

**TOWN OF HUDSON
PLANNING BOARD
PUBLIC MEETING
TOWN OF HUDSON, NH
MARCH 12, 2014**



12 School Street

Hudson, New Hampshire 03051

603/886-6008

The Town of Hudson Planning Board will hold a regularly scheduled meeting on Wednesday, March 12, 2014 at 7:00 p.m. in the "Buxton Community Development Conference Room" at Town Hall. The following items will be on the agenda:

- I. CALL TO ORDER BY CHAIRPERSON AT 7:00 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES
- V. MINUTES OF PREVIOUS MEETING(S)
- VI. CASES REQUESTED FOR DEFERRAL
- VII. CORRESPONDENCE
- VIII. PERFORMANCE SURETIES
- IX. ZBA INPUT ONLY
- X. PUBLIC HEARINGS
- XI. OLD BUSINESS/PUBLIC HEARINGS
- XII. DESIGN REVIEW PHASE
- XIII. CONCEPTUAL REVIEW ONLY

- XIV. NEW BUSINESS/PUBLIC HEARINGS

- | | |
|---|-----------------------------------|
| A. Dunkin Donuts Site Plan
SP# 01-14 | Map 105/Lot 019
14 Brady Drive |
|---|-----------------------------------|

Purpose of plan: To illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements.
Application Acceptance & Hearing.

- | | |
|---------------------------------------|------------------------------|
| B. Pine Road Subdivision
SB# 01-14 | Map 252/Lot 044
Pine Road |
|---------------------------------------|------------------------------|

Purpose of plan: To show Map 252/Lot 44 a 10.32 acre parcel, being subdivided into two lots. Lot 44-1 consists of 5.27 +/- acres with 232.40 ft. frontage along Pine Road, and Lot 44-2 consists of 5.05 acres with 233.62 frontage along Pine Road. Application Acceptance & Hearing.

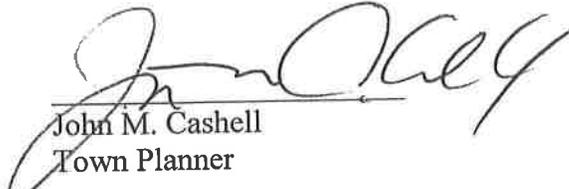
- C. Granite State Indoor Range & Gun Shop (Change of Use) Map 221/Lot 004
2-4 Hampshire Drive

Purpose of plan: To show the proposed change of use of 12,700 sq. ft. of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop. Application Acceptance & Hearing.

- XV. OTHER BUSINESS
XVI. ADJOURNMENT

All plans and applications are available for review in the Planning Office. Comments may be submitted in writing until 10:00 a.m. on the Tuesday prior to the day of the meeting.

The public is invited to attend.



John M. Cashell
Town Planner

POSTED: Town Hall, Library, Post Office – 02-28-14



TOWN OF HUDSON

PLANNING BOARD

**PUBLIC MEETING
TOWN OF HUDSON, NH
MARCH 12, 2014
(Addendum #1)**



12 School Street

Hudson, New Hampshire 03051

603/886-6008

In addition to items already scheduled and posted for review at the March 12, 2014 Planning Board Meeting, the following item is scheduled to be heard:

XI. OLD BUSINESS/PUBLIC HEARINGS

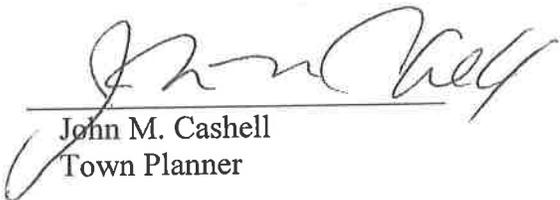
A. Boyer Site Plan
SP# 08-13

156 Lowell Road
Map 204/Lot 073

Purpose of plan: is to depict the site improvements associated with the new parking layout and paved display area. Hearing. Deferred Date Specific from the 02-26-14 Planning Board Meeting

All plans and applications are available for review in the Planning Office. Comments may be submitted in writing until 10:00 a.m. on the Tuesday prior to the day of the meeting.

The public is invited to attend.


John M. Cashell
Town Planner

POSTED: Town Hall, Library, Post Office – 02/28/14

Boyer Site Plan - 156 Lowell Road

Staff Report

March 12, 2014

SITE: 156 Lowell Road -- Map 204/Lot 075 -- SP# 08-13

ZONING: Industrial (I)

PURPOSE OF PLAN: is to depict the site improvements associated with the new parking layout and paved display area. Deferred Date Specific from the Feb. 26, 2014 Meeting.

PLAN UNDER REVIEW ENTITLED: Non-Residential Site Plan Boyer Site, 156 Lowell Rd. Map 204 Lot 075, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Nov. 12, 2013, last revised Mar. 3, 2014, consisting of Sheets 1 - 11 and Notes 1 – 24 (said plans are attached hereto).

ATTACHMENTS:

- 1) Letter from Jason Lopez, Project Eng., Keach-Nordstrom, Inc., re: response to staff's below email concerning Planning Board's outstanding concerns, per the Feb. 26th Meeting – "A".

REQUESTED WAIVERS APPROVED at the 01/08/2014 MEETING:

1. HTC 275-9(B) -- Traffic Study
2. HTC 275-9(D) -- Fiscal Impact Study
3. HTC 275-9(C) -- Noise Study

STAFF COMMENTS/OUTSTANDING ISSUES:

Below is an email communiqué sent project engineer, Jason Lopez, re: the Boyer Site Plan, per the Planning Board's Feb. 26th meeting, the following issues need to be resolved for the March 12th Planning Board Meeting:

- 1) A note needs to be added to the plan, to read: **"No outside storage of equipment or parking of vehicles shall be allowed in the rear yard area of the building designated as "C" on this Plan."**
- 2) Note 19 to be amended by adding the word **"If"** at the beginning of this note, so as to read: 19) "If drilling or blasting...."
- 3) The revised Plans are to include a typical exterior lighting plans, i.e., showing the lumens radii for each existing and proposed (if any) exterior site lighting.
- 4) The plans shall include an accurate revision date.
- 5) Due date for submission of revised plans is tomorrow, March 4th, at 10:00 A.M.

- 6) Remember to bring 5 full-sized sets of plans to the hearing, which is March 12, 2014.

Sincerely,
John Cashell

NOTE: Jason Lopez's response letter is attached – "A". Please note, in addition to the status of the outstanding issues cited in Jason's letter, the Surveyor's Stamp and Signature remains outstanding on the revised plans. Staff was informed by Jason that Tony Basso will be back in time for Wednesday night's meeting to provide his Surveyor's Stamp and Signature to the Plan, as well as to present the plans, i.e., with the correct latest revision date, 5 full-size sets of plans and all notes properly inscribed (hopefully).

RECOMMENDATION: Taking the abovementioned outstanding issues/comments into consideration, for Wednesday night's hearing staff recommends the following:

- (i) Open and conduct the public hearing;
- (ii) Allow the applicant to present the revised plans and address all of the issues involved in the above-cited outstanding issues and their present status.
- (iii) Receive any public input, and
- (iv) Take final action on this application in accordance with the below DRAFT MOTIONS.

APPLICATION TRACKING:

- 12/09/13 - Application submitted;
- 01/08/14 - Initial public hearing conducted, application accepted and deferred date specific, per the applicant's request, to the Feb. 26, 2014 meeting.
- 02/26/14 Per board action, deferred date specific to the Mar. 12, 2014 meeting.

MOTION to APPROVE:

I move to grant approval for the Site Plan entitled: Non-Residential Site Plan Boyer Site, 156 Lowell Rd. Map 204 Lot 075, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Nov. 12, 2013, last revised Mar. 3, 2014, consisting of Sheets 1 - 11 and Notes 1 - 24 in accordance with the following terms and conditions:

- 1) All stipulations of approval shall be incorporated into the Development Agreement, which shall be recorded at the HCRD, together with the Site Plan-of-Record (hereinafter referred to as the Plan).
- 2) Prior to the Planning Board endorsement of the Plan and the Development Agreement, the 12 ft. Wide Future Road Widening Easement Deed and the Access Easement Deed for the benefit of Map 210/Lot 9 and Map 204/Lot 75 shall be favorably reviewed and recommended on by Town Counsel.
- 3) All improvements shown on the Plan, including Notes 1-24, shall be completed in their entirety and at the expense of the Applicant or his assigns.

- 4) Prior to the issuance of a final certificate of occupancy, a L.L.S. certified "As Built" Site Plan shall be provided to the Town of Hudson Community Development Department, confirming that the site conforms with the Planning Board approved Plan.
- 5) Onsite landscaping and lighting shall be provided for in accordance with Sheet 7 of 11 of the Plan.
- 6) Construction activities on the site shall be limited to between 7:00 A.M. and 7:00 P.M. Monday through Saturday. No construction activities shall occur on Sunday.
- 7) This approval shall be subject to final engineering review.

Motion by: _____ Second: _____ Carried/Failed: _____

"A"

March 4, 2014

Mr. John Cashell, Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Boyer Site Plan
Tax Map 204, Lot 75
KNA#06-0808-2

Dear Mr. Cashell,

Our office is in receipt of the February 26th Planning Board comments outlined in your March 3rd email to our office. Your email will serve as an outline for our response to their comments. We have revised the site plans accordingly and below provide a brief summary of our efforts to address each of the concerns as noted. Our response is in ***bold italic*** following each of the comments.

1. A note needs to be added to the plan, to read: "No outside storage of equipment or parking of vehicles shall be allowed in the rear yard area of the building designated as "C" on this Plan."

After review of the request and further discussion with the Mr. Boyer about the function of the business and operation of the site, we propose the following. The area to the east of the fence near Building "C" will be cleaned and organized. 5,205 sf of the area will be loamed and seeded to bring the site into compliance with the open space requirements. A 2,765 sf area will be reserved for the temporary parking of vehicles awaiting auto body repair and/or equipment.

2. Note 19 to be amended by adding the word "If" at the beginning of this note, so as to read: 19) "If drilling or blasting...."

Note 19 has been reworded to incorporate the word "if".

3. The revised Plans are to include a typical exterior lighting plans, i.e., showing the lumens radii for each existing and proposed (if any) exterior site lighting.

We have worked with Charron Inc. to develop a lighting plan for the proposed lights. Standard lighting notes and a detail of the fixture has been added to Sheet 7 of 11. A light pole base detail has been added to Sheet 8 of 11.

To address the existing lighting we have added note 24 to sheet 1 of 11. The note states, "Upon completion of the as-built plan the existing site lighting shall be reviewed

and modified as needed to comply with the Town of Hudson, NH Land Use Regulations.”

4. The plans shall include an accurate revision date.

A new revision date has been added to the plans.

5. Due date for submission of revised plans is tomorrow, March 4th, at 10:00 A.M.

No response required.

6. Remember to bring 5 full-sized sets of plans to the hearing, which is March 12, 2014.

No response required.

In addition to the comments above we have corrected a concern raised by Mr. Boyer. On the previous plan we depicted the removal of the gravel access behind Map 210, Lot 9, between the building and the 6 proposed gravel parking spaces. Mr. Boyer's desire is to leave the existing gravel in place as shown on the revised plan. Due to this request, we have increased the area to be loamed and seeded behind Building "C". This increase in grassed area will offset the area of gravel to be retained and still maintain compliance with the open space requirement.

I trust the content of this letter and the attached revised site plans will serve to address concerns, as noted above. Should you have any other questions, or require further information regarding the same, please do not hesitate to contact our office.

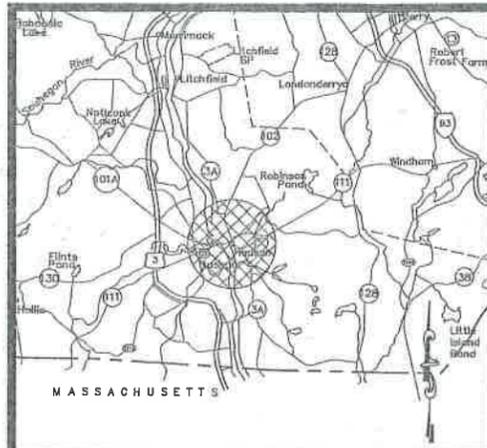
Respectfully,



Jason Lopez
Project Engineer

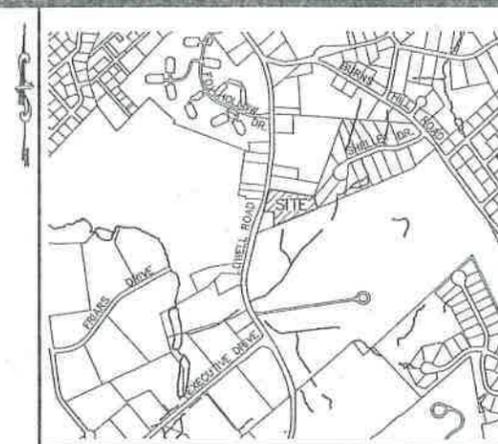
Attachments: 16- Copy of Revised Plan Set – 11x17

Cc: KNA File # 06-0808-2



VICINITY PLAN
NOT TO SCALE

MAP 204; LOT 75 NON-RESIDENTIAL SITE PLAN BOYER SITE 156 LOWELL ROAD HUDSON, NEW HAMPSHIRE



LOCATION PLAN
SCALE: 1" = 1,000'±



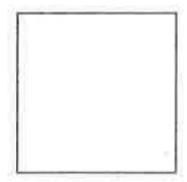
OVERVIEW PLAN
SCALE: 1" = 200'±



OWNER:
BOYER ASSOCIATES
65 PLATEAU RIDGE ROAD
LOUDON, NH 03307

PREPARED FOR:
TODD BOYER
BOYER'S AUTO BODY
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE 03051

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881



KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Planning Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

NOVEMBER 12, 2013
REVISED MARCH 3, 2014
PROJECT NO. 06-0808-2

SHEET TITLE	SHEET No.
MASTER SITE PLAN	1
EXISTING CONDITIONS PLAN	2
REMOVALS PLAN	3
SITE LAYOUT PLAN	4
GRADING & DRAINAGE PLAN	5
EROSION CONTROL PLAN	6
LANDSCAPE & LIGHTING PLAN	7
CONSTRUCTION DETAILS	8 - 11

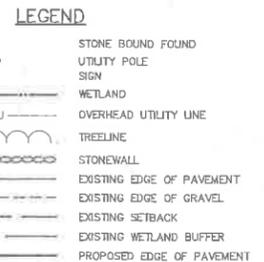
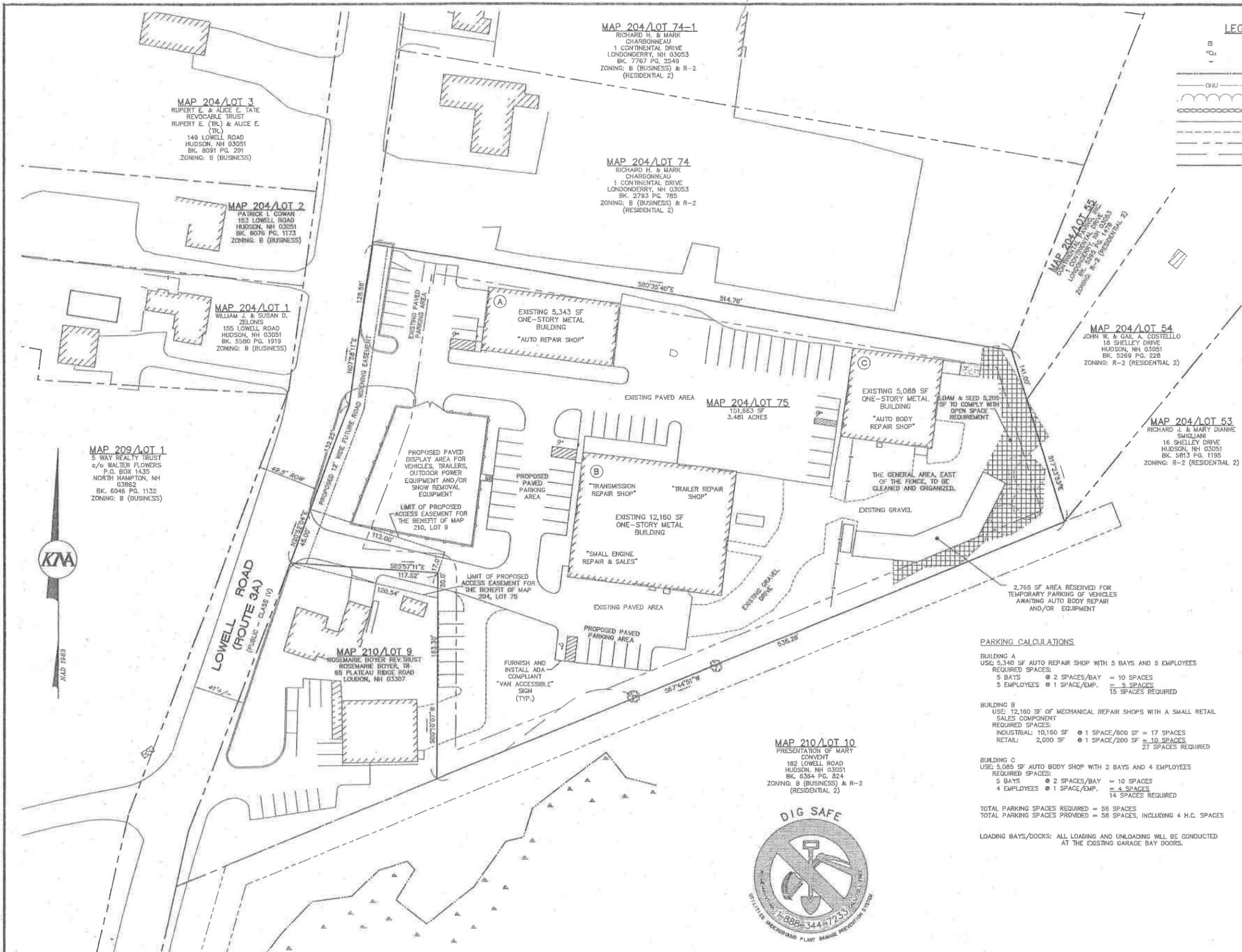
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

