

# **MAC THOMPSON SITE PLAN**

SP# 12-21

## **STAFF REPORT #4**

February 9, 2022

**SITE:** 48 Lowell Road; Tax Map 190 Lot 191-000

**ZONING:** Business (B)

**PURPOSE OF PLAN:** Redevelop the site and continue to utilize the parcel as mixed-use commercial site with a 12,000 sq. ft. building with associated site improvements, with uses to include business or professional office, retail business and personal service establishment, and eating & drinking establishment. Staff believes the primary intention of this application is to have a restaurant permitted.

**PLAN UNDER REVIEW:** MacThompson Site Plan, 48 Lowell Road, Hudson, New Hampshire 03051, Tax Map 190 Lot 191, Hudson, New Hampshire; prepared by Benchmark LLC, 1F Commons Drive, Suite 35, Londonderry, New Hampshire 03053; prepared for owner MacThompson Realty, Inc., 3 Marmon Drive, Nashua, New Hampshire 03060; consisting of 12 sheets with General Notes 1-36 on Sheet 3; dated August 3, 2021, last revised January 21, 2022.

### **ATTACHMENTS:**

- A. Peer Review #3, Fuss & O'Neill, January 6, 2022.
- B. Applicant's response to Peer Review Comments, by Benchmark LLC, received January 27, 2022.
- C. CAP Fee Worksheet

### **APPLICATION TRACKING:**

- September 3, 2021 – Application received.
- October 27, 2021 – Public hearing held by the Planning Board, continued to 11/17/21.
- November 17, 2021 – Public hearing held by the Planning Board, continued to 12/08/21.
- December 8, 2021 – Public hearing held by the Planning Board, waivers granted, continued to December 22, 2021.
- December 22, 2021 – Deferred to January 12, 2022.
- January 12, 2022 – Deferred to 02/09/2022.
- February 9, 2022 – Public hearing scheduled.

### **WAIVERS GRANTED (12-15-22):**

1. § 275-8:C(2), to allow fewer than required off-street parking spaces to be provided.
2. § 275-8:C(4), to allow for 9-foot by 20-foot and 9-foot by 18-foot parking spaces.

3. § 275-8:C(6), to not require a dedicated loading space.
4. § 275-8:C(7)(a), to allow less than 10% of the interior of a parking lot to be landscaped.
5. § 276-11.1(B)(22), to not require the minimum 35-foot green area along the frontage.
6. § 276-11.1(B)(25), to allow portions of the parking area and travelway to be located within setbacks.
7. **ETGTD 920.3.13 & 930.4**, to allow the existing and non-conforming stormwater drainage (regarding Minimum Stormwater Drainage Pipe Slope & Velocity) to be used as part of the proposed site plan.

## COMMENTS & RECOMMENDATIONS:

### BACKGROUND

There are two existing commercial buildings on the lot, close to Lowell Road. One of them currently houses KG Barbershop. The other building is currently used as residential but was the power station for the trolley line at one point in time. The rest of the lot is almost entirely paved for parking/storing automobiles, except for the landscaped area on the side and rear setbacks. A driveway by the commercial buildings provides access between Lowell Road and the parking lot.

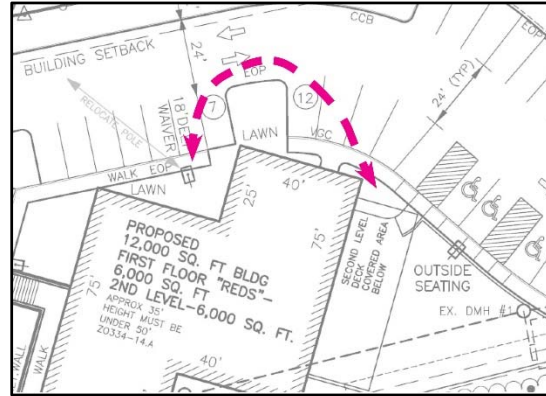
The lot has a wedge shape, with the narrower side located along the street frontage, which is existing nonconforming at 118-feet where 150-feet is required.

The Applicant is proposing to demolish the existing buildings and construct a new 2-story commercial building. Two existing underground drainage systems will remain, while a third is proposed to mitigate any increase. The existing parking lot and driveway will be redesigned to accommodate the required number of parking spaces.

### STAFF COMMENTS

1. **Accessory Use (§ 334-22):** As the Applicant clarified the second floor of the proposed building will be used as a function hall, even though its area will be treated as restaurant use for sewer and parking calculations, Staff notes that “Banquet or function hall, as an accessory use to a restaurant” is an accessory use and it is permitted in the Business (B) District. There is also a proposed office/retail space on the second floor. This represents a possible accessory use, but is not required to be accessory use to the restaurant.
2. **Building Layout**
  - a. **Deck:** The revised plan set dated January 21, 2021 includes two floor plans (on Sheet 1) that show a second-floor deck above part of the outdoor seating area. The Applicant has indicated that there will be no outdoor seating on the deck and it will only be used as an outdoor refuge for function hall guests.

**b. Relation to Site Plan:** The entrance to the restaurant is on the first level, on the façade facing Lowell Road. The restaurant shows 142 seats, whereas 27 spaces are adjacent to the entrance. Should restaurant patrons need to park in the rear of the building, they would be required to walk in the drive aisle. The Applicant intends to relocate the parking spot with the “7” label in order to connect the sidewalk areas. This simple revision is suggested as a condition of approval.



3. **Parking Lot Landscaping Requirements [§ 275-8.C(7)]:** The Applicant had indicated that, despite not meeting the landscaping area requirement (which was waived), the required planting will be met. Sheet 5 of the revised plan shows the calculation of the required planting.

- a. Landscape Note #2 states 41 trees were planted as part of previously approved site plan, while Shade Trees Note #1 states 36 were planted. Since this is a new site plan, the Applicant may consider rephrasing the wording to indicate:
  - i. The number of tree/shrub required for the current site plan;
  - ii. The number of existing tree/shrub to remain or relocated on-site; and
  - iii. The number of new tree/shrub planting proposed to satisfy the requirements.
- b. Staff has previously noted concern over the parking lot shrub requirement being so high, that it leads to overcrowding of shrubs. It is Staff’s understanding that the Applicant has worked with a Landscape Architect to achieve their preferred landscape treatment, therefore these concerns are mitigated. It is possible, as in any site plan, that upon installation, minor modifications to the landscape plan may be necessary for plant health.

4. **Hours of Operation/Construction/Garbage Collection:** Note #26 on Sheet 3 states that no restrictions are proposed with this plan on the intended hours of operation. Note #20 states that any blasting and/or ramming of bedrock materials will be limited to the hours of 7:00 am and 5:00 pm Monday through Friday, but the plan does not propose any restrictions to the hours of other construction activities, nor that of garbage collection. The Board may verify these hour restrictions, or the lack thereof, with the Applicant.

#### PEER REVIEW COMMENTS & APPLICANT’S RESPONSE

Fuss & O’Neill issued their third review letter on January 6, 2022 (**Attachment A**).

Subsequently, the Applicant provided their response (**Attachment B**) addressing the remaining issues noted, with the exception of (5.a) depth of the sewer, and (6.a) test pit data from within the footprint of the proposed underground chamber system. The Applicant indicates these issues will

be addressed when the development takes place (e.g. demolition of the existing building). The Town Engineer has reviewed these items and has found that these remaining items can be appropriately handled as conditions of approval.

## **DRAFT MOTIONS**

CONTINUE the public hearing to a date certain:

I move to continue the public hearing for the site plan application for the MacThompson Site Plan at 48 Lowell Road, Tax Map 190 Lot 191-000 to date certain, \_\_\_\_\_.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Carried/Failed: \_\_\_\_\_

APPROVE the site plan:

I move to approve MacThompson Site Plan, 48 Lowell Road, Hudson, New Hampshire 03051, Tax Map 190 Lot 191, Hudson, New Hampshire; prepared by Benchmark LLC, 1F Commons Drive, Suite 35, Londonderry, New Hampshire 03053; prepared for owner MacThompson Realty, Inc., 3 Marmon Drive, Nashua, New Hampshire 03060; consisting of 12 sheets with General Notes 1-36 on Sheet 3; dated August 3, 2021, and revised through January 21, 2022; subject to, and revised per, the following stipulations:

1. All stipulations of approval shall be incorporated into the Notice of Decision and the Development Agreement, which shall be recorded at the HCRD, together with the Plan.
2. All improvements shown on the Plan, including notes General Notes 1-35 on Sheet 3, shall be completed in their entirety and at the expense of the applicant or the applicant's assigns.
3. A cost allocation procedure (CAP) amount of \$85,920.00 shall be paid prior to the issuance of a Certificate of Occupancy.
4. Adequate test pit data for a test pit performed within the footprint of the proposed underground chamber system, alongside any other information required for the engineer review of the onsite drainage system, shall be provided to the Town, to the satisfaction of the Town Engineer. The test pit shall be performed and witnessed by a P.E. in the Engineering Department prior to installation of the underground chamber.
5. Elevations for the rim, invert in or invert out of the sewer manhole, alongside any other information required for the engineer review of the sewer system, shall be provided to the Town, to the satisfaction of the Town Engineer prior to recording of the Plan.

6. The sidewalk shall be revised to connect the rear area with the restaurant entrance to the satisfaction of the Town Planner.
7. Prior to the issuance of a final certificate of occupancy, a L/LIS/Certified “as-built” site plan shall be provided to the Town of Hudson Land Use Development, confirming that the site conforms to the Plan approved by the Planning Board.
8. Prior to applying for a building permit, the Applicant shall schedule a pre-construction meeting with the Town Engineer.
9. The onsite drainage system shall be constructed and maintained in compliance with NHDES requirements for such systems.
10. Prior to the Planning Board endorsement of the Plan, it shall be subject to final administrative review by Town Planner and Town Engineer.
11. Construction activities involving the subject lot shall be limited to the hours between 7:00 A.M. and 7:00 P.M. No exterior construction activities shall be allowed on Sundays.
12. Hours of refuse removal shall be exclusive to the hours between 7:00 A.M. and 7:00 P.M., Monday through Friday only.

Motion by: \_\_\_\_\_ Second: \_\_\_\_\_ Carried/Failed: \_\_\_\_\_



January 6, 2022

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

Re: Town of Hudson Planning Board Review  
MacThompson Site Plan, 48 Lowell Road  
Tax Map 190 Lot 191; Acct. #1350-979  
Reference No. 20030249.2090

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the third submission of materials received on December 21, 2021, related to the above-referenced project. Authorization to proceed was received on December 21, 2021. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, Zoning Regulations, and criteria outlined in the CLD Consulting Engineers Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, September 3, 2008, and October 2015.

The project appears to consist of the redevelopment of an existing multi-use site. The existing site contains three buildings with commercial, office and storage uses. The proposed improvements will include a new building with the construction of a new driveway, parking areas, drainage improvements, landscaping, lighting, and other associated site improvements. The proposed buildings will be serviced by public water and sewer.

Note that we have removed previously resolved comments from this letter for brevity and clarity. Refer to our letter dated December 3, 2021, to see those comments.

The following items have outstanding issues:

**2. Administrative Review Codes (HR 276)**

- a. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(6). The applicant has provided a space for the owner to sign the plan set. We note that the plan received for review was not signed.*

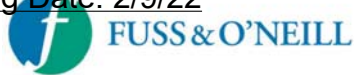
**Current Fuss & O'Neill Comment:** The applicant has stated that the owner will sign the final plan set.

**5. Utility Design/Conflicts**

- a. *Former Fuss & O'Neill Comment: Engineering Technical Guideline & Typical Details (ETGTD) Section 720.8.3. The applicant has not provided a cleanout for the proposed sewer service. This should be located at the property line. / The applicant has shown a sewer cleanout location on the plan set. The applicant should provide a detail for the cleanout.*

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New Hampshire  
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**Current Fuss & O'Neill Comment:** The applicant has revised the cleanout to a sewer manhole per the Town recommendation. We note that no elevations for the rim, invert in or invert out were provided.

- e. *Former Fuss & O'Neill Comment:* HR 276-13. *The applicant has not shown the existing water and sewer main locations within Lowell Road or provided any additional information about tying in the proposed services. The applicant should show the approximate location and size of these utilities.*

**Current Fuss & O'Neill Comment:** The applicant has stated that they have worked with the Town and limited information is available for these utilities. The applicant stated that they will gather necessary information when construction begins.

- f. *Former Fuss & O'Neill Comment:* HR 276-13. *The applicant should provide water and sewer connection details on the plan set. The applicant has stated that water details were added but the only detail we could find is a valve box detail. The applicant has also noted that the sewer should be connected per the Town standard. We note that the applicant should add the pertinent details from the Town standard to the plan set for contractor use in the field. It is unrealistic to believe a contractor will have the Town Construction Standards on site during construction.*

**Current Fuss & O'Neill Comment:** The applicant has stated that the details were cleaned up. We note if the pipe detail on Sheet 8 is for a water service, then it should be labeled as such. Both water details are located on a sheet titled Drainage Details and one is not labeled.

- g. *Former Fuss & O'Neill Comment:* *The applicant has shown two water shutoffs at the west corner of the lot at Lowell Road but has not shown any connections for these shutoffs or noted if they are to remain or be abandoned. The applicant has stated that they do not know what the shut offs are connected to or what they are used for. The applicant has shown the water main coming from one of those shut offs to be tied into for the site. The applicant should contact the water utility and coordinate to be sure of the location of the main and confirm the use of the shut off.*

**Current Fuss & O'Neill Comment:** The applicant has stated that they have coordinated with the Town and not found where the shutoffs are connected to. The applicant will explore this during construction.

- h. *Former Fuss & O'Neill Comment:* *The applicant has not provided any water or sewer service construction details. Also, the plans do not identify the size and material types for the water and sewer service piping. The applicant continues to not provide size or material information for the water and sewer services. The applicant has added a pipe detail to sheet 8 but the title and most of the notes for the detail have been covered by a white block.*

**Current Fuss & O'Neill Comment:** The applicant has removed the white block but has not provided a title for the detail.

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

- a. *Former Fuss & O'Neill Comment:* HR 275-9.A.(3). & 290-5.A.(4). *The applicant should illustrate the location of the test pit(s) upon the plan set, as well as provide the test pit information. The applicant should also illustrate the location of the proposed test pit(s) within the footprint of the proposed underground chamber system upon the plan set. The applicant has added test pits B-E on Plan Sheet 4. The applicant should provide the test pit information logs upon the plan set. The applicant should also illustrate the location of the proposed test pit(s) within the footprint of the proposed underground chamber system upon the plan set.*



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**Current Fuss & O'Neill Comment:** The applicant has added test pit B on Plan Sheet 4 and provided test pit logs upon Plan Sheet 2. We note that it is common engineering practice as well as a NHDES requirement that test pits performed be located within the footprint of the proposed underground chamber system. The applicant should provide test pit data for a test pit performed within the footprint of the proposed system, or discuss with the Town to ensure the location of the test pit is adequate for the current drainage application.

## 11. Other

- a. *Former Fuss & O'Neill Comment: The applicant has proposed retaining walls adjacent to the building. The applicant has not provided a typical detail for the walls or shown any grading that would show the height or intent of the walls. The applicant should provide detailed design drawings for the proposed wall, stamped by an Engineer licensed in the State of New Hampshire, for Town review prior to construction. / The applicant has shown a generic wall detail on the plan set but still does not provide any grading for top or bottom of wall.*

**Current Fuss & O'Neill Comment:** The applicant has added spot grades for the ramp and bottom of walls to the plan set. The applicant should specify the top of wall and if it will be level with the ramp or act as more of a railing. If the top of wall is to be level with the ramp then the applicant should review the need for a railing.

- e. *Former Fuss & O'Neill Comment: The applicant should provide a detail for the site sidewalks, including material types and dimensions. /The applicant has noted that sidewalk details were added to the plan, but the only detail we found on the plan set is for a paver walkway for sidewalks. The applicant should confirm if this is intended and if the handicap ramps will be made of this as well or if concrete will be used. The material is not called out on the site plan.*

**Current Fuss & O'Neill Comment:** The applicant has noted it is to be poured concrete and added a detail to the plan set. The applicant should add a title to the detail.

The following items are resolved or have no further Fuss & O'Neill input:

### 1. Site Plan Review Codes (HR 275)

- b. *Former Fuss & O'Neill Comments: HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has provided parking calculations on the plan set. The applicant has noted that 160 parking spaces are required for the 12,000 square foot facility and that 163 spaces are provided. The required parking space total was calculated using the highest parking requirement of the proposed uses. /The applicant has revised the plan and noted the site now required 169 spaces. The applicant has provided 148 spaces and requested a waiver for the additional spaces to allow for greater green space onsite.*

**Current Fuss & O'Neill Comment:** The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comments: HR 275-8.C.(4). The applicant has requested a waiver to reduce the parking spaces to 9 feet wide instead of the standard 10 feet. /The applicant has asked for an additional waiver to allow for 7 parking spaces to be only 18 feet deep as well as the 9 foot wide parking spaces.*

**Current Fuss & O'Neill Comment:** The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.





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- e. *Former Fuss & O'Neill Comment: HR 275-8.C.(6). The applicant has requested a waiver from the loading space requirement. The applicant feels that deliveries can be scheduled at off-peak hours and use the aisle widths to accommodate trucks and still allow vehicles to pass.*  
 Current Fuss & O'Neill Comment: The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.
- f. *Former Fuss & O'Neill Comments: HR 275-9.C.(11). The applicant has provided six handicap spaces for the site which meets the six spaces required. We recommend that the applicant add spot grades and ramp locations to the parking lot and sidewalk area to ensure that they are constructed as intended. / The applicant has reduced the handicap spaces to 5 to match the reduction in parking spaces. The applicant has added the ramp locations to the plan set as recommended. We continue to recommend that the applicant provide additional spot grades at those ramp locations to be sure they are constructed as intended.*  
 Current Fuss & O'Neill Comment: The applicant as added additional spot grades to the ramp locations. No further Fuss & O'Neill comment.
- g. *Former Fuss & O'Neill Comments: HR 275-9.C.(11). The applicant has not shown curb ramps, detectable pavers, or signs at the proposed sidewalks adjacent to the handicapped parking spaces on the site plans. Curb ramp and sign details are included in the plans. /The applicant has added sign locations to the Grading Plan but has not labeled them. It also appears that the applicant has shown a sign at the space that is no longer labeled handicap.*  
 Current Fuss & O'Neill Comment: The applicant has labeled the signs and removed the extra sign. No further Fuss & O'Neill comment.

## 2. Administrative Review Codes (HR 276)

- b. *Former Fuss & O'Neill Comments: HR 276-11.1.B.(13). & ZO 334-60. The applicant has provided the location and a photo of the proposed site sign. We note that details and dimensions have not been provided. The applicant has included a note stating that, "All signs are subject to approval by the Hudson Planning Board prior to installation."/ The applicant has updated the sign location and photo of the existing sign. No information about the proposed sign or sign dimensions were provided and therefore could not be reviewed against the Regulations.*  
 Current Fuss & O'Neill Comment: The applicant has noted that the sign will need to be reviewed if changes are made. We note that the current plan does not show any proposed changes. No further Fuss & O'Neill comment.
- c. *Former Fuss & O'Neill Comments: HR 276-11.1.B.(20). The applicant had not provided the height of the existing buildings on the plan set. The existing buildings are going to be raised as part of the project. /The applicant has stated the number of stories of each building but not the height. The applicant should review the need for a waiver from this Regulation with the Town.*  
 Current Fuss & O'Neill Comment: The applicant has added the building heights to the plan set. No further Fuss & O'Neill comment.
- d. *Former Fuss & O'Neill Comments: HR 276-11.1.B.(22).The applicant has requested a waiver from the 35-foot green area requirement. The applicant has shown the parking lot approximately 10 feet from the right-of-way. /The applicant has revised the plans to provide 30-feet of green area instead of the 10-feet previously proposed. The applicant continues to request a waiver for the 35-foot requirement.*  
 Current Fuss & O'Neill Comment: The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.
- g. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(25). The applicant as requested a waiver to allow*



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*the parking lots within the side and rear setback lines.*

Current Fuss & O'Neill Comment: The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.

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

- b. *Former Fuss & O'Neill Comments: HR 193.H. The applicant has proposed to keep the driveway location in the same spot as the existing driveway. We note that it appears the driveway will be widened slightly to the south to meet the 24-foot aisle width requirement. We note that this location is within the side setback of the property. /The applicant has added a waiver requesting to allow the driveway within the side setback.*

Current Fuss & O'Neill Comment: The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comments: The applicant should provide additional details and show more specific information on the plan set about the relocation of the existing sidewalk ramp within the Town Right-of-Way located at the southern edge of the driveway to accommodate the wider drive.*

Current Fuss & O'Neill Comment: The applicant has added additional notes and details to the plan for the sidewalk ramp. No further Fuss & O'Neill comment.

### 4. Traffic

- a. *Former Fuss & O'Neill Comments: HR 275-9.B. The applicant has not provided any traffic information as part of their review package. / The applicant as provided a traffic-assessment memorandum (TAM), dated November 16, 2021, and prepared by Transportation Engineering, Planning and Policy (TEPP), for review. The memo concluded that the redevelopment of is not anticipated to have a significant impact on area traffic. We generally agree with this conclusion, but have several comments.*

- b. *Former Fuss & O'Neill Comment: The TAM notes a proposed use for the site as a function facility. The applicant should provide additional detail related to expected impacts to vehicle trips for special events at the function facility. Information should also be provided regarding expected occurrences of special events (i.e. one per month, one per weekend, etc.) if known.*

Current Fuss & O'Neill Comment: The applicant provided information and noted that functions would be sporadic and mostly outside of peak periods. These functions would not have a significant impact to the area. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comment: The TAM provides calculated vehicle trips for the proposed uses for the site. Calculated vehicle trips for the existing uses for the site were not provided. The applicant should provide this information for comparison purposes.*

Current Fuss & O'Neill Comment: The applicant has noted that the only existing use is the barber shop and they have expressed interest in staying onsite therefore no changes to that use would occur. The consultant did not include them in the report as their trips would not be expected to change. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comment: We note that the ability to make left turns out of the site driveway during peak hours may be difficult with the volume of traffic on Lowell Road and the lack of nearby signals to create breaks in the traffic flow.*



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## 5. Utility Design/Conflicts

- b. *Former Fuss & O'Neill Comments: HR 276-13. The applicant has shown the new sewer connection tying into an existing sewer service. We note that this service is not shown on the existing conditions plan. The applicant should provide additional information about this service location. / The applicant has added the existing sewer service locations to the Existing Conditions Plans. The applicant has stated that one service will be capped and the other will be used in the redevelopment. The applicant should provide more information about the service to be capped and call it out on the plans so that the contract will know what is expected during construction.*

Current Fuss & O'Neill Comment: The applicant has noted the service to the south will be capped at the right-of-way per local regulations. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comments: HR 276-13. The applicant should advise if they have taken the outdoor seating area into account with their sewer loading calculations. / The applicant has stated that sewer loading calculations were shown on sheet 10. We were unable to locate those calculations on the plan set.*

Current Fuss & O'Neill Comment: The applicant has added the sewer loading calculations to the plan set. These calculations take into account the outdoor seating use. No further Fuss & O'Neill comment.

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

- b. *Former Fuss & O'Neill Comments: HR 290-5.A.(1), & 290-5.A.(3). The applicant should provide language in the Drainage Analysis Report stating if and how low impact development (LID) strategies for stormwater runoff were evaluated for this project. / The applicant has noted that language was added to the plans but we were unable to find any wording discussing Low Impact Development (LID) strategies for stormwater runoff.*

Current Fuss & O'Neill Comment: The applicant has added LID note to the plan. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comments: HR 290-5.A.(9). The applicant should provide test pit logs (illustrating ESHWT) for the proposed infiltration basin areas, as well as previously utilized test pit information for the two existing systems. / The applicant has noted that test pit logs were enclosed but we were unable to find test pit logs upon the plan set or within the comment response letter attachments.*

Current Fuss & O'Neill Comment: The applicant has shown test pits on Sheet 2. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comments: HR 290-5.A.(10). We note the drainage report notes the use of haybales. If this practice is utilized the applicant should provide details and locations upon the plan set. / The applicant has noted that they typically use haybales or silt sacks at existing drainage basins and locations for these are shown on the plans, but we were unable to find notes on the plans for these sediment control methods.*

Current Fuss & O'Neill Comment: The applicant has removed the haybale notes. No further Fuss & O'Neill comment.

- g. *Former Fuss & O'Neill Comments: HR 290-6.A.(8). The applicant should add a note on the plans requiring the coordination of a pre-construction meeting with the Town Engineer. / The applicant has noted that this note was added to the plans, but we were unable to locate it.*



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Current Fuss & O'Neill Comment: The applicant has added the note to sheet 3. No further Fuss & O'Neill comment.

- i. *Former Fuss & O'Neill Comments: HR 290-6.A.(12). The applicant should provide the winter stabilization notes to the plan set. / We note that the winter stabilization notes on Plan Sheet 9 state the Env-Wq 1505.03 required 45 days, where the Town specifies a shorter 30 days. The applicant should coordinate these notes to reference the 30 days.*

Current Fuss & O'Neill Comment: The applicant has revised the note. No further Fuss & O'Neill comment.

- m. *Former Fuss & O'Neill Comments: HR 290-10.A. Per the area scaled from the PDF plans provided, it appears the disturbed area may be close to or over 100,000 sf of disturbance, triggering the requirement of an NHDES Alteration of Terrain permit. The entire lot is 112,675sf (2.59 acres) while the disturbed area is nearly the entire lot. The applicant should provide the limit of disturbance line upon the plan set as well as note the total disturbed area. We note that a disturbed area/limit of disturbance line illustrated upon a plan set is not always observed by a contractor in the field. If this disturbed area is close to the 100,000 sf threshold, the installation of an orange construction fence staked out by a surveyor noting the proposed limit of disturbance is encouraged. We note if it is discovered during construction that the disturbed area exceeds the NHDES AoT threshold, an after the fact AoT permit will be required, and may halt/hold-up the construction process. /The applicant has noted that the total disturbed area is less than 50,000 square feet. The applicant should make the disturbed area clear on the plans through notes regarding saw cut lines, existing pavement that is to remain, limits of disturbance, etc.*

Current Fuss & O'Neill Comment: The applicant has added the disturbed area lines to sheet 4. No further Fuss & O'Neill comment.

## 7. Zoning (ZO 334)

- e. *Former Fuss & O'Neill Comments: ZO 334-60.C. The applicant has located a proposed sign 23' from the front property line, where the Ordinance requires that the sign be located at not less than 50% of the front setback, which would be 25'. Details and dimensions for the sign were not included in the plans. / The applicant as stated that the existing sign has a variance from 2017. The applicant has provided a picture of the sign on the plan set. No information about the proposed sign has been provided.*

Current Fuss & O'Neill Comment: The applicant has stated that the sign is to remain and only the text will change. No further Fuss & O'Neill comment.

- g. *Former Fuss & O'Neill Comment: ZO 334-17 & 334-21. The Traffic Assessment Memorandum notes that one of the proposed uses for this facility is as a function facility. This is a permitted accessory use to a restaurant per 334 Attachment 2. We note that this proposed use was not identified in other documents.*

Current Fuss & O'Neill Comment: The applicant has clarified this in the notes section. No further Fuss & O'Neill comment.

## 8. Erosion Control/Wetland Impacts

- a. *Former Fuss & O'Neill Comments: HR 290-5.A.(10). The applicant should provide labels for proposed locations of erosion and sediment control practices on the plans; including but not limited to silt fence, CB inlet protection, construction entrance, and any other details illustrated in the detail sheets. /The applicant has added silt fence locations to the plan set. The applicant should also show the location of the stabilized construction entrance and sediment control devices within catch basins instead of circling the catch basin with silt fence.*



Mr. Brian Groth  
January 6, 2022  
Page 8 of 9

Current Fuss & O'Neill Comment: The applicant as updated the erosion control as noted. No further Fuss & O'Neill comment.

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

- a. *Former Fuss & O'Neill Comments: HR 275-8.C.(7).(a). The applicant has requested a waiver for the 10% landscaping requirement and stated that 6% would be provided. The applicant should show landscaping calculation on the plan set for review. / The applicant has provided calculations on the plan set and continues to request a wavier for this requirement.*

Current Fuss & O'Neill Comment: The applicant has noted on the plan that a waiver was granted. No further Fuss & O'Neill comment.

- b. *Former Fuss & O'Neill Comments: HR 275-8.C.(7).(c). The applicant has noted that 40 shade trees are required. The applicant should provide calculations showing this number. We also note that the applicant has stated 36 trees are existing from a previous approval. We note that some of those trees appear to be in the proposed parking lot area. The applicant should clearly label existing trees to remain or trees to relocate. / The applicant has noted that trees within the lot are to be relocated but has not specifically shown where they are to be planted. The applicant has also labeled the size of these existing trees. We note that many are 1 inch diameter trees. Town Regulations do not specify a minimum tree size but we note that it is common practice to require 2 to 3 inch tree diameter minimum. The applicant should more clearly define the existing trees from shrubs onsite and show where each tree should specifically be moved. The size of trees to be installed on the site should also be noted on the plan set.*

Current Fuss & O'Neill Comment: The applicant has clearly labeled the trees and shrubs to be moved. The applicant has also labeled the size of the trees to be added. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comments: HR 275-8.C.(7).(d). The applicant has stated that 320 shrubs are required and that 272 were previously planted with prior approval. The applicant should provide calculations for this requirement for review. We note that the applicant has shown 42 shrubs onsite but has not shown any of the previously planted locations and if the shrubs still exist. / The applicant should more clearly show what shrubs on site are to remain and where relocated shrubs will be moved too. The applicant should provide a consistent shape for the existing shrubs so there are easily definable against the existing trees to provide an accurate count.*

Current Fuss & O'Neill Comment: The applicant has changed symbols to more clearly show the difference in shrubs and trees. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comments: The applicant should provide an index on the landscaping plan showing the symbols and the corresponding tree and shrub variety. We also recommend the applicant move the landscaping on its own sheet to clarify overwriting between the landscape and the lighting. / The applicant has moved the landscaping onto its own sheet but has not added a legend to clarify symbols or the varieties.*

Current Fuss & O'Neill Comment: The applicant has added a legend to the plan set. No further Fuss & O'Neill comment.

- g. *Former Fuss & O'Neill Comment: The applicant should clarify the number of existing planted trees on the Landscaping Plan. Some notes refer to 41, others note 36. The number of required shade trees should be reviewed and revised as well so that various notes agree (41 required).*

Current Fuss & O'Neill Comment: The applicant has clarified the trees. No further Fuss & O'Neill comment.



Mr. Brian Groth  
January 6, 2022  
Page 9 of 9

**11. Other**

- f. *Former Fuss & O'Neill Comment: The applicant should stamp the Landscaping Plan.*  
Current Fuss & O'Neill Comment: The applicant had added a stamp to the Landscaping Plan. No further Fuss & O'Neill comment.
- g. *New Fuss & O'Neill Comment: The applicant should correct the over-writing of notes on the underground chamber system #3 drawing on plan sheet 7.*  
Current Fuss & O'Neill Comment: The applicant has revised the notes. No further Fuss & O'Neill comment.

Please feel free to call if you have any questions.

Very truly yours,

Steven W. Reichert, P.E.

**Steven W. Reichert, PE**

Digitally signed by Steven W. Reichert, PE  
DN: cn=Steven W. Reichert, PE, c=US,  
o=Fuss & O'Neill, Inc., ou=Fuss & O'Neill, Inc.,  
email=streichert@fando.com  
Date: 2022.01.06 12:41:32 -0500

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File  
Benchmark, LLC - nick@benchmark-engineering.com

**BENCHMARK LLC  
1F COMMONS DRIVE SUITE 35  
LONDONDERRY NH 03053**

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

January 21, 2022

Re: Town of Hudson Planning Board Review  
MacThompson Site Plan, 48 Lowell Road Tax Map 190 Lot 191; Acct. #1350-979  
Reference No. 20030249.2090

Dear Mr Groth,

Please find the following as a response to the Fuss & ONiel comments dated January 06, 2022.

**2. Administrative Review Codes (HR 276)**

- a. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(6).  
The applicant has provided a space for the owner to sign the plan set. We note that the plan received for review was not signed.*

Current Fuss & O'Neill Comment: The applicant has stated that the owner will sign the final plan set.

**Please find attached a signed set of plans.**

**5. Utility Design/Conflicts**

- a. *Former Fuss & O'Neill Comment: Engineering Technical Guideline & Typical Details (ETGTD) Section 720.8.3.*

*The applicant has not provided a cleanout for the proposed sewer service. This should be located at the property line. / The applicant has shown a sewer cleanout location on the plan set. The applicant should provide a detail for the cleanout.*

**Current Fuss & O'Neill Comment:** The applicant has revised the cleanout to a sewer manhole per the Town recommendation. We note that no elevations for the rim, invert in or invert out were provided.

**Per our previous submittal we do not have clear information on the depth of the sewer. For the plans we have added a note indicating that some exploration will need to be done prior to the ordering of this structure (note 11, sheet 4)**

- e. Former Fuss & O'Neill Comment: HR 276-13. The applicant has not shown the existing water and sewer main locations within Lowell Road or provided any additional information about tying in the proposed services. The applicant should show the approximate location and size of these utilities.

**Current Fuss & O'Neill Comment:** The applicant has stated that they have worked with the Town and limited information is available for these utilities. The applicant stated that they will gather necessary information when construction begins.

No action necessary

- f. Former Fuss & O'Neill Comment: HR 276-13. The applicant should provide water and sewer connection details on the plan set. The applicant has stated that water details were added but the only detail we could find is a valve box detail. The applicant has also noted that the sewer should be connected per the Town standard. We note that the applicant should add the pertinent details from the Town standard to the plan set for contractor use in the field. It is unrealistic to believe a contractor will have the Town Construction Standards on site during construction.

**Current Fuss & O'Neill Comment:** The applicant has stated that the details were cleaned up. We note if the pipe detail on Sheet 8 is for a water service, then it should be labeled as such. Both water details are located on a sheet titled Drainage Details and one is not labeled.

We have changed the title of sheet 8 to "Construction Details". The water service Detail has also been labeled

- g. *Former Fuss & O'Neill Comment: The applicant has shown two water shutoffs at the west corner of the lot at Lowell Road but has not shown any connections for these shutoffs or noted if they are to remain or be abandoned. The applicant has stated that they do not know what the shut offs are connected to or what they are used for. The applicant has shown the water main coming from one of those shut offs to be tied into for the site. The applicant should contact the water utility and coordinate to be sure of the location of the main and confirm the use of the shut off.*

**Current Fuss & O'Neill Comment:** The applicant has stated that they have coordinated with the Town and not found where the shutoffs are connected to. The applicant will explore this during construction.

No action necessary



- h. Former Fuss & O'Neill Comment: The applicant has not provided any water or sewer service construction details. Also, the plans do not identify the size and material types for the water and sewer service piping. /The applicant continues to not provide size or material information for the water and sewer services. The applicant as added a pipe detail to sheet 8 but the title and most of the notes for the detail have been covered by a white block.

**Current Fuss & O'Neill Comment:** The applicant has removed the white block but has not provided a title for the detail.

A title was added to this detail on sheet 8

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

- a. *Former Fuss & O'Neill Comment: HR 275-9.A.(3). & 290-5.A.(4). The applicant should illustrate the location of the test pit(s) upon the plan set, as well as provide the test pit information. The applicant should also illustrate the location of the proposed test pit(s) within the footprint of the proposed underground chamber system upon the plan set. / The applicant has added test pits B-E on Plan Sheet 4. The applicant should provide the test pit information logs upon the plan set. The applicant should also illustrate the location of the proposed test pit(s) within the footprint of the proposed underground chamber system upon the plan set.*

**Current Fuss & O'Neill Comment:** The applicant has added test pit B on Plan Sheet 4 and provided test pit logs upon Plan Sheet 2. We note that it is common engineering practice as well as a NHDES requirement that test pits performed be located within the footprint of the proposed underground chamber system. The applicant should provide test pit data for a test pit performed within the footprint of the proposed system, or discuss with the Town to ensure the location of the test pit is adequate for the current drainage application.

