BOBCAT OF NEW HAMPSHIRE

SITE PLAN APPLICATION # 11-21 CONDITIONAL USE PERMIT APPLICATION # 10-21 STAFF REPORT #2

October 27, 2021

(See September 22, 2021 Staff Report for previous information)

SITE: 2 Rebel Road & 345 Derry Road; Map 101 Lot 018-000 & Map 101 Lot 019-000

ZONING: Business (B)

PURPOSE OF PLAN: To depict the proposed site work which includes paving and reconfiguration of the parking lot/access drives for Lot 101-18 and Lot 2-34A, as well as adding outdoor display and storage areas. Site Work for Lot 101-19 includes the construction of two building additions with associated site improvements and outdoor display areas.

PLAN UNDER REVIEW: Site Development Plans, Tax Map 101 Lot 18 & 19 / Tax Map 2 Lot 34A, Bobcat of New Hampshire, 2 Rebel Rd & 345 Derry Rd (Hudson, NH) 307 Nashua Rd (Londonderry, NH); prepared by TFM, 48 Constitution Drive, Bedford, NH 03110; prepared for owner/developer MalMar LLC, 9 Dover Rd, Chichester, NH 03258 and Bobcat of New Hampshire; consisting of 14 sheets with General Notes 1-15 on Sheet 2 and Notes 1-30 on Sheet 5 (C-4); dated July 26, 2021 and last revised September 24, 2021.

ATTACHMENTS:

- A. Applicant's Response to Peer Review Comments, by TFM, dated September 28, 2021
- B. Applicant's Response to Planning Staff Comments, by TFM, dated September 28, 2021
- C. Applicant's Response to Conservation Commission Comments, by TFM, dated September 28, 2021
- D. Plan Elevations, by A & B Barns, dated September 28, 2021 (2 Sheets)

APPLICATION TRACKING:

- August 31, 2021 Application received.
- September 13, 2021 Public hearing held by the Conservation Commission.
- September 22, 2021 Public hearing held by the Planning Board, continued to 10/27/21
- October 20, 2021 Revised plan set and review responses submitted.
- October 27, 2021 Public hearing scheduled.

COMMENTS & RECOMMENDS:

APPLICANT RESPONSES

The Applicant responded (**Attachment B**) to the staff comments from the first staff report (which is dated September 22, 2021). Staff identified the following remaining issues after reviewing the Applicant's response and revised site plan.

- 1. Wood Shed on Lot 18: The Site Preparation Plan on Sheet 4 (C-3) noted the wood shed on Lot 19 will be removed and other sheets in the plan set designate the footprint of the removed wood shed as snow storage. However, the plan set is unclear whether this area will be paved or landscaped.
 - Moreover, staff notes that part of the footprint is within the wetland buffer / Wetland Conservation Overlay District, and suggests the Applicant shift the snow storage area out of and away from the buffer/District.
- 2. Rear Lot Line & Setback for Lot 19: Note #2 on Sheet 5 (C-4) states rear setback is not applicable to Lot 19. Even though the side setback is identical to the rear setback in case of the Business District (both being 15'), staff notes that the Applicant has the option of choosing the rear lot line pursuant to the Zoning Ordinance § 334-5 "Lot Line, Rear" and the rear setback is applicable to Lot 19.
- **3.** No Cut/No Disturb Signage Details: The Applicant added Note #29 on Sheet 5 (C-4) in response to Conservation Commission's comments. Staff suggests the Applicant include placards demarcating the wetland buffer.
- 4. Stormwater Pollutant Management: In response to staff and the Town Engineer's comments regarding a lack of stormwater pollutant management infrastructure, the Applicant stated: "The stormwater runoff from the storage of machinery area is already being conveyed to CB-1 for pretreatment via new oil/gas hoods. The outdoor storage area adjacent to the pond is for storage of dry goods only and will not generate stormwater runoff with waste oil or other chemicals." Furthermore, the Applicant noted that the area where machinery will be stored have been converted to standard asphalt paving.

This is still under review by the Town's peer review consultant. In prior conversations it was Staff's understanding that the area near the detention basin would be used for, in part, waste oil storage. Stormwater from some of these areas would need to travel uphill to reach CB-1. The Applicant should clarify the proposed uses through the site.

Conditional Use Permit

5. Conditional Uses within the Wetland Conservation District (§334-36:C): The Conservation Commission issued its recommendation on Monday, September 13, 2021, which can be found in the previous staff report, to which the Applicant had responded (Attachment C).

Attachment A is the Applicant's response to the first round of Peer Review comments, which are currently under review.

DRAFT MOTIONS FOR CONDITIONAL USE PERMIT

CONTINUE the public hearing to a date certain:

	el Road & 345 Derry Road; N	ditional use permit for Bobcat of New Map 101 Lot 18 & Map 101 Lot 19 to date
Motion by:	Second:	Carried/Failed:
DRAFT MOTIONS I	FOR SITE PLAN public hearing to a date cer	rtain:
		plan for Bobcat of New Hampshire at 2 Rebel o 101 Lot 19 to date certain,
Motion by:	Second:	Carried/Failed:



September 28, 2021

Ref: 17851.08

Steven W. Reichert, P.E. Fuss & O'Neill 50 Commercial Street #2S Manchester, NH 03101 (603) 668-8223

Re: Town of Hudson Planning Board Review
Bobcat of NH's Site Plan, 2 Rebel Road & 345 Derry Road
Tax Map 101 Lot 18 & 19

Dear Mr. Reichert,

On behalf of our client, Bobcat of New Hampshire, TFMoran, Inc. is pleased to provide the enclosed revised plans for the proposed improvements associated with the Site Plans located at 2 Rebel Road and 345 Derry Road in Hudson, NH. These plans have been revised based on comments from the Fuss & O'Neill review dated 9/15/21.

We have provided responses to each of the comments from this letter relative to the Site Plan in italics below.

1. Site Plan Review Codes (HR 275)

a. Hudson Regulation (HR) 275-6.C. The applicant has not proposed a sidewalk along Derry Road or Rebel Road.

Derry Road and Rebel Road currently do not have sidewalks for pedestrian access or circulation. This proposal is consistent with the surrounding properties and area.

As such, this regulation does not apply to the project.

- b. HR 275-6.I. The scope of this review does not include the adequacy of any fire protection provisions for the buildings. No fire service connections to the buildings are shown.
 - TFM understands that this topic will be reviewed by the Hudson Building Department under the Building Permit process.
- c. HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has provided parking calculations on the plan set. We note that the building square footages do not match the areas used in the parking calculations. The applicant should clarify the areas. The applicant has noted that 13 parking are required and that 19 spaces are provided.
 - The parking calculations have been revised accordingly.
- d. HR 275-8.C.(6). The applicant has not provided any off-street loading spaces on the plan set.
 - Loading areas have been provided on the plans.
- e. HR 275-9.C.(11). The applicant has provided one handicap space for the site

Steven W. Reichert, P.E. Ref: 17851.08 Page 2

which meets the one space required. We recommend that the applicant add spot grades to the parking lot and sidewalk area to ensure that it is constructed as intended and the handicap space meets ADA requirement. Spot grades have been added to the plans.

f. HR 275-9.F. The applicant did not provide copies of any easements or deeds as part of the package received for review. The applicant has shown an existing slope and drainage easement along Nashua Road on the lot 34A portion of the project. The applicant should note whether this easement extends into the Hudson lots.

The existing slope and drainage easement is now clarified on the plans and is shown extending into Hudson.

2. Administrative Review Codes (HR 276)

- a. HR 276-11.1.B.(4).(b). The applicant should add the Town of Hudson approval block to each sheet of the plan set.
 - The Town of Hudson approval block has been added to each sheet of the plan set.
- b. HR 276-11.1.B.(6). The owner's signature should be provided on the plan set. *The owner's signature is provided on the Cover Sheet and Site Layout Plan Sheet.*
- c. 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 a note stating that, "All signs are subject to approval by the Hudson Planning Board prior to installation." We note that an existing sign is shown along Nashua Road within lot 34A.
 - Proposed site signage details have been added to the plans.
- d. HR 276-11.1.B.(16). The applicant has not provided the locations of all driveways and travel ways within 200 feet of the site.

 All driveways and travel ways within 200' of the site are now shown on the plans.
- e. HR 276-11.1.B.(23). The applicant has not noted any pertinent highway projects on the plan set.
 - This project does not affect or involve any highway projects. There are no proposed Right-Of-Ways or changes to the existing highway boundary.
- f. HR 276-11.1.B.(24). The applicant has shown the required open space percentage on the plan set but has not provide a calculation showing the actual open space provided.
 - The open space percentages are now provided on the plans.

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

- a. HR 193. The applicant has proposed to keep the existing driveway locations and connect the lots with an internal driveway connection. No new driveways are proposed.
 - Statement, no action required.
- b. HR 193.10.E. The applicant has not provided any sight distances for the existing driveway locations on the plan set.
 - The driveways are existing, therefore the location and sight distance for each driveway entrance has been previously approved by the town. The all season safe sight distances were measured in the field and noted on the plans.

4. Traffic

a. HR 275-9.B. The applicant has provided a Traffic Memorandum dated

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August 12, 2021, as part of their review package. We note that with this memorandum the trip generation calculations don't appear to account for the return of delivery vehicles and/or rental equipment (i.e. no 'in' deliveries are noted, just 'out'). The business closes at 4:30 PM. As such, it is assumed that the "in" deliveries do not occur during the PM peak.

b. HR 275-9.B. Fuss & O'Neill concurs with the overall conclusion in the Traffic Memorandum that impacts associated with traffic from this project will be negligible, with traffic from the existing Bobcat facility on the other side of NH102 already present on local roads.

Statement, no action required.

5. Utility Design/Conflicts

a. HR 276-13. The applicant has shown the locations of the existing wells on the plan set. The applicant should note if there is an existing well radius easement for lot 19 since the well is located close to the property line of lot 18.

There are no known recorded well radius easements on the lots.

- b. HR 276-13. The applicant has not shown the locations of the existing leach fields for both sites. We do note that there are some sewer manholes shown on lot 19 but no connections are shown to those manholes.

 The locations of the existing septic areas are now shown on the plans.
- c. HR 276-13. The applicant has noted in their application cover letter that they intend to keep both lots septic systems. The applicant also provided anticipated flows which they believe the existing systems have adequate capacity to treat, although the south lot (#19) leaching field is noted to have an unknown capacity. We recommend that the applicant perform further evaluation to confirm that the south lot system will be able to treat the anticipated flows for that lot.
 - The existing concrete bed under the parking lot of Lot 19 is approx. 4000 SF based on record plans. Based on the design perc rate of the septic system on abutting lot 18 (14 min/ in) the minimum size bed to accommodate the minimum design flow of 300 GPD would be 639 SF. As such the existing bed has more than adequate capacity based on the intended use. The proposed design flow is based on 12 employees and 10 customers per day usage, however upgraded to 300 GPD to be conservative.
- d. HR 276-13. The applicant had not shown any existing electrical or communication utility connections to the existing buildings.

 All existing electrical or communication utilities are underground and could not be located by Dig Safe. This project does not propose any changes to these existing utilities. Existing underground utilities shown were compiled from reference plans and deeds and is approximate.

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

- *a.* HR 275-9.A.(3). The applicant should illustrate the location of the test pits on the plan set.
 - The test pit location for the filtration pond is now shown.
- b. HR 290-5.A.10. The design currently calls for grading for the creation of the proposed infiltration pond, resulting in detention occurring within the 50' wetland buffer, as well as outlet structure OS-1 being located within the 50'

wetland buffer. Per section 334-35 of the Zoning Ordinance, this buffer is located within the Wetlands Conservation Overlay District. The applicant should coordinate with the Conservation Commission as well as the PB to ensure the proposed grading, stormwater detention, and installation of the outlet structure meets Town Standards within the 50' wetland buffer as currently proposed.

We are coordinating with the Conservation Commission and Planning Board to ensure that the proposed filtration pond meets Town Standards.

- c. HR 290-6.A.(5). The applicant should show the location of the proposed construction entrance(s) to the plan set.

 Construction entrances have been added to the plans.
- d. HR 290-6.A.(8). The applicant should add a note of the requirement to coordinate a pre-construction meeting with the Town Engineer. A note has been added to the Site Layout Plan.
- e. HR 290-6.A.(9) The applicant should revise Note #5 on Plan Sheet C-7 to state the "temporary stabilization within 5 days of initial disturbance". *The note has been revised accordingly.*
- f. HR 290-7.A.(6). The applicant should provide information as to how the stormwater system is designed to account for frozen ground conditions. We have added a 2' wide wick drain within the system to ensure infiltration through the stone during frozen ground conditions.
- g. HR 290-7.A.(7). The applicant should keep the Town informed of all communication with the Town of Londonderry in relation to the required concurrent Londonderry Site Plan Approval also required to ensure Towns comments do not alter drainage design/calculations.
- The Town of Hudson will be informed of all communication with the Town of Londonderry.
- h. HR 290-7.B.(16). The applicant should label snow storage areas upon the plan set. *Snow storage areas have been labeled on the plans.*
- Engineering Technical Guideline & Typical Details (ETGTD) ETGTD 920.2. The applicant should illustrate the proposed locations for the dandy bags upon the plan set.
 - The proposed location for catch basin inlet protection is shown on the Stormwater Management Pan.
- j. ETGTD 920.2. The applicant should coordinate the rip rap calculations with the details illustrated on plan sheet C-10.
 - The detail has been revised to reflect the rip rap calculations provided.
- k. ETGTD 920.4.2. The applicant should show equipment storage locations on the plan set.
 - The equipment storage location is now show on the Stormwater Management Plan.
- ETGTD 930.3. The Outlet Structure Detail on Plan Sheet C-11 illustrates a 3'x4' galvanized top grate, while the Stormwater Report for Pond 201P illustrates a 30"x42". The applicant should correct this discrepancy.
 The Stormwater Report and Pond 201P have been revised to illustrate a 3' x 4' top grate.
- m. ETGTD 930.4. We note that the two proposed stormwater pipes utilize a pipe slope less than the required 2.0%. The applicant should illustrate how the drain line velocities are self- cleaning.
 - The stormwater pipes now have a 2.0% slope.
- n. 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

Steven W. Reichert, P.E. Ref: 17851.08 Page 5

requirements, construction site stormwater runoff control, and record keeping requirements.

A note has been added to the Stormwater Management Plan. The project will comply with all provisions of the Town of Hudson's MS4 permit.

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

Statement, no action required.

7. Zoning (ZO 334)

- a. ZO 334-14.A. The applicant has not provided the proposed building addition heights on the plan set.
 - The proposed building heights and architectural elevations are now provided.
- 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.

 Statement, no action required.
- c. ZO 334-33. The applicant has shown wetlands on the plan set. The applicant has provided a Conditional Use Permit application for the Wetlands buffer, which details impacts to the wetland buffer in the south corner of lot 18. There are also impacts proposed for the wetlands buffer in the east corner of lot 19, however these impacts (installation of an 8'x40' storage unit and additional paving) are located in a previously paved/impacted area of the buffer. Statement, no action required.
- d. ZO 334-60. The applicant has not provided any information for any proposed signs within the Hudson lots, except traffic and parking signage.

 Proposed site signage details have been added to the plans.
- e. ZO 334-83 and HR 218-4.E. The applicant has noted that the site is not located within a designated flood hazard area. *Statement, no action required.*

8. Erosion Control/Wetland Impacts

- a. The Town of Hudson should reserve the right to require any additional erosion control measures as needed.

 Statement, no action required. Additional erosion control measures will be implemented if necessary.
- 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 provided the parking lot landscaping

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calculations on the plan set and noted that waivers are needed for the requirements. A waiver request form was included in the Site Plan Application documents, where the applicant is requesting waivers from Sections 275-8.C.(7)(a), (c) and (d).

Statement, no action required. Hudson PB approved this waiver on Sept 22, 2021

- b. HR 275-8.C.(8). The applicant has noted they will keep existing vegetation for screening of uses to the east of the site.

 Statement, no action required.
- c. HR 276-11.1.B.(14). The applicant has shown lighting fixture locations on the plans with details and photometric information for lot 18. We note that no new lighting is proposed for lot 19. *Statement, no action required.*
- d. HR 276-11.1.B.(14). The applicant should provide the hours of operation for the facility and note whether the lights are intended to be in operation during non-working hours.

 The hours of operation of the facility and intended light use are noted on the

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

Lighting Plan.

- a. HR 275-9.G. The applicant has listed the required permits on the plan set. We note that the applicant should show the status of those permits. *The status of the required permits have been added to the plans.*
- 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. *Permits and approvals are pending and once obtained, will be submitted.*
- c. Additional local and state permitting may be required. *Statement, no action required.*
- d. The applicant should confirm if a permit is required for the fuel/oil storage tanks proposed for lot 19 and provide a detail on the plans for the spill containment slab.

There is no uniform federal program that regulates aboveground storage tanks (ASTs). The proposed AST have capacity less than 1320 gal. As such, Registration of the AST is not required per NHDES Environmental Fact Sheet. A spill containment tank detail has been added to the plans.

11. Other

- a. The applicant should review the Professional Engineer Stamp location on many of the plan sheets. They appear to overwrite text making it illegible. The Professional Engineer Stamp locations have been revised.
- b. The applicant should review the need for an enclosure around the dumpster at lot 19.

A dumpster enclosure is being proposed and a detail has been added to the plans.

We trust these response materials adequately address your concerns. Please do not hesitate to contact me at (603) 472-4488 or at jhill@tfmoran.com with any questions.

Steven W. Reichert, P.E. Ref: 17851.08

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TFMoran, Inc.

Jacon S. Hill. DE

Jason S. Hill, PE Project Manager

cc: Bobcat of New Hampshire

File

Enclosures



September 28, 2021

Ref: 17851.08

Brian Groth, Town Planner Town of Hudson Planning Department 12 School Street Hudson, NH 03051 (603) 886-6008

Re: Bobcat of New Hampshire

2 Rebel Road and 345 Derry Road, Hudson, NH

Map 101, Lot 18 and 19

Dear Mr. Groth,

On behalf of our client, Bobcat of New Hampshire, TFMoran, Inc. is pleased to provide the enclosed revised plans for the proposed improvements associated with the Site Plans located at 2 Rebel Road and 345 Derry Road in Hudson, NH. These plans have been revised based on comments from the Staff of the Town of Hudson dated 9/22/21.

We have provided responses to each of the comments from this letter relative to the Site Plan in italics below.

STAFF COMMENTS

Site Plan

- 1. Use (§ 334-21): The proposed use, categorized as "Motor vehicle, motorcycle, trailer, snowmobile, or boat sales and rental" D.9. within the Table of Permitted Principal Uses, is permitted in the Business district. *Statement, no action required.*
- 2. Dimensional Requirements (§ 334-27): The submitted plan meets all dimensional requirements.

 Statement, no action required.
- **3. Green Area buffer [§ 276-11.1.B(22)]:** A 35' green area is required between the right- of-way line and any pavement, gravel, or structure. The submitted plan notes this requirement (Note #2 on Sheet 5) and seems to conform to

this requirement. Nevertheless, the Applicant should illustrate this requirement on the plan drawing via arrows and measurements.

The 35' green space area requirement is now shown on the plans.

4. Open Space Requirement [§ 276-11.1.B(24)(b)]: The submitted plan notes the 40% minimum open space requirement in Note #2 on Sheet 5 but does not include a developed vs. open space area calculation to verify whether the proposed development conforms with this requirement. The Applicant should add such a calculation to the plan.

Open space calculations have been added to the plans.

5. Shared Access § 276-11.1.B(25)]: Unless allowed by the Planning Board, access ways are not permitted in the side or rear setback areas. The Applicant must submit a waiver request.

A waiver has been submitted to the Town.

- a. Green Area Compensation [§ 276-11.1.B(25)]: An amount of frontage green area equal to the area of the shared access driveway should be added to the minimum green area / open space required.

 The open space calculations have been provided.
- **6. Parking Calculations** [§ 275-8(C)(2)]: The submitted plan includes parking calculations under note #3 on Sheet 5. The calculations are correct and the Applicant is proposing more parking spaces than required. *Statement, no action required.*
- 7. Parking Lot Landscaping Requirements [§ 275-8.C(7)]: The Applicant is requesting a waiver for § 275-8.C(7) Landscape Plan.

Given the parking layout on Lot 19, staff recognizes the Applicant's challenge of adding interior parking landscaping. In lieu of full compliance with the parking lot landscaping requirement, the Applicant may wish to consider additional landscaping around the lot perimeter or landscaping that may enhance the green area on Lot 18, similar to that of Item #5 above.

Additional landscaping has been added to enhance the green area for the site.

8. Off-Street Loading Space Requirement [§ 275-8.C(6)]: One loading space (12' x at least 60' with a vertical clearance of at least 14') is required for every nonresidential building or structuring having 5,000 SF or less of GFA. An additional space shall be provided for every additional 10,000' of GFA. Loading areas have been added to the plans.

Staff supposes the two lots would have plenty of space to locate the required loading space but the Applicant should designate it on the plan.

Loading areas have been added to the plans.

9. Traffic Memorandum: In Attachment A, the Applicant provides a traffic memo projecting the traffic conditions for this proposal. While the Town's peer review

notes that return trips for delivery vehicles and/rentals are not included, they concur with the overall conclusion of the Memorandum. Also noted is that this operation was previously located directly across the street, leading to a negligible change, if any.

Statement, no action required.

10. Plan Requirements (§ 276-11.1):

a. Utility Plan (§ 275-9.E): The submitted plan set does not include a utility plan. Staff suggests the Planning Board verify whether there are proposed changes to the utility connections and whether a utility plan is necessary for the site plan review.

There are no proposed changes to the utility connections and a utility plan is not necessary.

- b. Hudson Approval Block [§ 276-11.1.B(4) & (5)]: Plan approval expires in two years instead of one year from the date of approval. The Applicant should revise the approval block language.
 - The approval block has been revised accordingly.
- c. Owner's Address [§ 276-11.1.B(6)]: It does not appear the address for Mal-Mar, LLC is shown on the plan set. Also, the title block on Sheet 3 shows SMT Rebel Road, LLC as the owner (perhaps because this sheet was from an earlier date). The Applicant should verify and add the owner's address.