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



- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE LAYOUT OF A PROPOSED DISPLAY AREA, PARKING IMPROVEMENTS AND ASSOCIATED SITE IMPROVEMENTS TO TAX MAP 204; LOT 75.
 - TOTAL SITE AREA: 151,663 SF, OR 3.482 ACRES.
 - SUBJECT PARCEL IS LOCATED IN THE BUSINESS (B) ZONING DISTRICT AND IS SUBJECT TO THE FOLLOWING DIMENSIONAL REGULATIONS:
 - LOT AREA: 30,000 SF (WITH WATER AND SEWER)
 - LOT FRONTAGE: 150 FT
 - MINIMUM BUILDING SETBACKS:
 - FRONT: 50 FT
 - SIDE: 15 FT
 - REAR: 15 FT
 - SITE IS PRESENTLY SERVICED BY MUNICIPAL SEWER AND WATER.
 - OPEN SPACE:
 - REQUIRED: 35%
 - EXISTING: 33.22%
 - PROPOSED: 35%
 - SITE LIGHTING SHALL BE AS SHOWN ON THE PLAN, DIRECTED ONTO SITE, AND SHALL CONFORM WITH ALL APPLICABLE TOWN OF HUDSON ZONING REGULATIONS.
 - ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON PLANNING BOARD PRIOR TO INSTALLATION.
 - SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADE.
 - IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE TOWN OF HUDSON PLANNING BOARD.
 - TRASH PICK-UP SHALL NOT OCCUR EARLIER THAN 7:00 AM NOR LATER THAN 7:00 PM, MONDAY THROUGH FRIDAY ONLY.
 - EXTERIOR CONSTRUCTION ACTIVITIES ON THE SITE SHALL BE LIMITED TO BETWEEN 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY. NO CONSTRUCTION ACTIVITIES SHALL OCCUR ON SUNDAYS.
 - PRESENT OWNER OF RECORD:
 - BOYER ASSOCIATES
 - 65 PLATEAU RIDGE ROAD
 - LOUDBOROUGH, NH 03307-0711
 - BK. 4622; PG. 0224
 - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF HUDSON, NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 3301005080 PANEL NUMBER 508 OF 701, EFFECTIVE DATE: SEPTEMBER 25, 2009 INDICATES THAT THE SUBJECT PREMISES IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.
 - NO JURISDICTIONAL WETLANDS ARE PRESENT ON-SITE.
 - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
 - WAIVERS REQUESTED:
 - HTC 275-9(B) - TRAFFIC STUDY
 - HTC 275-9(C) - NOISE STUDY
 - HTC 275-9(D) - FISCAL/ENVIRONMENTAL IMPACT STUDY
 - PLOWED SNOW FROM THE FACILITIES, DRIVEWAY, PARKING LOTS, AND SIDEWALK 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 IN AN ENVIRONMENTALLY SOUND FASHION AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
 - IF BLASTING AND/OR RAMMING OF BEDROCK MATERIALS IS REQUIRED FOR THE DEVELOPMENT, SAID ACTIVITIES SHALL BE LIMITED TO THE HOURS BETWEEN 7:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY ONLY. SAID BLASTING/RAMMING ACTIVITIES SHALL BE PROHIBITED ON WEEKENDS.
 - ON-SITE DRAINAGE SYSTEM SHALL BE CONSTRUCTED AND MAINTAINED IN COMPLIANCE WITH NHDES REQUIREMENTS FOR SUCH SYSTEMS.
 - THE APPLICANT'S ENGINEER AND/OR CONTRACTOR SHALL CONTACT THE TOWN OF HUDSON TO SCHEDULE A PRECONSTRUCTION MEETING, WHICH WILL BE HELD WITH STAFF PRIOR TO STARTING CONSTRUCTION.
 - ALL STIPULATIONS OF APPROVAL SHALL BE INCORPORATED INTO THE DEVELOPMENT AGREEMENT, WHICH SHALL BE RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS, TOGETHER WITH THE SITE PLAN-OF-RECORD.
 - THIS APPROVAL SHALL BE SUBJECT TO FINAL ENGINEERING REVIEW, INCLUDING APPROVAL OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
 - UPON COMPLETION OF THE AS-BUILT PLAN, THE EXISTING SITE LIGHTING SHALL BE REVIEWED AND MODIFIED AS NEEDED TO COMPLY WITH THE TOWN OF HUDSON, NH LAND USE REGULATIONS.

PARKING CALCULATIONS

BUILDING A
 USE: 5,340 SF AUTO REPAIR SHOP WITH 5 BAYS AND 5 EMPLOYEES
 REQUIRED SPACES:
 5 BAYS @ 2 SPACES/BAY = 10 SPACES
 5 EMPLOYEES @ 1 SPACE/EMP. = 5 SPACES
 15 SPACES REQUIRED

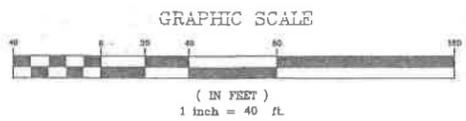
BUILDING B
 USE: 12,160 SF OF MECHANICAL REPAIR SHOPS WITH A SMALL RETAIL SALES COMPONENT
 REQUIRED SPACES:
 INDUSTRIAL: 10,160 SF @ 1 SPACE/600 SF = 17 SPACES
 RETAIL: 2,000 SF @ 1 SPACE/200 SF = 10 SPACES
 27 SPACES REQUIRED

BUILDING C
 USE: 5,085 SF AUTO BODY SHOP WITH 2 BAYS AND 4 EMPLOYEES
 REQUIRED SPACES:
 5 BAYS @ 2 SPACES/BAY = 10 SPACES
 4 EMPLOYEES @ 1 SPACE/EMP. = 4 SPACES
 14 SPACES REQUIRED

TOTAL PARKING SPACES REQUIRED = 56 SPACES
 TOTAL PARKING SPACES PROVIDED = 58 SPACES, INCLUDING 4 H.C. SPACES

LOADING BAYS/DOCKS: ALL LOADING AND UNLOADING WILL BE CONDUCTED AT THE EXISTING GARAGE BAY DOORS.

MAP 210/LOT 10
 PRESENTATION OF MARY CONVENT
 182 LOWELL ROAD
 HUDSON, NH 03051
 BK. 6364 PG. 824
 ZONING: B (BUSINESS) & R-2 (RESIDENTIAL 2)



PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

OWNER OF MAP 204; LOT 75

SIGNATURE: *Toddy Boyer*

DATE: 3-4-14

MASTER SITE PLAN
BOYER SITE
 MAP 204; LOT 75
 156 LOWELL ROAD
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

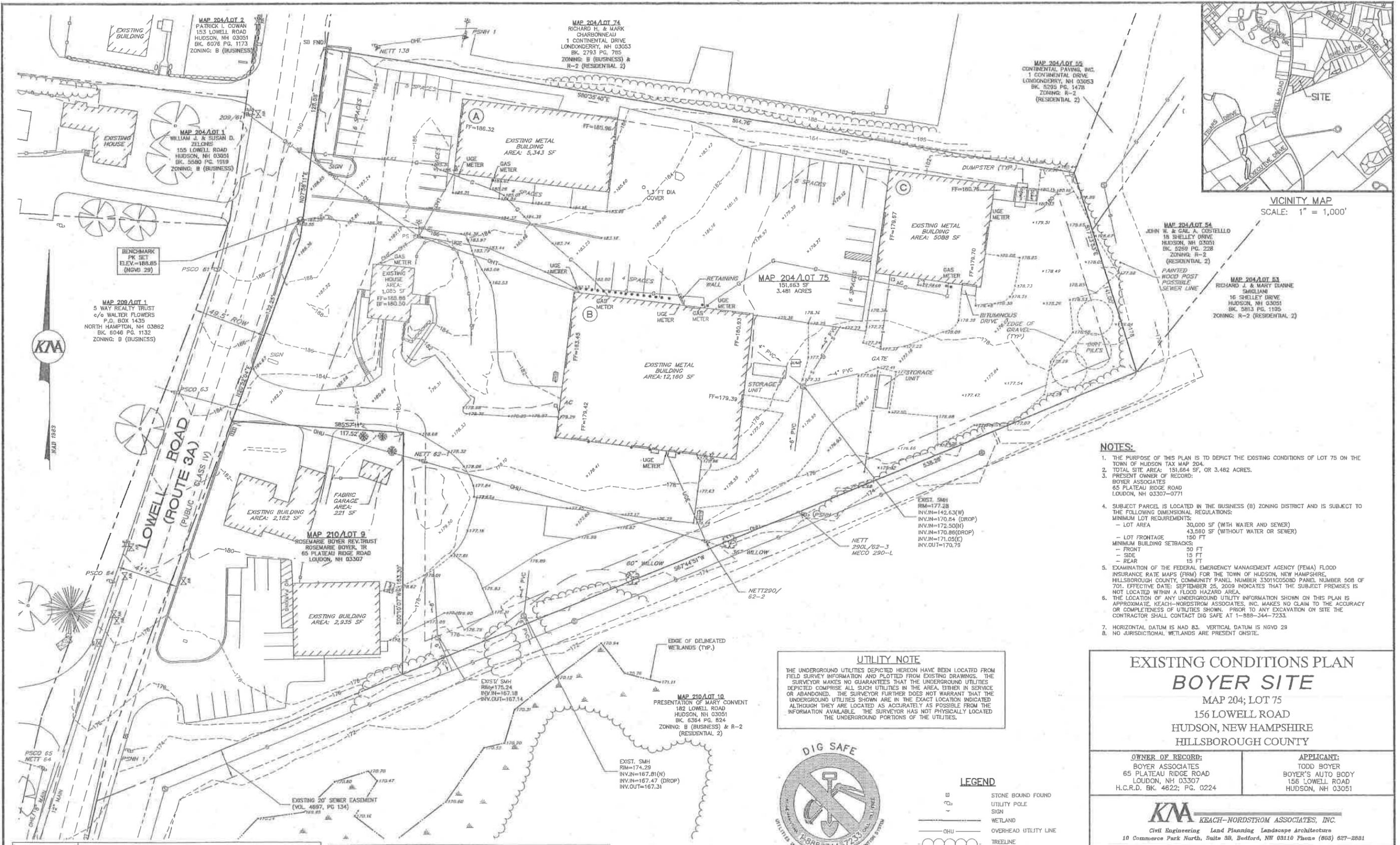
OWNER OF RECORD: BOYER ASSOCIATES 65 PLATEAU RIDGE ROAD LOUDBOROUGH, NH 03307 H.C.R.D. BK. 4622; PG. 0224	APPLICANT: TODD BOYER BOYER'S AUTO BODY 156 LOWELL ROAD HUDSON, NH 03051
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KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Planning Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2801

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	1/9/12	RESPONSE TO CTD COMMENTS	EMD
2	3/9/14	RESPONSE TO 2/26/14 PLANNING COMMENTS	JDL

DATE: NOVEMBER 12, 2013
 PROJECT NO: 06-0808-2
 SCALE: 1" = 40'
 SHEET 1 OF 11

K:\Projects\2013\2013-08-0808-2\Map 204-75-14-1\Map 204-75-14-1.dwg, MAJESTIC, 3/4/2014 10:23:16 AM



VICINITY MAP
SCALE: 1" = 1,000'

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS OF LOT 75 ON THE TOWN OF HUDSON TAX MAP 204.
 - TOTAL SITE AREA: 151,664 SF, OR 3.482 ACRES.
 - PRESIDENT OWNER OF RECORD: BOYER ASSOCIATES, 65 PLATEAU RIDGE ROAD, LOUDON, NH 03307-0771
 - SUBJECT PARCEL IS LOCATED IN THE BUSINESS (B) ZONING DISTRICT AND IS SUBJECT TO THE FOLLOWING DIMENSIONAL REGULATIONS:
MINIMUM LOT REQUIREMENTS:
- LOT AREA: 30,000 SF (WITH WATER AND SEWER)
43,500 SF (WITHOUT WATER OR SEWER)
- LOT FRONTAGE: 150 FT
MINIMUM BUILDING SETBACKS:
- FRONT: 50 FT
- SIDE: 15 FT
- REAR: 15 FT
 - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF HUDSON, NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 330110508080 PANEL NUMBER 508 OF 701, EFFECTIVE DATE: SEPTEMBER 25, 2009 INDICATES THAT THE SUBJECT PREMISES IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.
 - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
 - HORIZONTAL DATUM IS NAD 83. VERTICAL DATUM IS NGVD 29
 - NO JURISDICTIONAL WETLANDS ARE PRESENT ON SITE.

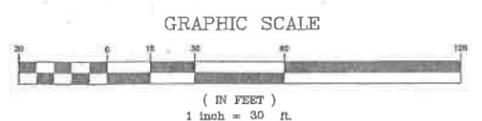
UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.



LEGEND

—	STONE BOUND FOUND
—	UTILITY POLE
—	SIGN
—	WETLAND
—	OVERHEAD UTILITY LINE
—	TREELINE
—	STONEWALL
—	EXISTING EDGE OF PAVEMENT
—	EXISTING EDGE OF GRAVE
—	EXISTING SETBACK
—	EXISTING WETLAND BUFFER
—	EXISTING 10' CONTOUR
—	EXISTING 2' CONTOUR
—	PROPOSED EDGE OF PAVEMENT



PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.



PETER S. SCHAUER, CERTIFIED WETLAND SCIENTIST #048 OF SCHAUER ENVIRONMENTAL CONSULTANTS, L.L.C. OF LOUDON, NH PERFORMED THE DELINEATION OF JURISDICTIONAL WETLANDS ON NOVEMBER 14, 2013 USING THE TECHNICAL CRITERIA IN THE COPEL OF ENGINEERS WETLAND DELINEATION MANUAL (TECHNICAL REPORT Y-87-1, JANUARY 1987).