No action necessary on this item until the existing building is removed. At this time we are unable to do a test pit in the middle of the proposed drainage system. The test pit we did conduct is in close proximity and outside of the existing structure. The town engineer has commented on this and it is our understanding that we can conduct additional test pits to the satisfaction of the town engineer once the structure is removed.

**11. Other**

- a. *Former Fuss & O'Neill Comment: The applicant has proposed retaining walls adjacent to the building. The applicant has not provided a typical detail for the walls or shown any grading that would show the height or intent of the walls. The applicant should provide detailed design drawings for the proposed wall, stamped by an Engineer licensed in the State of New Hampshire, for Town review prior to construction. / The applicant has shown a generic wall detail on the plan set but still does not provide any grading for top or bottom of wall.*

Current Fuss & O'Neill Comment: The applicant has added spot grades for the ramp and bottom of walls to the plan set. The applicant should specify the top of wall and if it will be level with the ramp or act as more of a railing. If the top of wall is to be level with the ramp then the applicant should review the need for a railing.

**Additional notes have been added to sheet 3. The intent is to have the wall flush with the walk/ramp and a handrail will be installed.**

- e. *Former Fuss & O'Neill Comment: The applicant should provide a detail for the site sidewalks, including material types and dimensions. /The applicant has noted that sidewalk details were added to the plan, but the only detail we found on the plan set is for a paver walkway for sidewalks. The applicant should confirm if this is intended and if the handicap ramps will be made of this as well or if concrete will be used. The material is not called out on the site plan.*

Current Fuss & O'Neill Comment: The applicant has noted it is to be poured concrete and added a detail to the plan set. The applicant should add a title to the detail.

**A title has been added to the detail on sheet 11**

The remainder of the Fuss & Oniel letter states that the last pages of their letter has been resolved.

I hope you find this complete. If you have any questions please let me know.

Sincerely,

Joseph Maynard  
Benchmark LLC



# TOWN OF HUDSON

## Planning Board

Timothy Malley, Chairman



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

### CAP FEE WORKSHEET - 2022

Date: 02-02-22 Zone # 2 Map/Lot: 190/191-000  
48 Lowell Road

Project Name: MacThompson Site Plan

Proposed ITE Use #1: Quality Restaurant

Proposed Building Area (square footage): 12,000 S.F.

#### CAP FEES: (ONE CHECK NEEDED)

1.	(Bank 09) 2070-702	Quality Restaurant (12,000 s.f @ \$7.16 per s.f)	<u>\$ 85,920.00</u>
		Total CAP Fee	<u>\$ 85,920.00</u>

Check should be made payable to the Town of Hudson.

Thank you,

*Brian Groth*

Town Planner

PLAN REFERENCES:  
 HCRD PLAN 05402  
 HCRD PLAN 13935  
 HCRD PLAN 08189  
 HCRD PLAN 35827  
 HCRD PLAN 20323  
 HCRD PLAN 18042  
 HCRD PLAN 36454  
 HCRD PLAN 23911  
 HCRD PLAN 26722

DEED REFERENCES  
 HCRD BOOK 8875 PAGE 2378  
 HCRD BOOK 7957 PAGE 0474  
 HCRD BOOK 4037 PAGE 170  
 HCRD BOOK 7879 PAGE 3004  
 HCRD BOOK 1226 PAGE 249  
 HCRD BOOK 1232 PAGE 77



TAX MAP 190 LOT 2  
 KENNETH E. ZIEHM, TR &  
 SANDRA L. ZIEHM, TR.  
 2 WINNHAVEN DR.  
 HUDSON, NH 03051  
 BOOK 8418/PAGE 2932

TAX MAP 190 LOT 7  
 ST. MARY'S BANK  
 ATTN: ACCOUNTS PAYABLE  
 200 MCGREGOR ST.  
 MANCHESTER, NH 03102  
 BOOK 7493/PAGE 2872

TAX MAP 190 LOT 7-1  
 NORTHERN N.E. TELEPHONE LLC  
 CONSOLIDATED COMMUNICATIONS--NN  
 770 ELM ST.  
 MANCHESTER, NH 03101  
 BOOK 7493/PAGE 2872

TAX MAP 190 LOT 9  
 J & R BROTHERS, LLC  
 49 LOWELL RD.  
 HUDSON, NH 03051  
 BOOK 8696/PAGE 0835

TAX MAP 190 LOT 10  
 ENTERPRISE BANK AND TRUST CO.  
 222 MERRIMACK ST.  
 LOWELL, MA 01852  
 BOOK 8206/PAGE 2884

TAX MAP 190 LOT 8  
 (NO OWNER INFORMATION  
 AVAILABLE FROM ASSESSOR)

TAX MAP 190 LOT 187  
 MANUEL & KATHLEEN SOUSA  
 18 OVERLOOK CIRCLE  
 HUDSON, NH 03051  
 BOOK 5928/PAGE 1842

TAX MAP 190 LOT 188  
 VT LOWELL PROPERTIES, LLC  
 36 LOWELL ROAD  
 HUDSON, NH 03051  
 BOOK 8545/PAGE 1560

TAX MAP 190 LOT 189  
 KEYMAR PROPERTIES, LLC  
 42 LOWELL ROAD  
 HUDSON, NH 03051  
 BOOK 6453/PAGE 0048

TAX MAP 190 LOT 190  
 MANUEL & KATHLEEN SOUSA  
 18 OVERLOOK CIRCLE  
 HUDSON, NH 03051  
 BOOK 4037/PAGE 0170

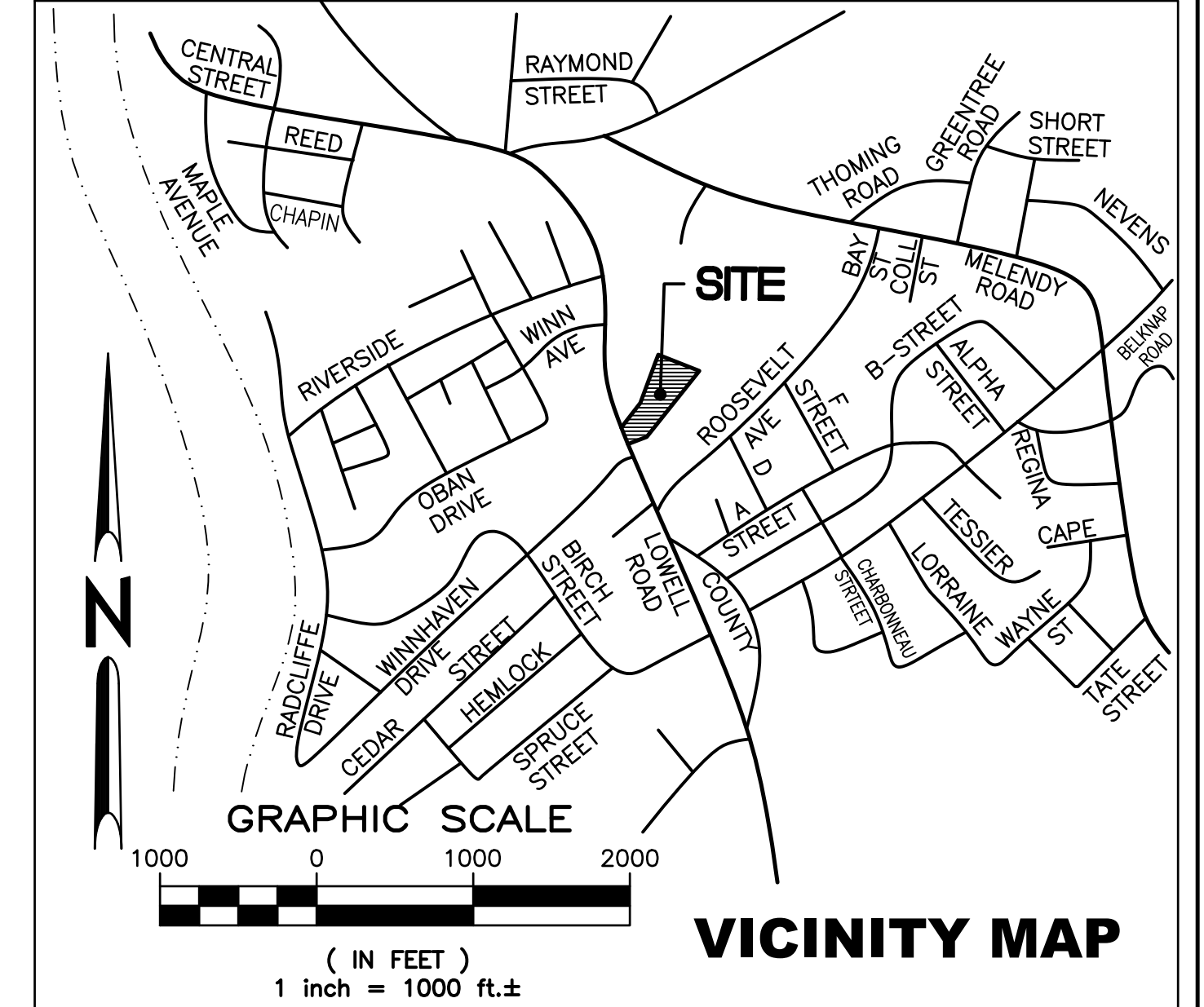
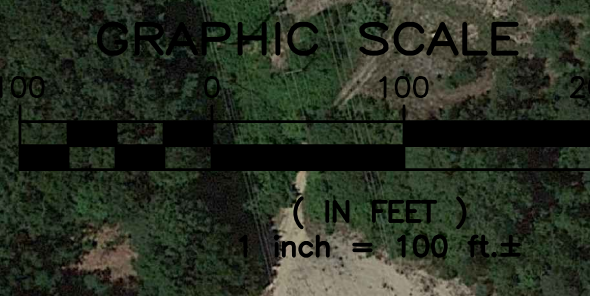
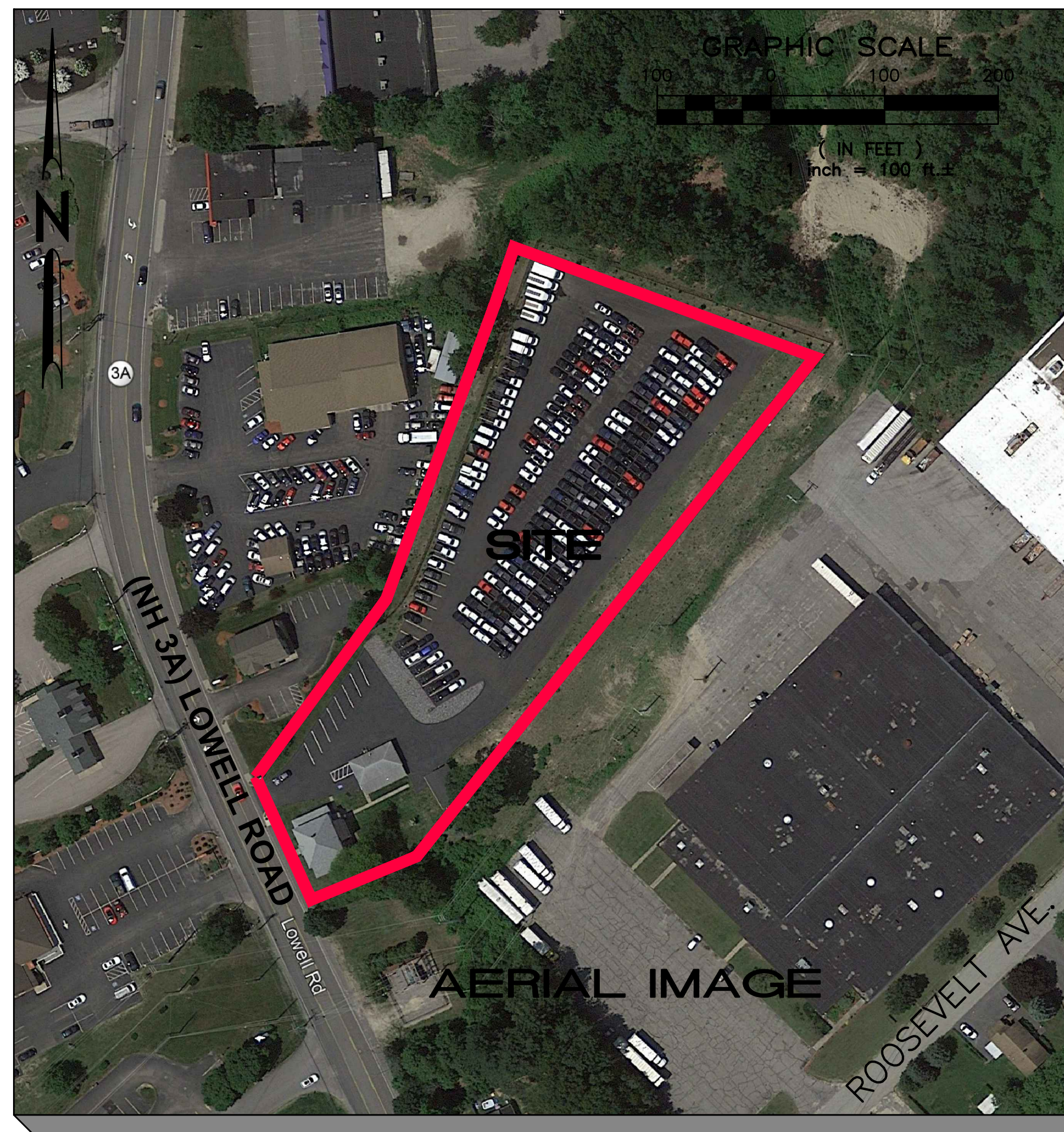
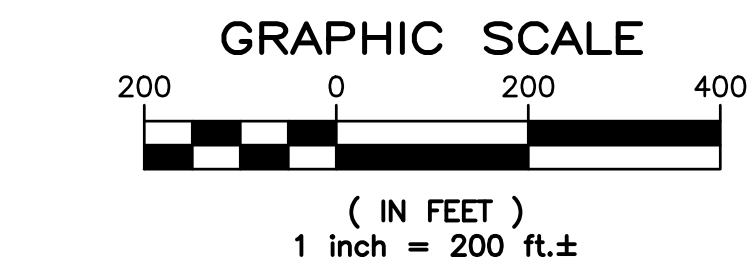
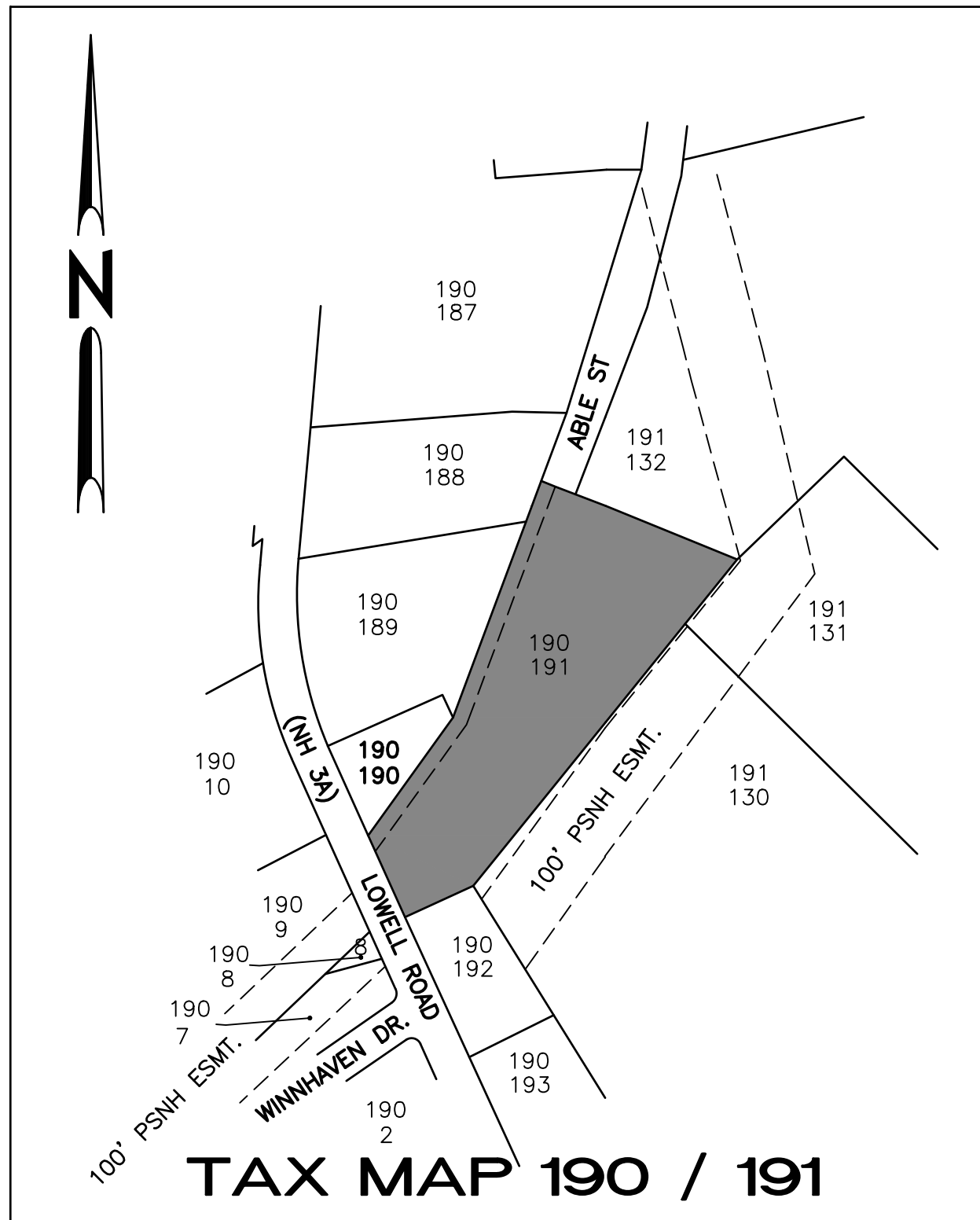
TAX MAP 190 LOT 192  
 PUBLIC SERVICE OF NH  
 C/O EVERSOURCE ENERGY  
 PO BOX 270  
 HARTFORD, CT 06141-0270  
 BOOK 7979/PAGE 0292

TAX MAP 190 LOT 193  
 ROBERT J. GAGNE LIFE ESTATE &  
 NORMA GAGNE LIFE ESTATE  
 436 OSGOOD RD.  
 MILFORD, NH 03055  
 BOOK 7927/PAGE 0367

TAX MAP 191 LOT 130  
 FIVE-N-ASSOCIATES  
 C/O PETER NASH, TR  
 91 AMHERST ST  
 NASHUA, NH 03064  
 BOOK 7879/PAGE 3004

TAX MAP 191 LOT 131  
 MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NH 03060  
 BOOK 9131/PAGE 2308

TAX MAP 191 LOT 132  
 PROLYN CORP.  
 5 LAWRENCE CORNER RD.  
 PELHAM, NH 03076  
 BOOK 5629/PAGE 262



**SHEET INDEX:**

SHEET 1.....	COVER PLAN
SHEET 2.....	EXISTING CONDITIONS PLAN
SHEET 3.....	SITE PLAN
SHEET 4.....	GRADING, UTILITY, DRAINAGE & EROSION CONTROL PLAN
SHEET 5.....	LANDSCAPE PLAN
SHEET 6.....	LIGHTING PLAN
SHEET 7.....	CHAMBER DETAILS
SHEET 8.....	CHAMBER DETAILS
SHEET 9.....	DRAINAGE DETAIL SHEET
SHEET 10.....	CONSTRUCTION DETAIL SHEET
SHEET 11.....	CONSTRUCTION DETAILS
SHEET 12.....	SIGHT DISTANCE & DETAIL SHEET

**ABBREVIATIONS:**

EOP	EDGE OF GRAVEL	UP	UTILITY POLE
EOC	EDGE OF PAVEMENT	OHW	OVERHEAD WIRES
VGC	EDGE OF CONCRETE	CONC	CONCRETE
SWL	VERTICAL GRANITE CURB	EXIST	EXISTING
SYL	SOLID WHITE LINE	R.O.W.	RIGHT OF WAY
DYCL	SOLID YELLOW LINE	EASMT	EASEMENT
	DOUBLE YELLOW CENTER LINE	CLF	CHAIN LINK FENCE
BYP CONC	BITUMINOUS CONCRETE	MW	MONITORING WELL
	TYPICAL		

# MACTHOMPSON SITE PLAN 48 LOWELL ROAD TAX MAP 190 LOT 191 HUDSON, NEW HAMPSHIRE

**CONSTRUCTION NOTE:**  
 HUDSON NH CONSTRUCTION INSPECTIONS

565.1.1 OFF-SITE FILL MATERIAL  
 CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING, CONTAINING, AND DULY REMOVING ALL CONSTITUENTS OF CONCERN BROUGHT TO THE SITE BY CONTRACTOR, SUBCONTRACTORS, SUPPLIERS, OR ANYONE ELSE FOR WHOM CONTRACTOR IS RESPONSIBLE, AND FOR ANY ASSOCIATED COSTS; AND FOR THE COSTS OF REMOVING AND REMEDIATING ANY HAZARDOUS ENVIRONMENTAL CONDITION CREATED BY THE PRESENCE OF ANY SUCH CONSTITUENTS OF CONCERN.

CONTRACTOR SHALL NOT IMPORT ANY FILL OVER THE AMOUNT OF TEN CUBIC YARDS CUMULATIVE TOTAL PER SOURCE TO ANY JOB SITE IN THE TOWN OF HUDSON WITHOUT SOILS TESTING VERIFYING THE ABSENCE OF ALL CONSTITUENTS OF CONCERN, AND WITHOUT PRIOR APPROVAL BY ENGINEERING DEPARTMENT STAFF, DOCUMENTATION SUCH AS TEST REPORTS, CERTIFICATIONS AND SIEVE ANALYZES OF FILL SHALL BE PROVIDED TO THE ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO TRANSPORTING THE MATERIAL TO HUDSON.

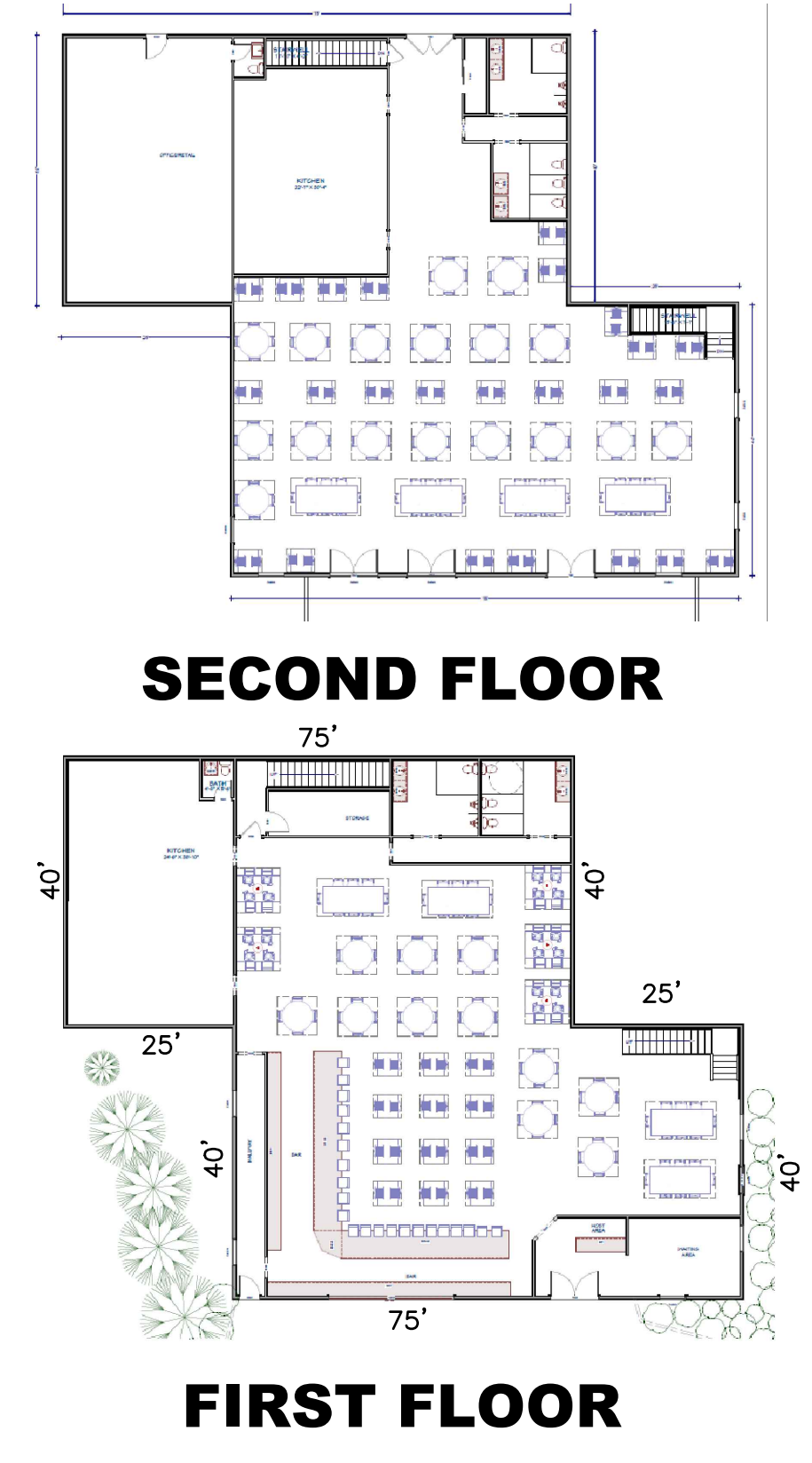
PURSUANT TO THE SITE PLAN REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
 DATE OF MEETING: \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.



**COVER PLAN**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
 MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NEW HAMPSHIRE 03060  
 HCRD BOOK 8875/PAGE 2378

SCALE: AS NOTED SHEET 1 OF 12 AUGUST 3, 2021

FUSS&ONIEL COMMENTS	01/21/2022
TOWN COMMENTS	12/23/2021
F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021
REVISIONS	DATE



X:\Jobs\BEB\1219-48 Lowell Road (MacThompson)\Civil\_3D\1219-Lowell Rd-Rev2.dwg 11/30/2020 1:38:16 PM EST

**GENERAL NOTES:**

- 1) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON TAX MAP 191 LOT 190
- 2) BOUNDARY SURVEY COMPLETED BY:  
RANGWAY LAND SURVEY AND DESIGN  
252 DANIEL PLUMMER ROAD  
GOFFSTOWN, NEW HAMPSHIRE 03045  
PHONE: (603) 624-1602
- 3) SEE SHEET-3 FOR ADDITIONAL NOTES.

**TEST PIT A:**

CONDUCTED ON DECEMBER 16, 2016

- 0-4 TOPSOIL (10YR 3/3) DARK BROWN FINE SANDY LOAM, GRANULAR, FRIABLE
  - 4-48 (10YR 5/4) YELLOWISH BROWN SAND, LOOSE, SINGLE GRAIN
  - 48-132 (10YR 5/4) YELLOWISH BROWN SAND & GRAVEL, LOOSE, SINGLE GRAIN
- ESHWT NONE OBSERVED @ 132"  
NO WATER OBSERVED  
NO RESTRICTIVE LAYERS ENCOUNTERED  
ROOTS 48"  
PERC RATE 2 MIN/INCH

**TEST PIT B:**

CONDUCTED ON DECEMBER 16, 2016

- 0-4 TOPSOIL (10YR 3/3) DARK BROWN FINE SANDY LOAM, GRANULAR, FRIABLE
  - 4-48 (10YR 5/4) YELLOWISH BROWN SAND, LOOSE, SINGLE GRAIN
  - 48-132 (10YR 5/4) YELLOWISH BROWN SAND & GRAVEL, LOOSE, SINGLE GRAIN
- ESHWT NONE OBSERVED @ 132"  
NO WATER OBSERVED  
NO RESTRICTIVE LAYERS ENCOUNTERED  
ROOTS 48"  
PERC RATE 2 MIN/INCH

**LEGEND:**

- IRON PIPE/ REBAR FOUND
- ⊙ BOUND FOUND
- ⊕ DRILL HOLE FOUND
- ⊕ DRILL HOLE/ REBAR SET
- BOUND SET
- ▲ MONUMENT TO BE SET
- TBM/ BENCHMARK
- CATCH BASIN
- FLOW DIRECTION
- SPOT ELEVATION
- EXISTING UTILITY POLE
- OVERHEAD UTILITIES
- EXISTING TREELINE
- PROPOSED TREELINE
- SILT FENCE
- WATER LINE
- WATER SHUTOFF
- PROPERTY LINE
- BUILDING SETBACK LINE
- EDGE OF GRAVEL
- FENCE
- ▭ EXISTING STRUCTURE
- STONEWALL
- ▨ PROPOSED PARKING LOT STRIPING
- EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- ⊕ LIGHTS

**TEST PIT C:**

CONDUCTED ON DECEMBER 16, 2016

- 0-4 TOPSOIL (10YR 3/3) DARK BROWN FINE SANDY LOAM, GRANULAR, FRIABLE
  - 4-42 (10YR 5/4) YELLOWISH BROWN SAND, LOOSE, SINGLE GRAIN
  - 42-132 (10YR 5/4) YELLOWISH BROWN SAND & GRAVEL, LOOSE, SINGLE GRAIN
- ESHWT NONE OBSERVED @ 132"  
NO WATER OBSERVED  
NO RESTRICTIVE LAYERS ENCOUNTERED  
ROOTS 60"  
PERC RATE 2 MIN/INCH

**TEST PIT D:**

CONDUCTED ON DECEMBER 16, 2016

- 0-4 TOPSOIL (10YR 3/3) DARK BROWN FINE SANDY LOAM, GRANULAR, FRIABLE
  - 4-36 (10YR 5/4) YELLOWISH BROWN SAND, LOOSE, SINGLE GRAIN
  - 36-124 (10YR 5/4) YELLOWISH BROWN SAND & GRAVEL, LOOSE, SINGLE GRAIN
- ESHWT NONE OBSERVED @ 124"  
NO WATER OBSERVED  
NO RESTRICTIVE LAYERS ENCOUNTERED  
ROOTS 36"  
PERC RATE 2 MIN/INCH

**TEST PIT E:**

CONDUCTED ON DECEMBER 16, 2016

- 0-5 TOPSOIL (10YR 3/3) DARK BROWN FINE SANDY LOAM, GRANULAR, FRIABLE
  - 5-42 (10YR 5/4) YELLOWISH BROWN SAND, LOOSE, SINGLE GRAIN
  - 42-126 (10YR 5/4) YELLOWISH BROWN SAND & GRAVEL, LOOSE, SINGLE GRAIN
- ESHWT NONE OBSERVED @ 126"  
NO WATER OBSERVED  
NO RESTRICTIVE LAYERS ENCOUNTERED  
ROOTS 48"  
PERC RATE 2 MIN/INCH

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

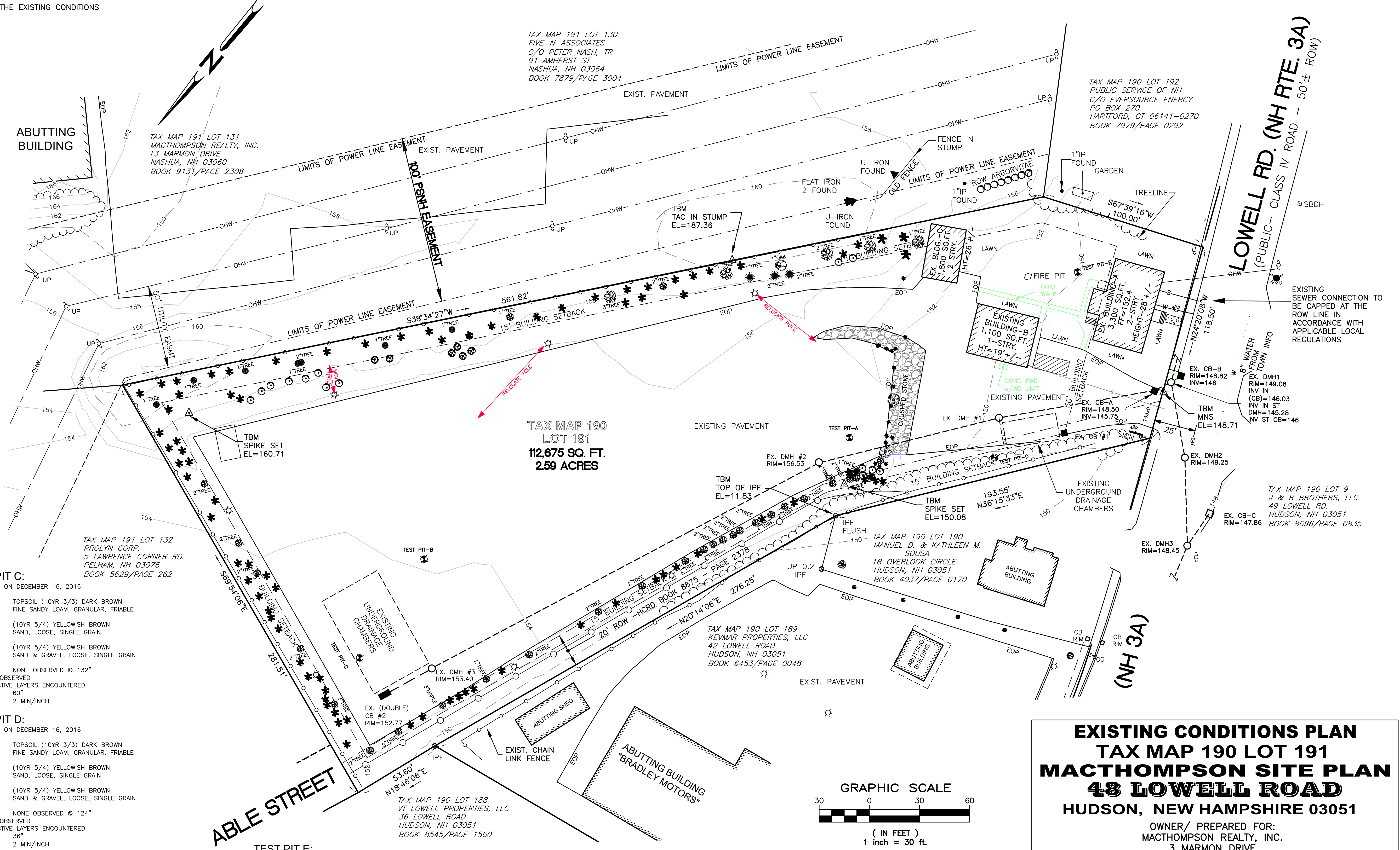
**APPROVED BY THE HUDSON, NH PLANNING BOARD**

DATE OF MEETING: \_\_\_\_\_

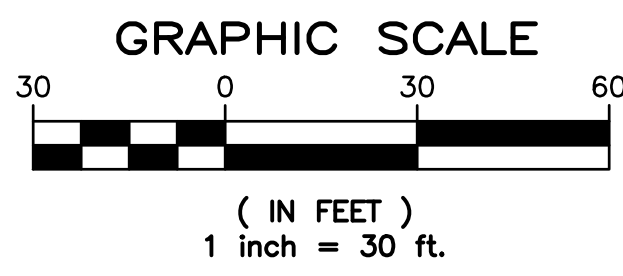
SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.



