diagram for 21284 APD CSR
Prepared by {enter your company name here}, Printed 9/27/2021
HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

21284 APD CSR

Prepared by {enter your company name here}

Printed 9/27/2021

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-yr	Type II 24-hr		Default	24.00	1	2.50	2
2	10-yr	Type II 24-hr		Default	24.00	1	3.58	2
3	25-yr	Type II 24-hr		Default	24.00	1	4.41	2
4	50-yr	Type II 24-hr		Default	24.00	1	5.15	2
5	100-yr	Type II 24-hr		Default	24.00	1	6.03	2

21284 APD CSR

Prepared by {enter your company name here}

Printed 9/27/2021

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

Page 3

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.087	74	>75% Grass cover, Good, HSG C (2S)
0.050	98	Paved parking, HSG C (2S)
0.137	83	TOTAL AREA

21284 APD CSR

Prepared by {enter your company name here}

Printed 9/27/2021

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

Page 4

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.137	HSG C	2S
0.000	HSG D	
0.000	Other	
0.137		TOTAL AREA

21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 2-yr Rainfall=2.50"

Printed 9/27/2021

Page 5

Summary for Subcatchment 2S: COURT YARD

Runoff = 0.22 cfs @ 12.02 hrs, Volume= 0.012 af, Depth= 1.06"
 Routed to Pond 1P : RAIN GARDEN

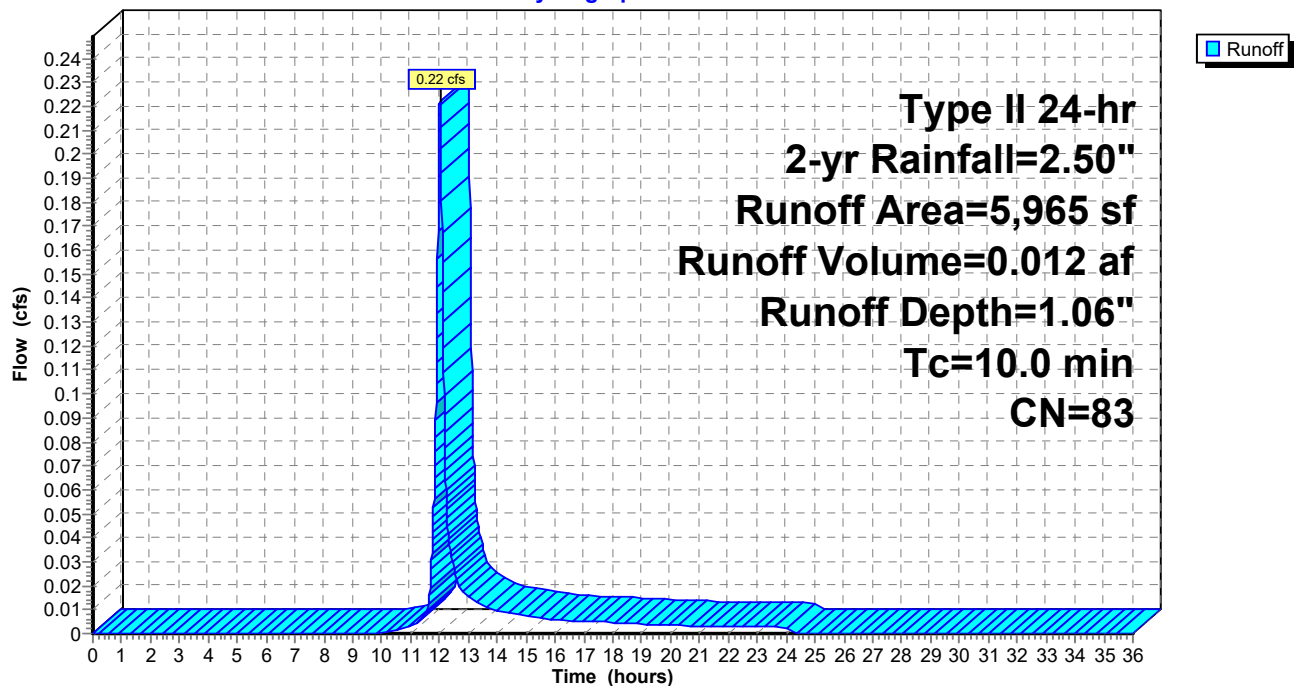
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Type II 24-hr 2-yr Rainfall=2.50"

Area (sf)	CN	Description
3,769	74	>75% Grass cover, Good, HSG C
2,196	98	Paved parking, HSG C
5,965	83	Weighted Average
3,769		63.19% Pervious Area
2,196		36.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 2S: COURT YARD

Hydrograph



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 2-yr Rainfall=2.50"

Printed 9/27/2021

Page 6

Summary for Pond 1P: RAIN GARDEN

Inflow Area = 0.137 ac, 36.81% Impervious, Inflow Depth = 1.06" for 2-yr event
 Inflow = 0.22 cfs @ 12.02 hrs, Volume= 0.012 af
 Outflow = 0.12 cfs @ 12.13 hrs, Volume= 0.012 af, Atten= 46%, Lag= 6.5 min
 Primary = 0.12 cfs @ 12.13 hrs, Volume= 0.012 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 518.38' @ 12.13 hrs Surf.Area= 227 sf Storage= 94 cf

Plug-Flow detention time= 10.6 min calculated for 0.012 af (100% of inflow)
 Center-of-Mass det. time= 10.7 min (856.3 - 845.6)

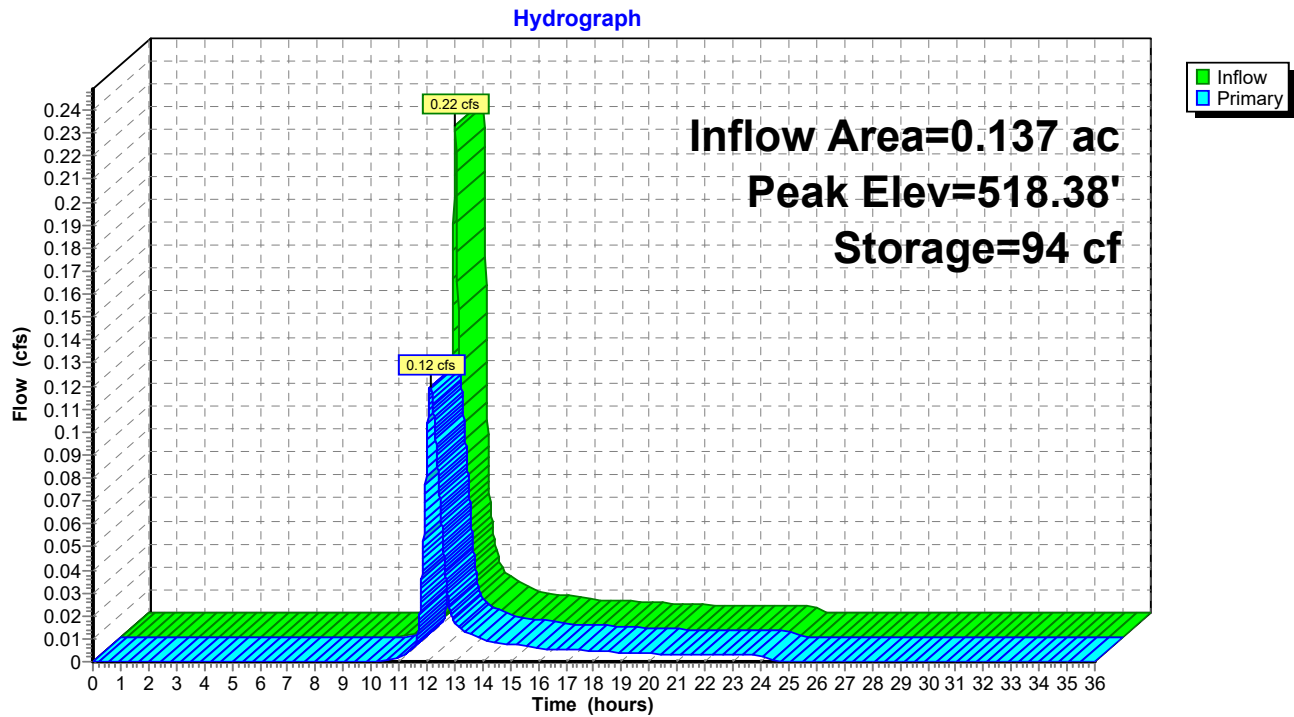
Volume	Invert	Avail.Storage	Storage Description			
#1	517.00'	533 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
517.00	227	75.0	0.0	0	0	227
518.50	227	75.0	30.0	102	102	340
520.50	227	75.0	30.0	136	238	490
521.38	457	93.0	100.0	295	533	741

Device	Routing	Invert	Outlet Devices			
#1	Primary	517.00'	2.0" Vert. Orifice/Grate	C= 0.600	Limited to weir flow at low heads	
#2	Primary	520.75'	8.0" Horiz. Orifice/Grate	C= 0.600	Limited to weir flow at low heads	

Primary OutFlow Max=0.12 cfs @ 12.13 hrs HW=518.38' (Free Discharge)

↑ **1=Orifice/Grate** (Orifice Controls 0.12 cfs @ 5.49 fps)
 — **2=Orifice/Grate** (Controls 0.00 cfs)

Pond 1P: RAIN GARDEN



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 10-yr Rainfall=3.58"

Printed 9/27/2021

Page 8

Summary for Subcatchment 2S: COURT YARD

Runoff = 0.41 cfs @ 12.02 hrs, Volume= 0.022 af, Depth= 1.93"
Routed to Pond 1P : RAIN GARDEN

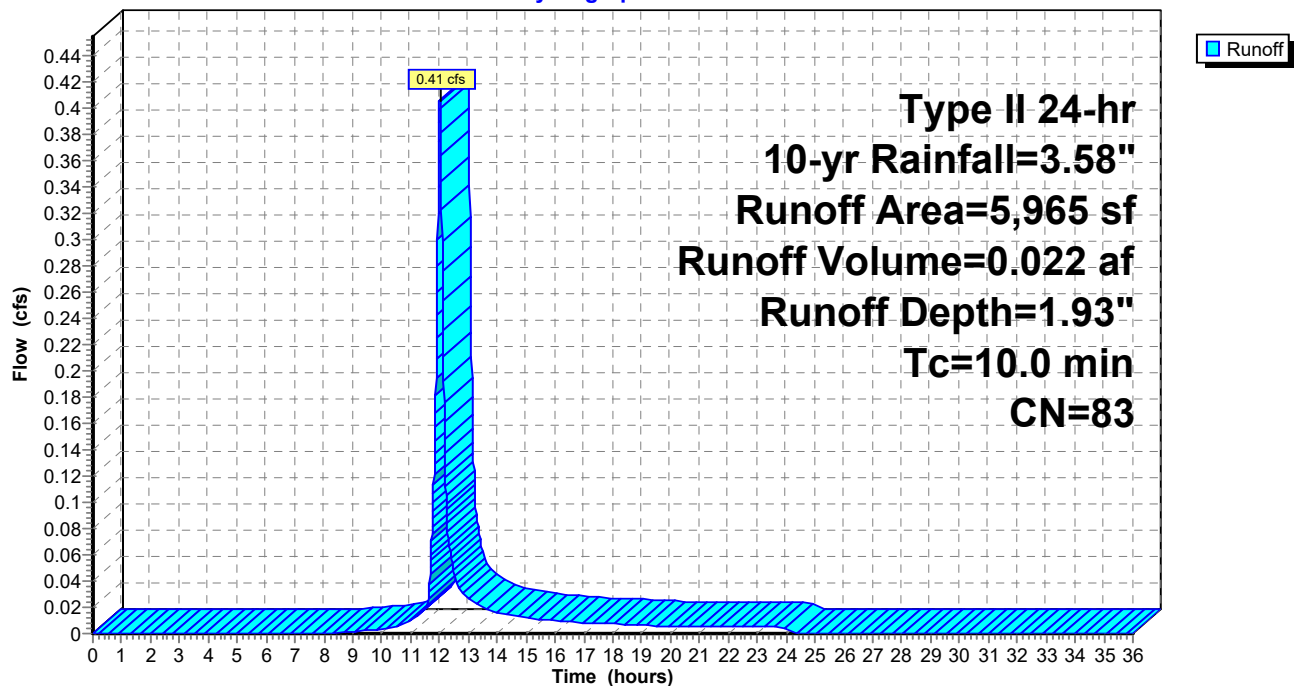
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.58"

Area (sf)	CN	Description
3,769	74	>75% Grass cover, Good, HSG C
2,196	98	Paved parking, HSG C
5,965	83	Weighted Average
3,769		63.19% Pervious Area
2,196		36.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 2S: COURT YARD

Hydrograph



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 10-yr Rainfall=3.58"

Printed 9/27/2021

Page 9

Summary for Pond 1P: RAIN GARDEN

Inflow Area = 0.137 ac, 36.81% Impervious, Inflow Depth = 1.93" for 10-yr event
 Inflow = 0.41 cfs @ 12.02 hrs, Volume= 0.022 af
 Outflow = 0.18 cfs @ 12.15 hrs, Volume= 0.022 af, Atten= 55%, Lag= 7.8 min
 Primary = 0.18 cfs @ 12.15 hrs, Volume= 0.022 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 520.09' @ 12.15 hrs Surf.Area= 227 sf Storage= 210 cf

Plug-Flow detention time= 12.1 min calculated for 0.022 af (100% of inflow)
 Center-of-Mass det. time= 12.1 min (840.4 - 828.3)

Volume	Invert	Avail.Storage	Storage Description			
#1	517.00'	533 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
517.00	227	75.0	0.0	0	0	227
518.50	227	75.0	30.0	102	102	340
520.50	227	75.0	30.0	136	238	490
521.38	457	93.0	100.0	295	533	741

Device	Routing	Invert	Outlet Devices	
#1	Primary	517.00'	2.0" Vert. Orifice/Grate	C= 0.600 Limited to weir flow at low heads
#2	Primary	520.75'	8.0" Horiz. Orifice/Grate	C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.18 cfs @ 12.15 hrs HW=520.09' (Free Discharge)

↑ **1=Orifice/Grate** (Orifice Controls 0.18 cfs @ 8.35 fps)

└ **2=Orifice/Grate** (Controls 0.00 cfs)

21284 APD CSR

Prepared by {enter your company name here}

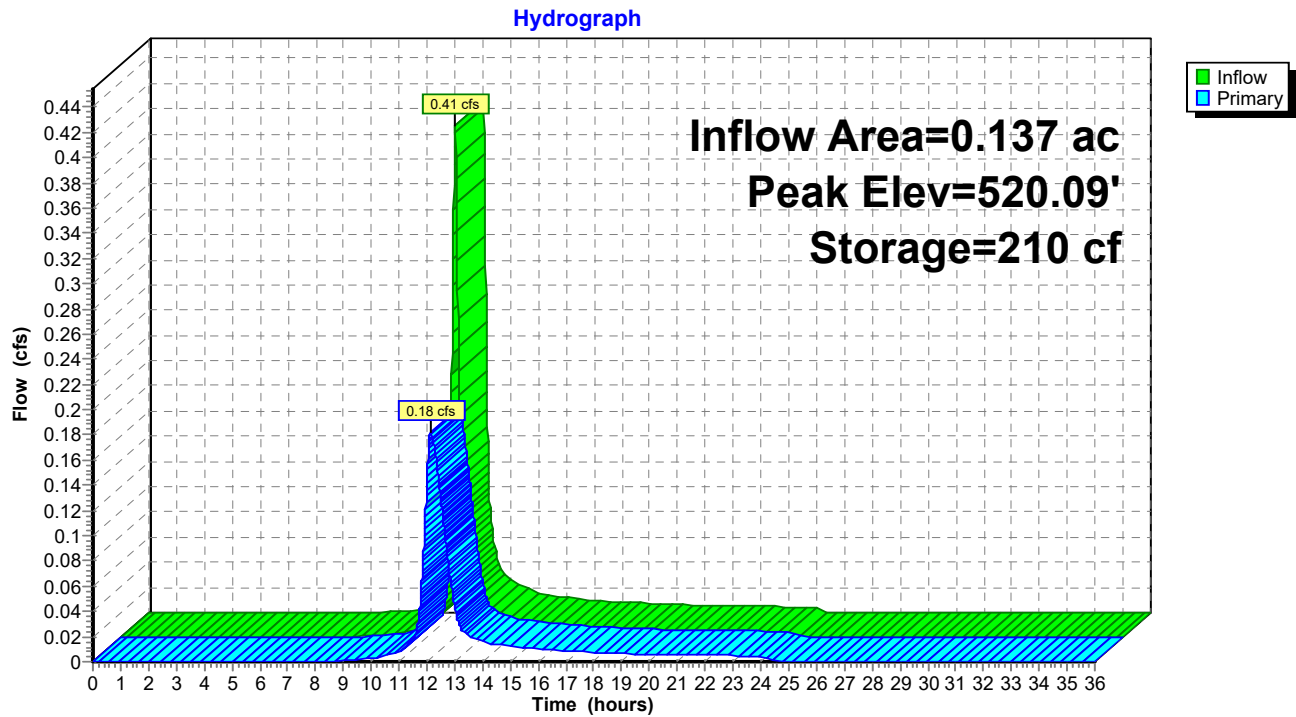
HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 10-yr Rainfall=3.58"