EXISTING CONDITIONS PLAN
BOYER SITE
MAP 204; LOT 75
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

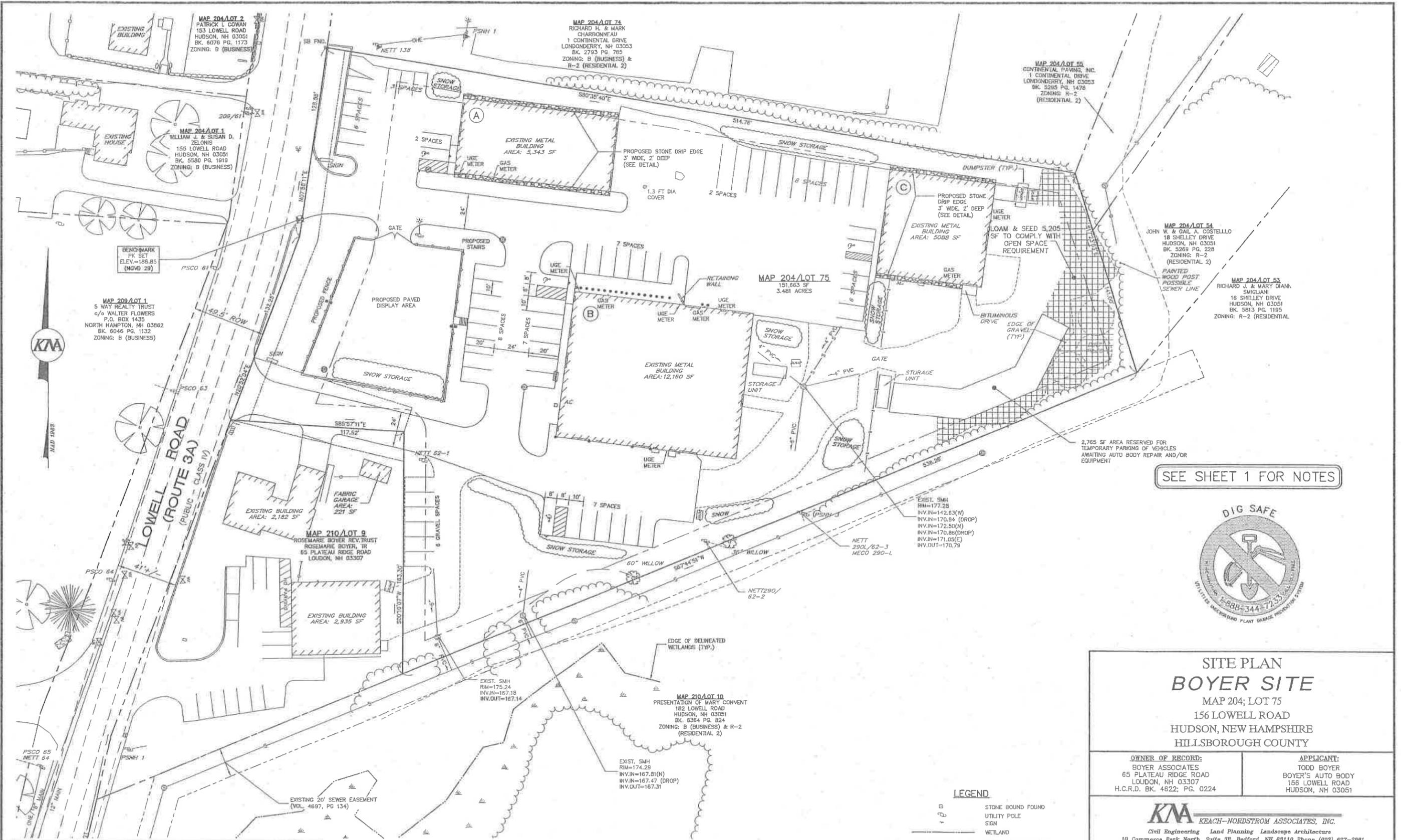
OWNER OF RECORD: BOYER ASSOCIATES 65 PLATEAU RIDGE ROAD LOUDON, NH 03307 H.C.R.D. BK. 4622; PG. 0224	APPLICANT: TODD BOYER BOYER'S AUTO BODY 156 LOWELL ROAD HUDSON, NH 03051
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KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Planning Landscape Architecture
10 Commerce Park North, Suite 39, Bedford, NH 03110 Phone (603) 827-2881

REVISIONS				
No.	DATE	DESCRIPTION	BY	
2	2/9/14	RESPONSE TO 2/9/14 PLANNING BOARD COMMENTS	JHL	

DATE: NOVEMBER 12, 2013 SCALE: 1" = 30'
PROJECT NO: 06-0808-2 SHEET 2 OF 11

E:\p\060808\060808-02\MAPS\MAP 204\REV 02.dwg DATE: 11/20/13 10:58:17 AM



SEE SHEET 1 FOR NOTES



SITE PLAN
BOYER SITE
 MAP 204; LOT 75
 156 LOWELL ROAD
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER OF RECORD:
 BOYER ASSOCIATES
 65 PLATEAU RIDGE ROAD
 LOUDON, NH 03307
 H.C.R.D. BK. 4622; PG. 0224

APPLICANT:
 TODD BOYER
 BOYER'S AUTO BODY
 156 LOWELL ROAD
 HUDSON, NH 03051

KMA KEACH-NORDSTROM ASSOCIATES, INC.
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PURSUANT TO THE SITE 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: _____

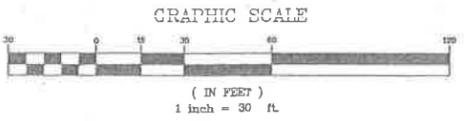
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ZONING NOTE

THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE SYNCHRONIZED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY KEACH-NORDSTROM ASSOCIATES, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.



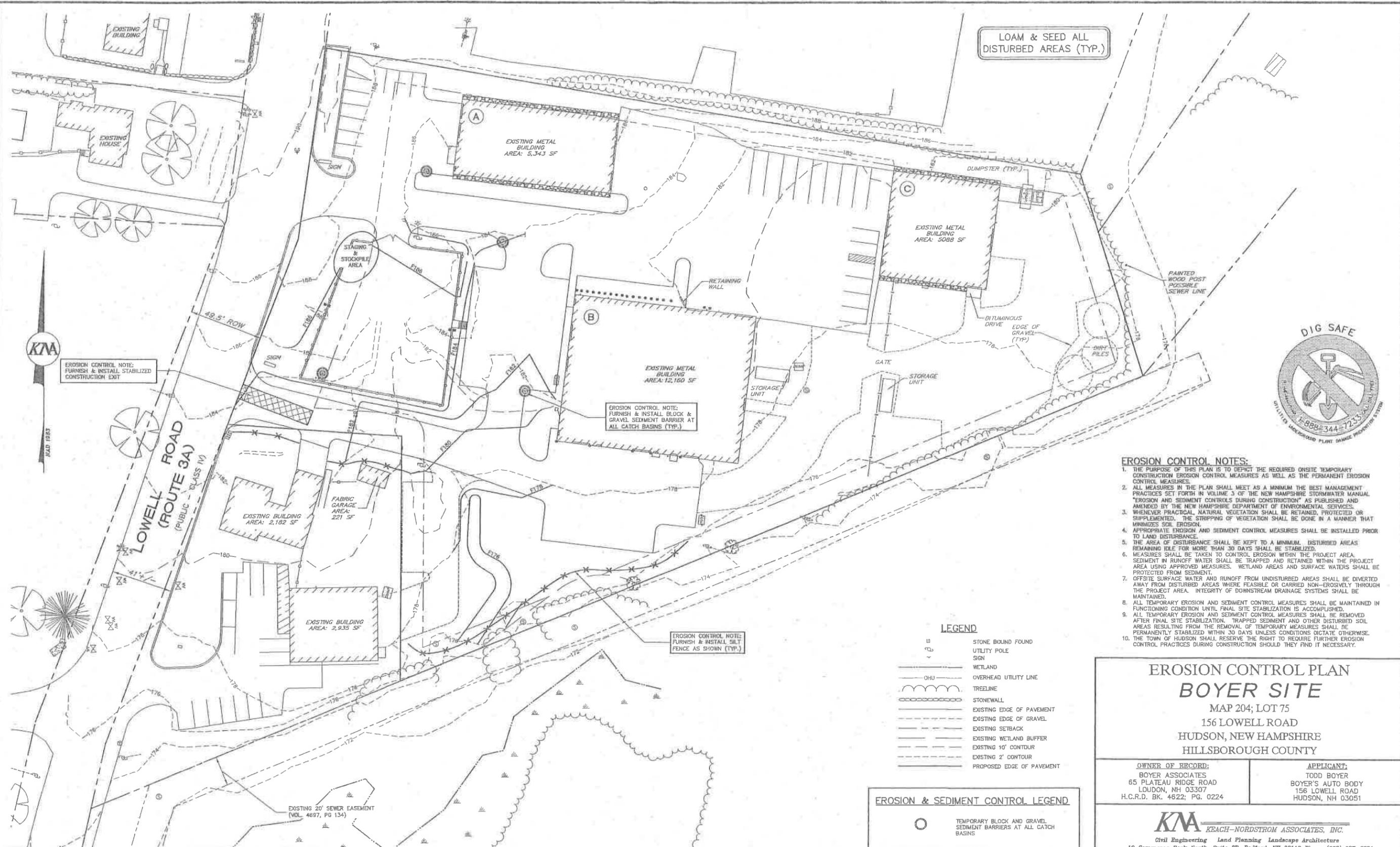
- LEGEND**
- STONE BOUND FOUND
 - UTILITY POLE
 - S— SIGN
 - W— WETLAND
 - U— OVERHEAD UTILITY LINE
 - T— TREELINE
 - S— STONEWALL
 - E— EXISTING EDGE OF PAVEMENT
 - G— EXISTING EDGE OF GRAVEL
 - D— EXISTING SETBACK
 - B— EXISTING WETLAND BUFFER
 - P— PROPOSED EDGE OF PAVEMENT

REVISIONS

No.	DATE	DESCRIPTION	BY
1	1/8/11	RESPONSE TO ORD COMMENTS	KMB
2	3/9/14	RESPONSE TO 2/26/14 PLANNING COMMENTS	JDL

DATE: NOVEMBER 12, 2013 SCALE: 1" = 30'
 PROJECT NO: 06-0808-2 SHEET 4 OF 11

LOAM & SEED ALL DISTURBED AREAS (TYP.)



EROSION CONTROL NOTE:
FURNISH & INSTALL STABILIZED CONSTRUCTION EXIT

EROSION CONTROL NOTE:
FURNISH & INSTALL BLOCK & GRAVEL SEDIMENT BARRIER AT ALL CATCH BASINS (TYP.)

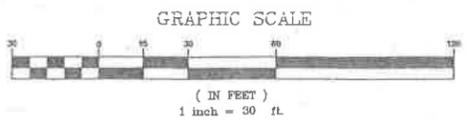
EROSION CONTROL NOTE:
FURNISH & INSTALL SILT FENCE AS SHOWN (TYP.)

LEGEND

- STONE BOUND FOUND UTILITY POLE SIGN
- WETLAND
- OHU OVERHEAD UTILITY LINE
- TREELINE
- STONEMALL
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- EXISTING SETBACK
- EXISTING WETLAND BUFFER
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED EDGE OF PAVEMENT

EROSION & SEDIMENT CONTROL LEGEND

- TEMPORARY BLOCK AND GRAVEL SEDIMENT BARRIERS AT ALL CATCH BASINS
- SILT FENCE
- STABILIZED CONSTRUCTION EXIT
- EROSION CONTROL BLANKETS
- NON DISTURBANCE AREA



- EROSION CONTROL NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DETECT THE REQUIRED ONSITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
 - ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" AS PUBLISHED AND AMENDED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES.
 - WHENEVER PRACTICAL NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
 - APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
 - THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
 - MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
 - OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
 - ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
 - ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE. THE TOWN OF HUDSON SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.



**EROSION CONTROL PLAN
BOYER SITE**
MAP 204; LOT 75
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
BOYER ASSOCIATES
65 PLATEAU RIDGE ROAD
LOUDON, NH 03307
H.C.R.D. BK. 4622; PG. 0224

APPLICANT:
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BOYER'S AUTO BODY
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HUDSON, NH 03051

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REVISIONS			
No.	DATE	DESCRIPTION	BY
1	1/9/14	RESPONSE TO CID COMMENTS	KMB
2	3/2/14	RESPONSE TO 2/28/14 PLANNING COMMENTS	JDL

DATE: NOVEMBER 12, 2013 SCALE: 1" = 30'
PROJECT NO: 06-0806-2 SHEET 6 OF 11

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

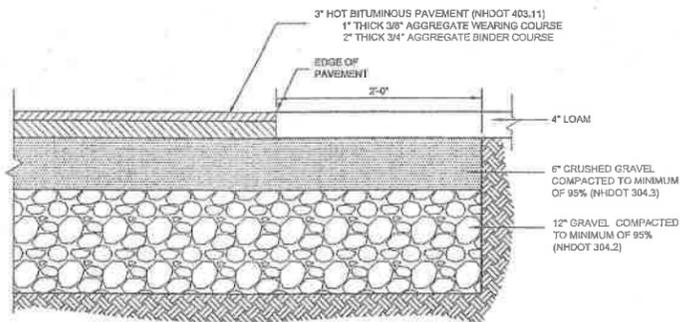
APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

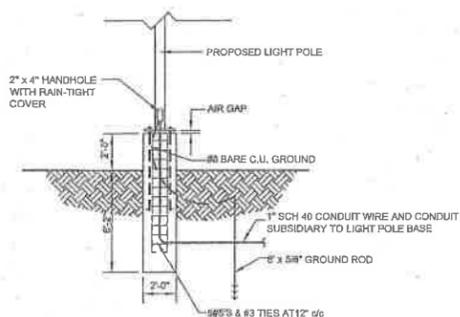
SIGNATURE _____ DATE _____

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S:\proj\060806\060806.dwg (06) 0806 SITE PLAN REV2.dwg, E:\CSD\06_3\060806.dwg



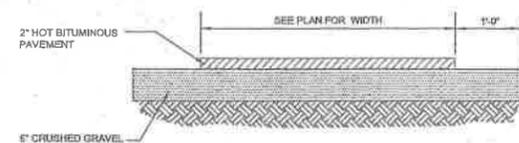
DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE
(MARCH 2008)



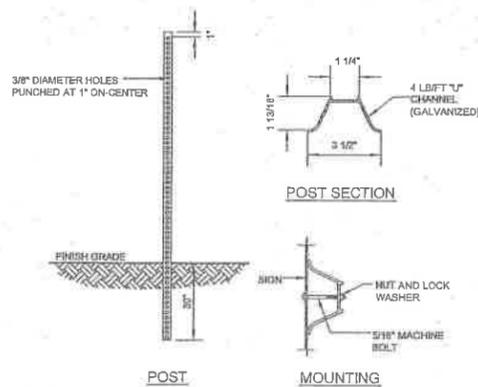
CONCRETE LIGHT POLE BASE DETAIL
NOT TO SCALE
(MARCH 2008)



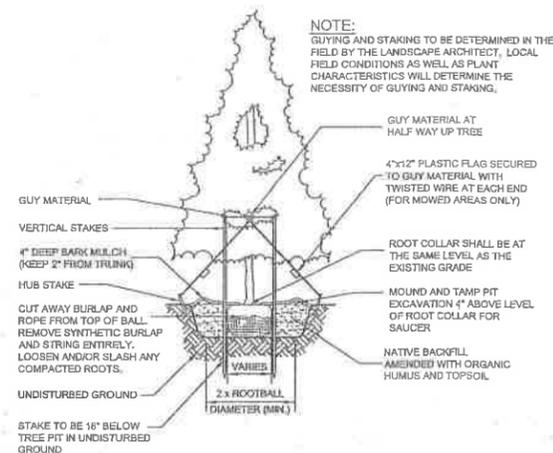
VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL
NOT TO SCALE
(MARCH 2008)



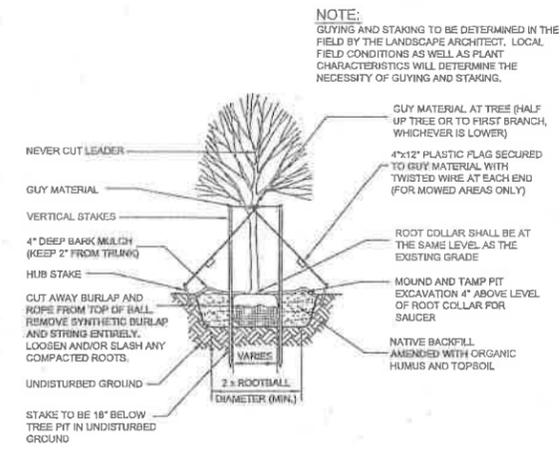
BITUMINOUS WALK DETAIL
NOT TO SCALE
(MARCH 2008)



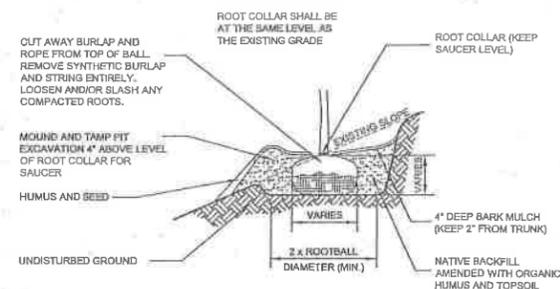
STEEL SIGN POST DETAIL
NOT TO SCALE
(MARCH 2008)



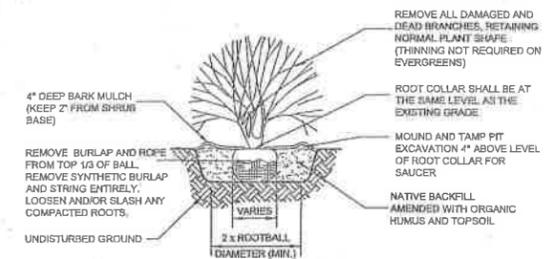
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



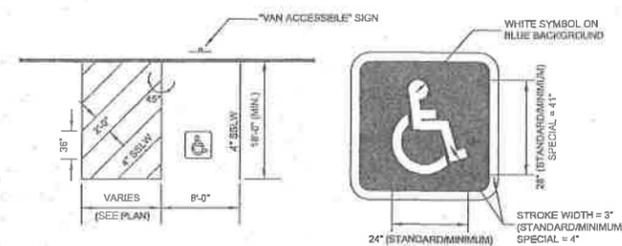
DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



TYPICAL PLANTING PIT ON SLOPE 4:1 OR GREATER
NOT TO SCALE
(JANUARY 2012)



BALLED & BURLAP SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



HANDICAP STRIPING DETAIL
NOT TO SCALE
(MARCH 2012)

- STRIPING NOTES:**
- ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCD.
 - WIDTH OF LINES SHALL VARY NO MORE THAN 1/4 INCH FROM THAT SPECIFIED.
 - THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
 - OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.
 - BROKEN LINES SHALL BEGIN AND END WITH THE NEAREST FULL CYCLE OF BROKEN LINE.
 - SOLID LONGITUDINAL LINES SHALL BEGIN AND END WITH + 2 INCHES OF A LAYOUT SYMBOL INDICATING THE END OF THE LINE, OR WITH A FULL CYCLE OF BROKEN LINE (IF APPROPRIATE).