TAX MAP 190 LOT 191  
112,675 SQ. FT.  
2.59 ACRES

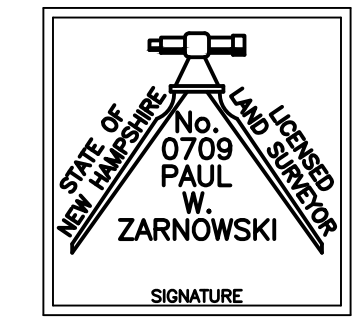


**EXISTING CONDITIONS PLAN  
TAX MAP 190 LOT 191  
MACHOMPSON SITE PLAN  
48 LOWELL ROAD  
HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
MACHOMPSON REALTY, INC.  
3 MARMON DRIVE  
NASHUA, NEW HAMPSHIRE 03060  
HCRD BOOK 8875/PAGE 2378

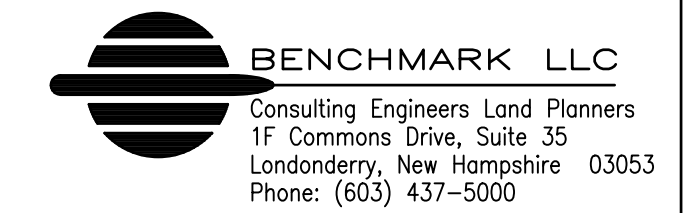
SCALE: 1"=30' SHEET 2 OF 12 AUGUST 3, 2021

I HEREBY CERTIFY THAT THE WORK PERFORMED IN THE PREPARATION OF THIS PLAN HAS AN ERROR OF CLOSURE OF 1:10,000 OR BETTER.



RANGWAY LAND SURVEYING & DESIGN, INC. DATE  
BY: PAUL W. ZARNOWSKI LLS.

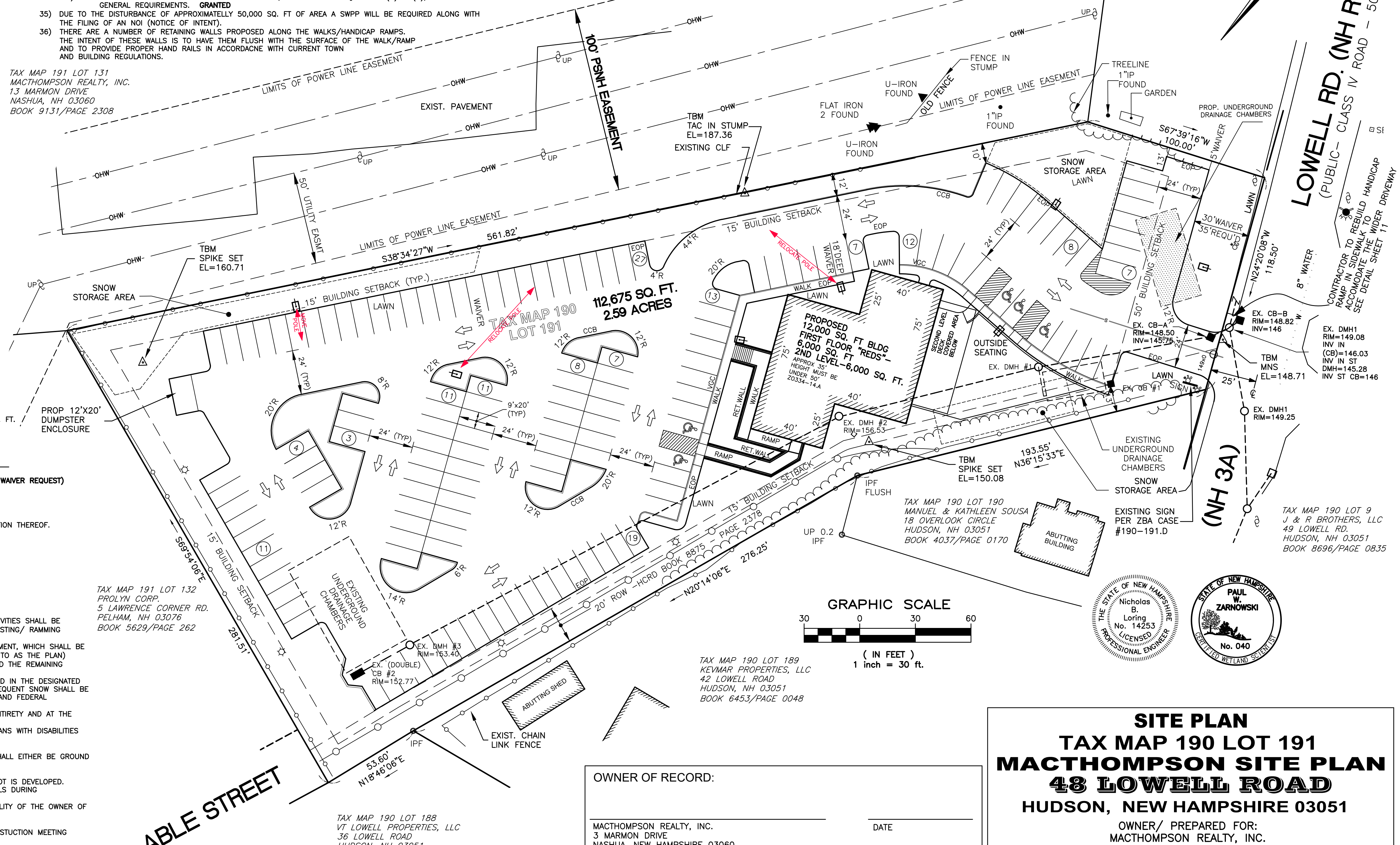
REVISIONS	DATE
FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021



- GENERAL NOTES:**
- THE PURPOSE OF THIS PLAN IS:**
    - TO RE-DEVELOP TAX MAP 190 LOT 191 AS A MULTI USE COMMERCIAL SITE PER TOWN OF HUDSON ZONING ORDINANCE SECTION 334-10 B. USES SHALL INCLUDE:
      - BUSINESS OR PROFESSIONAL OFFICE
      - RETAIL BUSINESS AND PERSONAL SERVICE ESTABLISHMENT
      - EATING & DRINKING ESTABLISHMENT
    - A PORTION OF THE UPPER FLOOR OF THE BUILDING WILL BE FOR A FUNCTION/BANQUET HALL. FOR PLANNING PURPOSES EATING & DRINKING ESTABLISHMENTS IS BEING UTILIZED FOR SEWAGE FLOWS AND PARKING CALC.
  - TO SHOW THE 12,000 SQ.FT. BUILDING WITH ASSOCIATED SITE IMPROVEMENTS.
- PARCEL ID: TAX MAP 190 LOT 191  
 PARCEL AREA = 112,675 S.F. = 2.59 ACRES  
 PARCEL ZONE: "B" BUSINESS  
 BOUNDARY SURVEY COMPLETED BY:  
 RANGWAY LAND SURVEY AND DESIGN  
 252 DANIEL PLUMMER ROAD, GOFFSTOWN, NH 03045  
 PHONE: (603) 624-1602
- NO WETLANDS ENCOUNTERED ON SITE.  
 WETLAND INFORMATION PROVIDED BY:  
 PAUL W. ZARNOWSKI C.W.S.#40, RANGWAY LAND SURVEY AND DESIGN  
 252 DANIEL PLUMMER ROAD, GOFFSTOWN, NEW HAMPSHIRE 03045
  - TOPOGRAPHIC INFORMATION IS BASED ON THE ACTUAL TOPOGRAPHIC AND LOCATION SURVEY BY BENCHMARK ENGINEERING, INC. IN JULY 2016.  
 VERTICAL DATUM NVD 29 FROM GPS SURVEY  
 HORIZONTAL DATUM NAD 83 FROM GPS SURVEY
  - PREDOMINANT SCS SOILS GROUP ON THIS LOT IS W4b  
 WINDSOR LOAMY SAND AS SHOWN ON THE SCS SOILS MAP FOR THE TOWN OF HUDSON, NEW HAMPSHIRE.
  - THIS PROPERTY IS LOCATED OUTSIDE OF THE ESTABLISHED 100-YEAR FLOOD HAZARD ZONE AS SHOWN ON THE FEDERAL FLOOD INSURANCE MAPS (F.I.R.M.) FOR HUDSON, NH, COMMUNITY PANEL #330092-0518D (EFFECTIVE SEPTEMBER 25, 2009).
  - LOCATIONS OF UTILITIES WERE COMPILED FROM THE FIELD SURVEY AND INFORMATION OF RECORD. THESE LOCATIONS ARE APPROXIMATE ONLY. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CALL DIG-SAFE AT 1-888-344-7233.
  - MINIMUM REQUIREMENTS: LOT AREA = 30,000 SQ. FT.  
 BUILDING SETBACKS: FRONT = 50'  
 SIDE/REAR = 15'  
 MINIMUM FRONTAGE: 150' REQUIRED (118' EXISTING)
  - EXISTING USE:  
 BUILDINGS A & B:  
 BUSINESS OR PROFESSIONAL OFFICE, GENERAL RETAIL & MOTOR VEHICLE SALES AND RENTAL = 4,400 SQ. FT.  
 BUILDING-C: STORAGE = 1,800 SQ. FT.
  - PROPOSED USES:  
 BUSINESS OR PROFESSIONAL OFFICE  
 RETAIL BUSINESS AND PERSONAL SERVICE ESTABLISHMENT & EATING & DRINKING ESTABLISHMENT W/ BAR = 4,500 SQ. FT.  
 KITCHEN AREA (FIRST FLOOR) = 1,500 SQ. FT.  
 OUTSIDE SEATING AREA (FIRST FLOOR) = 3,000 SQ. FT.  
 RETAIL BUSINESS AND PERSONAL SERVICE ESTABLISHMENT & EATING & DRINKING ESTABLISHMENT W/ BAR = 4,000 SQ. FT.  
 KITCHEN AREA (2ND FLOOR) = 1,000 SQ. FT.  
 OFFICE/RETAIL (2ND FLOOR) = 1,000 SQ. FT.  
 (PER TOWN OF HUDSON ZONING ORDINANCE: SECTION 334-10 B MULTIPLE COMMERCIAL USES AND ACTIVITIES DEVELOPED AS PART OF A SINGLE SITE PLAN ARE CONSIDERED A SINGLE PRINCIPAL USE.)
  - PARKING REQUIREMENTS:  
 EATING & DRINKING ESTABLISHMENT W/ BAR = 1 SPACE/75 SQ. FT.  
 8,500 SQ. FT. (REST) 1 SPACE/75 SQ. FT. = 113 SPACES  
 3,000 SQ. FT. (OUTSIDE SEATING) 1 SPACE/75 SQ. FT. = 40 SPACES  
 KITCHEN STAFF (5 EMPLOYEES PER KITCHEN) = 10 SPACES  
 RETAIL/OFFICE (1,000 SQ. FT. - 1 SPACE/200 SQ. FT.) = 5 SPACES  
 (USE WITH HIGHER PARKING REQUIREMENT USED)  
 TOTAL REQUIRED PARKING = 169 SPACES  
 TOTAL PARKING PROVIDED = 148 SPACES (SEE WAIVER REQUEST)  
 (5 ADA PARKING SPACES PROVIDED PER ADA REGULATIONS)
  - OPEN SPACE CALCULATIONS (35% REQUIRED):  
 39,500 SQ. FT. +/- OPEN SPACE/112,675 SQ. FT. = 35.0% PROVIDED
  - THE BUILDING IS SERVICED BY MUNICIPAL WATER AND MUNICIPAL SEWER.
  - ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON PLANNING BOARD PRIOR TO INSTALLATION THEREOF.
  - PLANNING BOARD WAIVERS: **GRANTED 12-08-2021**  
 275-B.C.(2) PARKING CALCULATIONS  
 275-B.C.(4) PARKING SPACE DIMENSIONS  
 275-B.C.(6) OFF STREET LOADING SPACE  
 275-B.C.(7)(a) INTERIOR LANDSCAPING  
 276-11.1.(B)(22) FRONT/SIDE GREEN AREA SETBACK  
 276-11.1.(B)(25) PARKING AND TRAVELWAY SETBACK  
 ETGD 920.3.13 & 930.4 MINIMUM STORMWATER DRAINAGE PIPE SLOPE & VELOCITY
  - NOISE FROM THE PROPOSED ACTIVITIES WITHIN THE SITE SHALL MEET THE MINIMUM STANDARDS AS SET BY THE TOWN OF HUDSON, NH SECTION 249
  - IF LOT DEVELOPMENT INVOLVES BLASTING AND/OR RAMMING OF BEDROCK MATERIALS, SAID ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 7:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY ONLY. SAID BLASTING/RAMMING ACTIVITIES SHALL BE PROHIBITED ON WEEKENDS.
  - ALL STIPULATIONS OF THE APPROVAL SHALL BE INCORPORATED INTO THE DEVELOPMENT AGREEMENT, WHICH SHALL BE RECORDED AT THE HCRD, TOGETHER WITH THE SITE PLAN-OF-RECORD (HEREAFTER REFERRED TO AS THE PLAN)
  - SHEET 3 OF 10 SHALL BE RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AND THE REMAINING SHEETS SHALL BE ON FILE AT THE TOWN OF HUDSON PLANNING DEPARTMENT.
  - PLOWED SNOW FROM THE FACILITIES, DRIVEWAY, WALKWAYS AND PARKING LOT SHALL BE STORED IN THE DESIGNATED AREAS SHOWN IN THIS PLAN SET WHEN THE SNOW STORAGE AREAS ARE AT CAPACITY, SUBSEQUENT SNOW SHALL BE HAULED OFF SITE AND DISPOSED OF PROPERLY AND IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
  - ALL IMPROVEMENTS SHOWN ON THE SITE PLAN OF RECORD SHALL BE COMPLETED IN THEIR ENTIRETY AND AT THE EXPENSE OF THE APPLICANT.
  - SITE IMPROVEMENTS SHOWN ON THE PLAN SET SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADE.
  - INTENDED HOURS OF OPERATION: NO RESTRICTIONS ARE PROPOSED WITH THIS PLAN.
  - NATURAL WOOD AND STUMP WASTE GENERATED FOR THE CONSTRUCTION OF THIS SITE PLAN SHALL EITHER BE GROUND UP AND RE-USED ON-SITE FOR EROSION CONTROL OR DISPOSED OF OFF-SITE.
  - THERE IS NOT ANTICIPATED TO BE ANY STOCKPILING OF AGGREGATE MATERIAL ON SITE. THE MAJORITY OF THE MATERIALS TO BE GENERATED ON-SITE ARE TO BE REMOVED AS THE LOT IS DEVELOPED. AN AREA IS DELINEATED ON THE GRADING & UTILITY PLAN FOR STORAGE OF BUILDING MATERIALS DURING CONSTRUCTION.
  - THE RESPONSIBILITY FOR MAINTENANCE OF THE STORMWATER SYSTEM IS THE SOLE RESPONSIBILITY OF THE OWNER OF THIS PROPERTY.
  - SEWER TIE IN CONNECTION SHALL MEET THE TOWN OF HUDSON ENGINEERING REQUIREMENTS.
  - ONCE THIS PLAN IS APPROVED, AND BEFORE ANY CONSTRUCTION CAN COMMENCE, A PRE-CONSTRUCTION MEETING WILL NEED TO BE SCHEDULED WITH THE TOWN ENGINEER.

- GENERAL NOTES:**
- CONTINUED**
- PRIOR VARIANCES  
 CASE 190-191 (DEFERRED FROM 10-26-2017)  
 A) A VARIANCE TO ALLOW A NON-PERMITTED USE; HZO ARTICLE V §334-21 TABLE OF PERMITTED PRINCIPLE USES. - **DENIED**  
 B) A SPECIAL EXCEPTION TO ALLOW REDUCTION OF REQUIREMENTS FOR MIXED USES; HZO ARTICLE VI §334-26 A, REDUCTION OF REQUIREMENTS FOR MIXED AND DUAL USES. **DENIED**  
 C) A VARIANCE TO ALLOW MIXED OR DUAL USE; HZO ARTICLE III §334-10 MIXED OR DUAL USE ON A LOT. **DENIED**  
 D) A VARIANCE TO ALLOW A SIGN WITHIN SETBACKS; HZO ARTICLE XII §334-60 (C) & (D). GENERAL REQUIREMENTS. **GRANTED**
  - DUE TO THE DISTURBANCE OF APPROXIMATELY 50,000 SQ. FT OF AREA A SWPP WILL BE REQUIRED ALONG WITH THE FILING OF AN NOI (NOTICE OF INTENT).
  - THERE ARE A NUMBER OF RETAINING WALLS PROPOSED ALONG THE WALKS/HANDICAP RAMPS. THE INTENT OF THESE WALLS IS TO HAVE THEM FLUSH WITH THE SURFACE OF THE WALK/RAMP AND TO PROVIDE PROPER HAND RAILS IN ACCORDANCE WITH CURRENT TOWN AND BUILDING REGULATIONS.
- TAX MAP 191 LOT 131  
 MACTHOMPSON REALTY, INC.  
 13 MARMON DRIVE  
 NASHUA, NH 03060  
 BOOK 9131/PAGE 2308
- TAX MAP 191 LOT 132  
 PROLYN CORP.  
 5 LAWRENCE CORNER RD.  
 PELHAM, NH 03076  
 BOOK 5629/PAGE 262
- TAX MAP 190 LOT 188  
 VT. LOWELL PROPERTIES, LLC  
 36 LOWELL ROAD  
 HUDSON, NH 03051  
 BOOK 8545/PAGE 1560
- TAX MAP 190 LOT 189  
 KEVMAR PROPERTIES, LLC  
 42 LOWELL ROAD  
 HUDSON, NH 03051  
 BOOK 6453/PAGE 0048
- TAX MAP 190 LOT 190  
 MANUEL & KATHLEEN SOUSA  
 18 OVERLOOK CIRCLE  
 HUDSON, NH 03051  
 BOOK 4037/PAGE 0170
- TAX MAP 190 LOT 9  
 J & R BROTHERS, LLC  
 149 LOWELL RD.  
 HUDSON, NH 03051  
 BOOK 8696/PAGE 0835

- PLAN REFERENCES:**
- HCRD PLAN 05402
  - HCRD PLAN 13935
  - HCRD PLAN 08189
  - HCRD PLAN 35827
  - HCRD PLAN 20323
  - HCRD PLAN 18042
  - HCRD PLAN 36484
  - HCRD PLAN 23911
  - HCRD PLAN 28722
- DEED REFERENCES:**
- HCRD BOOK 8875 PAGE 2378
  - HCRD BOOK 7957 PAGE 0474
  - HCRD BOOK 4037 PAGE 170
  - HCRD BOOK 7879 PAGE 3004
  - HCRD BOOK 1226 PAGE 249
  - HCRD BOOK 1232 PAGE 77
- TAX MAP 191 LOT 130  
 FIVE-N-ASSOCIATES  
 C/O PETER NASH, TR  
 91 AMHERST ST  
 NASHUA, NH 03064  
 BOOK 7879/PAGE 3004



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

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
**DATE OF MEETING:** \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**LOW IMPACT DEVELOPMENT:**  
 THIS PLAN WAS DESIGNED WITH LOW-IMPACT DEVELOPMENT MEASURES UTILIZED. PER THE PREVIOUS APPROVED SITE PLAN DRAINAGE MEASURES WERE PLACED UNDERGROUND AND TREAT/RECHARGE A LARGE AMOUNT OF THE SITE RUN-OFF. THESE UNDERGROUND DETENTION PONDS KEEP MOST STORM EVENTS WITHIN THEM AND THERE IS ONLY AN OVERFLOW PIPE FOR LARGE STORM EVENTS. WE HAVE ALSO APPLIED FOR A NUMBER OF WAIVERS TO REDUCE THE SIZE OF THE ON-SITE PARKING SPACES AND TO ALSO REDUCE THE REQUIRED NUMBER OF SPACES THIS ULTIMATELY REDUCES OUR OVERALL IMPERVIOUS COVERAGE FOR THIS PROJECT.

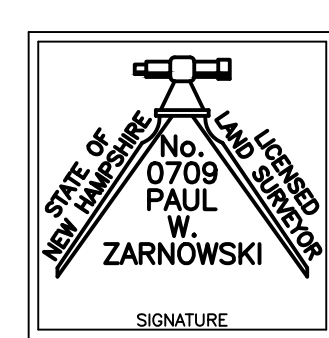
**OWNER OF RECORD:**

MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NEW HAMPSHIRE 03060  
 HCRD BOOK 8875/PAGE 2378

DATE \_\_\_\_\_

I HEREBY CERTIFY THAT THE WORK PERFORMED IN THE PREPARATION OF THIS PLAN HAS AN ERROR OF CLOSURE OF 1:10,000 OR BETTER.

RANGWAY LAND SURVEYING & DESIGN, INC. DATE \_\_\_\_\_  
 BY: PAUL W. ZARNOWSKI LLS.

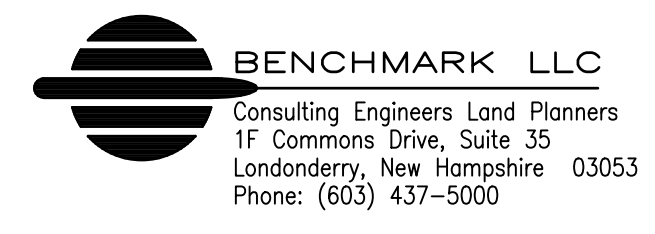


**SITE PLAN**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
 MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NEW HAMPSHIRE 03060  
 HCRD BOOK 8875/PAGE 2378

SCALE: 1"=30' SHEET 3 OF 12 AUGUST 3, 2021

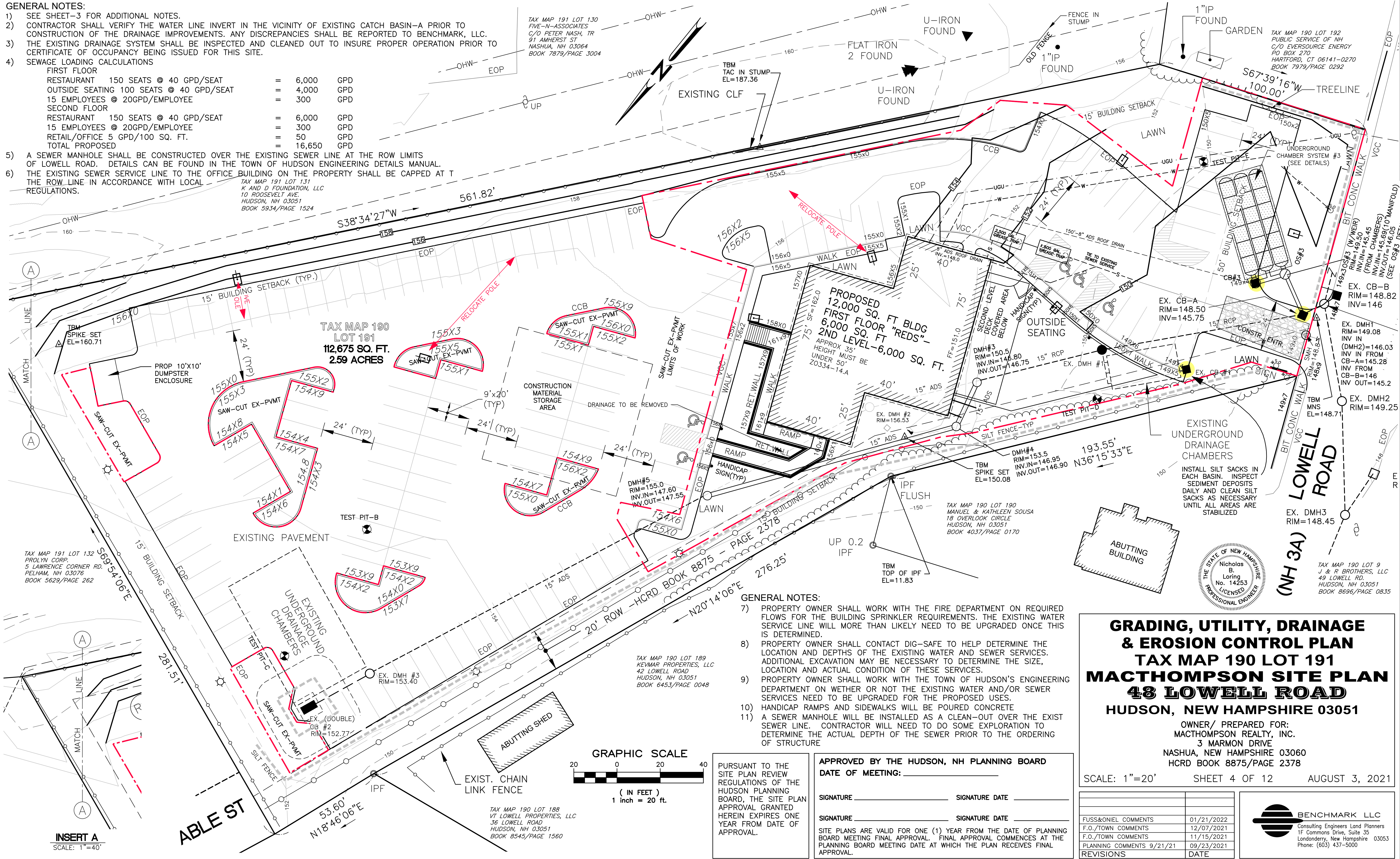
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F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021
REVISIONS	DATE



**GENERAL NOTES:**

- SEE SHEET-3 FOR ADDITIONAL NOTES.
- CONTRACTOR SHALL VERIFY THE WATER LINE INVERT IN THE VICINITY OF EXISTING CATCH BASIN-A PRIOR TO CONSTRUCTION OF THE DRAINAGE IMPROVEMENTS. ANY DISCREPANCIES SHALL BE REPORTED TO BENCHMARK, LLC.
- THE EXISTING DRAINAGE SYSTEM SHALL BE INSPECTED AND CLEANED OUT TO INSURE PROPER OPERATION PRIOR TO CERTIFICATE OF OCCUPANCY BEING ISSUED FOR THIS SITE.
- SEWAGE LOADING CALCULATIONS  

FIRST FLOOR			
RESTAURANT 150 SEATS @ 40 GPD/SEAT	=	6,000	GPD
OUTSIDE SEATING 100 SEATS @ 40 GPD/SEAT	=	4,000	GPD
15 EMPLOYEES @ 20GPD/EMPLOYEE	=	300	GPD
SECOND FLOOR			
RESTAURANT 150 SEATS @ 40 GPD/SEAT	=	6,000	GPD
15 EMPLOYEES @ 20GPD/EMPLOYEE	=	300	GPD
RETAIL/OFFICE 5 GPD/100 SQ. FT.	=	50	GPD
TOTAL PROPOSED	=	16,650	GPD
- A SEWER MANHOLE SHALL BE CONSTRUCTED OVER THE EXISTING SEWER LINE AT THE ROW LIMITS OF LOWELL ROAD. DETAILS CAN BE FOUND IN THE TOWN OF HUDSON ENGINEERING DETAILS MANUAL.
- THE EXISTING SEWER SERVICE LINE TO THE OFFICE BUILDING ON THE PROPERTY SHALL BE CAPPED AT T THE ROW LINE IN ACCORDANCE WITH LOCAL REGULATIONS.



**GENERAL NOTES:**

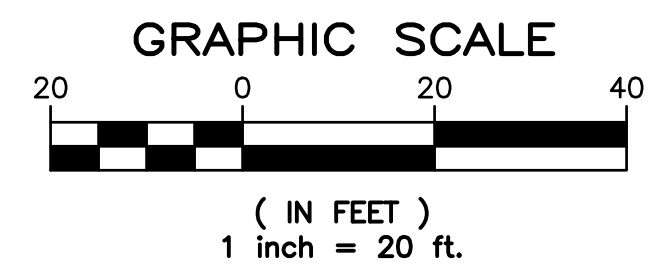
- PROPERTY OWNER SHALL WORK WITH THE FIRE DEPARTMENT ON REQUIRED FLOWS FOR THE BUILDING SPRINKLER REQUIREMENTS. THE EXISTING WATER SERVICE LINE WILL MORE THAN LIKELY NEED TO BE UPGRADED ONCE THIS IS DETERMINED.
- PROPERTY OWNER SHALL CONTACT DIG-SAFE TO HELP DETERMINE THE LOCATION AND DEPTHS OF THE EXISTING WATER AND SEWER SERVICES. ADDITIONAL EXCAVATION MAY BE NECESSARY TO DETERMINE THE SIZE, LOCATION AND ACTUAL CONDITION OF THESE SERVICES.
- PROPERTY OWNER SHALL WORK WITH THE TOWN OF HUDSON'S ENGINEERING DEPARTMENT ON WHETHER OR NOT THE EXISTING WATER AND/OR SEWER SERVICES NEED TO BE UPGRADED FOR THE PROPOSED USES.
- HANDICAP RAMPS AND SIDEWALKS WILL BE POURED CONCRETE
- A SEWER MANHOLE WILL BE INSTALLED AS A CLEAN-OUT OVER THE EXIST SEWER LINE. CONTRACTOR WILL NEED TO DO SOME EXPLORATION TO DETERMINE THE ACTUAL DEPTH OF THE SEWER PRIOR TO THE ORDERING OF STRUCTURE

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

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
 DATE OF MEETING: \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_  
 SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

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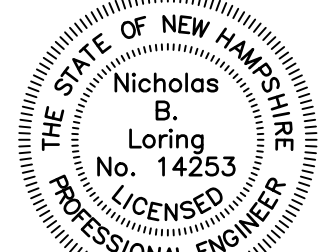
**GRADING, UTILITY, DRAINAGE & EROSION CONTROL PLAN**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
 MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NEW HAMPSHIRE 03060  
 HCRD BOOK 8875/PAGE 2378

SCALE: 1"=20' SHEET 4 OF 12 AUGUST 3, 2021

REVISIONS	DATE
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F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021

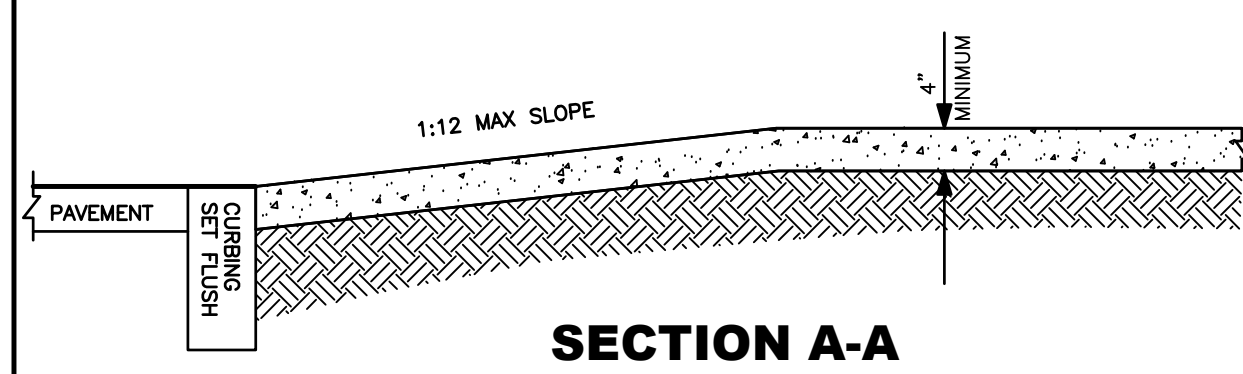
**BENCHMARK LLC**  
 Consulting Engineers Land Planners  
 1F Commons Drive, Suite 35  
 Londonderry, New Hampshire 03053  
 Phone: (603) 437-5000



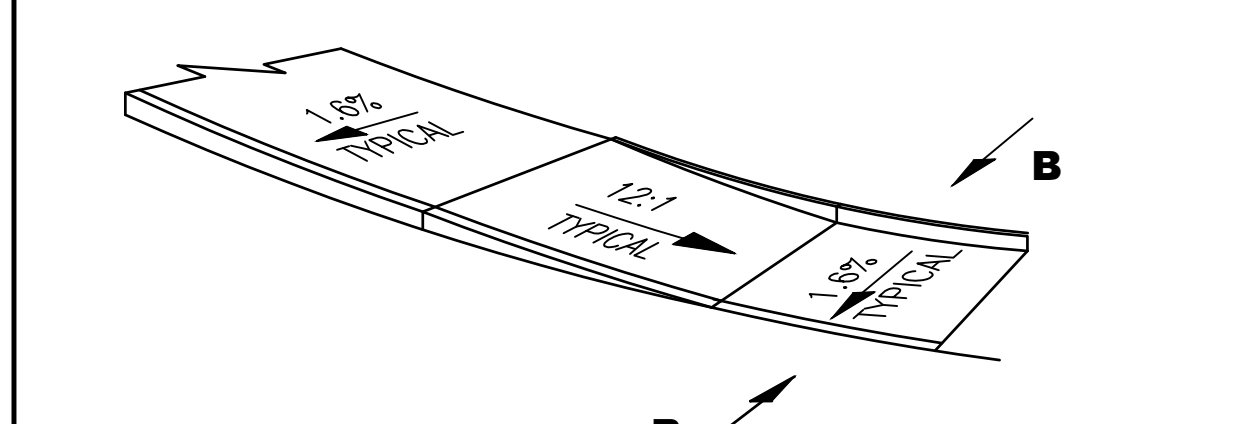
INSERT A  
 SCALE: 1"=40'

**LANDSCAPE NOTES:**

- INTERIOR PARKING LOT LANDSCAPING  
TOTAL ISLANDS IN PARKING AREA = 3,951 SQ. FT.  
TOTAL PARKING AREA = 64,250 SQ. FT.  
6% (SEE WAIVER) REQUIRED  
10% REQUIRED
- TOTAL EXISTING PLANTED TREES FROM PREVIOUSLY APPROVED SITE PLAN  
SP 275-8 STATE THAT ONE SHADE TREE SHOULD BE PLANTED FOR EVERY 1,600 SQ. FT. PAVEMENT  
64,250 SQ. FT. PAVEMENT/1,600 = 40.15 TREES REQUIRED
- TOTAL EXISTING SHRUBS PLANTED FROM PREVIOUSLY APPROVED SITE PLAN = 106  
TOTAL SHRUBS REQUIRED 1/200 OR 1.6/PARKING SPACE  
64,250 SQ. FT PAVEMENT/200 = 321.3  
OR  
1.6 PER PARKING SPACE \* 148 SPACE PROPOSED = 236.8  
TOTAL EXISTING (106) + ADDITIONAL 216 SHRUBS PROPOSED = 322



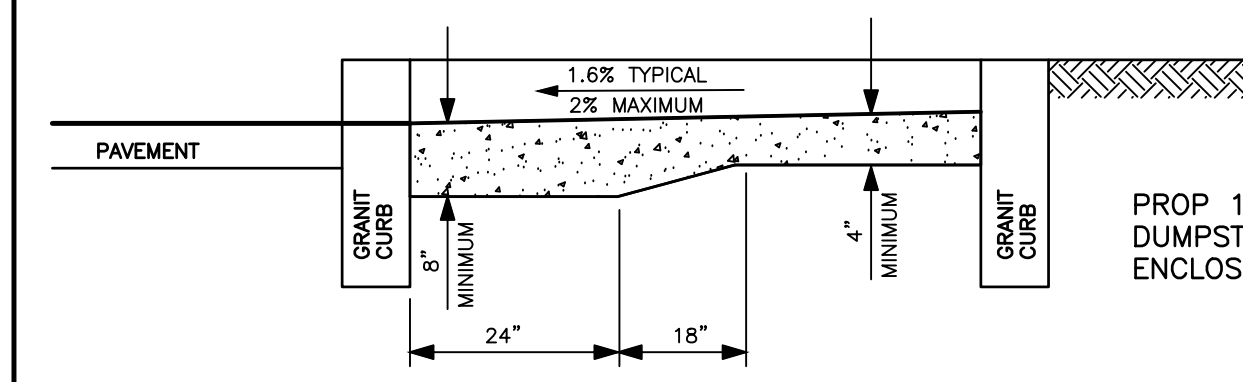
**SECTION A-A**



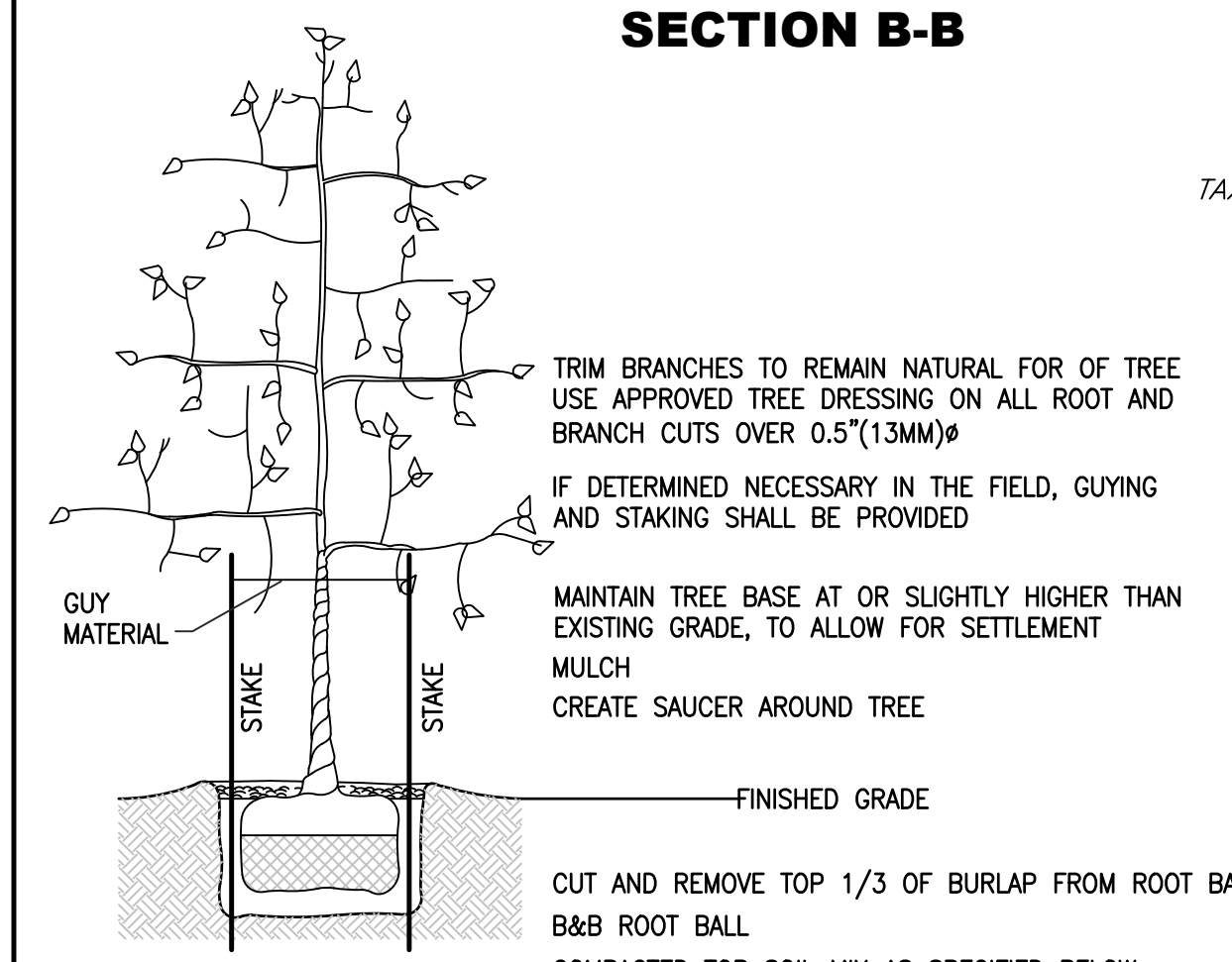
**PARALLEL CURB RAMP DETAIL**

**GENERAL NOTES**

- THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1. THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
- TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMP SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 2 FEET FROM THE ROADWAY CURBLINE.
- INTERCEPT DRAINAGE ALONG THE CURB RAMP OR LANDINGS, CATCH BASINS, MANHOLES, ETC SHALL NOT BE LOCATED IN OR AT BASE OF, SIDEWALK CURB RAMP OR LANDINGS. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING, EXCLUSIVE OF THE FLATED SIDES, SHALL BE WHOLLY CONTAINED WITHIN THE SIDEWALK CROSSWALK MARKINGS.
- THE SURFACE OF PERPENDICULAR SIDEWALK CURB RAMP OR THE LANDING OF A PARALLEL SIDEWALK CURB RAMP SHALL CONTRAST VISUALLY WITH THE ADJOINING SIDEWALK SURFACES, EITHER ASPHALT/LIGHT COLORED CONCRETE OR LIGHT COLORED CONCRETE/DARK-STAINED CONCRETE. THE CONCRETE SURFACES SHALL BE SLIP RESISTANT.



