

JONES & BEACH ENGINEERS INC.

85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885
603.772.4746 - JonesandBeach.com

June 15, 2022

Barrington Planning Board
Attn. Andy Knapp, Chairman
333 Calef Highway
Barrington, NH 03825

**RE: Response Letter – CMA Comments
Rock Iron Repair
Calef Highway, Barrington, NH
Tax Map 265, Lot 11 & 12
JBE Project No. 21206**

Dear Mr. Knapp,

We are in receipt of comments from Jody Bray Strickland, P.E. of CMA Engineers dated May 24, 2022. Review comments are listed below with our responses in bold.

REVIEW OF SITE PLAN REGULATIONS COMMENTS:

Article 3 Site Plan Specifications and Documents

1. 3.5 Improvement Plans

a. 3.5.7 The type and size of all utilities should be indicated on the plan.

RESPONSE: The size of utilities is now indicated on the plans.

b. 3.5.11(1) There are no handicapped parking spaces provided. Additionally, there are no parking spaces proposed adjacent to the second building.

RESPONSE: Handicap parking spaces have now been added. Building #2 will only be used for storage and thus, parking spaces depicted to be used for both buildings.

c. 3.5.11(2) Applicant should show site circulation including with respect to construction of the second building.

RESPONSE: Site circulation is now shown on the plans, see sheet TM-1.

2. 3.6 Construction Detail Drawings

a. 3.6(1) The Typical Roadway Section and Typical Bituminous Pavement detail reference old pavement mixes (Marshall Type B and F); however, these Marshall mix designs are no longer standard mix designs. The pavement mix designs should be updated to current mix designs that are comparable to the Marshall mix designs.

RESPONSE: The mix designs have been updated to a current mix design.

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- b. 3.6(14) Details of the septic system should be provided.

RESPONSE: A septic system detail has been added to the plans, see Sheet S1.

Article 4 Design and Construction Standards

1. 4.6 Sewage Disposal

- a. 4.6.1 The applicant should provide certifications from the Town and NHDES as required.

RESPONSE: Certifications from the town and NHDES will be provided.

2. 4.7 Drainage System

- a. 4.7.1(1) The post-development run off for the 2-year storm at analysis point #2 exceeds the pre-development run off slightly. The applicant indicates that this slight increase is attributed to stormwater downgradient of the treatment system and that all proposed development run off is directed to the treatment system without discharge.

RESPONSE: No Response.

- b. 4.7.2(3) Applicant should provide the pipe summary table in accordance with the Ordinances.

RESPONSE: A pipe summary table has been added to the Drainage Report.

- c. 4.7.2(4) Applicant should provide the swale summary table in accordance with the Ordinances.

RESPONSE: a swale summary table has been added to the Drainage Report.

- d. 4.7.3 Applicant should show the hydraulic grade line for the closed drainage system, swales, and ponds for the 50-year storm in accordance with the Ordinances.

RESPONSE: The hydraulic grade line for the closed drainage system, swales, and ponds for the 50-year storm has been added to the Drainage Report.

- e. 4.7.7(1) The minimum allowable pipe diameter in any storm drain system shall be 15 inches; however, the applicant shows 12-inch diameter drainpipes. Please correct.

RESPONSE: The 15" pipe diameter was reverified to be sufficient and no change to the plans was made.

- f. 4.7.7(3) The minimum depth of cover for storm drain lines shall be 36 inches from top of pipe to finished grade. Please address. Applicant could consider re-grading the site, if necessary, to achieve the proper cover over the drainage pipes with an associated lowering of the northern part of the property.

RESPONSE: A waiver will be requested to decrease the cover required for the closed drainage system.

3. 4.9 Off-Street Parking and Loading Standards

- a. 4.9.7(1) Applicant should provide interior parking lot landscaping calculations to show conformance with the Ordinances.

RESPONSE: Landscape calculations are included on Sheet L-1.

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- b. 4.9.7(5) Applicant should provide calculations to show that the perimeter shade trees requirement is met.

RESPONSE: Landscape calculations are shown on Sheet L-1.

- c. 4.9.7(6) Applicant should provide calculations to show that screening standards are met.

RESPONSE: Landscaping and stockage fencing have been provided to screen the proposed parking lot.