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CONSTRUCTION DETAILS
BOYER SITE
MAP 204; LOT 75
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

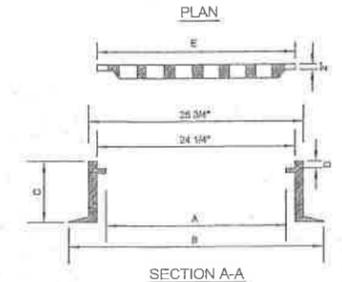
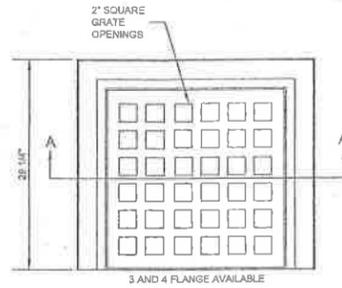
OWNER OF RECORD: BOYER ASSOCIATES 65 PLATEAU RIDGE ROAD LOUDON, NH 03307 H.C.R.D. BK. 4622; PG. 2240	APPLICANT: TODD BOYER BOYER'S AUTO BODY 156 LOWELL ROAD HUDSON, NH 03051
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10 Commerce Park North, Suite 3B, Bedford, NH 08110 Phone (603) 827-2881

REVISIONS			
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1	1/6/14	RESPONSE TO CDD COMMENTS	EMD
2	3/9/14	RESPONSE TO 2/28/14 PLANNING COMMENTS	JDL

DATE: NOVEMBER 12, 2013 SCALE: AS NOTED
PROJECT NO: 06-0808-2 SHEET 8 OF 11

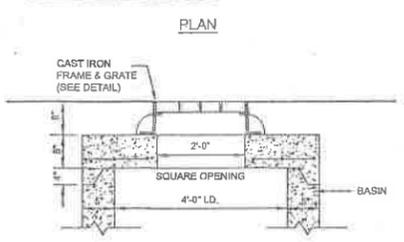
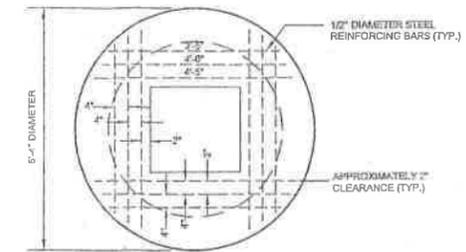
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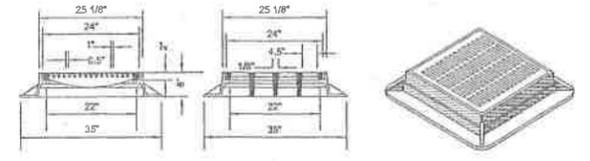
- SPECIFICATIONS:**
1. QUALITY CAST FRAME AND GRATE.
 2. BITUMINOUS COATED.
 3. NON-ROCKING GRATE.
 4. 2" SQUARE OPENING PATTERN ON GRATE.
 5. GRAY CAST IRON MEETS ASTM A8 CLASS 30.
 6. H-20 LOAD RATED.
 7. FRAME AVAILABLE IN 4', 6' AND 8' HEIGHTS, WITH 3 OR 4 FLANGES.

FRAME	DIMENSIONS (IN)				
	A	B	C	D	E
4"	22"	33.25"	4"	2"	24"
6"	22"	33.25"	6"	2"	24"
8"	22"	33.25"	8"	2"	24"

HEAVY DUTY CATCH BASIN WITH 2" SQUARE OPENINGS
NOT TO SCALE
(MARCH 2008)



REINFORCED CONCRETE TOP SLAB (4'-0" I.D.)
NOT TO SCALE
(MARCH 2008)

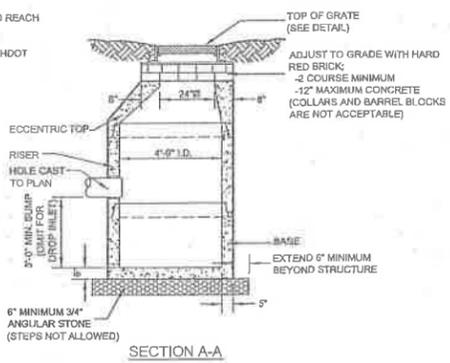
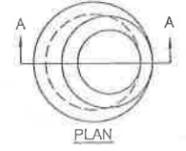


NOTES:
CONTRACTOR TO USE CATCH BASIN GRATE AS SHOWN, OR EQUAL, WITH OPENINGS LESS THAN OR EQUAL TO 1/2" PER AMERICANS WITH DISABILITIES ACT REGULATIONS.

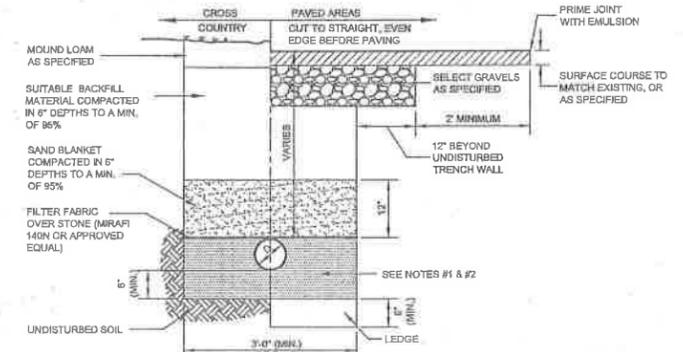
ADA CATCH BASIN FRAME & GRATE
NOT TO SCALE
JUNE 2012

NOTES:

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCH PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
2. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCH PER LINEAR FOOT.
3. RISER OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
4. MATERIALS AND CONSTRUCTION TO NHDOT STANDARDS.



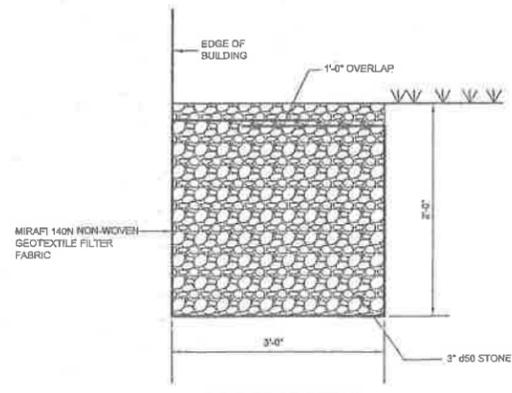
PRECAST REINFORCED CATCH BASIN
NOT TO SCALE
(MAY 2012)



NOTES

1. THOROUGHLY COMPACTED SCREENED GRAVEL FOR RCP PIPE. SCREENED GRAVEL TO EXTEND TO SELECT FILL LINE.
2. FOR HDPE OR PVC PIPE, BEDDING SHALL BE 3/4" STONE TO THE TOP OF THE PIPE.

STORM DRAINAGE TRENCH DETAIL
NOT TO SCALE
(MARCH 2008)



DRIP EDGE DETAIL
NOT TO SCALE

PIPE DIAMETER	DIMENSIONS, INCHES (MM)					
	PART No.	A (± 1')	B (MAX.)	H (± 1')	L (± 1/2')	W (± 2)
12" & 15"	1210 NP	6.5"	10"	6.5"	25"	29"
18"	1810 NP	7.5"	15"	6.5"	32"	35"
24"	2410 NP	7.5"	18"	6.5"	36"	45"
30"	3010 NP	10.5"	N/A	7.0"	53"	68"
36"	3610 NP	10.5"	N/A	7.0"	53"	68"

ADS END SECTION DETAIL
NOT TO SCALE
(MARCH 2008)

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CONSTRUCTION DETAILS
BOYER SITE
MAP 204; LOT 75
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

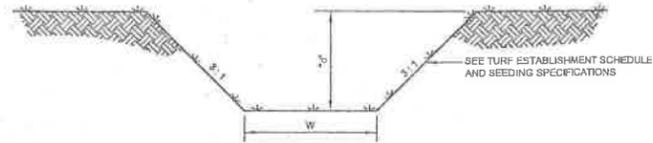
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2	3/3/14	RESPONSE TO 2/26/14 PLANNING COMMENTS	JDL

DATE: NOVEMBER 12, 2013
PROJECT NO: 06-0808-2

SCALE: AS NOTED
SHEET 9 OF 11



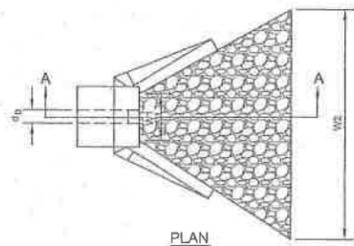
LOCATION	PEAK FLOW	PEAK VELOCITY	SWALE WIDTH "W"	SWALE LENGTH	SWALE SLOPE	DEPTH "d"	PEAK DEPTH OF RUNOFF
SWALE #1	2.57 CFS	0.57 FPS	8"	100'	0.005	1.5'	7"

MAINTENANCE

- TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE FILTERING EFFECT. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.
- THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

TREATMENT SWALE DETAIL

NOT TO SCALE
(MARCH 2008)



PIPE OUTLET TO WELL DEFINED CHANNEL

NOT TO SCALE
(MARCH 2008)

LOCATION	L1	W1	W2	d50	DEPTH
PES#1	12'	4'	8'	4"	10"

TABLE 7-24 - RECOMMENDED RIP RAP GRADATION RANGES

PERCENT OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100%	1.5 TO 2.0 d50
85%	1.3 TO 1.8 d50
50%	1.0 TO 1.5 d50
15%	0.3 TO 0.5 d50

CONSTRUCTION SPECIFICATIONS:

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

MAINTENANCE:

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR RAIN EVENT. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

TURF ESTABLISHMENT SCHEDULE

PURPOSE:

TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTORE GROWTH TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL EROSION.

PREPARATION AND EXECUTION:

- RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH.
- PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
- FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED; TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
- APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.
- APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
- DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
- SEEDING FOR PERMANENT COVER SHALL OCCUR BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND BETWEEN APRIL 15 AND JUNE 15. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER, WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET OR OTHERWISE UNTILLABLE.
- WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH HAY, ANCHOR MULCH ON ALL SLOPES EXCEEDING 3:1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
- PROTECT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEEDED.
- WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

MAINTENANCE:

ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH HEALTHY UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA. MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.

APPLICATION RATES:

- LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
- LIME SHALL BE APPLIED AT A RATE OF 75 TO 100 POUNDS PER 1,000 S.F.
- FERTILIZER SHALL BE APPLIED AT A RATE OF 30 POUNDS PER 1,000 S.F.
- SEED MIXTURE FOR LAWN AREAS SHALL BE APPLIED AT A RATE OF AT LEAST 80 POUNDS PER ACRE OR 2 POUNDS PER 1,000 S.F.
- TEMPORARY SEED MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 S.F.
- SEED MIXTURE FOR SLOPE AREAS SHALL BE APPLIED AT A RATE OF 80 POUNDS PER ACRE OR 2 POUNDS PER 1,000 S.F.
- SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS SHALL BE APPLIED AT A RATE OF 70 POUNDS PER ACRE OR 1.8 POUNDS PER 1,000 S.F.
- MULCH SHALL BE APPLIED AT A RATE OF 90 POUNDS PER 1,000 S.F.

MATERIALS:

- LOAM USED FOR TOPSOIL SHALL BE FRIABLE, FERTILE, NATURAL FREE-DRAINING LOAM, FREE OF ROOTS, GRASS, STICKS, WEEDS, CLAY, SOD LUMPS, DEBRIS AND STONES LARGER THAN 1 INCH IN ANY DIMENSION. SOIL SHALL NOT BE EXCESSIVELY ACID OR ALKALINE AND CONTAIN NO TOXIC MATERIALS.
- LIME SHALL BE GROUND LIMESTONE CONTAINING NO LESS THAN 95% CALCIUM AND MAGNESIUM CARBONATES.
- FERTILIZER SHALL BE 10-20-20 COMMERCIAL GRADE.
- SEED MIXTURE FOR LAWN AREAS SHALL BE 95% PURE LIVE SEED AND CONSIST OF THE FOLLOWING:
 - 25% CREEPING RED FESCUE
 - 25% KENTUCKY BLUEGRASS
 - 25% REDTOP
 - 25% MANHATTAN PERENNIAL RYEGRASS
- TEMPORARY SEEDING MIXTURE SHALL BE AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING:
 - 15% BLACKWELL OR SHELTER SWITCHGRASS
 - 30% NIAGRA OR KAW BIG BLUESTEM
 - 30% CAMPER OR BUAZE LITTLESTEM
 - 15% NE-27 OR BLAZE SAND LOVEGRASS
 - 10% VIKING BIRDSFOOT TREFLOID
- INOCULUM SPECIFIC TO BIRDSFOOT TREFLOID MUST BE USED WITH THIS MIXTURE. IF SEEDING BY HAND, A STICKING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR TIMES THE RECOMMENDED AMOUNT OF INOCULUM.
- SEED MIXTURE FOR SLOPE AREAS SHALL BE 95% PURE LIVE SEED AND SHALL CONSIST OF THE FOLLOWING:
 - 30% CREEPING RED FESCUE
 - 40% PERENNIAL RYE GRASS
 - 15% REDTOP
 - 15% BIRDSFOOT TREFLOID
- IN ADDITION TO THE MIX SPECIFIED ABOVE, CROWN VETCH SHALL BE USED ON ALL SLOPES STEEPER THAN 3:1. CROWN VETCH SHALL BE APPLIED AT A RATE OF 10 POUNDS PER ACRE AND INOCULUM SPECIFIC TO CROWN VETCH MUST BE USED.
- SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT SWALES SHALL CONSIST OF THE FOLLOWING:
 - 25% CREEPING RED FESCUE
 - 15% SWITCH GRASS
 - 15% FOX SEDGE
 - 15% CREEPING BENTGRASS
 - 10% FLATPEA
 - 20% WILDFLOWER VARIETY
- HAY FOR MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME MOWINGS, FREE FROM WEEDS, TWIGS, DEBRIS OR OTHER DELETERIOUS MATERIAL AND ROT OR MOLD.

SOD SPECIFICATIONS:

- SOD SHALL BE PROVIDED WITH A STRONG ROOT SYSTEM, NOT LESS THAN TWO YEARS OLD AND SHALL BE FREE OF ANY UNDESIRABLE NATIVE GRASSES OR WEEDS.
- SOD SHALL BE MACHINE CUT TO A THICKNESS NOT LESS THAN 3/4", EXCLUDING THATCH, AND SHALL BE CAPABLE OF VIGOROUS GROWTH WHEN PLANTED.
- SOD PADS SHALL BE OF UNIFORM SIZE AND COMPOSED OF AT LEAST TWO LOCAL GRASS VARIETIES.
- LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS, DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP SOD TO ENSURE CONTACT WITH SOIL.
- WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.

CONSTRUCTION DETAILS

BOYER SITE

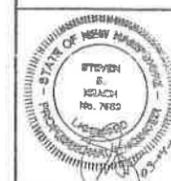
MAP 204; LOT 75
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
BOYER ASSOCIATES
65 PLATEAU RIDGE ROAD
LOUDON, NH 03307
H.C.R.D. BK. 4622; PG. 2240

APPLICANT:
TODD BOYER
BOYER'S AUTO BODY
156 LOWELL ROAD
HUDSON, NH 03051

KM KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Planning Landscape Architecture
10 Commerces Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881



REVISIONS			
No.	DATE	DESCRIPTION	BY
3	3/3/14	RESPONSE TO 2/25/14 PLANNING COMMENTS	JDL

DATE: NOVEMBER, 12 2013 SCALE: AS NOTED
PROJECT NO: 06-0808-2 SHEET 10 OF 11

PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

Dunkin Donuts Site Plan

STAFF REPORT

March 12, 2014

SITE: 14 Brady Drive (corner of Robinson Rd.& Derry St.) - Map 105/Lot 019 - SP# 01-14

ZONING: G-1

PURPOSE OF PLAN: to illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements. Application Acceptance & Hearing.

PLAN UNDER REVIEW ENTITLED: Non-Residential Site Plan Dunkin Donuts Map 105 Lot 19, 14 Brady Drive, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Jan. 24, 2014 (no revision date), consisting of Sheets 1 - 12 and Notes 1 – 29 (said plans are attached hereto).

ATTACHMENTS:

- 1) Project Narrative, Site Plan Application, Checklist and Waiver Forms, including an aerial site photo date stamped Jan. 28, 2014 – Attachment “A”.
- 2) CLD’s Initial Comments Report, including Application Checklist, dated Jan. 18, 2014 – “B”.
- 3) CLD’s Traffic Peer Review Letter, dated Feb. 27, 2014 – “C”.
- 4) GPI’s Traffic Impact and Access Study, dated Dec. 2013 – “D”.
- 5) Comments/Memos from Zoning Administrator, Bill Oleksak, Road Agent, Kevin Burns, HFD Deputy Fire Chief, John O’Brien, , and Asst. Assessor, various date stamps – “E”.
- 6) C.A.P. Fee Worksheet (Total Amount \$31,948.80) – “F”.

REQUESTED WAIVERS (see Note 23 on Sheet 1 of 17):

1. HTC 275-9(C) -- Noise Study
2. HTC 275-9(D) -- Fiscal Impact Study

STAFF COMMENTS/OUTSTANDING ISSUES:

To start off on a positive note: staff believes the proposed new uses for this site, which is prominently located on the southeastern corner of Robinson Rd. and Rte. 102, should prove to be another positive economic development element to this particular area of Town, and should inspire other developers to build additional architecturally appealing buildings in this area as time progresses. In regard to the appealing building design, please refer to Sheets A2 & A3.