Printed 9/27/2021

Page 10

Pond 1P: RAIN GARDEN



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 25-yr Rainfall=4.41"

Printed 9/27/2021

Page 11

Summary for Subcatchment 2S: COURT YARD

Runoff = 0.55 cfs @ 12.01 hrs, Volume= 0.030 af, Depth= 2.65"
Routed to Pond 1P : RAIN GARDEN

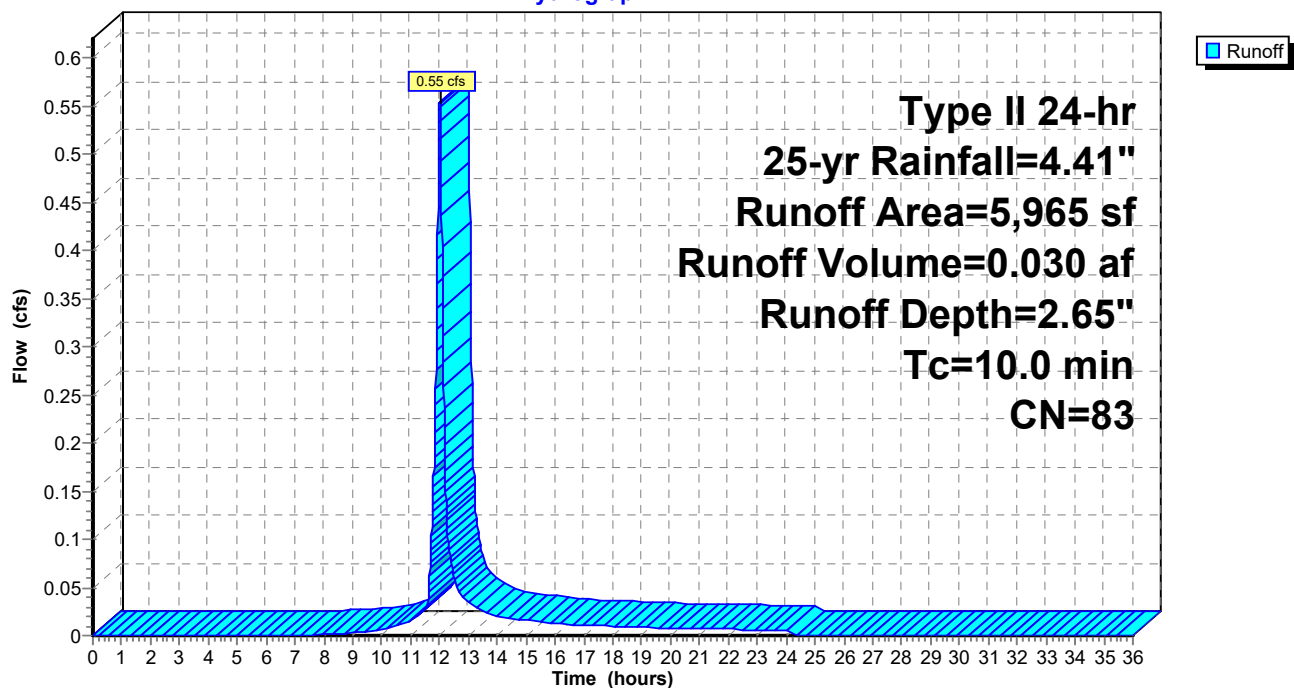
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-yr Rainfall=4.41"

Area (sf)	CN	Description
3,769	74	>75% Grass cover, Good, HSG C
2,196	98	Paved parking, HSG C
5,965	83	Weighted Average
3,769		63.19% Pervious Area
2,196		36.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 2S: COURT YARD

Hydrograph



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 25-yr Rainfall=4.41"

Printed 9/27/2021

Page 12

Summary for Pond 1P: RAIN GARDEN

Inflow Area = 0.137 ac, 36.81% Impervious, Inflow Depth = 2.65" for 25-yr event
 Inflow = 0.55 cfs @ 12.01 hrs, Volume= 0.030 af
 Outflow = 0.27 cfs @ 12.14 hrs, Volume= 0.030 af, Atten= 52%, Lag= 7.4 min
 Primary = 0.27 cfs @ 12.14 hrs, Volume= 0.030 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 520.79' @ 12.14 hrs Surf.Area= 294 sf Storage= 314 cf

Plug-Flow detention time= 13.6 min calculated for 0.030 af (100% of inflow)
 Center-of-Mass det. time= 13.6 min (832.9 - 819.3)

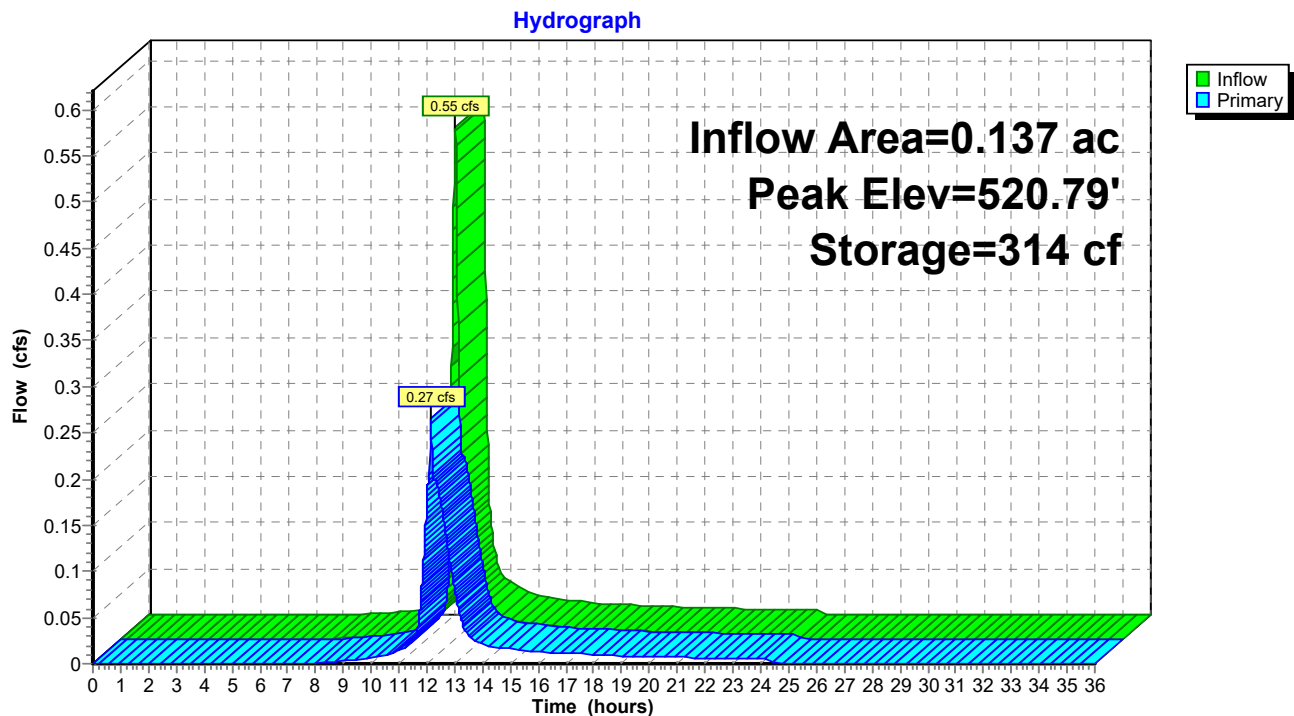
Volume	Invert	Avail.Storage	Storage Description			
#1	517.00'	533 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
517.00	227	75.0	0.0	0	0	227
518.50	227	75.0	30.0	102	102	340
520.50	227	75.0	30.0	136	238	490
521.38	457	93.0	100.0	295	533	741

Device	Routing	Invert	Outlet Devices			
#1	Primary	517.00'	2.0" Vert. Orifice/Grate	C= 0.600	Limited to weir flow at low heads	
#2	Primary	520.75'	8.0" Horiz. Orifice/Grate	C= 0.600	Limited to weir flow at low heads	

Primary OutFlow Max=0.26 cfs @ 12.14 hrs HW=520.79' (Free Discharge)

↑ **1=Orifice/Grate** (Orifice Controls 0.20 cfs @ 9.27 fps)
 — **2=Orifice/Grate** (Weir Controls 0.06 cfs @ 0.66 fps)

Pond 1P: RAIN GARDEN



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 50-yr Rainfall=5.15"

Printed 9/27/2021

Page 14

Summary for Subcatchment 2S: COURT YARD

Runoff = 0.69 cfs @ 12.01 hrs, Volume= 0.038 af, Depth= 3.31"
 Routed to Pond 1P : RAIN GARDEN

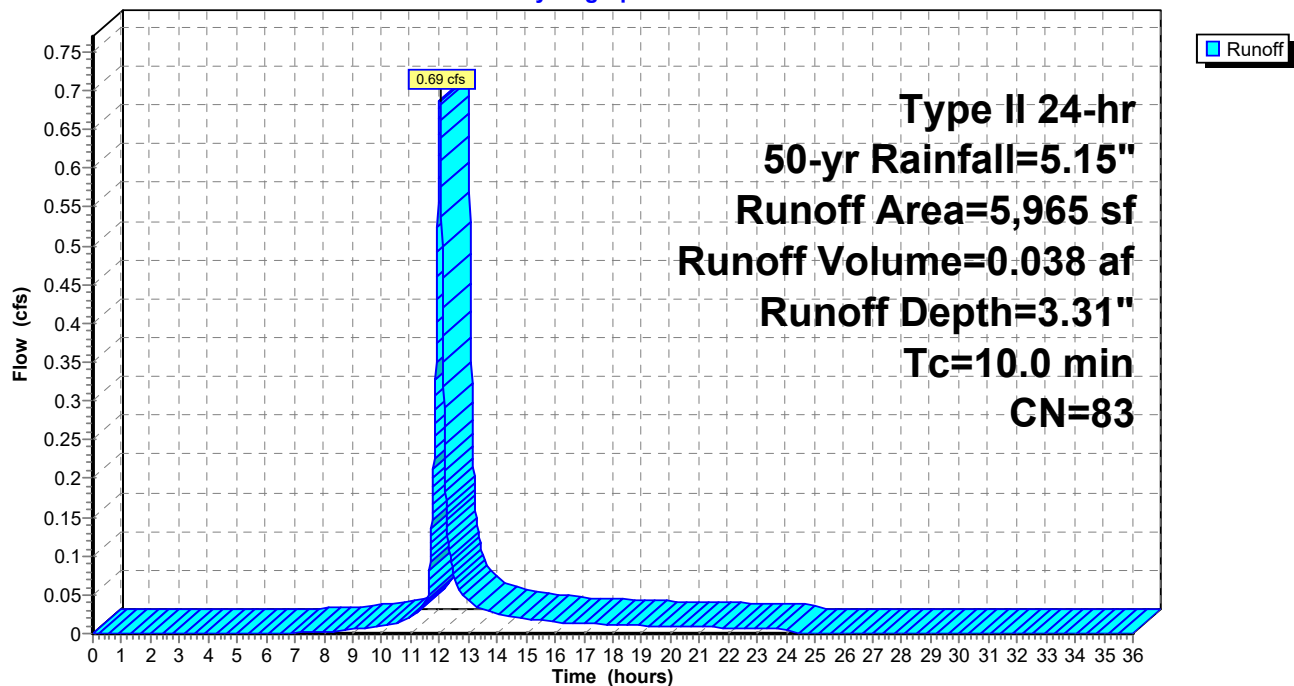
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Type II 24-hr 50-yr Rainfall=5.15"

Area (sf)	CN	Description
3,769	74	>75% Grass cover, Good, HSG C
2,196	98	Paved parking, HSG C
5,965	83	Weighted Average
3,769		63.19% Pervious Area
2,196		36.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 2S: COURT YARD

Hydrograph



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden
Type II 24-hr 50-yr Rainfall=5.15"

Printed 9/27/2021

Page 15

Summary for Pond 1P: RAIN GARDEN

Inflow Area = 0.137 ac, 36.81% Impervious, Inflow Depth = 3.31" for 50-yr event
 Inflow = 0.69 cfs @ 12.01 hrs, Volume= 0.038 af
 Outflow = 0.54 cfs @ 12.08 hrs, Volume= 0.038 af, Atten= 21%, Lag= 3.9 min
 Primary = 0.54 cfs @ 12.08 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 520.88' @ 12.08 hrs Surf.Area= 318 sf Storage= 342 cf

Plug-Flow detention time= 12.7 min calculated for 0.038 af (100% of inflow)
 Center-of-Mass det. time= 12.7 min (825.6 - 812.9)

Volume	Invert	Avail.Storage	Storage Description			
#1	517.00'	533 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
517.00	227	75.0	0.0	0	0	227
518.50	227	75.0	30.0	102	102	340
520.50	227	75.0	30.0	136	238	490
521.38	457	93.0	100.0	295	533	741

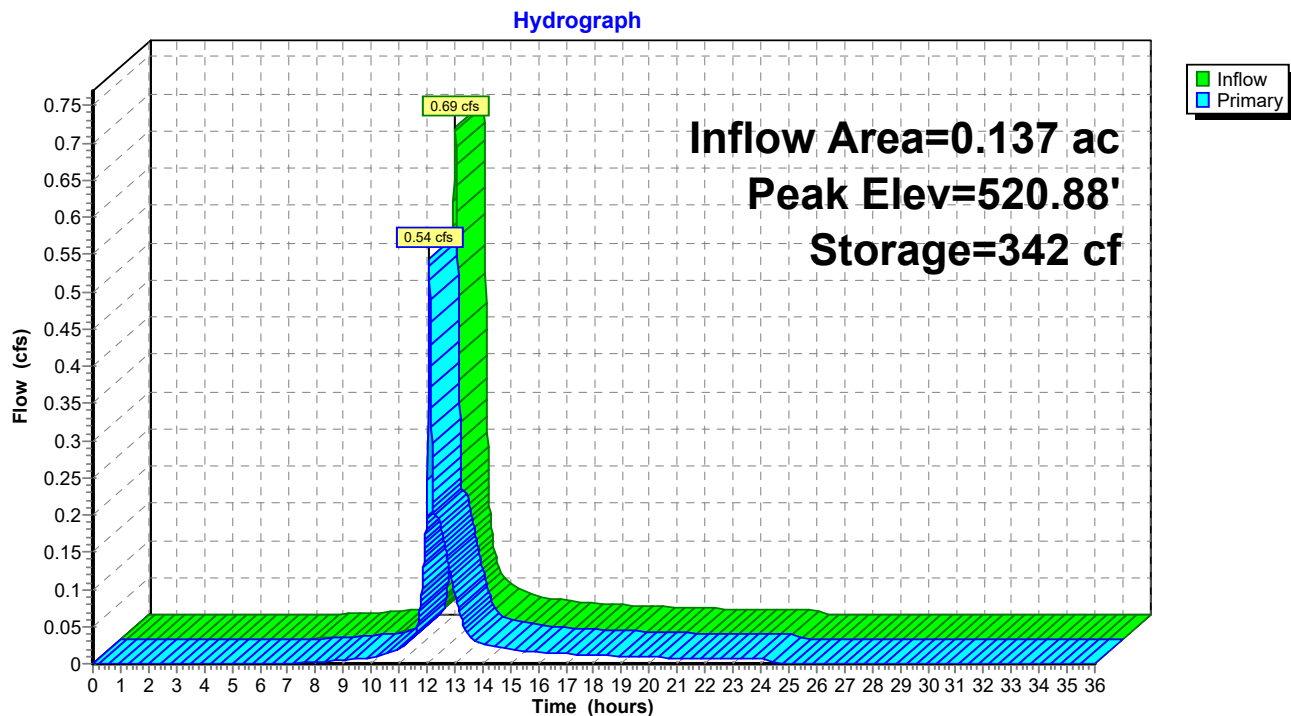
Device	Routing	Invert	Outlet Devices	
#1	Primary	517.00'	2.0" Vert. Orifice/Grate	C= 0.600 Limited to weir flow at low heads
#2	Primary	520.75'	8.0" Horiz. Orifice/Grate	C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.54 cfs @ 12.08 hrs HW=520.88' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.20 cfs @ 9.39 fps)

2=Orifice/Grate (Weir Controls 0.33 cfs @ 1.20 fps)

Pond 1P: RAIN GARDEN



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden

Type II 24-hr 100-yr Rainfall=6.03"

