3 FLAGSTONE DRIVE

SP# 01-22 STAFF REPORT

February 23, 2022

SITE: 3 Flagstone Drive; Tax Map 222 Lot 014-000

ZONING: Business (B)

PURPOSE OF PLAN: Development of a 5,100± square foot building containing a 3,600± square foot urgent care and additional 1,400± square feet of commercial space, with associated site improvements.

PLAN UNDER REVIEW: Proposed Urgent Care & Commercial Use; Map 222 Lot 14, 3 Flagstone Drive, Hudson, NH, 03051; prepared by Bohler Engineering, 352 Turnpike Road, Southborough, MA 01772; prepared for The Lannan Company, 7D Taggert Drive, Nashua, NH 03060; consisting of 17 sheets with General Notes 1-30 on Sheet C-102; dated January 17, 2022.

ATTACHMENTS:

- A. Project Narrative & Waiver Requests
- B. Traffic Memorandum, prepared by Bohler Engineering, dated January 17, 2022.
- C. Peer review, prepared by Fuss & O'Neill, dated February 2, 2022.
- D. Department Comments
- E. CAP Fee Worksheet

APPLICATION TRACKING:

- January 19, 2022 Application received.
- February 23, 2022 Public hearing scheduled.

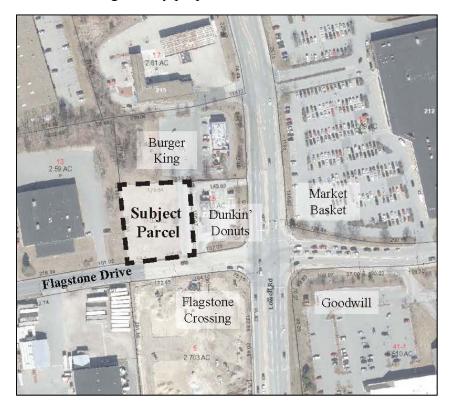
COMMENTS & RECOMMENDATIONS:

BACKGROUND

The existing lot is vacant, consisting of mostly open lawn, except for a paved access drive along its easterly lot line that connects Flagstone Drive to the abutting Burger King (which has a second street access to Lowell Road via another shared access drive through Haffner's Gas Station to the north). There is a stormwater facility on the west end of the property that connects to a storm drain under Flagstone Drive.

The submitted plan is proposing to develop a new commercial building, with access from the existing access drive, with a two-way driveway and another exit-only driveway. No new curb cut

would be necessary on Flagstone Drive. The proposed building is primarily an urgent care facility while the remainder is generally proposed as commercial.



STAFF COMMENTS

1. Use (§ 334-21, § 334-10): The Applicant is proposing an Urgent Care facility (3,600 sf) and ~1,400 sf of space generally labeled as "commercial." Urgent Care facility, whether it be considered a "hospital" or a personal service establishment, the use is permitted in Business Zone.

It appears that the additional commercial space is speculative with no known tenant or use. The Applicant utilized the parking requirements for restaurant (no bar) for a conservative estimate of the parking demand. Further, Staff suspects the Applicant wishes this space to be permitted for the following uses:

- a. D.3 Personal service establishment
- b. D.7 Retail food or drug store
- c. D.15 Restaurant
- d. D.17 Business or professional office
- e. D.20 Indoor commercial recreation
- f. D.28 Massage therapy (licensed)
- g. D.29 General retail

- Lastly, According to § 334-10.B, "multiple commercial or industrial uses/activities developed as part of a single site are considered a single principle use."
- 2. Waiver for Parking Area Setback [§ 276-11.1.(25)]: The proposed parking lot in the submitted plan intrudes the rear lot setback, with three parallel parking spaces located close to the northerly lot line.
 - Staff suggests the Board ask the Applicant to demonstrate where and how the frontage landscaping compensates for what is lost in the rear setback, as the Applicant indicated in the waiver request.
- 3. Waiver for Parking Space Dimensions [§ 275-8.C.(4)]: Most of the parking spaces in the proposed parking lot will be 9' x 18', but three out of the 27 spaces will be 8' x 22' parallel parking spaces.
 - Staff notes that 9' x 18' spaces are permitted by the Regulations but require a Board's vote, and that, even though not specifically allowed by the Regulations, 8' x 22' parallel parking spaces are appropriate.
- 4. Waiver for Off-Street Loading Spaces [§ 275-8.C.(6)]: The summited plan does not include a required off-street loading space.
 - In light of the Applicant's rationale, Staff suggests the Board to ascertain the anticipated types and sizes of delivery vehicles and ask the Applicant to demonstrate the anticipated circulation path of these vehicles.
- 5. **Parking Requirements (275-8.C):** The Applicant submits a parking requirement based on 3,600 sf of medical office (1 per 300 sf) and 1,400 sf of restaurant without bar (1 per 100 sf). The Applicant used the restaurant ratio, which requires more than most uses, to generate a safe estimate of the parking demand in order to have flexibility in the type of commercial use permitted for the 1,400 sf space. Using this formula, the estimated need is 26 spaces, where the Applicant has provided 27 spaces.
 - Staff notes that it may be difficult to maneuver in and out of the parking space nearest the proposed dumpster location. The parallel spaces may also be challenging as they wrap a bend in the traffic flow. It is possible that these parallel spaces are not needed, depending on the tenant of the commercial space.
- 6. **Signage Details or Required Note** [§ 276-11.1.B.(13)]: The submittal shows an approximate location for a freestanding sign in the front yard, but no details. No architectural elevations have been submitted, thus no approximate locations of wall signs have been identified.
 - The Applicant may either provide on the plan the location, size, and character of these signs or a note stating: "All signs are subject to approval by the Hudson Zoning Administrator prior to installation thereof."

- 7. Existing Access Drive: As noted in the Peer Review (Attachment C), the proposed site will be accessed using an existing access way, however no improvement is proposed to the drive.
- 8. **Drainage**: Also in **Attachment C**, the peer reviewer recommends additional test pits be performed in the area of the proposed infiltration area (item 6.a). It is common for test pits to be performed prior to a site design, so this is not uncommon. The Town Engineer has recommended a condition of approval to address this matter.
 - Item 6.c identifies a large difference in groundwater height between test pits #1 (96") and #2 (40"). A groundwater height of 40" would not meet the 4-foot required separation from the infiltration basin. Generally, there seems to be a significant drop in water table height moving east to west on the site. The Applicant should address this.
- 9. **Traffic:** The Applicant provided a traffic memorandum in **Attachment B**, which was peer reviewed in **Attachment C**. The peer reviewer found the generation analysis to be accurate, though they recommend that a newer edition of the ITE manual be used in the future. The peer reviewer expresses concern over the driveway's proximity to the signalized intersection of Lowell Rd. and Flagstone Dr. (185-feet). The concern is not with the Urgent Care facility, but with the final use of the 1,400 sf commercial space. They recommend the Applicant conduct a queue length analysis for the driveway as well as the eastbound approach of the intersection to ensure intersection operations aren't impacted by the proposed development during peak hours.
- 10. **Work in adjacent parcel:** The plan shows grading work on the neighboring parcel, 5 Flagstone Drive, needed to make this site plan feasible. While there are similarities in the ownership of the subject parcel and the neighboring parcel, they are owned by two different entities. Therefore, this application requires authorization of 5 Flagstone Drive to be complete.

DEPARTMENTAL COMMENTS

In **Attachment D** the Town Engineer requests a profile of the sewer line and a sewer manhole at the property line. Also requested, information related to water demand. The Town Engineer also pointed out the need for permission to do work in the neighboring parcel, however said permission should be permanent, not temporary.

DRAFT MOTIONS

ACCEPT the site plan application:

| move to accept the site plan application for 3 Flagstone Drive; Tax Map 222 Lot 014. | | | | |
|--|---------|-----------------|--|--|
| Motion by: | Second: | Carried/Failed: | | |

GRANT a waiver:

| discussion, the testimor | | king space dimensions, based on the Board's esentative, and in accordance with the language for said waiver. |
|--------------------------|---|---|
| Motion by: | Second: | Carried/Failed: |
| GRANT a waiver: | | |
| discussion, the testimor | | -street loading spaces, based on the Board's esentative, and in accordance with the language for said waiver. |
| Motion by: | Second: | Carried/Failed: |
| GRANT a waiver: | | |
| discussion, the testimor | · · · · · · · · · · · · · · · · · · · | arking area setback, based on the Board's esentative, and in accordance with the language for said waiver. |
| Motion by: | Second: | Carried/Failed: |
| CONTINUE the pul | blic hearing to a date ce | rtain: |
| | public hearing for the site te certain, | plan application for 3 Flagstone Drive; Tax |
| Motion by: | Second: | Carried/Failed: |

APPROVE the site plan application:

I move to approve Proposed Urgent Care & Commercial Use; Map 222 Lot 14, 3 Flagstone Drive, Hudson, NH, 03051; prepared by Bohler Engineering, 352 Turnpike Road, Southborough, MA 01772; prepared for The Lannan Company, 7D Taggert Drive, Nashua, NH 03060; consisting of 17 sheets with General Notes 1-30 on Sheet C-102; dated January 17, 2022; subject to, and revised per, the following stipulations:

- 1. All stipulations of approval shall be incorporated into the Notice of Decision and the Development Agreement, which shall be recorded at the HCRD, together with the Plan.
- 2. All improvements shown on the Plan, including notes 1-30 on Sheet C-102, shall be completed in their entirety and at the expense of the applicant or the applicant's assigns.
- 3. Prior to the Planning Board endorsement of the Plan, the Plan and proposed easements shall be subject to final administrative review by Town Planner, Town Engineer and Town Counsel.
- 4. Prior to applying for a building permit, the Applicant shall schedule a pre-construction meeting with the Town Engineer.
- 5. Adequate test pit data for a test pit shall be provided to the Town, to the satisfaction of the Town Engineer. The test pit shall be performed and witnessed by a P.E. in the Engineering Department prior to installation of the underground chamber.
- 6. A cost allocation procedure (CAP) amount of \$22,838.00 shall be paid prior to the issuance of a Certificate of Occupancy.
- 7. Prior to the issuance of a final certificate of occupancy, an LLS Certified "as-built" site plan shall be provided to the Town of Hudson Land Use Division, confirming that the site conforms to the Plan approved by the Planning Board.
- 8. The onsite drainage system shall be constructed and maintained in compliance with NHDES requirements for such systems.
- 9. Construction activities involving the subject lot shall be limited to the hours between 7:00 A.M. and 7:00 P.M. No exterior construction activities shall be allowed on Sundays.

| 10. Hours of refuse rem | oval shall be exclusive to the | hours between 7:00 A.M. and 7:00 |
|-------------------------|--------------------------------|----------------------------------|
| P.M., Monday throu | gh Friday only. | |
| Motion by: | Second: | Carried/Failed: |



352 Turnpike Road Southborough, MA 01772 508.480.9900

January 17, 2022

Town of Hudson Planning Board 12 School Street Hudson, NH 03051

Attention: Brian Groth, Town Planner

Re: Project Narrative to Accompany Site Plan Application 3 Flagstone Drive, Hudson, NH – Map 222, Lot 14

Dear Members of the Board:

The Lannan Company ("Applicant") proposes to redevelop the above referenced site with a 5,100± square foot multi-use commercial building, and we are submitting the enclosed Site Plan Application and additional materials in support of same. The Applicant respectfully requests to be on the agenda with the Planning Board at their February 9, 2022 hearing for review of the subject Site Plan Application. The following documents are enclosed in support of this request:

- One (1) original and one (1) copy of the Site Plan Application, dated January 17, 2022:
- One (1) original and one (1) copy of the Project Narrative, dated January 17, 2022;
- Three (3) full size (22"x34") copies of the Proposed Site Plan Documents, dated January 17, 2022:
- Two (2) copies of the Drainage Report, dated January 17, 2022;
- Two (2) copies of the Subdivision/Site Plan Waiver Request Form §275-8(4) Parking Space Dimensions, dated January 17, 2022;
- Two (2) copies of the Subdivision/Site Plan Waiver Request Form §275-8(6) Off-Street Loading Spaces, dated January 17, 2022;
- Two (2) copies of the Subdivision/Site Plan Waiver Request Form §276-11.2(25) Parking Space Setback, dated January 17, 2022;
- Two (2) copies of the Traffic Memorandum, dated January 17, 2022;
- One (1) List of Direct Abutters and Indirect Abutters, dated January 17, 2022;
- Two (2) sets of Mailing Labels for the Abutter Notifications;
- One (1) \$2,368.42 Fee Check;
- PDF's of Submitted Materials.

The site in question consists of 0.81± acres and is located on the northerly side of Flagstone Drive in Hudson, New Hampshire. The parcel is denoted as Lot 14 on Assessors Map 222 and is located within the Busniess (B) Zoning District. The site is bordered to the east by a Dunkin Donuts, to the west by Adax Machine Company, to the south across the street by the recent Flagstone Crossing



development, and to the north by a Burger King. The property is currently made up of a mowed lawn with thirty-five (35) foot easement containing a paved driveway to Burger King north of the site.

The project proposes the construction of a new 5,100± square-foot building and associated site improvements. The proposed building is anticipated to include a 3,600± square foot urgent care use and an additional 1,400± square foot commercial use to be determined. For the purposes of Zoning and parking calculations, the most restrictive use (restaurant) was assumed. The proposed uses are permitted-by-right in the Business (B) Zoning District.

The project proposes utilizing the existing paved access to Burger King, no new driveway connections are proposed. The project proposes twenty-seven (27) parking spaces to serve the proposed uses, with interior landscaped areas provided in accordance with the Land Use Regulations and a full thirty-five (35) foot landscape buffer along Flagstone Drive.

Three (3) waiver requests from the Town of Hudson Land Use Regulations are requested with the enclosed Site Plan Application, including requirements for parking space setbacks, parking space dimensions, and off-street loading spaces. Please see enclosed Waiver Request Letter for more information.

A water service is proposed to be provided by a connection to the existing municipal infrastructure proximate to the site at Flagstone Drive. A sewer service is proposed to be provided by a connection to an existing sewer manhole within Flagstone Drive. Electric and communication services are proposed to be provided through connection to the existing overhead utility infrastructure along Flagstone Drive. A gas service is proposed to be provided by a connection to the existing main at Flagstone Drive. A screened enclosure is proposed for collection of solid waste and a contract for the removal of same by a licensed vendor is proposed to be obtained by the tenant. Site lighting is proposed via cut-off pole mounted luminaires.

The stormwater management system has been designed in accordance with the standards described in both the New Hampshire Department of Environmental Services (NHDES) Stormwater Manual and the Town of Hudson stormwater management requirements. In general, stormwater runoff generated as a result of the project is designed to be collected, treated, and attenuated through a combination of Best Management Practices including deep sump catch basins and an underground infiltration system. Please refer to the enclosed Drainage Report for more information.

We look forward to discussing this project further with you at the upcoming hearing on February 9, 2022. We trust that this information is sufficient for your needs at this time. Please do not hesitate to contact us at (508) 480-9900 should you have any questions or wish to discuss further.

Sincerely,

BOHLER ENGINEERING

Matthew Bombaci

Meeting Date: 2/23/22 SP #1-22 - 3 Flagstone Dr. - Attachment A

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM Town of Hudson, New Hampshire

| Name of Subdivision/Site Plan:3 Flagstone Drive |
|---|
| Street Address: 3 Flagstone Drive, Hudson, NH |
| I Richard Lannan, The Lannan Company hereby request that the Planning Board waive the requirements of item \$276-11.1(25) - Parking Area Setback of the Subdivision/Site Plan Checklist in reference to a plan presented by Bohler Engineering (name of surveyor and engineer) dated January 17, 2022 for property tax map(s) 222 and lot(s) 14 in the Town of Hudson, NH. |
| As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations. |
| Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto): The project proposes to maintain the existing driveway within the side yard |
| building setback and to locate of three (3) parallel parking spaces within the rear yard building setback. The proposed layout has |
| been design to provide interior and exterior landscaping to the extent practicable in consideration of existing access and drainage |
| easements on-site, including fully meeting/exceeding the front yard landscaping requirements and interior landscaping |
| requirements. Additional frontage landscaping is provided in excess of that lost within the rear building setback. |
| Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the |
| Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate |
| documentation hereto): The project proposes to maintain the existing driveway within the side yard building setback and to |
| locate of three (3) parallel parking spaces within the rear yard building setback. The proposed layout has been design to provide |
| interior and exterior landscaping to the extent practicable in consideration of existing access and drainage easements on-site, |
| including fully meeting/exceeding the front yard landscaping requirements and interior landscaping requirements. Additional |
| frontage landscaping is provided in excess of that lost within the rear building setback. |
| |
| Signed: |
| Applicant or Authorized Agent |
| Planning Board Action: |
| Waiver Granted |
| Waiver Not Granted |

Meeting Date: 2/23/22 SP #1-22 - 3 Flagstone Dr. - Attachment A

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM Town of Hudson, New Hampshire

| Name of Subdivision/Site Plan: 3 Flagstone Drive |
|---|
| Street Address: 3 Flagstone Drive, Hudson, NH |
| I Richard Lannan, The Lannan Company hereby request that the Planning Board waive the requirements of item \$275-8(4) - Parking Space Dimensions of the Subdivision/Site Plan Checklist in reference to a plan presented by Bohler Engineering (name of surveyor and engineer) dated January 17, 2022 for property tax map(s) 222 and lot(s) in the Town of Hudson, NH. |
| As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations. |
| Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto): The proposed 9'x18' parking spaces allow the project to provide additional interior landscaped area where strict compliance with |
| the regulations would require the creation of unnecessary impervious surfaces. The proposed layout has been design to provide |
| an appropriate mix of parking and landscape areas and granting of the waiver allows for an improved design. |
| |
| Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the |
| Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate |
| documentation hereto): The proposed 9'x18' parking space dimensions are similar to other parking facilities in the Town of |
| Hudson. Additionally, no head-to-head parking spaces are proposed, with the majority of spaces abutting a landscaped area. Under |
| this condition, vehicles have the ability to hangover their front and rear bumpers over the curb, providing approximately two (2) |
| additional feet in available parking space length. The proposed parking layout therefore provides an available parking area more |
| closely compliant with the requirements than other parking areas in the Town, while also providing increased interior landscaping. |
| Signed: |
| Applicant or Authorized Agent |
| Planning Board Action: |
| Waiver Granted |
| Waiver Not Granted |

Meeting Date: 2/23/22 SP #1-22 - 3 Flagstone Dr. - Attachment A

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM Town of Hudson, New Hampshire

| Name of Subdivision/Site Plan: 3 Flagstone Drive |
|---|
| Street Address:3 Flagstone Drive, Hudson, NH |
| I Richard Lannan, The Lannan Company hereby request that the Planning Board waive the requirements of item <u>\$275-8(6) - Off-Street Loading Spaces</u> of the Subdivision/Site Plan Checklist in reference to a plan presented by <u>Bohler Engineering</u> (name of surveyor and engineer) dated <u>January 17, 2022</u> for property tax map(s) <u>222</u> and lot(s <u>14</u> in the Town of Hudson, NH. |
| As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations. |
| Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto): The proposed uses associated with the development are not anticipated to include large deliveries as part of their normal |
| operations. The implementation of loading spaces would result in the creation of unnecessary impervious surfaces and would not |
| allow for appropriate use of the site. |
| |
| Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the |
| Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate |
| documentation hereto): The proposed uses are not anticipated to require large dedicated loading spaces as part of their |
| typical operations. Any required deliveries are anticipated to utilize the existing parking area or bypass circulation lanes, and to |
| occur outside of peak operating hours. The site has been designed to circulate anticipated delivery vehicles and not to require the |
| use of public ways for maneuvers. Loading and unloading maneuvers are not to anticipated to restrict circulation lanes for |
| passenger and emergency vehicles. |
| Signed: |
| Applicant or Authorized Agent |
| Planning Board Action: |
| Waiver Granted |
| Waiver Not Granted |

Meeting Date: 2/23/22



352 Turnpike Road Southborough, MA 01772 508.480.9900

January 17, 2022

Town of Hudson Planning Board 12 School Street Hudson, NH 03051

Re: Traffic Memorandum

Proposed Commercial Building

3 Flagstone Drive, Hudson, NH - Map 222, Lot 14

Dear Members of the Board:

On behalf of the Applicant, The Lannan Company, Bohler has performed the following Trip Generation Analysis in conjunction with the proposed commercial building on the property currently known as 3 Flagstone Drive (Map 222, Lot 14).