The address for the owner is shown on the Cover Sheet in the top left corner. The title block on Sheet 3 has been revised.

d. **Signage Note** [§ 276-11.1.B(13)]: The plan set should include the required statement "All signs are subject to approval by the Hudson Zoning Administrator prior to installation thereof." This note may be appended to the existing Note 12 on Sheet 5.

The note has been revised accordingly.

e. Lighting details for Lot 19 [§ 276-11.1.B(14)]: Sheet 14 includes a lighting plan but the plan only covers Lot 18 within Londonderry. The lighting plan should cover both lots, where a change is proposed. There are no changes to the site lighting for Lot 19.

11. Other Plan Elements:

a. **Storage Units:** Several storage units are located outside the designated 9,200-SF outdoor storage area, including one in front of the new garage bay on Lot 19, which is also within the 50' wetland buffer. The Applicant should indicate the rationale for locating these units outside of the designated storage area and avoid placing any units within the wetland buffer.

The storage units are now located in the designated outdoor storage

area. The storage unit within the 50' wetland buffer has been removed.

- b. **Stormwater Pollutant Management:** The Applicant has indicated that the waste collection area may temporally store waste motor oil and other chemicals. The submitted plan does not indicate any proposed spill management infrastructure. Moreover, the retention pond receives stormwater runoff directly from the paved apron and waste collection area by sheet flow. This pond falls within the wetland buffer. This is also mentioned by the Town Engineer in **Attachment C**. The outdoor storage area adjacent to the pond is specified for storage of dry goods only. As such, it will not generate stormwater runoff with waste oil or other chemicals.
- c. Landscape Plan (Sheet 7): Several existing trees shown on the plan seem to be located within the paved area. The Applicant should identify trees to be removed or remove the tree symbols to avoid confusion.

Trees to be removed have now been indicated on the Site Preparation Plan.

d. **Dumpster on Lot 19:** Staff finds the dumpster location to be peculiar while also lacking proper screening.

The dumpster has been relocated and is now proposed to have an enclosure/screening.

Conditional Use Permit

12. Conditional Uses within the Wetland Conservation District (§334-36:C): The Conservation Commission issued its recommendation on Monday, September 13, 2021, which can be found in Attachment C.

The Applicant suggested the proposed stormwater pond will enhance the level of water quality in runoff. However, as mentioned in the Site Plan staff comments #10(b), staff finds the stormwater infrastructure lacking in regards to pollutant management.

The stormwater runoff from the storage of machinery area is already being conveyed to CB-1 for pretreatment via new oil/gas hoods. The outdoor storage area adjacent to the pond is for storage of dry goods only and will not generate stormwater runoff with waste oil or other chemicals.

Staff also recommends the Planning Board ascertain if the Applicant has explored and exhausted potentially viable alternatives.

13. Other Departments – See **Attachment B** for staff comments from other Town departments.

We trust these response materials adequately address your concerns. Please do not hesitate to contact me at (603) 472-4488 or at jhill@tfmoran.com with any questions.

Sincerely, TFMoran, Inc.

Jason S. Hill, PE Project Manager

cc: Bobcat of New Hampshire

File

Enclosures



September 28, 2021

Ref: 17851.08

William Collins, Chairman Town of Hudson Conservation Commission 12 School Street Hudson, NH 03051 (603) 668-8223

Re: Bobcat of New Hampshire

2 Rebel Road and 345 Derry Road, Hudson, New Hampshire

Map 101, Lot 18 and 19

Dear Mr. Collins,

On behalf of our client, Bobcat of New Hampshire, TFMoran, Inc. is pleased to provide the enclosed revised plans for the proposed improvements associated with the Site Plans located at 2 Rebel Road and 345 Derry Road in Hudson, NH. These plans have been revised based on comments from the Town of Hudson conservation Commission dated 9/13/21.

We have provided responses to each of the comments from this letter relative to the Site Plan in italics below.

Conservation Commission comments/recommendations:

- 1. The commission recommends that a stipulation and or note be added to the final plan set sheet C-5 that states "Construction and restoration shall comply with Best Management Practices set forth in New Hampshire Storm Water Manual Volume 3: Erosion and Sediment Control. A note has been added to sheet C-5.
- During construction and restoration erosion control barriers shall be installed and maintained to the satisfaction of the Town Engineer.
 A note has been added to the plans.
- **3.** The Town Engineer or his representative shall be allowed to inspect the boundaries of the wetland and wetland buffer areas during construction and report any finding to the applicant and the Conservation Commission for remediation.

 A note has been added to the plans.

HCC recommendations to aide in storm water containment and treatment on site

4. The conservation commission recommends that the Planning Board require the applicant to use a standard asphalt paving material in the area where recycled asphalt is proposed to help reduce infiltration of contaminates through the more pores recycled asphalt material.

William Collins, Chairman Ref: 17851.08

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We have updated the plans to stipulate the areas where machinery shall be stored and the area where dry goods can be stored. The areas where machinery will be stored have been converted to standard asphalt paving with catch basins having oil- gas hoods for control of petroleum contaminants prior to discharge into the drainage pond. The areas where the dry goods storage are proposed will not have a potential for fuel/oil leaks. For these reasons, the proposed hardpack gravel / recycled asphalt is an appropriate finish condition.

- 5. The conservation commission recommends that the Planning Board require the applicant to add an additional storm water catch basin within the proposed storage area and/or proposed paved surface area to pretreat and convey storm water to the retention basin.

 As stated above, the areas where machinery will be stored have been converted to standard asphalt paving with catch basins having oil- gas hoods for control of petroleum contaminants prior to discharge into the drainage pond. As such additional storm water catch basins are not necessary in the proposed dry goods storage areas.
- **6.** The Town Engineer recommends and conservation commission concur that an asphalt curbing be constructed along the south easterly portion of the storage area <u>adjacent</u> to the proposed retention basin to prevent storm water sheet flow off the property and into the nearby wetlands.

The grading in this area has been revised. An earthen berm is now being implemented to prevent stormwater sheet flow off the property.

- 7. The commission recommends that a stipulation and or note be added to the final plan set that states "No Cut/No Disturb" signage shall be installed along the wetland buffer boundary prior to issuing Certificates of Occupancy per Hudson Zoning Ordinance, Article IX §334-35 (E.) A note has been added to the plans.
- **8.** This motion is based on the plan(s) submitted by the applicant. It is recommended that if additional impacts are required the plan be returned to the Conservation Commission for further review.

Statement, no action required.

We trust these response materials adequately address your concerns. Please do not hesitate to contact me at (603) 472-4488 or at jhill@tfmoran.com with any questions.

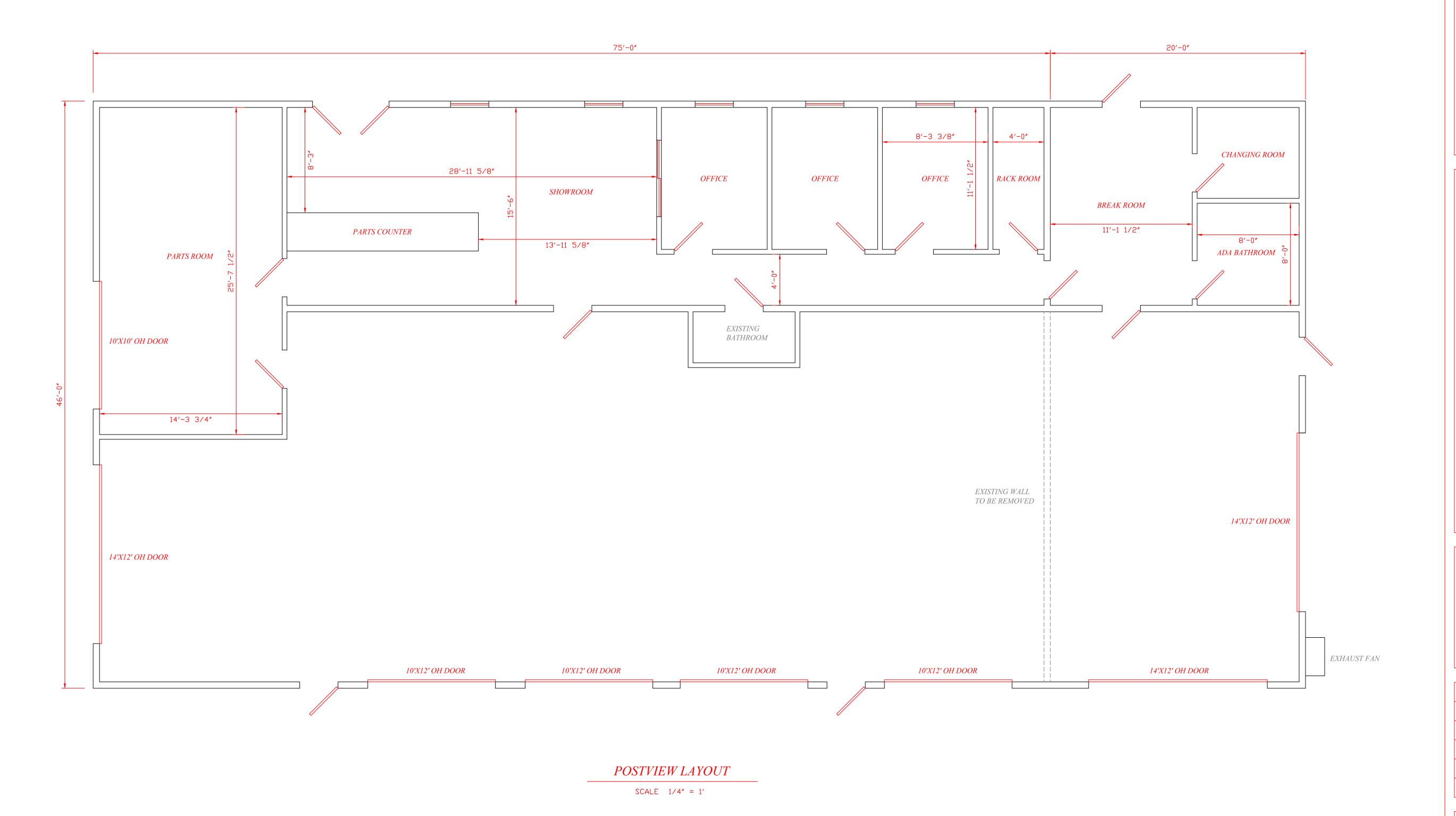
Sincerely, TFMoran, Inc.

Jason S. Hill, PE Project Manager

cc: Bobcat of New Hampshire File

Enclosures

PRELIMINARY ONLY



phon

INH

address HUDSON NH REMODEL/ ADDITIO

ISION OF BELLETETES
29 SHEEP DAVIS ROAD
PEMBROKE, NH 03275

A

 SCALE:
 1/4" = 1'-0"

 DATE:
 28 SEPT 2021

 DRAWN BY:
 SSH

 SALES PERSON:
 DAY

 SIZE:
 46'X95'

DRAWING NO.

BOBCAT HUDSON

THESE PLANS ARE THE PROPERTY OF BELLETETES AND MAY NOT BE REPRODUCED OR DUPLICATED WITHOUT THE EXPRESS WRITTEN APPROVAL OF BELLETETES INC.





LANDSCAPE REQUIREMENTS

(HUDSON)

1. INTERIOR PARKING LANDSCAPE AREA REQUIREMENTS:

(275-8.C(7) OF SITE PLAN REG.'S) INTÈRIOR PARKING LOT: 10% LANDSCAPE AREA REQUIRED. REQUIRED: 1,490 SF (10%) PROVIDED: *998 SF, (6.7%)

- a. REQUIRED TREES: 1 TREE PER 1,600 SF OR 1 TREE PER 5 SPACES, WHICHEVER IS GREATER. PROVIDED: *6 TREES
- b. REQUIRED SHRUBS: 1 SHRUB PER 200 SF OR 1 SHRUB PER 1.6 SPACES, WHICHEVER IS GREATER. PROVIDED: *57 SHRUBS

*WAIVER REQUIRED

LANDSCAPE REQUIREMENTS

1. GREEN SPACE REQUIREMENT:

30' GREEN SPACE BUFFER ALONG ROW.

15' GREEN SPACE BUFFER ALONG SIDE AND REAR LOT LINES.

2. INTERIOR PARKING LANDSCAPE AREA REQUIREMENTS: (3.10g OF SITE PLAN REG.'S)

PARKING LOT: 10% LANDSCAPE AREA REQUIRED REQUIRED: 350 SF (10%) PROVIDED: 397 SF (11.3%)

3. INTERNAL PARKING LOT LANDSCAPING (TREES): 1 TREE/15 PARKING SPACES.

4. PARKING LOT PERIMETER LANDSCAPING (TREES): 1 SHADE TREE/20' OF PARKING PERIMETER. REQUIRED: 2 TREES

PROVIDED: 2 TREES

5. SCREENING FROM PUBLIC RIGHT-OF-WAY: EXISTING AND PROPOSED DISPLAY AREAS TO SATISFY REQUIREMENT.

6. ACCORDING TO THE USDA PLANT HARDINESS ZONE MAP THE ANNUAL MINIMUM TEMERATURE ZONES FOR SOUTHERN NH ARE BETWEEN ZONE 4 $(-30\ \text{TO}\ -20\ \text{DEGREES})$ AND ZONE 5 $(-20\ \text{TO}\ -10\ \text{DEGREES})$. THE PLANT MATERIALS SHOWN ON THIS PLAN HAVE A HARDINESS ZONE TO MEET THAT OF SOUTHERN NH.

7. AT TIME OF PLANTING:

ALL TREES SHALL BE A MINIMUM OF 3" CALIPER. ALL ORNAMENTAL TREES SHALL BE A MINIMUM OF 2" CALIPER.

ALL EVERGREEN TREES SHALL BE A MINIMUM OF 6' HIGH.

- 8. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE THROUGHOUT CONSTRUCTION OF PROTECTIVE TREE FENCING LOCATED 12" INCHES OFF THE THE DRIPLINE OF ALL TREES TO BE PROTECTED. PRIOR TO CONSTRUCTION THE CONTRACTOR IS REQUIRED TO HAVE ALL NO-CUT ZONES
- 9. THE CONTRACTOR/APPLICANT IS RESPONSIBLE FOR REPLACEMENT OF "ANY TREES DESIGNATED TO REMAIN, WHICH HAVE BEEN DAMAGED, KILLED OR REMOVED AS A RESULT OF CONSTRUCTION ACTIVITIES". SEE TOWN OF LONDONDERRY "LANDSCAPE DESIGN STANDARDS" SECTION 3.10.D OF THE SITE PLAN
- 10. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL LANDSCAPE AREAS ONCE CONSTRUCTION IS COMPLETED AS OUTLINED IN THE TOWN OF LONDONDERRY, "LANDSCAPE DESIGN STANDARDS" SECTION 3.10.F OF THE SITE PLAN REGULATIONS.

LANDSCAPE LEGEND (LONDONDERRY)

SYMBOL	QTY	SIZE	REMARKS	
		ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	3 TO 3 1/2" CAL.	B&B
	2	NYSSA SYLVATICA BLACK GUM	3 TO 3 1/2" CAL.	B&B
	6	PINUS STROBUS WHITE PINE	3 GAL.	CONT.
0	15	CEANOTHUS AMERICANUS NEW JERSEY TEA	3 GAL.	CONT.
٠	17	JUNIPERUS C. 'PFITZERIANA COMPACTA' COMPACT PFITZER JUNIPER	3 GAL.	CONT.
•	8	SYRINGA PATULA 'MISS KIM' MISS KIM LILAC	3 GAL.	CONT.

SITE DEVELOPMENT PLANS

TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

LANDSCAPE PLAN

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH)

OWNED BY

MAL-MAR, LLC

PREPARED FOR

BOBCAT OF NEW HAMPSHIRE

JULY 26, 2021



Structural Engineers Land Surveyors Landscape Architects

48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com

17851-08 CK JSH CADFILE 17851-08_XR_LANDSCAPING DR PWH FB C-6

GENERAL INFORMATION

OWNER

MAP 101 LOTS 18 & 19 MAP 2 LOT 34A MAL-MAR, LLC 9 DOVER ROAD CHICHESTER, NH 03258

APPLICANT

BOBCAT OF NEW HAMPSHIRE 2 TRACY LANE HUDSON, NH 03051

LONDONDERRY RESOURCE LIST

603-432-1100 EXT. 149

PLANNING & ECONOMIC DEVELOPMENT 268B MAMMOTH ROAD LONDONDERRY, NH 03053

COLLEEN MAILLOUX BUILDING &

ZONING ENFORCEMENT 268B MAMMOTH ROAD LONDONDERRY, NH 03053 603-432-1100 EXT. 115

LIBBY CANUEL PUBLIC WORKS & ENGINEERING

268B MAMMOTH ROAD LONDONDERRY, NH 03053 603-432-1100 EXT. 146 JOHN TROTTIER; DIRECTOR

POLICE DEPARTMENT 268A MAMMOTH ROAD

LONDONDERRY, NH 03053 WILLIAM R. HART; CHIEF OF POLICE

FIRE DEPARTMENT 280 MAMMOTH ROAD

LONDONDERRY, NH 03053 603-432-1124 DARREN O'BRIEN; CHIEF

HUDSON RESOURCE LIST

PLANNING DEPARTMENT TOWN OF HUDSON 12 SCHOOL STREET HUDSON, NH 03051

ZONING DEPARTMENT

TOWN OF HUDSON 12 SCHOOL STREET HUDSON, NH 0305 603-886-6008

603-886-6008

POLICE DEPARTMENT

1 CONSTITUTION DRIVE HUDSON, NH 03051 603-886-6011 WILLIAM AVERY; CHIEF OF POLICE

FIRE DEPARTMENT

HUDSON, NH 03051 603-886-6021 ROBERT BUXTON; CHIEF

ABUTTERS

ABUTTERS-HUDSON

MAP 101 LOT 11 SMT REBEL ROAD, LLC 3 TRACY LANE HUDSON, NH 03051

MAP 101 LOT 17 SMT TRACEY LANE HOLDINGS, LLC 3 TRACY LANE HUDSON, NH 03051

MAP 101 LOT 30-000 MARIO PLANTE TR & DENYSE PLANTE TR GREEN MOUNTAIN PARTNERS TRUST 9 OLD DERRY ROAD HUDSON, NH 03051

MAP 101 LOTS 30-001, 30-002, 30-003, 30-004 & 30-005 ANTHONY E. DIONNE TRUST GREENLAND INVESTMENT REALTY TRUST P.O. BOX 1206

LONDONDERRY, NH 03053 MAP 101 LOT 20 4 REBEL ROAD, LLC 4 REBEL ROAD

HUDSON, NH 03051 MAP 101 LOT 21 MATTHEW E. MASON TR & LYNN A. MASON TR

13 CUTLER ROAD LITCHFIELD, NH 03052

MAP 102 LOT 1 LINDA K. HARVEY 11 AVERY ROAD LONDONDERRY, NH 03053

ABUTTERS-LONDONDERRY

MAP 2 LOT 34 SMT TRACEY LANE HOLDINGS, LLC 3 TRACY LANE HUDSON, NH 03051

MAP 2 LOT 34-1 CABLE HOLDCO EXCHANGE III LLC ONE COMCAST CENTER

PHILADELPHIA, PA 19103 MAP 2 LOT 35

CABLE HOLDCO EXCHANGE III LLC ONE COMCAST CENTER PHILADELPHIA, PA 19103

MAP 2 LOT 32 PETER J. SAPATIS REVOCABLE TRUST 5 AVERY ROAD

MAP 2 LOT 32A LINDA K. & DOUGLAS C. JR. HARVEY P.O. BOX 639

LONDONDERRY, NH 03053

LONDONDERRY, NH 03053

OWNER'S SIGNATURE OWNER OR REPRESENTATIVE DATE

Approved by the Town of Londonderry N.H. Planning Board for Phase __ Certified By:

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

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 ACHIEVES FINAL APPROVAL.