Printed 9/27/2021

Page 17

Summary for Subcatchment 2S: COURT YARD

Runoff = 0.85 cfs @ 12.01 hrs, Volume= 0.047 af, Depth= 4.12"
 Routed to Pond 1P : RAIN GARDEN

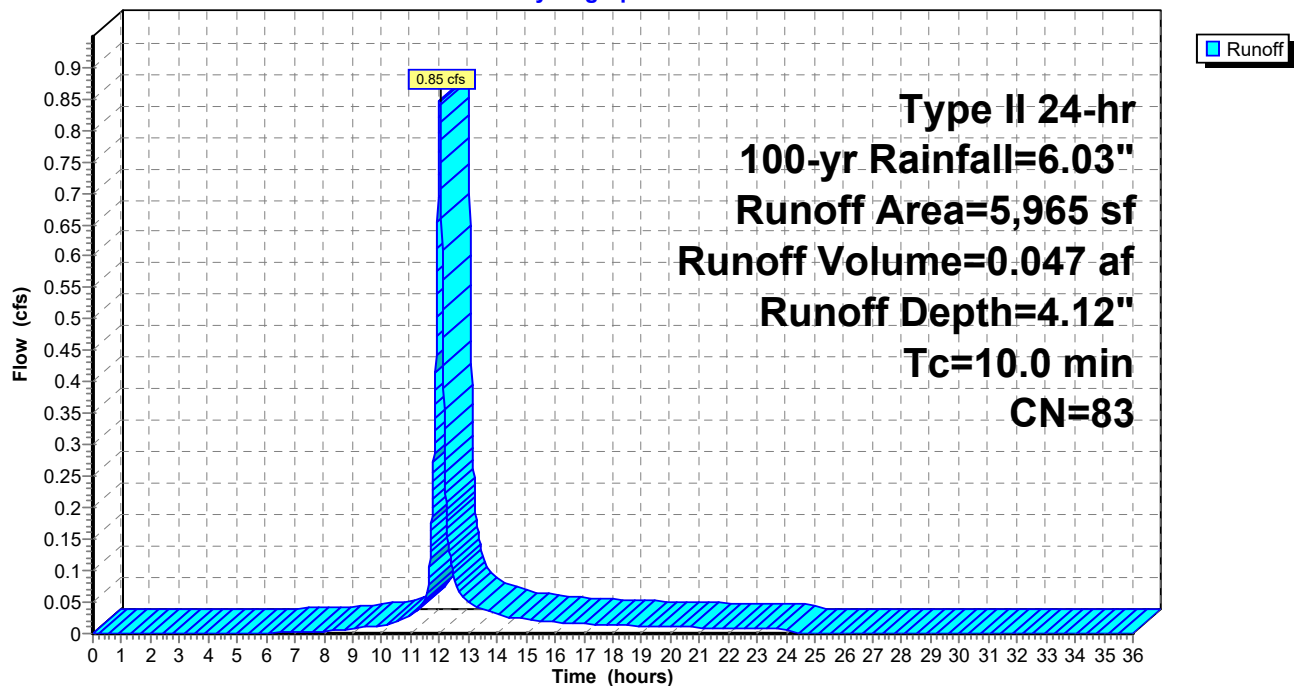
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Type II 24-hr 100-yr Rainfall=6.03"

Area (sf)	CN	Description
3,769	74	>75% Grass cover, Good, HSG C
2,196	98	Paved parking, HSG C
5,965	83	Weighted Average
3,769		63.19% Pervious Area
2,196		36.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 2S: COURT YARD

Hydrograph



21284 APD CSR

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02524 © 2020 HydroCAD Software Solutions LLC

APD CSR Rain Garden

Type II 24-hr 100-yr Rainfall=6.03"

Printed 9/27/2021

Page 18

Summary for Pond 1P: RAIN GARDEN

Inflow Area = 0.137 ac, 36.81% Impervious, Inflow Depth = 4.12" for 100-yr event
 Inflow = 0.85 cfs @ 12.01 hrs, Volume= 0.047 af
 Outflow = 0.78 cfs @ 12.05 hrs, Volume= 0.047 af, Atten= 7%, Lag= 2.3 min
 Primary = 0.78 cfs @ 12.05 hrs, Volume= 0.047 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 520.94' @ 12.05 hrs Surf.Area= 333 sf Storage= 361 cf

Plug-Flow detention time= 11.7 min calculated for 0.047 af (100% of inflow)
 Center-of-Mass det. time= 11.8 min (818.4 - 806.7)

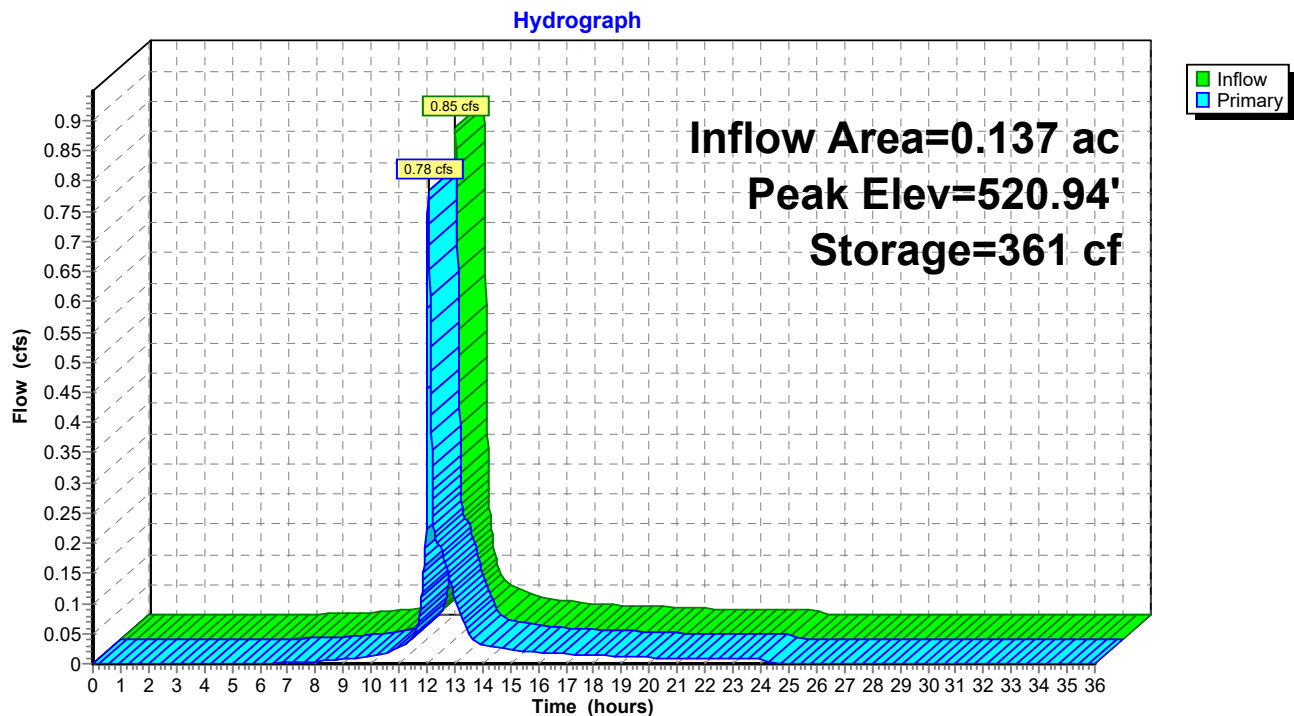
Volume	Invert	Avail.Storage	Storage Description			
#1	517.00'	533 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
517.00	227	75.0	0.0	0	0	227
518.50	227	75.0	30.0	102	102	340
520.50	227	75.0	30.0	136	238	490
521.38	457	93.0	100.0	295	533	741

Device	Routing	Invert	Outlet Devices			
#1	Primary	517.00'	2.0" Vert. Orifice/Grate	C= 0.600	Limited to weir flow at low heads	
#2	Primary	520.75'	8.0" Horiz. Orifice/Grate	C= 0.600	Limited to weir flow at low heads	

Primary OutFlow Max=0.78 cfs @ 12.05 hrs HW=520.94' (Free Discharge)

↑ **1=Orifice/Grate** (Orifice Controls 0.21 cfs @ 9.46 fps)
 — **2=Orifice/Grate** (Weir Controls 0.58 cfs @ 1.43 fps)

Pond 1P: RAIN GARDEN



Alice Peck Day CSR Addition

Stormwater Appurtenance Inspection and Maintenance Manual

Introduction

The Alice Peck Day CSR Addition project contains stormwater appurtenances which must be inspected and maintained on a regular basis. These systems include a rain garden, yard drains, and catch basins. In order to ensure the long-term effectiveness of approved stormwater practices, Alice Peck Day Memorial Hospital shall provide for on-going inspections and maintenance (I&M) for so long as the practices are reasonably expected to be used.

This text outlines the inspection and maintenance requirements of each system.

- (1) The party responsible for implementing the required reporting, inspection, and maintenance activities identified in this I&M Manual shall be:

Alice Peck Day Memorial Hospital
C/O Shawn Courtemanche, Director of Plant Operations
10 Alice Peck Day Drive
Lebanon, NH 03756
Tel: 603- 308-0235

- (2) The frequency of inspections shall be as follows:

Rain Garden:

- At least twice annually, and following any rainfall event exceeding 2.5 inches in a 24-hour period, with maintenance or rehabilitation conducted as warranted by such inspection.
- At least once annually, system should be inspected for drawdown time. If rain garden system does not drain within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore filtration function or infiltration function (as applicable), including but not limited to removal of accumulated sediments or reconstruction of the filter media.
- Vegetation should be inspected at least annually, and maintained in healthy condition, including pruning, removal and replacement of dead or diseased vegetation, and removal of invasive species.

Yard Drains & Catch Basins

- At a minimum, it is recommended that yard drains and catch basins be inspected at least twice annually, once following snow-melt and once following leaf-drop, and cleaned as indicated by inspection.

- (3) An inspection checklist to be used during each inspection Log can be found starting on Pages 3-4 of this manual.
- (4) An I&M Log shall be used to document each inspection and maintenance activity. A blank I&M Log can be found on Page 5 of this manual.

Alice Peck Day CSR Addition

Stormwater Appurtenance Inspection and Maintenance Manual

- (5) A plan showing the locations of the site and the stormwater appurtenances is included with this manual. The rain garden is labeled RG1, the yard drain is labeled YD1, and the catch basins are labeled CB1 and CB2.
- (6) If any invasive species begin to grow in the rain garden they shall be manually removed immediately and disposed properly. Herbicides are not recommended.

This I&M Manual and adherence to it are requirements of the Site Plan Approval issued by the City of Lebanon Planning Board.

All record keeping required by the I&M manual shall be maintained by the responsible party(ies) and be made available to the department upon request.

Alice Peck Day Memorial Hospital shall initiate the I&M activities upon the completion of all terrain alteration activities that direct stormwater to each appurtenance.

Alice Peck Day Memorial Hospital may contract with one or more third parties to conduct the I&M activities, but shall remain responsible for ensuring the long-term effectiveness of the stormwater practices.

If ownership of the property is transferred, the new owner(s) shall become the responsible party(ies).

Alice Peck Day CSR Addition

Stormwater Appurtenance Inspection and Maintenance Manual

I&M Checklist

Inspector:	Date:
Current Weather:	Time:
Rainfall in the Last 24 Hours (in): Can be checked here: http://www.nrcc.cornell.edu/page_nowdata.html	

Rain Garden Components

Items Inspected (Frequency)	Checked		Maintenance Needed		Maintenance Performed	
DEBRIS CLEANOUT (M)	Y	N	Y	N	Y	N
1. Rain gardens and contributing areas clean of debris						
2. No dumping of yard wastes into rain garden						
3. Litter (trash, debris, etc.) have been removed						
VEGETATION (M)						
4. No evidence of erosion.						
5. Is plant composition still according to plans						
6. No placement of inappropriate plants.						
7. No evidence of invasive species.						
DEWATERING AND SEDIMENTATION (A, AMS)						
8. Surface ponds dewater between storms.						
9. No evidence of standing water.						
10. No evidence of surface clogging.						
OUTLETS/OVERFLOW SPILLWAY (2A, AMS)						
11. Good condition, no need for repair						
12. No evidence of erosion.						
13. No evidence of any blockages.						
INTEGRITY OF BIOFILTER (2A, AMS)						
14. Rain garden has not been blocked or filled inappropriately.						
15. Mulch layer is still in place (depth of at least 3").						
16. Noxious plants or weeds removed.						

Inspection Frequency Key: A= Annual, 2A=Twice Annually, M=Monthly, AMS=After Major Storm (2.5")

(cont.)

Alice Peck Day CSR Addition

Stormwater Appurtenance Inspection and Maintenance Manual

I&M Checklist (cont.)

Inspector:	Date:
Current Weather:	Time:
Rainfall in the Last 24 Hours (in): Can be checked here: http://www.nrcc.cornell.edu/page_nowdata.html	

Catch Basins

Items Inspected (Frequency)	Checked		Maintenance Needed		Maintenance Performed	
	Y	N	Y	N	Y	N
DEBRIS CLEANOUT (2A)						
17. Contributing areas clean of debris						
18. Litter (trash, debris, etc.) have been removed						
19. Sediment removed if approaching half the sump depth.						
20. Floating hydrocarbons removed immediately by skimming, absorbent materials, or other method and disposed in conformance with applicable state and federal regulations.						

Inspection Frequency Key **A= Annual, 2A=Twice Annually, M= Monthly, AMS= After Major Storm (2.5")**

Comments:

Date by which outstanding maintenance must be completed:_____

Inspector's Signature:_____

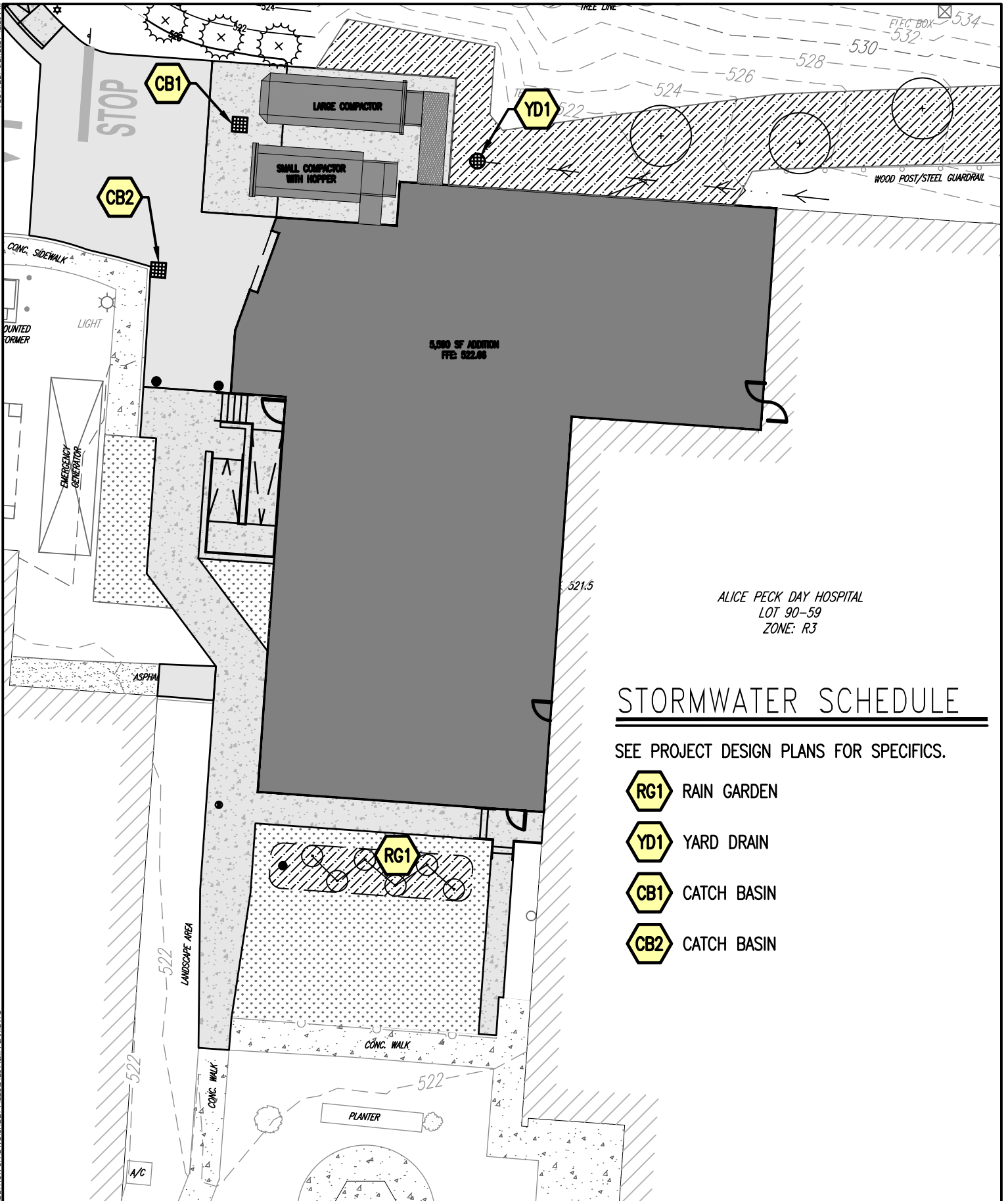
Alice Peck Day CSR Addition

Stormwater Appurtenance Inspection and Maintenance Manual

I&M Log

Date	Appurtenances Inspected	Maintenance Performed	Inspector's Signature

S:\PROJECTS\02-20121284 - NH APD ADDITION\DWG\3SHEET FILES\21284 I&M PLAN.DWG
PLOTTED: 9/27/2021 12:20 PM



ALICE PECK DAY HOSPITAL
LOT 90-59
ZONE: R3

STORMWATER SCHEDULE

SEE PROJECT DESIGN PLANS FOR SPECIFICS.