The proposed project consists of the construction of a 5,100± square foot commercial building with associated site improvements. The proposed building is anticipated to include a 3,600± square foot urgent care facility and an additional 1,400± square feet of commercial space with an undetermined use at this time. Although the ultimate use is likely to be less intensive, a conservative assumption that the use would be a fast food without drive-through use was made for the purposes of this analysis. The purpose of this analysis is to estimate the traffic generated by the proposed use. This estimate was completed by comparing the proposed site with existing facilities of the same use. To complete this estimate, a trip rate was calculated utilizing data and procedures from the Institute of Transportation Engineers (ITE) Trip Generation Manual, Ninth Edition.

Based upon the ITE information described above, traffic generated by the proposed project was estimated during the AM and PM peak hours for the proposed industrial building based upon the floor area of the building. This information is summarized in the table below.

Floor Weekday Peak Weekday Peak ITE Hour 7-9 AM Hour 4-6 PM Description Area Code (Enter/Exit) (SF) (Enter/Exit) 630 Clinic 3,600 19* 19 Fast Food 933 w/o Drive 1,400 61 37 Thru Totals 80 56

Table 1. Trip Generation Estimate

^{*} AM peak hour generation not available, PM trip generation utilized.





As outlined in the table above, the proposed commercial building is expected to generate up to a total of 80 trips in the AM peak hour and 56 trips in the PM peak hour with a conservative assumption relative to the use of the undetermined space. ITE recommends that traffic impact studies be performed whenever an increase in trips in any peak hour is greater than 100 trips per hour since this is the point where a change in roadway capacity may be found and mitigation may or may not be needed. Based upon the minimal changes in traffic volume it is anticipated that the proposed development will not have a negative impact on the surrounding street network nor merit a full traffic impact study.

Should you have any questions or need additional information, please do not hesitate to contact me at 508-480-9900.

Very Truly Yours,

BOHLER ENGINEERING

Matthew Bombaci, P.E.



Meeting Date: 2/23/22

February 2, 2022

Mr. Brian Groth Town Planner Town of Hudson 12 School Street Hudson, NH 03051

Re: Town of Hudson Planning Board Review 3 Flagstone Drive Site Plan, 3 Flagstone Drive Tax Map 222 Lot 14; Acct. #1350-990 Reference No. 20030249.2120

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the first submission of the materials received on January 20, 2022, related to the above-referenced project. Authorization to proceed was received on January 20, 2022. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, Zoning Regulations, and criteria outlined in the CLD Consulting Engineers Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, September 3, 2008, and October 2015.

We have included a copy of Fuss & O'Neill's evaluation of the checklist for your reference. We note that several items could not be verified by Fuss & O'Neill and require action by the Town.

The project appears to consist of the development of an urgent care facility with an attached commercial use on a previously undeveloped site. The commercial use is currently undetermined. Proposed improvements to the site also include the construction of a driveway, parking areas, drainage improvements, landscaping, lighting, and other associated site improvements. The proposed buildings will be serviced by public water and sewer.

The following items are noted:

1. Site Plan Review Codes (HR 275)

- a. Hudson Regulation (HR) 275-6.C. The applicant has not proposed to add any sidewalks along Flagstone Drive. We note that sidewalk exists along the Dunkin Donuts site to the east, and terminates at the driveway for that site. The Town should confirm whether adding sidewalk along the proposed site would be appropriate.
- b. HR 275-6.I. The scope of this review does not include the adequacy of any fire protection provisions for the proposed building. No fire service connections to the buildings are shown
- c. HR 275-6.T. The applicant is proposing to connect to the existing access driveway within the subject lot. We note that this driveway is not proposed for improvement as part of this project.

50 Commercial Street

Manchester, NH
03101

t 603.668.8223
800.286.2469

www.fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont



Mr. Brian Groth February 2, 2022 Page 2 of 7

- d. HR 275-6.T. The applicant has proposed some grading, seeding, and what may be a retaining wall on the abutting property to the west of the site. The applicant has noted that the Contractor shall coordinate grading on this property with the owner prior to commencement of construction. We recommend that the applicant provide verification to the Town that some type of rights to perform this off-site work have been secured prior to the start of construction.
- e. HR 275-6.T. The adjacent Dunkin Donuts property includes a retaining wall with portions of that wall in a state of disrepair. This wall appears to be at risk of further damage from vibratory compactors, large trucks, or other construction operations. We note that the plan currently calls for coordination of driveway work with abutters but is not specific as to what work is proposed.
- f. HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has provided parking calculations on the plan set. The applicant has noted that 26 parking are required for both the medical office and commercial spaces and that 27 spaces are provided. The applicant has used an eating and drinking establishment for the commercial space in order to be conservative with the parking calculations which we concur with.
- g. HR 275-8.C.(4). The applicant has requested a waiver to allow for parking space sizes to be reduced to nine feet by 18 feet for a majority of the site.
- h. HR 275-8.C.(6). The applicant has not provided any off-street loading spaces on the plan set and has requested a waiver from this requirement. We note that the applicant should provide some information as to where an ambulance would load a patient in the event of an emergency transport from the urgent care. We note that there does not appear to be a back or side door that could be used for easy access and there is no designated location for such loading if the site was full of cars.
- i. HR 275-9.C.(11). The applicant has provided two handicap spaces for the site which meets the minimum requirement.
- j. HR 275-9.F. The applicant did not provide copies of any easements or deeds as part of the package received for review. No proposed easements are shown on the plans. The applicant has shown an existing access easement at the driveway through the site. The applicant has also shown an existing drainage easement on the west side of the building, and is proposing to install new sidewalk within 4 feet of the drain alignment within that easement, but without the easement document we cannot verify if this improvement is allowed within the easement area.

2. Administrative Review Codes (HR 276)

- a. HR 276-11.1.B.(4).(b). The applicant should add the approval block to sheet C-702.
- b. HR 276-11.1.B.(6). The owner's signature should be added to the plan set. The applicant has provided a location for the signature but the plans received for review were not signed.
- c. HR 276-11.1.B.(9). We note that the surveyo'rs stamp and signature should be added to sheet C-102.
- d. HR 276-11.1.B.(13). The applicant has not included details for any proposed site signage other than traffic signs. The applicant has included the note requiring signs to be approved prior to installation, and shown an approximate location for a proposed freestanding sign.



Mr. Brian Groth February 2, 2022 Page 3 of 7

- e. HR 276-11.1.B.(23). The applicant has not noted any pertinent highway projects on the plan set.
- f. HR 276-11.1.B.(25). The applicant has requested a waiver for the rear parking lot setbacks. We note that the applicant has provided 3 parallel spaces within this area.

3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)

- a. HR 193.10.C. The applicant should provide more information related to any work proposed withing the access driveway. We note that no grading or repaving information is shown, and the existing drive is in rough condition. The applicant should verify that ponding does not exist and that the current driveway drainage is adequate.
- b. HR 193.10.E. The applicant has not provided any sight distances for the proposed driveway location on the plan set. We note that the site is planning to tie into the existing driveway located within an easement on the site.
- c. HR 193.10.H. We note that the applicant is proposing to tie into the existing driveway located in the side setback of the site that is shared with the abutting Burger King site.
- d. The driveway layout at the entrance and overall parking lot configuration doesn't appear to allow for WB-50 and larger trucks to access the site. The applicant should confirm that these are not anticipated, and review the need for signage to prevent such trucks from attempting to access the site. The applicant should provide information as to the types of delivery trucks that are expected to access the site. Also, it appears that large ladder-type fire trucks can access the site but cannot use the south exit without encroaching on the adjacent curbing and grass areas. The applicant should review egress from the site with the Fire Department and revise the driveway configuration if needed.

4. Traffic

We have reviewed the trip generation analysis memo prepared by Bohler Engineering dated January 17, 2022, for the proposed 5,100 sf commercial building on the 3 Flagstone Drive (Parcel ID 222-014) site in Hudson, New Hampshire. This analysis includes an estimate of the expected traffic to be generated by the proposed building, which will be split up into a 3,600 sf urgent care facility and a 1,400 sf commercial space. This commercial space has been assumed to be a fast food restaurant without a drive-through window to take a conservative approach to the trip generation estimation. The proposed site is currently vacant as it exists today.

The procedures that the Bohler Engineering report uses are reasonable and appropriate. The ITE Trip Generation Manual, 9th edition data and chosen land uses for the proposed site are accurate. This data shows that the site is expected to generate 80 total trips during the weekday morning peak hour and 56 total trips during the weekday evening peak hour between both uses. While this information is accurate, we believe that more recent editions of the ITE Trip Generation Manual should be used for future trip generation analysis. The trips expected to be generated by the site according to the 11th edition of the manual are 70



Mr. Brian Groth February 2, 2022 Page 4 of 7

during the weekday morning peak hour and 59 during the weekday evening peak hour. While this does not change the outcome of this analysis, it may change the results of future analyses because the data has been updated over the years since the 9th edition was published.

There is a potential cause for concern regarding the proposed site driveway's proximity to the signalized intersection at Lowell Street and Flagstone Drive. The site driveway is only about 185 feet from the intersection. The urgent care facility, which generates fewer trips than the building's retail use, is not expected to cause any issues. However, depending on the final use that will be proposed for the 1,400 sf commercial space and the number of trips generated by it, we recommend that the applicant conduct a queue length analysis for the driveway as well as for the eastbound approach to the signalized intersection to ensure intersection operations aren't impacted by the proposed development during the roadway network's peak hours. We understand that there are proposed signal improvements being made at the Flagstone Drive/Lowell Road intersection through a separate Town project. Therefore, analysis of potential impacts and coordination with those revised signals would be important when the rest of the subject site's use has been determined.

5. Utility Design/Conflicts

- a. Engineering Technical Guideline & Typical Details (ETGTD) Section 701. The applicant should provide anticipated sewer flows for the facility if available and verify with the Town that capacity exists within the adjacent existing sewer system to accommodate those flows.
- b. ETGTD Section 720.8.3. The applicant has not provided a cleanout for the proposed sewer service. This should be located at the property line.
- c. The applicant should provide a water/sewer crossing detail for the sewer service crossing the water main in Flagstone Drive and onsite, and crossing details for the service piping at the drain line in the driveway.
- d. The applicant has not confirmed a final use for the proposed commercial space. If a restaurant use is ultimately provided the need for a grease trap should be evaluated with the Town.
- e. ETGTD Section 801. The applicant should verify with the Town that the existing water main in Flagstone Drive has adequate flow and pressure to meet both domestic and fire suppression requirements of the proposed uses for this site.

6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

a. HR 275-9.A.3. & 290-5.A.4. The applicant has shown two test pits on the outside edges of the proposed subsurface infiltration basin. Test pits should be within the footprint of the infiltration basin area, as required by NHDES and common engineering practice. The applicant should add the test pit locations to the existing conditions plan and provide additional information on the perc rate utilized within the stormwater calculations, i.e. Field observation, Ksat conversion, etc.



Mr. Brian Groth February 2, 2022 Page 5 of 7

- b. HR 290-5.A.1. & 290-5.A.3. The applicant should provide language in the Drainage Analysis Report, stating if and how low impact development (LID) strategies for stormwater runoff were evaluated for this project.
- c. HR 290-5.A.9. We note TP# 1221-1 has an ESHGW of 96" while TP#1221-2 has an ESHGW of 40", and both are within proximity of the proposed subsurface infiltration basin. TP#1221-2 does not meet the requirements of 4' separation. The applicant should provide additional input on this noticeable difference in ESHGW as well as reasoning on utilizing only information from TP#1221-1 ESHGW with not taking into account TP#1221-2 ESHGW info
- d. HR 290-5.A.6. The applicant should provide the 25-Year Storm data in section IV of the write-up.
- e. HR 290-5.A.6. We note the write-up of table 4.1 mentions Weare, and not Hudson. The applicant should correct the report.
- f. HR 290-5.A.11. The applicant should note upon the plan sheet as well as the details which rows will be utilized as isolator rows.
- g. HR 290-5.A.11. The applicant should review and revise the BMP worksheet for the infiltration practice. It appears there is erroneous text from possibly a previous report; references to Node G, omitting the roof, Ksat of 5in/hr, AoT report, and TP-4, etc.
- h. HR 290-5.A.10. The applicant should provide labels for proposed locations of the hay bales, as detailed upon the Plan Sheet C-602.
- i. HR 290-6.A.8. The applicant should note the requirement to coordinate a pre-construction meeting with the Town Engineer.
- j. HR 290-6.A.9. The applicant should revise Erosion Control and Turf Establishment Notes on Plan Sheet #10 to state the "not to exceed 30 days, and temporary stabilization within 5 days of initial disturbance".
- k. HR 290-6.A.12. The applicant should provide the winter stabilization notes to the plan set.
- l. HR 290-7.A.6. The applicant should provide information as to how the stormwater system is designed to account for frozen ground conditions.
- m. HR 290-7.A.4. & 5. We note the requirement of the applicant to coordinate the need for a Bond or Escrow with the Town Engineer.
- n. HR 290-7.A.10. We note the stamp illustrated upon the front of the Drainage Report is not an official size stamp and is a scaled copy. The applicant should provide an official PE Stamp.
- o. The applicant will be required to comply with all provisions of the Town of Hudson's MS4 permit, including but not limited to annual reporting requirements, construction site stormwater runoff control, and record keeping requirements.
- p. Please note that this review was carried out in accordance with applicable regulations and standards in place in New Hampshire at this time. Note that conditions at the site, including average weather conditions, patterns and trends, and design storm characteristics, may change in the future. In addition, future changes in federal, state or local laws, rules or regulations, or in generally accepted scientific or industry information concerning environmental, atmospheric and geotechnical conditions and developments may affect the information and conclusions set forth in this review. In no way shall Fuss & O'Neill be liable for any of these changed conditions that may impact the review, regardless of the source of or reason for such changed conditions. Other than as described herein, no other



Mr. Brian Groth February 2, 2022 Page 6 of 7

investigation or analysis has been requested by the Client or performed by Fuss & O'Neill in preparing this review.

7. Zoning (ZO 334)

- a. ZO 334-14.A. The applicant has not provided the proposed building height on the plan set but has noted it will be less than 38 feet.
- b. ZO 334-17 & 334-21. The applicant has noted that the subject parcel is located within the Business (B) zoning district. The proposed use is permitted by the Ordinance within the Business district.
- c. ZO 334-33. The applicant has not shown any wetlands on the plan set.
- d. ZO 334-60. The applicant has not provided any details for any proposed signs on site, except traffic and parking signage. The applicant has noted that signs are subject to Planning Board approval prior to installation.
- e. ZO 334-83 and HR 218-4.E. The applicant has noted that the site is located within a designated flood hazard area X-unshaded. The applicant should review the need for a floodplain permit from the Town Engineer.

8. Erosion Control/Wetland Impacts

a. The Town of Hudson should reserve the right to require any additional erosion control measures as needed. The applicant has noted this on the plans.

9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))

- a. HR 275-8.C.(7). The applicant has met the parking lot landscaping requirements.
- b. HR 276-11.1.B.(14). The applicant has shown lighting fixture locations on the plans with details and photometric information.
- c. HR 276-11.1.B.(14). The applicant has not noted that the hours of operation for the facility. The applicant should provide information regarding hours of operation and whether the lights are intended to be in operation during non-working hours.
- d. HR 276-11.1.B.(14). The applicant has proposed to retain the existing light poles long the western edge of the access driveway. The new project shows these poles immediately adjacent to curbing which may subject them to snowplow damage.

10. State and Local Permits (HR 275-9.G.)

- a. HR 275-9.G. The applicant has not listed required permits and their status on the plan set.
- b. HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package.
- c. Additional local and state permitting may be required.

11. Other

a. The applicant should review the note numbers on the left of sheet C-102 as they appear to have been cut off.



Mr. Brian Groth February 2, 2022 Page 7 of 7

- b. ETGTD Section 565.1.1. The applicant is reminded of Town of Hudson requirements for the importing of off-site fill materials for use in constructing this project. It is recommended that these requirements be stated on the plans for the Contractors attention.
- c. It appears that the arrow for the snow storage area note should be pointing to the nearby clouded area, not the general lawn area, on sheet C-301.

Please feel free to call if you have any questions.