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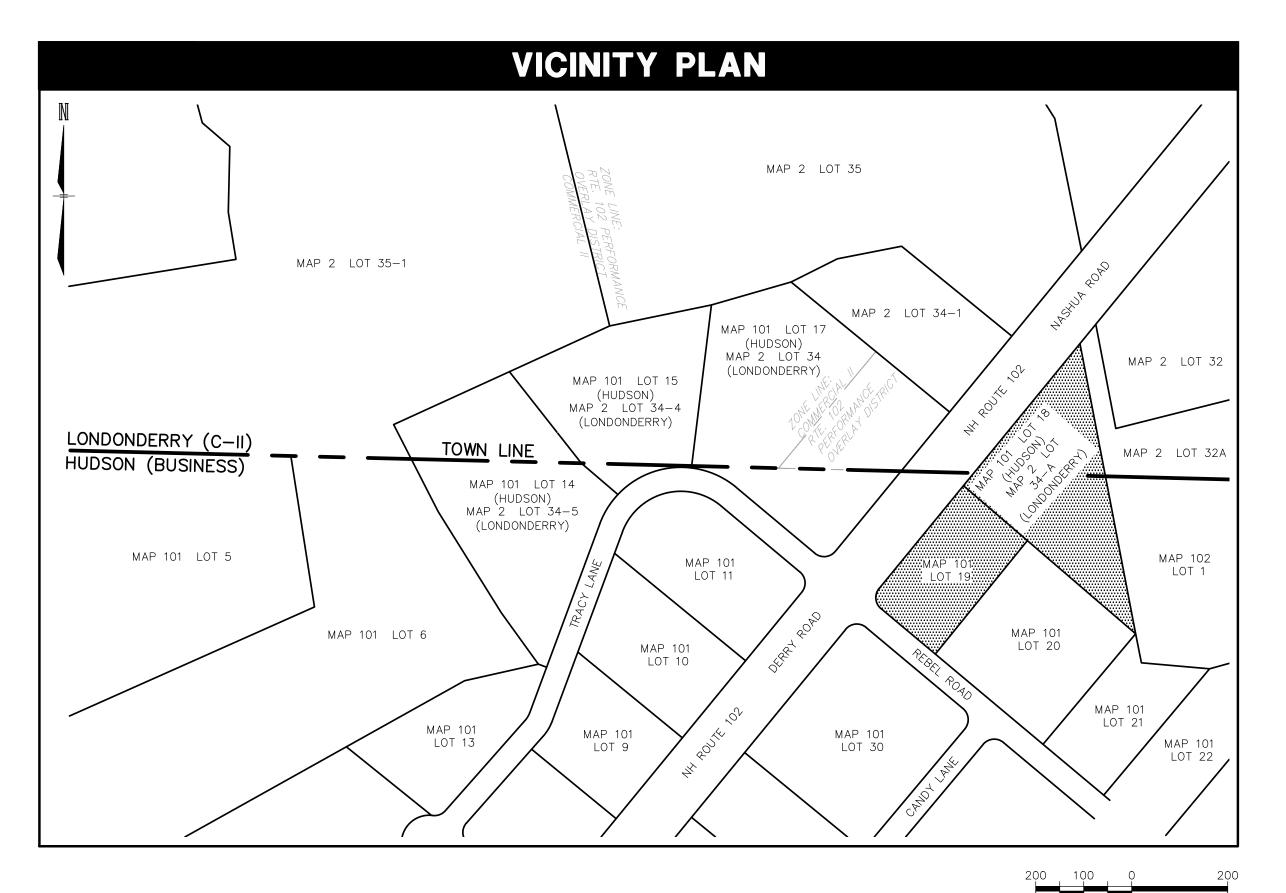
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This plan is not effective unless signed by a duly authorized officer of



BOBCAT OF NEW HAMPSHIRE

2 REBEL ROAD, 345 DERRY ROAD & 307 NASHUA ROAD **HUDSON & LONDONDERRY, NEW HAMPSHIRE**

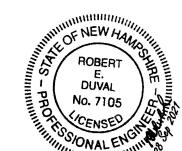




SCALE: 1"= 2,500'

VICINITY PLAN

Civil Engineers Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists



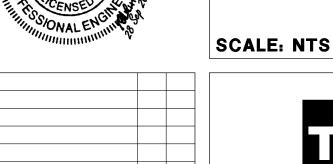
REV. PER ENGINEERING COMMENTS

DESCRIPTION

SCALE: 1"=200'

1 9/24/2021

REV DATE



DR CK

INDEX OF SHEETS

C-1COVER C-2NOTES & LEGEND EXISTING CONDITIONS PLAN C-3SITE PREPARATION PLAN SITE LAYOUT PLAN C - 5GRADING & DRAINAGE PLAN LANDSCAPE PLAN

SHEET

C-7

SHEET TITLE

STORMWATER MANAGEMENT PLAN

C-8 - C-13DETAILS

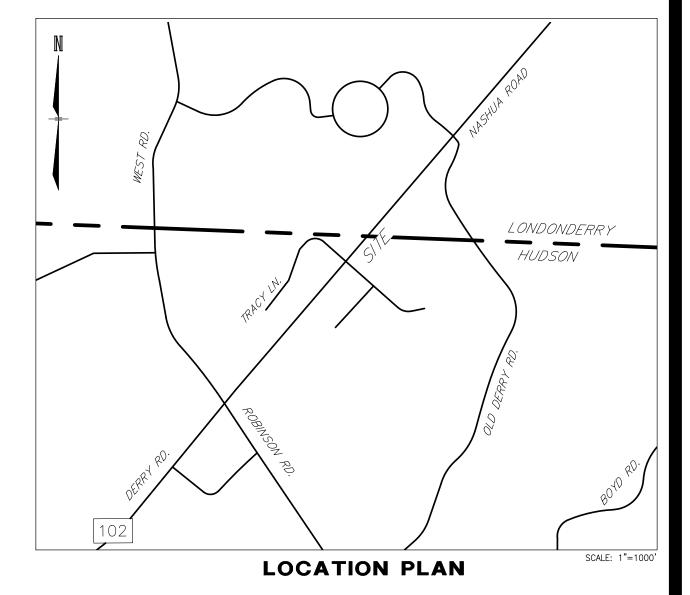
REFERENCE PLANS BY ASSOCIATED PROFESSIONALS

ARCHITECTURAL ELEVATION PLANS

LIGHTING PLAN

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
HUDSON PLANNING BOARD SITE PLAN REVIEW	-	PENDING	-
LONDONDERRY PLANNING BOARD SITE PLAN REVIEW	-	PENDING	-
HUDSON CONDITIONAL USE PERMIT	-	PENDING	-
HUDSON WAIVER (LANDSCAPING)	-	PENDING	-
HUDSON WAIVER (ACCESS DRIVE)	-	PENDING	-
LONDONDERRY WAIVER (APPROVAL BLOCK)	-	PENDING	-
LONDONDERRY VARIANCE: SECTION 4.3.2.D (OUTDOOR DISPLAY)	_	PENDING	-
NHDOT DRIVEWAY	-	PENDING	_



SITE DEVELOPMENT PLANS

TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

COVER

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH)

OWNED BY

MAL-MAR, LLC

PREPARED FOR

BOBCAT OF NEW HAMPSHIRE



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JULY 26, 2021

17851-08 | CK | JSH | CADFILE | 17851-08 SITE PLANS

C-1

LEGEND **PROPOSED** PROPERTY LINE **70NING LINE** EASEMENT BASELINE __ _ _ _ _ _ _ _ _ _ _ SETBACK (STRUCTURE) — — — — SETBACK (PARKING) —— — — — — SETBACK (LANDSCAPE) ---- GRAVEL ROAD EDGE OF PAVEMENT VERTICAL GRANITE CURB SLOPED GRANITE CURB CONCRETE CURB INTEGRATED CONCRETE CURB BUTIMINOUS ASPHALT CURB CCB CAPE COD BERM TREE LINE FENCE (CHAIN LINK) — x — x — x — SILT FENCE 5' CONTOUR 1' CONTOUR SPOT GRADE PARKING COUNT ACCESSIBLE PARKING SYMBOL TRAFFIC FLOW ARROW (NOT PAINTED) SIGN (SINGLE POST)

OWNER'S SIGNATURE

PURSUANT TO THE

REGULATIONS OF

PLANNING BOARD,

GRANTED HEREIN

YEARS FROM DATE

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48 Constitution Drive, Bedford, N.H. 03110

without the prior written permission of TFMoran, Inc.

EXPIRES TWO

OF APPROVAL

FMoran, Inc.

THE SITE PLAN

SITE REVIEW

THE HUDSON

APPROVAL

OWNER OR REPRESENTATIVE

DATE OF MEETING ____

SIGNATURE _____

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This plan is not effective unless signed by a duly authorized officer of

SIGNATURE _____

PLAN ACHIEVES FINAL APPROVAL.

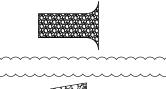
APPROVED BY THE HUDSON, NH PLANNING BOARD

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

PROPOSED CONCRETE GRAVFI



CONSTRUCTION ENTRANCE

OVERHEAD UTILITY LINE

WATER GATE VALVE

TEST PIT LOCATION

WATER SHUTOFF

FLOOD LIGHT

UTILITY POLE

UNDERGROUND UTILITY LINE

INFILTRATION TEST LOCATION

_____ — OHF —— – UGF –

RIPRAP

GAS LINE

APPROVAL OF THE TOWN PLANNING DIRECTOR. SNOW STORAGE 4. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF HUDSON AND TOWN OF LONDONDERRY AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK TO CONFORM DRAIN LINE TO TOWN OF HUDSON AND LONDONDERRY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. ALL WORK WITHIN THE RIGHT-OF-WAY OF THE TOWN AND/OR STATE SEWER LINE SHALL COMPLY WITH APPLICABLE STANDARDS. COORDINATE ALL WORK WITHIN THE WATER LINE

GENERAL NOTES

ENGINEER OF RECORD.

IN THE FIELD.

RIGHT-OF-WAY WITH APPROPRIATE TOWN, COUNTY, AND/OR STATE AGENCY. 5. AN ALTERATION OF TERRAIN PERMIT IS NOT REQUIRED PER ENV-WQ 1503.02. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL

ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR

2. THE SITE PLAN SHALL BE RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS.

3. ALL IMPROVEMENTS SHOWN ON THE SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED

OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS

IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY

NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE

6. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.

REQUIREMENTS OF NHDES ENV-WQ 1500 OR AS APPLICABLE.

- 7. PRIOR TO COMMENCING ANY SITE WORK ALL LIMITS OF WORK SHALL BE CLEARLY MARKED
- 8. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT
- 9. TEMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
- 10. TEMPORARY FENCING SHALL BE PROVIDED AND COVERED WITH A FABRIC MATERIAL TO CONTROL DUST MITIGATION.
- 11. ALL DEMOLITION SHALL INSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND ANY OTHER ADJACENT OPERATING FACILITIES. PRIOR WRITTEN PERMISSION FROM THE OWNER/DEVELOPER AND LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
- 12. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
- 13. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
- 14. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
- 15. CONTRACTOR'S GENERAL RESPONSIBILITIES:
- A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS.
- B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR
- C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- E. TAKE APPROPRIATE MEASURES TO REDUCE, TO THE FULLEST EXTENT POSSIBLE, NOISE, DUST AND UNSIGHTLY DEBRIS FROM CONSTRUCTION ACTIVITIES.
- F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
- G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800. THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
- H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
- I. PROTECT NEW AND EXISTING BURIED UTILITIES DURING INSTALLATION OF ALL SITE ELEMENTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL
- J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- L. VERIFY LAYOUT OF PROPOSED BUILDING FOUNDATIONS WITH ARCHITECT AND THAT PROPOSED FOUNDATION MEETS PROPERTY LINE SETBACKS PRIOR TO COMMENCING ANY
- M. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT TO THE PLANNING DIRECTOR AND PER TOWN REGULATIONS.
- N. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS. AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE
- O. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO

GRADING NOTES

- 1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
- 2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
- 3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.

DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.

- 5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEERS RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
- 6. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
- 7. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
- 8. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
- 9. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
- 10. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS AND LOADING
- 11. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THAN 1/4" FOR A PERIOD OF MORE THEN 15 MINUTES AFTER FLOODING.
- 12. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
- 13. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE 1/4" WITH A TOLERANCE OF 1/8".
- 14. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
- 15. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
- 16. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE
- 17. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- 18. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- 19. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND MULCH.

20. DENSITY REQUIREMENTS:

90%

MINIMUM DENSITY* 95% BELOW PAVED OR CONCRETE AREAS 95% TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL

BELOW LOAM AND SEED AREAS *ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM D-6938.

UTILITY NOTES

- 1. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
- 3. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION
- 4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 5. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
- 6. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPFRATIONAL
- 7. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
- 8. ON-SITE WATER DISTRIBUTION SHALL BE TO THE TOWN OF HUDSON AND LONDONDERRY STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, ENCASE THE SANITARY LINE IN 6" THICK CONCRETE FOR A DISTANCE OF 10' FITHER SIDE OF THE CROSSING, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHEN SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 3' HORIZONTALLY TO THE
- 9. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE. ALL THRUST BLOCKS SHALL BE
- 10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
- 11. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
- 12. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE
- 13. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT AND GRANULAR BASE THICKNESS TO MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.
- 14. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
- 15. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING: DRAINAGE PRIVATE

PRIVATE WATER PRIVATE GAS ELECTRIC

LIBERTY UTILITIES **EVERSOURCE** CONSOLIDATED COMMUNICATIONS COMCAST

SITE DEVELOPMENT PLANS TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

NOTES & LEGEMD

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH)

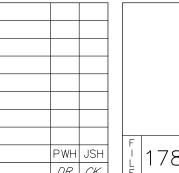
OWNED BY

MAL-MAR. LLC

PREPARED FOR

OF NEW HAMPSHIRE

SCALE: NTS



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JULY 26, 2021

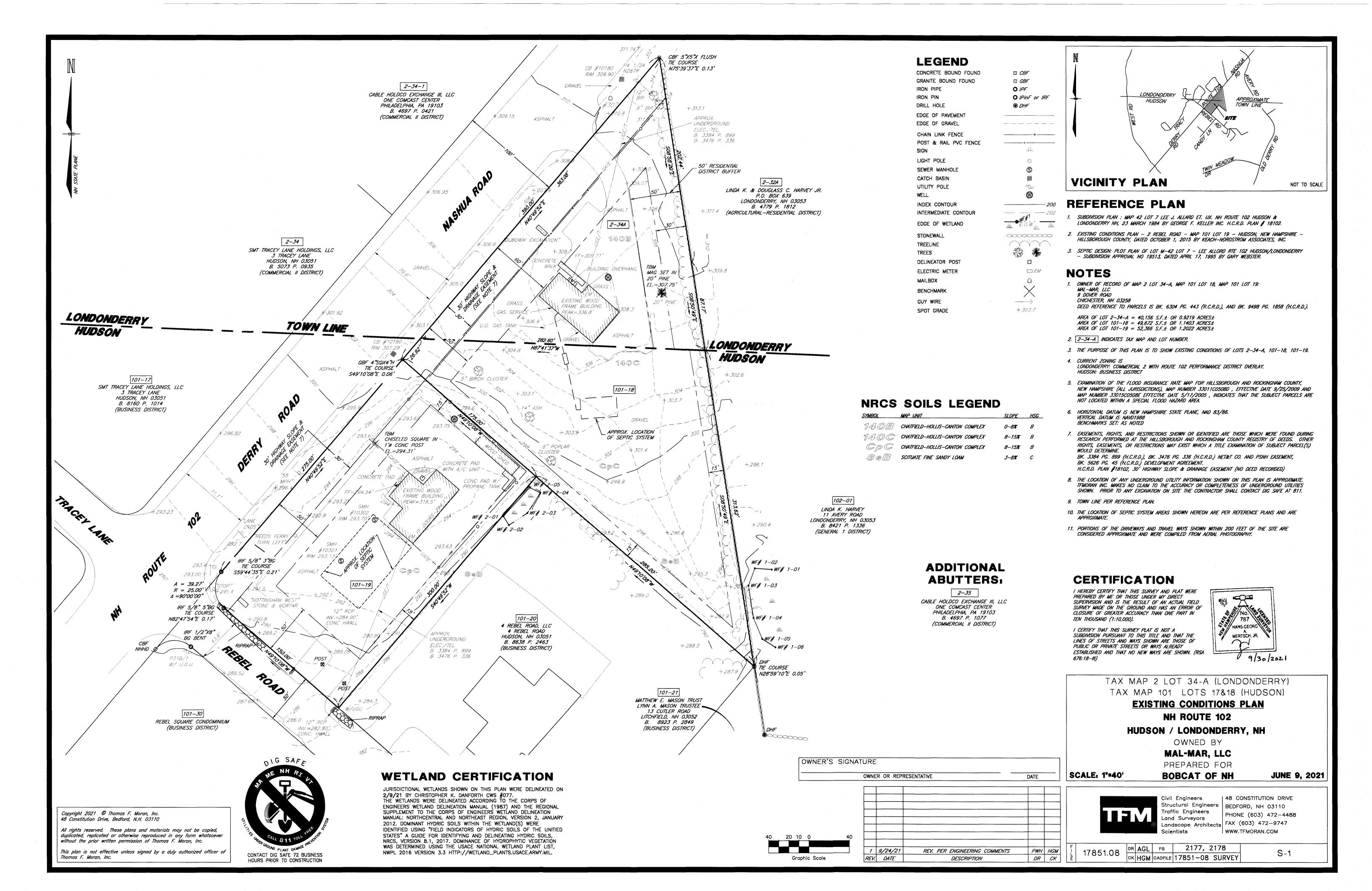
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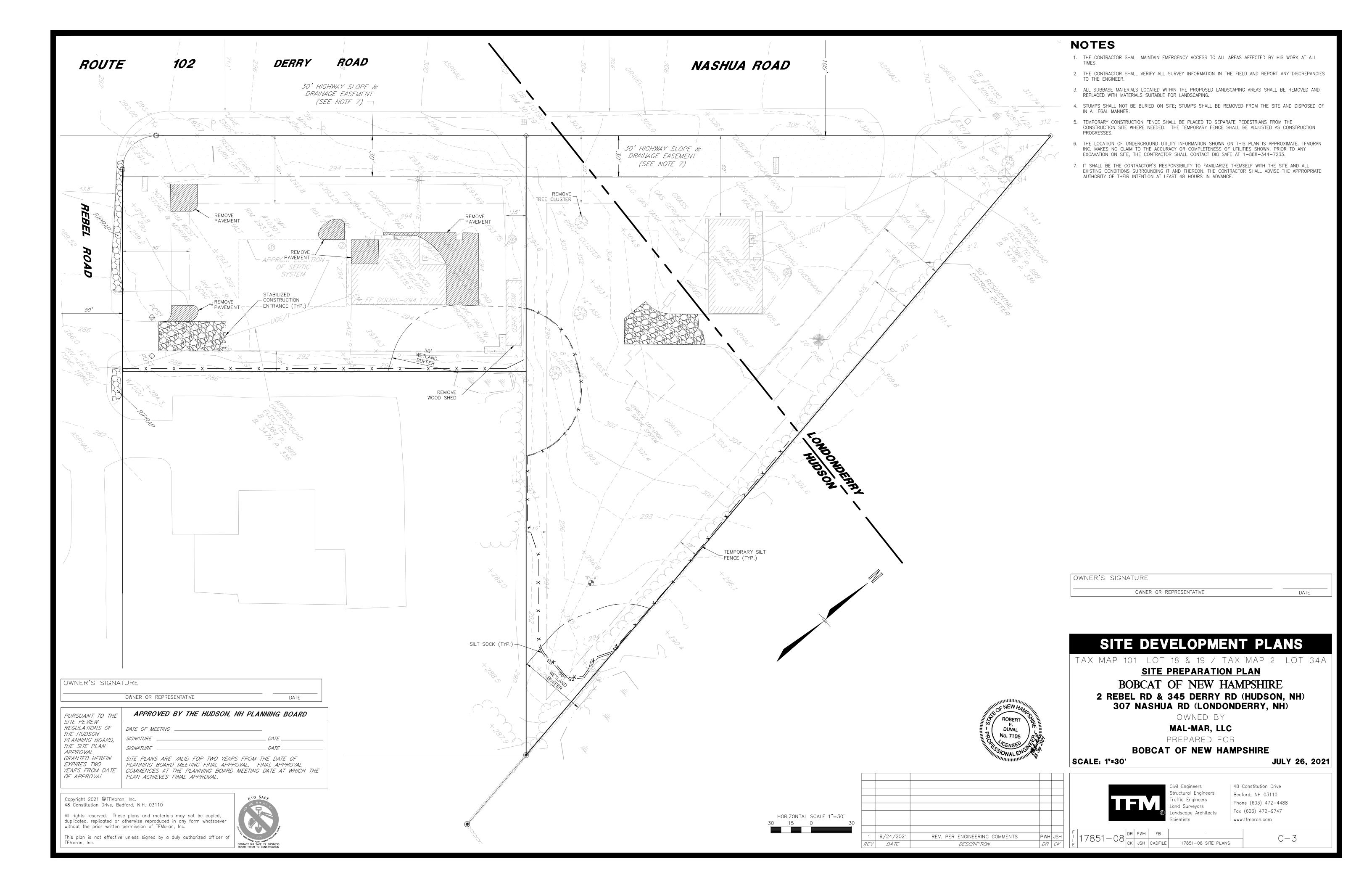


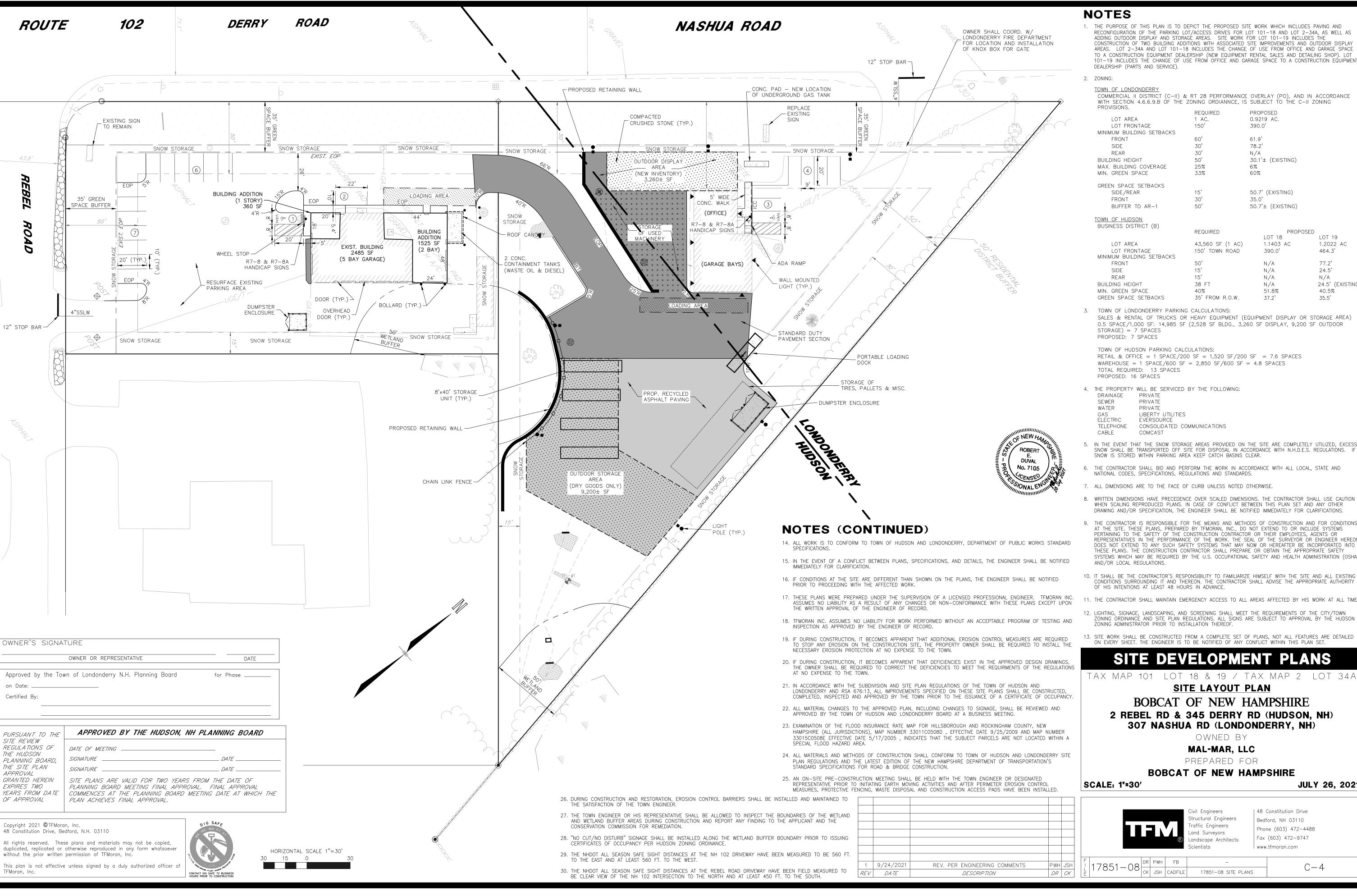
THE APPROVED PLANS AND SPECIFICATIONS.