With the above accolade taken into consideration, after board members read through CLD’s Initial Comments Report “B”, their Traffic Peer Review Analysis “C”, together with GPI’s Traffic Impact and Access Study “D” and the Site Plan, the board may want to consider this initial public hearing as an information gathering

session. That is, a session devoted to thinking of ways to make the site design work better for the proposed uses, for there are problems with the design that need to be addressed. For example,

- 1) The GPI Study cites, in particular, that the Level of Service (LOS) at the Robinson Rd. intersection with Derry Rd. (Rte. 102) is of concern. Besides the retiming of the traffic signal approach GPI suggests in their study, and CLD expresses issue with in their critique:

it is anticipated that in the not too distant future, this intersection, without the addition of an exclusive right-turn egress lane onto Derry Rd. eastbound, an exclusive north middle egress lane leading to West St. and an exclusive left-turn lane onto Derry Rd. westbound, the LOS at this quadrant of the intersection will approach or be F in the A.M. Peak Hour. Solution: as cited in CLD's critique (see page 3, second bullet from the top), the board may want to request the applicant to offer a 12 ft. in-width ROW easement along the subject lot's frontage for future road-widening purposes.

- 2) The proposed driveway design poses 2 problems, relative to proper and safe onsite traffic flow, i.e.,

If, for example, the drive-thru queue extends near the driveway ingress lane, taking a left into the site will prove problematic to drivers, and if at the same time a truck is making a delivery alongside the drive-thru queue, what will a driver do to get that morning fix of coffee? The next thing that will happen is that the person behind the person trying to enter the parking lot will beep for the person to get a move on, etc. Followed, perhaps, by the police being called to the scene to calm a disturbance. Of course the foregoing scenario may not happen, just as stated, but the way this site is presently designed, it's probably not farfetched, and closure to nonfiction to occurring the first day of operation than not. **Solution:** as explained to the Applicant's Engineer, Peter Julia, the Applicant may want to try and enlarge the lot, i.e., either easterly, away from Robinson Rd., and farther into the abutting slope or northerly, toward Derry Rd. In either case, the idea is to create enough of a perimeter travel corridor around the rear of the building, so as to eliminate the left-turn ingress movement at the site driveway, and replacing it with a right-turn only ingress to go around the rear of the building. At the same time, if the Applicant widens the area at the rear of the building or along the north side of the site (the Derry Rd. side), a safe and out of the way loading zone can be created that will not obstruct onsite traffic flow.

- 3) The Applicant wishes to provide for their water needs, via an onsite well. On the other hand, the Fire Dept. seeks to have a fire hydrant installed in close proximity to this site. **Solution:** other area developers have gone to great expense to extend the Town's water system in this area, which is within a reasonable distance (+/- 300 ft.) for the Applicant to connect to and provide, not only said hydrant, but also a more reliable and safer source of potable water, especially for the proposed heavy water dependent use.
- 4) The dumpster location can, perhaps, be better placed, especially if the lot is enlarged to solve the above-cited onsite traffic situation.
- 5) No freestanding sign(s) is proposed for this site. As explained to staff by the project eng., the site sits high and prominent over its surroundings, and as such, wall signs will suffice to advertise the proposed uses.

Other issues are formally cited in both CLD Site Plan and Traffic critiques "B & "C".

RECOMMENDATION: Taking the abovementioned outstanding issues/comments into consideration, i.e., the board will find it not yet in an approvable layout. The application is, however, ready for acceptance, as such, for this meeting staff recommends:

- (i) Board vote for application acceptance;
- (ii) Open and conduct the public hearing;
- (iii) Allow the applicant to present the project and address all of the issues involved in this application, including those cited-above and in CLD's attached Comments Reports "B" & "C", as well as your own.
- (iv) Hear any pro/con public input, and
- (v) Defer further review of this site plan, date specific to the April 9th or 23d meeting.
- (vi) In the unlikely, but possible, event the board moves to approve the 2 requested waivers DRAFT MOTIONS for same have been provided below.

APPLICATION TRACKING:

- 01/28/13 - Application submitted;
- 03/12/14 - Initial public hearing date.

DRAFT MOTIONS:

I move to accept the Site Plan application for the Dunkin Donuts Site Plan off Brady Drive, Map 105/Lot 19.

Motion by: _____ Second: _____ Carried/Failed: _____.

I move to defer further review of the Dunkin Donuts Site Plan application, off Brady Drive, Map 105/Lot 19, date specific, to the April 9 or 23d, 2014 meeting.

Motion by: _____ Second: _____ Carried/Failed: _____.

REQUESTED WAIVERS:

1. HTC 275-9(D) -- Fiscal Impact Study
2. HTC 275-9(C) -- Noise Study

- **HTC 275-9(D) -- Fiscal Impact Study**

I move to grant the requested waiver: HTC 275-9D - Fiscal Impact Study – because in addition to the submitted plans, CAP fee and other submitted application materials, said study is unnecessary in order to evaluate the fiscal impact of this development, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

- **HTC 275-9C – Noise Study**

I move to grant the requested waiver: HTC 275-9C - Noise Study - because such a study is unnecessary, taking into consideration that all of the abutting properties within a 1000 ft. radius are either developed commercially with similar uses as, as proposed, or anticipated and zoned to be developed commercially in the future, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

"A" cont.

PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: 1/27/14 Tax Map # 105 Lot # 19
Name of Project: Dunkin Donuts
Zoning District: _____ General SP# 01-14
(For Town Use) (For Town Use)
ZBA Action: _____



PROPERTY OWNER:

DEVELOPER:

Name: Noury Investments, LLC
Address: 17 Einathans Way
Address: Hollis, NH 03049
Telephone # (603) 235-6897
Fax # _____
Email: _____

Cafua Management Group
280 Merrimack Street, Suite A
Methuen, MA 01844
(978) 682-2382
(978) 683-2634
gholan@cafua.com

PROJECT ENGINEER

SURVEYOR

Name: Keach Nordstrom Assoc., Inc.
Address: 10 Commerce Park No., Suite 3
Address: Bedford, NH 03110
Telephone # (603) 627-2981
Fax # (603) 627-2915
Email: sknach@keachnordstrom.com

Keach Nordstrom Assoc., Inc.
10 Commerce Park No., Suite 3
Bedford, NH 03110
(603) 627-2981
(603) 627-2915
abasso@keachnordstrom.com

PURPOSE OF PLAN:

To illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements.

<i>For Town Use</i>	
Plan Routing Date: <u>2-3-14</u>	Sub/Site Date: <u>2-25-14 @ 10:00 AM</u>
<input type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
(Initials) _____	Title: _____ Date: _____
DEPT: _____ Zoning _____ Engineering _____ Assessor _____ Police _____ Fire _____ Planning _____ _____ Consultant _____ Highway Department	
Fees Paid: _____	

SITE DATA SHEET

PLAN NAME: Dunkin Donuts

PLAN TYPE: SITE PLAN

LEGAL DESCRIPTION: MAP 105 LOT 19

DATE: 1/27/14

Location by Street 14 Brady Drive

Zoning: General-1 (G-1)

Proposed Land Use: Retail & Service

Existing Use: Vacant Land

Surrounding Land Use(s): Retail, Commercial

Number of Lots Occupied: 1

Existing Area Covered by Building: 0

Existing Buildings to be removed: None

Proposed Area Covered by Building: 5,460

Open Space Proposed: 56.2%

Open Space Required: 35%

Total Area: S.F.: 94,981 Acres: 2.18

Area in Wetland: 0 Area Steep Slopes: 0

Required Lot Size: 87,120

Existing Frontage: 218.54

Required Frontage: 200

Building Setbacks:	<u>Required*</u>	<u>Proposed</u>
Front:	<u>50</u>	<u>196.2</u>
Side:	<u>15</u>	<u>95.8</u>
Rear:	<u>15</u>	<u>48.3</u>

SITE PLAN DATA SHEET
(Continued)

Flood Zone Reference: FIRM Map 33011C0508D, Panel # 508, 09/25/09

Width of Driveways: 24'

Number of Curb Cuts: One

Proposed Parking Spaces: 54 spaces

Required Parking Spaces: 50 spaces

Basis of Required Parking (Use): Retail: 1 space/200 sf, Restaurant w/no bar: 1 space/100sf

Dates/Case #/Description/Stipulations
of ZBA, Conservation Commission,
NH Wetlands Board Actions: Retail, stacking
(Attach stipulations on separate sheet)

Hudson Town Code

<u>Waivers Requested:</u>	<u>Reference</u>	<u>Regulation Description</u>
	1. <u>HTC 275-9, C</u>	<u>Noise Impact Study</u>
	2. <u>HTC 275-9, D</u>	<u>Fiscal/Enviro. Impact Study</u>
	3. _____	_____
	4. _____	_____
	5. _____	_____
	6. _____	_____
	7. _____	_____
	8. _____	_____

(Left column for Town Use)

Impact Fees:
C.A.P Fee: TBD

Development Agreement
Proposed: Yes

<i>For Town Use</i>	
Data Sheet Checked By: _____	Date: _____

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Thirty (30) days prior to Planning Board Meeting, a complete site plan to include all supporting materials/documents must be submitted in final form. The site plan shall comply with the following specifications/requirements:

Applicant Initials		Staff Initials
<u>PNJ</u>	a) Submission of nine (9) full sets of Site Plans (sheet size: 22" x 34") shall be submitted at the time of application filing, followed by the submission of seventeen (17) 11" X 17" plan sets (revised if applicable) to the Community Development Department no later than 10:00 A.M., Tuesday the week prior to the scheduled public hearing/conceptual review date.	_____
<u>PNJ</u>	b) A Site Plan narrative, describing the purpose, locations, long-range plans, impacts on traffic, schools, and utilities	_____
<u>PNJ</u>	c) Plan scale at not less the one inch equals fifty feet (1" = 50')	_____
<u>PNJ</u>	d) Locus plan with 1,000' minimum radius of site to surrounding area	_____
<u>PNJ</u>	e) Plan date by day/month/year	_____
<u>PNJ</u>	f) Revision block inscribed on the plan	_____
<u>PNJ</u>	g) Planning Board approval block inscribed on the plan	_____
<u>PNJ</u>	h) Title of project inscribed on the plan	_____
<u>PNJ</u>	i) Names and addresses of property owners and their signatures inscribed on the plan	_____
<u>PNJ</u>	j) North point inscribed on the plan	_____
<u>PNJ</u>	k) Property lines: exact locations and dimensions	_____
<u>PNJ</u>	l) Square feet and acreage of site	_____
<u>PNJ</u>	m) Square feet of each building (existing and proposed)	_____
<u>PNJ</u>	n) Names and addresses of bordering abutters, as shown on Tax Assessor's records not more than five (5) days prior to application date to be listed on the plan.	_____

Applicant
Initials

Staff
Initials

- | | | |
|----------------|--|-------|
| <u>PNJ</u> o) | Location of all structures, roads, wetlands, hydrants, wells, septic systems, 4k reserve areas, floodways/floodplains, driveways, travel areas, parking areas and natural features within 200 feet of the tract | _____ |
| <u>PNJ</u> p) | Locations of existing and proposed permanent monuments and bench marks within 200 feet of the development tract | _____ |
| <u>N/A</u> q) | Pertinent highway projects | _____ |
| <u>PNJ</u> r) | Assessor's Map and Lot number(s) | _____ |
| <u>PNJ</u> s) | Waiver application form shall be submitted with the site plan application, note on plan listing waivers requested/granted; and all waivers granted to the site plan regulations shall be listed on the final plan; waivers to checklist shall be reduced to writing and be signed by the Planning Board Chairman and Planning Board Secretary and recorded with the plan | _____ |
| <u>PNJ</u> t) | Delineate zoning district on the plan | _____ |
| <u>PNJ</u> u) | Storm water drainage plan | _____ |
| <u>PNJ</u> v) | Topographical elevations at 2-foot intervals contours: existing and proposed | _____ |
| <u>PNJ</u> w) | Utilities: existing and proposed | _____ |
| <u>PNJ</u> x) | Parking: existing and proposed | _____ |
| <u>PNJ</u> y) | Parking space: length and width | _____ |
| <u>PNJ</u> z) | Aisle width/maneuvering space | _____ |
| <u>PNJ</u> aa) | Landscaping: existing and proposed | _____ |
| <u>PNJ</u> ab) | Building and wetland setback lines | _____ |
| <u>PNJ</u> ac) | Curb cuts | _____ |
| <u>PNJ</u> ad) | Rights of way: existing and proposed | _____ |
| <u>PNJ</u> ae) | Sidewalks: existing and proposed | _____ |
| <u>PNJ</u> af) | Exterior lighting plan | _____ |
| <u>PNJ</u> ag) | Sign locations: size and design | _____ |
| <u>PNJ</u> ah) | Water mains and sewerage lines | _____ |
| <u>PNJ</u> ai) | Location of dumpsters on concrete pads | _____ |
| <u>PNJ</u> aj) | All notes from plats | _____ |

Applicant Initials		Staff Initials
<u>PNJ</u>	ak) Buffer as required by site plan regulations	_____
<u>PNJ</u>	al) Green and open space requirements met with both types of spaces inscribed on the plan	_____
<u>PNJ</u>	am) Soil types and boundaries, Note: If site contains marginal or questionable soils, a High Intensity Soil, Survey (HISS) may be deemed necessary to submit as part of the application. Said HISS, if required, shall be performed by a State of New Hampshire Certified Soil Scientist, who shall affix his/her stamp and signature shall be inscribed on the plan.	_____
<u>N/A</u>	an) Wetlands (and poorly-drained and very poorly-drained soils, also identified as Class 5 and Class 6 High Intensity Soil Survey (HISS soils), and permanent and seasonal wetlands shall be identified on the plan by a New Hampshire certified wetland or soil scientist, who shall affix his/her stamp and signature to the respective plan.	_____
<u>PNJ</u>	ao) "Valid for one year after approval" statement inscribed on the plan.	_____
<u>PNJ</u>	ap) Loading bays/docks	_____
<u>PNJ</u>	aq) State of New Hampshire engineer's stamp, signature, surveyor's stamp, and signature	_____
<u>PNJ</u>	ar) Error of closure (1 in 10,000 or better)	_____
<u>PNJ</u>	as) Drafting errors/omissions	_____
<u>PNJ</u>	at) Developer names, addresses, telephone numbers and signatures	_____
<u>PNJ</u>	au) Photographs, electronic/digital display or video of site and area	_____
<u>PNJ</u>	av) Attach one (1) copy of the building elevations	_____
<u>waiver</u>	aw) Fiscal impact study	_____
<u>PNJ</u>	ax) Traffic study	_____
<u>waiver</u>	ay) Noise study	_____

Applicant
Initials

Staff
Initials

PNJ az) Copies of any proposed or existing easements, covenants, deed restrictions,
right of way agreements or other similar documents _____

PNJ ba) Copy of applicable Town, State, Federal approval/permits to include but
not limited to the following: _____

- industrial discharge application
- sewer application
- flood plain permit
- wetlands special exception
- variance
- erosion control permit (149:8a)
- septic construction approval
- dredge and fill permit
- curb cut permit
- shore-land protection certification in
in accordance with RSA483-B
- if applicable, review application with Lower Merrimack River Local
Advisory Committee (LMRLAC) and attach LMRLAC project
comments hereto.

PNJ bb) Presentation plan (colored, with color-coded bar chart) _____

PNJ bc) Fees paid to clerk _____

PNJ bd) Five (5) 22" x 34" copies of the plan shall be brought to the Planning
Board meeting and distributed to the Planning Board members at the
meeting. Note: for all subsequent meetings involving revised plans,
five 22" x 34" copies of said plan shall be brought to the meeting for
distribution to the board members. _____

*Under the purview of the Planning Board, any and all items may be waived.

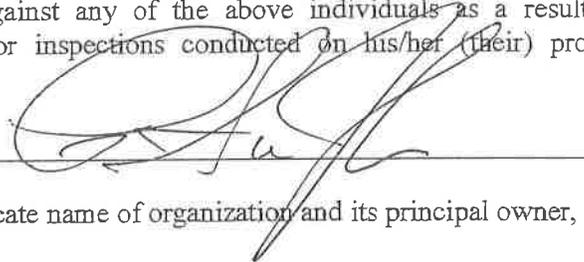
**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

I hereby apply for Site Plan Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the Site Plan specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s) by the filing of this application as indicated above, hereby given permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim to or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and/or inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner: _____

AGENT



- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: _____

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The Code Enforcement Officer/Building Inspector must be notified within two (2) working days of any change by the individual in charge of the project.

APPLICATION IS DUE AT NOON 21 days prior to the Planning Board Meeting. (The date the Agenda is CLOSED.) Any applications received after that time will be deferred until the next available meeting.



Applicant Affidavit

Cafua Management Group, applicant of the subject parcel known as Tax Map 105, Lot 19, located at 14 Brady Drive in Hudson, New Hampshire, hereby verify that I/we authorize Keach-Nordstrom Associates, Inc.(KNA) to prepare, submit and represent Cafua Management Group with the federal, state and municipal application process.