Very truly yours,

Steven W. Digitally signed by Steven W. Reichert, PE DN: cn=Steven W. Reichert, PE, c=US, o=Fuss & O'Neill, Inc., ou=Fuss & O'Neill, Inc., ou=Fuss

Steven W. Reichert, P.E.

SWR:

Enclosure

Town of Hudson Engineering Division - File cc: Bohler Engineering – mbombaci@bohlereng.com From: Dhima, Elvis

Sent: Thursday, January 20, 2022 2:40 PM **To:** Dubowik, Brooke; Groth, Brian

Cc: Kirkland, Donald

Subject: RE: Dept Sign Off - 3 Flagstone Drive Site Plan SP#01-22

Brooke / Brian

I have the following comments

- 1. Applicant shall provide a profile of the sewer run, including the water service to be 18" above the sewer service
- 2. Applicant shall provide a sewer manhole at the property line for inspection & cleaning purposes
- 3. Applicant shall provide backup information related to water demand to justify proposed y 1.5" water service
- 4. Applicant shall provide a temporary construction easement for the adjacent property or revise the plan to exclude grading outside of their property

Thanks

E

Elvis Dhima, P.E. Town Engineer

12 School Street Hudson, NH 03051 Phone: (603) 886-6008 Mobile: (603) 318-8286



Meeting Date: 2/23/22



Planning Administrative Aide

TOWN OF HUDSON



Planning Board

Timothy Malley, Chairman

12 School Street · Hudson, New Hampshire 03051 · Tel: 603-886-6008 · Fax: 603-594-1142

CAP FEE WORKSHEET - 2022

| | 02-16-22 Zo ame: 3 Fl | | | 3 F | lagstone Drive | |
|------------------------------|--------------------------|----------------------------|----------------|-------------------|----------------------|-------------|
| - | ITE Use #1: | | | | | |
| Proposed | Building Area (| net square foota | ge): | 5,10 | 00 +/- | <u>S.F.</u> |
| CAP FEES: (ONE CHECK NEEDED) | | | | | | |
| 1. | (Bank 09) 2070-701 | Zone 1 (\$4.94 per sf) | X 3,600 sf Med | | 17,784.00 Office) | |
| 2. | (Bank 09) 2070-701 | Zone 1 (\$3.61 per sf) | X 1,400 sf Sho | <u>\$</u> ppin | -, | |
| | | | Total | \$ | 22,838.00 | |
| Check sho | uld be made paya | ble to the <u>Town o</u> | f Hudson. | | | |
| Thank you | , | | | | | |
| Brooke l | Dubowik | | | | | |

SITE PLAN APPLICATION

| Date of Application: January 17, 2022 | Tax Map #: 222 Lot #: 14 | | |
|---|--------------------------------|--|--|
| Site Address: 3 Flagstone Drive | | | |
| Name of Project: 3 Flagstone Drive | | | |
| Zoning District: Business (B) | General SP#: | | |
| Z.B.A. Action: N/A | (For Town Use Only) | | |
| PROPERTY OWNER: | <u>DEVELOPER:</u> | | |
| Name: Nash-Tamposi | The Lannan Company | | |
| Address: 20 Trafalgar Sq., Suite 602 | 7D Taggert Drive | | |
| Address: Nashua, NH 03060 | Nashua, NH 03060 | | |
| Telephone # | (603) 888-8950 | | |
| Email: | hdumont@lannancompany.com | | |
| PROJECT ENGINEER: | SURVEYOR: | | |
| Name: Bohler Engineering | Control Point Associates, Inc. | | |
| Address: 352 Turnpike Road | 352 Turnpike Road | | |
| Address: Southborough, MA 01772 | Southborough, MA 01772 | | |
| Telephone # _(508) 480-9900 | (508) 948-3000 | | |
| Email: mbombaci@bohlereng.com gholdright@cpasurvey.com | | | |
| PURPOSE OF PLAN: Development of a 5,100 +/- square foot building containing a 3,600± square foot urgent care and additional 1,400± square feet of commercial space, with associated site improvements. See Project Narrative for additional information. | | | |
| (For Tow | n Use Only) | | |
| Routing Date: Deadline Date: | Meeting Date: | | |
| I have no comments I have comments (attach to form) | | | |
| Title:Date: | | | |
| Department: | | | |
| Zoning: Engineering: Assessor: Police:Fire: DPW: Consultant: | | | |

SITE DATA SHEET

PLAN NAME: 3 Flagstone Drive PLAN TYPE: SITE PLAN MAP 222 LOT 14 LEGAL DESCRIPTION: DATE: January 17, 2022 3 Flagstone Drive Location by Street: Business District Zoning: Medical/Commercial Proposed Land Use: N/AExisting Use: Service establishment, Restaurants Surrounding Land Use(s): one Number of Lots Occupied: 0 sq ft Existing Area Covered by Building: N/AExisting Buildings to be removed: 5,100 sq ft Proposed Area Covered by Building: 12,662+/- sq ft (36%+/- of site) Open Space Proposed: 12,310 sq ft (35% of site) Open Space Required: S.F.: 35,172 Acres: 0.81+/-Total Area: Area in Wetland: N/A Area Steep Slopes: N/A Required Lot Size: 30,000 sq ft 174 ft Existing Frontage: Required Frontage: 150 ft **Building Setbacks:** Required* **Proposed** 53+/- ft Front: 50 ft 16+/- ft 15 ft Side: Rear: 15 ft 57+/- ft

SITE DATA SHEET (Continued)

| Flood Zone Reference: | Zone X | |
|--|---|----------|
| Width of Driveways: | 24 ft and 15 ft (exit only) | |
| Number of Curb Cuts: | N/A (Utilizing Existing) | |
| Proposed Parking Spaces: | 27 | |
| Required Parking Spaces: | 26 See Zoning Analysis Table (Shoot C. 201 Site Development | |
| Basis of Required Parking (Use): Dates/Case #/Description/Stipulation of ZBA, Conservation Commission, NH Wetlands Board Actions: (Attach stipulations on separate sheet) | | Plans) |
| Waiver Requests | | |
| Town Code Reference: Re | egulation Description: | _ |
| | ff Street Loading Spaces | <u>-</u> |
| | earking Space Dimensions | _ |
| 276-11.1(25) Pa | arking Area Setback | - |
| | (For Town Use Only) | |
| Data Sheets Checked By: | Date: | |

PROPOSED SITE PLAN DOCUMENTS

------ FOR -

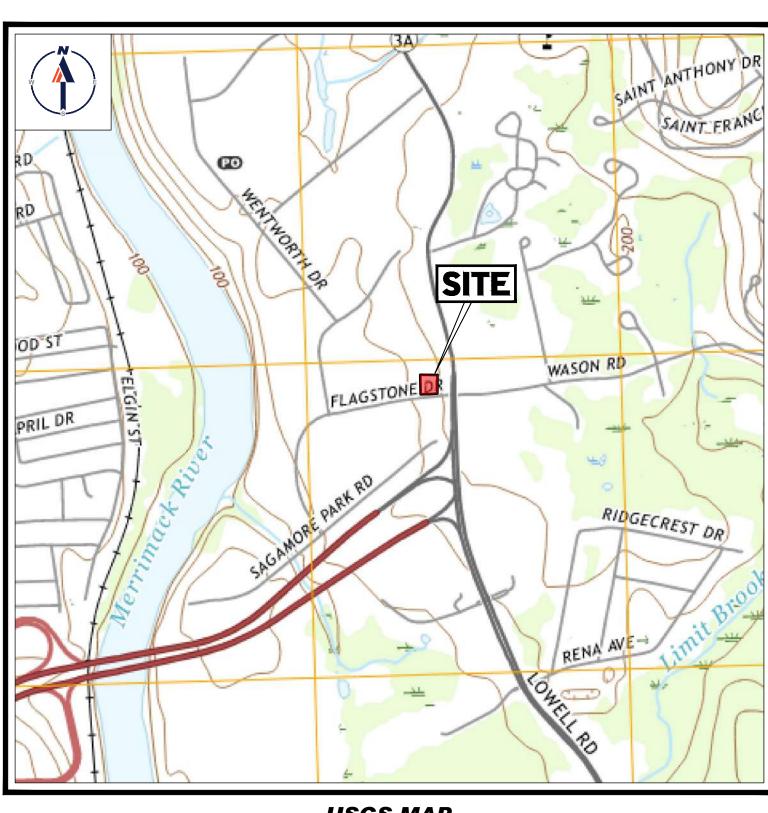


PROPOSED

URGENT CARE & COMMERCIAL USE

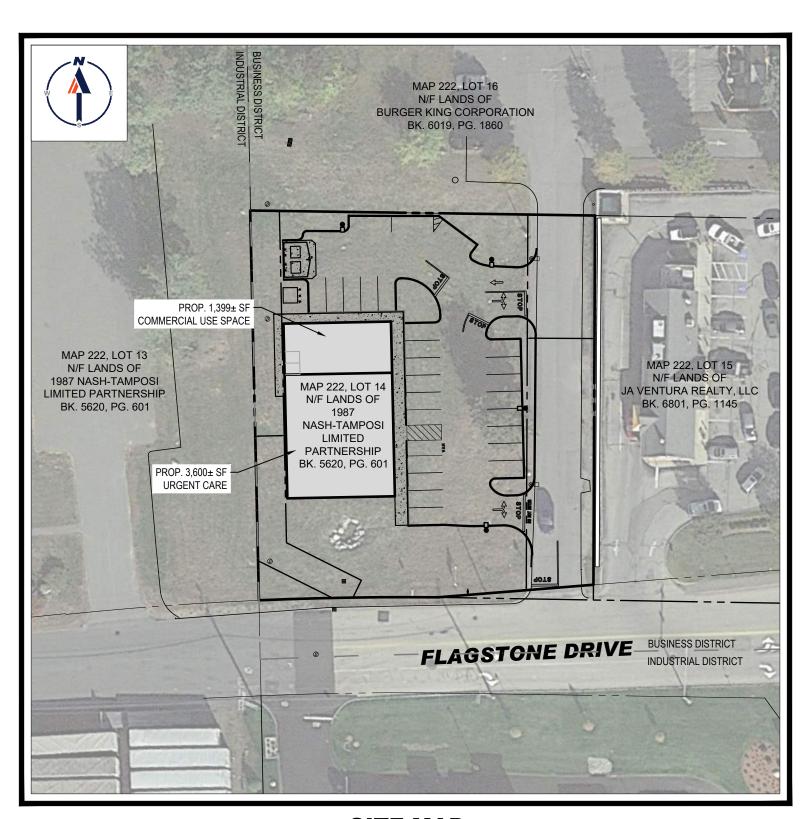
LOCATION OF SITE:

3 FLAGSTONE DRIVE, TOWN OF HUDSON HILLSBOROUGH COUNTY, NEW HAMPSHIRE MAP 222, LOT 14



USGS MAP

SCALE: 1" = 1,000' SOURCE: USGS NASHUA SOUTH QUADRANGLE



SITE MAP

SCALE: 1" = 50'

DRAWING SHEET INDEX

| SHEET TITLE | SHEET NUMBER |
|---|-----------------|
| COVER SHEET | C-101 |
| GENERAL NOTES SHEET | C-102 |
| DEMOLITION PLAN | C-201 |
| SITE LAYOUT PLAN | C-301 |
| GRADING AND DRAINAGE PLAN | C-401 |
| UTILITY PLAN | C-501 |
| EROSION AND SEDIMENT CONTROL PLAN | C-601 |
| EROSION AND SEDIMENT CONTROL NOTES AND DETAILS | C-602, C-603 |
| LANDSCAPE PLAN | C-701 |
| LANDSCAPE NOTES AND DETAILS | C-702 |
| LIGHTING PLAN | C-703 |
| DETAIL SHEET | C-901 |
| DETAIL SHEET | C-902 |
| DETAIL SHEET | C-903 |
| DETAIL SHEET | C-904 |
| BOUNDARY, TOPOGRAPHIC, AND UTILITY SURVEY (BY OTHERS) | 1 OF 1 |
| | |

OWNER SIGNATURE BLOCK

OWNER SIGNATURE: DATE:

| PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE O APPROVAL. |
|---|

DATE OF MEETING

CHAIRMAN SIGNATURE

DATE

SECRETARY SIGNATURE

DATE

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL

APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD

REVISIONS It's fast. It's free. It's the law **PERMIT SET** W211235-CVL-PROJECT: SITE **DEVELOPMENT PLANS** THE LANNAN COMPANY
REAL ESTATE INVESTMENT & DEVELOPMENT PROPOSED DEVELOPMENT MAP 222, LOT 14 **3 FLAGSTONE DRIVE** HILLSBOROUGH COUNTY, **NEW HAMPSHIRE 352 TURNPIKE ROAD** SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900 www.BohlerEngineering.com **COVER** SHEET C-101 ORG. DATE - 01/17/2022

GENERAL NOTES

NTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL BCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN-

CERTIFICATE OF OCCUPANCY

BOUNDARY & TOPOGRAPHIC & UTILITY SURVEY", PREPARED BY CONTROL POINT ASSOCIATES, INC. DATED 11/22/2021

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS

ALL ACCESSIBLE (A/K/A ADA) PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.

PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED.

CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES. THE OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A

ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.

THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND. IN CASE OF CONFLICT. DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY

THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK

CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.

PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE ENTIRE SITE PLAN AND THE LATEST ARCHITECTURAL PLANS (INCLUDING BUT NOT LIMITED TO STRUCTURAL MECHANICAL ELECTRICAL PLUMBING AND FIRE SUPPRESSION PLAN WHERE APPLICABLE) CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST

DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.

THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.

THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES AD IACENT TO PAVEMENT. STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES. REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES. PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT

THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES. LAWS RULES REGULATIONS STATUTORY REQUIREMENTS AND STATUTES CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION

ALL CONCRETE MUST BE AIR ENTRAINED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT

THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF

THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT, THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.

ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE. EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIA GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER ENGINEERING, AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH BOHLER ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL TO THE FULLEST EXTENT PERMITTED UNDER THE LAW. INDEMNIFY. DEFEND AND HOLD HARMLESS BOHLER ENGINEERING AND ITS PAST, PRESENT AND FUTURE OWNERS OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT IITED TO. REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS. ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT. INCLUDING ALL CLAII EMPLOYEES OF THE CONTRACTORS, ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION. SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER

BOHLER ENGINEERING WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES. COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME HEREUNDER. BOHLER ENGINEERING'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION. IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES. AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE. SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS DUTIES AND RESPONSIBILITIES INCLUDING BUT NOT LIMITED TO CONSTRUCTION MEANS METHODS SEQUENCE TECHNIQUES OR PROCEDURES. NECESSARY FOR PERFORMING. OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE IN NOTE 19 FOR JOB SITE SAFETY.

IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PLINITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER. TO THE FULLEST EXTENT PERMITTED UNDER THE LAW. IN ACCORDANCE WITH PARAGRAPH 19 HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO

CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.

ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT

ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD. THE SITE PLAN APPROVAL GRANTED HEREIN XPIRES TWO YEARS FROM DATE O APPROVAL

REFER TO SITE PLAN FOR ZONING ANALYSIS TABLE AND LAND USE/ ZONING INFORMATION & NOTES

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING CHAIRMAN SIGNATURE DATE

SECRETARY SIGNATURE

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL

APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL

GENERAL NOTES (CONTINUED)

- OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN AND, FURTHER ENGINEER IS NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE
- 26. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.
- 27. ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.
- CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE
- JURISDICTION REQUIRES FEWER) IS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE.

CONTRACTOR IS RESPONSIBLE TO MAINTAIN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH EPA REQUIREMENTS FOR SITES WHERE ONE (1) ACRE OR MORE (UNLESS THE LOCAL

30. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL'S KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

GENERAL GRADING & UTILITY PLAN NOTES

- LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER. ELECTRIC. SANITARY AND STORM SEWER. TELEPHONE. CABLE. FIBER OPTIC CABLE ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION. AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING. BUT NOT LIMITED TO. ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
- THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT RUIL DING LITH ITY CONNECTION LOCATIONS. GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES. TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL LITHLITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE SITE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER. IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAM
- WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.
- ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV. ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS
- SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT. FARTHWORK ACTIVITIES INCLUDING BUT NOT LIMITED TO EXCAVATION. BACKEILL AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS. RULES, STATUTES, LAWS, ORDINANCES AND CODES, EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE. DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
- APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL. FURTHER, CONTRACTOR IS FULLY RESPONSIBLE FOR EARTHWORK BALANCE.

ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND MUST BE COORDINATED WITH THE

THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES

PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED

- FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS,
- REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. DURING THE INSTALLATION OF SANITARY SEWER STORM SEWER AND ALL LITH ITIES. THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE
- KEPT ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE RUILDINGS, SOME OF WHICH MAY BE RUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING RUIT NOT LIMITED TO STORM SEWER, SANITARY SEWER, UTILITIES, AND IRRIGATION LINE, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. CONTRACTOR MUST CAP ENDS AS APPROPRIATE, MARK LOCATIONS WITH A 2X4. AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN. WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER UPON COMPLETION OF THE WORK.
- THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS OR EXISTING TOPOGRAPHY LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, MUST BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.
- 8. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF .075% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.
- REFER TO THIS SHEET FOR ADDITIONAL NOTES.
- IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN
- CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING ANY WORK
- 22. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS. ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE
- STORM DRAINAGE PIPE: UNLESS INDICATED OTHERWISE. ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SILT TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT TIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR
- LINESS INDICATED OTHERWISE ON THE DRAWINGS. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
- FOR PIPES LESS THAN 12 FT. DEEP: POLYVINYL CHLORIDE (PVC) SDR 35 PER ASTM D3034. FOR PIPES MORE THAN 12 FT. DEEP: POLYVINYL CHLORIDE (PVC) SDR 26 PER ASTM D3034
- FOR PIPE WITHIN 10 FT. OF BUILDING, PIPE MATERIAL SHALL COMPLY WITH APPLICABLE BUILDING AND PLUMBING CODES. CONTRACTOR TO VERIFY WITH LOCAL OFFICIALS
- 25. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL AND MEASURED CENTER OF INLET AND/OR MANHOLES STRUCTURE TO CENTER OF STRUCTURE. 26. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON PRELIMINARY ARCHITECTURAL PLANS. CONTRACTOR IS RESPONSIBLE TO AND FOR VERIFYING LOCATIONS OF SAME BASED ON FINAL ARCHITECTURAL PLANS.
- SEWERS CROSSING STREAMS AND/OR LOCATION WITHIN 10 FEET OF THE STREAM EMBANKMENT. OR WHERE SITE CONDITIONS SO INDICATE. MUST BE CONSTRUCTED OF STEEL. REINFORCED CONCRETE. DUCTILE IRON OR OTHER SUITABLE MATERIAL. SEWERS CONVEYING SANITARY FLOW COMBINED SANITARY AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE. THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. OR SUCH OTHER
- WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER. ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER MUST BE PROVIDED
- 28. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER PURVEYOR. IN THE ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE
- CEMENT-LINED DUCTILE IRON (DIP) MINIMUM CLASS 52 THICKNESS. ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION. 29. CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL
- COUNTY AND/OR DOT DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME
- 30. LOCATION OF PROPOSED UTILITY POLE RELOCATION IS AT THE SOLE DISCRETION OF UTILITY COMPANY.