1 9/24/2021 REV. PER ENGINEERING COMMENTS REV DATE DESCRIPTION DR CK

DATE







1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED SITE WORK WHICH INCLUDES PAVING AND RECONFIGURATION OF THE PARKING LOT/ACCESS DRIVES FOR LOT 101-18 AND LOT 2-34A, AS WELL AS ADDING OUTDOOR DISPLAY AND STORAGE AREAS. SITE WORK FOR LOT 101-19 INCLUDES THE CONSTRUCTION OF TWO BUILDING ADDITIONS WITH ASSOCIATED SITE IMPROVEMENTS AND OUTDOOR DISPLAY AREAS. LOT 2-34A AND LOT 101-18 INCLUDES THE CHANGE OF USE FROM OFFICE AND GARAGE SPACE TO A CONSTRUCTION EQUIPMENT DEALERSHIP (NEW EQUIPMENT RENTAL SALES AND DETAILING SHOP). LOT 101-19 INCLUDES THE CHANGE OF USE FROM OFFICE AND GARAGE SPACE TO A CONSTRUCTION EQUIPMENT

COMMERCIAL II DISTRICT (C-II) & RT 28 PERFORMANCE OVERLAY (PO), AND IN ACCORDANCE WITH SECTION 4.6.6.9.B OF THE ZONING ORDIANNCE, IS SUBJECT TO THE C-II ZONING

LOT AREA	1 AC.	0.9219 AC.	
LOT FRONTAGE	150'	390.0'	
MINIMUM BUILDING SETBACKS			
FRONT	60'	61.9'	
SIDE	30'	78.2'	
REAR	30'	N/A	
BUILDING HEIGHT	50'	30.1'± (EXISTING)	
MAX. BUILDING COVERAGE	25%	6%	
MIN. GREEN SPACE	33%	60%	
GREEN SPACE SETBACKS			
CIDE /BEAR	15'	50 7' (EXISTINIC)	

LOT 18 LOT 19 1.1403 AC 1.2022 AC 390.0' 464.3' 77.2 N/A 24.5 N/A N/A N/A N/A 24.5' (EXISTING) 51.8% 40.5%

35.5'

JULY 26, 2021

SALES & RENTAL OF TRUCKS OR HEAVY EQUIPMENT (EQUIPMENT DISPLAY OR STORAGE AREA) 0.5 SPACE/1,000 SF: 14,985 SF (2,528 SF BLDG., 3,260 SF DISPLAY, 9,200 SF OUTDOOR

RETAIL & OFFICE = 1 SPACE/200 SF = 1,520 SF/200 SF = 7.6 SPACES WAREHOUSE = 1 SPACE/600 SF = 2,850 SF/600 SF = 4.8 SPACES

5. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH N.H.D.E.S. REGULATIONS. IF

- 6. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE AND
- 8. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER
- 9. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY
- 11. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
- 12. LIGHTING, SIGNAGE, LANDSCAPING, AND SCREENING SHALL MEET THE REQUIREMENTS OF THE CITY/TOWN ZONING ORDINANCE AND SITE PLAN REGULATIONS. ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON
- ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.

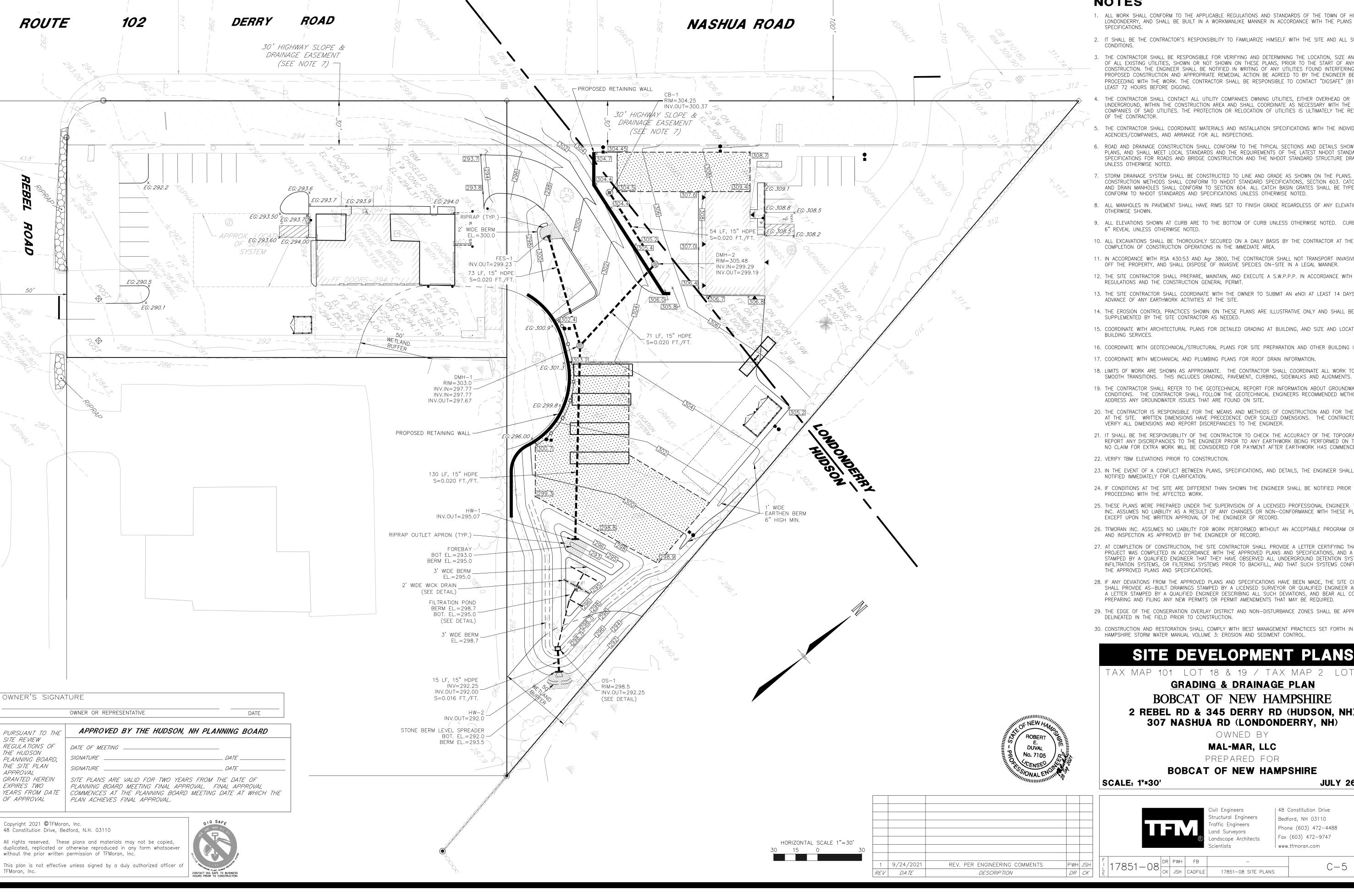
SITE DEVELOPMENT PLANS

TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH)

BOBCAT OF NEW HAMPSHIRE

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NOTES

- 1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF HUDSON AND LONDONDERRY, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY
- 5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY
- 6. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS
- 7. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- 8. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS
- 9. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A
- 10. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE
- 11. IN ACCORDANCE WITH RSA 430:53 AND Agr 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES
- 12. THE SITE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA
- 13. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN
- 14. THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE
- 15. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL
- 16. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
- 18. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE
- 19. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEERS RECOMMENDED METHODS TO
- 20. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
- 21. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
- 23. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE
- 24. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN THE ENGINEER SHALL BE NOTIFIED PRIOR TO
- 25. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
- 26. TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING
- 27. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO
- 28. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
- 29. THE EDGE OF THE CONSERVATION OVERLAY DISTRICT AND NON-DISTURBANCE ZONES SHALL BE APPROPRIATELY
- 30. CONSTRUCTION AND RESTORATION SHALL COMPLY WITH BEST MANAGEMENT PRACTICES SET FORTH IN NEW

SITE DEVELOPMENT PLANS

TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

GRADING & DRAINAGE PLAN

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH)

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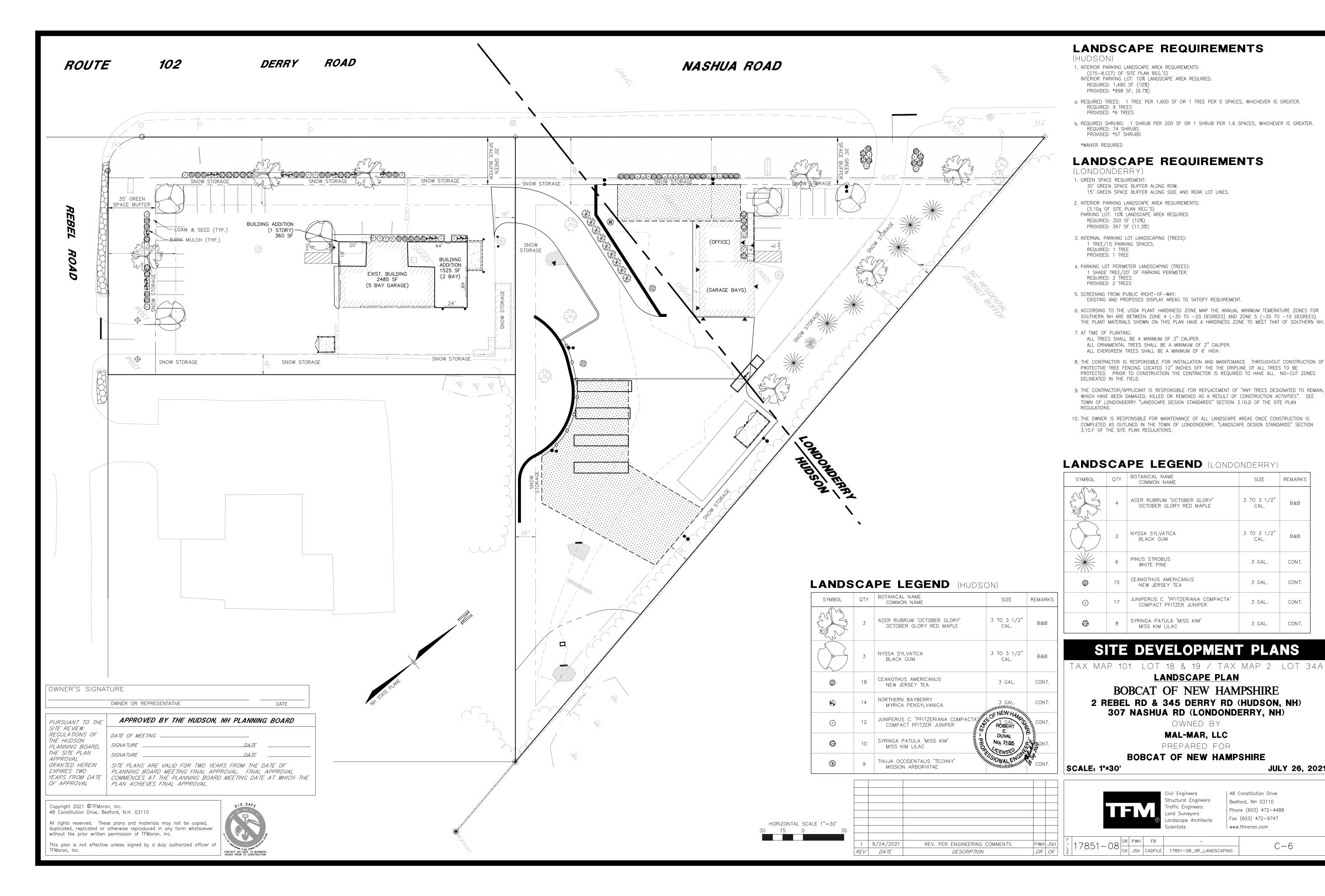
PREPARED FOR

BOBCAT OF NEW HAMPSHIRE

Structural Engineers Traffic Engineers and Surveyors Landscape Architects | 48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com

JULY 26, 2021

17851-08 SITE PLANS



SIZE REMARKS

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JULY 26, 2021

C-6

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3 TO 3 1/2"

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3 GAL.

3 GAL.

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ROAD **CONSTRUCTION GENERAL PERMIT DERRY** ROUTE NASHUA ROAD THE OWNER, IN CONJUNCTION WITH THE CONTRACTOR (OPERATORS), MUST OBTAIN A CONSTRUCTION GENERAL PERMIT (CGP) FOR LARGE CONSTRUCTION ACTIVITIES (FIVE OR MORE ACRES) OR SMALL CONSTRUCTION ACTIVITIES (GREATER THAN ONE ACRE BUT LESS THAN FIVE ACRES) FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA). AS PART OF THE CGP, A STORMWATER NOTICE OF INTENT (NOI) MUST BE SUBMITTED TO THE EPA AT LEAST 7 DAYS PRIOR TO COMMENCING CONSTRUCTION. THE NOI MUST BE SUBMITTED TO STORM WATER NOTICE OF INTENT (4203M), USEPA, 1200 PENNSYLVANIA AVE. NW, WASHINGTON, DC 20460. THE CGP OUTLINES A SET OF PROVISIONS MANDATING THE OWNER AND CONTRACTOR TO COMPLY WITH THE - PROPOSED RETAINING WALL REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER REGULATIONS, INCLUDING, BUT NOT LIMITED TO, STORM WATER POLLUTION PREVENTION PLANS (SWPPP'S) RIM=304.25 IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROLS, EQUIPMENT MAINTENANCE GUIDELINES, ETC. INV.OUT=300.37 PLEASE CONTACT USEPA OFFICE OF WASTEWATER MANAGEMENT AT 202-564-9545 OR AT WWW.EPA.GOV/NPDES/STORMWATER FOR ADDITIONAL INFORMATION. FOR FURTHER ASSISTANCE, CONTACT ABBY SWAINE OF NEW ENGLAND'S EPA REGION 1 AT 617-918-1841. DAM (TYP.) CATCH BASIN INLET PROTECTION **NOTES** THIS PROJECT INCLUDES PAVING AND RECONFIGURATION OF THE PARKING LOT/ACCESS DRIVES FOR LOT 101-18 AS WELL AS ADDING OUTDOOR DISPAY AND STORAGE AREAS. SITE WORK FOR LOT 101-19 INCLUDES THE CONSTRUCTION OF TWO BUILDING ADDITIONS WITH ASSOCIATED SITE IMPROVEMENTS AND OUTDOOR DISPLAY AREAS. TOTAL AREA OF DISTURBANCE: 1.27± AC **BUILDING ADDITION** SOILS SHOWN ARE FROM THE SOIL SURVEY OF HILLSBOROUGH COUNTY, NH, EASTERN PART, G: 293.7 EG: 293.9 (1 STORY) EG: 294.0 PREPARED BY USDA-SOIL CONSERVATION SERVICES. 140B - CHATFIELD-HOLLIS CANTON COMPLEX (OFFICE) 140C - CHATFIELD-HOLLIS CANTON COMPLEX EG: 293.50 RIPRAP (TYP CpC - CHATFIELD-HOLLIS CANTON COMPLEX SsB - SCITUATE FINE SANDY LOAM WIDE BERM EL = 300.0STORM WATER DRAINAGE SYSTEM IS SHOWN ON THE PLAN. SEE GRADING & DRAINAGE PLAN FOR RIM, EG: 293.60 ^ EG: 294.00 ADDITION S=0.020 FT./F INVERT, PIPE LENGTH, AND SLOPE INFORMATION. **EQUIPMENT** 1525 SF EXIST. BUILDING POST-CONSTRUCTION RUNOFF COEFFICIENT: C=0.80 STORAGE (2 BAY) 2485 SF IMPERVIOUS SURFACE AREA: 1.35± AC RIM = 305.48(5 BAY GARAGE) INV.OUT=299.23 $\sqrt{\text{INV.IN}} = 299.29$ STABILIZATION PRACTICES FOR EROSION AND SEDIMENTATION CONTROLS: 73 LF, 15" HDPE INV.OUT=299.19 STABILIZED TEMPORARY STABILIZATION - TOPSOIL STOCKPILES AND DISTURBED AREAS OF THE CONSTRUCTION SITE CONSTRUCTION S=0.020 FT./FT. EG: 290.5 THAT WILL NOT BE REDISTURBED FOR 30 DAYS OR MORE MUST BE STABILIZED BY THE 5TH DAY AFTER ENTRANCE (TYP.) THE LAST DISTURBANCE. THE TEMPORARY SEED SHALL BE ANNUAL RYE APPLIED AT THE RATE OF 1.1 LBS PER 1,000 SF. PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY. AREAS OF THE SITE THAT WILL BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING EXCESS MATERIAL STORAGE AREA GEOTEXTILES AND A STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED. CALCIUM CHLORIDE SHALL BE USED FOR DUST CONTROL IF NEEDED. PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES S=0.020 FT./FT. PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 3 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL BE AS SPECIFIED BY THE LANDSCAPE PLAN NOTES OR MAY OTHERWISE CONSIST OF 0.45 LBS/1,000 SF TALL FESCUE, 0.20 LBS/1,000 SF CREEPING RED FESCUE, AND 0.20 LBS/1,000 SF BIRDSFOOT TREFOIL. PRIOR TO SEEDING, A MINIMUM OF 2 ⁻286- — — -TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE IF 10-20-20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY. $RIM = 303.0^{-3}$ INV.IN=297.77 STRUCTURAL PRACTICES FOR EROSION AND SEDIMENTATION CONTROL INV.IN=297.77 INV.OUT=297.67 SILT SOCK - WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE DISTURBED AREAS AND WILL DELINEATE THE LIMITS OF WORK FOR THE PROPOSED CONSTRUCTION. THE SILT SOCK WILL BE INSTALLED - AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB; BY OTHERS. POSTS SHALL BE USED WITH AT LEAST 6" OF THE POST BURIED BELOW THE GROUND - ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE SURFACE TO PREVENT THE SILT SOCK FROM FORMING GAPS NEAR THE GROUND SURFACE. RUNOFF WILL CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE; FLOW THROUGH THE OPENINGS IN THE SILT SOCK WHILE RETAINING THE SEDIMENT WITHIN THE - PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL; PROPOSED RETAINING WALL -CONSTRUCTION AREA. - SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER; - WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER; SILT FENCE - WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE DISTURBED AREAS AND WILL - MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED; DELINEATE THE LIMITS OF WORK FOR THE PROPOSED CONSTRUCTION. THE SILT FENCE WILL BE INSTALLED - TRASH DUMPSTERS SHALL BE GASKETED OR HAVE A SECURE WATERTIGHT LID AND BE PLACED AWAY BY STRETCHING REINFORCED FILTER FABRIC BETWEEN POSTS WITH AT LEAST 8" OF THE FABRIC BURIED FROM STORMWATER CONVEYANCES AND DRAINS. BELOW THE GROUND SURFACE TO PREVENT GAPS FROM FORMING NEAR THE GROUND SURFACE. RUNOFF - THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS WILL FLOW THROUGH THE OPENINGS IN THE FILTER FABRIC WHILE RETAINING THE SEDIMENT WITHIN THE 130 LF, 15" HDPE S=0.020 FT./FT. STABILIZED CONSTRUCTION ENTRANCE - WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL AT THE THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS: ENTRANCE TO THE CONSTRUCTION SITE TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS OFF THE SITE. - PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE; HORIZONTAL SCALE 1"=30" THE STABILIZED ENTRANCE WILL BE 20'-WIDE AND FLARE AT THE ENTRANCE TO THE PAVED ROAD AND - ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT HAVE A DEPTH OF 12" OF STONE. THE STABILIZED ENTRANCE SHALL BE MAINTAINED UNTIL THE REMAINDER HW-1 OF THE CONSTRUCTION SITE HAS BEEN FULLY STABILIZED. THE PAVED STREET ADJACENT TO THE SITE - IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED -EARTHEN BERM INV.OUT=295.07 SHALL BE SWEPT ON A WEEKLY BASIS TO REMOVE EXCESS MUD AND DIRT FROM BEING TRACKED FROM THE SITE. TRUCKS HAULING MATERIAL TO AND/OR FROM THE SITE SHALL BE COVERED WITH A TARPAULIN RIPRAP OUTLET APRON (TYP.) -CATCH BASINS - WILL BE CLEANED ON AN ANNUAL BASIS TO REMOVE ALL SEDIMENTS FROM THE CATCH THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE: OWNER'S SIGNATURE FORFBAY CATCH BASIN PROTECTION - WILL BE INSTALLED AT ALL CATCH BASINS WITHIN THE CONSTRUCTION AREA. BOT EL.=293.0 — TEMPORARY SILT ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE OWNER OR REPRESENTATIVE DATE FILTER FABRIC WILL BE INSTALLED AROUND THE GRATES OF CATCH BASINS THAT ARE LOCATED IN THE FENCE (TYP.) MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN BERM EL.=295.0 TRAVEL WAY AND STONE/FILTER FABRIC PROTECTION WILL BE INSTALLED AT THE CATCH BASINS FOUND TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE 3' WIDE BERM_ WITHIN THE PARKING AREA AND GRASS. WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. APPROVED BY THE HUDSON, NH PLANNING BOARD PURSUANT TO THE EL.=295.0SITE REVIEW BLANKET SLOPE PROTECTION - SHALL BE INSTALLED ON ALL 2:1 SLOPES OR STEEPER ON SITE. ANCHOR FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE 2' WIDE WICK DRAIN REGULATIONS OF THE TOP OF THE BLANKET BY ANCHORING THE BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT (SEE DETAIL) TRENCH AFTER STAPLING. ROLL THE BLANKET IN THE DIRECTION OF STORM WATER FLOW. WHERE 2 OR MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO THE HUDSON FILTRATION POND MORE STRIPS OF BLANKET ARE REQUIRED, A MINIMUM OF 4" OF OVERLAP SHALL BE PROVIDED. STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS PLANNING BOARD, OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS. BERM EL.=298.7 THE SITE PLAN STONE CHECK DAMS - WILL BE INSTALLED IN EXISTING AND PROPOSED GRASS SWALES TO REDUCE THE BOT. EL.=295.0 APPROVAL VELOCITY OF CONCENTRATED STORM WATER FLOWS AND PREVENT EROSION OF THE SWALE. (SEE DETAIL) GRANTED HEREIN SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT EXPIRES TWO PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL WILL NOT BE DISCHARGED TO THE STORM SEWER BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO 3' WIDE BERM YEARS FROM DATE | COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS. EL = 298.7OF APPROVAL PLAN ACHIEVES FINAL APPROVAL. STORM WATER DRAINAGE FOR DEVELOPED AREAS WILL BE COLLECTED BY A PIPE AND CATCH BASIN CLOSED DRAINAGE SYSTEM. APPROXIMATELY 1.07 ACRES OF THE 2.342 ACRE SITE WILL REMAIN SILT SOCK (TYP.) -UNTOUCHED AND IN ITS NATURAL STATE. WHEN CONSTRUCTION IS COMPLETE THE MAJORITY OF THE SITE EXCESS CONCRETE SHALL BE USED IN AREAS DESIGNATED BY THE SITE CONTRACTOR. WASH WATER WILL DRAIN TO ONE FILTRATION BASIN SYSTEM FOR STORMWATER RUN OFF TREATMENT. SHALL BE DISPOSED OF USING BEST MANAGEMENT PRACTICES. BUILDING CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DRUM WASH WATER ASSOCIATED WITH CONCRETE FOR THE BUILDING PAD. SITE SITE DEVELOPMENT PLANS ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURE CONTRACTOR TO COORDINATE AND PROVIDE BUILDING CONTRACTOR WITH AN AREA FOR DRUM WASH DUMPSTERS OR APPROVED ENCLOSURE AND REMOVED FROM THE SITE ON A WEEKLY BASIS. NO 15 LF, 15" HDPE CONSTRUCTION WASTE SHALL BE BURIED ON SITE. PORTABLE TOILET SANITARY WASTE FACILITIES WILL BE INV = 292.25RIM = 298.5TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A SPILL CONTROL PRACTICES: IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PROVIDED DURING CONSTRUCTION AND MAINTAINED/DISPOSED OF ON A REGULAR BASIS IN ACCORDANCE INV.OUT=292.00 ¬INV.0UT=292.25 WITH TOWN AND STATE REGULATIONS. S=0.016 FT./FT. (SEE DETAIL) STORMWATER MANAGEMENT PLAN PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION THRUST BLOCK SHALL BE PROVIDED WHERE WATER LINE CHANGES DIRECTION OR TAPS INTO EXISTING AND CLEANUP: BOBCAT OF NEW HAMPSHIRE - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE INV.OUT=292.0 PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND A LIST OF CONSTRUCTION ITEMS AND OTHER PRODUCTS USED ON THIS PROJECT SHALL BE KEPT ON CLEANUP SUPPLIES. 2 REBEL RD & 345 DERRY RD (HUDSON, NH) STONE BERM LEVEL SPREADER RECORD WITH THIS PLAN ONSITE. ALL CHEMICALS, PETROLEUM PRODUCTS AND OTHER MATERIALS USED - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE BOT. EL.=292.C 307 NASHUA RD (LONDONDERRY, NH) DURING CONSTRUCTION SHALL BE STORED IN A SECURE AREA, AND PRECAUTIONS USED TO PREVENT AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, BERM EL.=293.5 MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH POTENTIAL SOURCES OF CONTAMINATION OR POLLUTION. ANY SPILL OF THESE TYPES OF SUBSTANCES SHALL BE CLEANED UP AND DISPOSED OF IN A LEGAL MANNER AS SPECIFIED BY STATE REGULATIONS AND CONTAINERS SPECIFICALLY FOR THIS PURPOSE. OWNED BY THE MANUFACTURER. ANY SPILL IN AMOUNTS EQUAL TO OR EXCEEDING REPORTABLE QUANTITY AS DEFINED - ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. BY THE EPA SHALL TAKE THE FOLLOWING STEPS: - THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE MAL-MAR, LLC - NOTIFY THE NATIONAL RESPONSE CENTER IMMEDIATELY AT (888) 424-8802; IN WASHINGTON, D.C., PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE - SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL CALL (202) 426-2675. PREPARED FOR GOVERNMENT AGENCY, REGARDLESS OF SIZE. WITHIN 14 DAYS, SUBMIT A WRITTEN DESCRIPTION OF THE RELEASE TO THE EPA REGIONAL OFFICE - THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF PROVIDING THE DATE AND CIRCUMSTANCES OF THE RELEASE AND THE STEPS TO BE TAKEN TO **BOBCAT OF NEW HAMPSHIRE** SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A PREVENT ANOTHER RELEASE DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED - MODIFY THE POLLUTION PREVENTION PLAN TO INCLUDE THE INFORMATION LISTED ABOVE | SCALE: 1"=30' JULY 26, 2021 - THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THEY WILL DESIGNATE AT LEAST THREE OTHER SITE NOTES: THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PERSONNEL WHO WILL EACH RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN 48 Constitution Drive THE APPLICANT SHALL COMPLY WITH ALL PROVISIONS OF THE TOWN OF THE OFFICE TRAILER ONSITE. HUDSON'S MS4 PERMIT, INCLUDING BUT NOT LIMITED TO ANNUAL tructural Engineers Bedford, NH 03110 REPORTING REQUIREMENTS, CONSTRUCTION SITE STORMWATER RUNOFF Copyright 2021 ©TFMoran, Inc. raffic Engineers 11. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN RECORDS OF CONSTRUCTION ACTIVITIES, INCLUDING DATES Phone (603) 472-4488 CONTROL, AND RECORD KEEPING REQUIREMENTS. 48 Constitution Drive, Bedford, N.H. 03110 and Surveyors OF MAJOR GRADING ACTIVITIES, DATES WHEN CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED ON A Fax (603) 472-9747 PORTION OF THE SITE, DATES WHEN WORK IS COMPLETED ON A PORTION OF THE SITE, AND DATES WHEN andscape Architects PERIODIC INSPECTIONS SHALL BE PERFORMED TO ENSURE NO VEHICLE All rights reserved. These plans and materials may not be copied, STABILIZATION MEASURES ARE INITIATED ONSITE. LEAKAGE. IF LEAKAGE IS OBSERVED, LEAKING EQUIPMENT AND SPILLS cientists www.tfmoran.com duplicated, replicated or otherwise reproduced in any form whatsoever