- RG1** RAIN GARDEN
- YD1** YARD DRAIN
- CB1** CATCH BASIN
- CB2** CATCH BASIN



208 Flynn Ave, Suite 2A, Burlington, VT 05401
85 Mechanic St, Suite E2-3, Lebanon, NH 03766
414 Union St, Schenectady, NY 12305
www.engineeringventures.com

Sheet Title: STORMWATER APPURTENANCE
INSPECTION & MAINTENANCE EXHIBIT
Project Title: ALICE PECK DAY MEMORIAL HOSPITAL
CSR ADDITION

EV Project # 21284.02
Drawn By: JF/NAF
Checked By: NAF
Scale: 1" = 20'
Date: 09/27/2021

Figure:

I&M-1

**Agenda
Planning Board
October 12, 2021**

**Agenda Item #3D
Public Hearing Items**

**XYZ Dairy, LLC,
River Park Drive
(Tax Map 44, Lots 3 & 7 &
Tax Map 58, Lot 27),
zoned CBD, IND-L and R-3
PB2021-29-EXT**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 12, 2021 Meeting

Staff Memorandum – PB2021-29-EXT

APPLICATION INFORMATION

Agenda Item: 3.D

Application ID#:
PB2021-29-EXT

Application Type:
Site Plan Extension

Property Location:
North Main Street,
West Lebanon

Property Owner/Applicant:
XYZ Dairy, LLC

Property Size:
+/-38.18 Ac. (combined tract)

Zoning District(s):

- Central Business District (CBD)
- Light Industrial (IND-L)
- Residential Three (R-3)

Overlay District:

- Wetlands Conservation District
- Flood Plain District

Attachments:

- Notice of Action for PB2018-34-EXT dated September 9, 2019 (17 pages)

HEARING NOTICE

XYZ Dairy, LLC, River Park Drive (Tax Map 44, Lots 3 & 7 & Tax Map 58, Lot 27), zoned CBD, IND-L and R-3: Applicant requests an extension of the timelines set forth in the Planning Board Notice of Action dated September 9, 2019 (PB2018-34-SPA) for the commencement of construction and completion of the River Park development. PB2021-29-EXT

APPLICATION MATERIALS

- ▶ Application form (1 page)
- ▶ Letter from Chet Clem, Lyme Properties, dated September 13, 2021 (extension request; 6 pages)

COMPLETENESS REVIEW

This application has been reviewed in accordance with the Lebanon Site Plan Review Regulations. The Planning and Development Department recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

APPLICATION OVERVIEW

On October 24, 2011, the Planning Board granted approval for a seven (7) phase development known as River Park. As approved, the development would consist of eight (8) non-residential or multi-family residential buildings totaling 839,145 square feet plus two parking garages for 1,393 vehicles on 7 parcels within the CBD and IND-L zoning districts. (PB2010-25-SPR).

The applicant was granted an extension to the approved site plan on September 9, 2013, and on June 8, 2015, the applicant was granted a site plan amendment for the layout of Lot 1, which included changes to the building footprint, parking layout, vehicular circulation, loading location of the building, landscaping, lighting, and the drainage and engineering of the site. (PB2015-10-SPA). On November 9, 2015, the applicant was granted additional time within which to obtain Building Permits for each approved development phase.

On September 9, 2019, the Planning Board approved an amendment to the site plan to, among other things, change the sequencing of the project phasing and increase the number of residential dwelling units from 80 to 125 in Building #8 (PB2018-34-SPA). The Notice of Action for this approval

– a copy of which is attached for reference – was written to supersede and replace all prior Notices of Action relating to the River Park site plan approval.

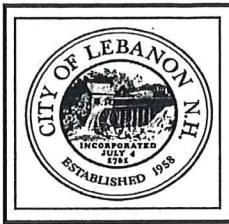
As discussed in the attached application materials, the applicant now proposes to extend the various deadlines set forth in the 2019 Notice of Action by two (2) years. It is staff's understanding that the applicant's request would necessitate changes to the following conditions of approval set forth in the 2019 Notice of Action:

- 14-2. The construction of Phase 1 infrastructure improvements, which commenced in 2018, shall be completed within ~~5-7~~ years from the date of the Planning Board's final subdivision approval, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 15-1. As proposed by the applicant, the construction of Phase 1-A improvements shall commence before the end of ~~2023-2025~~ and shall be completed within 2 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 16-1. As proposed by the applicant, the construction of Phase 1-B improvements shall commence before the end of ~~2024-2026~~ and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 17-1. As proposed by the applicant, the construction of Phase 2 infrastructure improvements shall commence before the end of ~~2026-2028~~ and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 18-1. As proposed by the applicant, the construction of Phase 3 improvements shall commence before the end of ~~2028-2030~~ and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 19-1. As proposed by the applicant, the construction of Phase 4 improvements shall commence before the end of ~~2030-2032~~ and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 20-1. As proposed by the applicant, the construction of Phase 5 improvements shall commence before the end of ~~2032-2034~~ and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 21-1. As proposed by the applicant, the construction of Phase 6 improvements shall commence before the end of ~~2035-2037~~ shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 29. Effect of Approval. This approval is a final, conditional site plan approval for a "phased development" under Section 4.9 of the Site Plan Review Regulations and is a final decision of the Planning Board for purposes of RSA 677:15, I. As set forth in Section 4.10(C) of those Regulations, the deadlines for the construction of improvements

within each phase shall be as stated in the approved phasing plan, rather than the 1-year period under Section 4.10(A). It is the intent and effect of this approval, subject to the satisfactory completion of the financial security requirements set forth in Condition #5 of the Final Major Subdivision approval (#PB2011-01-FMAJ) for the development, that upon completion of the Phase 1 infrastructure improvements within ~~5~~7 years of the final subdivision approval, as set forth in Condition #14-2 above, the subdivision as a whole, including all phases, shall vest as provided in RSA 674:39, II, and no subsequent changes in subdivision regulations, site plan regulations, or zoning ordinances, except impact fees adopted pursuant to RSA 674:21 and 675:2-4, shall operate to affect this phased development, provided that the applicant and its successors-in-interest continue to comply with all conditions of this approval and of the Planning Board's approval of Final Major Subdivision application #PB2011-01-FMAJ, including the time limits set forth in the phasing plan, unless such a limit is extended for good cause by the Planning Board, acting upon an application submitted prior to the expiration of such limit.

Attachments

cc: David Clem, XYZ Dairy, LLC (via e-mail)
Chet Clem, Lyme Properties (via e-mail)
File



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

LEBANON PLANNING BOARD NOTICE OF ACTION #PB2018-34-SPA

Notice is hereby given that on **JANUARY 14, 2019**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Bruce Garland moved that the Lebanon Planning Board finds the application of **XYZ DAIRY, LLC** for a Site Plan Amendment, #PB2018-34-SPA, is complete enough to accept jurisdiction and commence review.

The motion was seconded by Gregory Schwarz. The vote on the motion was 8-0.

Notice is hereby given that on **SEPTEMBER 9, 2019**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that the Lebanon Planning Board **APPROVE** waivers for the application of **XYZ DAIRY, LLC**, #PB2018-34-SPA, from the requirements of Article VI ("Design and Construction Requirements") of the Site Plan Review Regulations, Sections 6.2, 6.5, 6.6 and 6.7, to allow the construction of temporary parking facilities on Lots 3, 4 and 5 of the River Park development.

The motion was seconded by Matthew Cole. The vote on the motion was 5-2, with Ms. Monroe and Mr. Schwarz voting against the motion. Ms. Romano and Ms. Stavis recused themselves from hearing the application.

Notice is hereby given that on **SEPTEMBER 9, 2019**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that the Lebanon Planning Board **APPROVE** the application of **XYZ DAIRY, LLC** for an amendment to the Site Plan approval for the River Park mixed-use development to (i) change the sequence of the project phasing, (ii) increase the number of proposed residential dwelling units from 80 to 125, (iii) relocate the proposed sewer line from Crafts Avenue Ext. across Lot 2, and (iv) allow temporary parking facilities on Lots 2, 3, 4, and 5 for the first three phases of the development, #PB2018-34-SPA, including any and all supplemental submissions and testimony provided for and during the public hearing, and per the conditions of approval noted below.

Approval of the River Park development is in accordance with the Lebanon Zoning Ordinance dated December 5, 1990, last revised July 21, 2010, and the Lebanon Site Plan Review Regulations dated May 9, 1977, last revised November 9, 2009. The phased

build-out of River Park shall be as shown on the map and described in the chart under the heading "NEW PHASING PLAN" on page 5 of this Decision¹ (the "New Phasing Plan"), and is projected to occur over a 15-year period, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.

This Site Plan approval is related to a subdivision plat for River Park that was originally approved by the Planning Board on October 11, 2011 (#PB2011-01-FMAJ), was revised on May 11, 2015 (#PB2015-07-FMAJ) and was recorded in the Grafton County Registry of Deeds on January 2, 2018.

PRIOR NOTICES OF ACTION

River Park, located at North Main Street, Tax Map 44, Lots 3 & 7 and Tax Map 58, Lot 27, in the CBD, IND-L and R-3 zones, was originally approved in 2011, and received extensions and modifications in 2013, 2015, and 2016. This Notice of Action is intended to consolidate and update all prior conditions of Site Plan approval for River Park and, therefore, is intended to supersede and replace the following Notices of Action:

- Notice of Action dated October 24, 2011, approving the site plan review application for XYZ DAIRY, LLC for a seven (7) phase development known as River Park, located at North Main Street, Tax Map 44, Lots 3 & 7 and Tax Map 57, Lot 27, West Lebanon, NH, in the CBD, IND-L and R-3 zones, #PB2010-25-SPR, as shown on plans titled "Site Plans – River Park" (Sheets numbered 1 through 5; D1 through D18; 1-1 through 1-16; 2-1 through 2-21; 3-1 through 3-16; 4-1 through 4-9; 5-1 through 5-7; 6-1 through 6-9; and 7-1 through 7-8), prepared by Holden Engineering & Surveying, Inc., issued for permitting: June 10, 2010, latest issue: May 2, 2011.
- Notice of Action dated September 9, 2013, approving the request of XYZ Dairy, LLC, for an extension of time in order to obtain Building Permits for each phase of a phased development known as River Park, located at North Main Street, Tax Map 44, Lots 3 and 7, and Tax Map 58, Lot 27, in the CBD, IND-L and R-3 zones, #PB2013-22-EXT.
- Notice of Action dated June 8, 2015, approving the application of XYZ DAIRY, LLC for a Site Plan Amendment to amend the layout of Lot 1, including changes to the building footprint, parking layout, vehicular circulation, loading location of the building, landscaping, lighting, and drainage and engineering of the site and associated site improvements, located at North Main Street, Tax Map 44, Lot 3, in the CBD district, #PB2015-10-SPA, plans titled "River Park, Proposed Amendment to Site Plan – Lot 1, West Lebanon, Grafton County, New Hampshire" prepared by Elkus/Manfredi Architects, dated April 13, 2015, and plans titled "Site Plans, River Park, River Park Drive, Lebanon, New Hampshire, Grafton County," prepared by TF Moran, dated May 26, 2015.
- Notice of Action dated November 9, 2015, approving the application XYZ DAIRY, LLC for an extension pursuant to the Site Plan Review Regulations for a 7-phase development known as River Park, located at North Main Street, Tax Map 44, Lots

¹ The New Phasing Plan replaces and supersedes the Master Phasing Plan (Sheet 5 of the Approved Plan Set).

3 and 7, and Tax Map 58, Lot 27, in the CBD, IND-L, and R-3 zones, #PB2015-34-EXT, as requested in a letter from David Clem of Lyme Properties.

- Notice of Action dated November 14, 2016, approving the request of XYZ DAIRY, LLC, for an extension of Site Plan Approval for a seven (7) phase development known as River Park, located at North Main Street, Tax Map 44, Lots 3 and 7, and Tax Map 58, Lot 27, in the CBD, IND-L, and R-3 zones, #PB2016-28-EXT.

The approval documented by this Notice of Action for #PB2018-34-SPA incorporates the following:

- The following approvals granted on October 24, 2011, as part of #PB2010-25-SPR:
 - A conditional use permit for the use of off-lot parking within the development in accordance with Section 607.5 of the Zoning Ordinance as set forth in the "Master Plan-Phasing Parking" table on Sheet 5 of the Approved Plan Set.
 - Waivers for Sections 5.2.A (Statement of Service from Utilities) and Section 7.3.C (Use of Landscape Architect) of the Site Plan Review Regulations for the overall development.
- Any and all supplemental submissions and testimony provided for and during the public hearings for #PB2010-25-SPR, #PB2013-22-EXT, #PB2015-10-SPA, #PB2015-34-EXT, #PB2016-28-EXT, and for the current application, #PB2018-34-SPA.

APPROVED SITE PLANS

As set forth in the Notices of Action outlined above, the approved site plans for River Park consist of the following:

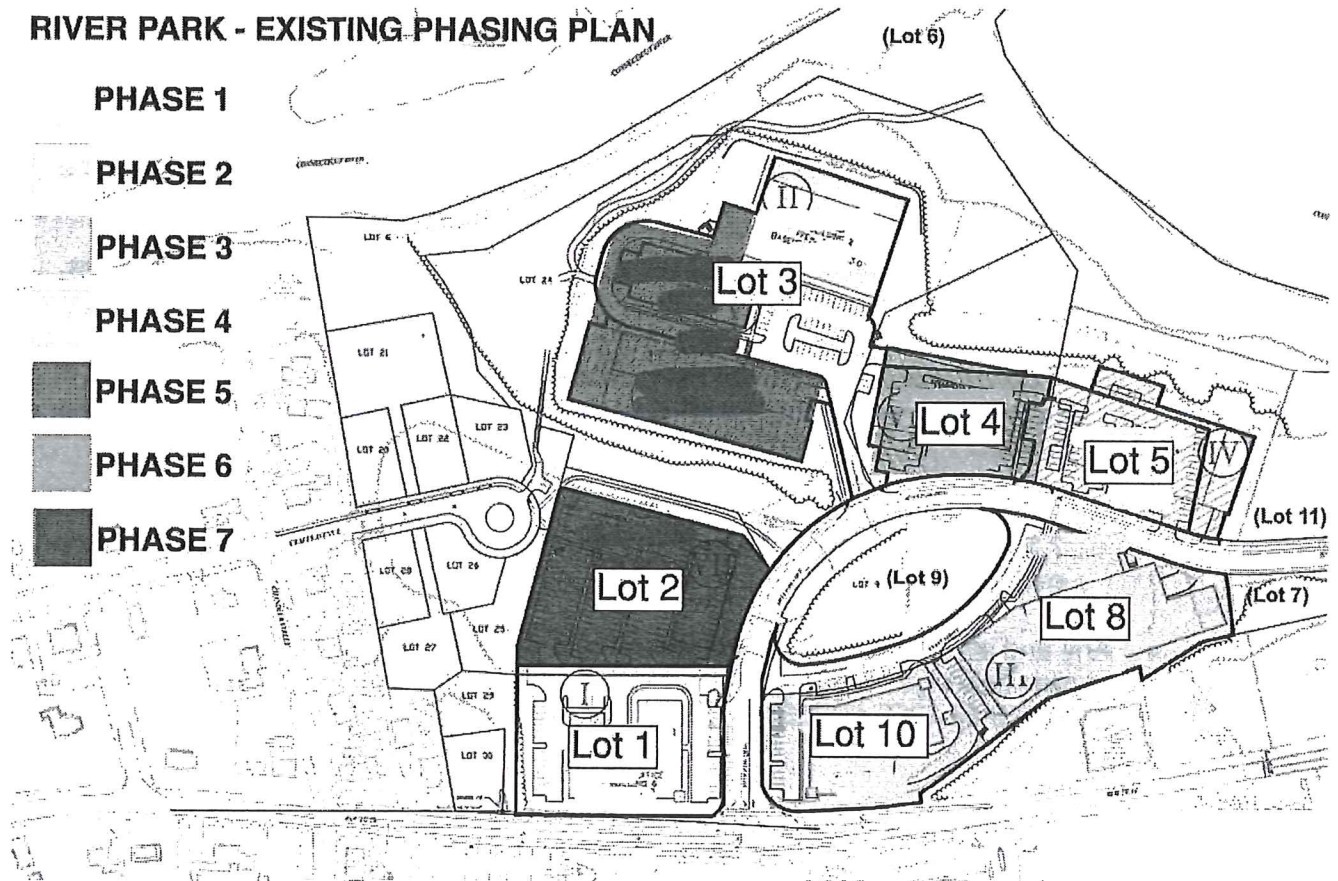
- Plans titled "Site Plans – River Park" (Sheets numbered 1 through 5; D1 through D18; 1-1 through 1-16; 2-1 through 2-21; 3-1 through 3-16; 4-1 through 4-9; 5-1 through 5-7; 6-1 through 6-9; and 7-1 through 7-8), prepared by Holden Engineering & Surveying, Inc., issued for permitting: June 10, 2010, latest issue: May 2, 2011 ("Approved Plan Set").
- Plans titled "River Park, Proposed Amendment to Site Plan – Lot 1, West Lebanon, Grafton County, New Hampshire" prepared by Elkus/Manfredi Architects, dated April 13, 2015, and plans titled "Site Plans, River Park, River Park Drive, Lebanon, New Hampshire, Grafton County," prepared by TF Moran, dated May 26, 2015. [These plans sets supersede and replace Sheets 1-1 through 1-16 of the Approved Plan Set].