Signature of Applicant:

Cafua Management Group

Date

Printed Name (Applicant):

Gregory Nolan

Title

Address:

280 Merrimack Street, Suite A

Methuen, MA 01844

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM

Name of Subdivision/Site Plan: Dunkin Donuts

Street Address: 14 Brady Drive

I _____ hereby request that the Planning Board
waive the requirements of item 275-9, C of the Subdivision/Site Plan
Checklist in reference to a plan presented by Keach-Nordstrom

_____ (name of surveyor and engineer) dated
_____ for property tax map(s) 105 and lot(s)
19 in the Town of Hudson, NH.

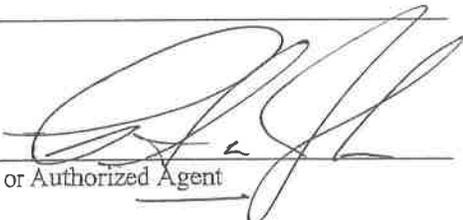
As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

(See Attached)

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

(See Attached)

Signed: 

Applicant or Authorized Agent

Planning Board Action:

Waiver Granted: _____

Waiver Not Granted: _____

January 24, 2014

Subject: **Dunkin Donuts - Non-Residential Site Plan Application**
Owner: Noury Investments, LLC
Applicant: Cafua Management Group
Map 105, Lot 19
14 Brady Drive, Hudson NH
KNA Project No. 13-0304-1

SITE PLAN WAIVER – Supplemental Narrative

The purpose of this supplemental narrative is to further explain the project specific non-residential Site Plan Application **Noise** waiver request, per chapter 275-9, part C of the Town of Hudson Site Plan Regulations. Please refer to the standard municipal waiver request form for additional information.

Hardship reason(s) for granting this waiver:

A project specific noise impact study is not applicable to the proposed non-residential site development. The noise impact study is not applicable, because the proposed uses (Dunkin Donuts and future retail spaces) are specifically located at a busy signalized intersection along a major arterial highway where vehicular noise is a prevalent existing condition. In this specific case, the minor and unobtrusive ambient noise generated by Dunkin Donuts is simply moving from one side of the road to the other. Ambient operational retail noise will not cease at the Circle K gas station, convenience store and car wash across the street (Robinson Road), but rather be replicated on the subject parcel. I doubt the closest abutter, the storage facility will mind the additional engine starts, car door closure and cell phone ringing. To the contrary, the similar noises are likely to blend into the surrounding commercial community, if heard at all due to the both horizontal (+/- 400 ft) and vertical (+/- 25 ft) physical separation. In either case, all sounds are likely to be drowned out by the large rumbling diesel engine noises, as they either accelerate up Route 102 or decelerate down Route 102, as they repeatedly turn into West Road all day long. The applicant respectfully requests a noise impact study waiver, due to the associated schedule and resulting financial hardships created through the subject impact study preparation, submittal and review process.

Reason(s) for granting this waiver, relative to not being contrary to the spirit and Intent of the Site Plan regulations:

The proposed non-residential site plan is an approved use amongst similar small businesses in the immediate commercial community. Both Dunkin Donuts and future retail stores provide convenient services to the community at large without creating harmful effects to public health, safety or property values. The intended uses are not only commensurate to the area, but are a direct response to market growth in compliance with both the master plan and site plan regulatory intent. The applicant respectfully requests a noise impact study waiver, due to the associated schedule and resulting financial hardships created through the subject impact study preparation, submittal and review process.

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM

Name of Subdivision/Site Plan: Dunkin Donuts

Street Address: 14 Brady Drive

I _____ hereby request that the Planning Board
waive the requirements of item 275-9, D of the Subdivision/Site Plan
Checklist in reference to a plan presented by Keach-Nordstrom

_____ (name of surveyor and engineer) dated
_____ for property tax map(s) 105 and lot(s)
19 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

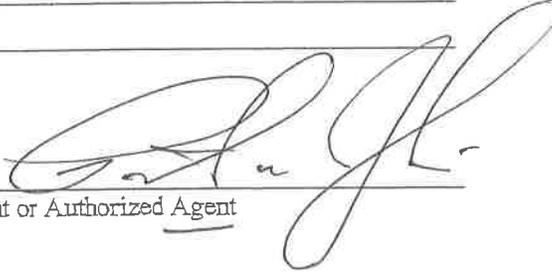
Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

(See Attached)

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

(See Attached)

Signed:



Applicant or Authorized Agent

Planning Board Action:

Waiver Granted: _____

Waiver Not Granted: _____



January 24, 2014

Subject: **Dunkin Donuts - Non-Residential Site Plan Application**
Owner: Noury Investments, LLC
Applicant: Cafua Management Group
Map 105, Lot 19
14 Brady Drive, Hudson NH
KNA Project No. 13-0304-1

SITE PLAN WAIVER – Supplemental Narrative

The purpose of this supplemental narrative is to further explain the project specific non-residential Site Plan Application **Fiscal and Environmental** waiver request, per chapter 275-9, part D of the Town of Hudson Site Plan Regulations. Please refer to the standard municipal waiver request form for additional information.

Hardship reason(s) for granting this waiver:

Project specific fiscal and environmental impact study(s) are not applicable to the proposed non-residential site development. The fiscal impact study is not applicable, because the proposed uses (Dunkin Donuts and future retail spaces) will not increase population, build infrastructure or diminish the present level of municipal services. The proposed development will not create an undue tax burden, but rather assist Hudson tax payers by creating sustainable jobs and increasing tax revenues, without added services. The environmental impact study is also not applicable, because the proposed land uses are not environmental threats. No activities related to this vacant parcel's site development pose a significant environmental threat. Not reshaping the land, building construction or future business operations. At all times, specific preventative measures will be in place, such as temporary construction BMP's, permanent stormwater and sanitary sewer systems and corporate operational manuals specifically designed to minimize and likely prevent potential environmental threats. In terms of potential natural environment impacts, the vacant lot is within a relatively urban setting and is not contiguous to any significant environmental resource. In addition, the site's natural assessment produced a negative impact, as determined by the state's Natural Heritage Bureau. Lastly, Dunkin Donuts (fast food restaurant with drive through) and future retail spaces do not manufacture, use or store harmful chemicals, other than ordinary and common house hold products on site. The applicant respectfully requests a fiscal and environmental impact study(s) waiver, due to the associated schedule and resulting financial hardships created through the subject impact study(s) preparation, submittal and review process.



KEACH-NORDSTROM ASSOCIATES, INC.

Reason(s) for granting this waiver, relative to not being contrary to the spirit and Intent of the Site Plan regulations:

The proposed non-residential site plan is an approved use amongst similar small businesses in the immediate commercial community. Both Dunkin Donuts and future retail stores provide convenient services to the community at large without creating harmful effects to public health, safety or property values. The intended uses are not only commensurate to the area, but are a direct response to market growth in compliance with both the master plan and site plan regulatory intent. The applicant respectfully requests a fiscal and environmental impact study(s) waiver, due to the associated schedule and resulting financial hardships created through the subject impact study(s) preparation, submittal and review process.



"A"

January 27, 2014

Subject: **Dunkin Donuts – Mixed-Use Commercial Site Plan Application**
Owner: Noury Investments, LLC
Applicant: Cafua Management Group
Map 105, Lot 19
14 Brady Drive, Hudson NH
KNA Project No. 13-0304-1

PROJECT NARRATIVE

The proposed site plan application is a mixed use commercial development project located on an existing unimproved 2.2 acre parcel known as map 105, lot 19. The vacant parcel is situated at the corner of Derry and Robinson Road in Hudson New Hampshire and is accessed from Brady Drive, a private way. The proposed multi-tenant commercial building is anticipated to provide commercial lease space for three (3) individual tenants. The first, an anchor tenant is Dunkin Donuts, which will occupy 2,210 sf and include a classic interior counter service style restaurant with interior seating and a perimeter drive thru. The remaining two (2) 1,625 sf spaces are for anticipated retail satellite tenants, which are not yet determined. The proposed 5,460 sf single story, New England style building will have vinyl siding and shingle roofing. Each entrance will have Roman Doric style columns, and insulated, tempered glass windows.

The improved site will include various surface and sub-surface improvements. The surface improvements will involve lowering the high side along Derry Road and raising the lower side along Robinson Road. Whenever practical and compliant, all on site materials will be repurposed on reused on site to the maximum extent possible. The proposed re-grading activities are necessary to accommodate on site vehicle and pedestrian accessibility into and around the building. Additional surface improvements will include pavement, curbing, concrete sidewalks/pads and various landscape plantings. The sub-surface improvements will include on site private water, sewer and drainage improvements, underground utilities (power, data, phone, cable) as well as an irrigation system.

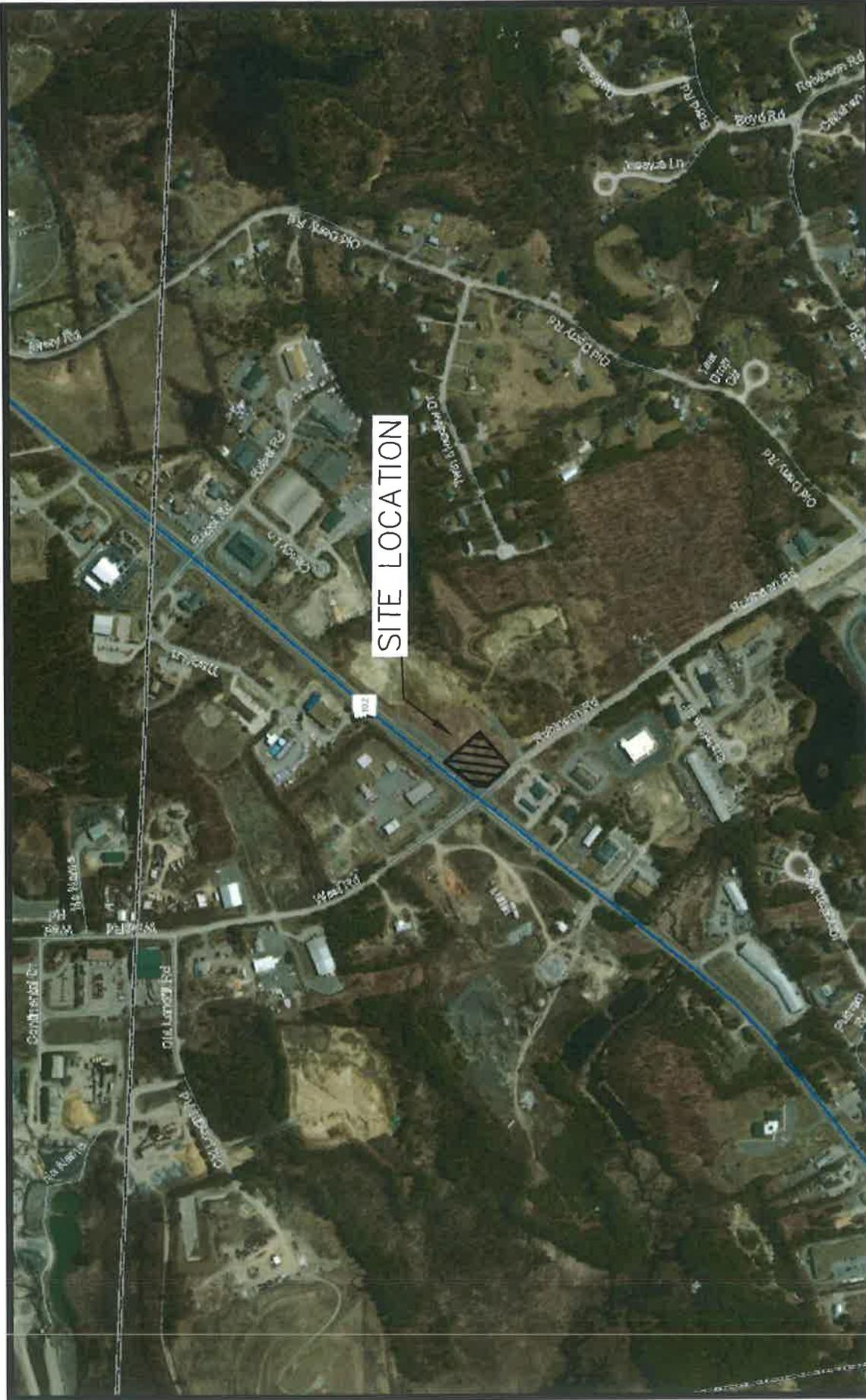
The proposed mixed use commercial pad site is commensurate with the neighboring land uses. Directly across from the site, on Robinson Road is a gas station/convenience store. Opposite the site, located on the western side of Derry Road is Eastern propane, a mixed use light commercial warehouse facility with office space. Similarly, properties North and South of the site along Derry Road are various small service oriented business enterprises. Immediately adjacent to the subject parcel, both to the south and East is vacant commercially zoned land (lots 18 & 20). The nearest isolated residential property is located over a half a mile south of the site on Robinson Road with the nearest residential community located over a mile away on West Road.



For the most part, the subject parcel is located within a typical rural business community, whose intended use is suitable, comparable and supportive of the similar service industries in the area.

The proposed mixed use commercial development project will not produce any measureable local, regional or state impact to traffic, schools and utilities. While Dunkin Donuts franchisee locations are often a destination location and can often produce measureable traffic counts during both am and pm peak travel times, this proposed location is just one (1) of ten (10) other franchise locations within an approximate seven (7) mile radius. There will be minor traffic impacts at the signalized Derry Road and Robinson Road intersection (please refer to attached GPI traffic analysis). However, these impacts are minimal, because the new store is replacing the existing sub-lease franchise presently operating within the Circle K gas station located at the same signalized intersection. The only impact to the surrounding school system is the risk of students and faculty being late, as they pick up their morning cup of coffee. On the serious side, the new franchise will likely offer employment opportunities to the neighboring communities youth. There are no anticipated impact to public infrastructure, since all utilities are private, with the exception of power, data, cable and phone, which presently existing within the newly improved Brady Drive.

The new franchise location intends to execute a long term lease agreement, with no immediate plans to vacate the new facility in the near future. Of course all retail establishments are subject to market conditions, but Dunkin Donuts is a financially stable franchise consistently expanding their market share throughout New Hampshire for the past decade. The long term trend appears steadfast, which is why Dunkin Donuts was specifically targeted as the anchor tenant within the proposed mixed use commercial site development.



SITE LOCATION

TITLE: AERIAL EXHIBIT PREPARED FOR:

DUNKIN DONUTS

MAP 105; LOT 19 - 14 BRADY DRIVE - HUDSON, NEW HAMPSHIRE

DRAWN BY: KMB DATE: 1/22/14 JOB. NO. 13-0304-I

CHECKED BY: PNJ SCALE: 1" = 1000' SHEET 1 OF 1

KMA KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110
 Phone (603) 627-2861



"B"

February 18, 2014

Mr. John Cashell, Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
Dunkin Donuts, 14 Brady Drive
Tax Map 105, Lot 19, PO #1350-805
CLD Reference No. 03-0249.1310

Dear Mr. Cashell:

CLD Consulting Engineers, Inc. (CLD) has reviewed the first submission of the materials received on February 5, 2014 related to the above-referenced project. 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, and criteria outlined in the CLD Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, and September 3, 2008.

We have included a copy of CLD's evaluation of the checklist for your reference. We did not receive a copy of the applicant's checklist. We note that several items could not be verified by CLD and require action by the Town.

The project consists of constructing a 5,460-square foot multi-tenant commercial building with associated site improvements, on the previously undeveloped site. The site is to be serviced by proposed wells and a proposed septic system.

The following items are noted:

1. Site Plan Review Codes

- a. Hudson Regulations (HR) 275-8.B. (17) The applicant has shown two temporary benchmarks on the plan set. Reference to a USGS benchmark was not provided.
- b. No existing fire hydrants have been shown within 200 feet of the site.
- c. HR 275-9.A. See comments below.
- d. HR 275-9.B. See comments below.
- e. HR 275-9.C. The applicant has noted on the plan set that a waiver from the Noise Study requirement has been requested.
- f. HR 275-9.D. The applicant has noted on the plan set that a waiver from the Fiscal and Environmental Impact Study requirement has been requested.
- g. HR 275-9.E. See comments below.
- h. HR 275-9.F. Copies of deeds or easements were not received for review. The applicant has shown several existing easements: NHDOT drainage easement, a 25-foot slope easement, an access and utility easement, and a 30-foot wide utility easement. The plan shows that the existing riprap area starting with the slope easement area has extended well beyond the easement area outlined. The Town should discuss with the applicant and the owner of the easement the need to expand the



Mr. John Cashell
CLD Reference No. 03-0249.1310
February 18, 2014
Page - 2

easement. The applicant is also proposing substantial grading on the lot to the north, but has not shown any proposed easement.

i. HR 275-9.G. See comments below.