SHALL BE HANDLED PER STATE AND FEDERAL REGULATIONS.

1 9/24/202

REV DATE

REV. PER ENGINEERING COMMENTS

DESCRIPTION

DR PWH FB

17851-08 SITE PLANS

DR CK

12. THE CONTRACTOR SHALL PERFORM INSPECTIONS OR HAVE A CONSULTING ENGINEER PERFORM INSPECTIONS

REPORTS ARE TO BE KEPT ON FILE AT THE SITE WITH THIS PLAN. MAINTENANCE OR MODIFICATION SHALL

EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS AFTER A STORM OF 0.5" OR GREATER. INSPECTIONS

BE IMPLEMENTED AND ADDED TO THE PLAN AS RECOMMENDED BY THE QUALIFIED INSPECTOR.

without the prior written permission of TFMoran, Inc.

This plan is not effective unless signed by a duly authorized officer of

CONSTRUCTION SEQUENCE NOTES

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 2. CUT AND CLEAR TREES WITHIN AREA OF DISTURBANCE UNLESS OTHERWISE NOTED.
- 3. CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES PRIOR TO ANY EARTH MOVING OPERATION.
- 4. DEMOLISH EXISTING STRUCTURES (IF ANY).
- 5. CONSTRUCT CULVERTS, DETENTION BASINS AND TREATMENT SWALES. PLACE HEADWALLS, RIP-RAP AND OTHER DRAINAGE FACILITIES ACCORDING TO PLAN. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS/BASINS PRIOR TO DIRECTING FLOW TO THEM. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPS ARE STABILIZED.
- 6. ROUGH GRADE SITE OR PHASED WORK AREA. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72 HOURS AFTER CONSTRUCTION ACTIVITY CEASES. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21 DAYS, THE AREA SHALL BE STABILIZED. IN NO CASE SHALL UNSTABILIZED SOIL BE EXPOSED FOR GREATER THAN 45 DAYS.
- AN AREA SHALL BE CONSIDERED STABILIZED IF:
- A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
- B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 7. INSTALL ALL UNDERGROUND UTILITIES.
- 8. CONSTRUCT BUILDINGS.
- 9. CONSTRUCT PARKING AND FINISH GRADE SITE ACCORDING TO PLAN. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- 10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES WEEKLY AND IMMEDIATELY AFTER 0.5" OR GREATER RAINFALL STORM EVENTS.
- 11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 12. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED WITH A SUITABLE STAND OF GRASS, PAVEMENT OR COMPACTED GRAVELS.
- * REFER TO THE STORM WATER MANAGEMENT PLAN FOR EROSION CONTROL MEASURES AND SPECIFIC INFORMATION.

GENERAL NOTES

- 1. ALL IN PAVEMENT MANHOLES SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
- 2. WHERE DEPTH OF COVER IS LESS THAN 3 FEET CLASS V REINFORCED CONCRETE PIPE SHALL BE USED.
- 3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
- 5. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- 6. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN
- ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THESE DETAILS SERVE AS A GUIDE ONLY.
- 7. REFER TO THE TOWN STANDARD DETAILS, LATEST REVISION, FOR ADDITIONAL INFORMATION AND CRITERIA.
- 8. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING FLOW TO THEM. 9. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5

WINTER CONSTRUCTION

ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

IN ADDITION TO THE OTHER NOTES CONTAINED ON THIS PLAN, THE FOLLOWING MUST BE IMPLEMENTED:

- WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED AS SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- 2. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE
- . TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.
- AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THE SAME DAY.
- IN THE EVENT OF A SNOWFALL GREATER THAN 1 INCH (FRESH OR CUMULATIVE). THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.
- 6. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.
- 7. A DITCH THAT WILL BE CONSTRUCTED DURING THE WINTER MUST BE STABILIZED WITH RIPRAP.

OVERWINTER STABILIZATION

- PERMANENT STABILIZATION CONSISTS OF AT LEAST 85% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.
- ALL PROPOSED VEGETATED AREAS THAT DO NO EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE, THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- 3. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OR 3 INCHES OF CRUSHED GRAVEL PER NHDOT
- . DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.
- . APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.
- USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR MIX FOR ALL SLOPES GREATER THAN 8% OR OTHER AREAS EXPOSED TO DIRECT WIND.
- 8. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGE WAYS (BOTTOM AND SIDES) WITH A SLOPE
- 9. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

EROSION CONTROL NOTES

- DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED: 1. INSTALLATION OF SILTATION FENCES AND OTHER EROSION CONTROL MEASURES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILTATION FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- 2. SILTATION FENCES AND OTHER EROSION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A VEGETATIVE COVER OF GREATER THAN 85%. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.
- 3. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
- 4. THE AREA OF LAND EXPOSED AND THE TIME OF EXPOSURE SHALL BE MINIMIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.

5. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM. ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

- <u>TYPICAL LAWN MIX (MIN. 200 LBS/ACRE):</u>
 - 33% CREEPING RED FESCUE (MIN. 66 LBS/ACRE) 42% PERENNIAL RYEGRASS (MIN. 84 LBS/ACRE) 21% KENTUCKY BLUEGRASS (MIN. 42 LBS/ACRE) (MIN. 8 LBS/ACRE)
 - TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)

WILDFLOWER SLOPE (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 160 LBS/ACRE):

32% PERENNIAL RYEGRASS (MIN. 51 LBS/ACRE) 5% REDTOP (MIN. 8 LBS/ACRE) 5% ALSIKE CLOVER (MIN. 8 LBS/ACRE` 5% BIRDSFOOT TREFOIL (MIN. 8 LBS/ACRE) 3% LANCE-LEAF COREOPSIS (MIN. 3 LBS/ACRE) 3% OXEYE DAISY (MIN. 3 LBS/ACRE) 3% BUTTERFLY WEED (MIN. 3 LBS/ACRE) 3% BLACKEYED SUSAN (MIN. 3 LBS/ACRE) (MIN. 3 LBS/ACRE) 3% WILD LUPINE

38% CREEPING RED FESCUE (MIN. 60 LBS/ACRE)

GENERAL SLOPE (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 160 LBS/ACRE):

44% CREEPING RED FESCUE (MIN. 70 LBS/ACRE) 38% PERENNIAL RYEGRASS (MIN. 60 LBS/ACRE) 6% REDTOP (MIN. 10 LBS/ACRE) 6% ALSIKE CLOVER (MIN. 10 LBS/ACRE) 6% BIRDSFOOT TREFOIL (MIN. 10 LBS/ACRE)

PLACING LOAM ON SITE

100% ANNUAL RYE

- a. ALL SUBGRADE ELEVATIONS SHOULD BE UNIFORMLY GRADED TO RECEIVE LOAM AND SHALL BE INSPECTED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO PLACEMENT OF LOAM.
- b. PLACE LOAM TO FORM A MINIMUM DEPTH OF 4" WHEN ROLLED, UNLESS OTHERWISE INDICATED. c. ALL DEPRESSIONS EXPOSED DURING THE ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM.
- AFTER FINISH GRADING AND JUST BEFORE SEEDING, THE AREAS TO BE SEEDED SHALL BE LOOSENED TO PROVIDE A ROUGH, FIRM BUT FINELY PULVERIZED SEEDBED. THE INTENT IS A TEXTURE CAPABLE OF RETAINING WATER, SEED AND FERTILIZER WHILE REMAINING STABLE AND ALLOWING SEED TIME TO GERMINATE. SEED SHALL BE APPLIED TO THE CONDITIONED SEEDBED NOT MORE THAN 48 HOURS AFTER THE SEEDBED HAS BEEN PREPARED.
- 6. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF AT THE TIME OF SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
- 7. HAY MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S
- 8. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS AREA NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
- 9. WATER SHALL BE USED FOR DUST CONTROL IN APPROPRIATE AREAS.

- 1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES AND INLETS.
- 2. PROTECT ALL STOCKPILES FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS DIVERSIONS, BERMS, SANDBAGS OR OTHER APPROVED PRACTICES.
- 3. STOCKPILES SHOULD BE SURROUNDED BY SEDIMENT BARRIERS, SUCH AS SILT FENCE OR SILT SOCK, TO
- PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.
- 4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL. 5. PLACE BAGGED MATERIALS ON PALLETS AND UNDER COVER.
- 6. INACTIVE STOCKPILES
- a. INACTIVE SOIL STOCKPILES SHOULD BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS AT ALL TIMES.
- b. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS AND OTHER SIMILAR MATERIALS SHOULD BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHOULD ALSO BE
- a. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH
- b. WHEN A STORM EVENT IS PREDICTED, STOCKPILES SHOULD BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

COMPOST FILLED SILT SOCK (12"-18" TYP.) 2"x 2" WOOD STAKE PLACED 10' O.C. FLOW - WORK AREA AREA TOP OF GROUND -1. SILT SOCK SHALL BE FILTREXXTM SILTSOXXTM OR APPROVED EQUIVALENT. 2. SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL

THE ENGINEER.

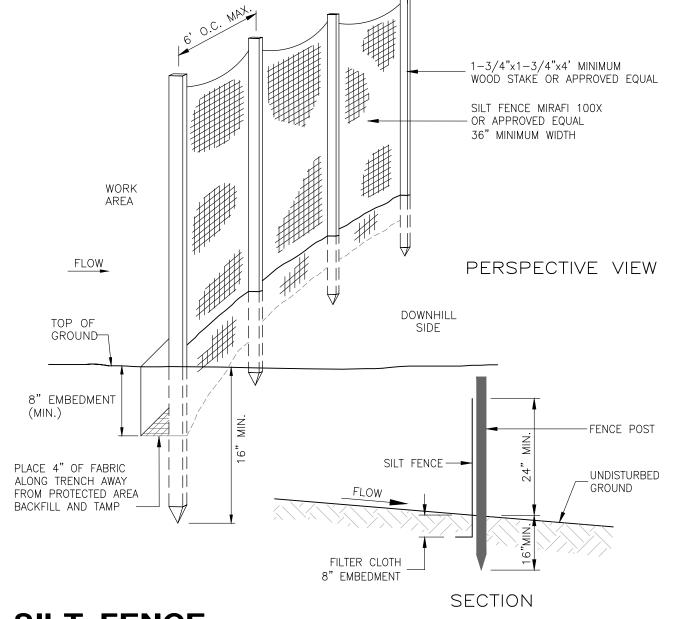
SILT SOCK

NOT TO SCALE

3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM

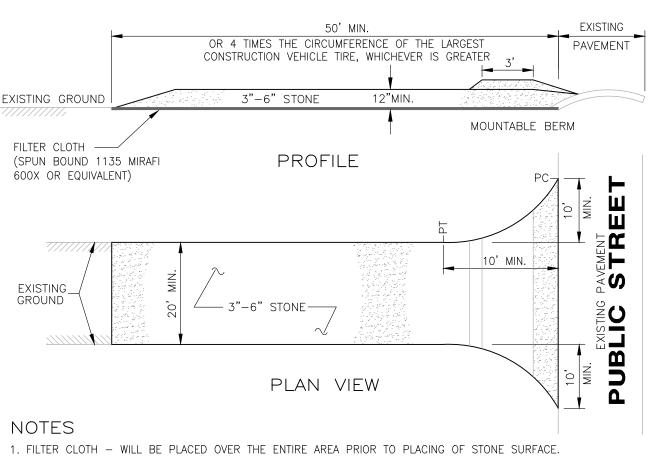
4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY

EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS



SILT FENCE

NOT TO SCALE

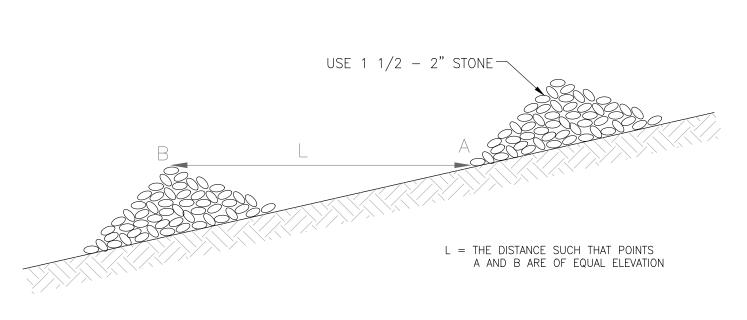


- 2. WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 3. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT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

USDA - SCS STABILIZED CONSTRUCTION ENTRANCE

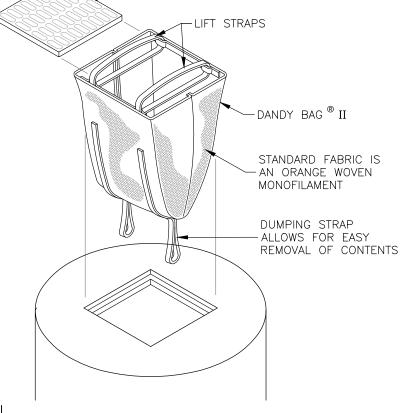
SEE PLAN FOR PROPOSED LOCATION

NOT TO SCALE



STONE CHECK DAM

NOT TO SCALE



INSTALLATION

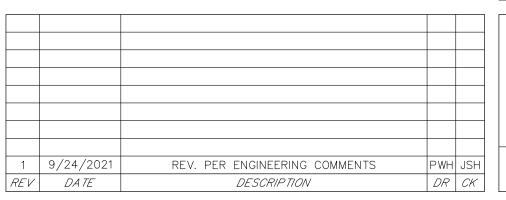
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY BAG® II SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

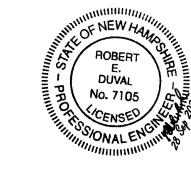
MAINTENANCE

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY BAG $^{\circledR}$ II. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT

DANDY BAG® II

NOT TO SCALE





TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A **DETAIL SHEET**

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH)

MAL-MAR, LLC

OWNED BY

PREPARED FOR **BOBCAT OF NEW HAMPSHIRE**

JULY 26, 2021 SCALE: AS SHOWN



ivil Engineers Structural Engineers Traffic Engineers Land Surveyors andscape Architects cientists

48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com

17851-08 ck jsh cadfile C-817851-08 DETAILS

48 Constitution Drive, Bedford, N.H. 03110

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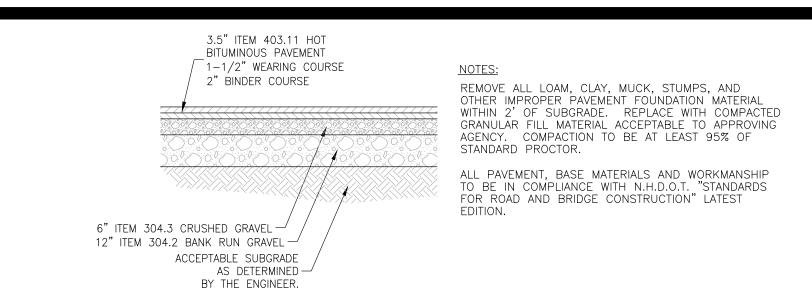
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN FROM DATE OF *APPROVAL*

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING _____

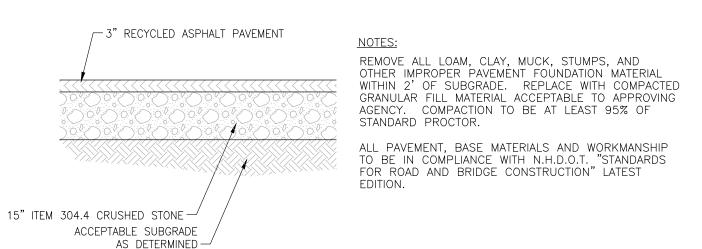
SIGNATURE _____

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



TYPICAL PAVEMENT SECTION

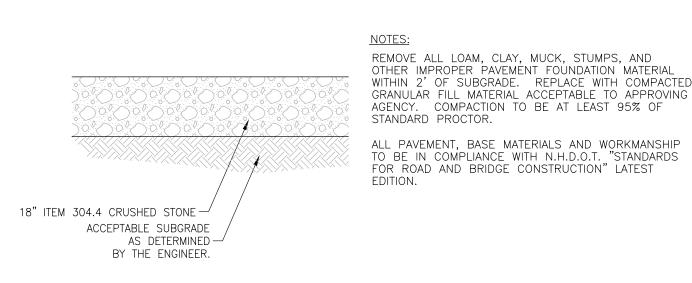
BY THE ENGINEER.