[continued on following page]

PRIOR PHASING PLAN

River Park was originally approved as a seven (7) phase project as follows:

RIVER PARK - EXISTING PHASING PLAN

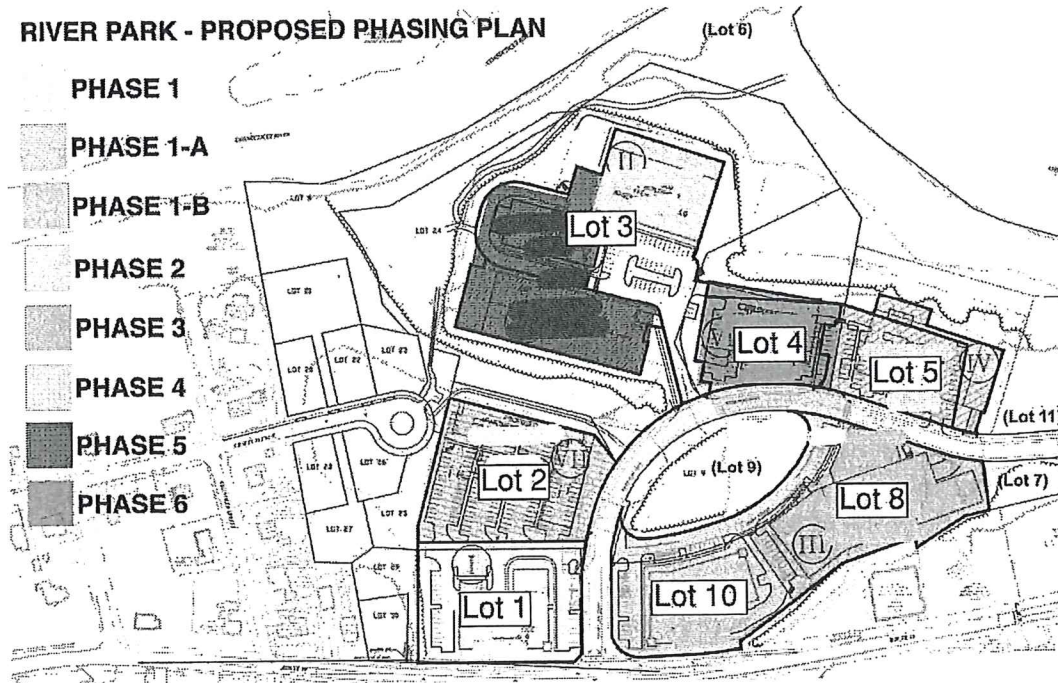


PRIOR PHASING -- APPROVED ON 10/24/11	
Phase	Improvements
1	48,750-square-foot building for office and retail use located on Lot 1 with temporary parking located on Lot 2. Phase 1 also includes construction of a portion of the development roadway sufficient to access the proposed building, the southerly development entrance intersection, the extension of Crafts Avenue, and the installation of water and sewer lines necessary for this portion of the site.
2	178,650-square-foot building for laboratory/office use located on Lot 3 with temporary parking located on Lots 4 and 5. Phase 2 also includes the construction of the remainder of the development roadway and the northerly access intersection.
3	95,800-square-foot building for office and retail use located on Lot 10; a 23,000-square-foot building for office and retail use and a 585-space parking garage located on Lot 8, and construction of proposed Lyman Street.
4	153,120-square-foot building for laboratory/office use located on Lot 5.
5	81,500-square-foot building for laboratory/office use and an 808-space parking garage located on Lot 3.
6	133,200-square-foot building for laboratory/office use located on Lot 4.
7	125,125-square-foot building for 80 units of multi-family housing located on Lot 2.

NEW PHASING PLAN

This Notice of Action approves the rephasing of the River Park development, as follows:

RIVER PARK - PROPOSED PHASING PLAN



NEW PHASING	
Phase	Improvements
1	46,925 ² -square-foot building for office and retail use located on Lot 1 with temporary parking located on Lot 2 and Lot 3. Phase 1 also includes construction of a portion of the development roadway sufficient to access Lot 3, the southerly development entrance intersection, the extension of Crafts Avenue, and the installation of water and sewer lines necessary for this portion of the site.
1-A	125,125-square-foot building for 125 units of multi-family housing located on Lot 2, and the construction of a temporary parking lot on Lot 3 and Lot 4. Phase 1-A also includes the extension of the development roadway and construction of proposed Lyman Street.
1-B	95,800-square-foot building for office and retail use located on Lot 10 with temporary parking on Lot 3, Lot 4, and Lot 5.
2	178,650-square-foot building for laboratory/office use located on Lot 3 with temporary parking located on Lot 3, Lot 4, and Lot 5. Phase 2 also includes the construction of the remainder of the development roadway and the northerly access intersection.
3	23,000-square-foot building for office and retail use and a 585-space parking garage located on Lot 8.
4	153,120-square-foot building for laboratory/office use located on Lot 5.
5	81,500-square-foot building for laboratory/office use and an 808-space parking garage located on Lot 3.
6	133,200-square-foot building for laboratory/office use located on Lot 4.

² Reduced from 48,750 sq. ft. per Notice of Action dated June 8, 2015, #PB2015-10-SPA. The applicant may apply to the Planning Board for a Site Plan Amendment to reallocate the 1,825 sq. ft. difference towards another building or buildings in the River Park development.

CONDITIONS OF APPROVAL

GENERAL CONDITIONS-PRECEDENT TO THE ISSUANCE OF A BUILDING PERMIT FOR EACH PHASE:

1. The applicant shall submit final designs, including construction drawings, of all infrastructure features associated with each phase, including proposed on- and off-site roadway and parking areas, sidewalks, water and sewer utilities, and storm drainage systems, to the City Engineer for approval, which shall not be unreasonably withheld.

2. The applicant has submitted sufficient site and building information to obtain Site Plan approval for development of the site. However, the applicant shall be required to submit updated site plans, building elevations, and phasing information sufficient to demonstrate compliance with the approval to the City for review and approval by the Planning Department, prior to the issuance of Building Permits for each phase and prior to the start of any construction activities for development shown or described in all remaining phases as depicted on the New Phasing Plan. For purposes of this decision, construction activities shall include any construction, excavation, or other site work associated with the construction or installation of buildings, roadways, parking, water, sewer, or storm drainage infrastructure. All such plans and information shall be in accordance with the Site Plan Review Regulations dated last revised November 9, 2009. Such Planning Department review shall be for the purpose of ensuring that the proposed building design and uses are in substantial conformance with the approved phased development project and with the Site Plan Review Regulations referenced above.

3. The applicant shall complete all required improvements for all approved phases in accordance with the New Phasing Plan and in accordance with this decision, except that the applicant, upon written notice to the Planning Board, may elect to commence Phase 3 (including the 585-space parking garage located on Lot 8) at any time prior to the date referenced in Condition #18-1. In so doing, the applicant may commence Phase 3 prior to any one or more of the phases preceding Phase 3 in the sequence set forth in the New Phasing Plan. For purposes of this decision, the commencement dates referenced on the New Phasing Plan and in this decision shall be deemed to be the date by which a Building Permit shall have been applied for with stamped construction drawings prepared by a licensed architect and engineer for that phase, pursuant to Section 4.9.C(4) of the Site Plan Review Regulations, and the phasing deadline is tolled until the Building Permit is issued. If the applicant anticipates being unable to meet any time deadline(s) set forth in this decision with respect to any phase(s), the applicant shall submit an updated phasing schedule to the Planning Board for review and approval in accordance with Section 4.9.E of the Site Plan Review Regulations. In determining whether to grant any requested extensions, the Board shall consider the totality of the circumstances, including the extent and complexity of the conditions-precedent, and whether the need for more time is attributable to circumstances beyond the control of the applicant, rather than to the applicant's neglect or failure to proceed with reasonable promptness.

4. Prior to the start of any construction activities for which construction inspection is required pursuant to this decision or any applicable ordinance or code for each phase of the project, the City shall retain the services of an independent 3rd party

inspector, for which the applicant shall be responsible for all inspection fees related to construction and installation of on- and off-site roadways, parking, sidewalks, water and sewer utilities, storm drainage, and erosion control, in accordance with Chapter 181 of the City Code and Section 14 of the Subdivision Regulations unless waivers have been granted. The applicant shall provide funding for inspection services in a form acceptable to the City. Third party engineer inspection reports and as-built drawings provided by the applicant (using NH State Plane Coordinate system), including tie sheets and Northing and Easting coordinates and elevations of underground utilities, shall be reviewed and approved by the City Engineer, prior to acceptance of any utility improvements by the City and all inspection reports shall be made available to the applicant.

5. Edge-of-Disturbance fencing shall be installed and maintained before and during any site work for each phase under construction, to be verified by the City Engineer or City's third-party inspector on site.
6. The applicant shall be required to have at least one fire hydrant operational within the development prior to the issuance of any Building Permit for structural improvements (excluding the building foundation) to the satisfaction of the Lebanon Fire Department. Note: the Lebanon Fire Department has approved the fire hydrant on Crafts Avenue extension as satisfaction of this condition.
7. Temporary parking facilities.
 - a. Temporary parking facilities are approved in accordance with the chart attached hereto as Exhibit "A".
 - b. Prior to the issuance of a building permit for any phase involving the construction of a temporary parking facility, the applicant shall provide the Planning & Development Department with plans for the proposed temporary parking facility, together with an operation and maintenance plan.
 - c. Each temporary parking facility shall be designed to ensure the safe movement of vehicles and pedestrians to the satisfaction of the Director of the Department of Public Works and the Director of the Planning Department, which shall not be unreasonably withheld. It shall be the responsibility of the applicant to maintain each temporary parking facility in accordance with the operation and maintenance plan.
 - d. The temporary parking identified in Exhibit A may be used until such parking is replaced by the permanent parking garage included in Phase 3 or December 31, 2038, whichever is earlier.

GENERAL CONDITIONS-PRECEDENT TO THE ISSUANCE OF CERTIFICATES OF OCCUPANCY FOR EACH PHASE:

Temporary Certificates of Occupancy:

8. A water flow test shall be completed on the new water main within the development as soon as the water main is substantially complete and prior to any occupancy of any new buildings within the subdivision. Such test is for the purpose of designing

fire suppression sprinkler systems for each building and shall be witnessed and approved by the Lebanon Fire Department.

- 8a. The subdivision plat shall be recorded in the Grafton County Registry of Deeds prior to any occupancy of any new buildings within the subdivision. Note: The River Park Subdivision plat was filed on December 27, 2017 and recorded on January 2, 2018 in the Grafton County Registry of Deeds.
9. Prior to the issuance of any Certificate of Occupancy for each phase, the applicant shall enter into a Performance Security Agreement, pursuant to Section 8.2 of the Site Plan Review Regulations for any unfinished and outstanding improvements, unless waivers have been granted, that are required for the current development phase, both on- and off-site, including, but not limited to: parking and sidewalk improvements, sewer and water utilities, storm drainage systems, landscaping, and lighting, in an amount considered adequate by the Department of Public Works, and in a form satisfactory to the City Attorney. The Performance Security Agreement shall be secured by a surety bond, a letter of credit, or an escrow account.
10. Prior to the issuance of any Certificate of Occupancy for each phase, the applicant shall be required to provide the City with a copy of a recorded deed or easement, a 99-year lease, or other legal instrument acceptable to an attorney representing the City for off-lot parking in accordance with Section 607.5.A(2) of the Zoning Ordinance to ensure that the occupants of each phase have adequate on-site or off-site parking at all times.

Final Certificates of Occupancy:

11. Prior to the issuance of a final Certificate of Occupancy for each phase, the applicant shall dedicate the completed water mains and hydrants within the current development phase, excluding service connections beyond the curb shut-off valves, to the City for ownership and maintenance, subject to any appropriate easements. Said conveyance and easements shall be approved by the City Attorney and the Department of Public Works and recorded in the Grafton County Registry of Deeds prior to acceptance of any utility improvements by the City.
12. Prior to the issuance of a final Certificate of Occupancy for each phase, the applicant shall comply with all other applicable provisions of Chapter 181 of the City Code, to the satisfaction of the Department of Public Works.
13. Prior to the issuance of a final Certificate of Occupancy for each phase, the applicant shall provide a digital as-built record drawing for each lot (Cad .dwg format using the NH State Plane Coordinate System).

SPECIFIC CONDITIONS FOR PHASE 1:

- 14-1. The Applicant shall ensure that all trees are a minimum of ten (10) ft. from the water and sewer mains when planted.
- 14-2. The construction of Phase 1 infrastructure improvements, which commenced in 2018, shall be completed within 5 years from the date of the Planning Board's final

subdivision approval, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.

- 14-3. This condition was originally Condition #14-2 in the October 24, 2011 Notice of Action, and was obviated by the Planning Board's Notice of Action dated June 8, 2015 (#PB2015-10-SPA). It is included below for historical purposes only:

Prior to the issuance of a Building Permit for Phase 1 of the development, the applicant shall provide two complete sets of revised plans to the Planning Department, depicting the following plan changes:

- a. Sheet 1 of the approved Site Plan sets shall be revised to include the tax map and lot number and abutter name and address for the adjacent islands within the Connecticut River, which are owned by the State of New Hampshire.
- b. Sheets 2 & 3 of the approved Site Plan sets shall be revised to eliminate the reference to "Lot 6" within the boundaries of proposed Lot 21.
- c. Sheet 3 of the approved Site Plan sets shall be revised to relocate the Surveyor's signature block and to properly label Lot 21.
- d. As proposed by the applicant in a letter to the Planning Board dated July 19, 2011, the Phasing Notes on Sheet 5 of the approved Site Plan sets shall be revised to push back by one year the dates of commencement for each phase of the overall development.
- e. Sheets 1-9 and 1-11, and any other applicable plan sheets, shall be revised to depict bollards or other safety measures around all propane tanks that are exposed to vehicle traffic to the satisfaction of the Lebanon Fire Department.

- 14-4. Prior to the issuance of a Building Permit for Phase 1 of the development, the applicant shall obtain all required State approvals including, but not limited to, the following:

- NHDES Alteration of Terrain Permit
- NHDES approval for Sewage Discharge

Note: this requirement has already been satisfied. Alteration of Terrain Permit #AoT-0994 dated October 6, 2015 and Sewage Discharge Permit #D2015-0802 dated September 10, 2015, have been issued by NH DES for Phase 1.

- 14-5. The requirements of Sections 6.2.B(1) of the Site Plan Review Regulations are waived for improvements on Lot 2 for Phase 1. See *also* Condition 15-3.

- 14-6. As proposed by the applicant, the southerly development entrance improvements shall be constructed as part of Phase 1 of the development. If a Traffic Signal Warrant Analysis for the southerly development entrance indicates that signalization of the intersection will be required during any phase of the development, the applicant shall be required to install and activate traffic signal improvements when actual traffic conditions warrant such implementation, pursuant to Condition 14-8 of this decision. Note: the applicant has provided a Traffic Signal Warrant Analysis as required by this condition.