**SECTION B-B**



- SPECIFICATIONS:**
- TOPSOIL MIX, SEE SPEC.
  - DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
  - WATER THOROUGHLY AFTER INSTALLATION.
  - REMOVE TREE RINGS AND STAKES TWO YEARS AFTER INSTALLATIONS
  - PROVIDED DRAINAGE FOR PLANTING PIT IN IMPERMEABLE SOIL.



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

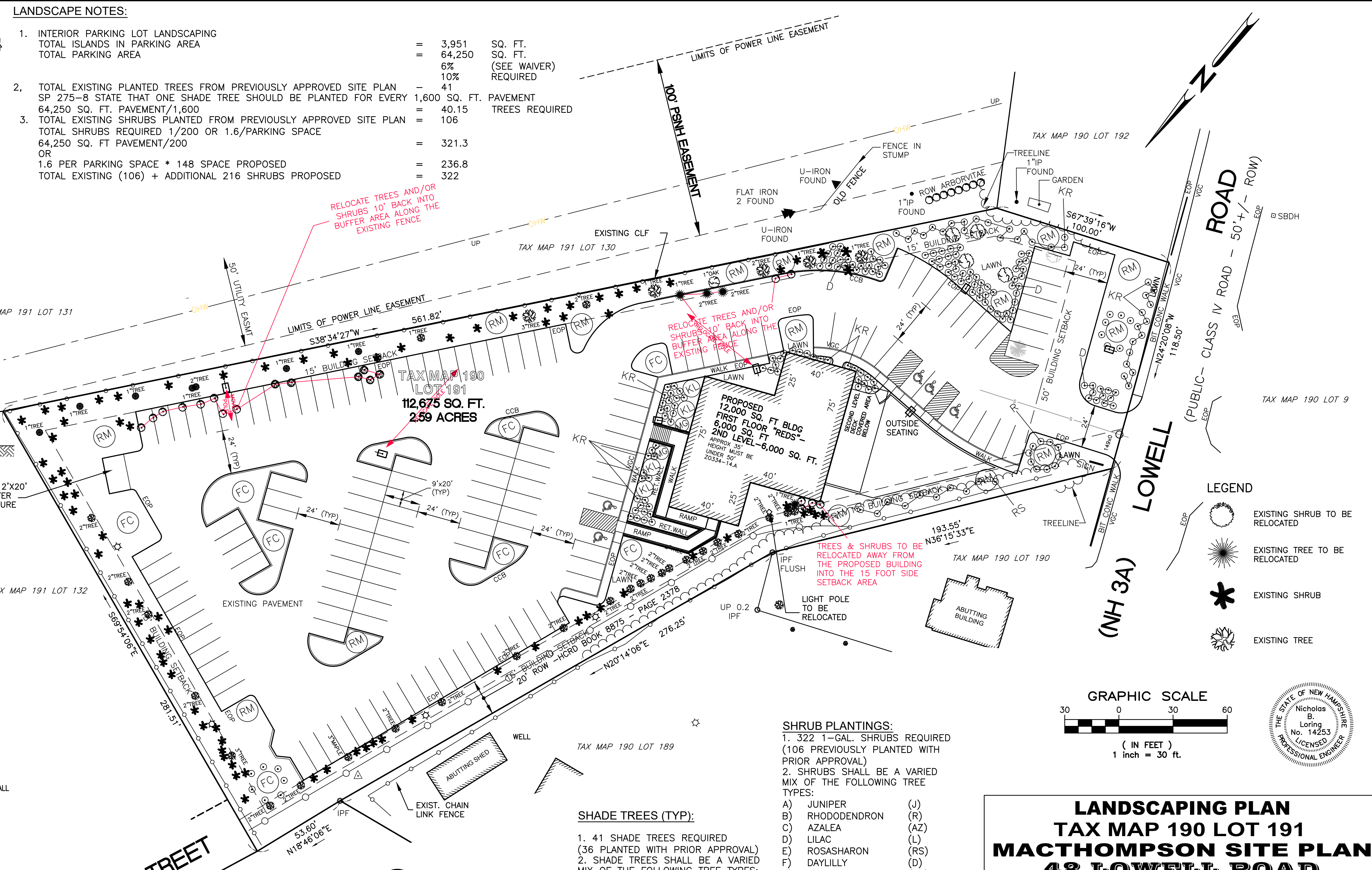
**APPROVED BY THE HUDSON, NH PLANNING BOARD**

DATE OF MEETING \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.



**PLANTING**

BALLED AND BURLAP SHRUB

TOP OF ROOT BALL SHALL BE LEVEL WITH FINISHED GRADE

MULCH 2" MIN. AWAY FROM TRUNK OF PLANT

2"-3" SHREDDED HARDWOOD BARK

CUT & REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL. NON-DEGRADABLE BURLAP SHALL BE REMOVED OR ROLLED UNDER BALL AFTER PLACEMENT OF PLANT

PROVIDE DRAINAGE IN PLANTING PIT AS NECESSARY

PRUNE TO REMOVE DEAD OR BROKEN BRANCHES

FORM SAUCER WITH 3" CONTINUOUS RIM

BACKFILL MIXTURE: 3:1 TOPSOIL ORGANIC HUMUS

BOTTOM LAYER OF BACKFILL SHALL BE LIGHTLY TAMPED AND SETTLED WITH WATER PRIOR TO PLACEMENT OF PLANT

**SHRUB PLANTINGS:**

- 322 1-GAL. SHRUBS REQUIRED (106 PREVIOUSLY PLANTED WITH PRIOR APPROVAL)
- SHRUBS SHALL BE A VARIED MIX OF THE FOLLOWING TREE TYPES:

A) JUNIPER	(J)
B) RHODODENDRON	(R)
C) AZALEA	(AZ)
D) LILAC	(L)
E) ROSASHARON	(RS)
F) DAYLILLY	(D)
G) KNOCKOUT ROSE	(KR)
H) KOREAN LILAC	(KL)
I) MAIDEN GRASS	(MG)
J) NINEBARK	(N)
K) PANICLE HYDRANGEA	(PH)
L) ROSE	(R)

**SHADE TREES (TYP):**

- 41 SHADE TREES REQUIRED (36 PLANTED WITH PRIOR APPROVAL)
- SHADE TREES SHALL BE A VARIED MIX OF THE FOLLOWING TREE TYPES:

A) RED MAPLE	(RM)
B) RED OAK	(RO)
C) FLOWERING PEAR	(FP)
D) JAPANESE YEW	(JY)
E) FLOWERING CHERRY	(FC)

ALL PLANT MATERIAL SHALL HAVE A MINIMUM WINTER HARDINESS FOR ZONE 5B AS DETERMINED BY THE AMERICAN STANDARDS FOR NURSERY STOCK.

ALL PROPOSED TREES WILL BE A MINIMUM OF 1" IN DIA

ALL SHRUBS TO BE PLANTED SHALL BE A MINIMUM OF 2-3 GALLONS IN SIZE

OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANTING BASED ON AVAILABLE NURSERY STOCK

**LEGEND**

- EXISTING SHRUB TO BE RELOCATED
- EXISTING TREE TO BE RELOCATED
- EXISTING SHRUB
- EXISTING TREE

**GRAPHIC SCALE**

30 0 30 60  
( IN FEET )  
1 inch = 30 ft.

**LANDSCAPING PLAN**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
MACTHOMPSON REALTY, INC.  
3 MARMON DRIVE  
NASHUA, NEW HAMPSHIRE 03060  
HCRD BOOK 8875/PAGE 2378

SCALE: 1"=30' SHEET 5 OF 12 AUGUST 3, 2021

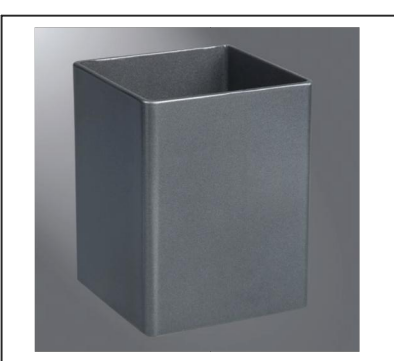
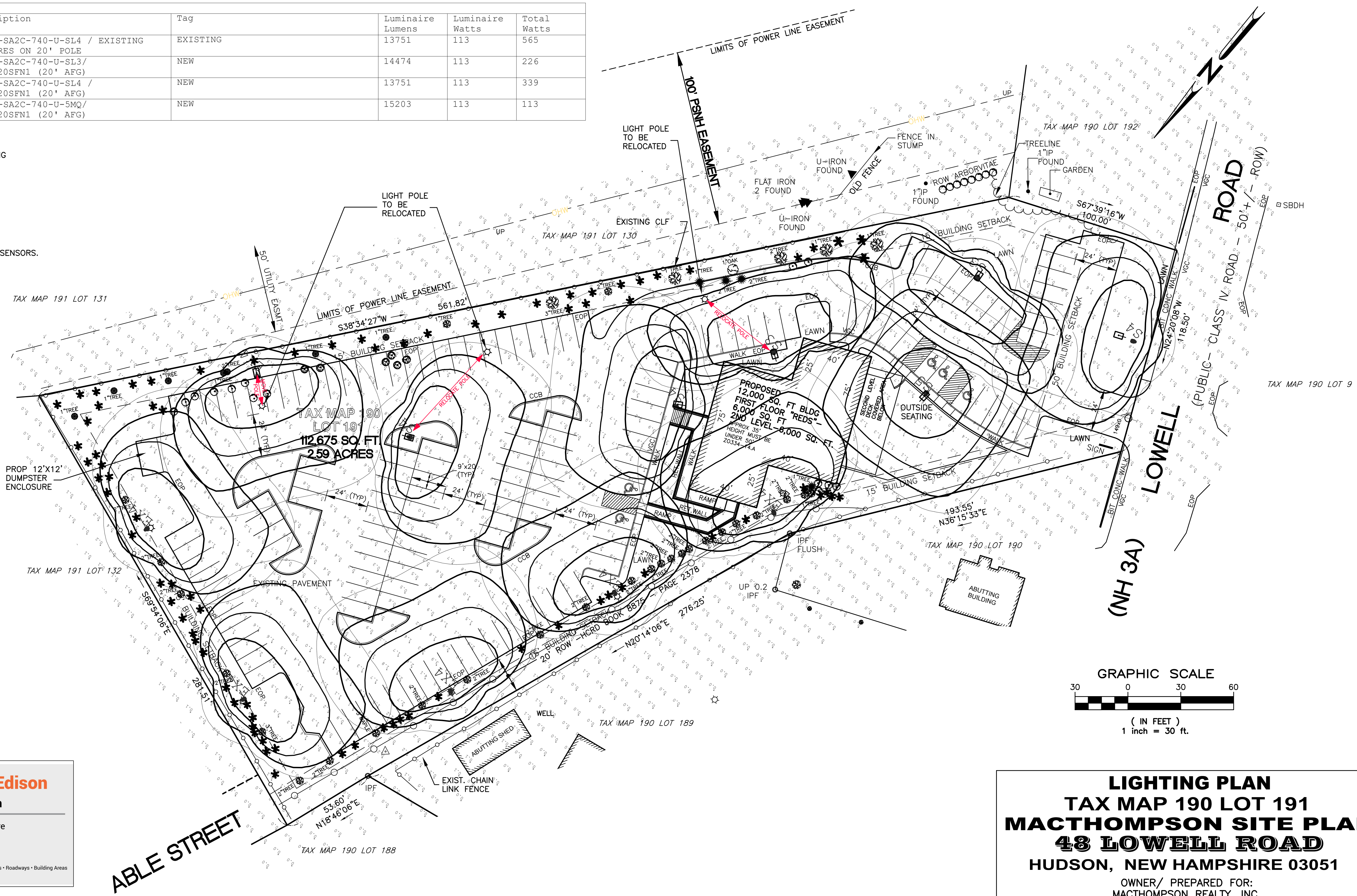
FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021
REVISIONS	DATE

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000



Symbol	Qty	Label	Arrangement	Description	Tag	Luminaire Lumens	Luminaire Watts	Total Watts
	5	EX4	Single	GLEON-SA2C-740-U-SL4 / EXISTING FIXTURES ON 20' POLE	EXISTING	13751	113	565
	2	S3	Single	GLEON-SA2C-740-U-SL3/SSS4A20SFN1 (20' AFG)	NEW	14474	113	226
	3	S4	Single	GLEON-SA2C-740-U-SL4 / SSS4A20SFN1 (20' AFG)	NEW	13751	113	339
	1	S5	Single	GLEON-SA2C-740-U-5MQ/SSS4A20SFN1 (20' AFG)	NEW	15203	113	113

- LIGHTING NOTES:**
- ALL LIGHTING SHALL CONFORM TO THE TOWN OF HUDSON ZONING ORDINANCE AND SITE PLAN REGULATIONS.
  - ALL LIGHTING TO BE DARK SKY COMPLIANT.
  - LIGHTING PROVIDED BY:  
CHARRON INC.  
40 LONDONDERRY TURNPIKE, SUITE 1  
HOOKSETT, NH 03106  
PHONE (603) 624-4827
  - LIGHT FIXTURES MAY BE SUBSTITUTED WITH AN EQUIVALENT TYPE OF FIXTURE PROVIDING THE FOOT CANDLES REMAIN THE SAME AS THE EXAMPLES SHOWN
  - ALL LIGHTS WILL BE EQUIPPED WITH DUSK TO DAWN PHOTOCELL SENSORS. LIGHTING WILL BE UTILIZED FROM DUSK TO DAWN.



SSS SQUARE STRAIGHT STEEL

LIGHT POST DETAIL



**McGraw-Edison**  
**GLEON Galleon**  
Area / Site Luminaire  
  
Typical Applications  
Outdoor • Parking Lots • Walkways • Roadways • Building Areas

"S" LIGHT FIXTURE

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

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

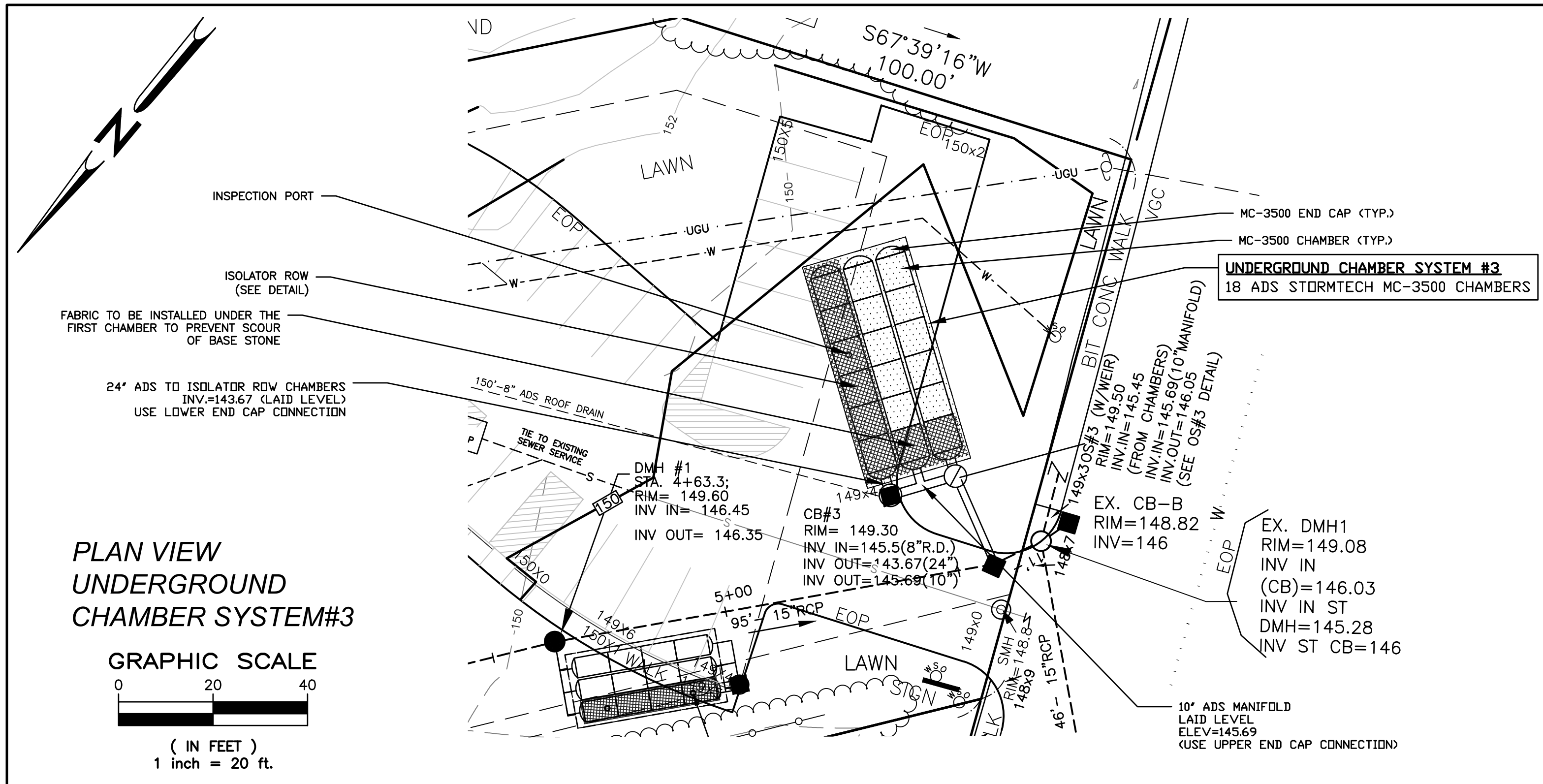
**LIGHTING PLAN**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
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SCALE: 1"=30' SHEET 6 OF 12 AUGUST 3, 2021

FUSS&ONIEL COMMENTS	01/21/2022
TOWN COMMENTS	12/23/2021
F.O./TOWN COMMENTS	12/07/2021
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PLANNING COMMENTS 9/21/21	09/23/2021
REVISIONS	DATE





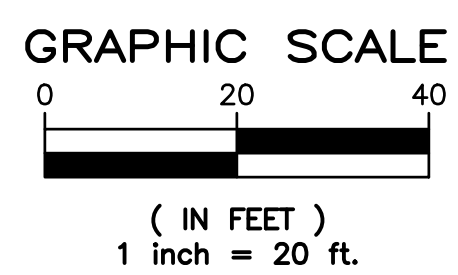
**MC-3500 STORMTECH CHAMBER SPECIFICATIONS**

- CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

**IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM**

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
  - STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
    - STONESHOOTER LOCATED OFF THE CHAMBER BED.
    - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
    - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
  - THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
  - JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
  - MAINTAIN MINIMUM SPACING BETWEEN THE CHAMBER ROWS.
  - INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
  - EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
  - STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
  - THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
  - ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.
- NOTES FOR CONSTRUCTION EQUIPMENT**
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
    - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
    - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
    - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

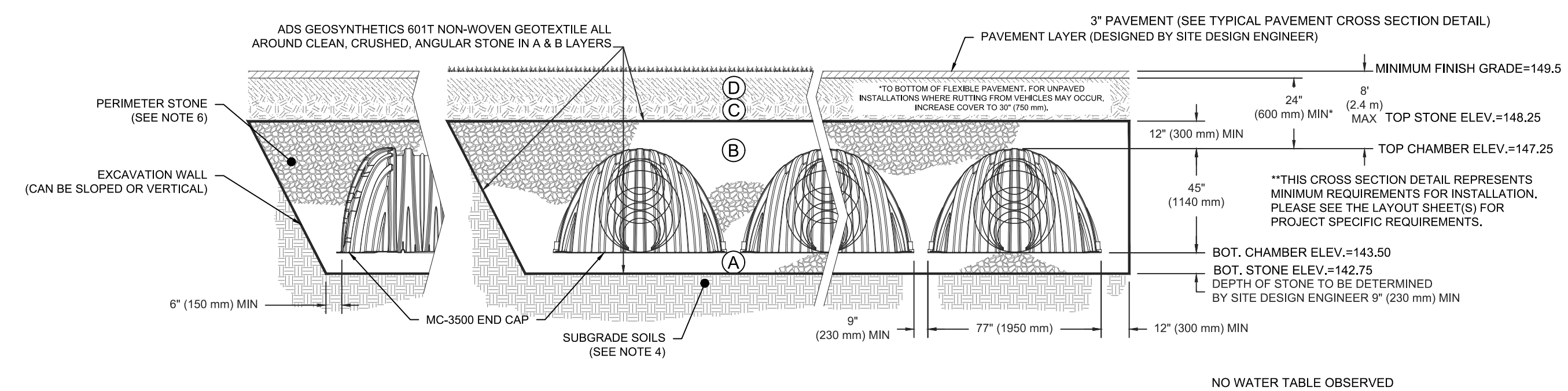
**PLAN VIEW UNDERGROUND CHAMBER SYSTEM#3**



**ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	<b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS, PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	<b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2.4, A-3 OR AASHTO M43 <sup>3</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	<b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>3</sup> 3, 4	NO COMPACTION REQUIRED.
A	<b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>3</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

PLEASE NOTE:  
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR ALL LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.  
 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



- NOTES:**
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
  - MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
  - THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
  - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
  - REQUIREMENTS FOR HANDLING AND INSTALLATION:
    - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
    - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
    - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

**DRAINAGE DETAIL SHEET  
 TAX MAP 190 LOT 191  
 MACTHOMPSON SITE PLAN  
 48 LOWELL ROAD  
 HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
 MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NEW HAMPSHIRE 03060  
 HCRD BOOK 8875/PAGE 2378

SCALE: AS NOTED SHEET 7 OF 12 AUGUST 3, 2021

REVISIONS	DATE
FUSS&ONIEL COMMENTS	01/21/2022
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**ON-SITE DRAINAGE OPERATIONS AND MAINTENANCE SCHEDULE**

**CATCH BASIN - MAINTENANCE PROCEDURES:**

- STEP 1) INSPECT CATCH BASIN UPSTREAM SEMIANNUALLY FOR SEDIMENT
- STEP 2) REMOVE GRATES AND COVERS
- STEP 3) SKIM OFF OILS AND FLOATABLES.
- STEP 4) MEASURE THE DEPTH OF SEDIMENT
- STEP 5) IF SEDIMENT IS AT A DEPTH GREATER THAN 6" PROCEED TO STEP 6, IF NOT PROCEED TO STEP 7
- STEP 6) VACUUM OR MANUALLY REMOVE SEDIMENT
- STEP 7) REPLACE GRATES OR COVERS
- STEP 8) RECORD OBSERVATION, DEPTH & DATE AND SCHEDULE NEXT INSPECTION.

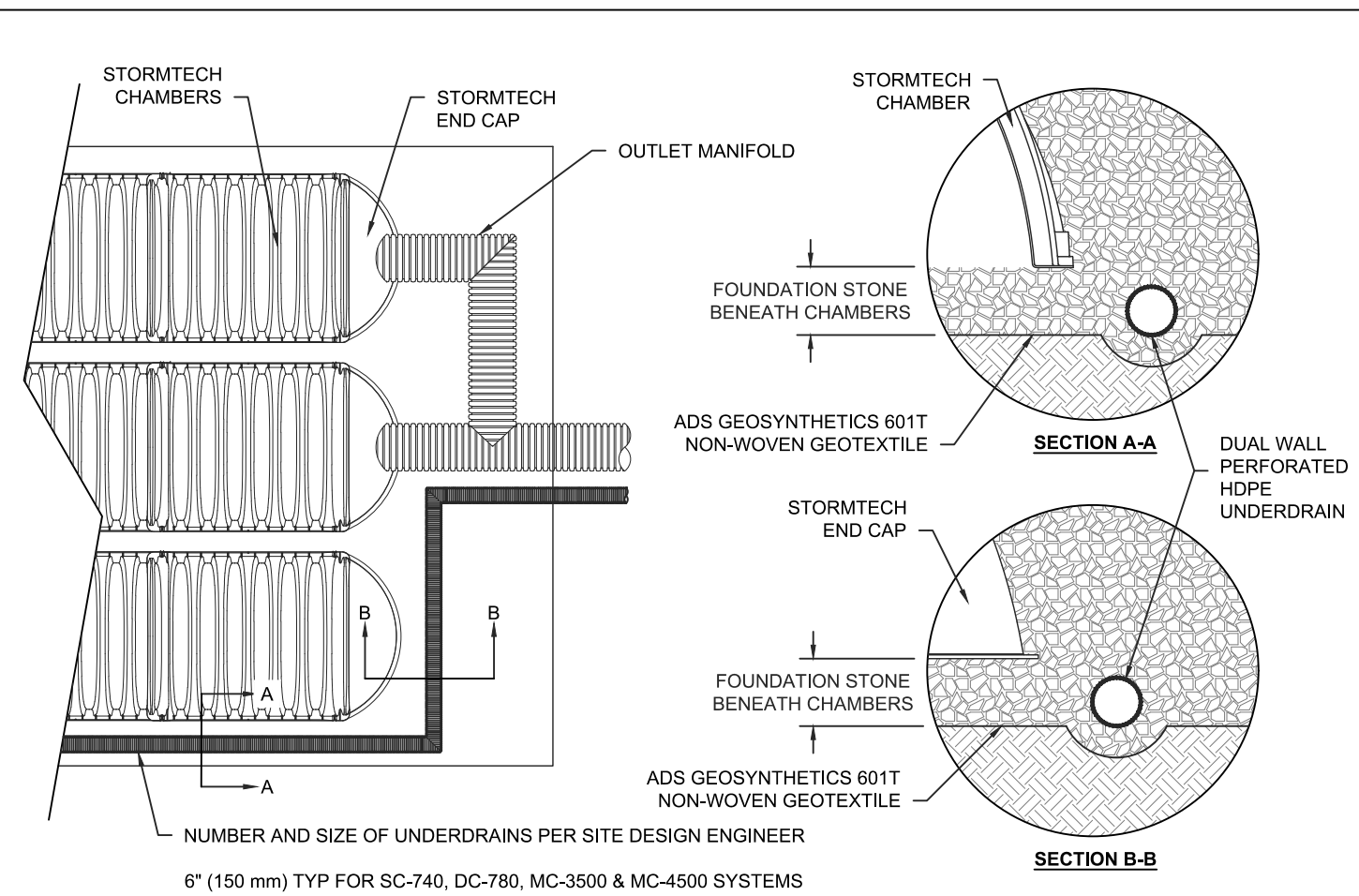
**OUTLET STRUCTURE MAINTENANCE PROCEDURES:**

- STEP 1) INSPECT OUTLET STRUCTURE ON A SEMIANNUAL BASIS
- STEP 2) INSPECTION FORMS INCLUDED IN THE LONG TERM INSPECTION AND MAINTENANCE MANUAL FOR THIS SITE.
- STEP 3) INSPECT SLOTTED WEIRS. IF SEDIMENT OR DEBRIS IS CLOGGING WEIR ORIFICES GO TO STEP 3, OTHERWISE GO TO STEP 5.
- STEP 4) REMOVE ALL TRASH, DEBRIS AND SEDIMENT OUTSIDE THE OUTLET STRUCTURE MANUALLY OR USING LOW IMPACT EQUIPMENT.
- STEP 5) REMOVE GRATES OR COVERS
- STEP 6) VACUUM OR MANUALLY REMOVE TRASH, SEDIMENT OR DEBRIS
- STEP 7) VACUUM OILS AND FLOATABLES
- STEP 8) REPLACE GRATES AND COVERS
- STEP 9) RECORD OBSERVATION AND DEPTH OF SEDIMENT, PROTECTION BAR MAINTENANCE AND SCHEDULE NEXT INSPECTION.

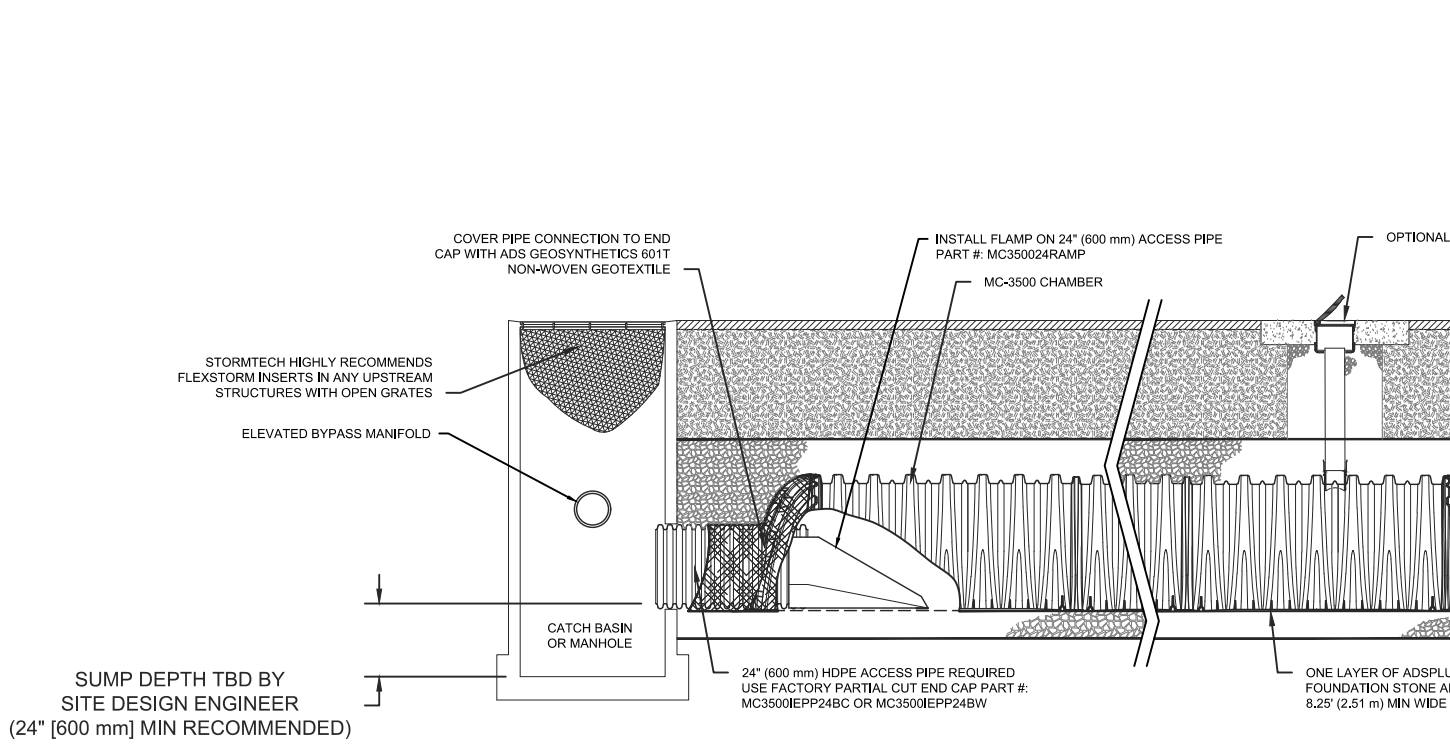
SEE ISOLATOR ROW INSPECTION NOTES TO LEFT

**INSPECTION & MAINTENANCE LOGS**

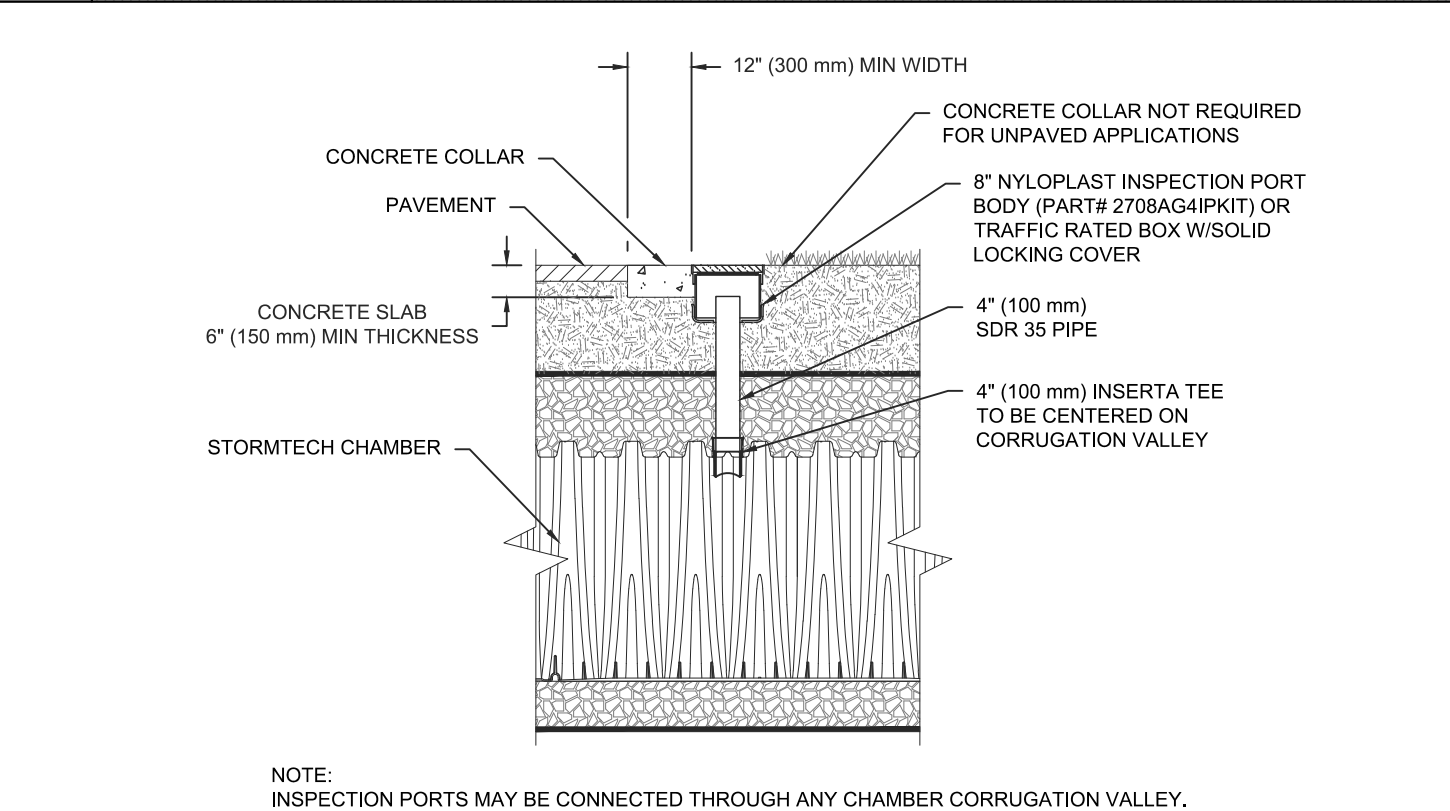
STORM WATER INSPECTION & MAINTENANCE REPORTS (SEE INSPECTION & MAINTENANCE MANUAL BY BENCHMARK, LLC) SUMMARIZING ALL OF THE ABOVE SHALL BE KEPT ON FILE BY THE OWNER AND PROVIDED TO THE TOWN UPON REQUEST.