RECYCLED ASPHALT PAVEMENT SECTION

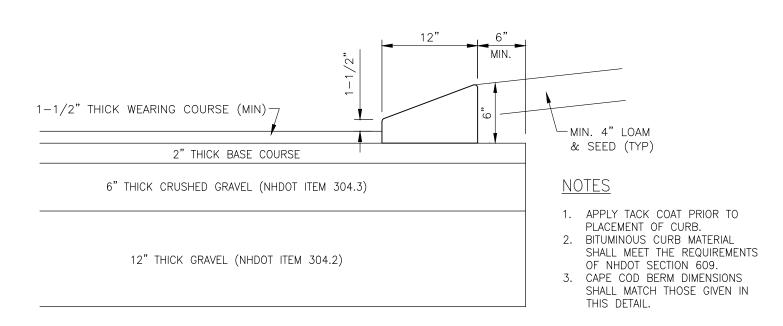
NOT TO SCALE

NOT TO SCALE



CRUSHED STONE SECTION

NOT TO SCALE



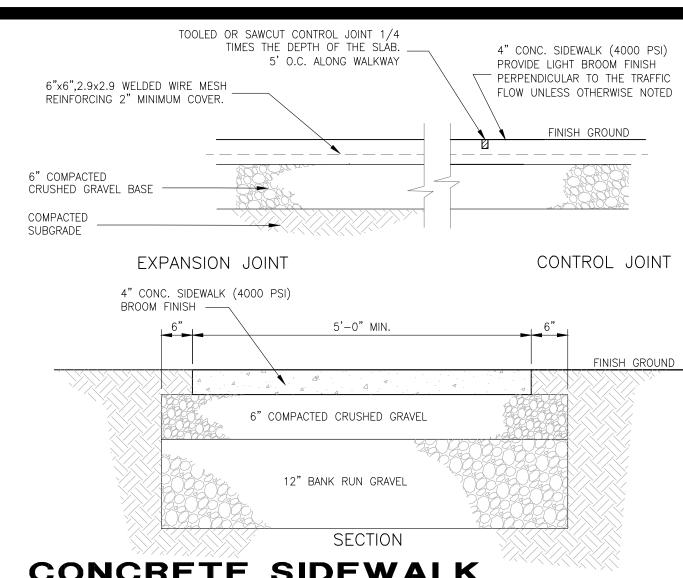
CAPE COD BERM

TOWN OF LONDONDERRY

NOT TO SCALE

PURSUANT TO THE	APPROVED BY THE HUDSON, NH PLANNING BOARD				
SITE REVIEW REGULATIONS OF THE HUDSON	DATE OF MEETING				
PLANNING BOARD,	SIGNATURE	DATE			
THE SITE PLAN APPROVAL	SIGNATURE	DATE			
GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL	BOARD MEETING FINAL APPROVA	E YEAR FROM THE DATE OF PLANNING L. FINAL APPROVAL COMMENCES AT DATE AT WHICH THE PLAN ACHIEVES			

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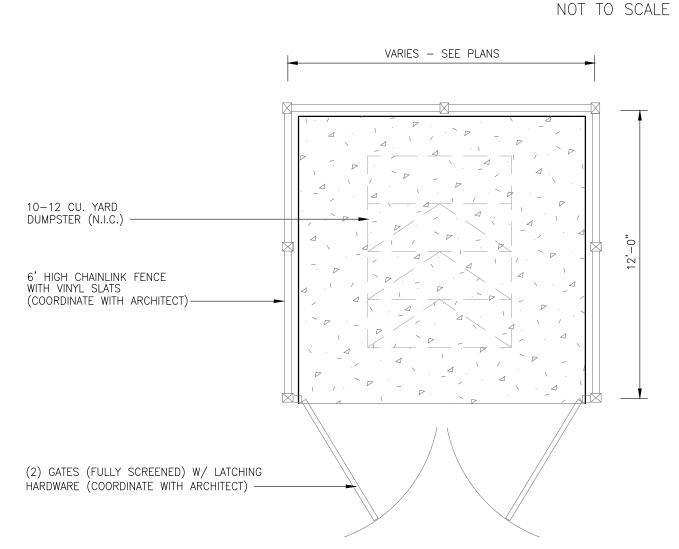
CONCRETE SIDEWALK

NOT TO SCALE 4000# CLASS B PORTLAND CEMENT CONCRETE PAVEMENT TOOLED EXPANSION JOINT TO BE PLACED 5' O.C. AND 1/2" THICK WIRE MESH REINFORCEMENT (MIN. SPACING 6"x6"-W2.9xW2.9) FABRIC EXPANSION JOINT 20' O.C. COMPACTED CRUSHED ASPHALT PAVEMENT GRAVEL CRUSHED GRAVEL ITEM 304.3 STANDARD PARKING LOT OR ROADWAY SECTION (SEE DETAIL) BANK RUN GRAVEL ITEM 304.2

CONCRETE CURB AT SIDEWALK

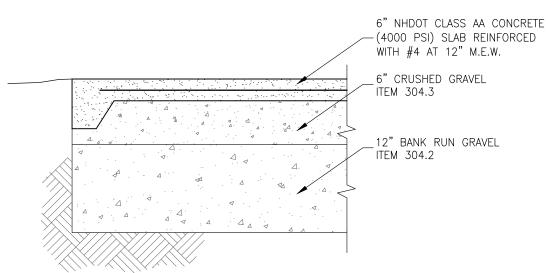
COMPACTED SUBGRADE

NOT TO SCALE



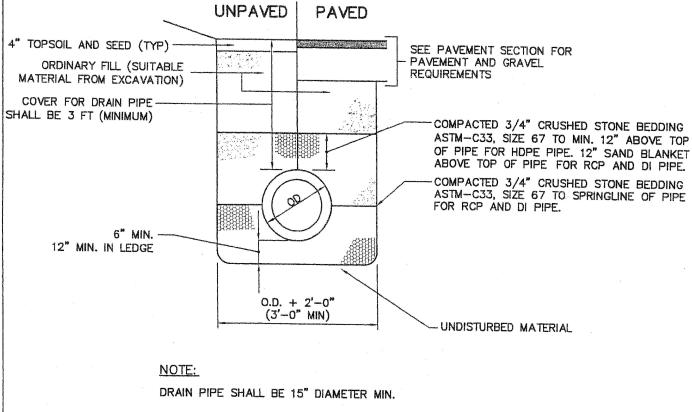
DUMPSTER ENCLOSURE - VINYL

SEE PLANS FOR LAYOUT



CONCRETE PAD

NOT TO SCALE DUMPSTER

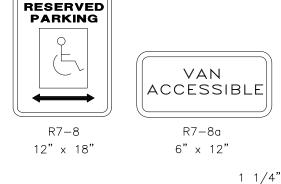


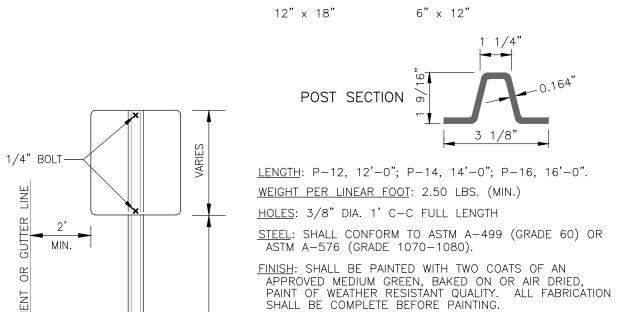
PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

DI DRAIN PIPE SHALL BE CL. 50.

RC DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE

TYPICAL DRAIN PIPE TRENCH NOT TO SCALE EXHIBIT D101





FINISH GRADE

1. POSTS SHALL BE PLUMB; ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.

2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH, AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NO TO EXCEED 6" DEEP THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.

3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS-SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.

4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.

5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIEMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

6. WHEN SIGN IS IN PLACE NO PART OF POST SHALL EXTEND ABOVE THE SIGN.

7. DIMENSIONS SHOWN ARE NOMINAL.

8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

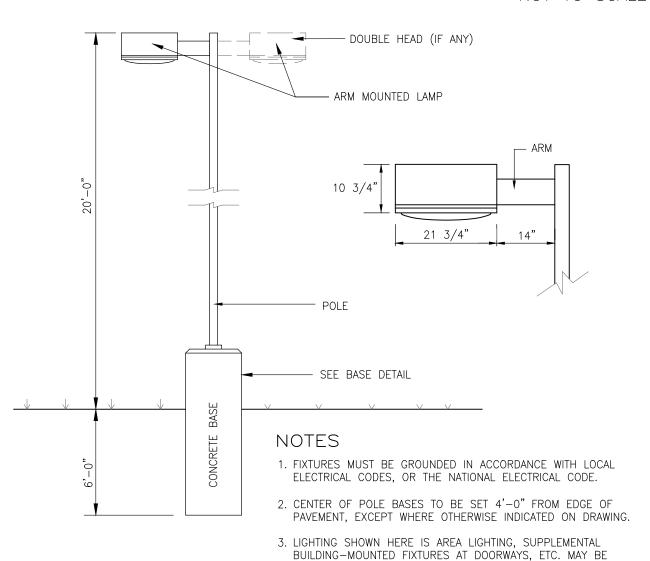
TRAFFIC SIGN POST IN GRADE

NOT TO SCALE

#6 BARE CU GND. HANDHOLE CONDUCTOR — ANCHOR BOLT COVER GROUND LUG FURNISHED FURNISHED WITH POLE WITH POLE --3/4" CHAMFER TERMINATE ALL CONDUIT ENTRIES IN A GROUNDING BUSHING 1" PVC SLEEVE FOR GROUNDING CONDUCTOR IN PAVED AREAS 0'-6" MIN. FINISHED GRADE (SOIL IN LANDSCAPED AREAS PAVEMENT OR CONCRETE) ANCHOR BOLT (4REQ'D) FURNISHED WITH POLE — CADWELI #6 VERTICAL BARS @ 6" O.C. AND #4 HORIZONTAL TIES @ 12" O.C. ALL CONDUIT INSIDE OF —#6 CU GND. CONCRETE POLE BASES SHALL BE GALVANIZED RIGID STEEL AND ALL ELBOWS SHALL BE A MIN. 36" RADIUS. SCH. 40 PVC - SCH. 40 PVC POLE BASE SHALL BE 6'-6" MIN. SURROUNDED BY UNDISTURBED (VARIES BASED - SOIL OR BACKFILL COMPACTED ON SOIL TO 95% DENSITY OF CONDITIONS) SURROUNDING UNDISTURBED SOIL. - ROUND CONCRETE POLE BASE SONO TUBE FORMED CONCRETE WORK BY ELECTRICAL CONTRACTOR 24" ø 3/4" ø, 10'-0" LONG COPPER WELD GROUNDING ROD (LIGHTNING PROTECTION)

LIGHT POLE BASE

NOT TO SCALE



LIGHT POLE

NOT TO SCALE

TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

4. SEE LIGHTING PLAN FOR FIXTURE SCHEDULE.

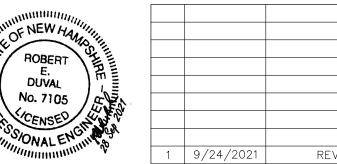
DETAIL SHEET

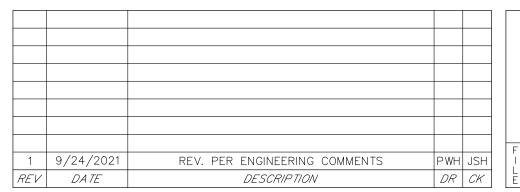
BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH) OWNED BY

MAL-MAR, LLC

PREPARED FOR

BOBCAT OF NEW HAMPSHIRE SCALE: AS SHOWN JULY 26, 2021

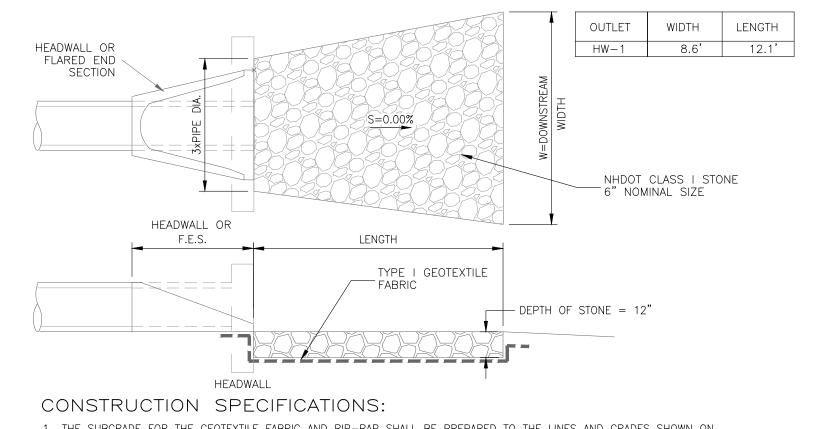






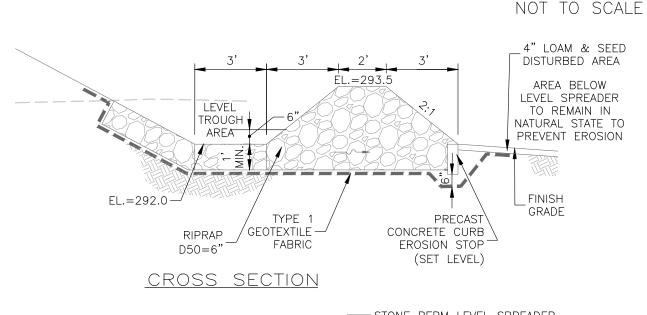
48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com

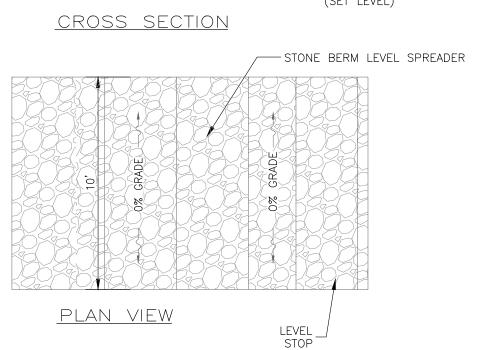
17851-08 | CK | JSH | CADFILE | C - 917851-08 DETAILS



- 1. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP-RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON
- 2. THE ROCK USED FOR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- 4. STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

OUTLET APRON





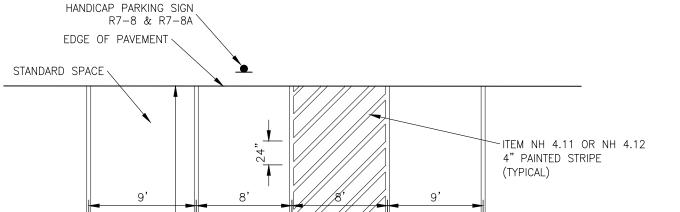
NOT TO SCALE

ITEM NH 4.11 OR NH 4.12

—(2) 2" WIDE MIN. PAINTED STRIPES AT 1' APART

FINAL APPROVAL.

RIPRAP LEVEL SPREADER



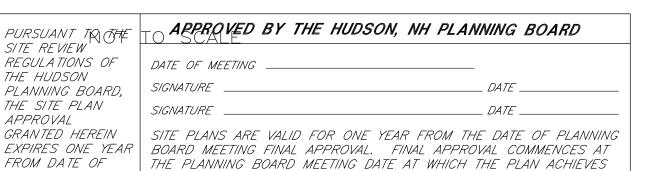
PARKING STRIPING DETAIL

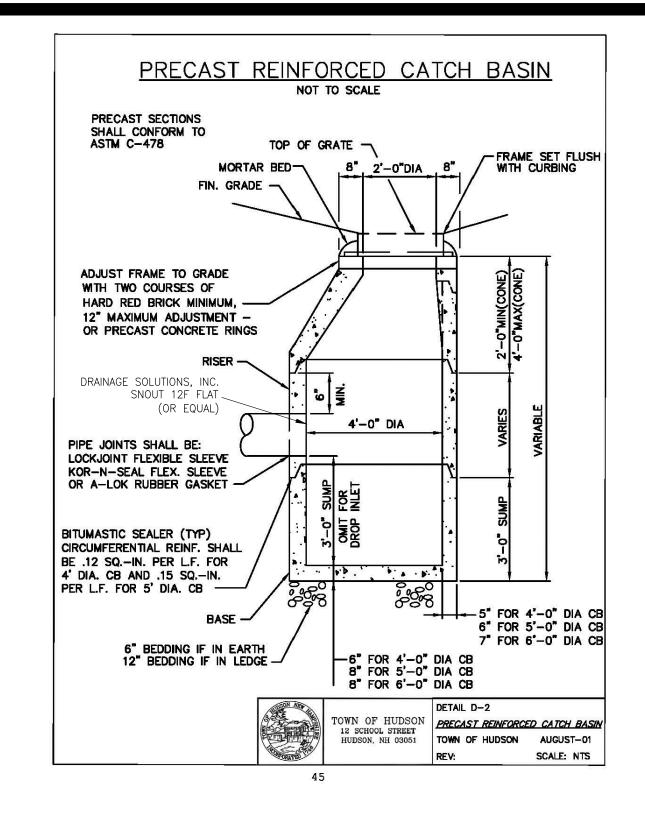
VAN

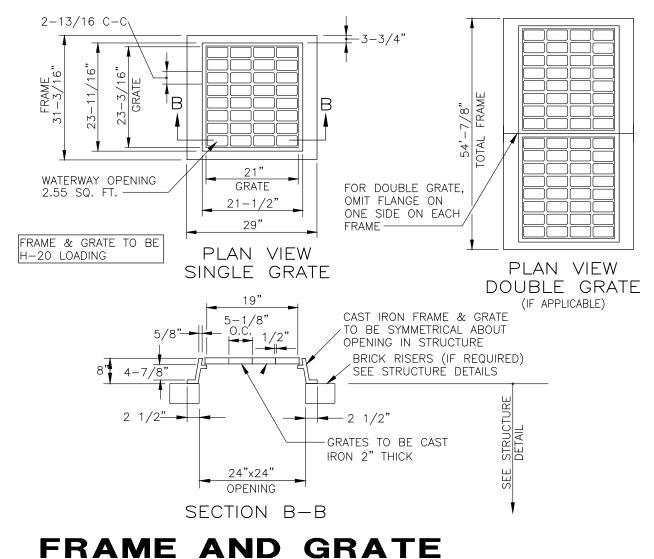
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PURSUANT TO THE SITE REVIEW' REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN *APPROVAL* GRANTED HEREIN FROM DATE OF APPROVAL







ITEM NH 4.11 OR 4.12

MATCH PARKING LOT

PAINT COLOR TO

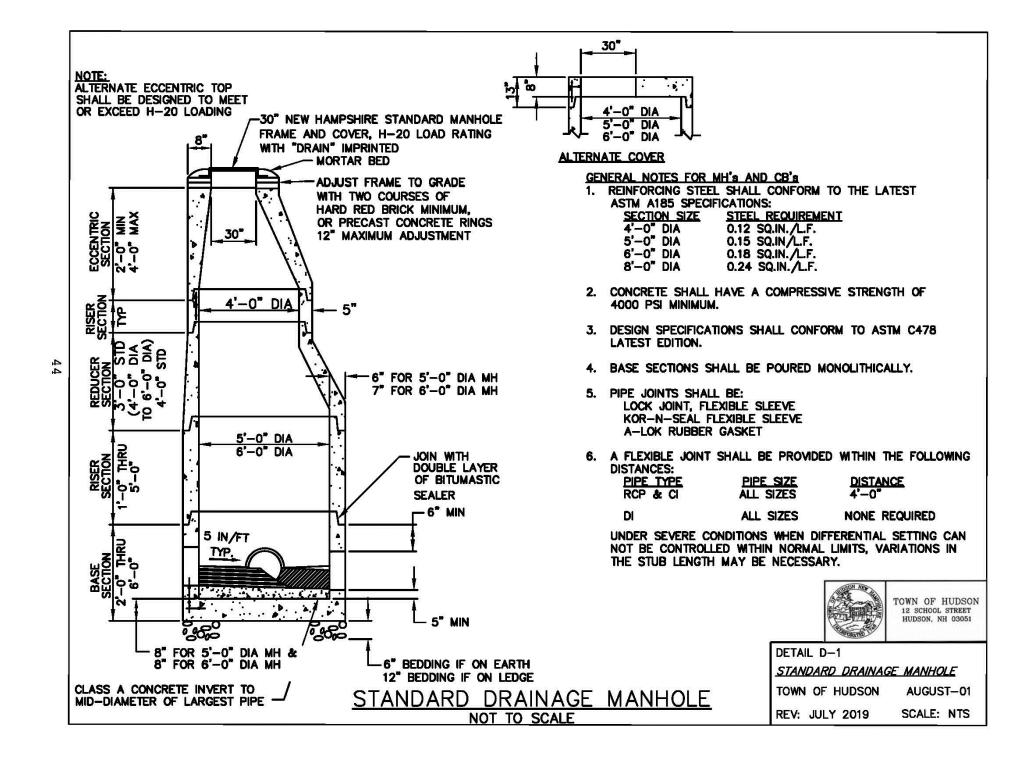
STRIPING

NOT TO SCALE

50" (SEE SITE PLAN FOR LOCATIONS)

PAINTED HANDICAP SYMBOL

NHDOT TYPE B ALT 1



CONSTRUCTION SPECIFICATIONS

PREPARE BEDDING:

BACKFILL MATERIAL AROUND THE END SECTION MAY BE THE SAME AS THE MATERIAL AROUND THE PIPE, PLACE A FEW INCHES OF BACKFILL MATERIAL IN THE TRENCH OR DITCH WHERE THE END SECTION WILL BE PLACED. COMPACT AND CONTOUR THIS BEDDING MATERIAL TO GENERALLY MATCH THE END SECTION, EXCAVATE AN AREA IN THE BEDDING WHERE TOE TROUGH WILL SEAT SO THAT THE END SECTION WILL BE LEVEL WITH THE BOTTOM OF THE TRENCH OR DITCH IN THE FINISHED INSTALLATION.