- 14-7. As recommended in Phase "A" of the applicant's Traffic Impact and Site Access Study, prepared by Holden Transportation Engineering, dated August 17, 2010, the applicant shall be required to implement traffic signal timing optimization improvements at the intersection of Main Street/Bridge Street/Dana Street within 6 months following the issuance of any Certificate of Occupancy for Phase 1 of the development to the satisfaction of the Department of Public Works which shall not be unreasonably withheld. Prior to issuing any Certificate of Occupancy for Phase 1, the applicant shall provide the City with an acceptable performance security in an amount sufficient to guarantee the completion of the traffic signal timing update as required. Any performance security required under this condition for Phase 1 shall be separate from any performance security required by Condition 9 of this decision.
- 14-8. The applicant shall be required to monitor traffic volumes and distribution patterns at both the northerly and southerly development entrances to ensure the adequacy of proposed mitigation measures as outlined in the Traffic Impact and Site Access Study, prepared by Holden Transportation Engineering, dated August 17, 2010, and to determine when signalization of the southerly development intersection might be required, based on the Traffic Signal Warrant Analyses to be prepared by the applicant and provided to the City. Such monitoring shall be conducted within 6 months following the issuance of any Certificate of Occupancy for Phase 1 and for each later phase to the satisfaction of the Department of Public Works. The applicant shall be required to install and activate traffic signal improvements, to the satisfaction of the Department of Public Works, when actual traffic conditions warrant such implementation. Prior to issuing any Certificate of Occupancy for Phase 1 and for each later phase, the applicant shall provide the City with an acceptable performance security in an amount sufficient to guarantee the completion of the traffic monitoring as required. Any performance security required under this condition for Phase 1 and for each later phase shall be separate from any performance security required by Condition 9 of this decision. Note: the applicant has provided a Traffic Signal Warrant Analysis as required by this condition.
- 14-9. Prior to the issuance of a Building Permit, the applicant shall submit an updated Site Plan that reflects the correct and updated phasing schedule as approved as part of the Subdivision Amendment approved by the Planning Board May 11, 2015. Note: With the approval of the New Phasing Plan, this condition is no longer applicable.
- 14-10. Prior to the issuance of a Building Permit, the applicant shall submit an updated landscaping plan, to the satisfaction of the Planning Department, with a table indicating the proposed number, size, and species names of all the proposed plantings for Lot 1, as well as updating parking shading calculations for Lot 1 only. Note: the applicant has satisfied this condition.
- 14-11. Prior to the issuance of a Building Permit, the applicant shall submit an updated lighting plan showing the number of proposed light poles for Lot 1 and the location of any proposed lighting on the building façade, if applicable. The applicant shall also confirm that the lighting intensity on the residential lots to the south does not exceed 0.1 foot-candles, to the satisfaction of the Planning Department. Note: the applicant has satisfied this condition.

- 14-12. Prior to the issuance of a Building Permit, the applicant shall obtain approval from the Fire Department regarding the turning radius of the fire trucks and location of the proposed fire hydrants on Lot 1, and all plans shall reflect the final and approved details. Note: the applicant has satisfied this condition.
- 14-13. The applicant shall provide appropriate signage and/or pavement markings to identify the one-way circulation of the proposed driveway on site to the satisfaction of the City Engineer. Note: the applicant has satisfied this condition.
- 14-14. The applicant shall provide an accurate drainage report that shall reflect current and proposed drainage, to the satisfaction of the City Engineer. Note: the applicant has satisfied this condition.
- 14-15. The applicant shall provide a plan that demonstrates a lack of conflict between overhead utilities and landscaping, to the satisfaction of the City Engineer. Note: the applicant has satisfied this condition.
- 14-16. The requirements of Sections 5.1.E(13) and 6.2.B of the Site Plan Regulations are waived as was requested by the applicant in connection with the Site Plan Review approval for #PB2015-10-SPA.

SPECIFIC CONDITIONS FOR PHASE 1-A:

- 15-1. As proposed by the applicant, the construction of Phase 1-A improvements shall commence before the end of 2023 and shall be completed within 2 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 15-2. The applicant shall obtain all required State approvals including, but not limited to, the following:
- NHDES Alteration of Terrain Permit, if applicable
 - NHDES approval for Sewage Discharge
- 15-3. The requirements of Section 6.2.B(1) of the Site Plan Review Regulations are waived for improvements on Lot 2 for Phase 1-A.

SPECIFIC CONDITIONS FOR PHASE 1-B:

- 16-1. As proposed by the applicant, the construction of Phase 1-B improvements shall commence before the end of 2024 and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 16-2. The applicant shall obtain all required State approvals including, but not limited to, the following:
- NHDES Alteration of Terrain Permit
 - NHDES approval for Sewage Discharge
- 16-4. The requirements of Section 6.2.B(6) of the Site Plan Review Regulations are waived for improvements on Lot 8 for Phase 1-B.

SPECIFIC CONDITIONS FOR PHASE 2:

- 17-1. As proposed by the applicant, the construction of Phase 2 infrastructure improvements shall commence before the end of 2026 and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 17-2. Prior to the issuance of a Building Permit for Phase 2 of the development, the applicant shall provide two complete sets of revised plans to the Planning Department, depicting the following plan changes:
 - a. Landscaping on Sheet 2-15 shall be revised and foundation plantings added along the westerly side of the parking garage structure to be consistent with the relocated garage #2 layout as depicted on Sheet 5-4, dated last revised May 2, 2011.
- 17-3. The applicant shall obtain all required State approvals including, but not limited to, the following:
 - NHDES Alteration of Terrain Permit
 - NHDES approval for Sewage Discharge
 - NHDES Comprehensive Shoreland Protection permit
- 17-4. As proposed by the applicant, the northerly development entrance improvements shall be constructed as part of Phase 2 of the development. Prior to the issuance of a Building Permit and prior to the start of any construction activities for Phase 2, the applicant shall have received approval from the NH Department of Transportation for the northerly development entrance and any other improvements within the portion of NH Route 10 under NHDOT jurisdiction. Signalization of the northerly development entrance shall be subject to approval and requirement of the NH Department of Transportation.
- 17-5. As recommended in Phase "A" of the applicant's Traffic Impact and Site Access Study, prepared by Holden Transportation Engineering, dated August 17, 2010, the applicant shall be required to implement traffic signal timing optimization improvements at the intersections of Main Street/Tracy Street and Main Street/South Main Street/Maple Street within 6 months following the issuance of any Certificate of Occupancy for Phase 2 of the development. Prior to issuing any Certificate of Occupancy for Phase 2, the applicant shall provide the City with an acceptable performance security in an amount sufficient to guarantee the completion of the traffic signal timing optimization as required. Any performance security required under this condition for Phase 2 shall be separate from any performance security required by Condition 9 of this decision.

SPECIFIC CONDITIONS FOR PHASE 3:

- 18-1. As proposed by the applicant, the construction of Phase 3 improvements shall commence before the end of 2028 and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.
- 18-2. The applicant shall obtain all required State approvals including, but not limited to, the following:

- NHDES Alteration of Terrain Permit
- NHDES approval for Sewage Discharge

- 18-3. As recommended in Phase "B" of the applicant's Traffic Impact and Site Access Study, prepared by Holden Transportation Engineering, dated August 17, 2010, the applicant shall be required to make a payment to the City in the amount of \$274,554.00 toward design, construction and installation by the City of geometric improvements and/or traffic signal upgrades as outlined in the Study for the intersection of Main Street/Bridge Street/Dana Street intersection and/or traffic signal upgrades at Main Street/Tracy Street and Main Street/South Main Street/Maple Street intersections prior to the issuance of any Certificate of Occupancy for Phase 3 of the development.

If the City elects to pursue geometric improvements at the Main Street/Bridge Street/Dana Street intersection, the City shall determine whether any existing on-street parking spaces on Main Street will be lost due to construction of these intersection improvements. If existing on-street parking spaces are to be lost, the applicant shall, prior to the issuance of any Certificate of Occupancy for Phase 3, be required to pay to the City an amount equal to \$4,700.00 per space for each lost parking space, which is the amount estimated by the City needed to pay for land and construction costs necessary to replace such lost parking. Any funds received by the City from the applicant shall be used by the City to study the parking needs of the West Lebanon Village Central Business District and to identify locations for and/or to reconstruct such lost parking spaces. Any funds not expended by the City within a period of 6 years from receipt shall be returned to the applicant in accordance with RSA 674:21,V(j).

- 18-4. The applicant shall be required to monitor and update traffic signal timing optimization along Main Street as individual phases of the development are completed and occupied to ensure optimal traffic operations through the Main Street corridor for the duration of the project build-out. Such monitoring shall be conducted within 6 months, and updates shall be implemented within 1 year, following the issuance of any Certificate of Occupancy for Phase 3 and for each later phase, to the satisfaction of the Department of Public Works. Prior to issuing any Certificate of Occupancy for Phase 3 and for each later phase, the applicant shall provide the City with an acceptable performance security in an amount sufficient to guarantee the completion of the traffic signal timing monitoring and updates, as required. Any performance security required under this condition for Phase 3 and each later phase shall be separate from any performance security required by Condition 9 of this decision.

- 18-5. The requirements of Section 6.2.B(6) of the Site Plan Review Regulations are waived for improvements on Lot 8 for Phase 3.

SPECIFIC CONDITIONS FOR PHASE 4:

- 19-1. As proposed by the applicant, the construction of Phase 4 improvements shall commence before the end of 2030 and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.

19-2. The applicant shall obtain all required State approvals including, but not limited to, the following:

- NHDES Alteration of Terrain Permit, if applicable
- NHDES approval for Sewage Discharge
- NHDES Comprehensive Shoreland Protection permit

SPECIFIC CONDITIONS FOR PHASE 5:

20-1. As proposed by the applicant, the construction of Phase 5 improvements shall commence before the end of 2032 and shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.

20-2. Prior to the issuance of a Building Permit for Phase 5 of the development, the applicant shall provide two complete sets of revised plans to the Planning Department, depicting the following plan changes:

- a. Landscaping on Sheet 5-7 shall be revised and foundation plantings added along the westerly side of the parking garage structure to be consistent with the relocated garage #2 layout as depicted on Sheet 5-4, dated last revised May 2, 2011.

20-3. The applicant shall obtain all required State approvals including, but not limited to, the following:

- NHDES Alteration of Terrain Permit, if applicable
- NHDES approval for Sewage Discharge
- NHDES Comprehensive Shoreland Protection permit

SPECIFIC CONDITIONS FOR PHASE 6:

21-1. As proposed by the applicant, the construction of Phase 6 improvements shall commence before the end of 2035 shall be completed within 5 years of commencement, unless the applicant requests and receives an extension of time for such build-out from the Planning Board.

21-2. The applicant shall obtain all required State approvals including, but not limited to, the following:

- NHDES Alteration of Terrain Permit, if applicable
- NHDES approval for Sewage Discharge
- NHDES Comprehensive Shoreland Protection permit

GENERAL CONDITIONS OF APPROVAL:

22. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.

23. All proposed streets, sidewalks, water and sewer mains, and service lines shall be constructed pursuant to the City's standards.

24. All required landscape plantings shall meet the minimum size requirements for such plantings set forth in Section 6.2.B of the Site Plan Review Regulations at the time of installation.
25. Any light fixtures used to illuminate signage, including building-mounted signage, shall be installed to light the signs from above and shall conform to the City Site Plan Review Regulations.
26. In accordance with the City's Impact Fee Ordinance fee schedule adopted on September 13, 2010, this application is exempt from impact fees for a period of 5 years from the date of the Planning Board's final approval. Building permits obtained after the 5-year period shall be subject to impact fees in existence at the time of the Building Permit application submission. [Note: The River Park subdivision plat (#PB2011-01-FMAJ) was recorded on January 2, 2018, representing the final approval for the subdivision and starting the 5-year exemption period, which shall expire on January 2, 2023.]
27. The applicant shall provide to the City copies of any agreements, memoranda of understanding, or licenses granting permission for Advance Transit and other local transit service providers to utilize the River Park development as a transfer point for existing and future transit routes serving West Lebanon. Any such documents shall be provided as soon as practicable and prior to the relocation of transit services from Main Street to the River Park development.
28. The applicant is encouraged to work with tenants and residents of the River Park development to implement Transportation Demand Management measures, including flexible work hours, incentives for carpooling, adequate parking and showers and changing rooms for bicyclists, and other measures, to reduce peak hour travel and reliance on single-occupancy vehicles.
29. Effect of Approval. This approval is a final, conditional site plan approval for a "phased development" under Section 4.9 of the Site Plan Review Regulations and is a final decision of the Planning Board for purposes of RSA 677:15, I. As set forth in Section 4.10(C) of those Regulations, the deadlines for the construction of improvements within each phase shall be as stated in the approved phasing plan, rather than the 1-year period under Section 4.10(A). It is the intent and effect of this approval, subject to the satisfactory completion of the financial security requirements set forth in Condition #5 of the Final Major Subdivision approval (#PB2011-01-FMAJ) for the development, that upon completion of the Phase 1 infrastructure improvements within 5 years of the final subdivision approval, as set forth in Condition #14-2 above, the subdivision as a whole, including all phases, shall vest as provided in RSA 674:39, II, and no subsequent changes in subdivision regulations, site plan regulations, or zoning ordinances, except impact fees adopted pursuant to RSA 674:21 and 675:2-4, shall operate to affect this phased development, provided that the applicant and its successors-in-interest continue to comply with all conditions of this approval and of the Planning Board's approval of Final Major Subdivision application #PB2011-01-FMAJ, including the time limits set forth in the phasing plan, unless such a limit is extended for good cause by the Planning Board, acting upon an application submitted prior to the expiration of such limit.

30. If any dispute arises over the interpretation or application of any of the above conditions, such dispute shall be resolved by the Planning Board itself after notice and public hearing.

The motion was seconded by Matthew Cole. The vote on the motion was 5-2, with Ms. Monroe and Mr. Schwarz voting against the motion. Ms. Romano and Ms. Stavis recused themselves from hearing the application.

THE CITY OF LEBANON PLANNING BOARD

By:  DATE: 10/22/19
Bruce Garland, Chair

SIGNED _____

DATED _____

River Park

Master Plan – Proposed Phasing Parking

Color Code	Lot #	Building#	Modified Parking Required	Onsite Parking Provided	Net Temporary Parking Needed	Temporary Parking Location ****	
	Phase 1	1	1	149	42	107	Lot 3 (120 spaces)
	Phase 1-A	2	8	132*	73	59	Lot 3 & 4 (225 spaces)
	Phase 1-B	10	3	285	30	255	Lot 3, 4, 5 (325 spaces + shared parking reduction credit of 123 spaces)
	Phase 2	3	5	209	33	0	
	Phase 3	8	Garage 1 4	(585)*** 70	585 19	0	Garage #1 must be completed prior to Bldg 5 Certificate of Occupancy
	Phase 4	5	7	180	6	0	
	Phase 5	3	Garage 2 2	(808)*** 96	808 0	0	
	Phase 6	4	6	156	6	0	
			1276**	209 surface 1393 Garages 1+2	421		

*Assumes 125 units X 1.5 spaces per unit required X .070 (approved reduction factor)

** Proposed totals 1276 spaces required due to increase in apartment units from 80 to 125 (Existing totals 1233 spaces)

*** Garage 1 and 2 total 1393 spaces

**** Assumes Waiver Request is granted

**CITY OF LEBANON
APPLICATION FOR**

SPECIAL EXCEPTION	☐	☐	SITE PLAN REVIEW
VARIANCE	☐	☐	SUBDIVISION
MOTION FOR REHEARING	☐	☐	LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☐	CONDITIONAL USE PERMIT

☒ OTHER Extension

PROPERTY OWNER (APPLICANT):

NAME: XYZ Dairy, LLC

TEL.#: (603) 676-7800

MAILING ADDRESS: 57 Main Street, West Lebanon, NH 03784

E-MAIL ADDRESS: dclem@lymeproperties.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Lyme Properties

TEL.#: (603) 676-7106

MAILING ADDRESS: 57 Main Street, West Lebanon, NH 03784

E-MAIL ADDRESS: chet@lymeproperties.com

PROJECT LOCATION:

TAX MAP #: 44

LOT#: 21-30 & 7

PLOT #:

ZONE: CBD, IND-L, R3

STREET ADDRESS OF PROJECT: River Park Drive, West Lebanon, NH

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO

FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

River Park Site Plan extension

TYPE OF OCCUPANCY:

EXISTING ☒ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL

PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☒ COMMERCIAL ☒ INDUSTRIAL

IF USE IS COMMERCIAL OR INDUSTRIAL, PLEASE NOTE SPECIFIC

USE: Lab, Office, Retail, Apartments

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on October 12, 2021, unless I personally request in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: David Clem

DATE: 9/13/2021

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY

OWNER: David Clem

DATE: 9/13/2021

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #
9/13/21	44/21-30	17-PB2021-29-EXT	474.84	9-13-21	18429

(Last Revised 4/04/18)



September 13, 2021

Planning Board
City of Lebanon
51 N Park Street
Lebanon, NH 03766

Re: Request for Extension of River Park Site Plan Approvals Due to COVID-19 Pandemic

Members of the Lebanon Planning Board:

On March 13, 2020 the State of New Hampshire issued Executive Order 2020-04 declaring a state of emergency due to the COVID-19 pandemic. On March 17, 2020 Lebanon City Hall closed to the public. On March 26, 2020 Governor Sununu issued a Statewide Stay-At-Home Order.