- d. 4.9.11(1) Businesses that are used regularly at least five (5) days per week shall be graded and surfaced with asphalt, concrete, or other comparable surface; however, gravel surfaces are proposed. Has the applicant requested a waiver from this requirement? As noted in our Review of Drainage Analysis below, pavement area would significantly increase the Water Quality Volume (WQU) and associated size/volume of the proposed infiltration pond

RESPONSE: A waiver will be requested to allow gravel surfaces. All gravel surfaces were calculated as impervious for stormwater treatment purposes.

- e. 4.9.11(2) Applicant is proposing gravel parking and should describe how a reduction in dust and erosion will be achieved.

RESPONSE: Non-paved surfaces will be installed with crushed gravel per 4.9.11 (2).

- f. 4.9.11(3) How will parking spaces on the gravel be demarcated?

RESPONSE: Parking spaces are to be painted. Demarcated using concrete wheel stops.

- g. 4.9.11(4) The applicant should describe gravel surface maintenance.

RESPONSE: Gravel surface maintenance has been included on Sheet C2, Note #21.

4. 4.10 Landscaping Design and Screening Standards

- a. 4.10 The proposed landscaping consists of 5 arborvitaes between Calef Highway and the site. The applicant should describe how the proposed landscaping meets the intent of this section of the Ordinances. Additionally, see Section 4.9.7 comments above.

RESPONSE: Landscaping has been revised, see Sheet L1.

5. 4.12 Outdoor Lighting Design Standards

- a. 4.12.2 The applicant should show conformance with the requirements of recommended site lighting levels. Also, both types of proposed light fixtures are available in a range of watts/lumens. What is being proposed?

RESPONSE: The actual model, wattage, etc, is included in the description. Fall lighting cut-sheets have been provided.

6. 4.14 Traffic Impact Analysis and Mitigation Standards

- a. 4.14 Applications creating 5,000 s.f. or more of non-residential floor space are required to provide a Short Traffic Impact Analysis. Please submit.

RESPONSE: A traffic impact analysis is included with this submittal.

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REVIEW OF DRAINAGE ANALYSIS:

1. *Pre- and Post-Development Drainage Area Plans:*
 - a. *The legends on the Existing and Proposed Watershed Plan should be updated to reflect the content of the plans.*
RESPONSE: Legend has been updated.
2. *O&M Plan:*
 - a. *Remove B.f. catch basins and drain manholes section.*
RESPONSE: O&M Plan has been revised.
 - b. *Remove B.n. detention pond section.*
RESPONSE: O&M Plan has been revised.
 - c. *B.o. twice annual inspection of the Infiltration basin should include the sediment forebay.*
RESPONSE: O&M Plan has been revised.
 - d. *Update the inspection form to include all on site features.*
RESPONSE: O&M Plan has been revised.

REVIEW OF PLAN SET:

1. *Sheet C1-Existing Conditions Plan*
 - a. *The legend should be updated to remove items that are not applicable.*
RESPONSE: The legend has been updated
2. *Sheet C2-Site Plan*
 - a. *Development calculations in the Site Notes consider the project as a whole (both buildings constructed) and as only the Phase 1 building being constructed. If the intent is to get Planning Board approval for the construction of both buildings under this application, all development calculations should include the full development.*
RESPONSE: Site plan notes include full buildout.
 - b. *Site Note 15 references traffic arrows but none are shown on the plan.*
RESPONSE: Note 15 has been revised.
 - c. *The Phase 1/2 limits should be shown.*
RESPONSE: The phase limits have been added to Sheet C2.
 - d. *What is the purpose of the extensive gravel area behind the buildings?*
RESPONSE: The gravel area is intended to be used as vehicle and equipment storage.
 - e. *It appears drainpipe P-201 does not have adequate cover to meet manufacturer's minimum cover requirements. Applicant should confirm.*
RESPONSE: A waiver will be requested to decrease the cover required for the closed drainage system.

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- f. *The project includes development on both Lots 11 and 12, and the lot calculation includes the sum of both lots. The lots should be merged into a single lot as part of this application.*

RESPONSE: Lots will be merged as part of the project.

3. *Sheet L1-Landscape and Lighting Plan:*

- a. *There is no proposed lighting shown for Building #2.*

RESPONSE: Lighting has been updated as required.

- b. *It does not appear the proposed lighting complies with the Town's lighting standards in regard to footcandle requirements for low-level parking lot use. Please confirm.*

RESPONSE: Lighting has been updated to conform with the Town's lighting standards.

4. *Sheet D1-Detail Sheet:*

- a. *Typical Roadway Section*

- i. *How deep is the underdrain installed?*

RESPONSE: Underdrain has been removed from the typical roadway section.