REFER TO SOIL EROSION CONTROL

EROSION NOTES AND DETAILS

NOTES & DETAILS SHEET FOR TYPICAL

SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.

11. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT

REFER TO LIGHTING PLAN FOR TYPICAL LIGHTING NOTES AND TABLES

REFER TO LANDSCAPE NOTES &

LANDSCAPE NOTES AND DETAILS

DETAILS SHEET FOR TYPICAL

GENERAL DEMOLITION NOTES

- THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY: "BOUNDARY & TOPOGRAPHIC & UTILITY SURVEY", PREPARED BY CONTROL POINT ASSOCIATES, INC. DATED 11/22/2021
- BOHLER ENGINEERING HAS NO CONTRACTUAL. LEGAL. OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION. OR ANYTHING RELATED TO SAME
- THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION ONLY REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR MUST ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
- CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS. CONCERNS REGARDING THE APPLICABLE SAFET STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH BOHLER ENGINEERING, IN WRITING, AND RESPONDED TO BY BOHLER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND
- PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:
- A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT. SITE WORK, AND DEMOLITION WORK.
- B. NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION DISTRICT, 72 HOURS PRIOR TO THE START OF WORK
- C. INSTALLING THE REQUIRED SOIL FROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE

MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY

ONTRACTOR SHALL PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE

- D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARKOUT, IN ADVANCE OF ANY EXCAVATION.
- ELOCATING AND PROTECTING ALL LITILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CARLE, EIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
- F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
- G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
- H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" IS TO BE DONE AT NO ADDITIONAL COST TO THE OWNER.

I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THI

- CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK AND IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE
- THE CONTRACTOR MUST PROVIDE ALL "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT. SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIR MUST INCLUDE THE RESTORATION OF ANY ITEMS REPAIRED TO THE PRE-DEMOLITION CONDITION, OR BETTER.
- THE CONTRACTOR MUST NOT PERFORM ANY FARTH MOVEMENT ACTIVITIES DEMOLITION OR REMOVAL OF FOUNDATION WALLS. FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINFER
- 10. CONTRACTOR MUST BACKELL ALL EXCAVATION RESULTING FROM OR INCIDENTAL TO DEMOLITION ACTIVITIES. BACKELL MUST BE ACCOMPLISHED WITH APPROVED BACKELL MATERIALS, AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND MUST BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE
- EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND explosive control measures that are required by the federal, state, and local governments must be in place prior to contractor starting an explosive PROGRAM AND/OR ANY DEMOLITION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS
- CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY
- CONTRACTOR MUST CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
- DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL. STATE. AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS
- CONTRACTOR IS RESPONSIBLE TO SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED

CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION

- CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH MUST INCLUDE, BUT NOT BE LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER PPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
- THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED TO ACCOMPLISH THAT WORK, ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER
- 19. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL. COUNTY STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR MUST MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES. TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST
- CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.

ADA INSTRUCTIONS TO CONTRACTOR:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (ACCESSIBLE) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA AND/OR STATE ARCHITECTURAL ACCESS BOARD STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA AND/OR ARCHITECTURAL ACCESS BOARD CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES SLOPE SHALL NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.
- CURB RAMPS SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.

PERSONS AT ANY TIME

- LANDINGS MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION
- PATH OF TRAVEL ALONG ACCESSIBLE ROLLE MUST PROVIDE A 36-INCH OR GREATER LINORSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL E GREATER THAN 1:20 (5.0%). ADA RAMP MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (2.0%) FOR POSITIVE DRAINAGE
- DOORWAYS MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY CODE.
- WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OF EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOW FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS. IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM I IMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS
- THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETI
- IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

TYPICAL

ABBREVIATIONS KEY DESCRIPTION KEY DESCRIPTION BC **BOTTOM CURB** PROP. PROPOSED TO BE REMOVED TBR/R TOP CURB AND REPLACED BOC BACK OF CURB TO BE REMOVED BW BOTTOM OF WALL GRADE TPF TREE PROTECTION FENCE TOP OF WALL BLDG. BUILDING EXIST. **EXISTING** SQUARE FEET BENCHMARK SEWER MANHOLE EOP EDGE OF PAVEMENT DMH DRAIN MANHOLE STM CENTERLINE STORM FINISHED FLOOR SANITARY VERIFY IN FIELD CONC. V.I.F. CONCRETE GENERAL CONTRACTOR GC ARCH ARCHITECTURAL HIGH POINT DEP DEPRESSED LOW POINT RADIUS TYPICAL MINIMUM INTERSECTION MAXIMUM MAX PC. POINT OF CURVATURE NUMBER POINT OF TANGENCY WIDE POINT OF INTERSECTION DEC. DECORATIVE POINT OF VERTICAL ELEV. ELEVATION INTERSECTION STA. STATION UNDERGROUND R.O.W. GRATE RIGHT OF WAY INVERT LINEAR FOOT DUCTILE IRON PIPE LOD LIMIT OF DISTURBANCE PVC POLYVINYL CHLORIDE PIPE LOW LIMIT OF WORK HIGH DENSITY HDPE L.S.A LANDSCAPED AREA POLYETHYLENE PIPE REINFORCED PLUS OR MINUS RCP CONCRETE PIPE

SLOPE

MEET EXISTING

| TYPICAL LEGEND | | | | |
|-----------------------|-------------------------|-----------------------------|--|--|
| EXISTING | | PROPOSED | | |
| | PROPERTY LINE | | | |
| | SETBACK | | | |
| | EASEMENT | | | |
| | CURB | | | |
| 0 | STORM MANHOLE | 0 | | |
| S | SEWER MANHOLE | © | | |
| | CATCH BASIN | | | |
| <u> </u> | WETLAND FLAG | | | |
| | WETLAND LINE | | | |
| × 54.83 | SPOT ELEVATION | 53.52 | | |
| × TC 54.58 G 53.78 | TOP & BOTTOM OF CURB | TC=54.32 BC=53.82 | | |
| 53 | CONTOUR | 45 | | |
| | FLOW ARROW | 5% | | |
| | PAINTED ARROW | | | |
| | RIDGE LINE | | | |
| | GAS LINE | | | |
| | TELEPHONE LINE | т—т | | |
| E | ELECTRIC LINE | EE | | |
| | WATER LINE | W W | | |
| OH | OVERHEAD WIRE | OH | | |
| _ = = = = = = | STORM PIPE | | | |
| ======= | SANITARY LINE | ssss | | |
| 10 | PARKING COUNT | 4 | | |
| - | SIGN | - | | |
| <i>◇</i> *◇ | LIGHT POLE | | | |
| | GUIDE RAIL | | | |
| ø | UTILITY POLE | ø | | |

Ø / DIA.

DEGREE

DIAMETER

TO CERTIFY THAT THE SURVEY FROM WHICH THIS SITE PLAN WAS WAS PREPARED UNDER MY SUPERVISION. THE SURVEY HAS A LINEAR CLOSURE GREATER THAN 1:15,000 I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT T THIS TITLE AND THAT THE LINES OF STREET AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREET OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN"

NOT VALID UNLESS SEALED WITH AN INK SEAL

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772

508-948-3000 - 508-948-3003 FAX - WWW.CPASURVEY.COM

REVISIONS

DATE COMMENT



PERMIT SET

HIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENC VIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCT

01/17/202

W211235-CVL-

CHECKED BY CAD I.D.

PROJECT No.:

DRAWN BY:

PROJECT:

SITE **DEVELOPMENT**

PLANS

THE LANNAN COMPANY REAL ESTATE INVESTMENT & DEVELOPMENT

PROPOSED DEVELOPMENT

MAP 222, LOT 14 **3 FLAGSTONE DRIVE** HILLSBOROUGH COUNTY, **NEW HAMPSHIRE**

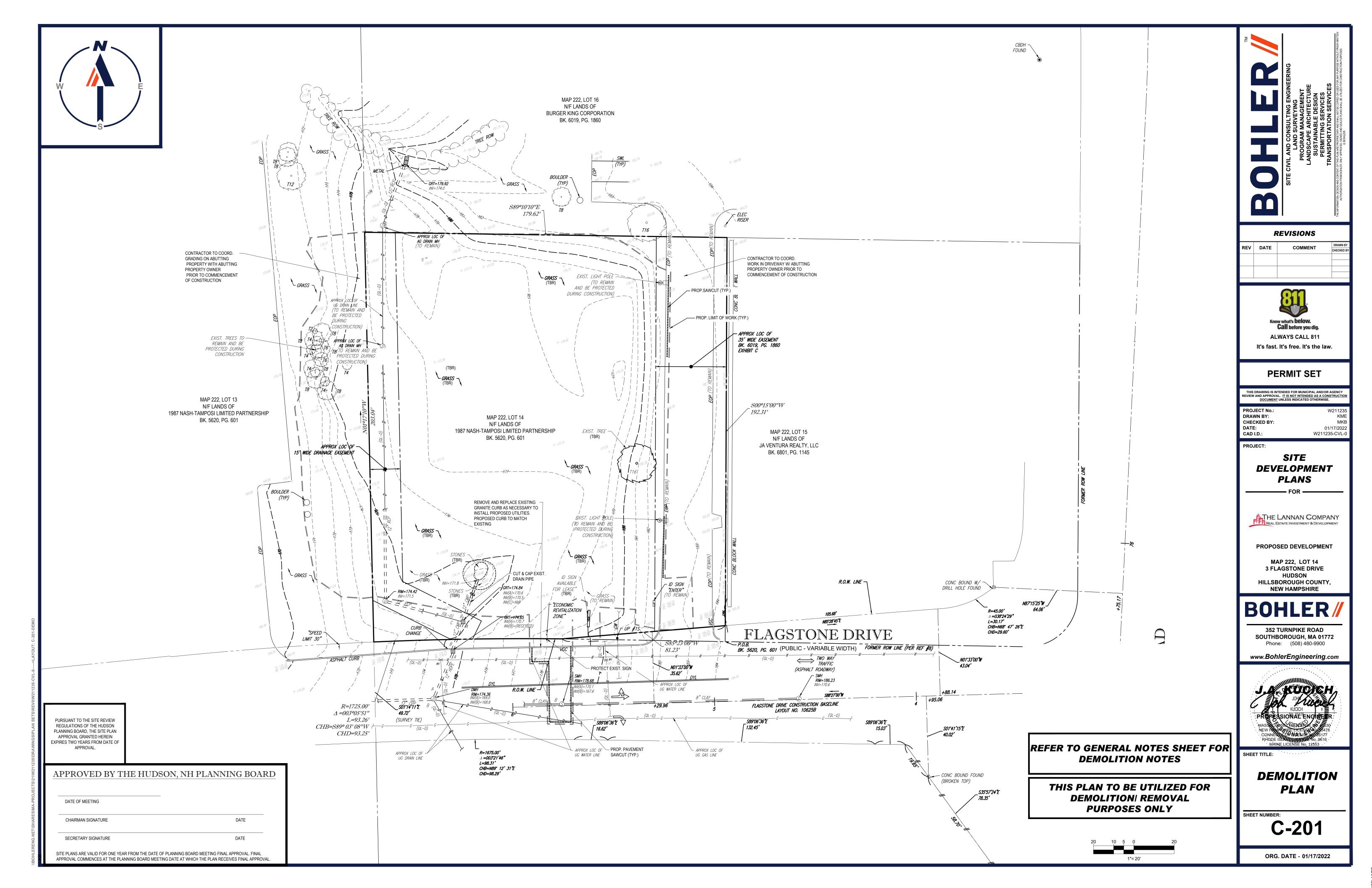
352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900

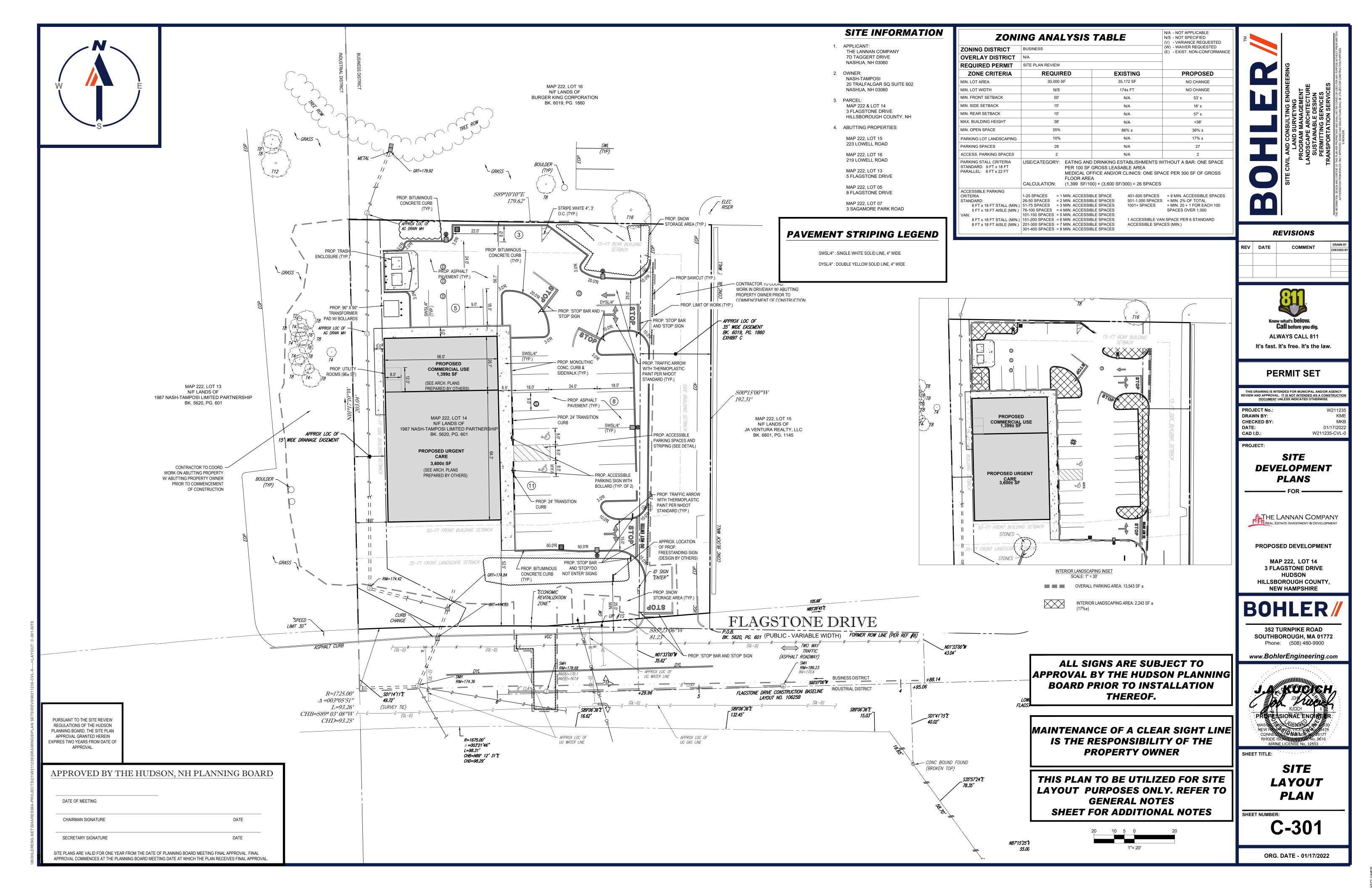
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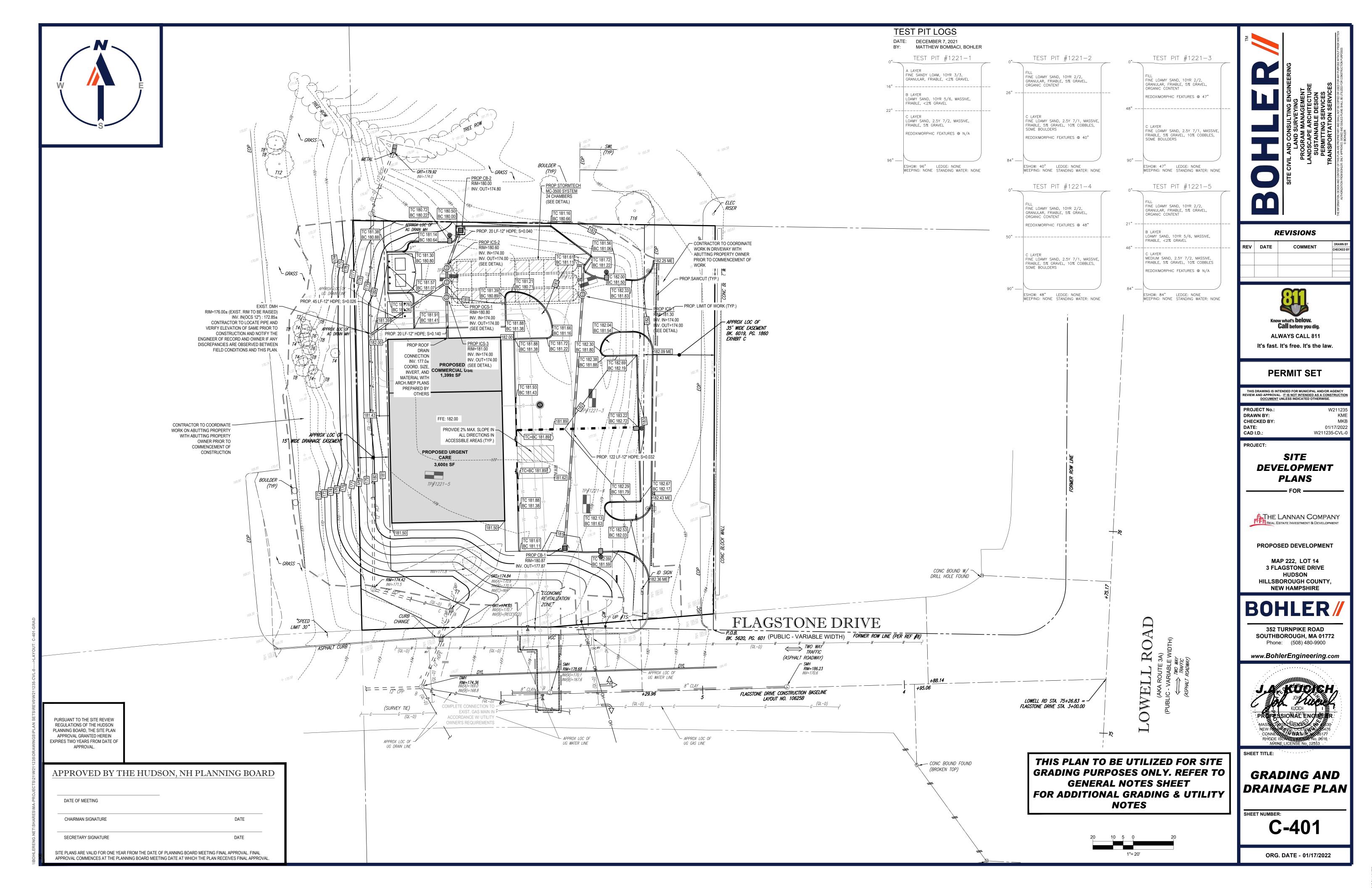
GENERAL SHEET