For reasons we will outline below, the fog of uncertainty surrounding the early COVID-19 response and resultant State and Local policies resulted in the suspension of River Park construction activities that were scheduled to commence in earnest on April 1, 2020 upon expiration of City of Lebanon's seasonal excavation moratorium.

That suspension, in effect, disrupted the construction timeline for Phase 1 Infrastructure and 100 River Park for a full calendar year. The uncertainty among financial, joint-venture, and tenant partners for 100 River Park Drive, which carried through 2020 and into 2021, has now pushed re-commencement of the project into 2022 at the earliest.

Our Attorney Phil Hastings first inquired about COVID-19 related tolling of River Park's Site Plan approvals to Lebanon Director of Planning David Brooks on December 7, 2020. The December 15, 2020 response from Mr. Brooks clarified that the Planning Director has no authority to "stop the clock," and the applicant must "request and receive an extension of time for such build-out from the Planning Board."

Given the unique nature of the COVID-19 pandemic and the multiple public emergency orders that impacted private property owners, Lyme Properties is requesting that the City of Lebanon Planning Board grant a 2-year extension of the River Park site plan approvals. The pandemic, the governmental response, and ongoing uncertainties resulted in delays beyond our control that have had significant and adverse effects on our ability to commence construction.

We believe this request meets the requirements set forth in the City of Lebanon Site Plan Review Regulations, Section 4.10.C, and request that "the Board shall consider the totality of the circumstances, including the extent and complexity of the conditions precedent, the extent of the progress made by the Applicant toward satisfying the conditions-precedent and/or starting construction, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant, rather than to the Applicant's neglect or failure to proceed with reasonable promptness."



We have had multiple delays befall the attempted execution of River Park since we received our final approvals from the City of Lebanon in 2011, and the State of New Hampshire in 2015. Previous attempts to initiate construction in 2016 and 2018 were stymied by municipal actions, losing tenants, momentum, and money each time. Documentation of those delays can be made available to the Planning Board upon request.

Nevertheless, we remain committed to executing the project that was designed with significant input from the public during the 2007-2009 *Neighborhood Planning Process*, received unprecedented support from the Lebanon voters on the March 2, 2010 ballot referendum, and stands to make significant contributions to economic development in West Lebanon.

To that end, conversations are now in motion with City officials in pursuit of opportunities for public-private partnership to facilitate the development of River Park in a manner that would lead to additional community benefits and contribute to other priorities in West Lebanon. This requested extension would allow time for these conversations to progress productively, as they involve many moving parts and will require a significant time commitment and collaborative efforts to accomplish.

Additional context is included herein for those members of the Planning Board who may not be familiar with what has transpired previously and/or prior to their time on the Board, and in an effort to proactively provide information in advance of a hearing.

We respectfully request to be included on the agenda for the regularly scheduled Planning Board Hearing on October 12, 2021.

Sincerely,

A handwritten signature in black ink that reads "Chet Clem". The signature is written in a cursive, flowing style.

Chet Clem
President
Lyme Properties



Impact of Emergency Order On Construction Efforts

The City and State's early Covid-19 response in the Spring of 2020 was the right thing to do given the confusing and evolving public health emergency and should be applauded. However, it created uncertainty that prevented the River Park project from proceeding safely, efficiently, and affordably with the Construction Manager engaged on the project.

In October, 2019 Lyme Properties engaged Consigli Construction of Milford, Massachusetts as the Construction Manager for the execution of Phase 1 infrastructure improvements and the construction of 100 River Park (Lot 1, Building 1). From October, 2019 to March, 2020 Consigli was actively re-bidding the project with key subcontractors and suppliers located in four (4) different states.

When the first emergency orders were issued, the responses and safety policies enacted by each State were disparate and created confusion. For example, it was unclear whether our selected site work subcontractor based in Vermont would be allowed to perform the work given the State of Vermont's restrictions on travel to/from the State at that time. Similar subcontractor challenges were expected, but unknown as Consigli had pre-selected subcontractors and suppliers from multiple States.

Communications from Consigli in March, 2020 declared that COVID-19 was considered *force majeure*, meaning River Park had no contractual protection from delays, cost increases, or other resultant liabilities. This jeopardized the timeline for completion and caused ripple effects and substantial cost increases throughout the project.

On March 24, 2020, in consideration of the public health risk and economic uncertainty, and in consultation with all project partners, Lyme made the decision to suspend construction. Consigli, which was already mobilized and on-site using 167 N. Main Street as the construction office, signed over all contracts and building permits to XYZ Dairy, LLC, owner of River Park.

In hindsight, and in view of the subsequent cost increases, labor shortages, and supply chain disruptions the economy has seen in 2020-2021, this was absolutely the financially prudent and safest decision for River Park.

The Time-Sensitivity of the Construction Process

It's important to understand why April 1 is a critical start date for River Park construction, and how the delays resulting from the Emergency Order didn't just push things back weeks or months but rather resulted in the immediate loss of a full year.

For each of the three times (2016, 2018, 2020) Lyme has sought to initiate this scope of work, the construction management plan has been to start site work as soon as the winter conditions moratorium is lifted by the City on approximately April 1-15th each year. This approach allows 100 River Park to be enclosed prior to winter season, which facilitates a 14-month construction timeline for the building and avoids costly winter conditions.



Given the complexity of this particular building and the necessary site work– which includes the gating issue of relocating a municipal storm water line currently running diagonally through our property and the Building 100 footprint. The subterranean utility work and surface improvements on Route 10 makes construction timing even more critical.

As the Covid-19 pandemic continued through 2020 and into 2021, Lyme analyzed whether an April, 2021 start was feasible. The Fall and Winter spikes in the pandemic resulted in further market uncertainty, increase in construction material costs (and associated supply shortages), and decision-making challenges for all parties. Tenant prospects were required to work remotely and the need for expansion/future space became uncertain.

Additionally, from June to September, 2020 Lyme was engaged in preliminary talks with the City regarding a public-private approach to infrastructure that did not materialize. Those talks have now restarted in good faith and in earnest.

Big Picture Progress

Not all was lost in 2020-2021. While construction could not advance for reasons explained herein, Lyme advanced community benefits at River Park and collaborative planning efforts that we believe are significant and additive to the big picture success of the project and broader West Lebanon and regional goals.

Lyme was ultimately able to complete the Crafts Avenue Extension subdivision roadway and sub-surface infrastructure improvements that were halted in the Fall of 2018 by the City Engineer. This work was done outdoors and in compliance with the evolving rules and requirements, and within the approvals and security agreement in place previously in place.

This effort perfected nine (9) single-family home sites and prevented vehicular access to the commercial component of River Park from the abutting Crafts Avenue residential neighborhood, the number one priority of those neighbors expressed during the 2007-2009 *Neighborhood Planning Process*.

It also completed the extension of the new, 16-inch municipal sewer line down Crafts Avenue and onto the River Park development, done at the sole expense of River Park, to service the entire subdivision and site plan.

Lot sales continue, and construction is underway on multiple home sites. Unfortunately, we were not able to recover the purchase & sale agreements for four lots that were terminated in February, 2019 when the Building Inspector erroneously refused to consider Building Permit applications. That error was subsequently confirmed by City Officials, but at a cost of over \$400,000 in lost revenue and progress towards the development of new housing.

The trail system planned for River Park since the initial *Neighborhood Planning Process* was implemented in "rough draft" form, with 2-miles of publicly accessible trails mowed and marked and made available to the general public. In July, 2020 "Trails + Trucks at River Park" was launched



to provide a free venue for local Food Trucks and Vendors and a COVID-safe outdoor event series that drew over 2,000 visitors to the site. Thanks to a partnership with the Lebanon Recreation, Arts & Parks, the trails were groomed for XC-skiing, snowshoeing, sledding, and even Skijoring(!). In the Summer of 2021 the Upper Valley Trails Alliance Summer Trail Crew expanded the trail network even further, adding an additional publicly accessible waterfront picnic location and trails.

In December, 2020, River Park completed the transfer of Lot 6—the 6-acre waterfront parcel—to *Friends of River Park*, a N.H. not-for-profit founded for this purpose in 2015 during the initial construction mobilization for River Park. This non-profit ownership ensures public access to the waterfront and open space at River Park, in keeping with commitments made to the West Lebanon community and the deed restrictions placed upon Lot 6 in 2018.

This renewed interest in public access to the waterfront and trails lead Lyme and *Friends of River Park* to take a leadership role in building a coalition around the West Lebanon Greenway, which would connect from the Mascoma River Greenway to the Wilder Dam/Boston Lot via Westboro Yard and River Park. Those plans and the ongoing effort to achieve them are available at www.westleb.org/greenway. In October, 2021 the U.S. National Park Service will be joining the coalition, following an application lead by the *Friends of River Park* to the “Rivers, Trails & Conservation Assistance” program.

In August, 2021, River Park and Advance Transit executed a Memorandum of Understanding (MOU) relating to the potential development of a public multi-modal transit stop, Advance Transit transfer station, and park-and-ride facility as part of the mixed-use River Park development. Conversations between River Park and Advance Transit have been ongoing since approximately 2009, and are reflected in the “River Park Transit Integration Schematic Plan” prepared by ORW and dated 6/28/2010, as well as the November, 2010 “Lebanon Bus Stop Design Study: City of Lebanon, New Hampshire” prepared for Advance Transit and the City of Lebanon.

Our intent is to make River Park the first “Transit Oriented Development” and “Trail Oriented Development” in the Upper Valley, in keeping with best practices, long-standing regional planning priorities, and Lyme’s commitment to sustainable and community-conscious development.

In addition to our own marketing efforts, we continue to work with the State of New Hampshire Bureau of Economic Affairs in pursuit of potential commercial tenants for River Park, and we are presently in consideration for a large life science user that is undergoing a professional site selection process.

Past Delays & Future Path Forward

The repeat delays affecting the commencement of River Park are very frustrating, but Lyme Properties remains committed to executing the mixed-use and smart growth campus with public access to the Connecticut River that was envisioned during the *Neighborhood Planning Process* in 2007-2009 and received significant and unprecedented public support on the March 2, 2010 zoning referendum.



The various delays are well-documented and can be made available to the Planning Board if/as needed. Our preference is to move forwards and towards a more collaborative and productive working relationship with the City, as we are attempting to do with the aforementioned public-private partnership proposal.

River Park was last before the Planning Board for four hearings over 11 months from 2018-2019 to secure a phasing amendment that expedited the multi-family housing phase, allowing it to be built subsequently or simultaneously with 100 River Park. This was consistent with municipal policy and planning, and in response to the regional housing shortage. Thanks to the efforts of the Lebanon Planning Department, all past amendments and associated extensions were incorporated into the September 9, 2019 Site Plan phasing amendment approval document in the interest of creating a singular point of reference.

In closing, the requested 2-year extension is justified by progress lost to the COVID-19 pandemic and circumstances beyond our control. Additionally, an extension will allow ongoing conversations with the City Manager and City Council to be successfully completed, creating an opportunity to improve how the project is executed and a better result for all parties. We are requesting no changes other than the time extension.

We believe this request meets the requirements set forth in the City of Lebanon Site Plan Review Regulations, Section 4.10.C, and request that the Board "...consider the totality of the circumstances, including the extent and complexity of the conditions precedent, the extent of the progress made by the Applicant toward satisfying the conditions-precedent and/or starting construction, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant, rather than to the Applicant's neglect or failure to proceed with reasonable promptness."

We are hopeful that this extension will allow our broader efforts to continue and help facilitate economic development and create new tax revenue streams that could be used to fund public improvements being identified and prioritized by the West Lebanon Revitalization Advisory Committee. The broader opportunity, from our perspective, can be found online at www.riverparkwestlebanon.com/vision

Should this request for extension be rejected, River Park will have no choice but to proceed under duress to meet the timeline set forth in the original 2011 approvals despite delays beyond our control. In that scenario, we anticipate the time pressure will create significant additional costs and the financial stress will adversely impact the overall project.

**Agenda
Planning Board
October 12, 2021**

**Agenda Item #3E
Public Hearing Items**

City of Lebanon Impact Fee Update 2021

**Agenda
Planning Board
October 12, 2021**

**Agenda Item #5A
Approval of Minutes**

September 13, 2021

DRAFT

LEBANON PLANNING BOARD
Regular Meeting
Monday, September 13, 2021, 6:30 PM
City Council Chambers, City Hall
or Remote Via Webex
LebanonNH.gov/Live

MEMBERS PRESENT: Bruce Garland (Chair), Karen Zook (Council Representative), Gregorio Amaro, Kim Chewning, Joan Monroe, Jeremy Rutter, Kathie Romano, Laurel Stavis, Michael Smith (Alt.)

MEMBERS ABSENT: Matthew Hall (Vice Chair)

STAFF PRESENT: David Brooks (Planning Director), Tim Corwin (Senior Planner), Brian Vincent (City Engineer)

1. Call to Order

Chair Garland called the meeting to order at 6:32 PM.

2. Notice of Regional Impact

The following applications were received by the Planning and Development Department on or before September 13, 2021:

Michaels Student Living, LLC (applicant) and Trustees of Dartmouth College (property owner), 401 Mount Support Road (Tax Map 24, Lot 2), zoned R-1, R-3 and RL-3: A 309-unit multi-family development is currently under construction pursuant to an approved Major Subdivision and Site Plan (PB2020-07-SPR & PB2020-29-SPA). The applicant requests a modification to the conditions of approval in order to allow two of the four proposed residential buildings to be occupied prior to the completion of all site improvements. PB2021-30-SPA

Alice Peck Day Memorial Hospital, 10 Alice Peck Day Drive (Tax Map 90, Lot 59), zoned R-3: Request for Site Plan Review to construct a +/-5,590 sq. ft. addition to the hospital, together with associated site work including a new loading dock, renovated sidewalks, and an expanded courtyard. PB2021-28-SPR

XYZ Dairy, LLC, River Park Drive (Tax Map 44, Lots 7 & 21-30), zoned CBD, IND-L and R-3: Applicant requests an extension of the timelines set forth in the Planning Board Notice of Action dated September 9, 2019 (PB2018-34-SPA) for the commencement of construction and completion of the River Park development. PB2021-28-EXT

Mr. Brooks stated that Staff recommends that the above applications have no potential for regional impact.

A MOTION by Jeremy Rutter that the above applications have no potential for regional impact. The motion was seconded by Gregorio Amaro.

**The MOTION was approved (7-0).*

1 **3. Public Hearing Items**

2
3 **A. Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD:** Request
4 for Site Plan Review to construct a 15,000 sq. ft. addition to an existing warehouse building.
5 PB2021-13-SPR - Continued from August 9, 2021
6

7 Mr. Corwin stated that there are a number of outstanding issues and concerns, and the applicant has
8 requested that the hearing be continued to Tuesday, October 12, 2021. The Planning Staff has no
9 objection to the request.
10

11 ***A MOTION by Kathie Romano to continue the hearing of Mason Storage, LLC, 38 Spencer Street***
12 ***(Tax Map 78, Lot 39), zoned LD to Tuesday, October 12, 2021, at 6:30 PM.***

13 ***The motion was seconded by Laurel Stavis.***
14

15 ****The Motion was approved (7-0).***
16

17 **B. Gordon E. Bagley, III and Cynthia L. Louzier, 18 Eastman Hill Road (Tax Map**
18 **112, Lot 12) and 32 Eastman Hill Road (Tax Map 112, Lot 10), zoned RL-2:** Request for
19 approval of a Boundary Line Adjustment between lands located at 18 Eastman Hill Road and 32
20 Eastman Hill Road. PB2021-27-BLA
21

22 Mr. Corwin stated that Planning Staff has reviewed the application and finds it complete enough for the
23 Planning Board to accept jurisdiction and commence review.
24

25 ***A MOTION by Jeremy Rutter that the Lebanon Planning Board finds the application of Gordon E.***
26 ***Bagley, III and Cynthia L. Louzier, for a proposed Boundary Line Adjustment between lands located at***
27 ***18 Eastman Hill Road (Tax Map 112, Lot 12) and 32 Eastman Hill Road (Tax Map 112, Lot 10), PB2021-***
28 ***27-BLA, IS complete enough to accept jurisdiction and commence review.***
29

30 ***The motion was seconded by Kim Chewing.***

31 ****The motion was approved (7-0).***
32

33 Mr. Corwin stated that he did not speak with the applicant regarding attendance at the meeting. The
34 application is very straight forward and may proceed without the applicant present.
35

36 Joan Monroe arrived at 6:39 PM.
37

38 Mr. Corwin explained the boundary line adjustment, which involves an equal swap of property.
39 Ms. Romano inquired if there are unique features of the property. Mr. Corwin stated that there are not.
40 Ms. Monroe asked if there was a stated reason for the adjustment. Mr. Corwin replied that the applicants
41 are related but there was no other reason given. Ms. Monroe observed that both properties are in
42 compliance.
43

44 Chair Garland invited public comment. There was none. The public hearing was closed.
45

46 **A MOTION by Joan Monroe** that the Lebanon Planning Board **APPROVE** the application of Gordon E.
47 Bagley, III and Cynthia L. Louzier, for a proposed Boundary Line Adjustment between lands located at 18
48 Eastman Hill Road (Tax Map 112, Lot 12) and 32 Eastman Hill Road (Tax Map 112, Lot 10), PB2021-27-
49 BLA, as shown on a plat titled "Lot Line Adjustment Plan for Gordon E. Bagley, III & Cynthia L. Louzier",
50 prepared by Pathways Consulting, LLC, dated August 9, 2021, Project No. 12858, including any and all
51 supplemental submissions and testimony provided during the public hearing, with the following conditions

1 which shall satisfied prior to the signing and recording of the plat:

- 2 1. The applicants shall provide to the City a draft copy of the deed of the land transfer for review
- 3 to ensure the transfer will be completed properly for Assessing and recording purposes.
- 4 2. The applicants shall provide one (1) full-size copy of the plat and a digital record drawing
- 5 (Cad .dwg Format using NH State Plane Coordinate system).
- 6

7 ***The motion was seconded by Jeremy Rutter.***

8
9 Mr. Corwin stated that the reason involves the sale of one property, and the adjustment provides
10 additional room for a driveway.