PLACE END SECTION OF PIPE:

OPEN THE END SECTION COLLAR AND SEAT IT OVER THE TWO PIPE CONNECTIONS. ONCE THE END SECTION IS POSITIONED. CHECK TO MAKE SURE THAT THE INVERT OF THE END SECTION MATCHES THE INVERT OF THE PIPE AND THAT THE END SECTION IS LEVEL WITH THE TRENCH OR DITCH BOTTOM.

SLIP THE STAINLESS STEEL ROD THROUGH THE PRE-DRILLED HOLES AT THE TOP OF THE COLLAR. THE ROD SHOULD BE BETWEEN THE CROWNS OF THE TWO PIPE CONNECTIONS. PLACE A WASHER ON EITHER END OF THE ROD. PLACE A NUT ON EITHER END OF THE ROD AND TIGHTEN WITH A

SECURE THE TOE TROUGH: TO PREVENT WASHOUTS FROM HIGH VELOCITY FLOW, IT IS RECOMMENDED THAT THE TROUGH BE SECURED WITH CONCRETE. POUR CONCRETE IN THE TROUGH UP TO THE LEVEL OF THE TRENCH OR DITCH BOTTOM AND ALONG THE ENTIRE LENGTH OF THE TROUGH.

SHOVEL BACKFILL AROUND THE END SECTION IN 6 TO 9 INCH LAYERS EQUALLY ON BOTH SIDES, KNIFING IT TO ELIMINATE VOIDS. TAMP WITH A SMALL-FACED COMPACTOR OR OTHER EQUIPMENT SUITABLE FOR SMALL AREAS. CONTINUE PLACING, KNIFING, AND COMPACTING BACKFILL LAYERS TO THE TOP OF THE END SECTION TO SEAT IT WELL INTO THE BACKFILL.

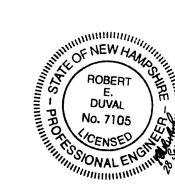
TYP. TOP VIEW SIDE VIEW

	DIMENSIONS, INCHES (mm)					
PIPE DIAMETER	PART NO.	A, ±1 (25)	B MAX	H, ±1 (25)	L, ±1/2 (13)	W, ±2 (50)
2", 15" (300,375)	1210 NP	6.5 (165)	10 (254)	6.5 (165)	25 (635)	29 (736)
18" (450)	1810 NP	7.5 (190)	15 (380)	6.5 (168)	32 (812)	35 (890)
24" (600)	2410 NP	7.5 (190)	18 (450)	6.5 (165)	36 (900)	45 (1140)
30" (750)	3010 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)
36" (900)	3610 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)

FLARED END SECTION

HIGH DENSITY POLYETHYLENE (HDPE)

NOT TO SCALE



TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

DETAIL SHEET

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH)

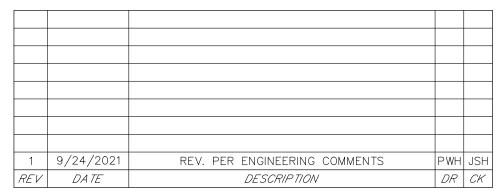
307 NASHUA RD (LONDONDERRY, NH) OWNED BY

MAL-MAR, LLC

PREPARED FOR

BOBCAT OF NEW HAMPSHIRE

JULY 26, 2021 SCALE: AS SHOWN



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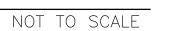
Structural Engineers Traffic Engineers Land Surveyors Landscape Architects Scientists

48 Constitution Drive Bedford, NH 03110 Phone (603) 472-4488 Fax (603) 472-9747 www.tfmoran.com

CONCRETE

SEE NOTES

351-08 ck jsh cadfile C - 1017851-08 DETAILS



BIORETENTION AREA CONSTRUCTION

CLEAR AND GRUB THE AREA WHERE THE BIORETENTION AREAS ARE TO BE LOCATED. STOCKPILE LOAM FOR REUSE ON SLOPES.

GRADE BIORETENTION AREAS ACCORDING TO PLAN AND DETAILS. SIDE SLOPES SHALL HAVE 4" LOAM AND SEED. BOTTOM OF BIORETENTION AREAS TO BE CONSTRUCTED WITH MULCH, MANUFACTURED SOIL, PEA STONE AND CRUSHED STONE (SEE BIORETENTION AREA DETAIL). SPECIFIC PLANTINGS SHALL BE FIELD LOCATED BY LANDSCAPE ARCHITECT AT TIME OF INSTALLATION.

BIORETENTION SOIL MIXTURE SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIORETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVIDE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATION.

TOPSOIL/LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN ONE INCH (1") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.2. LOAM SHALL CONTAIN A MINIMUM OF FOUR PERCENT (4%) AND A MAXIMUM OF FIVE AND A HALF PERCENT (5.5%) ORGANIC MATTER AS DETERMINED BY WEIGHT. NOT MORE THAN TWENTY—FIVE PERCENT (25%) SHALL PASS A NO. 200 SIEVE. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES. THE RATIO OF THE PARTICLE SIZE FOR 80% PASSING (D80) TO THE PARTICLE SIZE FOR 30% PASSING (D30) SHALL BE 6.0 OR LESS (D80/D30 \leq 6.0). SATURATED HYDRAULIC CONDUCTIVITY OF TOPSOIL/LOAM SHALL BE BETWEEN 3 INCHES/HOUR AND 10 INCHES/HOUR ACCORDING TO ASTM D5856—95 WHEN COMPACTED TO A MINIMUM OF 88% STANDARD PROCTOR, ASTM 698.

FILTER MEDIA

FILTER MEDIA SHALL CONFORM TO THE FOLLOWING:
20% TO 30% BY VOLUME OF MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH THAT HAS NO MORE THAN 5% FINES PASSING THE NUMBER
200 SIEVE, WITH 70 TO 80% BY VOLUME LOAMY COARSE SAND USED IN THE MIXTURE MEETING THE FOLLOWING SIEVE ANALYSIS SPECIFICATION:

FROM 85 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 10 SIEVE;

FROM 70 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 20 SIEVE;

FROM 15 TO 40 PERCENT BY WEIGHT SHALL PASS THE NUMBER 60 SIEVE; AND FROM 8 TO 15 PERCENT BY WEIGHT SHALL PASS THE NUMBER 200 SIEVE;

SEEDING FOR BIORETENTION AREA SIDE SLOPES SHALL HAVE A MINIMUM OF 4" LOAM MIXTURE INSTALLED WITH TYPICAL LAWN MIX (MIN. 200 LBS/ACRE): 33% CREEPING RED FESCUE (MIN. 66 LBS/ACRE)

42% PERENNIAL RYEGRASS (MIN. 84 LBS/ACRE)
21% KENTUCKY BLUEGRASS (MIN. 42 LBS/ACRE)
4% REDTOP (MIN. 8 LBS/ACRE)

SEEDING FOR BIORETENTION AREA BASIN SHALL BE NEW ENGLAND WETLAND PLANTS, INC. NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES (MIN. 35 LBS/ACRE).

THE DRAINAGE LAYER MATERIAL SHALL BE PLACED WITH ONLY NOMINAL COMPACTION APPLIED BY A DOZER OR GRADER. FORMAL COMPACTION USING A VIBRATORY STEEL DRUM ROLLER SHALL NOT BE USED AS DENSIFICATION WILL REDUCE THE PERMEABILITY AND ABILITY FOR THE MANUFACTURED SOIL TO PROPERLY DRAIN. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT EQUIPMENT & VEHICLE TRAFFIC FROM DRIVING IN THE AREA OF THE PROPOSED BIORETENTION AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT SMEARING OF THE SUBGRADE DURING CONSTRUCTION.

BIORETENTION AREA INSPECTION & MAINTENANCE

INSPECTION & MAINTENANCE SCHEDULE TO BEGIN AFTER CONSTRUCTION SITE IS STABILIZED AND FLOW DIRECTED TO BASIN.

MAINTENANCE REQUIREMENTS

ONCE ANNUALLY, EACH BIO—RETENTION SYSTEM SHALL BE INSPECTED BY THE DESIGN ENGINEER OR OTHER QUALIFIED PARTY. THE RESULTS OF THE INSPECTION SHALL BE PROVIDED TO DEPARTMENT OF PUBLIC WORKS.

SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

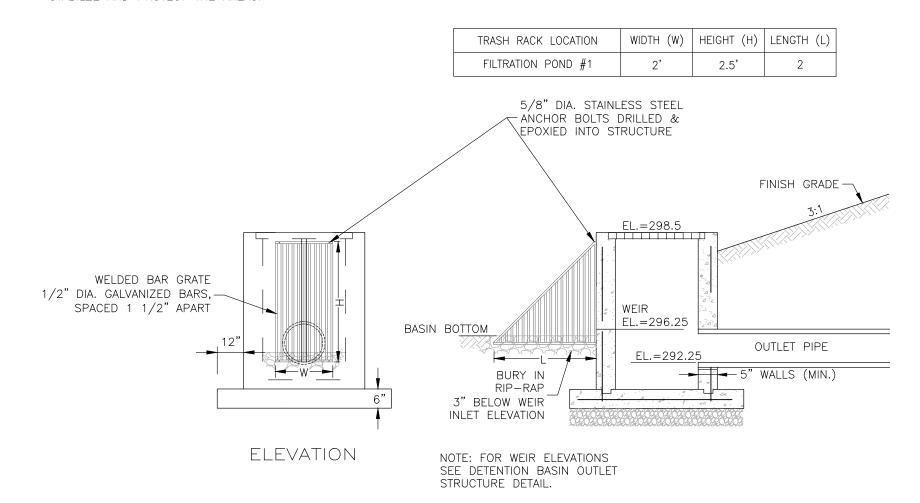
TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION. ALL SEDIMENT AND TRASH SHOULD BE HANDLED PROPERLY AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

VEGETATION — SHALL BE INSPECTED AND MAINTAINED IN A HEALTHY CONDITION BY REMOVING/REPLACING DEAD OR DESEASED VEGETATION AND REMOVING INVASIVE SPECIES. THE VEGETATED AREAS SHALL BE PROTECTED FROM DAMAGE BY TRAFFIC AND DENSE WEED GROWTH. VEGETATION MAINTENANCE A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED.

BOTTOM OF BASIN — BOTTOM OF BASIN SHALL BE INSPECTED FOR EROSION, SEDIMENT ACCUMULATION, TRASH & DEBRIS. REPAIR ANY ERODED AREA OF THE BIORETENTION AREA WITH APPROPRIATE GRASS COVER AFTER REPLACING ANY LOST FILL MATERIAL AND LOAM. REMOVED SEDIMENT, TRASH & DEBRIS SHALL BE REMOVED AND DISPOSED OF PROPERLY.

INLET/OUTLET — CONDITIONS OF PIPES/RIPRAP SHALL BE NOTED AND REPAIRS MADE IF NEEDED. ACCUMULATED SEDIMENT & DEBRIS SHALL BE REMOVED AND DISPOSED OF PROPERLY. IF EROSION HAS OCCURED, THEN MEASURES SHALL BE TAKEN TO STABILZE AND PROTECT THE AREAS.



APPROVAL

FABRICATED TRASH RACK

AT OUTLET STRUCTURE

TFMoran, Inc.

NOT TO SCALE

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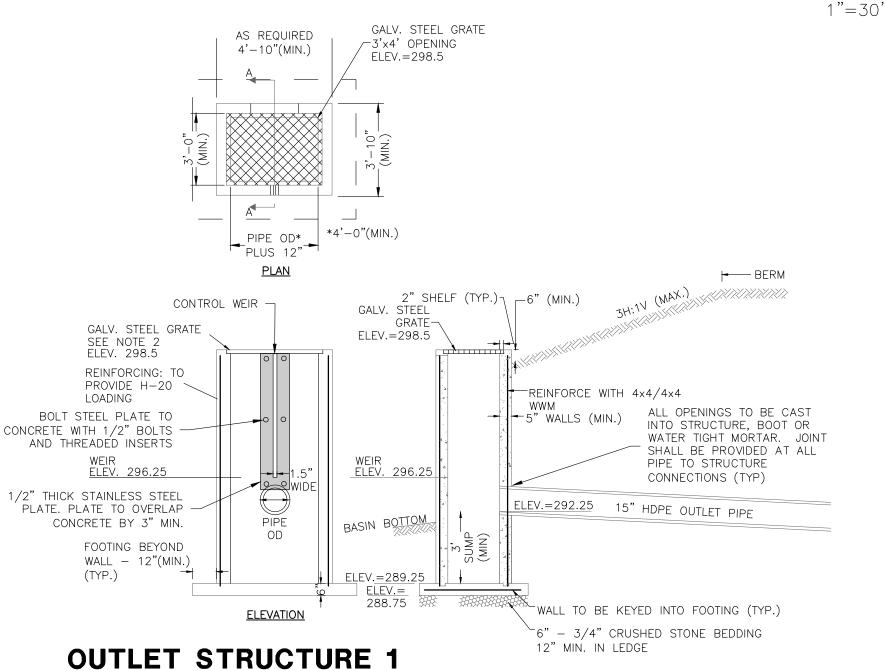
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANWING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF

This plan is not effective unless signed by a duly authorized officer o

FINAL APPROVAL.

130 LF, 15" HDPE S=0.020 FT./FT. INV.OUT=295.07 RIPRAP OUTLET APRON (TYP.) -FORFRAY -BOT EL.=293.0 -BERM EL.=295.0 3' WIDE BERM EL = 295.02' WIDE WICK DRAIN (SEE DETAIL) FILTRATION POND BERM EL.=298.7 BOT. EL.=295.0 (SEE DETAIL) 3' WIDE BERM EL = 298.715 LF, 15" HDPE INV=292.25 RIM=298.5 INV.OUT=292.00 INV.OUT=292.25 S=0.016 FT./FT. (SEE DETAIL) INV.OUT=292.0 STONE BERM LEVEL SPREADER BOT. EL.=292.0 BERM EL.=293.5

FILTRATION BASIN #1

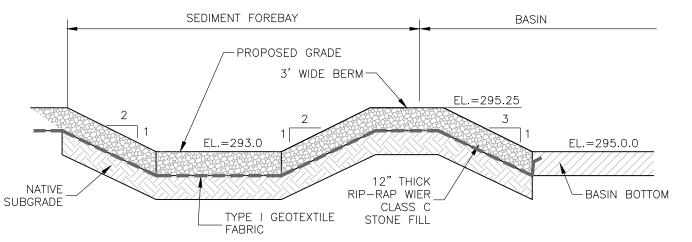


NOTES:

- 1. ALL CEMENT CONCRETE TO BE 4000 PSI (NHDOT CLASS AA) WITH AIR ENTRAINMENT
- 2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE W/1/2" SS BOLTS AND THREADED INSERTS.
- 3. ALL OPENEINGS CAST AS REQUIRED. MIN. CONCRETE WEIR WIDTH TO BE 2 INCHES.
 4. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING
- 5. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY REGULATIONS AND IN ACCORDANCE WITH THE APPROVED DRAINAGE CALCULATIONS. STAINLESS STEEL PLATE SHALL BE USED FOR CONTROL WEIRS
- 6. ALL STAINLESS STEEL SHALL BE GRADE 316.

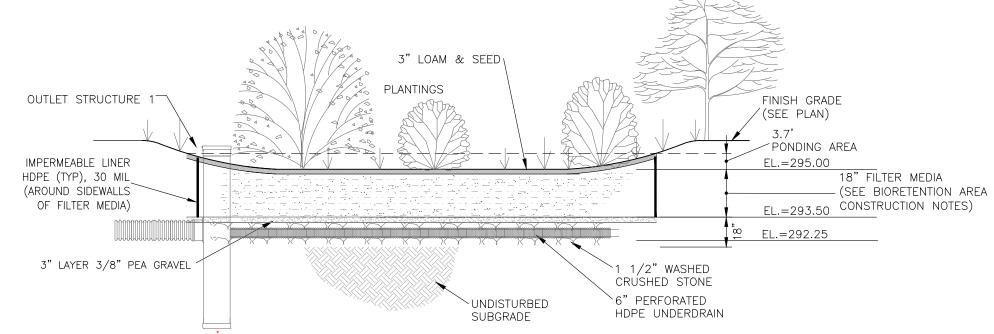
LESS THAN 2 INCHES WIDE.

- 7. MINIMUM EMBANKMENT ELEVATIONS TO BE 12" ABOVE 50-YEAR STORM ELEVATION.
- 8. PROVIDE GALVANIZED STEEL TRASH RACK TO COVER VERTICAL WIER. BOLT TO STRUCTURE W/ STAINLESS STEEL BOLTS.



SEDIMENT FOREBAY

NOT TO SCALE



BIORETENTION NOTES

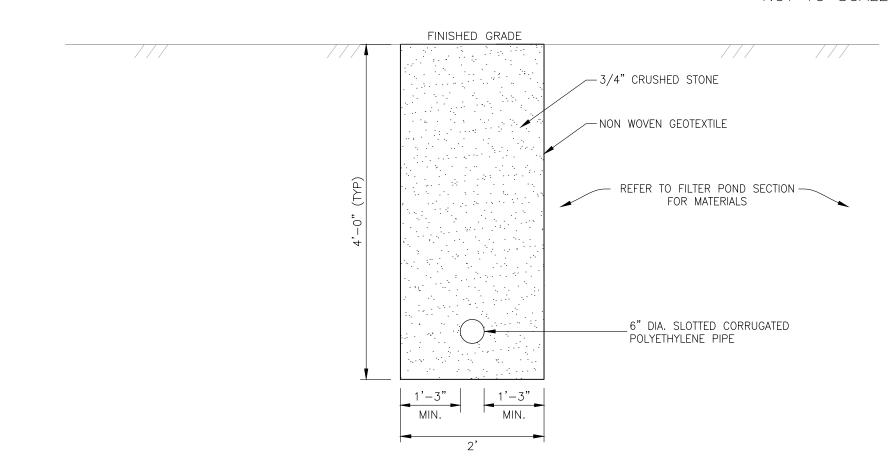
- DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND IT'S CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

-DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.

- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

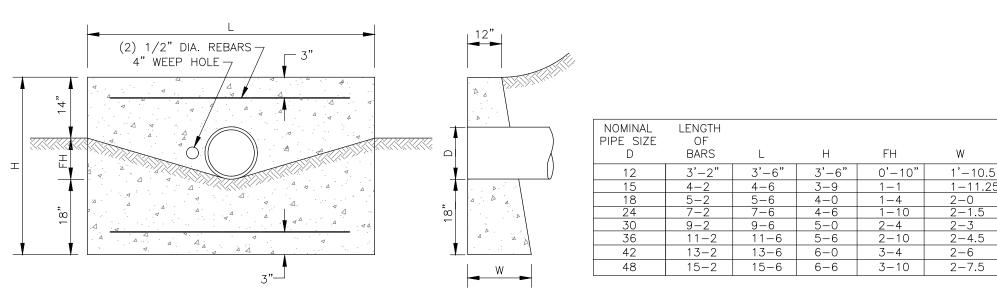
BIORETENTION AREA SECTION

NOT TO SCALE



WICK DRAIN AT FILTER POND

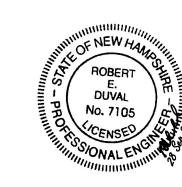
NOT TO SCALE



CONCRETE HEADWALL

SINGLE PIPE SYSTEM

NOT TO SCALE



TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

DETAIL SHEET

BOBCAT OF NEW HAMPSHIRE

2 REBEL RD & 345 DERRY RD (HUDSON, NH)

307 NASHUA RD (LONDONDERRY, NH)

OWNED BY

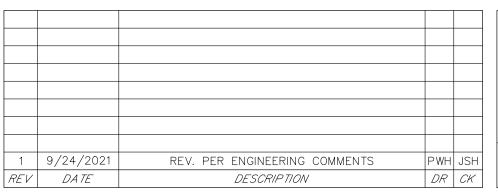
MAL-MAR, LLC

PREPARED FOR

BOBCAT OF NEW HAMPSHIRE

SCALE: AS SHOWN

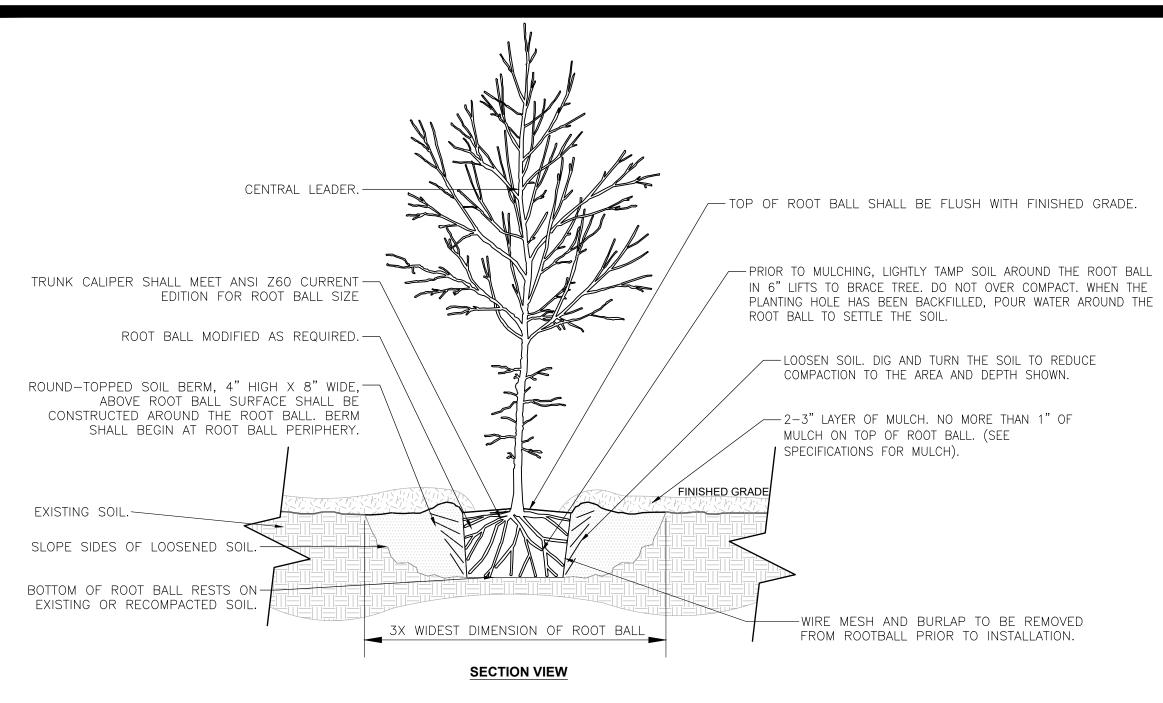
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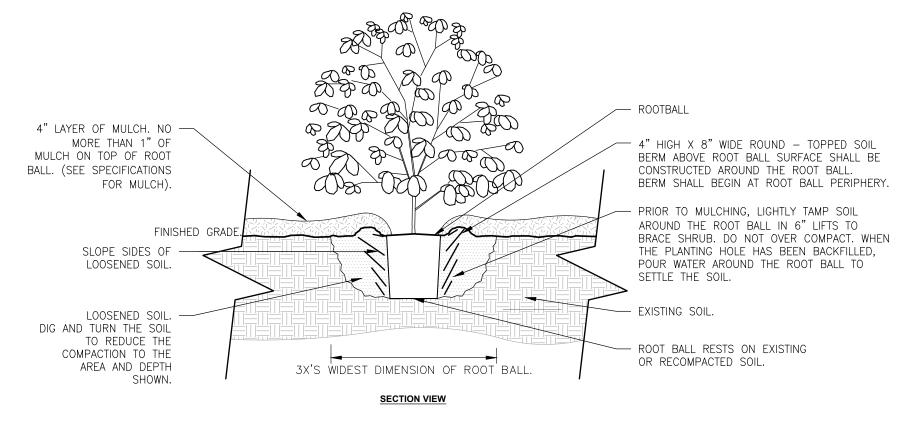
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com