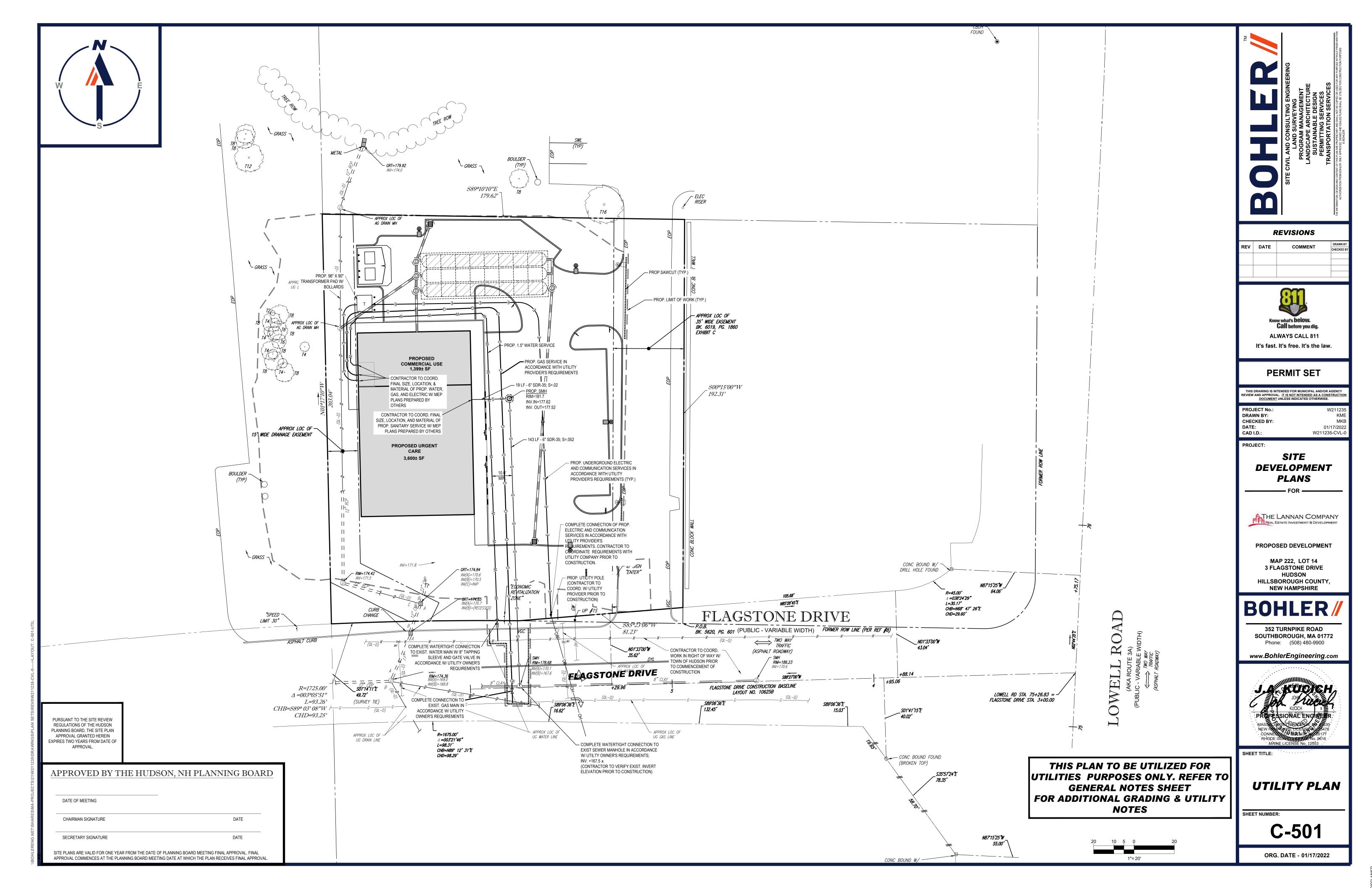
DATE

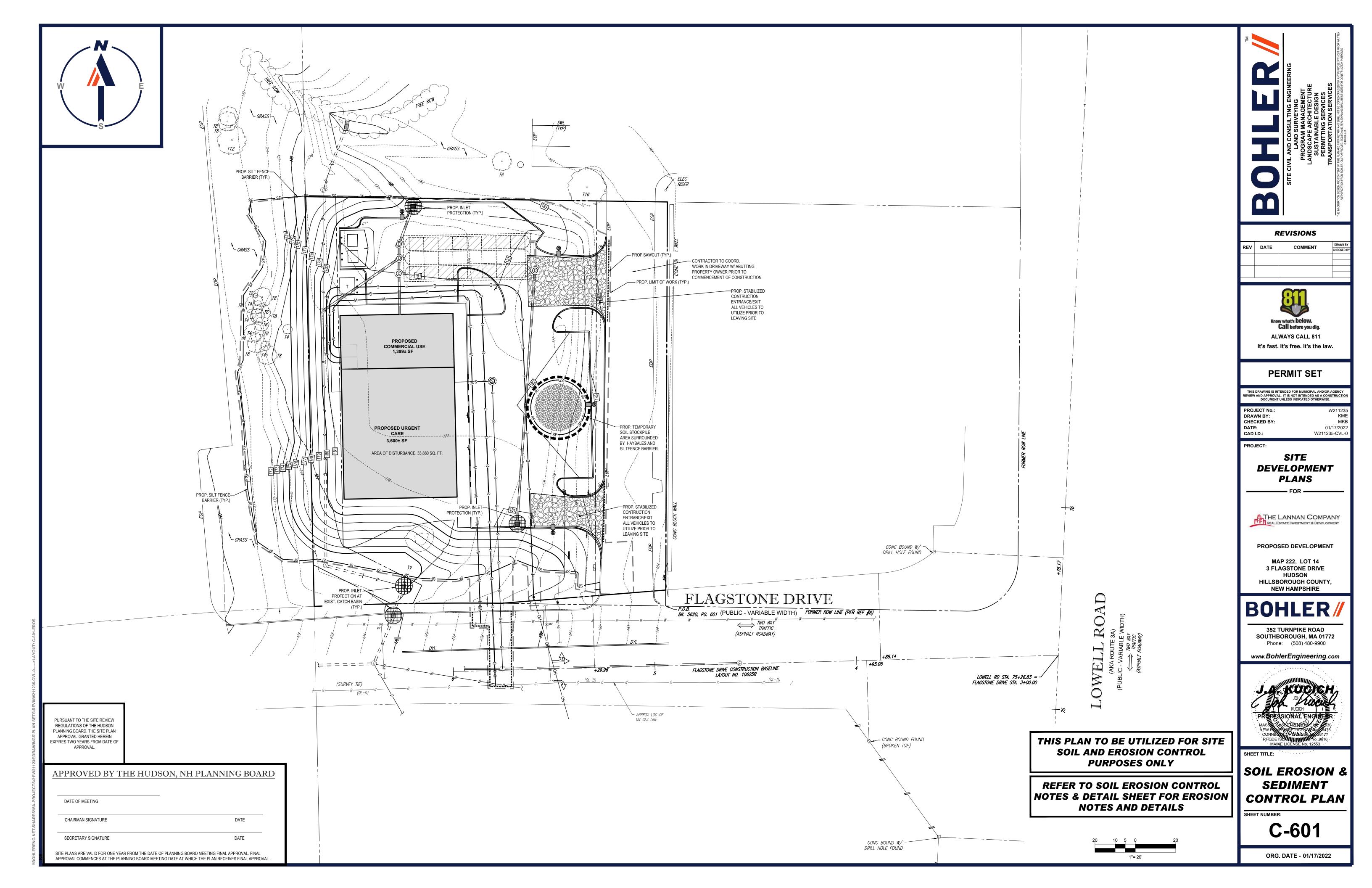
ORG. DATE - 01/17/2022











EROSION & SEDIMENT CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE
- SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
- 6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1)
- IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST. USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- 8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO
- 9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
- 10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
- 10.1. SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1.000 SF USING 10-20-20 OR EQUIVALENT, APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER1,000 SF).
- FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE-GRASS. 44% CREEPING RED FESCUE. AND 12% PERENNIAL RYEGRASS: SEEDING RATE IS 1.03 LBS PER 1.000 SE LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED
- STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.
- 11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
- 12. WETLANDS WILL BE PROTECTED W/STRAWBALES AND/OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- 13. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
- 14. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED,

PROTECT AREA 185-275 POUNDS WINDY AREA SHREDDED OR CHOPPED CORNSTALKS STRAW (ANCHORED)* 100 POUNDS MODERATE TO HIGH JUTE MESH OR EXCELSIOR MAT AS REQUIRED

VFI OCITY AREAS OR STEEP SLOPES **GREATER THAN 3:1**

(REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT) **GREATER THAN 3:1**

A HYDRO-APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON STRAW MULCH FOR WIND CONTROL.

ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

EROSION CONTROL NOTES DURING

WINTER CONSTRUCTION

- WINTER CONSTRUCTION PERIOD: OCTOBER 15 THROUGH APRIL 15.
- WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME
- EXPOSED AREA SHOULD BE LIMITED TO THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
- 4. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR straw AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
- BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MUI CHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED REFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM FROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF straw OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.

MULCHING REQUIREMENTS

- BETWEEN THE DATES OF OCTOBER 15TH AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS ANI FOR ALL OTHER SLOPES GREATER THAN 8%.
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL
- AFTER OCTOBER 15TH THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT
- STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT M OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF

DATE

DATE

. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD. THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING

SECRETARY SIGNATURE

CHAIRMAN SIGNATURE

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

CONSTRUCTION SEQUENCE

THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

-INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)

-INSTALLATION OF EROSION CONTROL BARRIER (SILT FENCE) (AS SHOWN)

-DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)

-INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS

-EARTHWORK AND EXCAVATION/FILLING AS NECESSARY -CONSTRUCTION OF UTILITIES

-CLEARING AND GRUBBING

-STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING

-INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)

-CONSTRUCTION OF BUILDINGS

-CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS

-SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH

"L" = 50' MIN. (SEE CHART 1)

PITCH TO DRAIN AWAY FROM-

"L" = 50' MIN. (SEE CHART 1)

GRADE TO DRAIN-

PUBLIC ROADWAY

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY

SEE EROSION CONTROL PLAN FOR-

SITE SPECIFIC CONSTRUCTION PERIOD

DRMWATER MANAGEMENT REQUIREMENTS

PERCENT SLOPE OF ROADWAY

2% TO 5%

AWAY FROM

PROVIDE CORNER ROUNDINGS-

CONSTRUCTION-

LENGTH OF STONE REQUIRED

ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1)

STABILIZED CONSTRUCTION EXIT

FINE GRAINED SOILS

FENCE / GATES

(AS APPLICABLE)

COARSE GRAINED SOILS

(AS APPLICABLE FOR SITE

SPECIFIC CONDITIONS)

PUBLIC RIGHT-OF-WAY

PUBLIC R.O.W.

-PROVIDE GEOTEXTILE FILTER

FABRIC UNDER STONE

-SIDEWALK

(OR SHOULDER)

-TRAVELED-

MAINTENANCE NOTES

INSPECT STABILIZED CONSTRUCTION

ENTRANCE / ANTI-TRACKING PAD AND

OR AFTER EVERY MAJOR RAIN STORM

SEDIMENT DISPOSAL AREA WEEKLY

WASH WATER (IF USED) SHALL BE

DIRECTED TOWARD A SEDIMENT

TRAP, SUFFICIENTLY SIZED FOR

EXCESSIVELY MUD-CLOGGED STON

SHALL BE REMOVED AND REPLACED,

N.T.S.

SPECIFIC SITE CONDITIONS

WAY

-3' MIN. WIDE

STONE BERM

¹ 3-6" HIGH

(MIRAFI 140N, OR EQUAL)

-FINAL GRADING OF ALL SLOPED AREAS

-PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED AS REQUIRED.

-REMOVAL OF THE TEMPORARY SEDIMENT BASINS

-PAVE PARKING LOT

3-6" HIGH, 3'-

MIN. WIDE

STONE BERM

EXISTING GROUND-

PROFILE VIEW

-CONSTRUCTION

PLAN VIEW

CHART 1

ACCESS

DRIVE

CRUSHED STONE

(6" MIN. THICKNESS

-LANDSCAPING PER LANDSCAPING PLAN

-REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER.

AREA OF SITE CONSTRUCTION AREA WITHIN PROTECTION ZONE/TREE DRIP LINE FENCE TO FOLLOW TREE DRIP LINE OR 6' FROM TRUNK, WHICHEVER IS GREATER 4' WOOD & WIRE SNOW FENCE WITH STEEL STAKES 18" O.C. - WOOD & WIRE SNOW FENCE USED AS TREE GUARD TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT TREE DRIP LINE/TREE PROTECTION 70NF - AREA WITHIN TREE PROTECTION ZONE TO REMAIN UNDISTURBED DURING CONSTRUCTION - 4' WOOD & WIRE SNOW FENCE WITH STEEL STAKES 18' O.C.

2 RE-BAR, STEEL PICKETS OR 2"X2" STAKES — 1 1/2' TO 2' IN GROUND, DRIVE STAKES FLUSH WITH BALES ANGLE FIRST STAKE TOWARD PREVIOUSLY LAID BALE' **BOUND BALES PLACED ON CONTOUR**

DRAINAGE AREA NO MORE THAN 1/4 AC. PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%

1. BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

2. EACH BALE SHALL BE PLACED SO THE BINDINGS ARE HORIZONTAL.

3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.

4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPTLY AS

5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE DETAIL TREE PROTECTION DURING CONSTRUCTION

NATIVE SOIL -

SECURE LIFTING LOOPS TO OR

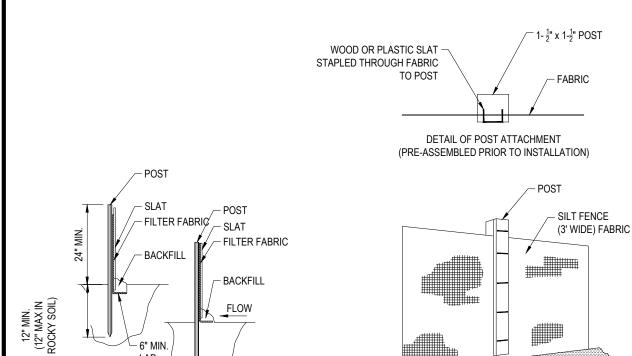
UNDER SURROUNDING SURFACE

TOE-IN METHODS

1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF EROSION CONTROL OF THE SITE. 2. UNROLL SILTATION FENCE AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM

DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS LAYING ACROSS THE TRENCH BOTTOM.

4. LAY THE TOE-IN FLAP OF THE FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING FABRIC FLAP ON UNDISTURBED GROUND AND PILING & TAMP- ING FILL AT THE BASE.



TEMPORARY STOCKPILE DETAIL

ISOMETRIC VIEW

GRADE⁻

2"X2"X3/4"

RUBBER BLOCK

1/4" BRIGHTLY

RESTRAINT

COLORED NYLON

ROPE EXPANSION

CONSTRUCT SILT FENCE AND STRAW BALES AROUND PERIMETER OF STOCKPILE —

1:3 MAXIMUM SLOPE

LOOPS SIZED FOR

FILTER BAG FROM

OVERFLOW HOLES -

GEOTEXTILE BAG -

LOOPS SIZED FOR 1" REBAR. USE

REBAR FOR A HANDLE TO EMPTY

FILTER SACK AT A SEDIMENT

COLLECTION LOCATION.

1/4" BRIGHTI Y COLORED

NYLON ROPE EXPANSION

1" REBAR, LIFT

INLET USING

REBAR FOR

HANDLES.