11
12 ****The motion was approved (8-0).***

13
14 ***A MOTION by Joan Monroe that the Lebanon Planning Board authorizes the Chair to sign the***
15 ***Boundary Line Adjustment plat for Gordon E. Bagley, III and Cynthia L. Louzier, as referenced above.***

16 ***The motion was seconded by Jeremy Rutter.***

17
18 ****The motion was approved (8-0).***

19
20 **C. Novo Nordisk US Bio Production, Inc., 5 & 9 Technology Drive (Tax Map 145, Lot**
21 **3), zoned IND-L: Request for Site Plan Review to expand the existing building at 5 Technology**
22 **Drive with two additions totaling +/-7,915 sq. ft., together with associated site improvements**
23 **including utilities, lighting, stormwater management, sidewalks, and parking. PB2021-26-SPR**
24

25 Mr. Corwin stated that Staff received all necessary information and recommends that the above
26 application is complete enough to accept jurisdiction and commence review.

27
28 ***A MOTION by Joan Monroe that the Lebanon Planning Board finds the Site Plan Review application***
29 ***of Novo Nordisk US Bio Production, Inc. regarding 5 & 9 Technology Drive (Tax Map 145, Lot 3),***
30 ***PB2021-26-SPR, is complete enough to accept jurisdiction and commence review.***

31 ***The motion was seconded by Kim Chewing.***

32 ****The motion was approved (8-0).***

33
34 Stuart Sawyer of Novo Nordisk and Jim Jackson, Pare Corporation Managing Engineer, appeared to
35 speak on behalf of the application.

36
37 Mr. Sawyer introduced the company, its products, and the application. Mr. Jackson explained the waiver
38 requests and described the details of the proposed additions. Renderings of the additions were displayed,
39 parking and stormwater management were described, and landscaping plans were shown.

40
41 Mr. Corwin provided the Staff comments and the modifications to the waiver requests.

42
43 The Board members discussed the waiver requests. The proposed lighting would meet the new color
44 temperature requirements. Mr. Vincent confirmed the stormwater management capability.

45
46 Ms. Romano inquired about the combination of the lots and subsequent separate treatment for waivers.
47 Ms. Stavis suggested a precedent could result from the approval of the waiver. Mr. Brooks noted that the
48 Board has routinely granted waivers when an application only involves a small percentage of a developed

1 site. He suggested the circumstances might be different when a proposed project represents a significant
2 proportion of a property or a substantial change to a building.

3
4 Mr. Rutter inquired about the reduction in parking spaces. Mr. Sawyer explained the change in spaces

5
6 Ms. Monroe inquired about the propane tanks. Mr. Sawyer stated that they would be relocating the tanks
7 to the east side of the building. Trucks with compressed natural gas will be used. Ms. Monroe suggested
8 the applicant consider building mounted solar panels. Mr. Sawyer stated that the company built a solar
9 field in South Carolina that creates enough power to make the entire company energy neutral.

10
11 Chair Garland invited public comment. Hearing none, the waiver requests were addressed individually for
12 approval.

13
14 ***A MOTION by Joan Monroe that the Lebanon Planning Board APPROVE the partial waiver from***
15 ***Article V submission requirements and Article VI design requirements as they may apply outside of the***
16 ***specific area of the lot proposed to be redeveloped.***

17 ***The motion was seconded by Laurel Stavis.***

18
19 ****The MOTION was approved (8-0).***

20
21 ***A MOTION by Joan Monroe that the Lebanon Planning Board APPROVE the partial waiver from***
22 ***Section 5.1.E.13 requiring architectural renderings to show the height and location of wall-mounted***
23 ***lighting fixtures.***

24 ***The motion was seconded by Laurel Stavis.***

25
26 ****The MOTION was approved (8-0).***

27
28 ***A MOTION by Joan Monroe that the Lebanon Planning Board APPROVE the waiver from Section***
29 ***5.1.E.20 requiring a plan for the development showing provisions for automobile, transit, bicyclist, and***
30 ***pedestrian access and circulation.***

31 ***The motion was seconded by Kathie Romano.***

32
33 ****The MOTION was approved (8-0).***

34
35 ***A MOTION by Joan Monroe that the Lebanon Planning Board APPROVE the waiver from Section***
36 ***6.7.B.2 requiring light intensity at adjoining commercial property boundaries not to exceed 0.5 foot-***
37 ***candles.***

38 ***The motion was seconded by Gregorio Amaro.***

39
40 ****The motion was approved (8-0).***

41
42 Chair Garland invited public comment. There was none. The Public Hearing was closed.

43
44 **A MOTION by JOAN MONROE that the Lebanon Planning Board APPROVE the application of Novo**
45 **Nordisk US Bio Production, Inc. regarding 5 & 9 Technology Drive (Tax Map 145, Lot 3), PB2021-26-**
46 **SPR, for Site Plan Review to expand the existing building at 5 Technology Drive with two additions totaling**
47 **+/-7,915 sq. ft., together with associated site improvements, as shown on a plan set titled “5 Technology**
48 **Drive Upgrade,” prepared by Pare Corporation, dated August 9, 2021, revised August 30, 2021 (cover sheet**
49 **plus 16 sheets), including any and all submissions and testimony provided for and during the public hearing,**
50 **with the following conditions:**

Conditions to be Satisfied Prior to Application for a Building Permit

1. The applicant shall make the following revisions to the plan set to the satisfaction of the Planning and Development Department and the City Engineer:
 - a) Eliminate the built-in ladder within the typical manhole detail shown on Sheet C5.3, consistent with DPW sewer standards.
 - b) Add survey and wetland delineation to the plan set.
 - c) Update plan sheet numbers.
 - d) Amend sheets titled, "Existing Conditions Plan," prepared by WSP USA, Inc., dated September 13, 2021, to remove boundary line between 5 and 9 Technology Drive, add plan sheet numbers, add to plan set and update the Table of Contents.
 - e) Title block text is illegible. Please address.
 - f) Amend the cover sheet to:
 - i. Provide description of plan revisions (5.1.E.4.d).
 - ii. Add the name, seal, and business address of the wetland scientist.
 - iii. Update the zoning analysis table to identify the parking calculations for the entire property (5.1.E.4.e(5)).
 - iv. Add Pare project number, if applicable.
 - g) Amend Sheet 4/C2.1 to:
 - i. Identify dashed line to the rear of the property.
 - ii. Clarify the number of parking spaces proposed at the southeastern corner of the building and update the zoning analysis table on the cover sheet, as needed.
 - iii. Remove the limits of disturbance lines and the compost filter sock line.
 - iv. Show snow removal areas.
 - h) Amend the lighting plan to:
 - i. Clarify whether 16 or 17 lighting fixtures are proposed.
 - ii. Add Sections 6.7.2.c and 6.7.2.d of the Site Plan Review Regulations as plan notes.
 - i) Vegetative screening of at least 5 ft. in height shall be provided for all mechanical equipment (Section 6.2.B.8).
 - j) Ensure that the number of proposed parking spaces is consistent between the zoning analysis table and each plan sheet.

The applicant shall provide the Planning and Development Department with one (1) full size copy of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for archival purposes.
2. The applicant shall schedule and hold a pre-building permit application meeting with the Planning and Development Department, City Building Inspectors, City Engineer/Department of Public Works, and Fire Department, in order to help streamline the building permit review process and to review applicable code requirements.
3. The applicant shall coordinate the final water service configuration with the Department of Public Works (DPW).
4. The applicant shall obtain approval from the City Council or the City Manager's office for any additional water and/or sewer flows in accordance with the applicable Chapter 136 and 182 of the City Code.
5. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations.

Conditions to be Satisfied Prior to the Issuance of a Building Permit

6. The development shall be subject to City of Lebanon Impact Fees, pursuant to Section 213 of the Zoning Ordinance. The Impact Fee shall be calculated at the time of Building Permit issuance based on the Impact Fee Schedule adopted on August 13, 2018. In accordance with RSA 674:39, the approved site plan shall be exempt from any future changes in impact fees and methodology for five years from the date of approval; however, any building permits which are issued after the end of that five-year period shall be fully subject to whatever impact fees and methodology are in effect at the time of building permit issuance.
7. All water and sewer fees shall be paid as set forth in City Code Chapter 68.
8. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required State approvals including, but not limited to, the following:
 - a) NHDES Sewer Connection Permit, if necessary

Conditions to be Satisfied Prior to the Issuance of a Certificate of Occupancy

9. The impact fee calculated pursuant to Condition of Approval #6 shall be paid.
10. All improvements depicted on the plan shall be completed and shall be constructed as depicted on the approved plan, including any modifications to the plan as may be approved by the Planning Board in accordance with the Site Plan Review Regulations.

General Conditions

11. The applicant shall obtain an Excavation Permit from the Department of Public Works for any site work in the public right-of-way prior to any work in the right-of-way.
12. All required landscape plantings shall meet the minimum size requirements for such plantings set forth in Section 6.2.B of the Site Plan Review Regulations at the time of installation.
13. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.
14. The property owner is responsible for the maintenance and operation of the stormwater management system in accord with the O&M plan, and such responsibility shall run with the land. (Section 6.6.H.2.b of the Site Plan Review Regulations).
15. Prior to any construction that would interfere with the City's use of the 30 ft. right-of-way easement located at the rear of the property, the applicant shall relocate the easement in agreement with the City or shall obtain written consent from the City allowing such interference. Any relocation of the easement that impacts the design and layout of the property may require additional review by the Planning Board pursuant to Sections 3.1, 9.1 and/or 9.2 of the Site Plan Review Regulations.

The motion was seconded by Jeremy Rutter.

**The motion was approved (8-0).*

1
2 **D. Amendments to the Site Plan Review Regulations:** The Lebanon Planning Board will
3 hold a public hearing for the purpose of receiving input and taking action on proposed amendments to the
4 Site Plan Review Regulations to create an administrative technical review committee per NH RSA
5 674:43, III, for the purpose of reviewing minor site plans, and to specify application, acceptance and
6 approval procedures, and to define what size and kind of site plans may be reviewed by the site review
7 committee. The amendments primarily include changes to Article II (Definitions) and Article III
8 (Administration), and also include related changes to Article IV (Procedure), Article V (Submission
9 Requirements), and Article IX (Modifications and Minor Alterations to an Approved Site Plan). Copies of
10 the proposed amendments are available for review at the Planning and Development Department and will
11 be made available online at the City's Web site.

12
13 Mr. Corwin described the minor changes to exemptions, terms, and membership as outlined in the Staff
14 Memo.

15
16 The Board members suggested changes for clarification.

17
18 Chair Garland invited public comment.

19
20 Mr. Brooks read a statement by Dan Nash regarding the proposed language and thresholds, which
21 suggested that the threshold remain at 1,000 square feet for triggering any site plan review.

22
23 Mr. Brooks stated that the goal was to create a more streamlined process. Ms. Stavis noted that the statute
24 sets specific timelines and allows local boards to set their own thresholds. Mr. Amaro stated that the
25 minor review process was started to address a need. Ms. Chewing asked for clarification as to the
26 number of projects that would fall within the 500-999 square foot category. Mr. Corwin stated that there
27 is a gray area that is not being regulated at present despite the need. Mr. Brooks noted that it would be
28 difficult to predict the number of projects that would be impacted. Ms. Zook stated that the suggested
29 wording is suitable. Ms. Romano agreed, stating that changes impacting density should have some
30 oversight. Ms. Monroe inquired about a backup plan in the event of complaints and unintended
31 consequences. Chair Garland noted that the intention would be to evaluate the process and make
32 adjustments as it goes along.

33
34 Mr. Corwin noted that the current regulations have no exemptions and requires review by Staff for all
35 proposed projects. The proposed definition of land development provides guidance, and more options are
36 available than at present.

37
38 Jeremy Katz commented in favor of a minor review process. The burden of a full review often dissuades
39 development.

40
41 *A MOTION by Laurel Stavis that the Planning Board adopt the changes to the Site Plan Review*
42 *process and the amendments as discussed.*
43 *The motion was seconded by Kim Chewing.*

44
45 **The MOTION was approved (8-0).*

46 47 **4. Other Business**

48
49 **A. Review of CIP Subcommittee discussions; adopt CIP and submit final**
50 **recommendation for 2022 capital budget to Council via the City Manager.**
51

1 Mr. Brooks thanked the members of the subcommittee for their review of the 25 projects. The Lebanon
2 School District also contributed to the discussion. The results of the review will provide guidance for the
3 City Council's 2022 budget process.

4
5 Chair Garland noted that there are needs that cannot be funded, and delays will occur. The School District
6 and City are trying to coordinate projects.

7
8 Ms. Romano commented on the reduction of public school funding as passed by the legislature this year.

9
10 Ms. Stavis noted that federal funds may positively impact the availability of funding. Mr. Brooks stated
11 that the City Manager is considering the use of those funds for West Lebanon development among other
12 things. There may be Grafton County funds coming to Lebanon.

13
14 ***A MOTION by Joan Monroe that the Lebanon Planning Board APPROVES AND ADOPTS the***
15 ***Capital Improvement Program for the six-year period (2022-2027) as presented in the September 13,***
16 ***2021, agenda packet, and hereby SUBMITS Year 1 (2022) of the CIP as the Board's recommendation to***
17 ***the City Council for capital budget funding for 2022. The Planning Board also wishes to acknowledge***
18 ***and highlight the importance of the CIP program and process as an essential component of the City's***
19 ***overall financial and community planning effort and as a mechanism for anticipating future facility and***
20 ***infrastructure requirements in order to ensure that they are funded in a responsible and systematic***
21 ***fashion.***

22
23 ***The motion was seconded by Laurel Stavis.***

24
25 ****The MOTION was approved (7-0-1). Karen Zook abstaining.***

26
27 Mr. Brooks updated the Board regarding the property behind the Volvo dealership and the plan to
28 aggregate the land for redevelopment by an individual owner. The land is zoned Light Industrial (IND-L)
29 and is in the flood plain. No activity has occurred that would trigger site plan review.

30
31 Ms. Zook commented on the CIP process changes being considered by the City Council.

32
33 Ms. Romano noted that September 25th is Mascoma River cleanup day, adding that they are seeking
34 volunteers.

35
36 Ms. Stavis noted that the Governor's Executive Council meeting has the demolition of Westboro Yard on
37 the agenda for the September 15th meeting. There is a contractor for the project.

38
39 ***A MOTION by Kathie Romano to extend the meeting until 9:45 PM.***

40 ***The motion was seconded by Jeremy Rutter.***

41
42 ****The MOTION was approved (8-0).***

43
44 **5. Approval of Minutes**

45
46 A. August 9, 2021

47
48 ***A MOTION by Kathie Romano to approve the Planning Board minutes of August 9, 2021, as***
49 ***presented.***

50 ***The motion was seconded by Joan Monroe.***

1 ****The MOTION was approved (8-0).***

2
3 B. August 3, 2021, CIP Mins – Postponed

4
5
6 C. August 19, 2021, CIP Mins

7
8 ***A MOTION by Laurel Stavis to approve the Planning Board minutes of August 19, 2021, as presented.***
9 ***The motion was seconded by Jeremy Rutter.***

10
11 ****The MOTION was approved (8-0).***

12
13
14 **6. Adjournment**

15
16 ***A MOTION by Kathie Romano to adjourn the meeting.***
17 ***The motion was seconded by Laurel Stavis.***

18
19 ****The MOTION was approved (8-0).***

20
21 The meeting was adjourned at 9:27 PM.

22
23 Respectfully submitted,

24
25 Holly Howes
26 Recording Secretary