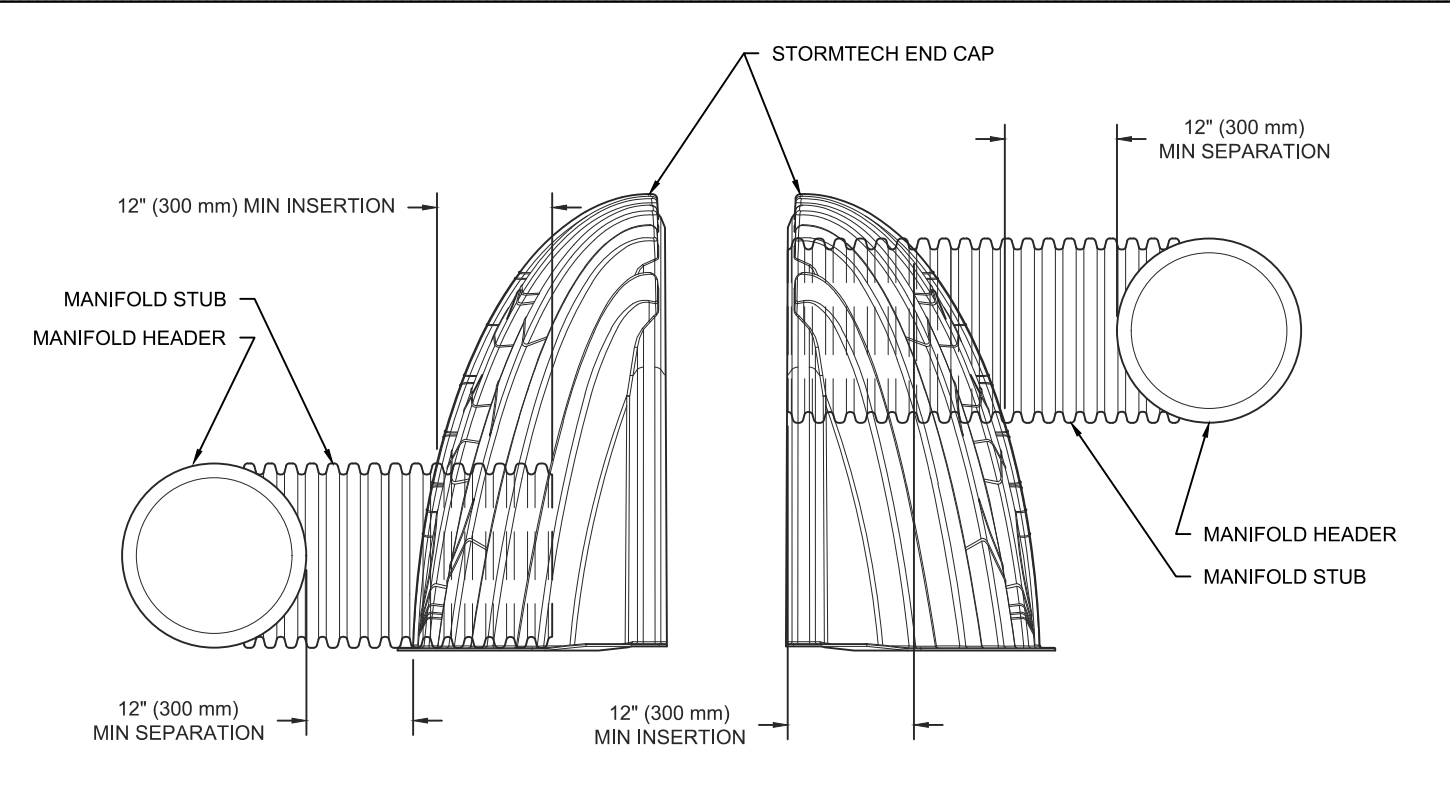
**5 UNDERDRAIN DETAIL**



**3 MC-3500 ISOLATOR ROW PLUS DETAIL**



**4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)**



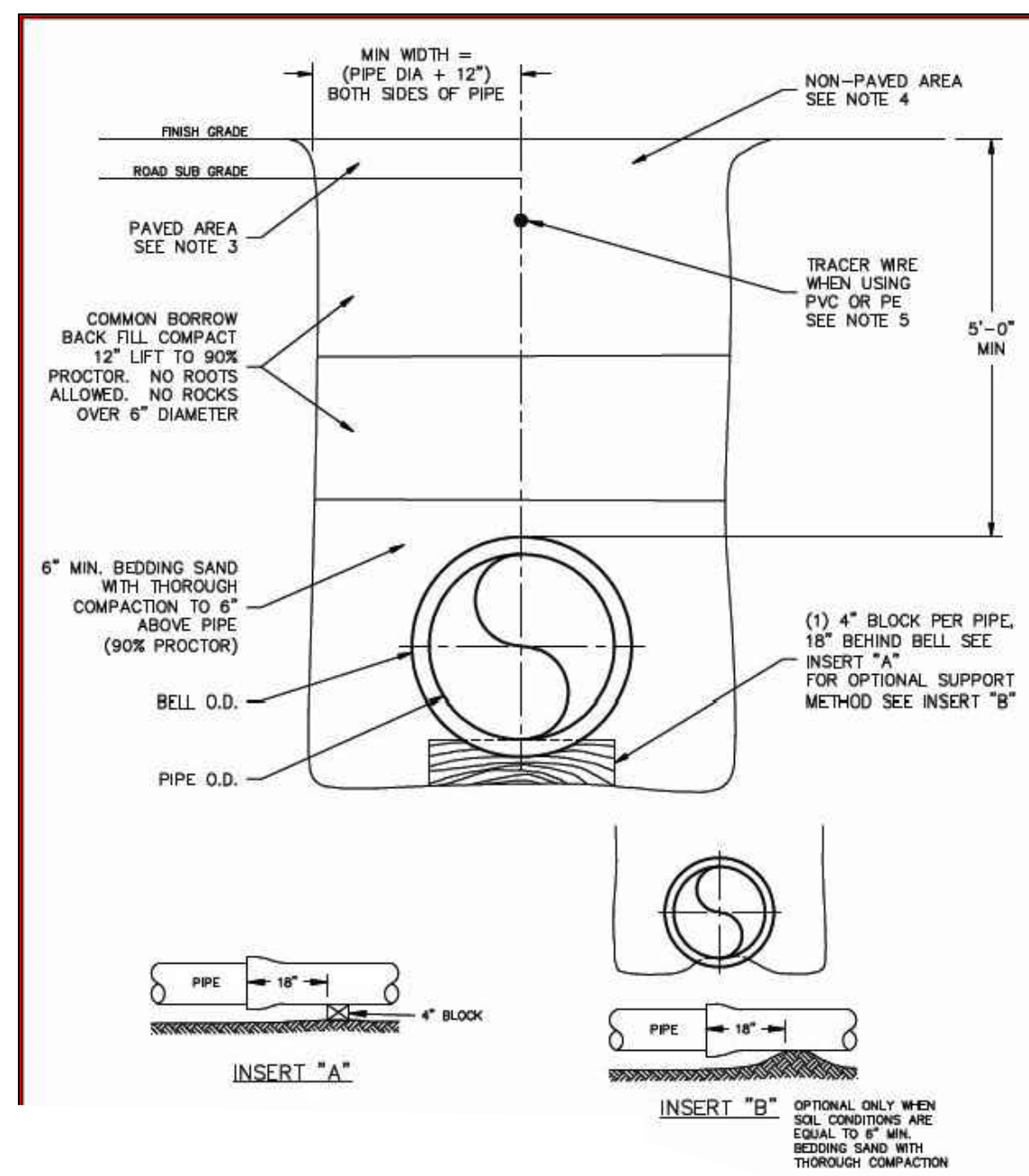
**7 MC-SERIES END CAP INSERTION DETAIL**

**INSPECTION & MAINTENANCE**

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
  - A. INSPECTION PORTS (IF PRESENT)
    - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
    - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
    - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
    - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
    - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
  - B. ALL ISOLATOR PLUS ROWS
    - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
    - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
      - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
      - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
    - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
  - A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
  - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

**NOTES**

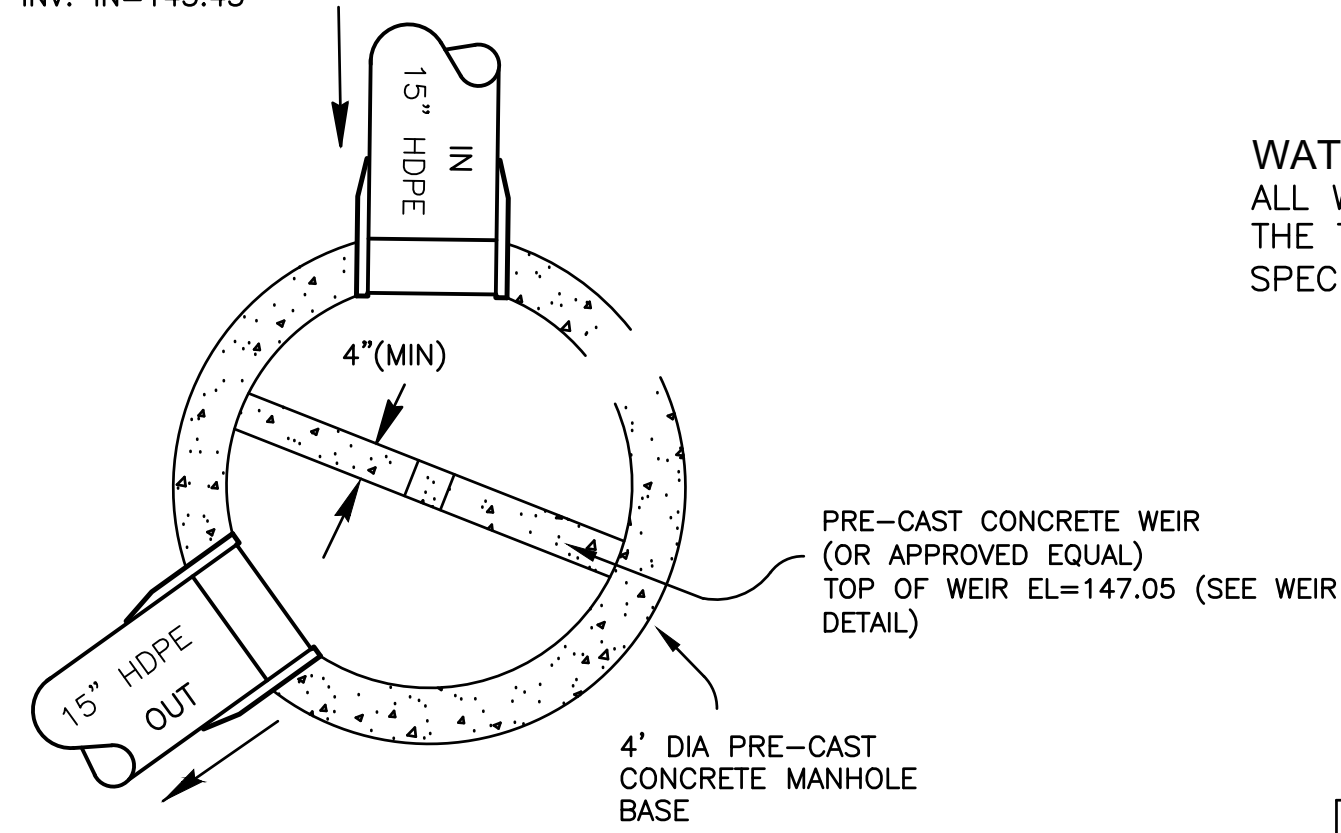
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



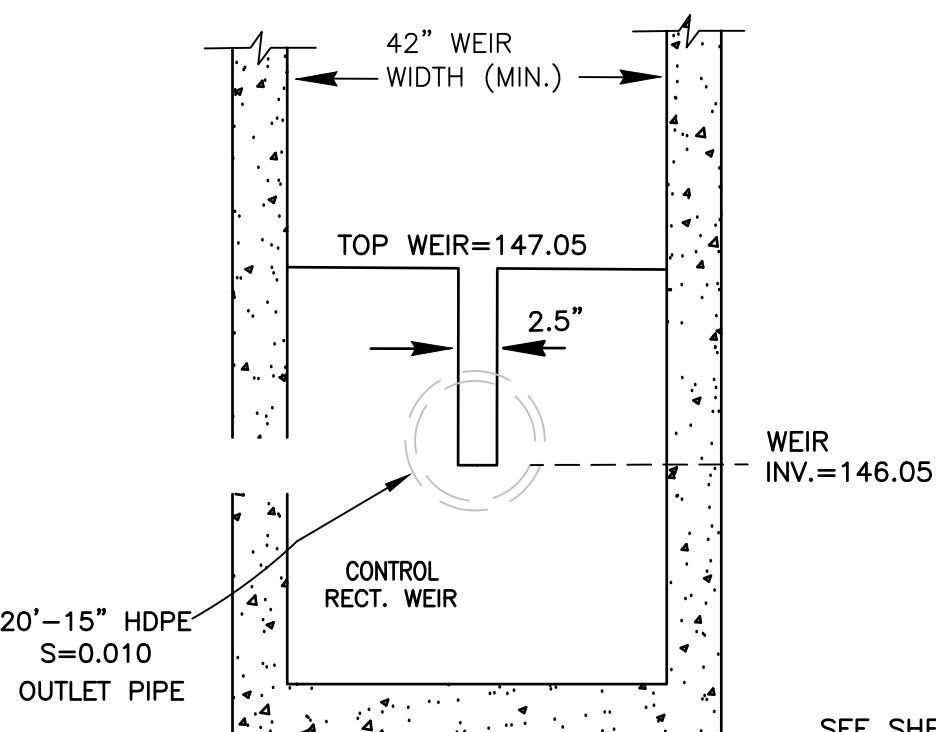
- NOTES**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO THE TOWN OF HUDSON WATER DEPARTMENT SPECIFICATIONS.
  2. ALL PIPE SHALL HAVE A MINIMUM DEPTH OF 5 FEET FROM THE TOP OF PIPE TO FINISH GRADE
  3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
  4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING JURISDICTION IN NON-PAVED AREAS
  5. 10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBLE STAR COP, AVON MASS OR EQUIVALENT

**WATER SERVICE DETAIL (NO SCALE)**

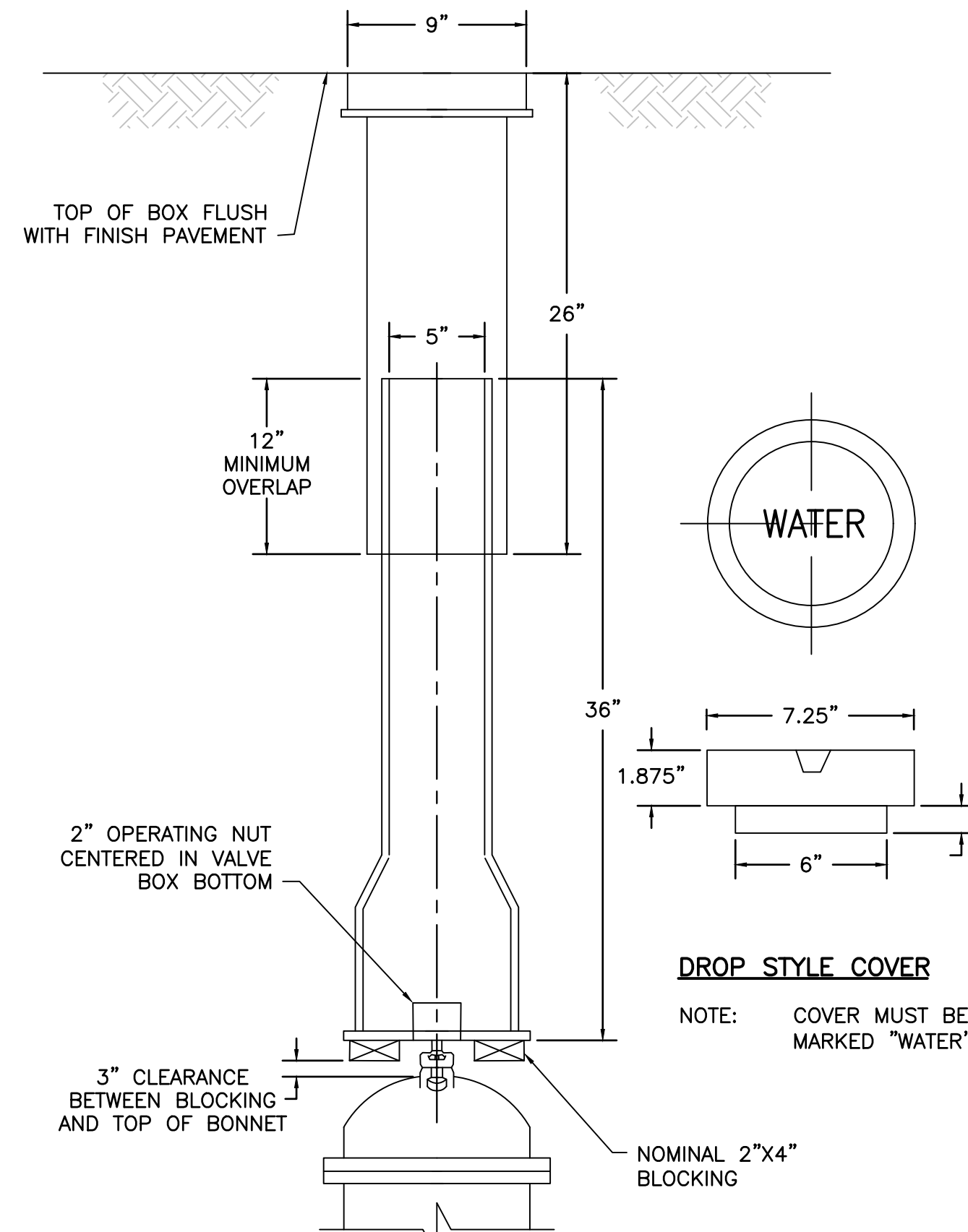
FROM CHAMBER SYSTEM #3  
INV. IN=145.45



TO EX. CB F  
INV. OUT=146.05



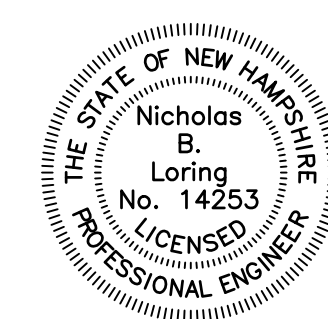
**WEIR ELEVATION SPECIAL O.S.#3 DETAIL (NO SCALE)**



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNSYLVANIA WATERWORKS TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

**TYPICAL VALVE BOX DETAIL (NO SCALE)**

**WATER CONSTRUCTION NOTES:**  
ALL WATER LINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF HUDSON WATER DEPARTMENT TECHNICAL SPECIFICATIONS FOR MAIN, HYDRANT AND SERVICE INSTALLATIONS"

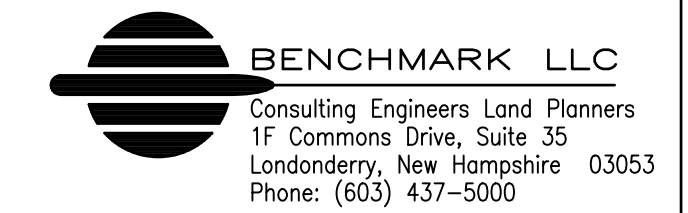


**CONSTRUCTION DETAIL SHEET TAX MAP 190 LOT 191 MACTHOMPSON SITE PLAN 48 LOWELL ROAD HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
MACTHOMPSON REALTY, INC.  
3 MARMON DRIVE  
NASHUA, NEW HAMPSHIRE 03060  
HCRD BOOK 8875/PAGE 2378

SCALE: AS NOTED SHEET 8 OF 12 AUGUST 3, 2021

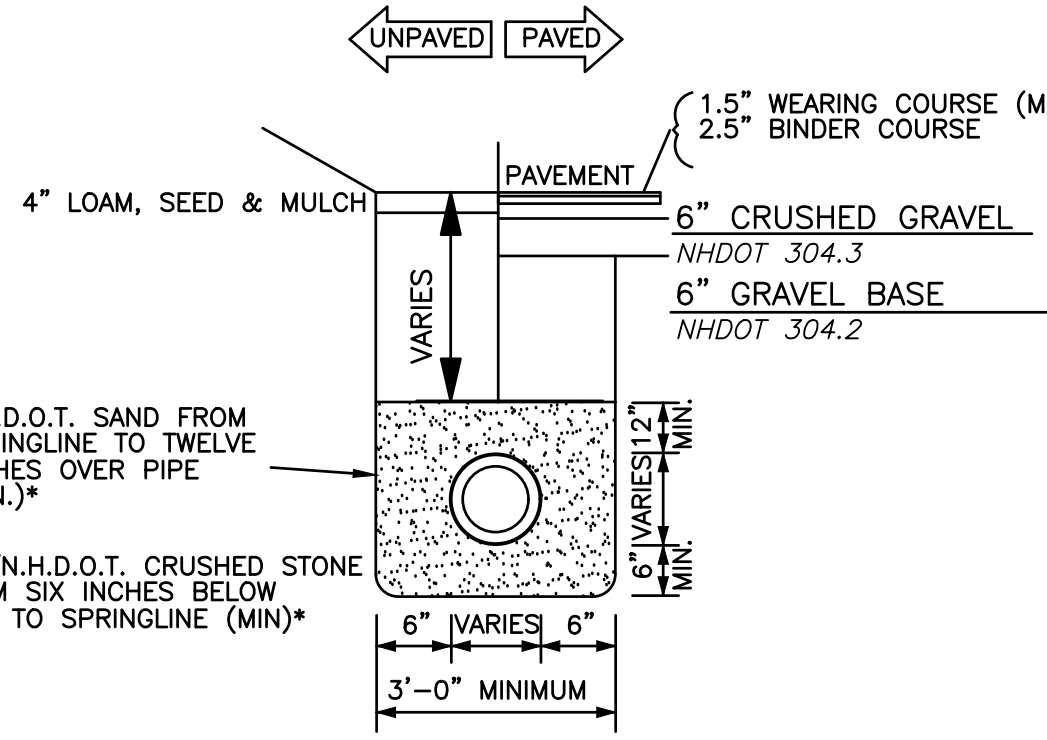
FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021
REVISIONS	DATE



MC-3500 STANDARD DETAILS



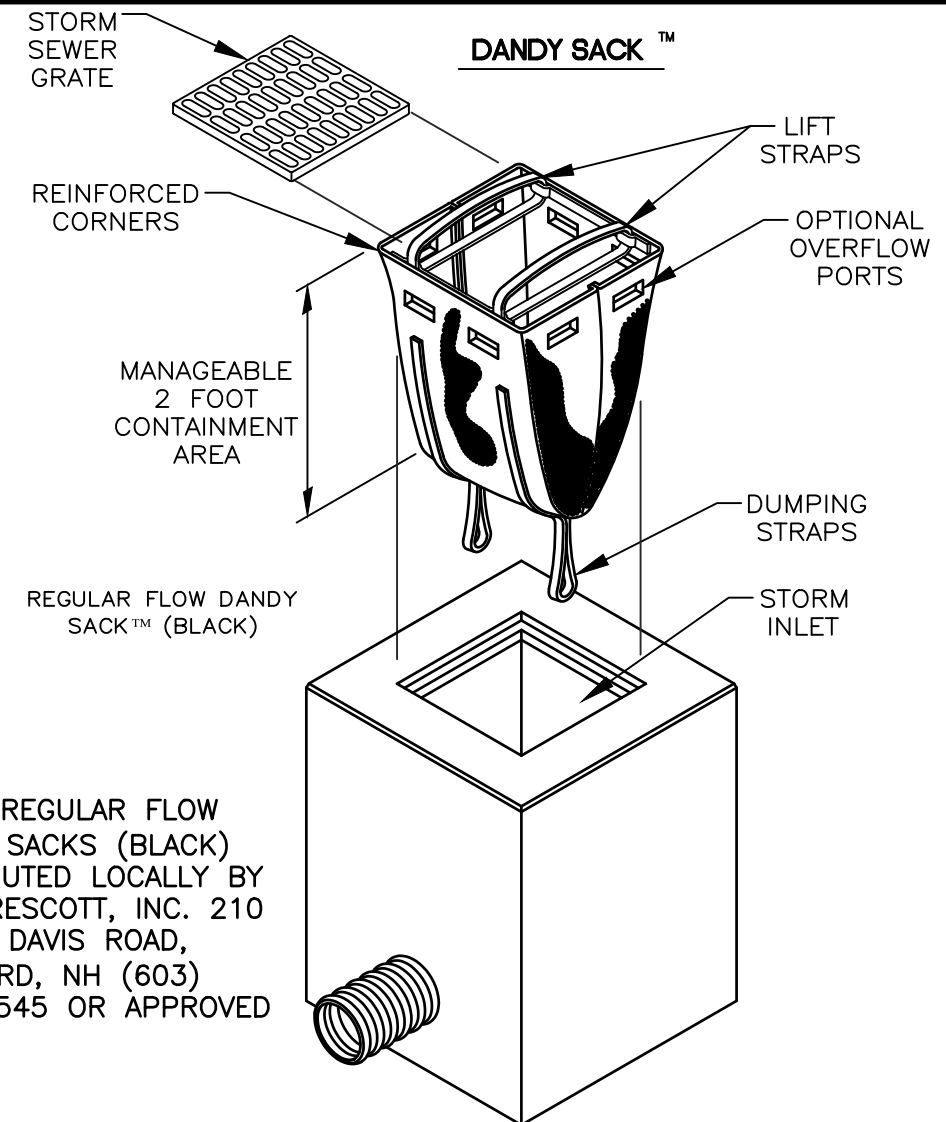
4640 TRUJMAN BLVD  
HILLIARD, OH 43026  
**ADS**  
ADVANCED DRAINAGE SYSTEMS, INC.



**TYPICAL DRAIN TRENCH DETAIL**  
(NO SCALE)

SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN THE LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE TOWN OF HUDSON TOWN ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. SUITABLE MATERIAL SHALL BE PLACED IN 12" LIFTS AND THOROUGHLY COMPACTED TO 95% OR BETTER COMPACTION.

IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE TOWN OF HUDSON TOWN ENGINEER MAY PERMIT THE USE OF TOPSOIL, LOAM OR PEAT, IF SATISFIED THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE STRUCTURES FOR MAINTENANCE AND RECONSTRUCTION (WHEN NECESSARY) WILL BE PRESERVED. SUITABLE MATERIAL SHALL BE PLACED IN 18" LIFTS AND THOROUGHLY COMPACTED TO 92% OR BETTER COMPACTION IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS, SECTION 304.



**DETAIL OF INLET SEDIMENT CONTROL DEVICE**  
(NOT TO SCALE)

**GENERAL CONSTRUCTION NOTES:**

FUGITIVE DUST GENERATED ON SITE SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

Env-Wq 1504.06(k) THIS PROJECT SHALL MEET THE REQUIREMENTS AND INTENT OF RSA 430:51-57 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.

**Env-Wq 1505.03 MAXIMUM OPEN AREA ALLOWED:**

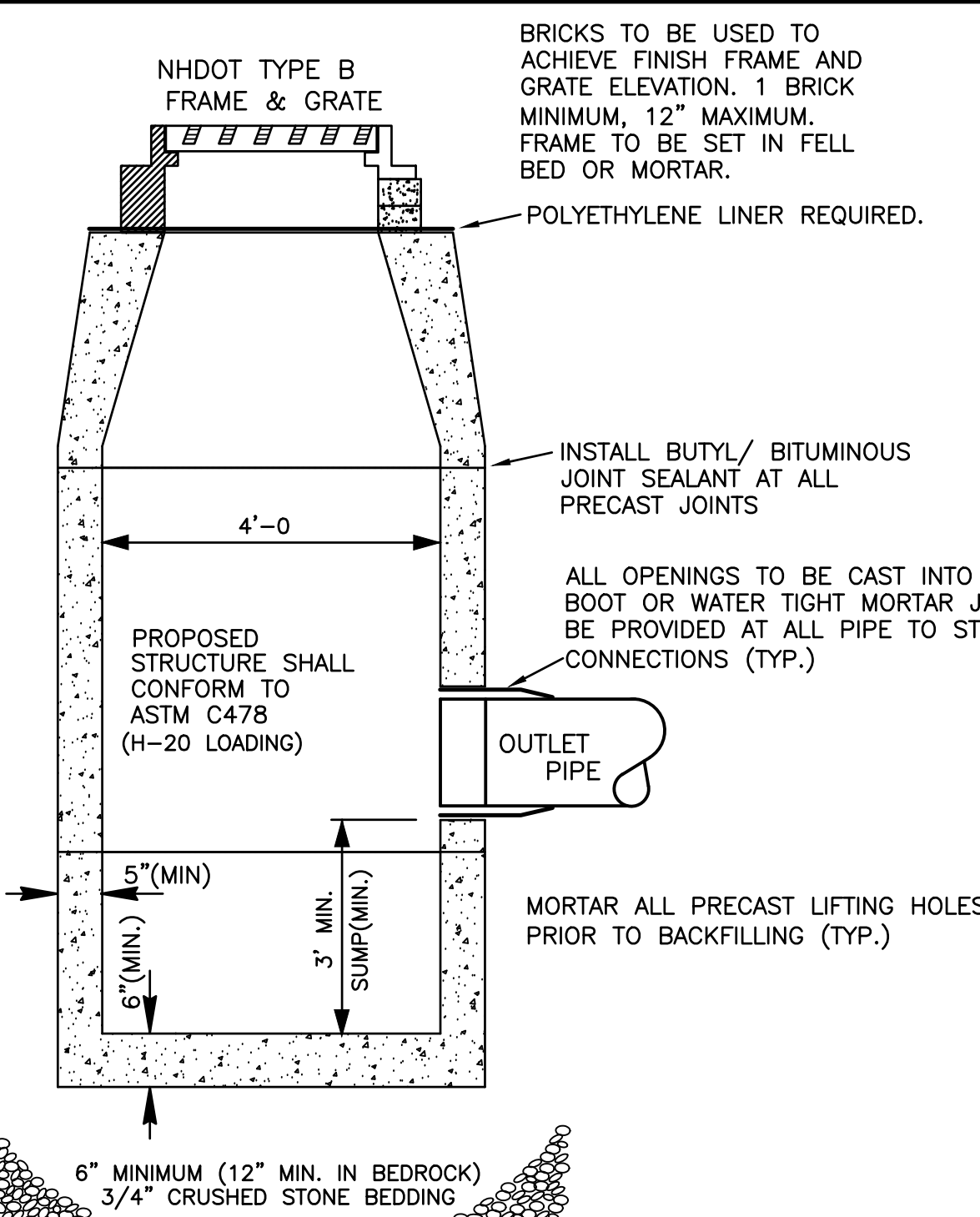
- (A) ALL AREAS OF UNSTABILIZED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL BUT IN ALL CASES WITHIN 30 DAYS OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES. THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT MONITOR, AND PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT IN ALL CASES WITHIN 3 DAYS OF FINAL GRADING.
- (B) THE AREA OF UNSTABILIZED SOILS IS APPROXIMATELY 50,000 SQ. FT.

**Env-Wq 1505.06 COLD WEATHER SITE STABILIZATION:**

- (A) TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFIED BELOW SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1.
- (B) SUBJECT TO (C), BELOW, THE AREA OF EXPOSED, UNSTABILIZED SOILS SHALL BE:
  - (1) LIMITED TO APPROXIMATELY ONE ACRE; AND
  - (2) PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT.
- (C) THE ALLOWED AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN IS DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST AND SUBMITTED TO THE DEPARTMENT FOR APPROVAL AS A REQUEST TO WAIVE THE ONE-ACRE LIMIT.
- (D) SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE AND SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(b). (SEE BELOW)
- (E) SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF 15% OR GREATER THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A LEAST 4 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(b). (SEE BELOW)
- (F) ANCHORED HAY MULCH OR EROSION CONTROL MIX THAT MEETS THE CRITERIA OF ENV-WQ 1506.05(b) SHALL NOT BE INSTALLED OVER SNOW OF GREATER THAN ONE (1) INCH IN DEPTH.
- (G) EROSION CONTROL BLANKETS SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE (1) INCH IN DEPTH OR ON FROZEN GROUND.
- (H) ALL PROPOSED STABILIZATION IN ACCORDANCE WITH (D) OR (E), ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
- (I) ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% 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, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
- (J) AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, TABLE 304-1, ITEM NO. 304.1, 304.2, OR 304.3.

**Env-Wq 1506.05 (b): EROSION CONTROL MIX SHALL:**

1. HAVE AN ORGANIC PORTION BETWEEN 25% AND 65%, DRY WEIGHT BASIS THAT IS:
  - a. FIBROUS AND ELONGATED SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS; AND
  - b. NOT COMPRISED OF WOOD CHIPS, BARK CHIPS, GROUND CONTROL DEBRIS, OR REPROCESSED WOOD PRODUCTS;
2. NOT CONTAIN SILTS, CLAYS, OR FINE SANDS;
3. HAVE A PARTICLE SIZE BY WEIGHT OF 100% PASSING A 3-INCH SCREEN, 90% TO 100% PASSING A 1-INCH SCREEN, 70% TO 100% PASSING A 0.75-INCH SCREEN, AND 30% TO 75% PASSING A 0.25-INCH SCREEN; AND
4. HAVE A pH BETWEEN 5.0 AND 8.0.