TYP. SILTATION FENCE DETAIL

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE TEST METHOD GRAB TENSILE STRENGTH ASTM D-4632 GRAB TENSILE ELONGATION ASTM D-4632 PUNCTURE ASTM D-4833 120 LBS MULLEN BURST ASTM D-3786 120 LBS TRAPEZOID TEAR ASTM D-4533 UV RESISTANCE ASTM D-4355 ASTM D-4751 40 US SIEVE APPARENT OPENING SIZE 40 GAL/MIN/SQ FT FLOW RATE ASTM D-4491 0.55 SEC -1 PERMITTIVIT ASTM D-4491

PERSPECTIVE OF FENCE

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE PROPERTIES TEST METHOD GRAB TENSILE STRENGTH | ASTM D-4632 GRAB TENSILE ELONGATION | ASTM D-4632 20 % PUNCTURE ASTM D-4833 135 I BS MULLEN BURST ASTM D-3786 420 PSI 45 LBS TRAPEZOID TEAR ASTM D-4533 UV RESISTANCE 90 % ASTM D-4355 APPARENT OPENING SIZE ASTM D-4751 20 US SIEVE FLOW RATE ASTM D-4491 200 GAL/MIN/SQ FT

ASTM D-4491 1.5 SEC -1 REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS

PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE

WHEN OIL SPILLS ARE A CONCERN. INSPECT PER REGULATORY REQUIREMENTS. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE

WIDTH OF THE GRATED INLET BOX. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18

THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. TO BE USED IN EXISTING RIGHT OF WAY

INLET PROTECTION (GRATED INLETS)

SECTION VIEW

PROFILE VIEW OF

INSTALLED FILTER SACH

REVISIONS

| DATE | COMMENT | DRAWN BY |
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> 01/17/2022 W211235-CVL-

PROJECT No. DRAWN BY: **CHECKED BY:**

PROJECT:

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N.T.S.

SITE **DEVELOPMENT PLANS**

THE LANNAN COMPANY REAL ESTATE INVESTMENT & DEVELOPMENT

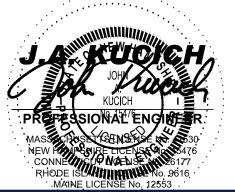
PROPOSED DEVELOPMENT

MAP 222, LOT 14 **3 FLAGSTONE DRIVE** HILLSBOROUGH COUNTY, **NEW HAMPSHIRE**

BOHLER

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900

www.BohlerEngineering.com

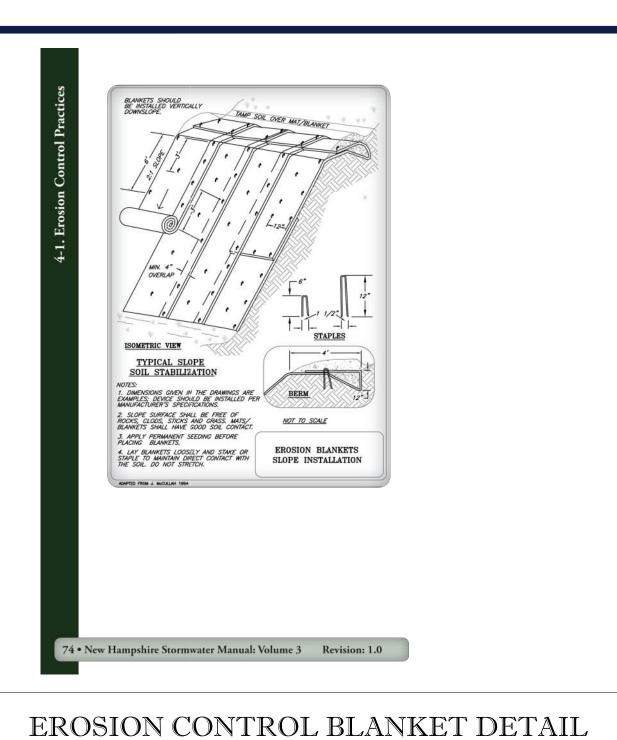


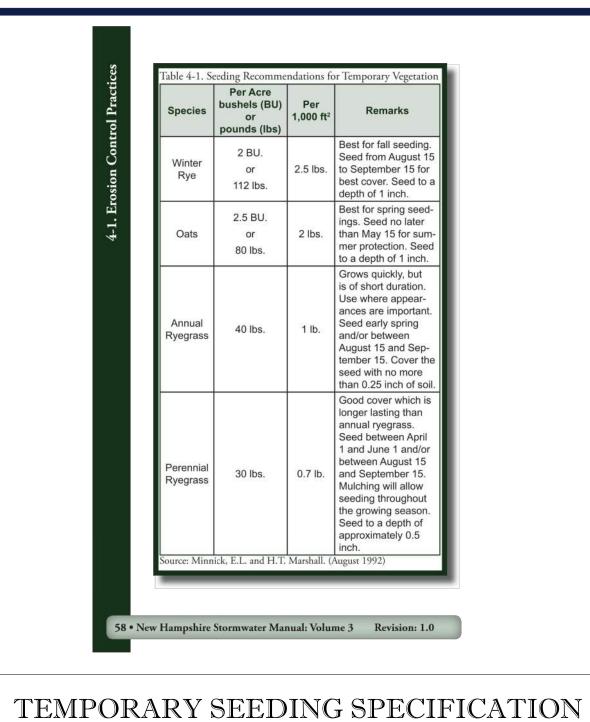
SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS

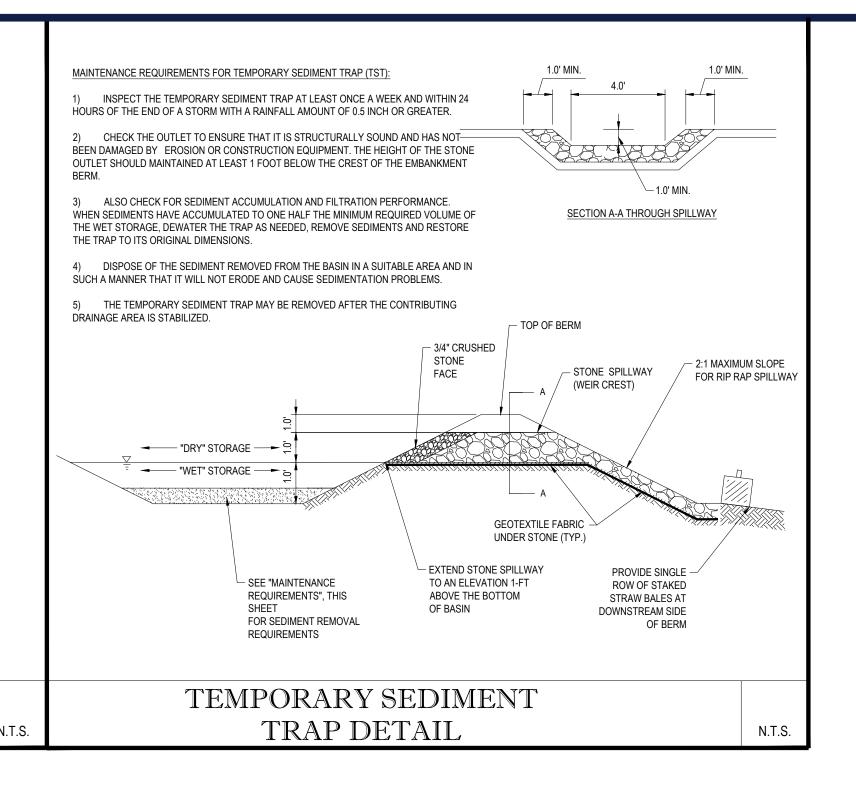
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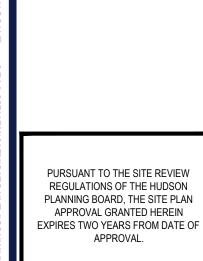
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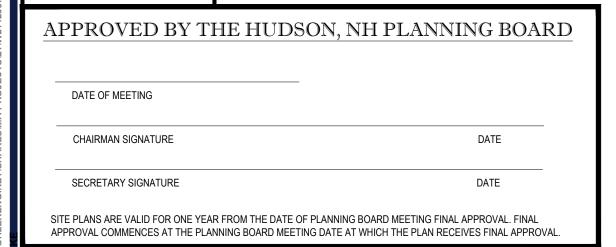
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 W211235

 DRAWN BY:
 KME

 CHECKED BY:
 MKB

 DATE:
 01/17/2022

 CAD I.D.:
 W211235-CVL-0

PROJECT:

SITE DEVELOPMENT PLANS

—— FOR —



PROPOSED DEVELOPMENT

MAP 222, LOT 14 3 FLAGSTONE DRIVE HUDSON HILLSBOROUGH COUNTY, NEW HAMPSHIRE

BOHLER/

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900

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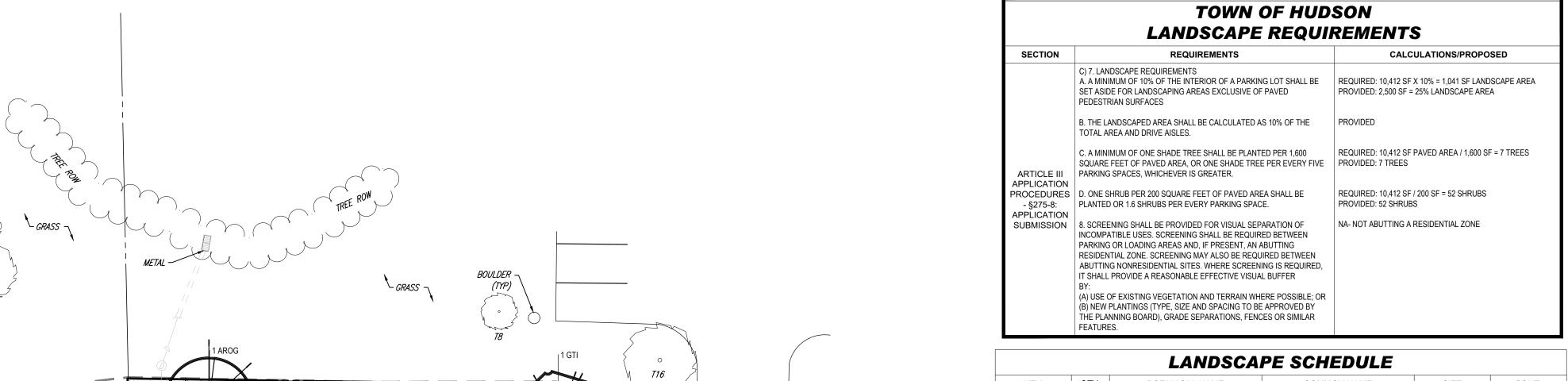


SOIL EROSION &
SEDIMENT
CONTROL NOTES
& DETAILS

C-603

ORG. DATE - 01/17/2022







SEED MIX KEY

PROPOSED HYDROSEED

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SITE **DEVELOPMENT PLANS**

REVISIONS

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

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W211235-LND-0

COMMENT

REV DATE

THE LANNAN COMPANY

REAL ESTATE INVESTMENT & DEVELOPMENT

PROPOSED DEVELOPMENT MAP 222, LOT 14 **3 FLAGSTONE DRIVE** HILLSBOROUGH COUNTY,

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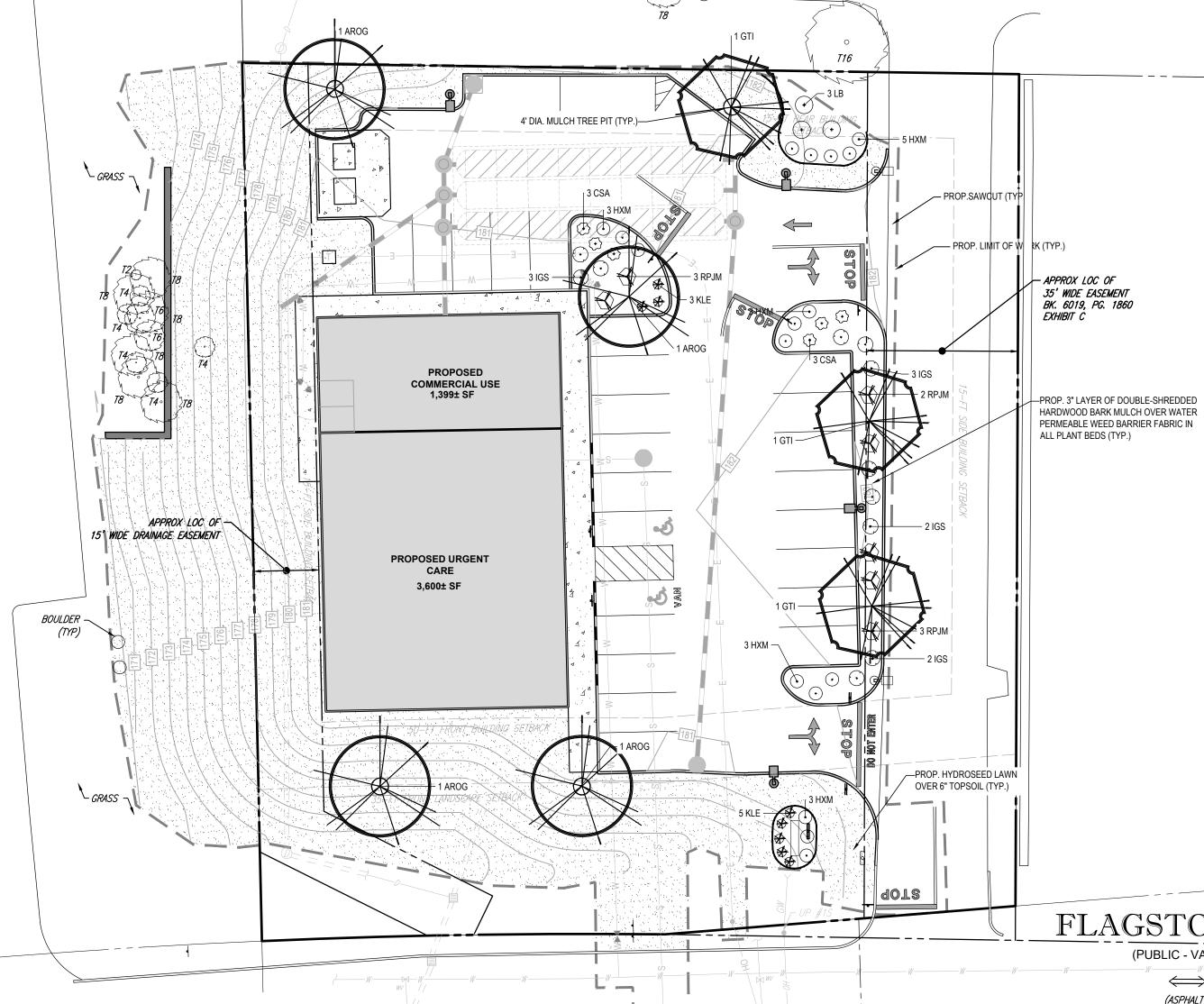


SHEET TITLE:

LANDSCAPE PLAN

C-701

ORG. DATE - 01/17/2022



FLAGSTONE DRIVE

(PUBLIC - VARIABLE WIDTH)

(ASPHALT ROADWAY)

OWNER MAINTENANCE RESPONSIBILITIES

FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND

 TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT AN BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL. · TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE

HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS. VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

DETAILS SHEET FOR LANDSCAPE

AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO

FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR

THIS PLAN TO BE UTILIZED FOR

LANDSCAPE PURPOSES ONLY

REFER LANDSCAPE NOTES &

NOTES AND DETAILS

CHAIRMAN SIGNATURE DATE SECRETARY SIGNATURE SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF

APPROVAL.

DATE OF MEETING

LANDSCAPE SPECIFICATIONS

SCOPE OF WORK

THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

- GENERAL ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS
- TOPSOIL NATURAL FRIABLE LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5% A PH RANGE BETWEEN 4 5-7 0 IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
- LAWN ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN
- LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
- SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER HAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE
- MULCH ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH. UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES /DETAILS.

- FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR
- FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

PLANT MATERIAL

- ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1). LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF
- IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL
- PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
- TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 11/1", WHICH HAVE NOT BEEN COMPLETELY CALLUSED. SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
- ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
- CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER. THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE
- SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
- 2.6.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

- CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
- WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

SITE PREPARATIONS

- 4.1. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
- ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT

EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE

CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL LUTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE REGINNING OF WORK

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
- A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
- WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED
- AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE

SOIL MODIFICATIONS

- 6.1. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED
- LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS
- THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
- TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
- TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE IHAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
- MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE

FINISHED GRADING

- 7.1. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
- 7.2. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).
- ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
- ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

- 8.1. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT. IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
- ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE
- ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):
- 20 POUNDS 'GRO-POWER' OR APPROVED SOIL CONDITIONER/FERTILIZER
- 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER
- 8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

- 9.1. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE
- PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR

- ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
- ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO
- POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
- PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN. MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
- PLANTS: MARCH 15 TO DECEMBER 15
- LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
- PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS
- FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES

BE PLANTED DURING THE FALL PLANTING SEASON: ACER RUBRUM PLATANUS X ACERIFOLIA BETULA VARIETIES POPULUS VARIETIES **CARPINUS VARIETIES** PRUNUS VARIETIES CRATAFGUS VARIFTIES PYRUS VARIETIES **KOELREUTERIA QUERCUS VARIETIES** LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOSA LIRIODENDRON TULIPIFERA 7FI KOVA VARIFTIES

- PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS. WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 9.8.4. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
- 2 TABLETS PER 1 GALLON PLANT
- 3 TABLETS PER 5 GALLON PLANT 9842 4 TABLETS PER 15 GALLON PLANT
- LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK
- FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY
- ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
- ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE
- GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.
- 9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND
- ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS 1 TOUCH THE TRUNK OF THE TREE OR SHRUB.
- ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

- ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
- IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
- 10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
- UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
- TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN. F TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6")

DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

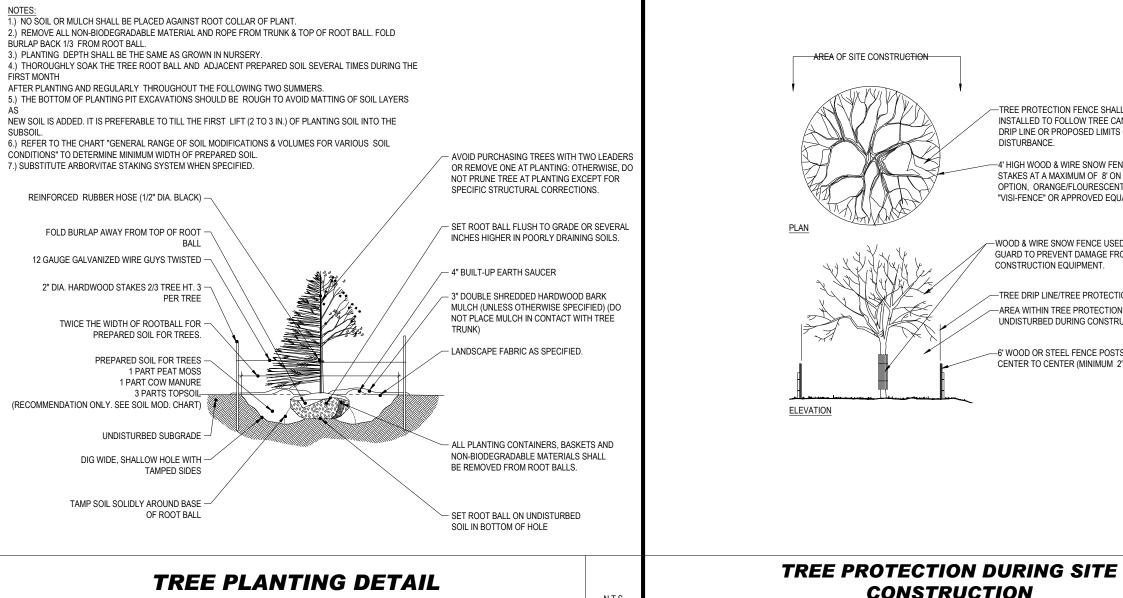
- 11.1. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
- 11.2. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES
- 11.3. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS.

- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THI APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
- ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GLIARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.
- TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
- LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

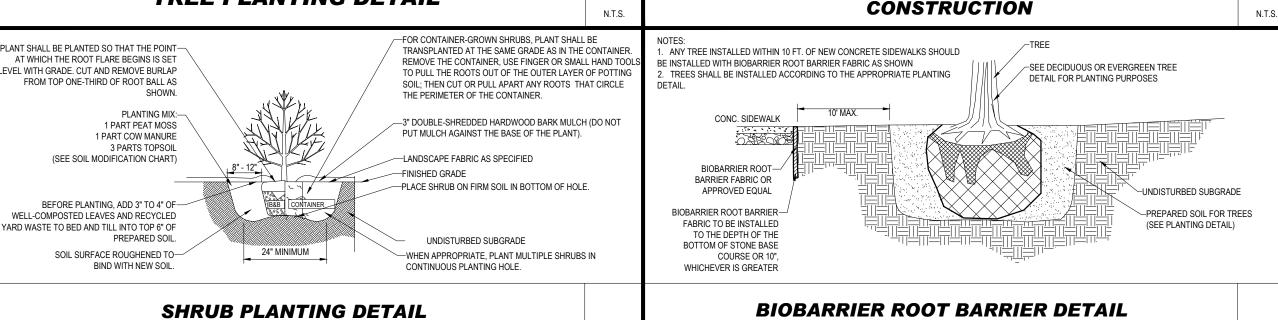
- 13.1. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE. THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
- THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE

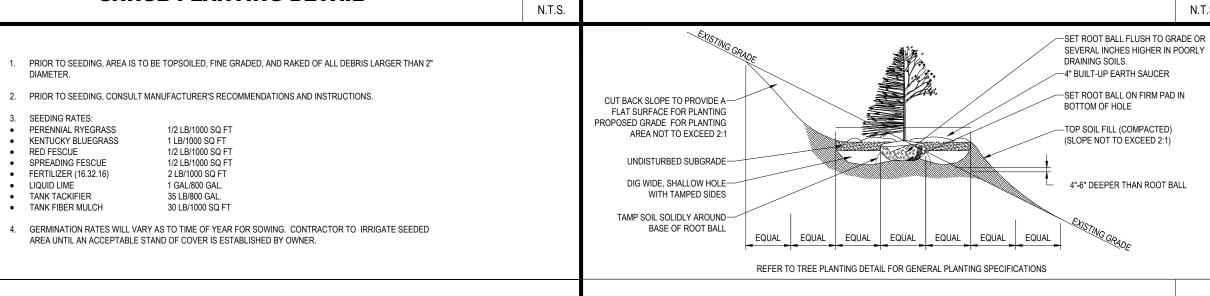
14. MAINTENANCE (ALTERNATIVE BID):

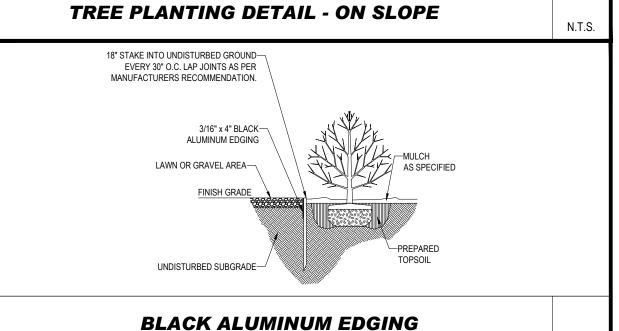
14.1. A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.



HYDROSEED SPECIFICATIONS







TREE PROTECTION FENCE SHALL BE

INSTALLED TO FOLLOW TREE CANOP'

4' HIGH WOOD & WIRE SNOW FENCE W/WOOD

OPTION, ORANGE/FLOURESCENT HIGH-DENSITY

-WOOD & WIRE SNOW FENCE USED AS TREE

TREE DRIP LINE/TREE PROTECTION ZONE

UNDISTURBED DURING CONSTRUCTION.

-AREA WITHIN TREE PROTECTION ZONE TO REMAIN

-6' WOOD OR STEEL FENCE POSTS AT 8' MAXIMUM

CENTER TO CENTER (MINIMUM 2' BELOW GRADE).

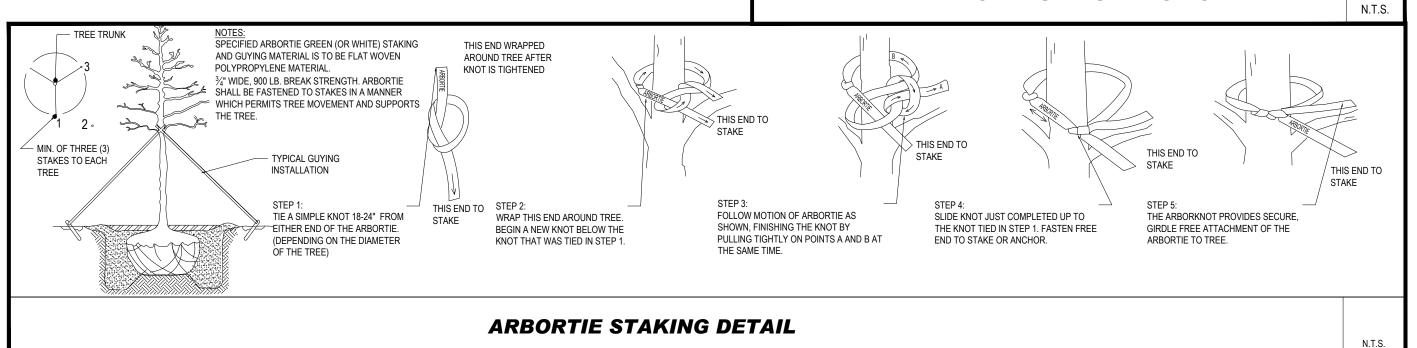
GUARD TO PREVENT DAMAGE FROM

CONSTRUCTION EQUIPMENT.

STAKES AT A MAXIMUM OF 8' ON CENTER. AS AN

VISI-FENCE" OR APPROVED EQUAL CAN BE USED

DRIP LINE OR PROPOSED LIMITS OF





REVISIONS

DATE COMMENT



PERMIT SET

It's fast. It's free. It's the law

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY IEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTI DOCUMENT UNLESS INDICATED OTHERWISE.

01/17/202

W211235-LND-

CAD I.D.

PROJECT:

PROJECT No.

CHECKED BY:

DRAWN BY:

DEVELOPMENT **PLANS**

THE LANNAN COMPANY REAL ESTATE INVESTMENT & DEVELOPMENT

PROPOSED DEVELOPMENT MAP 222, LOT 14 **3 FLAGSTONE DRIVE**

NEW HAMPSHIRE

HILLSBOROUGH COUNTY,

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900

www.BohlerEngineering.com



SHEET TITLE:

LANDSCAPE NOTES AND DETAILS

C-702

ORG. DATE - 01/17/2022



LIGHTING NOTES

- THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.90 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
- THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
- WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC, ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER. AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS,
- CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
- IT IS THE LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
- PUBLISHED STANDARDS
- FUNCTIONING AT ALL TIMES.

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE

DATE

DATE OF MEETING

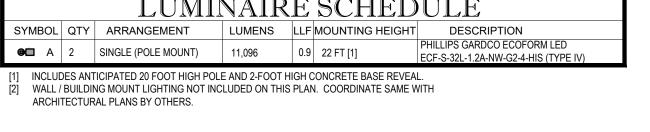
CHAIRMAN SIGNATURE

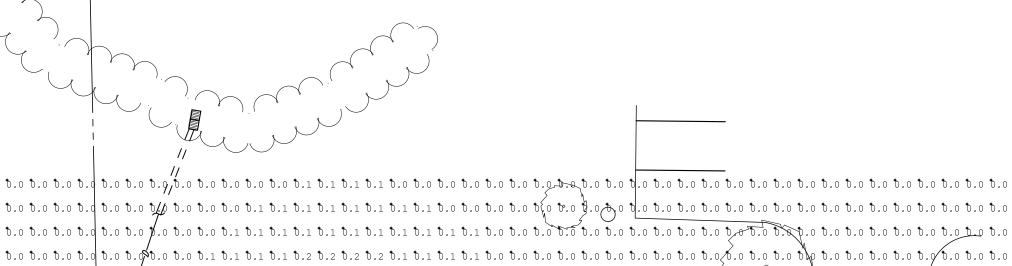
SECRETARY SIGNATURE

SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL

LUMINAIRE SCHEDIILE

| SYMBOL | QTY | ARRANGEMENT | LUMENS | LLF | MOUNTING HEIGHT | DESCRIPTION | |
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APPROX,LOC,OF

15' WIDE DRAINAGE EASEMENT

INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE

10. THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.

THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS

WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY

OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND

FLAGSTONE DRIVE

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(PUBLIC - VARIABLE WIDTH) $\stackrel{\text{\tiny W-}}{\Longleftrightarrow} \stackrel{\text{\tiny W}}{\text{\tiny TWO WAY}} \stackrel{\text{\tiny W-}}{\text{\tiny TRAFFIC}}$

<u>\$\bullet\$ \bullet\$ </u> (ASPHALT ROADWAY)

ELAGSTONE DRIVE

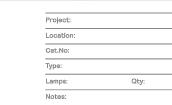
– APPROX LOC OF

.5**35:4WIDE EASEMENT**

Site & Area G GARDCO



Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.



Ordering guide

by (Signify

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

| Numbe | er Drive | LED Color - | | | | Options | | | | | |
|-------------------------|--|---|---------------|--|--|----------------------------|---------------------|---|---|--|--|
| Prefix of LED | | Generation | Mounting | Distribution | Voltage | Dimming controls | Motion sensing lens | Photo-sensing | Electrical | Luminaire | Finish |
| 48L 48 LE1 (3 mod | Jacob San (1970) 530 mA (1970) 700 mA (1970) 12A (1970) | 4000K, 70CRI Generation 2 CW-G2 Cool White 5000K, 70CRI Generation 2 | The following | Type 2 2 Type 2 2 Type 2 2-90 Rotated left 90' 2-270 Rotated right 270' Type 3 3-90 Rotated left 90' 3-270 Rotated right 270' Type 4 4 Type 4 4-90 Rotated left 90' 4-270 Rotated right 270' Type 5 5 Type 5 5 Type 5 5 Type 5 W Type 5W AFR Auto Front Row AFR-90 Auto Front Row Rotated left 90' AFR-270 Auto Front Row Rotated left 90' AFR-270 Auto Front Row Rotated right 270' | 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) | module ^{4,6,8,17} | | PCB Photocontrol Button 8.9 TLRD5 Twist Lock Receptacle 5 Pin 10 Twist Lock Receptacle 7 Pin 10 TLRPC Twist Lock Receptacle 7 Pin 10 TLRPC Twist Lock Receptacle Whotocell 8.01 | Fusing F1 Single (120, 277, 347VAC)° F2 Double (208, 240, 480VAC)° Pole Mount Fusing FP1 Single (120, 277, 347VAC)° FP2 Double (208, 240, 480VAC)° FP3 Canadian Double Pull (208, 240, 480VAC)° Surge Protection (10kA standard) SP2 Increased 20kA | Square Pole Adapter included in standard product TB Terminal Block RPA ROUND Pole Adapter (fits to 3"- 3,9" O.D. pole) THIS Internal Housing Side Shield M | Textured BK Black WH White BZ Bronze DGY Dark Gray MGYMedium Gr Customer specified RAL Specify optional color or RA (ex: RAL70: CC Custom col (Must supp color chip for requirer factory quo |

2. Mounts to a 4" round pole with adapter included for square poles. 10. Dimming will not be connected to NEMA receptacle if ordering 16. Not available with DD, DCC, FAWS and LLC dimming contro

13. Not available with SF and WS. RPAs provided with black finish

11. Not available in 480V. Order photocell separately with TLRD5/7. 17. Must specify a motion sensor lens

Must specify input voltage.

with other control options.

ECF-S_EcoForm_area_small 06/20 page 1 of 8

3. Limited to a maximum of 45 degrees aiming above horizontal.

voltage is HVU (347-480V)

6. Not available with photocontro

7. Available only in 120 or 277V.





Not available with DD, DCC, and FAWS dimming control options



PROJECT:

SITE DEVELOPMENT **PLANS**

REVISIONS

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01/17/2022

REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT UNLESS INDICATED OTHERWISE.

REV DATE

COMMENT

THE LANNAN COMPANY REAL ESTATE INVESTMENT & DEVELOPMENT

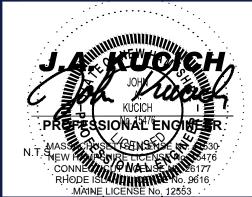
PROPOSED DEVELOPMENT

MAP 222, LOT 14 **3 FLAGSTONE DRIVE** HUDSON HILLSBOROUGH COUNTY,

NEW HAMPSHIRE

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900

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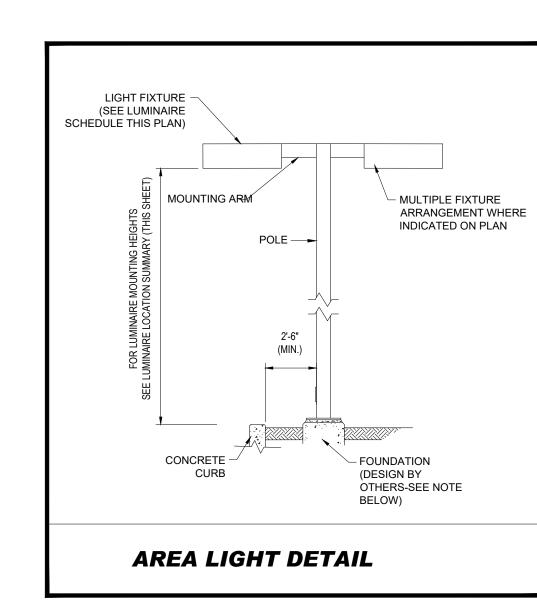


SHEET TITLE:

LIGHTING PLAN

C-703

ORG. DATE - 01/17/2022

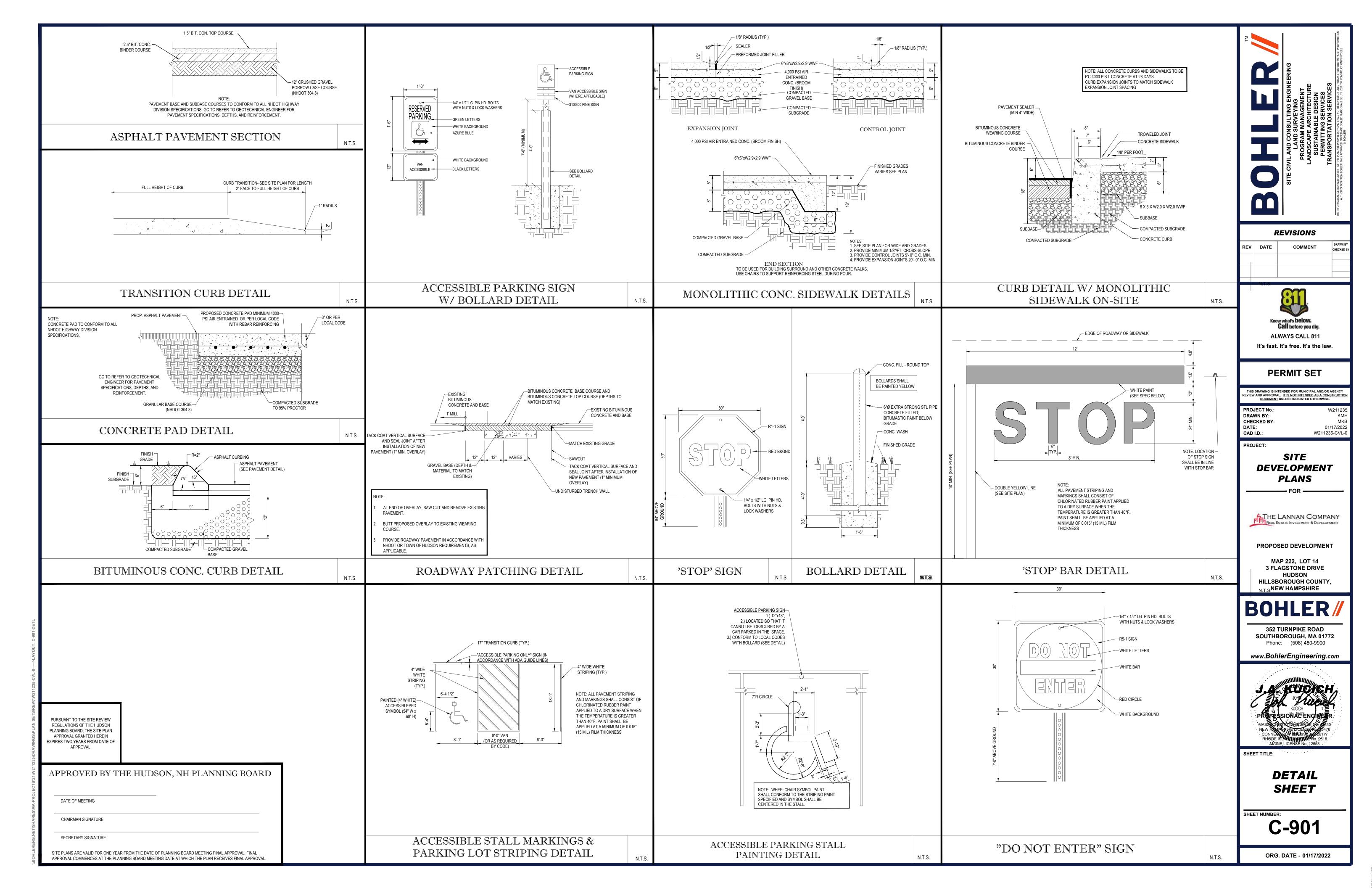


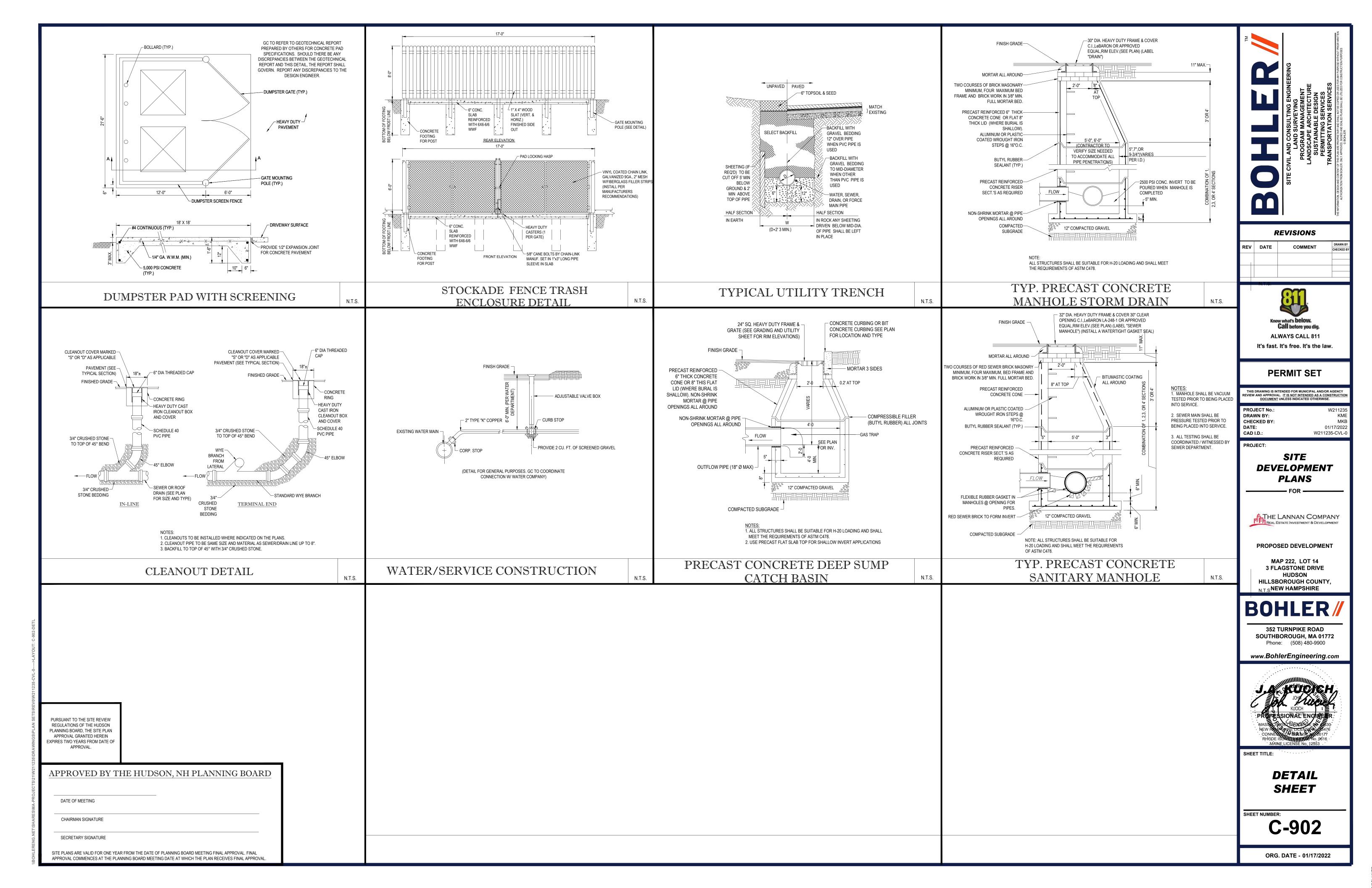
NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS

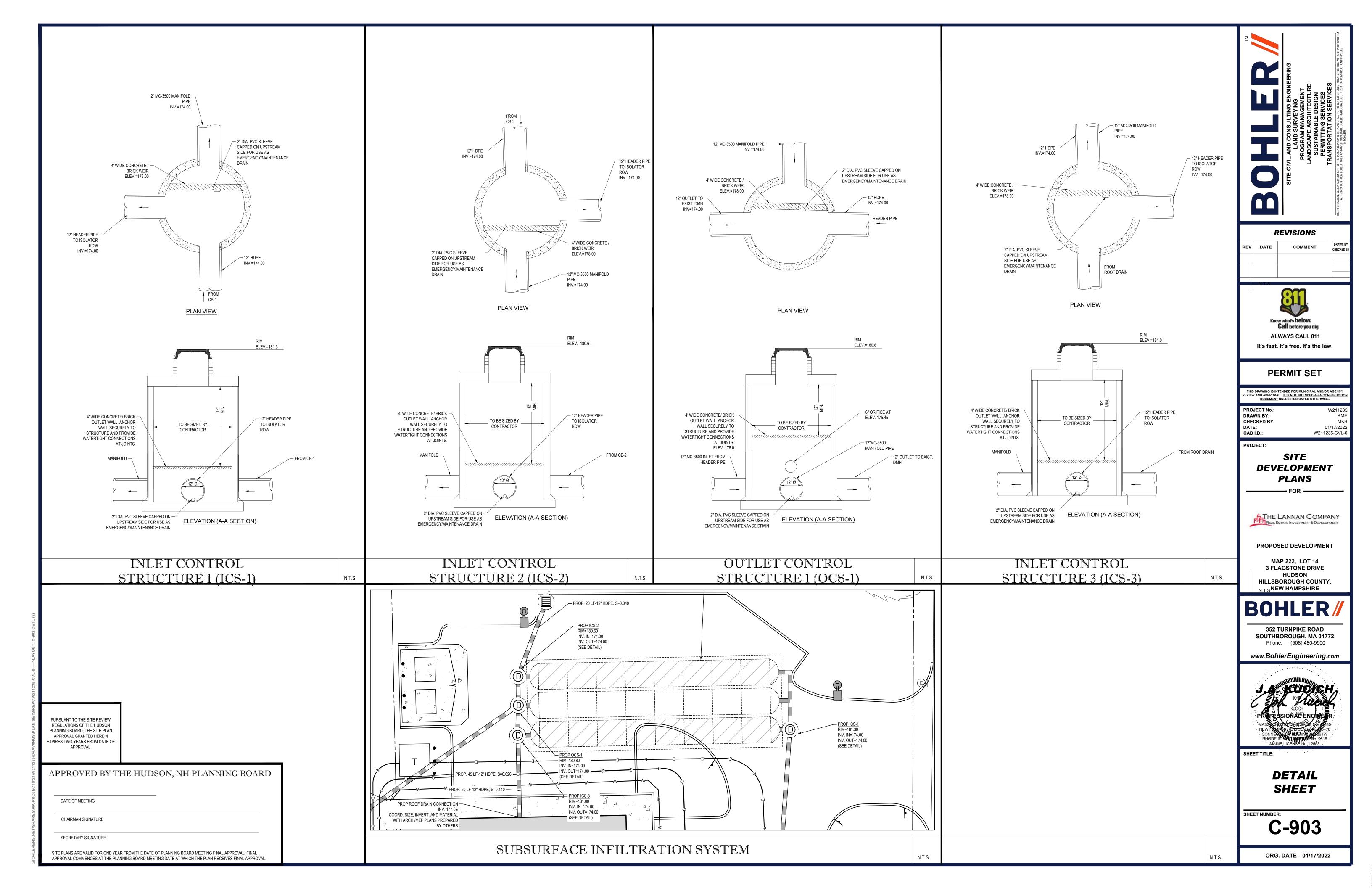
 SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND

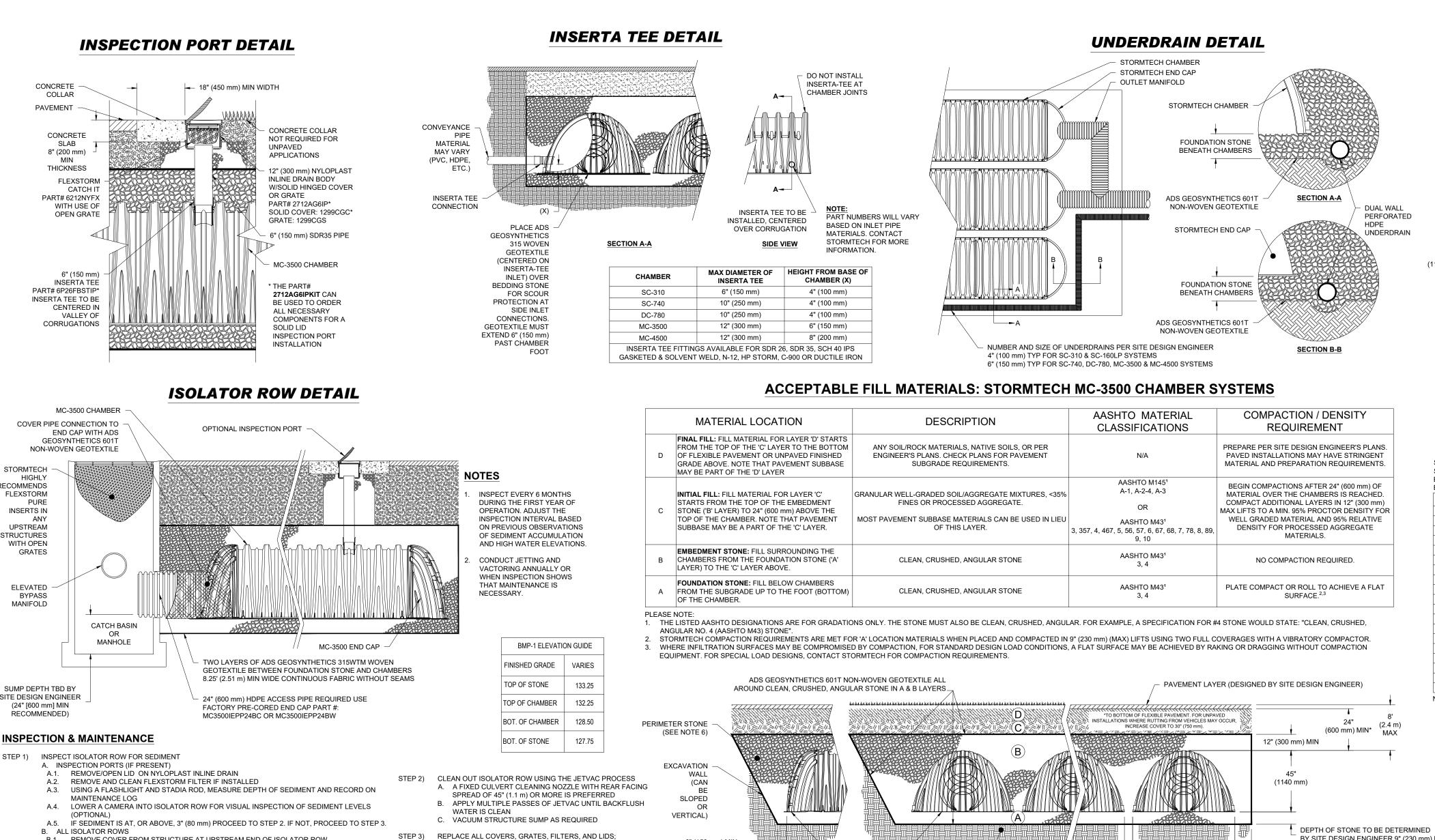
> THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

FOUNDATION DESIGN.









MC3500IEPP24BW PAVEMENT LAYER (DESIGNED BY SITE DESIGN ENGINEER) MC3500IEPP30BC NOTE: ALL DIMENSIONS ARE NOMINAL (600 mm) MIN*

77" (1950 mm) — 12" (300 mm) MIN

STORMTECH MC-3500 (BMP-1) SUBSURFACE **DETENTION/INFILTRATION BASIN DETAILS**

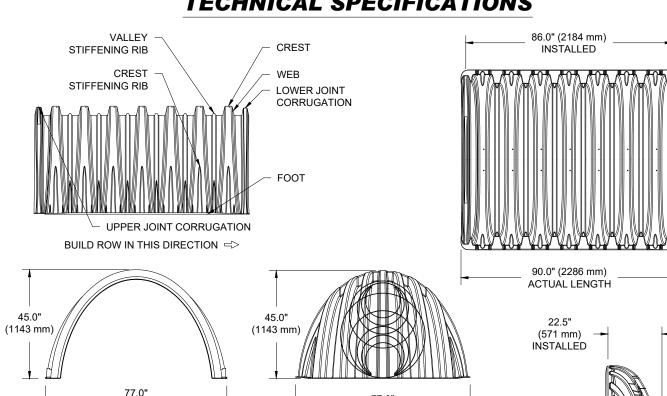
MC-3500 END CAF

SUBGRADE SOILS -

(SEE NOTE 4)

STORMTECH DETAIL SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO INSTALL PER MANUFACTURER'S REQUIREMENTS.

TECHNICAL SPECIFICATIONS



(1956 mm) (1956 mm) **NOMINAL CHAMBER SPECIFICATIONS** SIZE (W X H X INSTALLED LENGTH) 77.0" X 45.0" X 86.0" (1956 mm X 1143 mm X 2184 mm) CHAMBER STORAGE 109.9 CUBIC FEET MINIMUM INSTALLED STORAGE 175.0 CUBIC FEET (4.96 m³) 135.0 lbs.

(0.42 m³)

(1.28 m³)

NOMINAL END CAP SPECIFICATIONS 77.0" X 45.0" X 22.5" (1956 mm X 1143 mm X 571 mm) SIZE (W X H X INSTALLED LENGTH) 14.9 CUBIC FEET END CAP STORAGE MINIMUM INSTALLED STORAGE 45.1 CUBIC FEET WEIGHT 50.0 lbs.

DUAL WALL

PERFORATED

UNDERDRAIN

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" (152 mm) STONE BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

| PART# | STUB | В | С |
|----------------|-----------------|--------------------|-----------------|
| MC3500IEPP06T | 6" (150 mm) | 33.21" (844 mm) | |
| MC3500IEPP06B | 0 (130 11111) | | 0.66" (17 mm) |
| MC3500IEPP08T | 8" (200 mm) | 31.16" (791 mm) | |
| MC3500IEPP08B | 0 (200 111111) | | 0.81" (21 mm) |
| MC3500IEPP10T | 10" (250 mm) | 29.04" (738 mm) | |
| MC3500IEPP10B | 10 (230 11111) | | 0.93" (24 mm) |
| MC3500IEPP12T | 12" (300 mm) | 26.36" (670 mm) | |
| MC3500IEPP12B | 12 (300 11111) | | 1.35" (34 mm) |
| MC3500IEPP15T | 15" (375 mm) | 23.39" (594 mm) | |
| MC3500IEPP15B | 15 (3/311111) | | 1.50" (38 mm) |
| MC3500IEPP18TC | | 20.03" (509 mm) | |
| MC3500IEPP18TW | 18" (450 mm) | 20.03 (309 11111) | |
| MC3500IEPP18BC | 16 (430 11111) | | 1.77" (45 mm) |
| MC3500IEPP18BW | 1 | | 1.77 (45 11111) |
| MC3500IEPP24TC | | 14.48" (368 mm) | |
| MC3500IEPP24TW | 24" (600 mm) | 14.40 (300 111111) | |
| MC3500IEPP24BC | 24 (000 111111) | | 2 06" (52 mm) |
| | | | |

25.7"

USTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. VENTORIED MANIFOLDS INCLUDE 2-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM IVERT LOCATIONS ON THE MC-3500 ND CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

2.75" (70 mm)

- 2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- 4 THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL
- 5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT BY SITE DESIGN ENGINEER 9" (230 mm) MIN SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S
 - 6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

MAP 222, LOT 14 **3 FLAGSTONE DRIVE**

REVISIONS

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SITE

DEVELOPMENT

PLANS

THE LANNAN COMPANY

REAL ESTATE INVESTMENT & DEVELOPMENT

PROPOSED DEVELOPMENT

01/17/2022

W211235-CVL-0

COMMENT

REV DATE

PROJECT No

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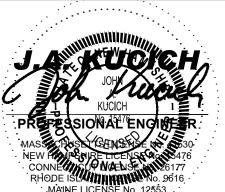
CAD I.D.:

PROJECT:

HUDSON HILLSBOROUGH COUNTY, N T S NEW HAMPSHIRE

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900

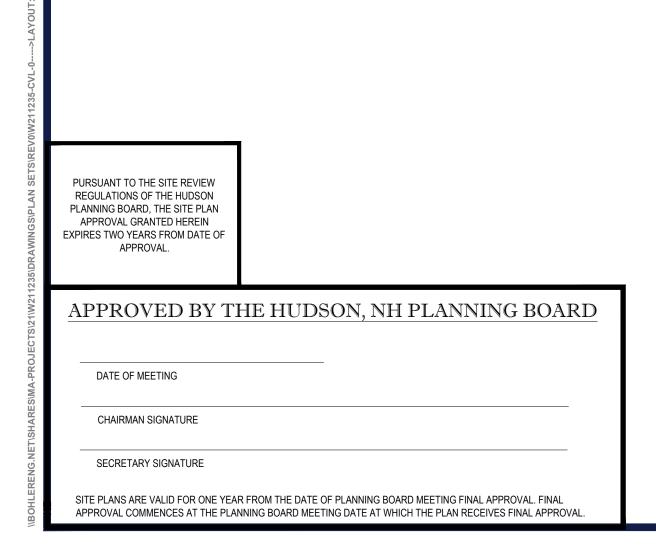
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DETAIL SHEET

C-904

ORG. DATE - 01/17/2022



B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW

B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE

MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY

ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE

B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

RECORD OBSERVATIONS AND ACTIONS.

THE STORMTECH SYSTEM.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF