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

- a. HR 193-10.C. The applicant is proposing a driveway to the south that has a stopping platform with a 10% cross slope.
- b. HR 193-10.E. The applicant has not shown any sight distance information on the plan set for the proposed driveway.
- c. HR 193-10.H. The proposed common access driveway (Brady Drive) is in the side yard setback. No cross easement documentation was provided.
- d. HR 275-8.B. (29) The applicant should provide additional information on the types of trucks that may make deliveries to the proposed businesses, as large trucks (WB-50) may have a hard time maneuvering the site.
- e. HR 275-8.B. (30) The applicant has proposed a loading area within the side yard setback. The loading area also doubles as a thru-traffic lane to bypass the drive-thru lane; however, if a truck is parked, site circulation will not function as designed. During the delivery time-frame, the drive-thru queue could interfere with vehicles entering the site because the 24-foot, two-way aisle width in the primary drive is partially blocked by queue vehicles. The applicant should note when deliveries will be made as to not interfere with on-site traffic. Also, "No Parking – Loading Area" sign should be provided at this location.
- f. HR 275-9.B. The applicant has provided a traffic study for review. CLD has only recently received authorization to begin the review; therefore, the review will be completed separately.

3. Utility Design/Conflicts (HR 275-9.E.)

- a. HR 275-9.E. The applicant has not shown how the proposed wells will connect to the proposed building.
- b. The applicant has shown a proposed screened utility pad; but has not provided details. Due to the proximity of the wells, additional details should be provided related to any fluids that may be part of this utility area that could adversely affect the wells.
- c. The applicant has proposed two wells at a close proximity to the proposed edge of pavement for the site. The applicant should comment on awareness to protect the wells from the use of deicing chemicals.
- d. The applicant has shown the proposed septic system within the 25-foot slope easement on the western side of the site.
- e. A septic review was not performed as part of this review; however, we note that the plan provided indicates that the design provided is for a failed system. No existing subsurface disposal system is shown on the existing conditions plan.
- f. No existing fire hydrants have been shown within 200 feet of the site.



Mr. John Cashell
CLD Reference No. 03-0249.1310
February 18, 2014
Page - 3

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

- a. The applicant should provide copies to the Town of all pertinent communication with New Hampshire Department of Environmental Services (NHDES) with respect to the required Alteration of Terrain (AoT).
- b. The applicant should review the discrepancy between pre-development area and post-development area within the drainage calculations. The 0.077 acres difference (approximately 3,350 sf) results in a 2.6% difference between areas. Typically, the engineering threshold is a 1% difference.
- c. The applicant should provide a copy of the Site Specific Soils Map referenced in Section 15 of the AoT Application.
- d. The applicant should coordinate the AoT Application calculations (and proposed drainage plan) with the Site Plan set. The OS1 within Bio retention Basin-3 in the AoT Application is illustrated as OS2 on the plan set.
- e. The applicant should coordinate the AoT Application calculations (and the proposed drainage plan) with the Site Plan set for the proposed outlet elevations and detail of Bio Retention Basin Area #2.
- f. The applicant should provide additional orifice and outlet detail on the plan set for the outlet within Bio Retention Area #3.
- g. The applicant should provide riprap calculations within the AoT Application, confirming that the dimensions depicted on the plan set meet or exceed required dimensions.
- h. The applicant should show the test pit locations for the six test pits whose logs are provided in the drainage report. Also, a Test Pit #8 is shown on the plan set but no data is provided for Test Pit #8.

5. Landscaping (HR 275-8B (31))

- No comment at this time.

6. Erosion Control/Wetland Impacts

- a. The applicant should propose a silt fence detail from the proposed silt fence that is to be installed around the stockpile area outlined in the Stockpile Stabilization Detail.
- b. The staging stockpile and several of the erosion control measures are proposed on the owner's adjacent lot to the southeast. We note that if the abutting parcel is sold before the site work is completed a temporary construction easement may be necessary. This is important for maintenance of the erosion control measures.
- c. The Town should reserve the right to require additional erosion control measures during construction if needed.

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

- a. The applicant has noted on the plan that a NHDES AoT Permit is needed for the site and that the status is pending.



Mr. John Cashell
CLD Reference No. 03-0249.1310
February 18, 2014
Page - 4

- b. The applicant has noted on the plan that NHDES Individual Subsurface Septic Disposal System Approval is pending.
- c. The applicant has noted on the plan that NHDES Non-Community Public Water Systems Permit is needed for the site and that the status is pending.
- d. The applicant should note on the plan that a Stormwater Pollution Prevention Plan development and the filing of a Notice of Intent as part of the NPDES General Construction Permit are required.
- e. Additional local permitting may be required.

8. Other

- a. HR 275-8.B. (35) The applicant has shown four handicap parking areas and has provided corresponding details; however, the handicap van accessible sign location(s) are not shown on the plans or in the handicap striping detail. The applicant should also label Americans with Disabilities Act (ADA) compliant building entrances and provide additional spot grades and if necessary.
- b. The applicant has proposed a dumpster in the setback.
- c. The applicant has shown several proposed features that do not have corresponding details. These included but are not limited to; pavement marking and striping, menu board sign, the proposed identification sign, the two signs on opposite sides of the driveway entrance, well protective radii, decorative fence detail, bollard detail, and patio detail.
- d. Lighting plan review was not performed as part of CLD's requested scope. We recommend that the Town confirm that the lighting approach is acceptable.

Please feel free to call if you have any questions.

Very truly yours,

A handwritten signature in blue ink that reads 'Heidi Marshall'.

Heidi J. Marshall, P.E.

A handwritten signature in blue ink that reads 'Paul Konieczka'.

Paul Konieczka, AICP

HJM/PK:sad

Enclosure

cc: Town of Hudson Engineering Division – File
Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3B
Bedford, NH 03110
Fax (603) 627-2915

F:\Proj2003\030249 Hudson\Sec\1310 Dunkin Donuts (Brady Dr) Letter.doc



540 Commercial Street Manchester, NH 03101
(603) 668-8223 • Fax: (603) 668-8802
cld@cldengineers.com • www.cldengineers.com
New Hampshire • Vermont • Maine

TO: File
FROM: Kelsey M. Gagnon *KMG*
DATE: February 18, 2014
RE: Town of Hudson Planning Board Review
Dunkin Donuts, 14 Brady Drive
Tax Map 105, Lot 19, PO #1350-805
CLD Reference No. 03-0249.1310

The following list itemizes the documents reviewed related to the current Dunkin Donuts Site Plan review comments.

- Various emails between Town of Hudson and CLD, from February 10, 2014 to February 12, 2014.
- Letter from the Town of Hudson to CLD, dated February 3, 2014 and received February 5, 2014, including the following:
 1. Copy of *Preliminary and Final Site Plan Application for Plan Review*, dated January 27, 2014.
 2. Copy of *Dunkin Donuts – Mixed-Use Commercial Site Plan Application, Project Narrative*, dated January 27, 2014, prepared by Keach-Nordstrom Associates, Inc.
 3. Copy of *Traffic Impact and Access Study, Proposed Dunkin' Donuts and Retail Development, Hudson, New Hampshire*, prepared by Greenman-Pedersen, Inc. (GPI), dated December 2013.
 4. Copy of *Alteration of Terrain Application and Stormwater Management Report, Dunkin Donuts*, prepared by Keach-Nordstrom Associates, Inc., dated January 24, 2014, with no revisions noted, including the following:
 - a. *Pre Development Plan*, Sheet 1 of 2.
 - b. *Post Development Plan*, Sheet 1 of 2.
 5. Copy of *Non-Residential Site Plan, Dunkin Donuts, Hudson, New Hampshire Plan Set*, prepared by Keach-Nordstrom Associates, Inc., dated January 24, 2014, unless otherwise noted, with no revisions noted, including the following:
 - a. Cover Sheet.
 - b. *Master Site Plan*, Sheet 1 of 12.
 - c. *Existing Conditions Plan*, Sheet 2 of 12.
 - d. *Non-Residential Site Layout Plan*, Sheet 3 of 12.
 - e. *Grading and Drainage Plan*, Sheet 4 of 12.
 - f. *Drainage Profile Plan*, Sheet 5 of 12.

Memorandum to File
CLD Reference No. 03-0249.1310
February 18, 2014
Page - 2

- g. *Erosion Control Plan*, Sheet 6 of 12.
- h. *Landscape Plan*, Sheet 7 of 12.
- i. *Lighting Plan*, Sheet 8 of 12, prepared by Charron Inc.
- j. *Construction Details*, Sheets 9 through 12 of 12.
- k. *Proposed ISDS Plan for Failed System*, Sheet 1 of 2, prepared by Advanced Onsite Solutions, LLC., dated January xx, 2014[sic].
- l. *Proposed ISDS Plan for Failed System*, Sheet 1 of 2, prepared by Advanced Onsite Solutions, LLC., dated January xx, 2014[sic].
- m. *Proposed Floor Plan*, Sheet A1, prepared by James D. Smith, Architect, AIA, dated November 21, 2013.
- n. *Exterior Elevations*, Sheet A2, prepared by James D. Smith, Architect, AIA, dated November 21, 2013.
- o. *Exterior Elevations*, Sheet A3, prepared by James D. Smith, Architect, AIA, dated November 21, 2013.

The Traffic Impact and Access Study was not reviewed as part of this comment letter.

KMG:mjt

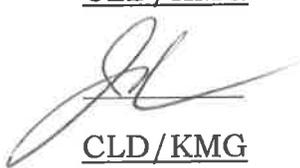
cc: John Cashell – Town of Hudson Planner
Town of Hudson Engineering Division – File

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Thirty (30) days prior to Planning Board Meeting, a complete site plan to include all supporting materials/documents must be submitted in final form. The site plan shall comply with the following specifications/requirements:

Applicant
Initials

Staff
Initials

- | | | |
|----------|--|---|
| _____ a) | Submission of nine (9) full sets of Site Plans (sheet size: 22" x 34") at the time of application filing, followed by the submission of seventeen (17) 11" X 17" plan sets (revised if applicable) to the Community Development Department no later than 10:00 A.M. Tuesday the week prior to the scheduled public hearing/conceptual review date. |  |
| _____ b) | A Site Plan narrative, describing the purpose, locations, long range plans, impacts on traffic, schools, and utilities | <u>CLD/KMG</u> |
| _____ c) | Plan scale at not less the one inch equals fifty feet (1" = 50') | <u>CLD/KMG</u> |
| _____ d) | Locus plan with 1,000' minimum radius of site to surrounding area | <u>CLD/KMG</u> |
| _____ e) | Plan date by day/month/year |  |
| _____ f) | Revision block inscribed on the plan | <u>CLD/KMG</u> |
| _____ g) | Planning Board approval block inscribed on the plan |  |
| _____ h) | Title of project inscribed on the plan | <u>CLD/KMG</u> |
| _____ i) | Names and addresses of property owners and their signatures inscribed on the plan | <u>CLD/KMG</u> |
| _____ j) | North point inscribed on the plan | <u>CLD/KMG</u> |
| _____ k) | Property lines: exact locations and dimensions | <u>CLD/KMG</u> |
| _____ l) | Square feet and acreage of site | <u>CLD/KMG</u> |
| _____ m) | Square feet of each building (existing and proposed) | <u>CLD/KMG</u> |
| _____ n) | Names and addresses of bordering abutters, as shown on Tax Assessor's records not more than five (5) days prior to application date to be listed on the plan. |  |

Applicant
Initials

Staff
Initials

- | | | |
|-----------|--|---|
| _____ o) | Location of all structures, roads, wetlands, hydrants, wells, septic systems, 4k reserve areas, floodways/ floodplains, driveways, travel areas, parking areas and natural features within 200 feet of the tract | <u>CLD/KMG</u> |
| _____ p) | Locations of existing and proposed permanent monuments and bench marks within 200 feet of the development tract | <u>CLD/KMG</u> |
| _____ q) | Pertinent highway projects | <u>N/A</u> |
| _____ r) | Assessor's Map and Lot number(s) | <u>CLD/KMG</u> |
| _____ s) | Waiver application form shall be submitted with the site plan application, note on plan listing waivers requested/granted; and all waivers granted to the site plan regulations shall be listed on the final plan; waivers to checklist shall be reduced to writing and be signed by the Planning Board Chairman and Planning Board Secretary and recorded with the plan | <u></u> |
| _____ t) | Delineate zoning district on the plan | <u>CLD/KMG</u> |
| _____ u) | Stormwater drainage plan | <u>CLD/KMG</u> |
| _____ v) | Topographical elevations at 2-foot intervals contours: existing and proposed | <u>CLD/KMG</u> |
| _____ w) | Utilities: existing and proposed | <u>CLD/KMG</u> |
| _____ x) | Parking: existing and proposed | <u>CLD/KMG</u> |
| _____ y) | Parking space: length and width | <u>CLD/KMG</u> |
| _____ z) | Aisle width/maneuvering space | <u>CLD/KMG</u> |
| _____ aa) | Landscaping: existing and proposed | <u>CLD/KMG</u> |
| _____ ab) | Building and wetland setback lines | <u>CLD/KMG</u> |
| _____ ac) | Curb cuts | <u>CLD/KMG</u> |
| _____ ad) | Rights of way: existing and proposed | <u>CLD/KMG</u> |
| _____ ae) | Sidewalks: existing and proposed | <u>N/A </u> |
| _____ af) | Exterior lighting plan | <u>CLD/KMG</u> |
| _____ ag) | Sign locations: size and design | <u>WALL SIGNS ONLY 
BOTH WAS
ONSITE ONLY </u> |
| _____ ah) | Water mains and sewerage lines | |
| _____ ai) | Location of dumpsters on concrete pads | <u>CLD/KMG</u> |
| _____ aj) | All notes from plats | <u>CLD/KMG</u> |

Applicant
Initials

Staff
Initials

- | | | |
|-----------|---|------------------------|
| _____ ak) | Buffer as required by site plan regulations | <u>CLD/KMG</u> |
| _____ al) | Green and open space requirements met with percentages of both types of spaces inscribed on the plan | <u>CLD/KMG</u> |
| _____ am) | Soil types and boundaries, Note: If site contains marginal or questionable soils, a High Intensity Soil; Survey (HISS) may be deemed necessary to submit as part of the application. Said HISS, if required, shall be performed by a State of New Hampshire certified Soil Scientist, who shall affix his/her stamp and signature shall be inscribed on the plan. | <u>N/A</u> |
| _____ an) | Wetlands (and poorly-drained and very poorly-drained soils, also identified as Class 5 and Class 6 High Intensity Soil Survey (HISS soils), and permanent and seasonal wetlands shall be identified on the plan by a New Hampshire certified wetland or soil scientist, who shall affix his/her stamp and signature to the respective plan. | <u>CLD/KMG</u> |
| _____ ao) | "Valid for one year after approval" statement inscribed on the plan | <u>JC INSIG. Block</u> |
| _____ ap) | Loading bays/docks | <u>CLD/KMG</u> |
| _____ aq) | State of New Hampshire engineer's stamp, signature, surveyor's stamp, and signature | <u>JC</u> |
| _____ ar) | Error of closure (1 in 10,000 or better) | <u>CLD/KMG</u> |
| _____ as) | Drafting errors/omissions | <u>CLD/KMG</u> |
| _____ at) | Developer names, addresses, telephone numbers and signatures | <u>JC</u> |
| _____ au) | Photographs, electronic/digital display or video of site and area | <u>JC</u> |
| _____ av) | Attach one (1) copy of the building elevations | <u>CLD/KMG</u> |
| _____ aw) | Fiscal impact study | <u>W</u> |
| _____ ax) | Traffic study | <u>CLD/KMG</u> |
| _____ ay) | Noise study | <u>W</u> |

Applicant

Staff

Initials

Initials

_____ az) Copies of any proposed or existing easements, covenants, deed restrictions, right of way agreements or other similar documents

PENDING JC

_____ ba) Copy of applicable Town, State, Federal approval/ permits to include but not limited to the following:

PENDING JC

- industrial discharge application
- sewer application
- flood plain permit
- wetlands special exception
- variance
- erosion control permit (149:8a)
- septic construction approval
- dredge and fill permit
- curb cut permit
- shoreland protection certification in accordance with RSA483-B
- if applicable, review application with Lower Merrimack River Local Advisory Committee (LMRLAC) and attach LMRLAC project comments hereto.

_____ bb) Presentation plan (colored, with color coded bar chart)

PROVIDED AT MEETING

_____ bc) Fees paid to clerk

JC

_____ bd) Five (5) 22" x 34" copies of the plan shall be brought to the Planning Board meeting and distributed to the Planning Board members at the meeting. Note: for all subsequent meetings involving revised plans, five 22" x 34" copies of said plan shall be brought to the meeting for distribution to the board members.

JC

*Under the purview of the Planning Board any and all items may be waived.



"C"

February 27, 2014

Mr. John Cashell, Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051



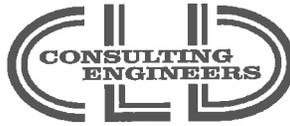
Re: Town of Hudson Planning Board Reviews
14 Brady Drive Site Plan
Tax Map 105, Lot 19
CLD Reference No. 03-0249.1312

Dear Mr. Cashell:

CLD has reviewed the Traffic Impact and Access Study prepared by Greenman-Pedersen, Inc. (GPI), dated December 17, 2013, for the above-referenced project. We received the report on February 5, 2014, and received authorization to proceed with our review on February 12, 2014.

The proposed project consists of the construction of a 5,640-square-foot multi-tenant retail building, one of which will be for a 2210 sf Dunkin Donuts restaurant with a drive-thru window, and the other two 1,625 sf spaces are for small retail uses, yet to be determined. Access and egress to the site is proposed via a single driveway on Brady Drive and not from NH Route 102. We offer the following comments on the GPI study and its conclusions.