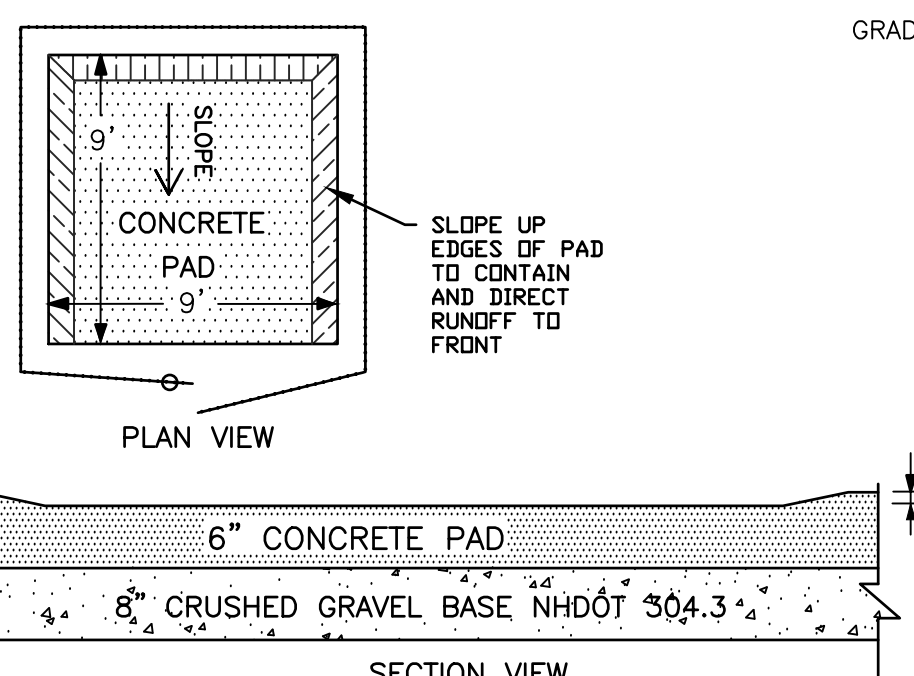


**CATCH BASIN DETAIL**  
(NO SCALE)

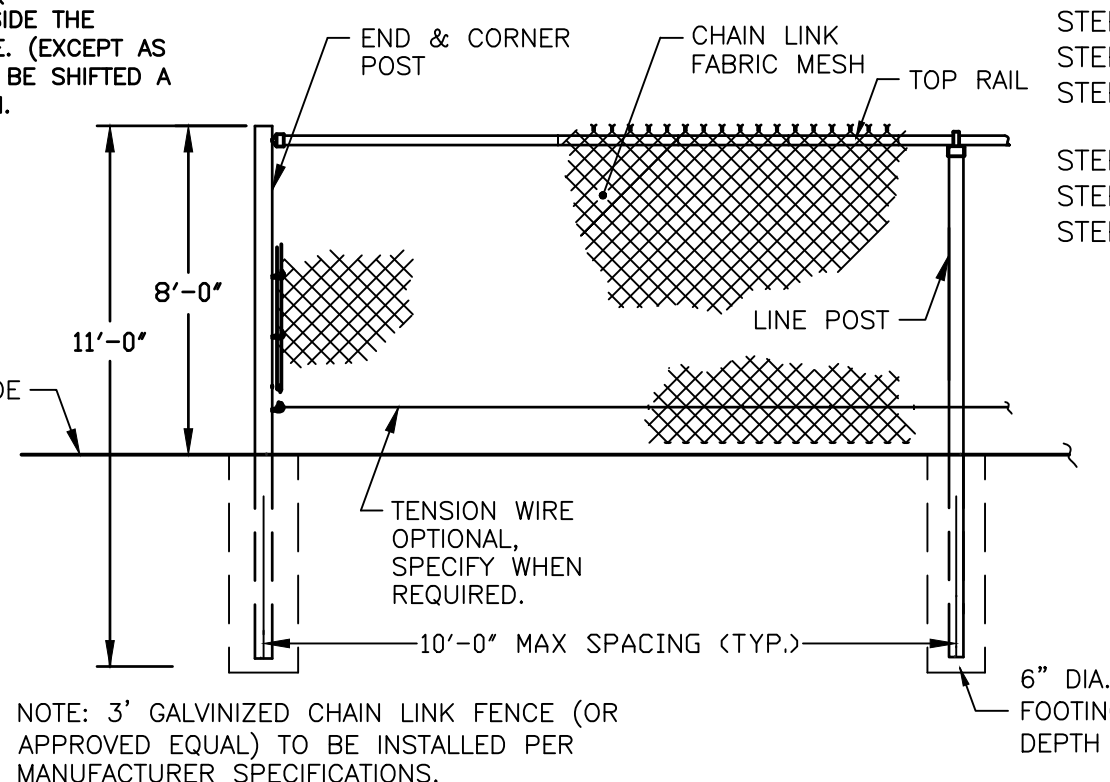
**POLYETHYLENE LINER NOTES:**

ALL CATCH BASINS TO BE OUTFITTED WITH A POLYETHYLENE LINER DOWNSPOUT. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN THE FRAME AND POLYETHYLENE SHEET.

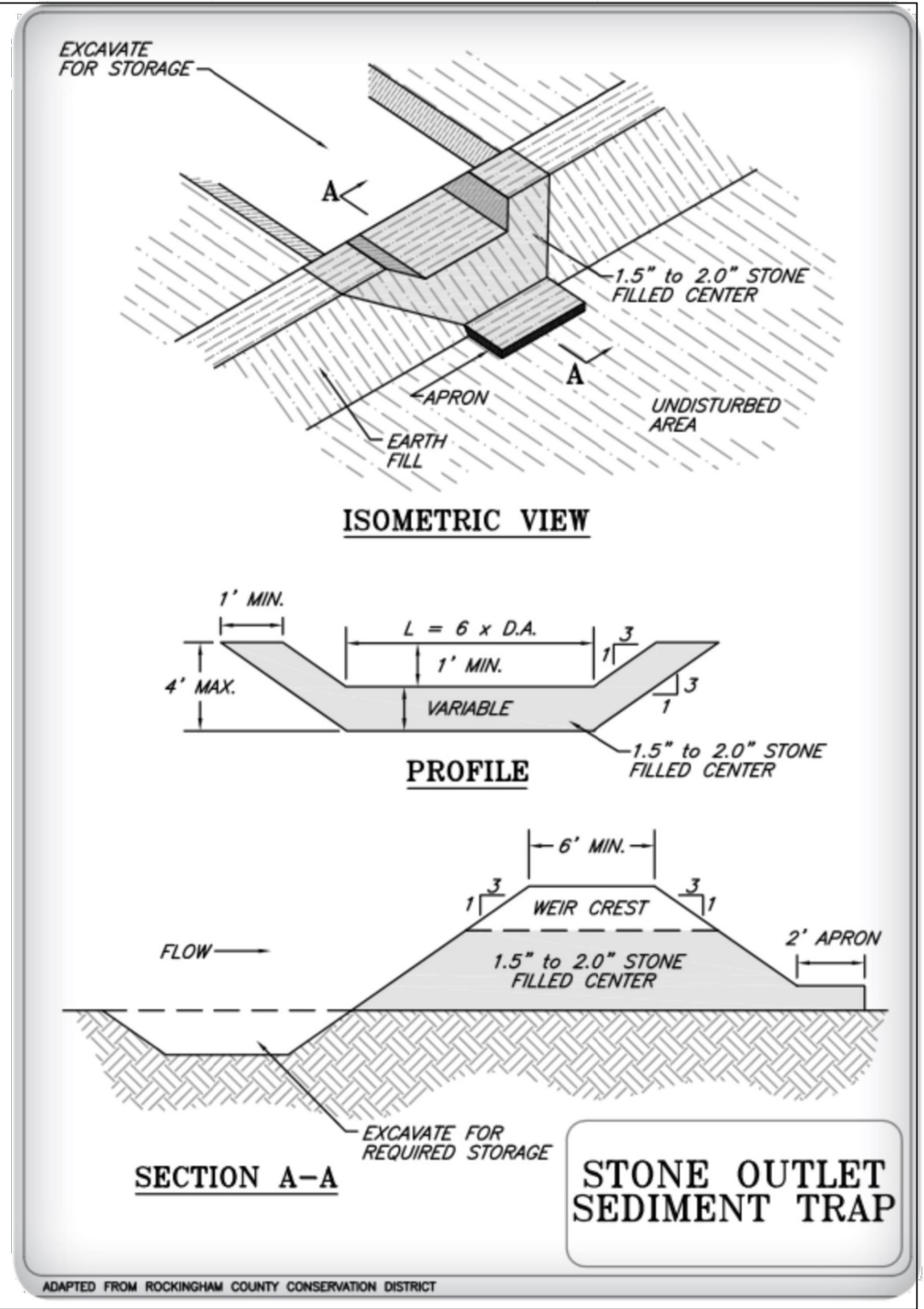
PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE) TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE OF THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE. (EXCEPT AS SHOWN WHEN USED WITH CURBS). CENTER OF THE GRATE AND FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.



**CONCRETE DUMPSTER PAD DETAIL**  
(NO SCALE)



**FENCED IN DUMPSTER ENCLOSURE**  
(NO SCALE)



**SEDIMENT TRAP DETAIL**  
(NO SCALE)

- CONSTRUCTION SPECIFICATIONS**
1. MINIMUM STONE SIZE FOR WEIR AND APRON SHALL BE 1 1/2 INCH CRUSHED STONE
  2. SEE PLAN VIEW FOR SIZING REQUIREMENTS
  3. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED
  4. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED

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

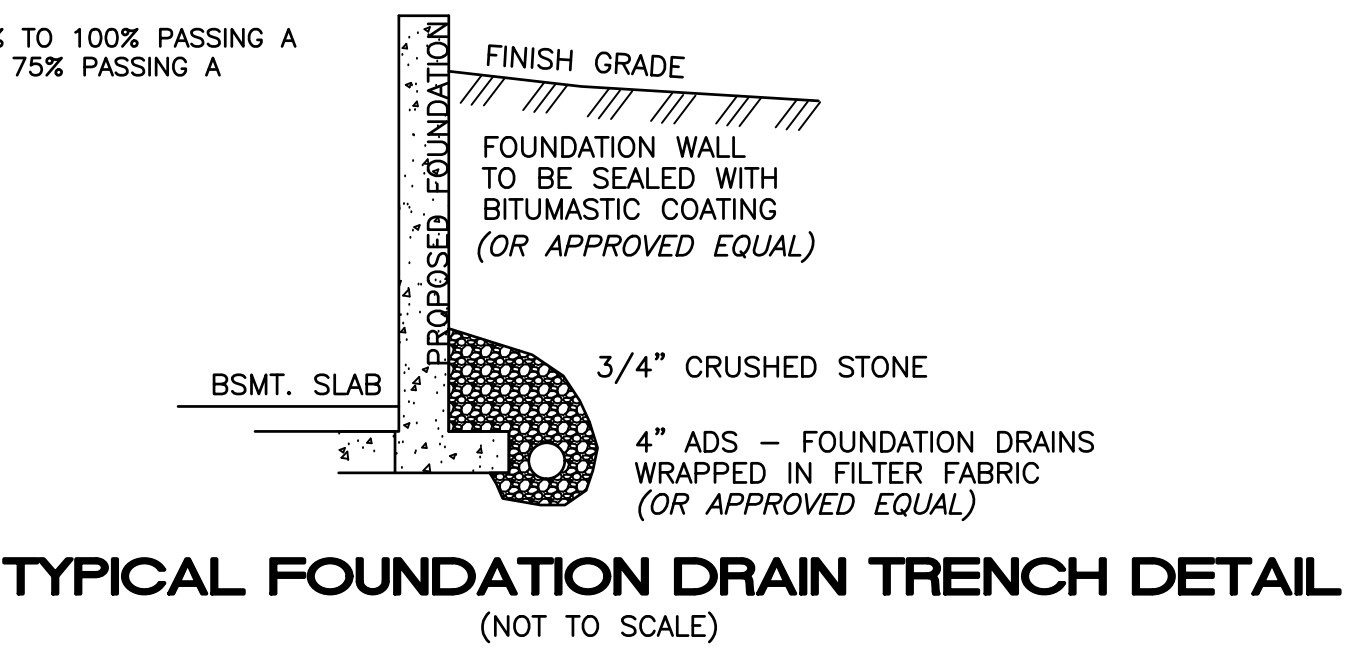
**APPROVED BY THE HUDSON, NH PLANNING BOARD**

DATE OF MEETING: \_\_\_\_\_

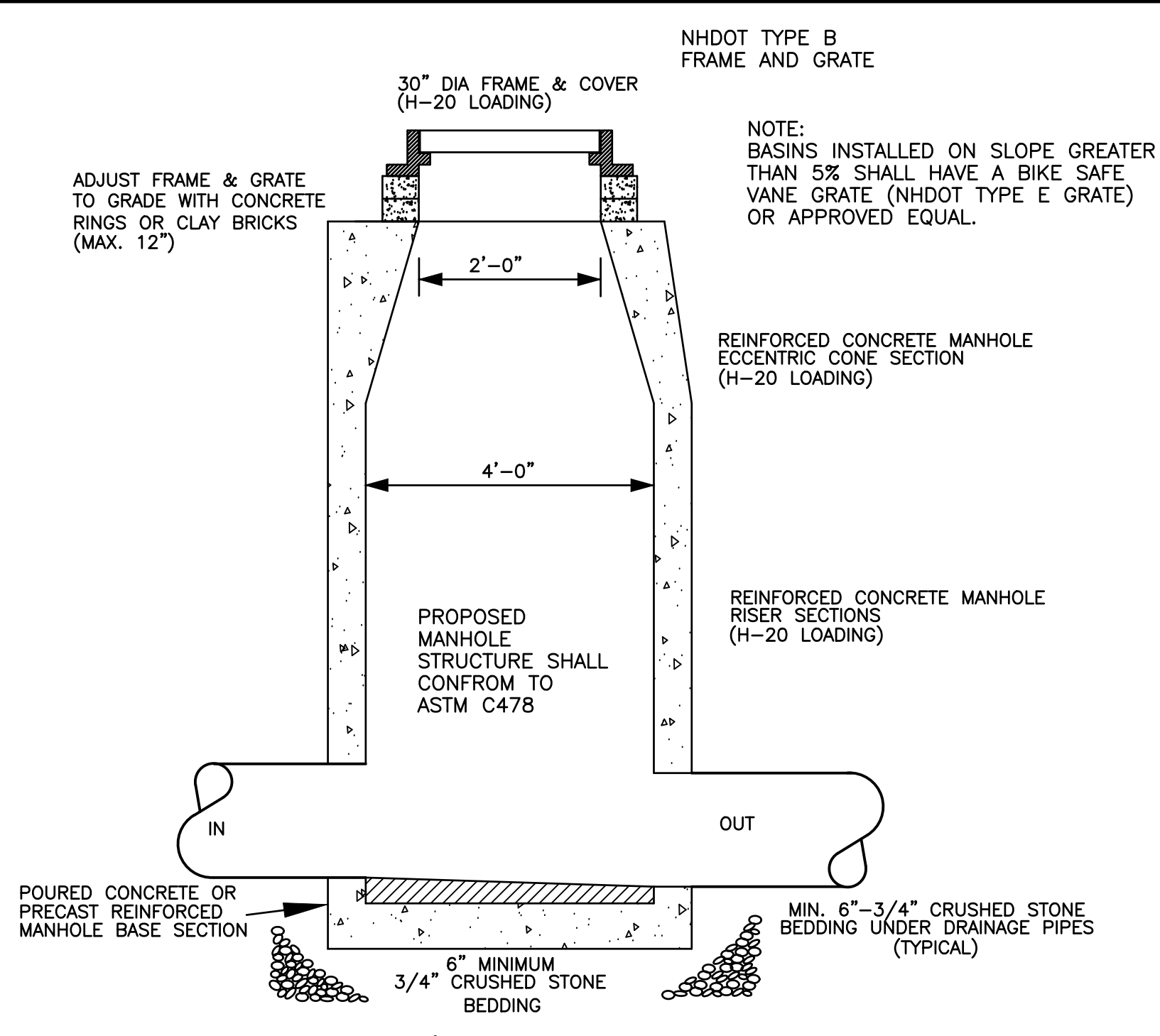
SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.



**TYPICAL FOUNDATION DRAIN TRENCH DETAIL**  
(NOT TO SCALE)



**DRAINAGE / SEWER MANHOLE DETAIL**  
(NO SCALE)

**ON-SITE DRAINAGE OPERATIONS AND MAINTENANCE SCHEDULE**

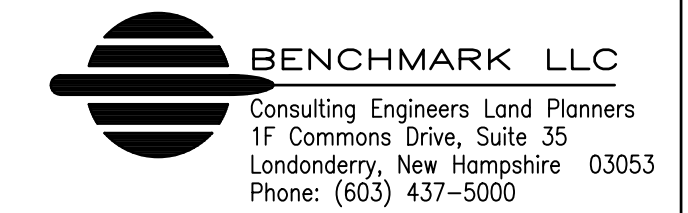
- CATCH BASIN - MAINTENANCE PROCEDURES:
- STEP 1) INSPECT CATCH BASIN UPSTREAM SEMIANNUALLY FOR SEDIMENT
  - STEP 2) REMOVE GRATES AND COVERS
  - STEP 3) SKIM OFF OILS AND FLOATABLES.
  - STEP 4) USING A STADIA ROD, MEASURE THE DEPTH OF SEDIMENT
  - STEP 5) IS SEDIMENT IS AT A DEPTH GREATER THAN 6" PROCEED TO STEP 6, IF NOT PROCEED TO STEP 7
  - STEP 6) VACUUM OR MANUALLY REMOVE SEDIMENT
  - STEP 7) REPLACE GRATES OR COVERS
  - STEP 8) RECORD OBSERVATION, DEPTH & DATE AND SCHEDULE NEXT INSPECTION.

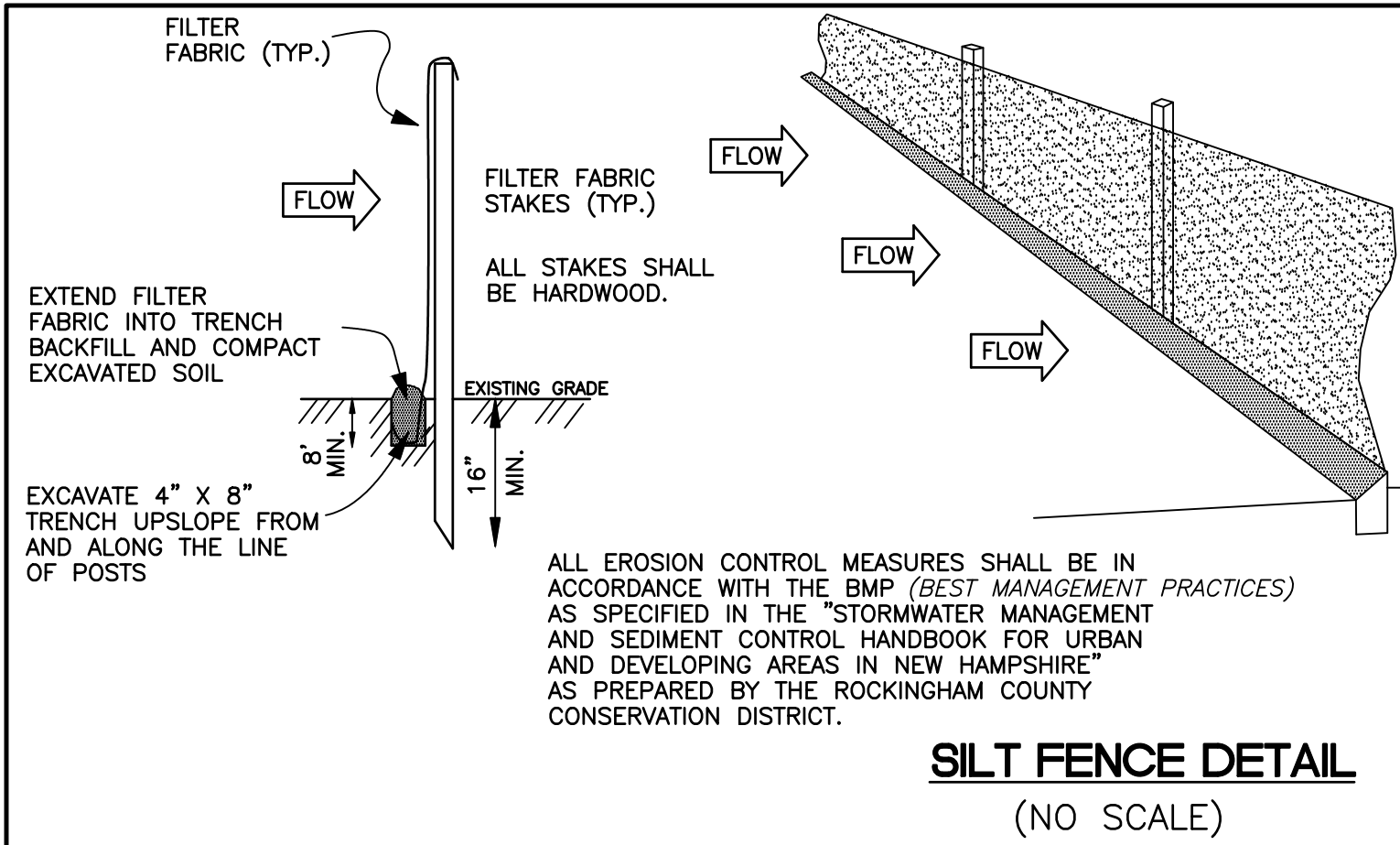
**DRAINAGE DETAIL SHEET**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
MACTHOMPSON REALTY, INC.  
3 MARMON DRIVE  
NASHUA, NEW HAMPSHIRE 03060  
HCRD BOOK 8875/PAGE 2378

SCALE: AS NOTED SHEET 9 OF 12 AUGUST 3, 2021

REVISIONS	DATE
FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS 9/21/21	09/23/2021





**SILT FENCE MAINTENANCE**

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

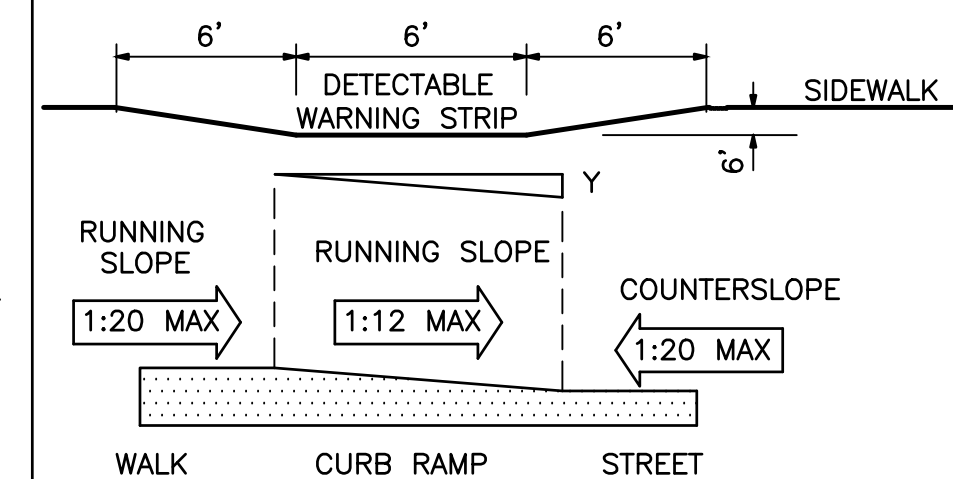
**CONSTRUCTION SPECIFICATIONS**

1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
4. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MIDSIDE AND BOTTOM.
5. WHEN 2 SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED.
6. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. THE MAXIMUM SPACING BETWEEN STAKES SHALL BE 10 FEET. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.

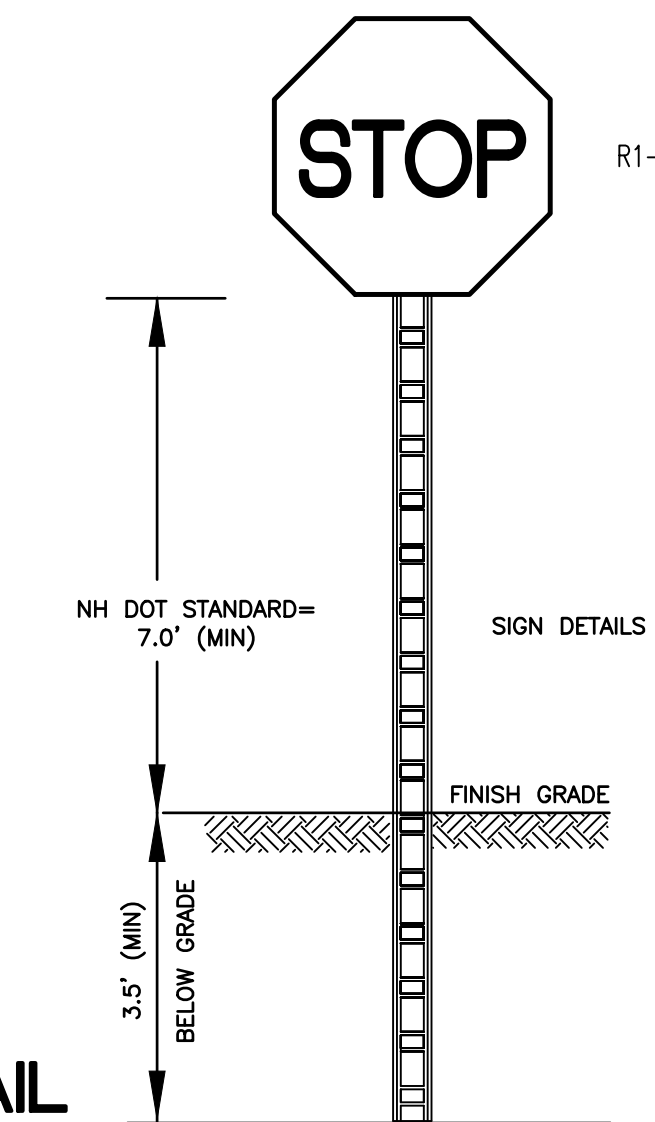
**SIDEWALK NOTES:**

SIDEWALK ALONG PROPOSED ROADWAYS SHALL TIP DOWN AT THE PROPOSED DRIVEWAYS AND INTERSECTIONS. TAPERS AND CONSTRUCTION METHODS FOR "TIP-DOWNS" SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND ANY ADDITIONAL REQUIREMENTS OF THE TOWN OF HUDSON, NEW HAMPSHIRE.

ADA CURB RAMP TO COMPLY WITH THE CURRENT STANDARDS PER THE AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN (HTTP://WWW.ADA.GOV)

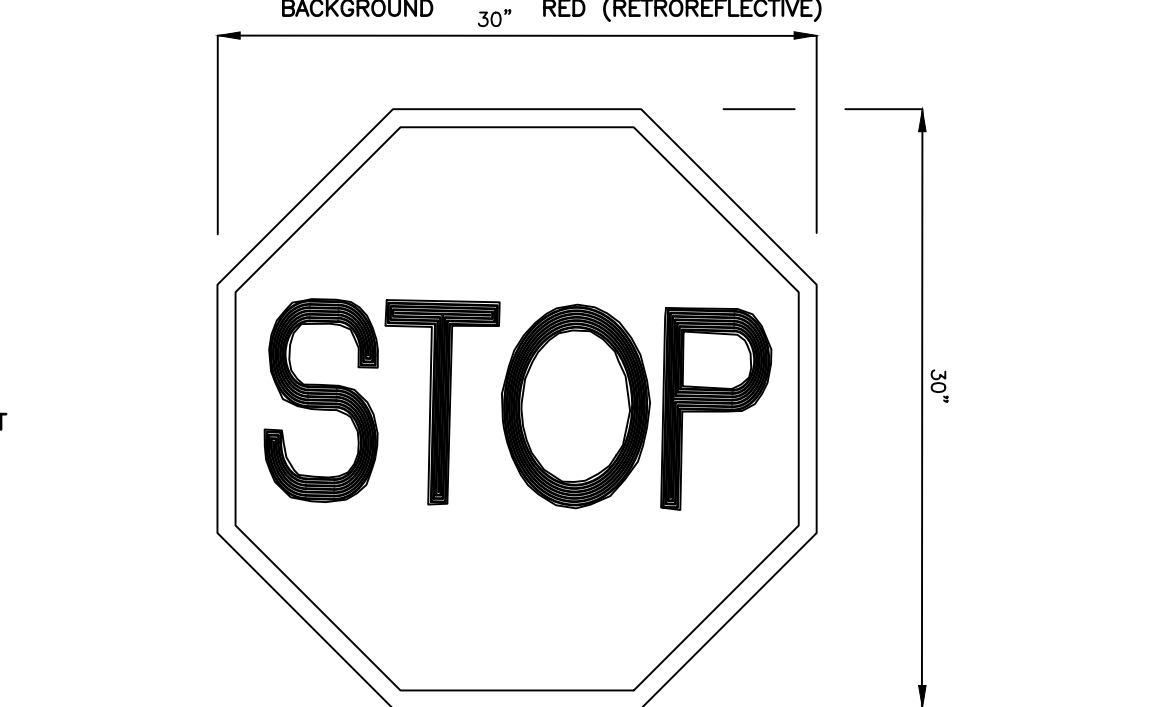


- NOTE:  
 (1) SLOPE = Y/X, WHERE X IS A LEVEL PLANE  
 (2) COUNTERSLOPE SHALL NOT EXCEED 1:20



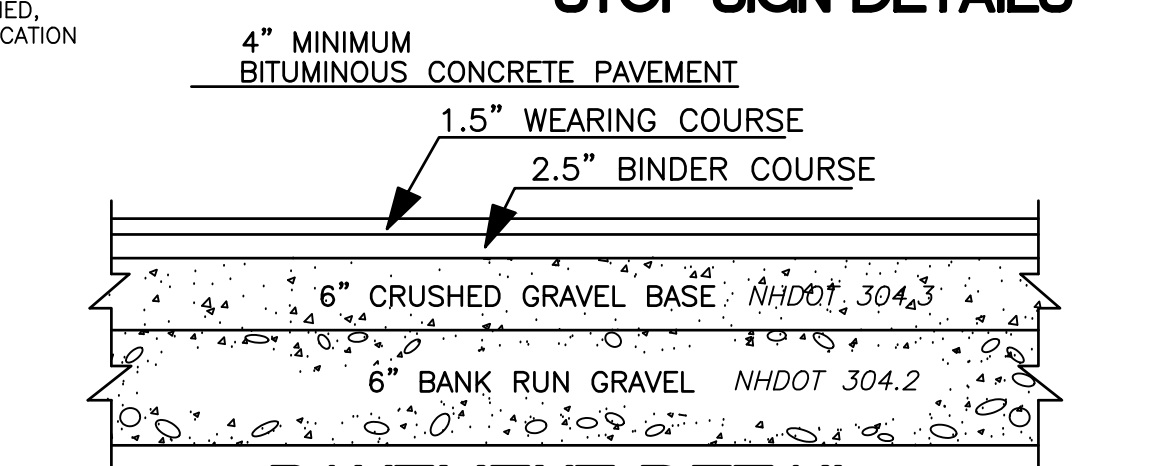
INSTALL MUTCD R1-1 STOP SIGN AT SITE DRIVEWAY

**COLORS:**  
 LEGEND WHITE (RETROREFLECTIVE)  
 BACKGROUND 30" RED (RETROREFLECTIVE)



**TRAFFIC SIGNS:**  
 ALL TRAFFIC SIGNS & PAVEMENT MARKINGS SHALL BE PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), LATEST EDITION.