- ii. *Where is suitable clean fill defined?*

RESPONSE: Notes regarding definition of suitable clean fill has been added to the revised plans, see Sheet D1.

- b. *Typical Gravel Section and Typical Bituminous Pavement*

- i. *The crushed gravel layer states "including reclaimed material". What is reclaimed material?*

RESPONSE: The reclaimed material is as allowed by substitution per NHDOT under Section 304.3.1 of the NHDOT Standards and Specifications for Road and Bridge Construction.

- c. *Drainage Trench*

- i. *Detail shows 2'-0" min. cover over HDPE pipe; however, 4.7.7(3) requires 36-inches of minimum over. Additionally, from the Grading and Drainage Plan, it does not appear the proposed drainage pipes meet the detail's min. cover. Please correct.*

RESPONSE: A waiver will be requested to decrease the cover required for the closed drainage system.

5. *The Building Plan is not complete/legible.*

RESPONSE: Additional building information is included with this resubmittal.

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Included with this response letter are the following:

1. Two (2) Revised Drainage Analysis.
2. Three (3) Site Plan Sets.
3. Twelve (12) 11"x17" Plan Set.
4. One (1) Architectural Plan.
5. Waiver Request Letter.
6. Traffic Memo.

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Barry Gier

Barry Gier, P.E.
Vice President

cc: Jeff Sullivan (via email)
CMA (via email & U.S. Mail)

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June 15, 2022

Barrington Planning Board
Attn. James Jennison, Chairman
333 Calef Highway
Barrington, NH 03825

**RE: Waiver Request
Red Iron Repair
Calef Highway, Barrington, NH
Tax Map 265, Lot 11 & 12
JBE Project No. 21206**

Dear Mr. Jennison,

On behalf of our client, Jeff Sullivan, Jones & Beach Engineers, Inc. respectfully requests a waiver from the Town of Barrington Site Plan Regulation for the following:

Barrington Site Plan Regulations, Section 4.7.7 (3) – To allow the minimum depth of cover over storm drain line to be less than 36”. The manufacturer’s minimum cover over storm drains is 12” (see attached excerpt from ADS Installation Manual). The proposed culverts are located at the low area of the project which is also flat. The site has been raised in this area to the degree practicable. The applicant requests the minimum cover be as suggested by the manufacturer.

Barrington Site Plan Regulations, Section 4.9.11 (1) – To allow gravel parking and drives. The proposed site requires less than 20 parking spaces and isn’t necessarily used regularly 5 days per week. The applicant has few employees and clients do not regularly visit the office. Applicant is often away for multiple days servicing machinery on-site. For these reasons, we respectfully request to utilize gravel parking and drives.

We look forward to discussing these waiver requests at the Planning Board Hearing. Thank you very much for your time.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Barry Gier

Barry Gier, PE
Vice President

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Barrington Planning Board
Attn. James Jennison, Chairman
333 Calef Highway
Barrington, NH 03825

**RE: ITE Traffic Memo
Red Iron Repair
Calef Highway, Barrington, NH
Tax Map 265, Lot 11 & 12
JBE Project No. 21206**

Dear Mr. Jennison:

Jones & Beach Engineers, Inc., on behalf of the owner & applicant, is providing a trip generation report for the proposed development located at Tax Map 265, lots 11 & 12. Utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) we have calculated the following A.M. Peak Hour and P.M. Peak Hour trip, and Weekday total trips generations based upon the proposed 3,480 sq.ft. welding and repair shop and 3,600 sq.ft. future storage building:

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Proposed Use – Building #1:**Specialty Trade Contractor: ITE Land Use #180**

Specialty Trade Contractor ITE Land Use 180	Trips Generated per 1,000 sq.ft.	Trips Generated
AM Peak Hour Weekday	1.66	5.77
PM Peak Hour Weekday	1.97	6.85
Weekday	10.22	35.56

Proposed Use- Building #2:**Warehouse: ITE Land Use #150**

Warehouse ITE Land Use 150	Trips Generated per 1,000 sq.ft.	Trips Generated
AM Peak Hour Weekday	0.17	0.61
PM Peak Hour Weekday	0.19	0.68
Weekday	1.74	6.26

Please contact our office with any further questions.

Very truly yours,
Jones & Beach Engineers, Inc.

Barry Gier

Barry W. Gier, P.E.
 Vice-President

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