TREE WITH MULCH BERM

NOT TO SCALE



LANGUNG KANTANTAN MENANGKAN PENGENTAN PENGENTA

6" LOAM (ITEM 641)

- LIMESTONE (ITEM 642)

FERTILIZER (ITEM 643.11)

MULCH (ITEM 645.111)

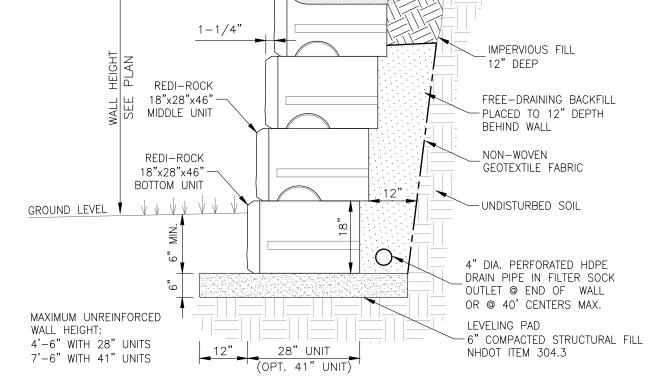
SEED (SEE LANDSCAPE SPECIFICATIONS)

NOT TO SCALE

SHRUB PLANTING

TFMoran, Inc.

NOT TO SCALE



4" LOAM & SEED -

NOTE: RETAINING WALL SHALL HAVE A COBBLESTONE FINISH

REDI-ROCK

18"x28"x46" -

TOP UNIT

REDI-ROCK RETAINING WALL (OR EQUAL) SCALE: 1/2"=1'-0"UNREINFORCED

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LOAM & SEED

APPROVED BY THE HUDSON, NH PLANNING BOARD DATE OF MEETING _____ __ *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 ACHIEVES FINAL APPROVAL.

LANDSCAPE NOTES

SITE AND SOIL PREPARATION

- 1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE
- 2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.
- 3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.0. LOAM SHALL CONTAIN A MINIMUM OF TWO PERCENT (2%) AND A MAXIMUM OF FIVE PERCENT (5%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. SOIL TEXTURE SHALL BE SANDY CLAY LOAM OR SANDY LOAM WITH CLAY CONTENT BETWEEN 15 AND 25%, AND A COMBINED CLAY/SILT CONTENT OF NO MORE THAN 55%. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY
- 4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE
- 5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.
- APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.
- 7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

<u>SEEDING</u>

- 1. ROUGH GRADING SHALL BE COMPLETED PRIOR TO THE START OF PLANTING IN ANY GIVEN AREA OF THE PROJECT SITE.
- 2. SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 15, EXCEPT FOR RESEEDING OF BARE SPOTS AND MAINTENANCE. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING OR AREAS THAT HAVE NOT BEEN OTHERWISE DEVELOPED SHALL BE SEEDED OR SODDED. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. AFTER OCTOBER 15 DISTURBED SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE WINTER CONSTRUCTION NOTES.

ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

PARK SEED MIX (NHDOT TYPE 44) MIN. 135 LBS/ACRE: 33% CREEPING RED FESCUE (MIN. 45 LBS/ACRE) 42% PERENNIAL RYEGRASS (MIN. 55 LBS/ACRE) 21% KENTUCKY BLUEGRASS (MIN. 30 LBS/ACRE) 4% REDTOP (MIN. 5 LBS/ACRE)

[EMPORARY LAWN MIX: (MIN. 47 LBS/ACRE) 100% ANNUAL RYE

SLOPE SEED (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 90 LBS/ACRE):

44% CREEPING RED FESCUE (MIN. 40 LBS/ACRE) 38% PERENNIAL RYEGRASS (MIN. 35 LBS/ACRE) 6% REDTOP (MIN. 5 LBS/ACRE) 6% ALSIKE CLOVER (MIN. 5 LBS/ACRE) 6% BIRDSFOOT TREFOIL (MIN. 5 LBS/ACRE)

<u>PLANTING</u>

- 1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
- 2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.
- 3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.
- 4. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.
- 5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.
- 6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"-2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.
- 7. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

LANDSCAPE MAINTENANCE

- 1. BEGINING MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL UNTIL ACCEPTABLE LAWN IS ESTABLISHED, BUT NOT LESS THAN THE FOLLOWING PERIODS:
 - A. SEEDED LAWNS: 60 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
 - 1. WHEN FULL MAINTENANCE PERIOD HAS NOT ELAPSED BEFORE END OF OF PLANTING SEASON, OR IF LAWN IS NOT FULLY ESTABLISHED, CONTINUE MAINTENANCE DURING NEXT PLANTING SEASON.
 - B. SODDED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION. PLUGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION. SPRIGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
- 2. MAINTAIN AND ESTABLISH LAWN BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH LAWN.
 - A. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH. ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.
- 3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP LAWN UNIFORMLY MOIST TO A DEPTH OF FOUR INCHES (100 mm).
 - A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
 - B. WATER LAWN AT A MINIMUM RATE OF ONE INCH (25 mm) PER WEEK.
- 4. MOW LAWN AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIC HEIGHT WITHOUT CUTTING MORE THAN 40 PERCENT OF GRASS HEIGHT. REMOVE NO MORF THAN 40 PERCENT OF GRASS-LEAF GROWTH IN INITAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE
 - A. MOW GRASS TO $\frac{1}{2}$ INCH (13 mm) HIGH OR LESS.
 - MOW GRASS $\frac{1}{2}$ TO 1 INCH (13 TO 25 mm) HIGH OR LESS. MOW GRASS 1 TO 2 INCHES (25 TO 50 mm) HIGH OR LESS.
 - D. MOW GRASS 1-1/2 TO 2 INCHES (38 TO 50 mm) HIGH OR LESS. E. MOW GRASS 2 TO 3 INCHES (50 TO 75 mm) HIGH OR LESS.
- 5. LAWN POSTFERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.
 - A. USE FERTILIZER THAT WILL PROVIDE ACTUAL NITROGEN OF AT LEAST 1 lb/1,000 SF (0.45 kg/92.9 SM) TO LAWN AREA.

<u>MEADOW</u>

- 1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE MEADOW IS ESTABLISHED, BUT FOR NOT LESS THAN 40 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
- MAINTAIN AND ESTABLISH MEADOW BY WATERING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH.
- WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP MEADOW UNIFORMLY MOIST.
 - A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO
 - AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS B. WATER LAWN AT A MINIMUM RATE OF 1/2 INCH (13 mm) PER WEEK FOR 4

TREES AND SHRUBS:

- 1. PRUNING SHOULD BE STARTED EARLY AND KEPT UP AT REGULAR INTERVALS. TREES SHOULD BE PRUNED AND SHAPED TO AVOID SPLITTING LATER IN LIFE. BROKEN TOPS AND BRANCHES SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER INJURY. BROKEN, WEAK OR DISEASED BRANCHES SHOULD BE REMOVED FIRST, DEAD BRANCHES SECOND AND HEALTH BRANCHES LAST.
- 2. TREES AND SHRUBS SHOULD BE PROTECTED AGAINST DAMAGE INCURRED WITH LAWN MOWERS AND GARDEN EQUIPMENT. KEEPING GRASS AWAY FROM TREE TRUNKS WITH THE USE OF MULCH IS RECOMMENDED.
- 3. THE USE OF ROAD SALT AROUND TREES AND SHRUBS SHOULD BE AVOIDED OR MINIMIZED.
- 4. LANDSCAPED AREAS SHALL BE ROUTINELY MAINTAINED FREE OF DEBRIS AND LITTER. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. MAINTAINENCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL WITHIN THE GUARANTEED CONTRACT

BOBCAT OF NEW HAMPSHIRE 2 REBEL RD & 345 DERRY RD (HUDSON, NH) 307 NASHUA RD (LONDONDERRY, NH)

SCALE: AS SHOWN

MAL-MAR, LLC

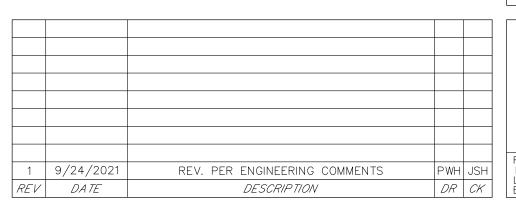
OWNED BY

TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

DETAIL SHEET

PREPARED FOR **BOBCAT OF NEW HAMPSHIRE**

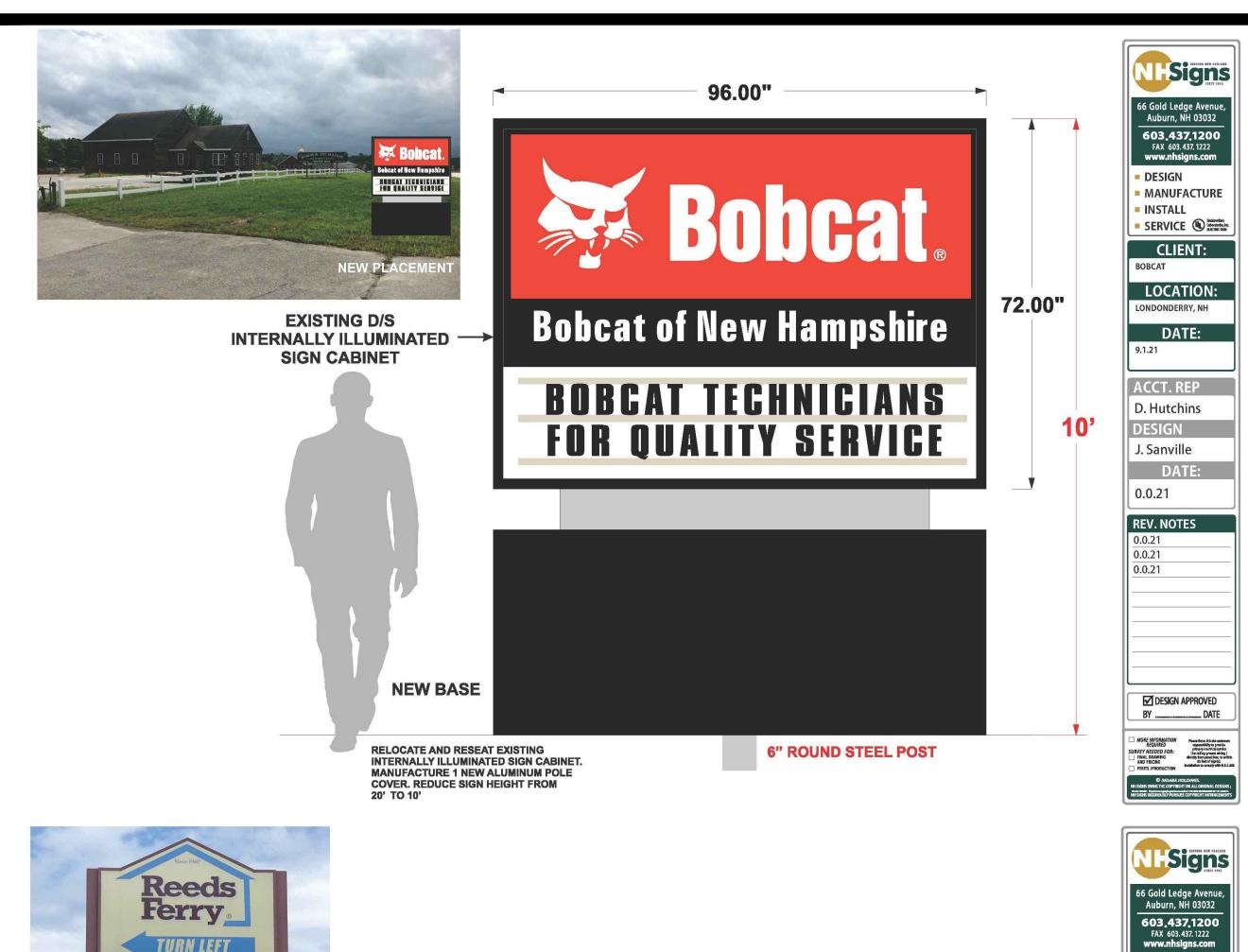
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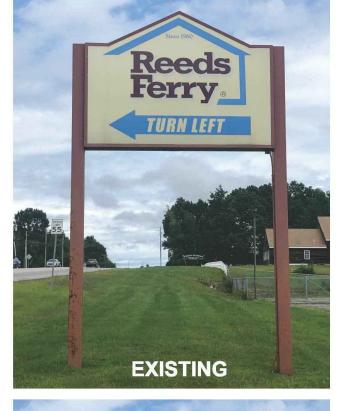


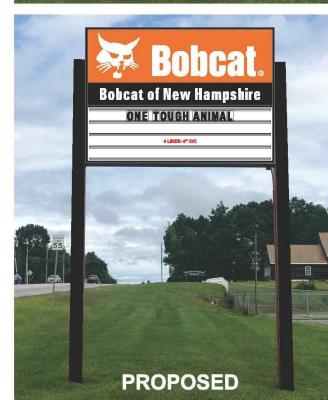
Structural Engineers Traffic Engineers and Surveyors Landscape Architects cientists

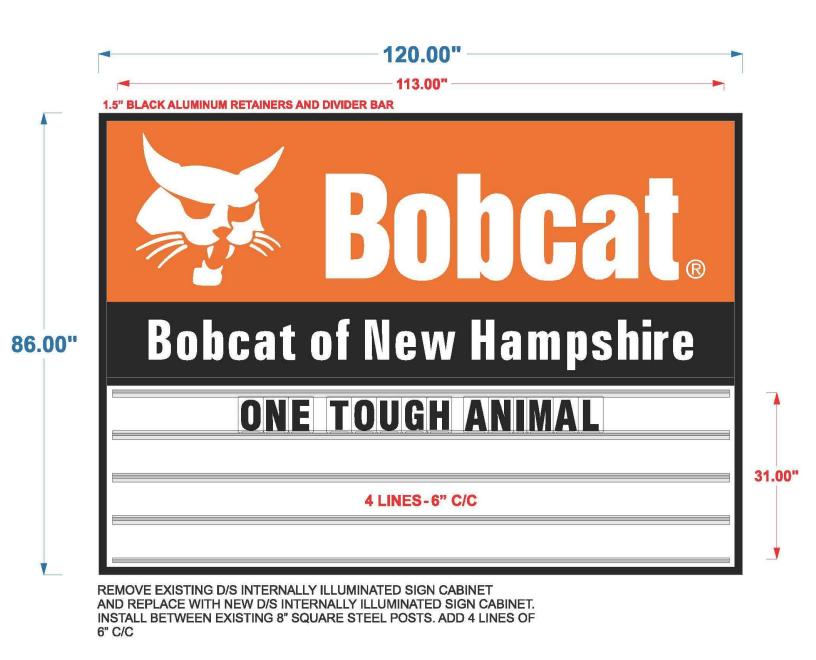
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-08 CK JSH CADFILE 17851 C - 1217851-08 DETAILS









PROJECT SIGNS

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NOT TO SCALE

DESIGN

INSTALL

HUDSON, NH

MANUFACTURE

SERVICE (Laboritories, Inc.
BLECTISC SHOW

CLIENT:

DATE:

ACCT. REP

D. Hutchins

J. Sanville

0.0.21

9.9.21

DATE:

REV. NOTES

☑ DESIGN APPROVED

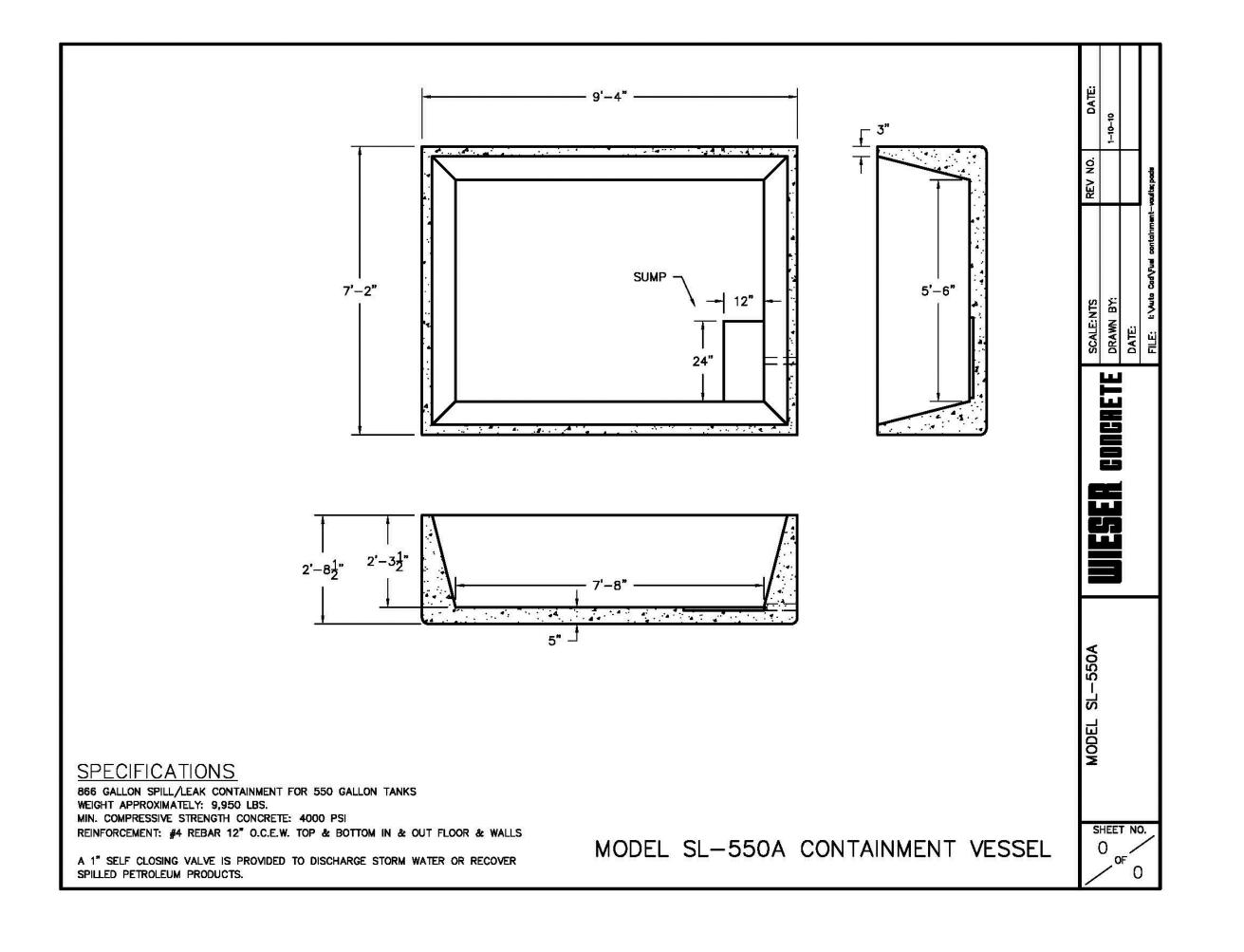
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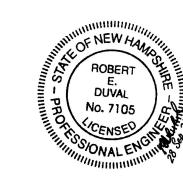
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THE SITE PLA APPROVAL GRANTED HEIGHT APPR

PURSUANT TO THE
SITE REVIEW
REGULATIONS OF
THE HUDSON
PLANNING BOARD,
THE SITE PLAN
APPROVAL
GRANTED HEREIN
EXPIRES ONE YEAR
FROM DATE OF
THE APPROVAL
APPROVAL
THE SITE PLANS ARE
BOARD MEETING
THE PLANNING APPROVAL





TAX MAP 101 LOT 18 & 19 / TAX MAP 2 LOT 34A

DETAIL SHEET

BOBCAT OF NEW HAMPSHIRE

2 REBEL RD & 345 DERRY RD (HUDSON, NH)

307 NASHUA RD (LONDONDERRY, NH)

OWNED BY

MAL-MAR, LLC

PREPARED FOR

BOBCAT OF NEW HAMPSHIRE

1 9/24/2021 REV. PER ENGINEERING COMMENTS PWH JSH
REV DATE DESCRIPTION DR CK



SCALE: AS SHOWN

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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JULY 26, 2021

Scientists www.tfmoran.com

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