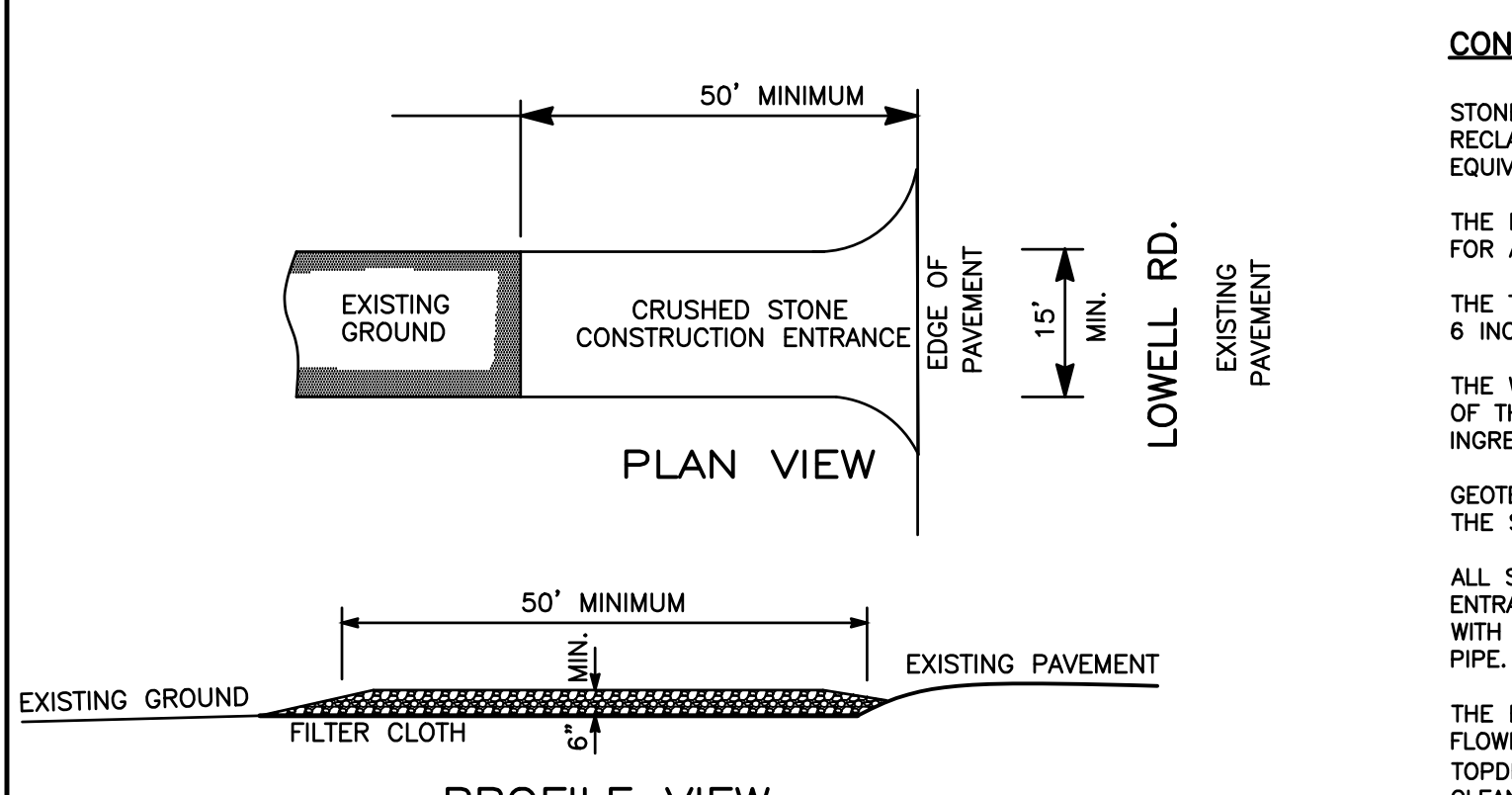
**STOP SIGN DETAILS**



**PAVEMENT DETAIL**

NO SCALE

**SEWER LOADING CALCULATION:**  
 300 SEATS X 40 GPD / SEAT = 12,000 GPD  
 15 EMPLOYEES X 20 GPD / EMPLOYEE = 300 GPD  
 TOTAL SEWER LOADING = 12,300 GPD

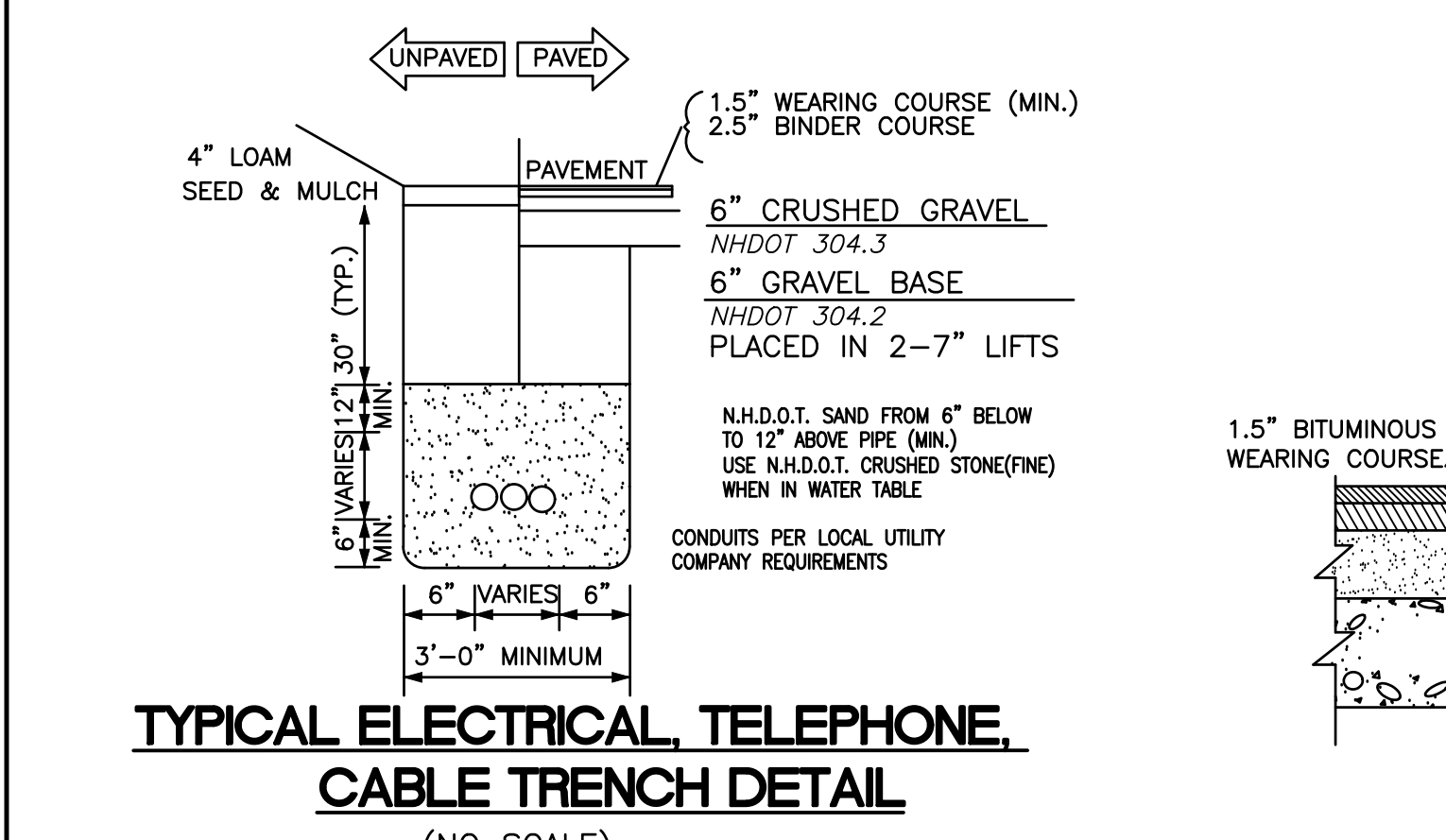


**STABILIZED CONSTRUCTION ENTRANCE**

TO BE CONSTRUCTED AT THE START OF THE NEW DRIVEWAY BEHIND BUILDING B (NO SCALE)

**CONSTRUCTION SEQUENCE:**

1. CUT AND CLEAR TREES.
2. INSTALL EROSION CONTROL MEASURES (PRIOR TO STUMPING).
3. STUMP AND GRUB ALL CLEARED AREAS.
4. STRIP AND STOCKPILE LOAM
5. CONSTRUCT UNDERGROUND STORMWATER CHAMBERS SYSTEMS AND STORM SEWER SYSTEM AS SHOWN ON PLANS.
6. INSTALL TEMPORARY EROSION AND SILTATION CONTROL MEASURES TO PROTECT STORMWATER CHAMBER SYSTEMS FROM SILTATION DURING CONSTRUCTION.
7. PROTECT CATCH BASINS FROM SILTATION BY CONSTRUCTING TEMPORARY STORM DRAINAGE INLET PROTECTION AROUND ALL CATCH BASINS (SEE DETAILS)
8. EXCAVATE AND INSTALL BUILDING FOUNDATION.
9. CUT AND FILL PARKING LOT TO SUBGRADE.
10. INSTALL UNDERGROUND UTILITIES WITHIN PARKING LOT AND TO BUILDING
11. ALL AREAS OUTSIDE PROPOSED PAVEMENT TO BE LOAM AND SEED.
12. INSTALL SELECT MATERIALS (BANK RUN & PROCESSED GRAVEL) WITHIN PARKING LOT
13. PAVE PARKING LOT TO BINDER
14. AS EARLY AS PRACTICAL, LOAM, FERTILIZE, SEED AND MULCH ALL DISTURBED AREAS, EXCEPT UNDER THE PROPOSED PAVEMENT (MIN. 4" LOAM)
15. STEEP SLOPES SHALL BE HYDROSEEDED. USE OF EROSION CONTROL MATS IS HIGHLY RECOMMENDED.
16. EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5" RAINFALL.
17. WEEKLY OR AS NEEDED, MAINTAIN AND/OR REPAIR EROSION CONTROL MEASURES: FILL, REPAIR, LOAM & SEED ANY ERODED EMBANKMENTS.
18. EARTH PILES SHALL BE STABILIZED TO PREVENT EROSION BY SEEDING AND/OR MULCHING.
19. CONSTRUCTION ACCESS TO THE SITE SHALL BE FROM LOWELL ROAD.
20. APPROXIMATE AREA TO BE DISTURBED FOR PARKING LOT CONSTRUCTION AND DRAINAGE IMPROVEMENTS = 0.8 ACRES.



**TYPICAL ELECTRICAL, TELEPHONE, CABLE TRENCH DETAIL**

(NO SCALE)

**CONSTRUCTION SPECIFICATIONS**

STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 3/4 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.

THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.

THE THICKNESS OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.

THE WIDTH OF THE CONSTRUCTION ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.

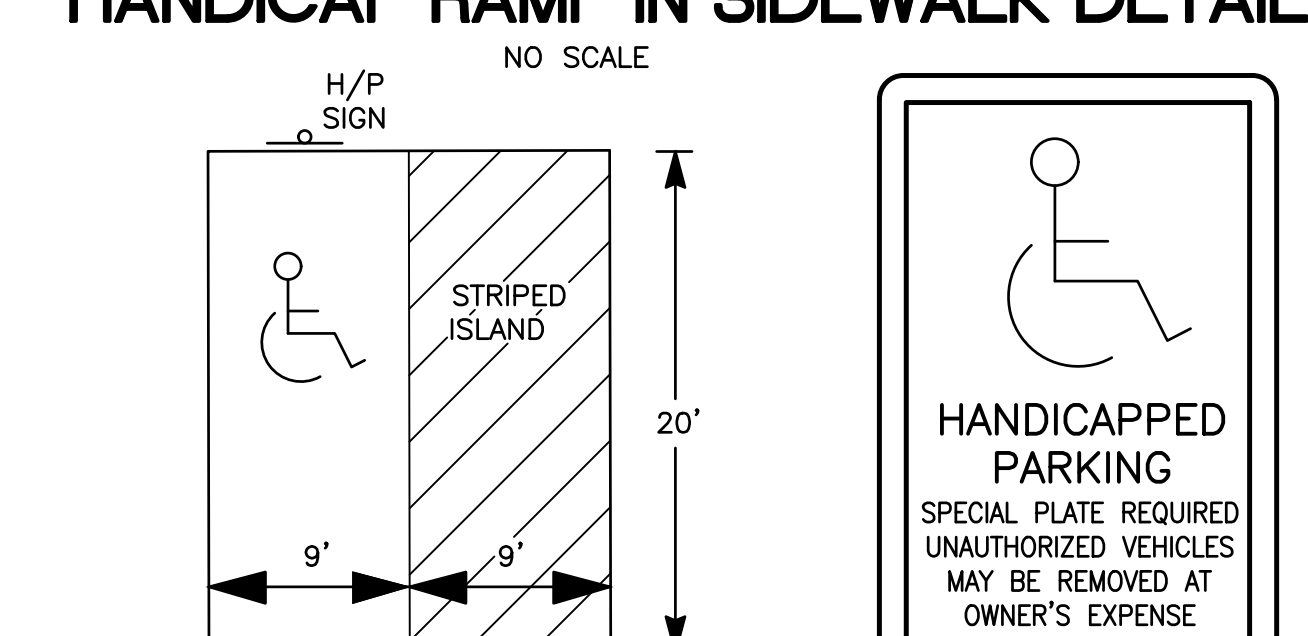
GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL LOT.

ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED PROMPTLY.

WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

**HANDICAP PARKING DETAIL**



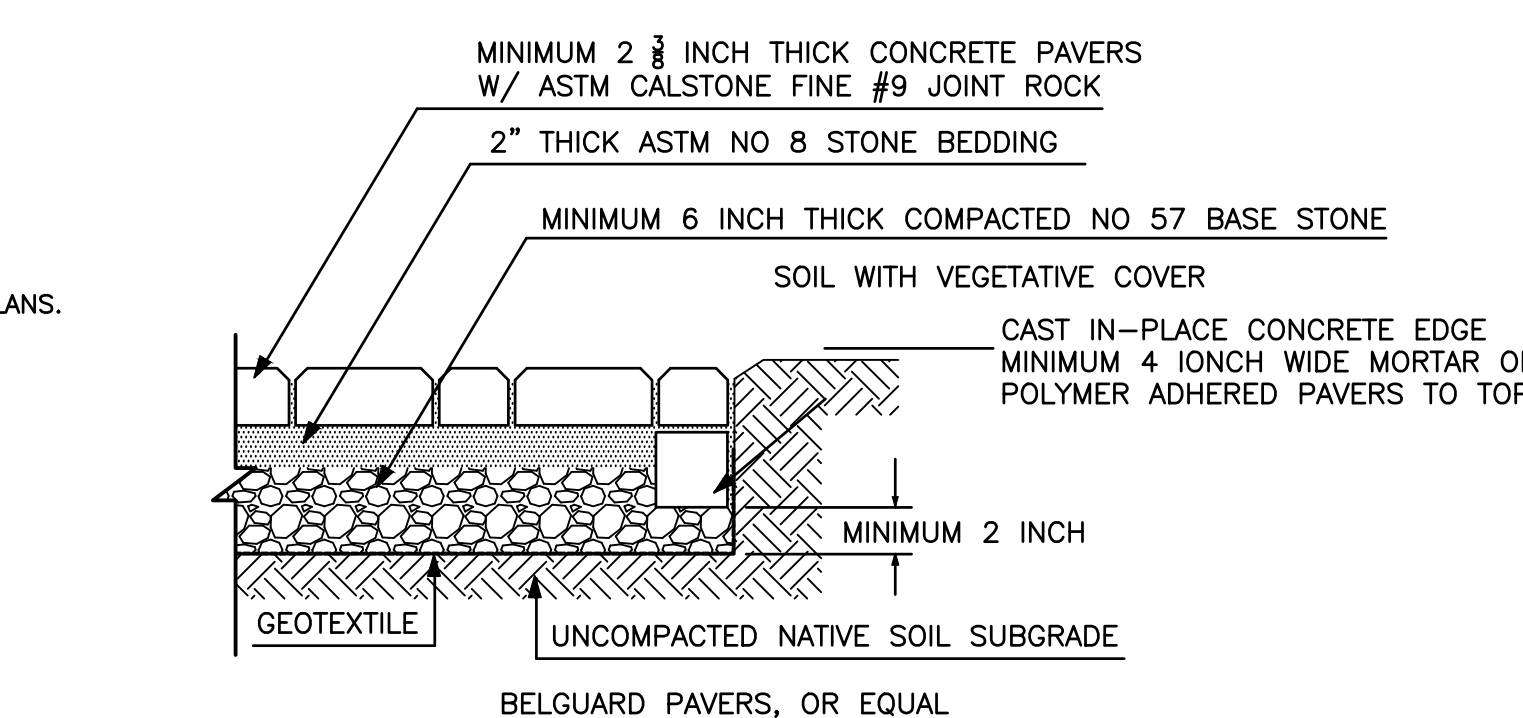
**HANDICAP PARKING DETAIL**

(NO SCALE)

**HANDICAP PARKING SIGN**

(NO SCALE)

(SIGNS TO BE MUTCD R7-8 & R7-8P AND TO BE MOUNTED AT A MINIMUM OF 60" IN HEIGHT)



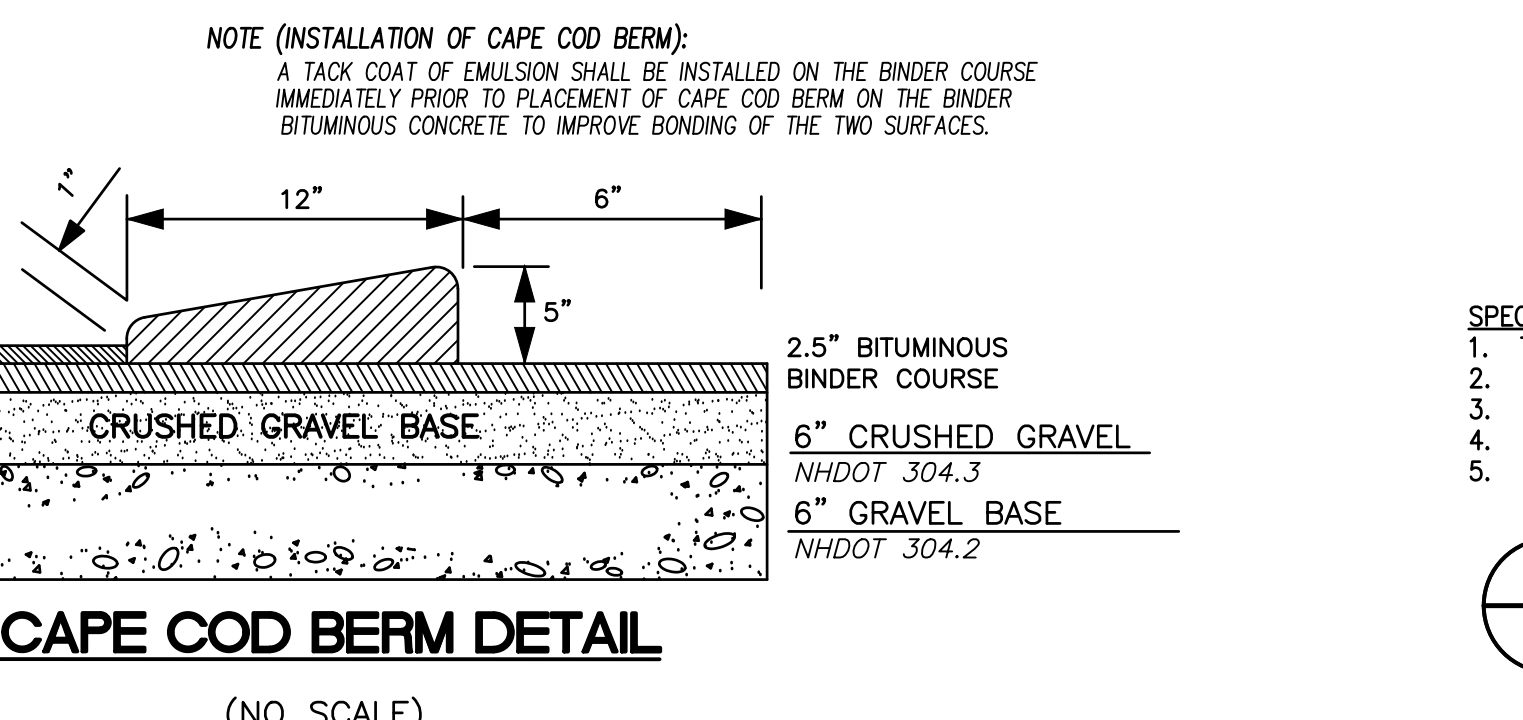
**CONCRETE WALKS/PATIO PAVERS**

NO SCALE

**CONCRETE WALKS/PATIO PAVERS**

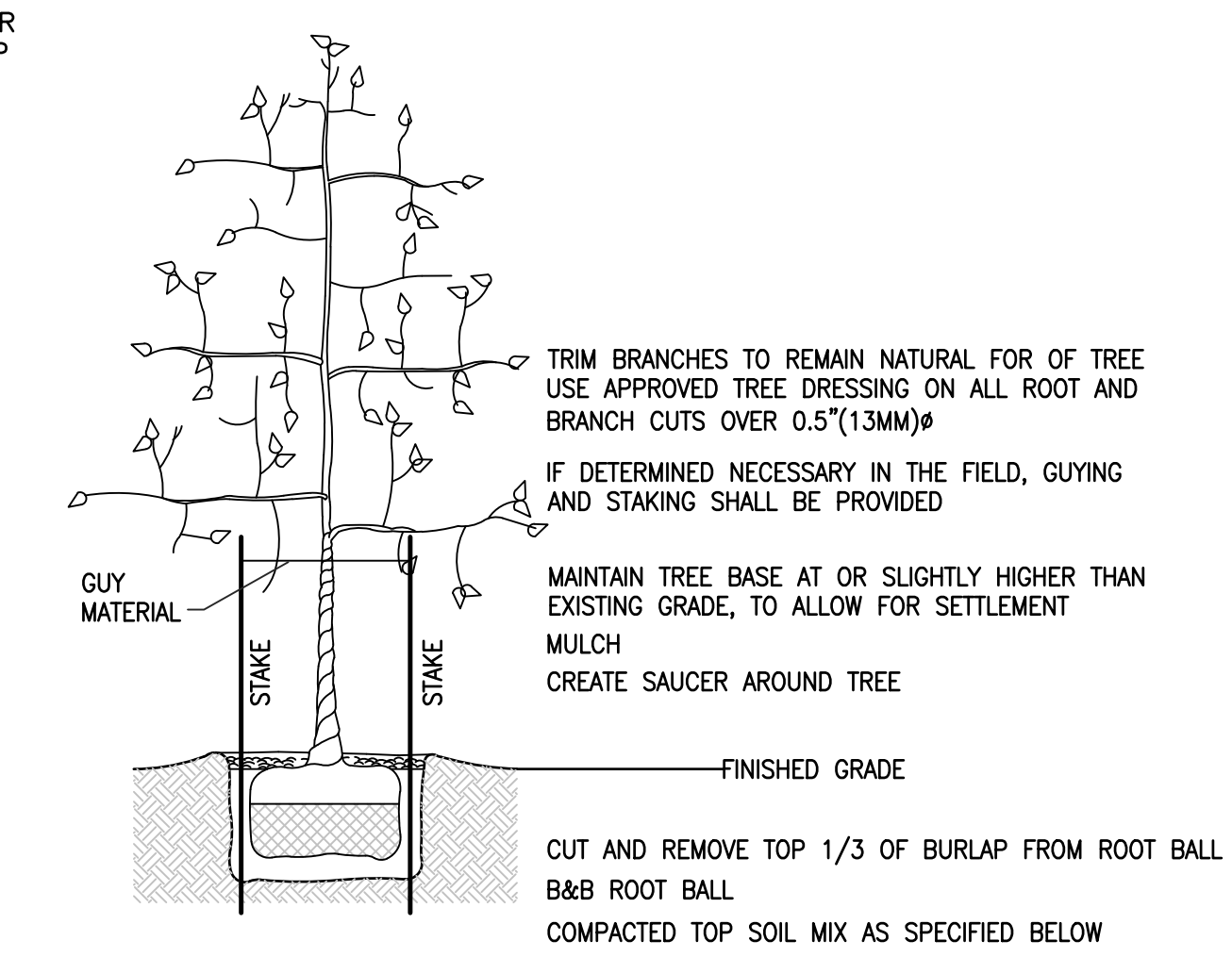
NO SCALE

**CAPE COD BERM DETAIL**



**CAPE COD BERM DETAIL**

(NO SCALE)



**DECIDUOUS TREE DETAIL**

NO SCALE

**DECIDUOUS TREE DETAIL**

NO SCALE

**DECIDUOUS TREE DETAIL**

NO SCALE

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

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
 DATE OF MEETING: \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

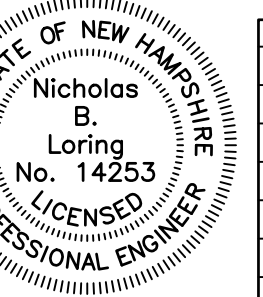
SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

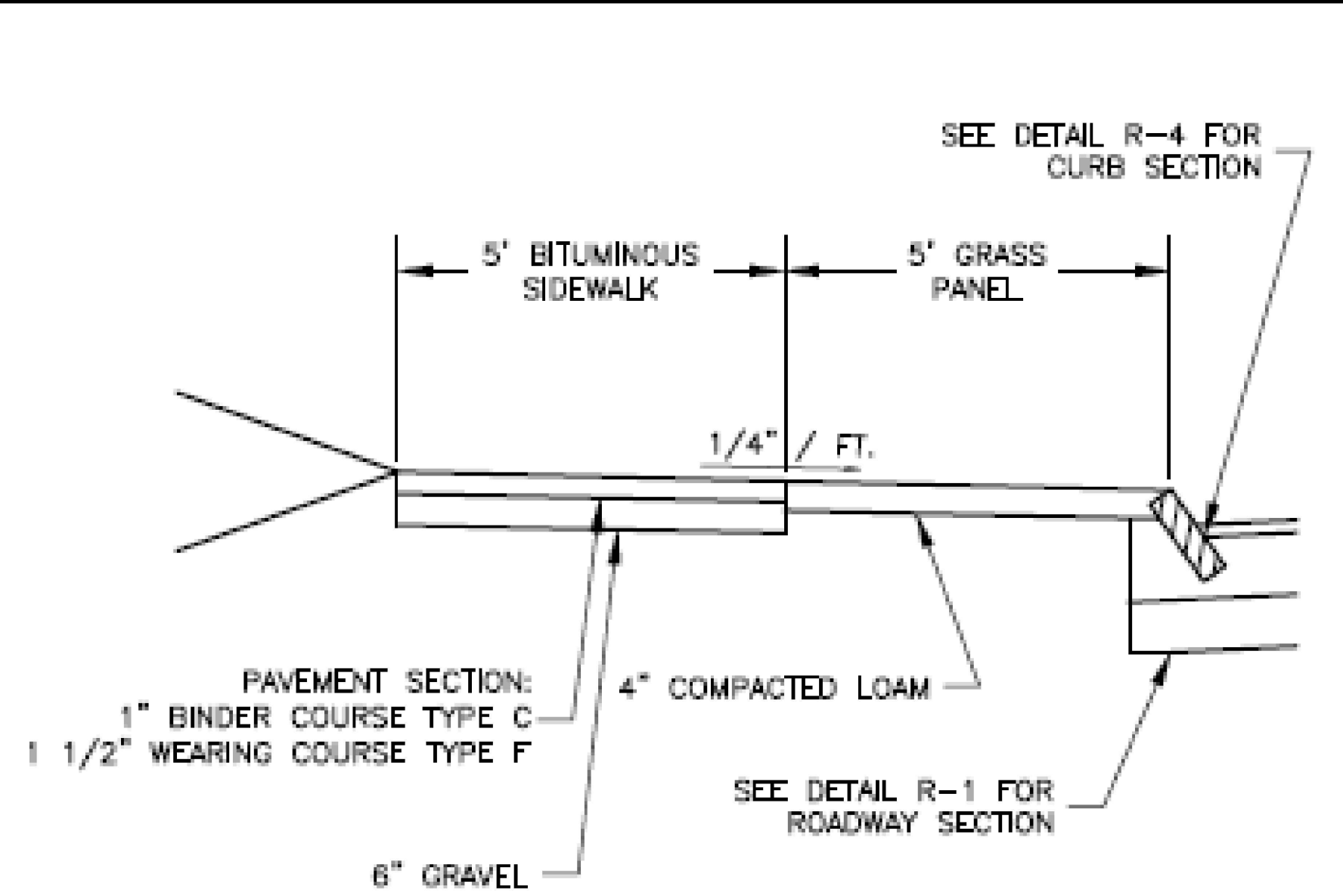
**CONSTRUCTION DETAIL SHEET**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

OWNER/ PREPARED FOR:  
 MACTHOMPSON REALTY, INC.  
 3 MARMON DRIVE  
 NASHUA, NEW HAMPSHIRE 03060  
 HCRD BOOK 8875/PAGE 2378

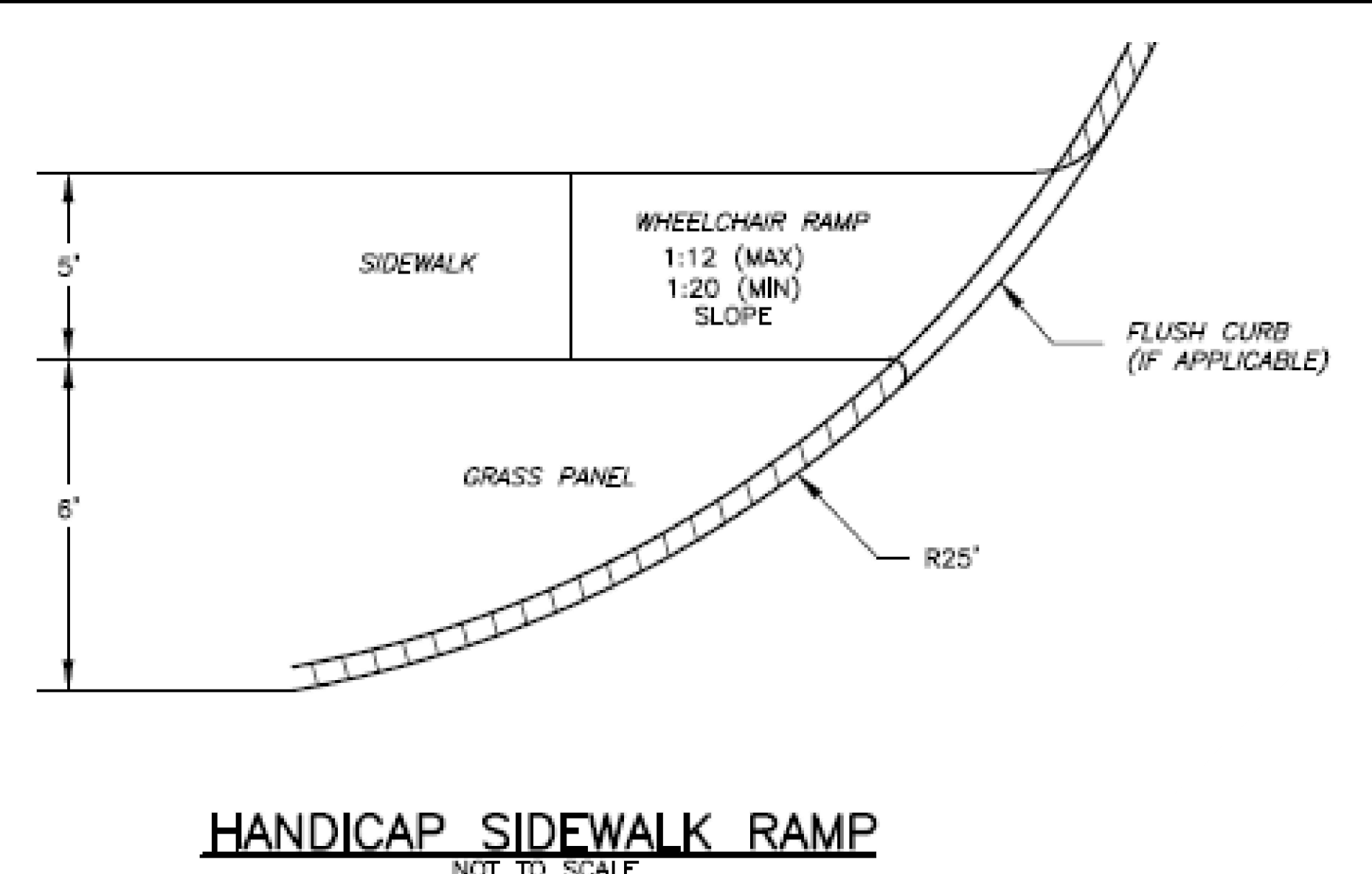
SCALE: AS NOTED SHEET 10 OF 12 AUGUST 3, 2021

FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
F.O./TOWN COMMENTS	11/15/2021
PLANNING COMMENTS	09/23/2021
REVISIONS	DATE

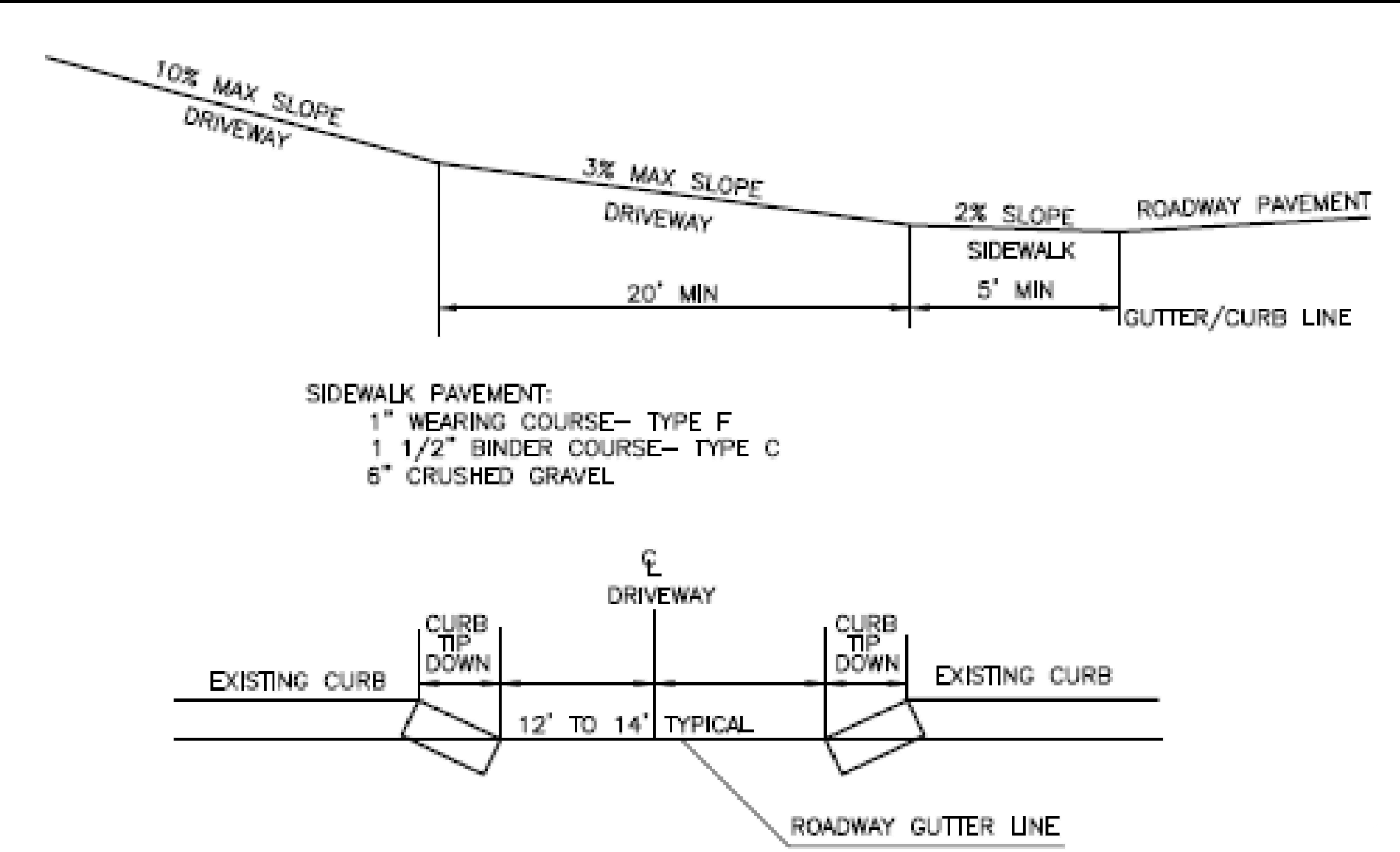




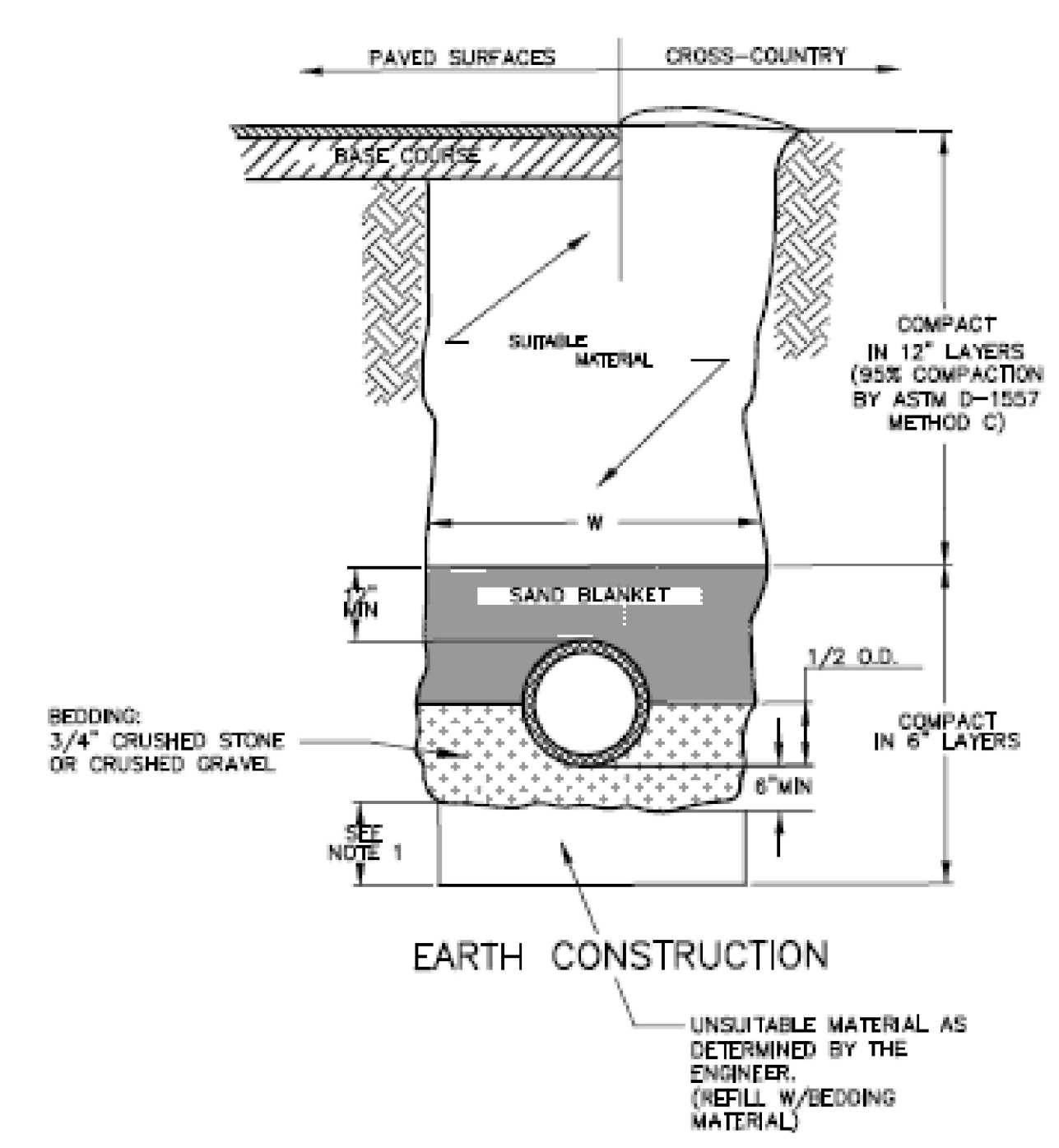
**SIDEWALK DETAIL**  
NO SCALE



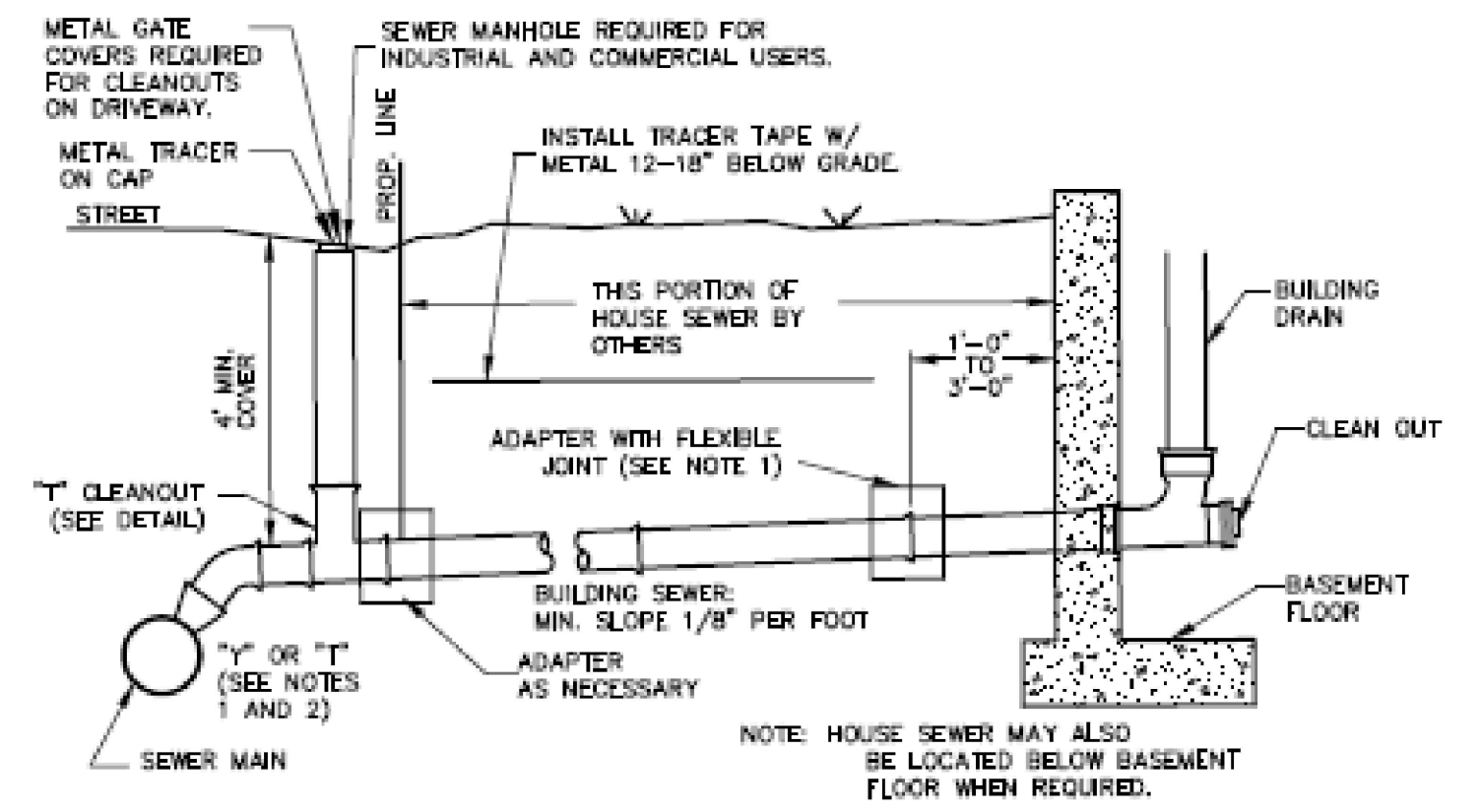
**HANDICAP SIDEWALK RAMP**  
NOT TO SCALE



**DRIVEWAY CROSS SECTION AT CURB WITH SIDEWALK**  
NOT TO SCALE

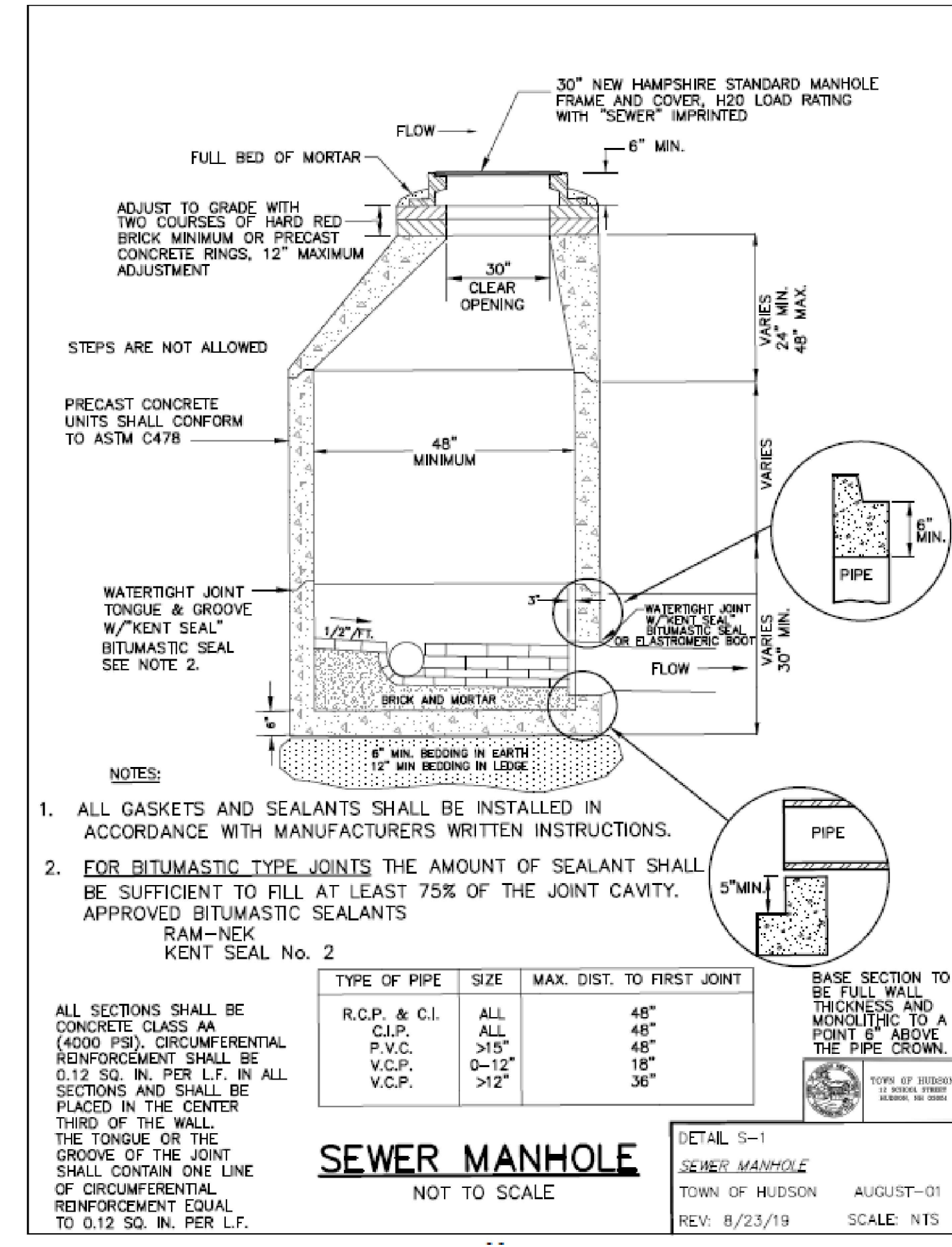


**SEWER TRENCH SECTION**  
NOT TO SCALE



- JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATERTIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER "Y" OR AT THE FOUNDATION WALL, APPROPRIATE ADAPTERS SHALL BE USED.
- WHERE A "Y" OR "Y" IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE IN ACCORDANCE WITH THE TOWN ENGINEER.
- PIPE SHALL BE 6" DIAMETER MINIMUM FROM SEWER MAIN TO EASEMENT (O.D.) AND 4" DIAMETER MINIMUM FROM CLEANOUT TO BUILDING FOUNDATION.

**BUILDING SERVICE CONNECTION**  
NOT TO SCALE



- ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.
- FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY. APPROVED BITUMASTIC SEALANTS:  
RAM-NEK  
KENT SEAL No. 2

TYPE OF PIPE	SIZE	MAX. DIST. TO FIRST JOINT
R.C.P. & C.I.	ALL	48"
C.I.P.	ALL	48"
P.V.C.	>15"	48"
V.C.P.	0-12"	18"
V.C.P.	>12"	36"

**SEWER MANHOLE**  
NOT TO SCALE

DETAIL S-1  
SEWER MANHOLE  
TOWN OF HUDSON  
REV: 8/23/19  
AUGUST-01  
SCALE: NTS

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

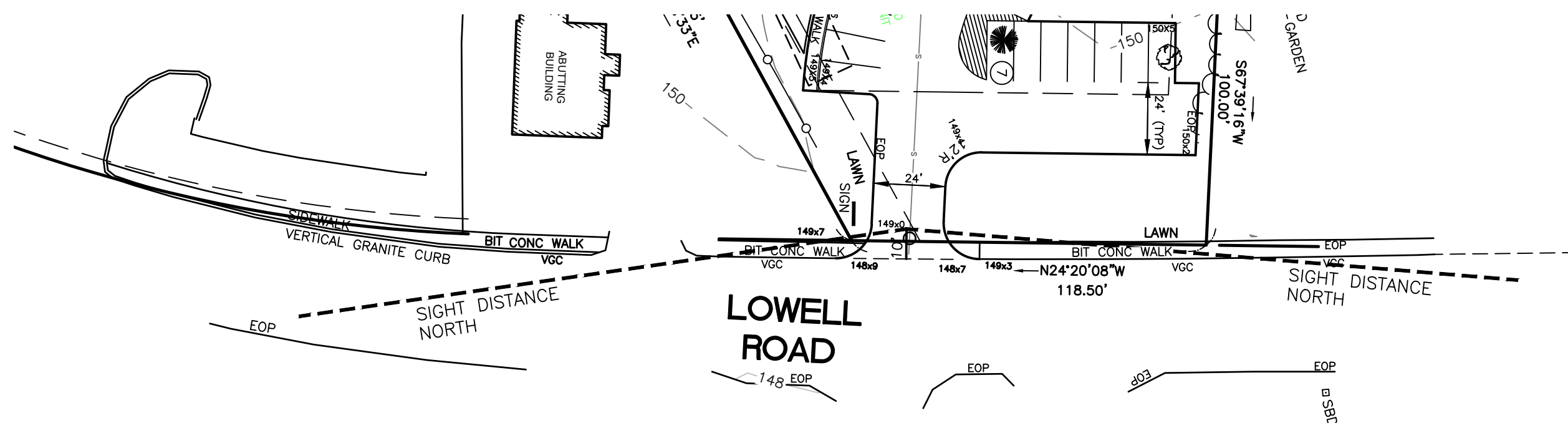
APPROVED BY THE HUDSON, NH PLANNING BOARD  
DATE OF MEETING: \_\_\_\_\_  
SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_  
SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_  
SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**CONSTRUCTION DETAIL SHEET**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

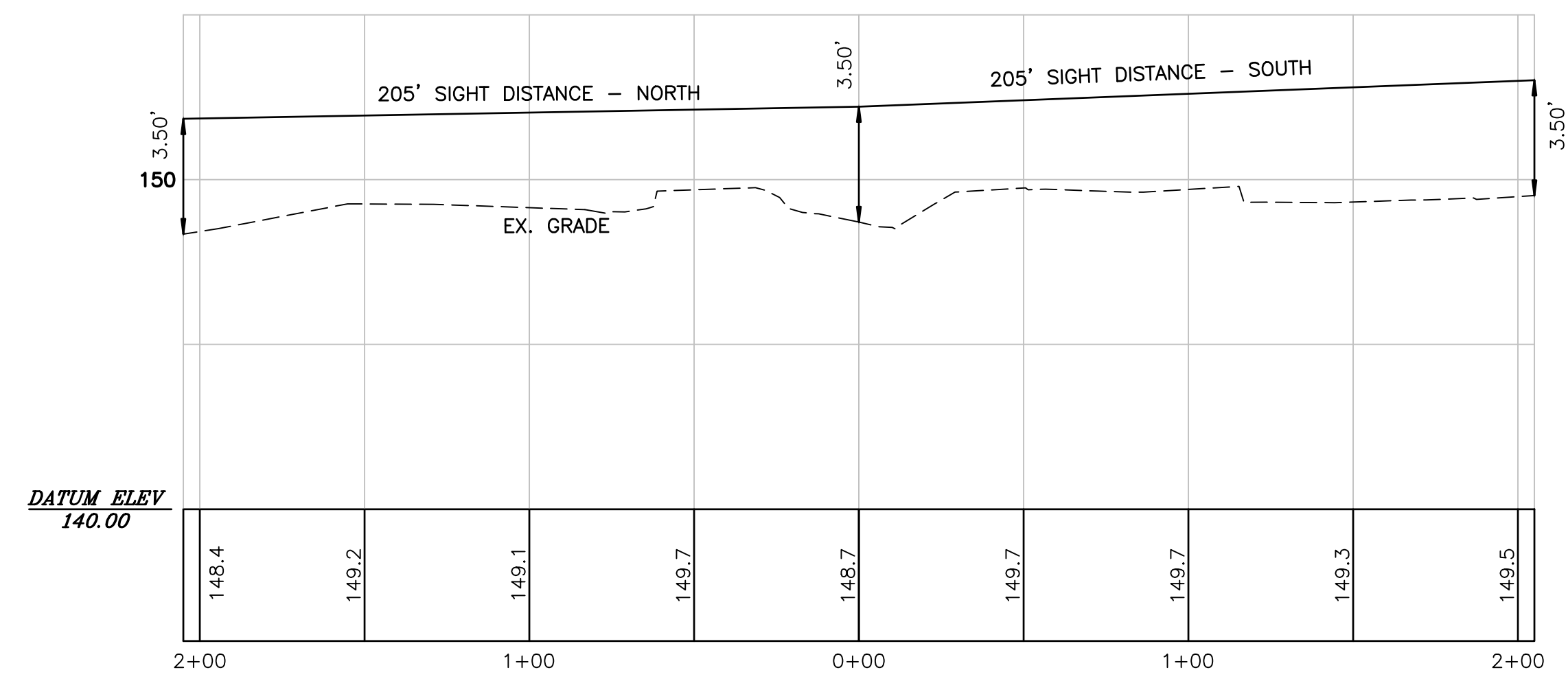
OWNER/ PREPARED FOR:  
MACTHOMPSON REALTY, INC.  
3 MARMON DRIVE  
NASHUA, NEW HAMPSHIRE 03060  
HCRD BOOK 8875/PAGE 2378  
SCALE: AS NOTED SHEET 11 OF 12 AUGUST 3, 2021

REVISIONS	DATE
FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
PLANNING COMMENTS	9/23/21
REVISIONS	DATE

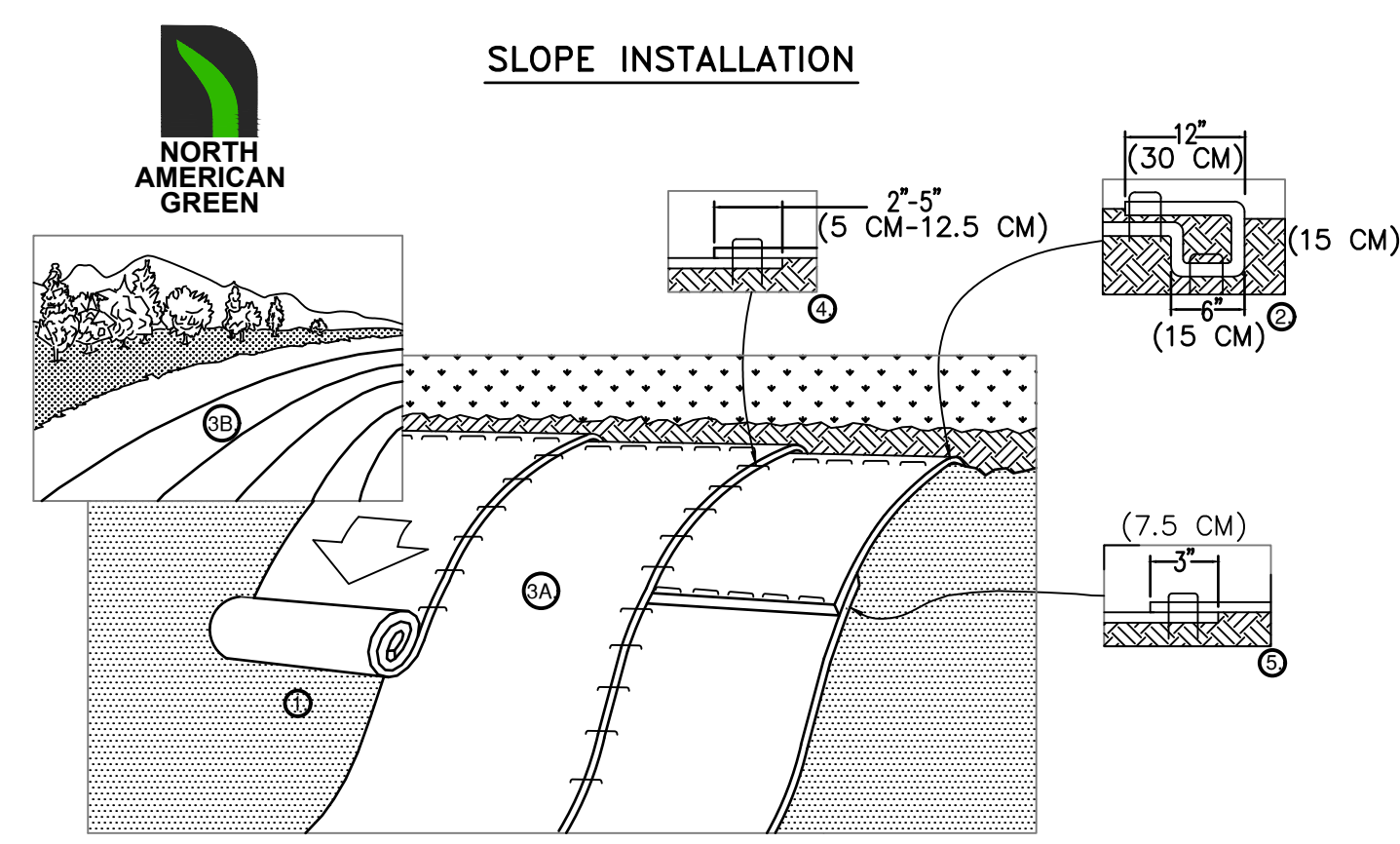
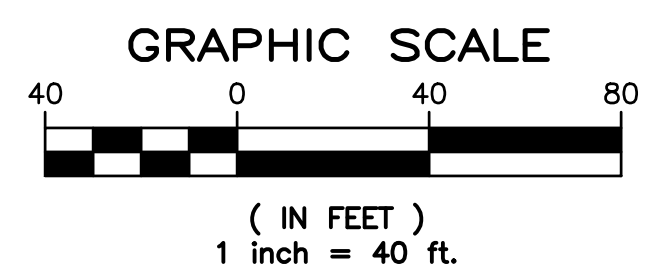




**SIGHT DISTANCE PLAN**  
SCALE: 1"=40'

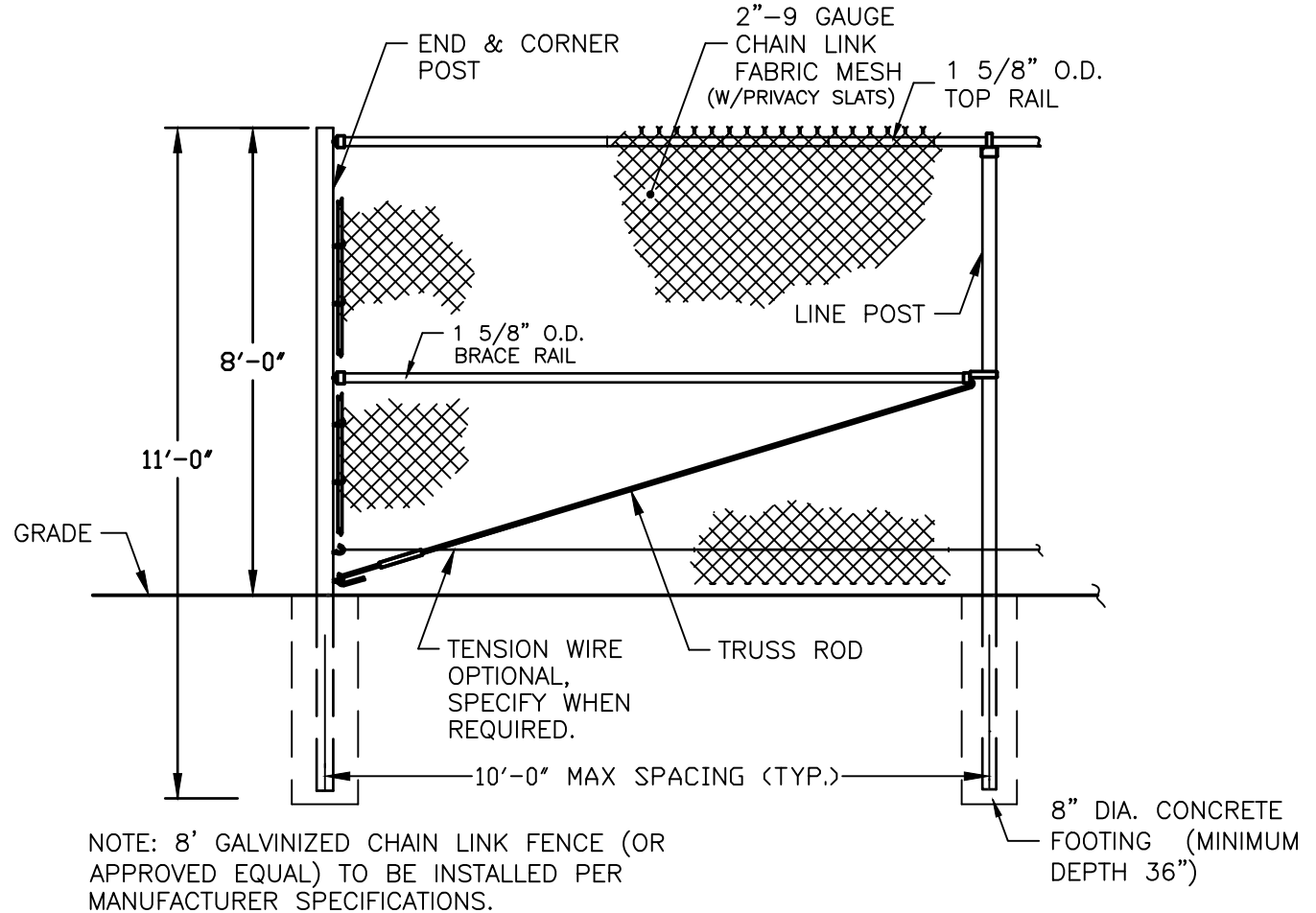


**SIGHT DISTANCE PROFILE**  
SCALE: 1"=40' (HORIZ.)  
1"=4' (VERT.)



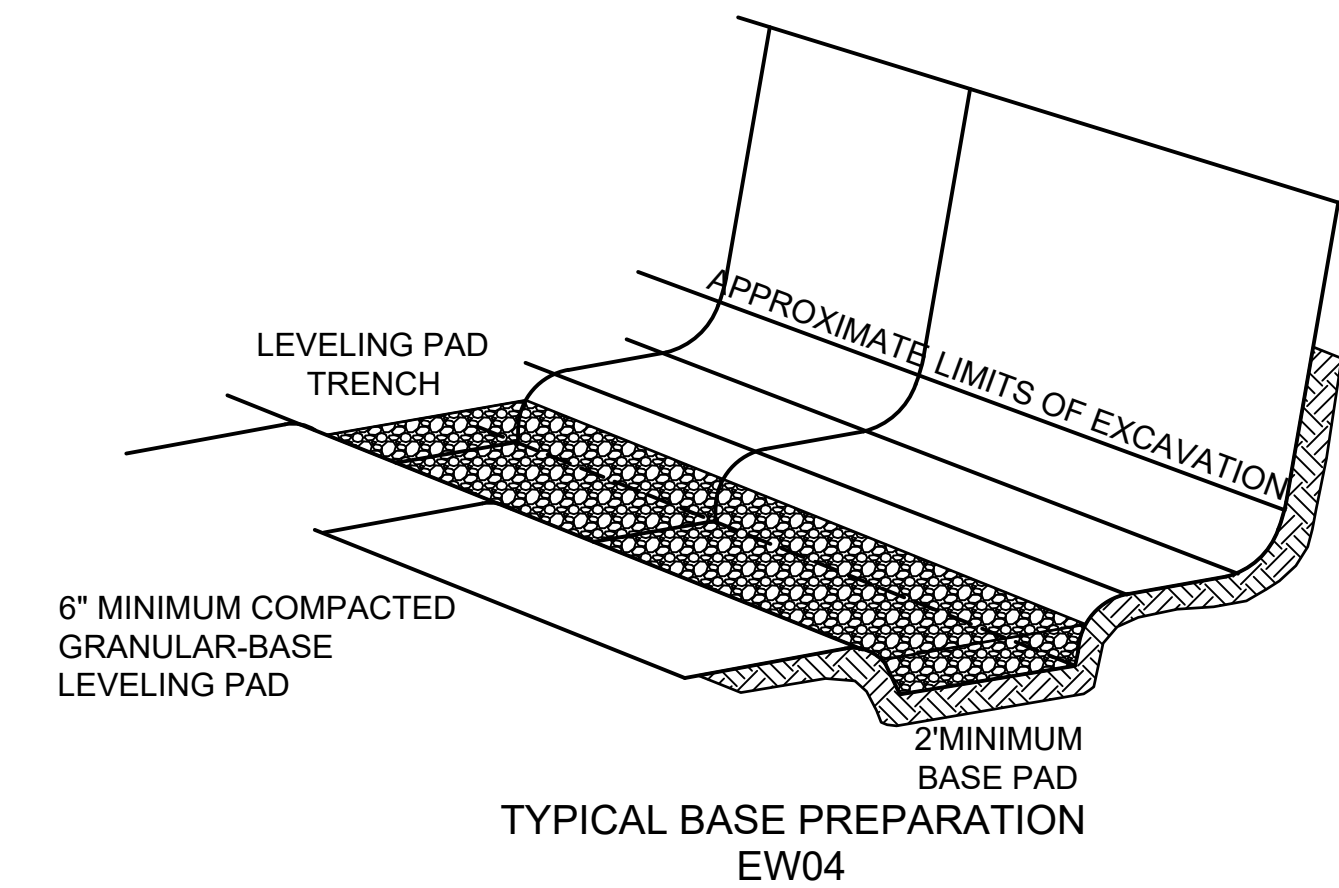
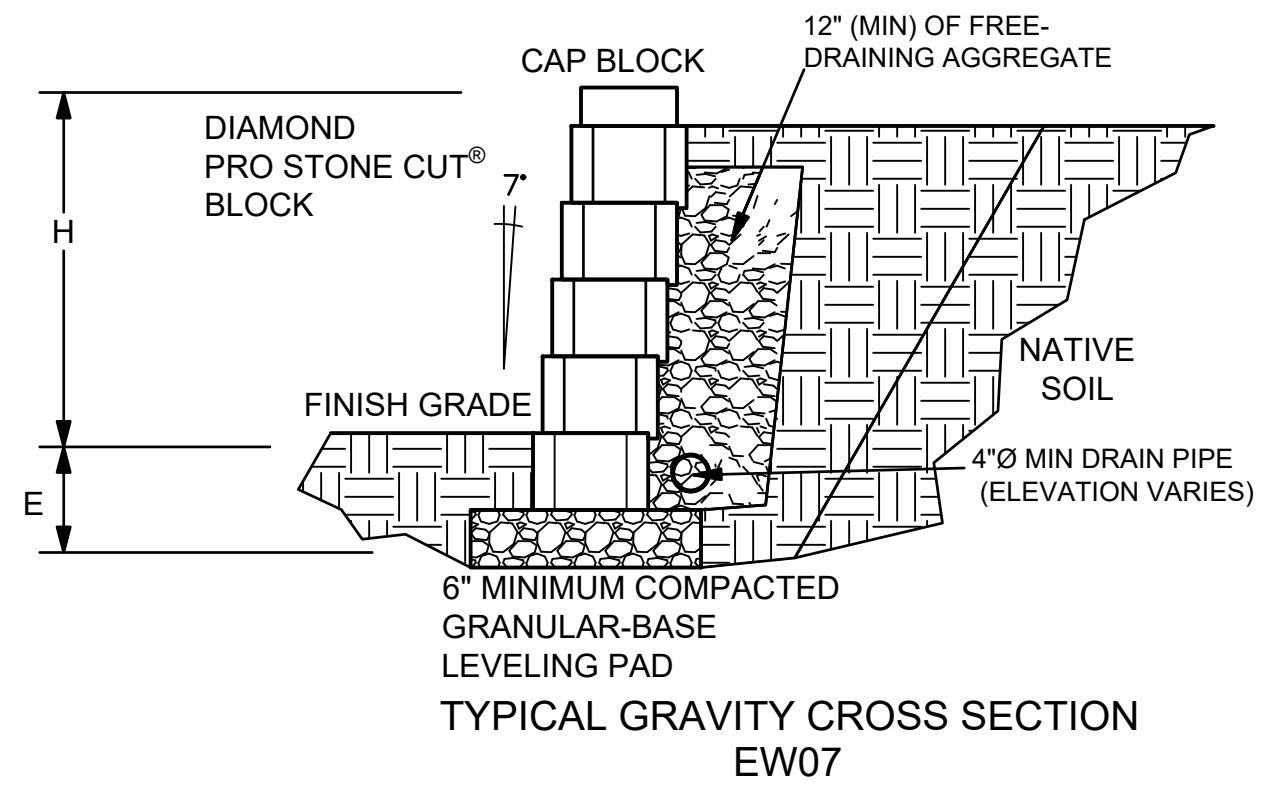
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH. NOTE: \*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- USE B60 MAT 40 EROSION CONTROL BLANKET (OR APPROVED EQUAL) BY US CONSTRUCTION FABRICS, LLC 8 LEDGE ROAD PO BOX 505 WINDHAM, NH 03087 PHONE: (603) 893-5480

**EROSION CONTROL BLANKET**  
(NO SCALE)



NOTE: 8" GALVANIZED CHAIN LINK FENCE (OR APPROVED EQUAL) TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

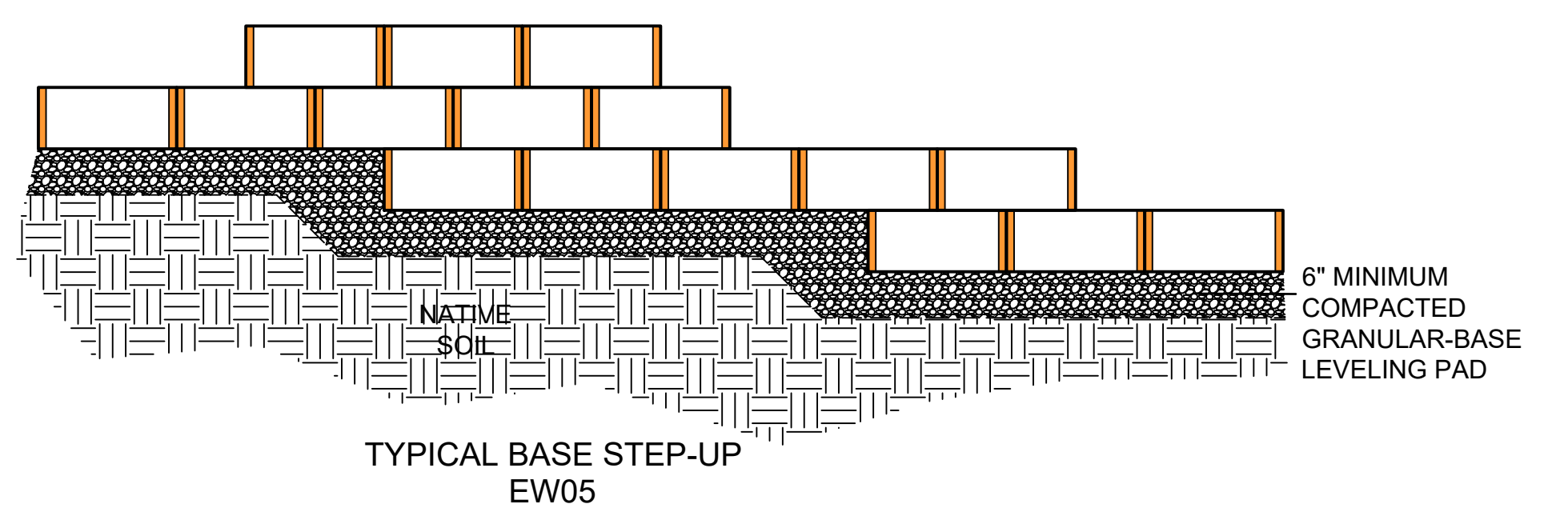
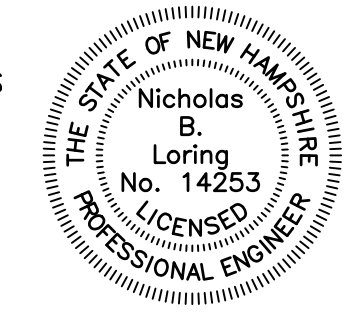
**CHAIN LINK FENCE DETAIL**  
(NO SCALE)  
USE AS PRIVACY FENCE AROUND DUMPSTER



WALL DETAILS AND CONSTRUCTION SPECIFICATIONS PROVIDED BY ANCHOR WALL SYSTEMS 5909 BAKER ROAD, SUITE 550 MINNETONKA MN 55345 [HTTPS://WWW.ANCHORWALL.COM](https://www.anchorwall.com) 877-295-5415

I HEREBY CERTIFY THAT THE DRIVEWAY ALL SEASON SAFE SIGHT DISTANCE, FOR A 30 MPH SPEED LIMIT, REQUIRED BY AASHTO STANDARDS WILL BE ACHIEVED UPON COMPLETION OF THE IMPROVEMENTS PROPOSED WITH THESE PLANS.

NICHOLAS B. LORING, PE DATE \_\_\_\_\_ BENCHMARK ENGINEERING, INC.



THE PROJECT SIGNS SHALL REMAIN IN THE SAME LOCATION AND OF THE SAME SIZE AS THE EXISTING FREESTANDING SIGN. ANY CHANGES TO THIS SIGN WILL NEED TO MEET THE TOWN OF HUDSON SIGN REGULATIONS.



**SIGN DETAIL**  
(NO SCALE)

NOTE: SEE SHEET-3 FOR ACTUAL SIGN LOCATION

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

**APPROVED BY THE HUDSON, NH PLANNING BOARD**  
DATE OF MEETING: \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ SIGNATURE DATE \_\_\_\_\_

SITE PLANS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

**SIGHT DISTANCE & DETAIL SHEET**  
**TAX MAP 190 LOT 191**  
**MACTHOMPSON SITE PLAN**  
**48 LOWELL ROAD**  
**HUDSON, NEW HAMPSHIRE 03051**

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SCALE: AS NOTED SHEET 12 OF 12 AUGUST 3, 2021

FUSS&ONIEL COMMENTS	01/21/2022
F.O./TOWN COMMENTS	12/07/2021
PLANNING COMMENTS	9/21/21
REVISIONS	DATE