1. The GPI report defined a realistic study area limit, collected traffic data for appropriate analysis periods, and made reasonable adjustments to the base data to provide acceptable peak month traffic volume estimates for the roads and intersections in the study area under 2014 and 2024 No-Build conditions for design purposes.
2. The vehicle speed information collected near the site could be construed as somewhat misleading, since traffic speeds being measured are either approaching a likely stop condition at the signalized intersection with Route 102 or turning at slower speeds from Route 102 onto Robinson Road. As such, it would not be expected that traffic would be exceeding the posted 30 mph speed limit in the immediate vicinity of the site under these conditions. Nevertheless, using the posted 30 mph speed as the sight distance design criterion is appropriate.
3. The GPI report notes that they considered the 98-unit Hickory Woods elderly housing project with two commercial lots in Londonderry as the only known planned development in the study area. However, they did not provide any backup information on the number or distribution of these specific trips to the study area roads and intersections. Rather, these trips were combined with the overall background growth in Figures 3 and 4. It would have been helpful to segregate the distribution of these trips from the background growth, even if the number of these trips appears to be small during the two analysis periods.



Mr. John Cashell
CLD Reference No. 03-0249.1312
February 27, 2014
Page - 2

4. The trip generation estimates for the proposed uses on the site appear to be reasonable, including the 'pass-by' and 'diverted' trip percentages. We also agree that treating the 'pass-by' and 'diverted' trips together is appropriate and presents a conservative approach. However, the distribution of these 'pass-by' trips appears overly skewed towards Robinson Road, even though 'technically' this is where the 'pass-by' trips would be coming from. The facility would not be marketable if it was expecting that most of the 'pass-by' trips would be from Robinson Road. As such, it is fully expected that the bulk of the 'pass-by/diverted' traffic for Dunkin Donuts would come from Route 102 which has 4-5 times the traffic volume of Robinson Road. The only reason this is not being considered this way is that there is not a site driveway directly serving existing Route 102 traffic, which makes them 'diverted' trips as opposed to 'pass-by' trips.

Our opinion is that the percentages used for the 'new' trips should be more in line with what the 'pass-by/diverted' traffic should be for this site, and that the volumes in Figure 5 and the associated Build networks and subsequent capacity analyses should be adjusted to reflect a more realistic distribution of site-generated trips.

5. The drive-thru lane queuing analysis table in the Appendix for the Weekday AM peak appears incorrect. The cumulative probability column appears to be in error after the 4th vehicle, since the probabilities cannot exceed 100%. The 95th percentile queue should really be nine vehicles in the AM peak. This queue length could be accommodated on the site, even if the queue begins at the menu board. However, a queue of this length and starting point might adversely affect access to the bypass lane should vehicles queue back towards the site driveway.
6. The GPI study recommends signal timing and signing improvements to mitigate their impact at the Route 102/Robinson Road intersection. This is done by reallocating green time to the Robinson Road approach that primarily serves the proposed site at the expense of other approaches, notably Route 102 eastbound and West Road southbound. There are a couple of concerns with this suggestion:
 - The intersection analyses should be recalculated given the suggested redistribution of the 'pass-by/diverted' trips noted in Comment 4, above, to confirm that the proposed retiming is still appropriate.
 - The accident history indicates that failure to yield from the side streets (West and Robinson) has already contributed to the crash history at this location. Shortening the green time for West Road may further encourage drivers to force their way into the intersection for fear of being caught with the short phase. Adding 'Left Turn Yield on Green' signs for these lefts may not be as effective under such a scenario.
 - Since the West and Robinson Road phases are still intended to go concurrently and not split phased (where each one goes separately), reducing the minimum green time on West does not really change operations because Robinson Road traffic will continue to be the critical controlling movement of the two side streets.



Mr. John Cashell
CLD Reference No. 03-0249.1312
February 27, 2014
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- The applicant should provide some guidance to the Town as to whether they feel the additional R10-12 signs can be handled by the mast arms and foundations for increased wind and ice loadings.
 - While the signal retiming may be an interim solution, the long-term answer to improve capacity at this intersection is to provide exclusive left turn lanes and protected phasing for the two side street approaches, particularly on Robinson Road where the projected left turn exiting volume is approaching 200 vehicles during peak hours. Since this applicant is in control of the roadway frontage along Robinson Road, it is suggested that, at a minimum, right-of-way be reserved from this parcel for 'future highway purposes' so that this third lane could be added at some point in the future.
7. It should be noted that the average and peak queues on the Robinson Road approach to the signal are between 6-10 vehicles during the AM peak hour, even with the suggested retiming. Since there is only about 250 feet from the stop bar to the driveway, this queue length will hinder the traffic exiting the Irving site from adding to the back of the queue, as well as impair visibility of this traffic from traffic entering Robinson Road. Therefore, their ability to accept smaller than normal gaps to exit the site may be limited.

In summary, the GPI study accurately depicts the relative impacts of the additional traffic from the proposed Dunkin Donuts restaurant use on the adjacent street network. However, the recommended signal retiming to add green time to the Robinson Road approach is only an interim solution to deal with an intersection that is increasingly capacity constrained due to the cumulative effects of increased development in this immediate area. A more long-term approach would be for the Town to consider the reservation of right-of-way along the site's frontage on Robinson Road for additional lane capacity that will be needed in the not-too-distant future.

Please feel free to call if you have any questions.

Very truly yours,

A handwritten signature in blue ink that reads "Paul Konieczka".

Paul Konieczka, AICP
Senior Vice President

PK:mjt

cc: Town of Hudson Engineering Division – File
Keach-Nordstrom Associates, Inc.
10 Commerce Park North
Bedford, NH 03110
Fax (603) 627-2915



TRAFFIC IMPACT AND ACCESS STUDY

**PROPOSED DUNKIN' DONUTS AND
RETAIL DEVELOPMENT
HUDSON, NEW HAMPSHIRE**

GPI

**181 BALLARDVALE STREET, SUITE 202
WILMINGTON, MASSACHUSETTS 01887
(978) 570-2999**

PREPARED FOR:

**JFJ HOLDINGS, LLC
C/O CAFUA REALTY TRUST
280 MERRIMACK STREET, SUITE A
METHUEN, MASSACHUSETTS 01844**

DECEMBER 2013

*Traffic Impact and Access Study
Proposed Dunkin' Donuts and Retail Development
Hudson, New Hampshire
December 2013*

TECHNICAL MEMORANDUM

REF: MAX-2013022

DATE: December 17, 2013

TO: Mr. Gregory Nolan
JFJ Holdings, LLC
c/o Cafua Realty Trust
280 Merrimack Street, Suite A
Methuen, Massachusetts 01844

FROM: Ms. Heather L. Monticup, P.E. Project Manager
Ms. Susannah E. Barnes, E.I.T., Engineer

RE: Traffic Impact and Access Study
Proposed Dunkin' Donuts and Retail Development
Hudson, New Hampshire

INTRODUCTION

Greenman-Pedersen, Inc. (GPI) has prepared this Traffic Impact and Access Study (TIAS) for a proposed Dunkin' Donuts to be relocated from within the Irving Oil/Circle K gasoline station (205 Robinson Road) onto Brady Drive in Hudson, New Hampshire. The site is currently vacant. As proposed, the development consists of constructing a $\pm 5,900$ square foot building which will include a $\pm 2,500$ square foot Dunkin' Donuts with a drive-through window and an additional $\pm 3,400$ square feet of retail space. This TIAS has been prepared to evaluate the traffic impacts and access/egress requirements for the proposed development.

The site is bounded by NH Route 102 to the north, Brady Drive to the south, Hudson Hilltop Self Storage and SSI Security System Design Specialists to the east, and Robinson Road to the west. Access to the site is proposed to be provided via a full access/egress driveway on Brady Drive. Brady Drive intersects Robinson Road from the east, opposite the Irving Oil/ Circle K gasoline station driveway. Figure 1 shows the site in relation to the surrounding roadways.

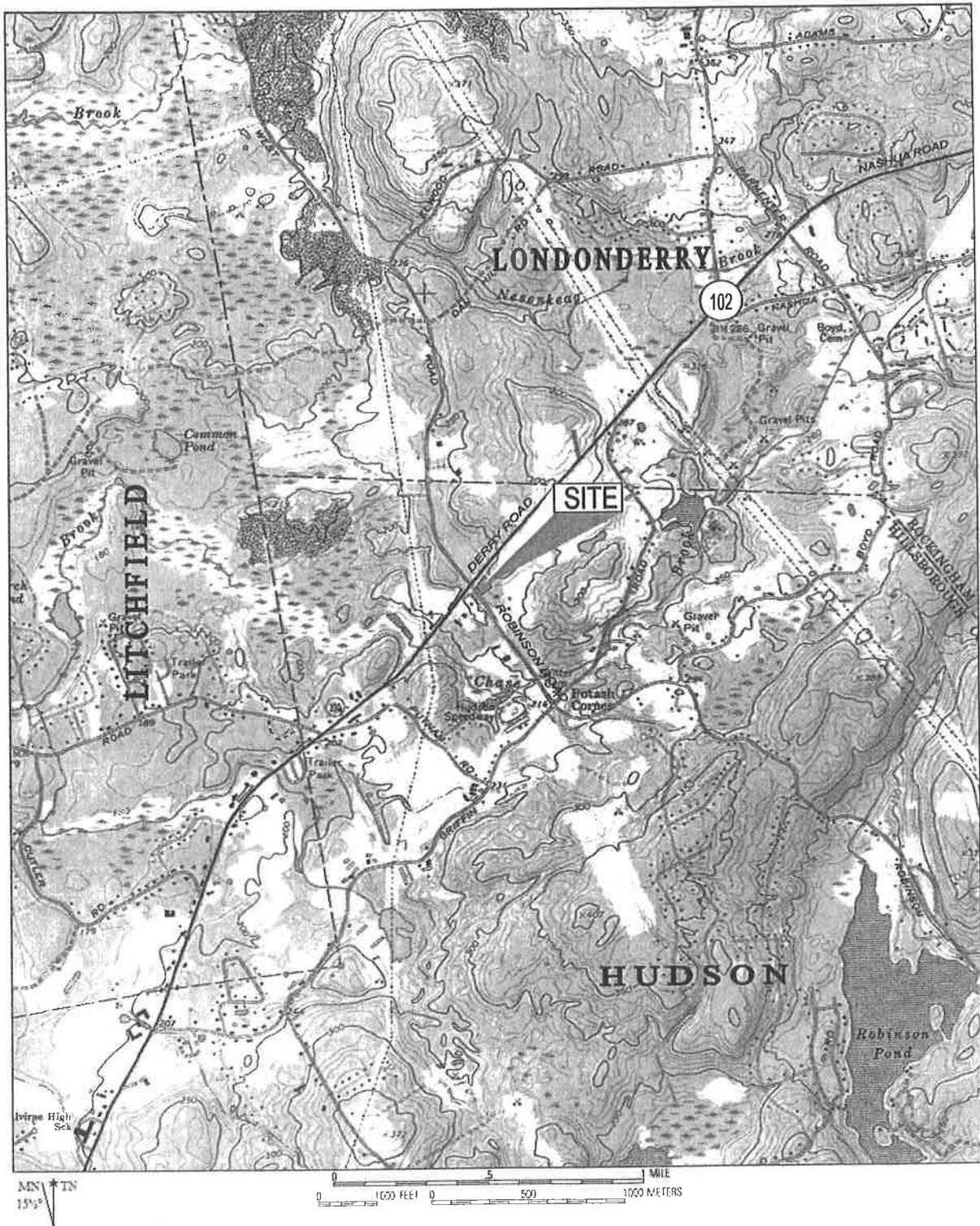
GPI Greenman-Pedersen, Inc.

181 BALLARDVALE STREET, SUITE 202, WILMINGTON, MA 01887 TELEPHONE (978) 570-2999 FACSIMILE: (978) 658-3044

An Equal Opportunity Employer

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire



GPI Greenman-Pedersen, Inc.

Engineers, Architects, Planners, Construction Engineers & Inspectors

Figure 1
Site Location Map

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

EXISTING CONDITIONS

Evaluation of the traffic impacts associated with the proposed project requires an evaluation of existing and projected traffic volumes on the adjacent streets, the volume of traffic expected to be generated by the project, and the impact that this traffic will have on the adjacent streets and nearby intersections. In preparing this study for the proposed site development, the following intersections have been analyzed:

- Derry Road (NH Route 102) at Robinson Road and West Road
- Robinson Road at Brady Drive and Irving Oil/Circle K driveway

A description of the geometric and traffic control characteristics of each of these roadways and intersections is provided below.

Geometrics and Traffic Control

NH Route 102 (Derry Road)

Within the study area, NH Route 102 is a state-maintained roadway and is generally oriented in an east-west direction. NH Route 102 connects Route 111 to the southwest with Route 107 in Raymond to the northeast. In the vicinity of the site, NH Route 102 maintains a two-lane cross section with one travel lane per direction and exclusive turn lanes at major intersections. Land use along NH Route 102 within the study area consists of commercial and industrial uses. In the vicinity of the site, the posted speed limit along NH Route 102 is 40 miles per hour (mph).

Robinson Road

Robinson Road is generally oriented in a north-south direction and provides access from NH Route 102 to Lawrence Road, which connects with Route 111. In the vicinity of the site, Robinson Road maintains a two-lane cross section with one travel lane per direction. Land use along Robinson Road consists of both commercial and residential uses. The posted speed limit along Robinson Road is 30 mph.

West Road

West Road is generally oriented in a north-south direction and provides access from NH Route 102 to the Town of Londonderry. In the vicinity of the site, West Road maintains a two-lane cross section with one travel lane per direction. Land use along West Road consists of

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

commercial and industrial uses, single and multi-family residential developments, and recreational land uses. The posted speed limit along West Road is 30 mph.

NH Route 102 at Robinson Road and West Road

NH Route 102 meets Robinson Road and West Road to form a four-way, signalized intersection under actuated traffic signal control. The NH Route 102 eastbound approach consists of an exclusive left-turn lane, a through lane, and a shared through/right-turn lane. The NH Route 102 westbound approach consists of an exclusive left-turn lane, a through lane, and an exclusive right-turn lane. Directional travel along NH Route 102 is separated by a raised median island at the intersection and by a double yellow centerline to the east and west of the intersection. The Robinson Road northbound approach consists of a shared left-turn/through lane and an exclusive right-turn lane. The West Road southbound approach consists of a shared left-turn/through lane and an exclusive right-turn lane. Directional travel along Robinson Road and West Road is separated by a double yellow centerline. Land use in the vicinity of the intersection consists of an Irving Oil gasoline station, and commercial and industrial uses.

Robinson Road at Brady Drive and the Irving Oil Driveway

Robinson Road intersects Brady Drive and the Irving Oil driveway to form a four-way, unsignalized intersection with the Irving Oil driveway approach under STOP-sign control. Brady Drive has no signage, however, operates under STOP control. Robinson Road adjacent to the site consists of a single general-purpose travel lane in each direction separated by a double yellow centerline. Brady Drive has no pavement markings, but operates with one lane entering and one lane exiting. The Irving Oil driveway is striped as to allow one lane to enter and one lane to exit onto Robinson Road.

Traffic Volumes

Base traffic conditions within the study area were developed by conducting manual turning movement counts (TMCs), vehicle classification counts, and automatic traffic recorders (ATRs) counts in May and June 2013. The TMCs and vehicle classification counts were performed during the weekday AM peak period (7:00 to 9:00 AM) and the Saturday midday peak period (11:00 AM to 2:00 PM). These peak periods were chosen based on the hours of operation of the proposed use and to be consistent with New Hampshire Department of Transportation (NHDOT) traffic study guidelines. Evaluation of the TMC data revealed that the weekday AM peak hour occurred between 7:15 and 8:15 AM at the intersection of NH Route 102 at West Road and Robinson Road and between 7:00 and 8:00 AM at Robinson Road and Brady Drive/Irving driveway. The Saturday midday peak hour occurred between 11:00 AM and 12:00 PM at both

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

locations. The ATRs were used to obtain weekday and Saturday daily traffic volumes on Robinson Road adjacent to the site. All traffic-count data are provided in the Appendix.

Traffic on a given roadway typically fluctuates throughout the year depending on the area and the type of roadway. Based on NHDOT guidelines for the preparation of a traffic study, existing traffic volumes must represent the peak of the monthly average peak-hour conditions. To determine if the data needed to be adjusted to account for this fluctuation, seasonal adjustment and historical count data provided by NHDOT were reviewed.¹ This information revealed that the May weekday traffic volumes are 4.1 percent lower than peak-month conditions and the June Saturday traffic volumes are 1.3 percent lower than peak-month conditions. Additionally, this information indicated that the May and June traffic volumes are 0.3 percent lower than the peak-month volumes during weekday AM peak period and are 3.5 percent lower than the peak-month conditions during the Saturday midday peak period. Therefore, the May and June traffic counts were upwardly adjusted to reflect peak-month conditions. The NHDOT seasonal adjustment factors are provided in the Appendix.

Table 1 summarizes the existing traffic volumes on Robinson Road adjacent to the site. The 2013 Existing weekday AM and Saturday midday peak-hour traffic-volume networks are shown on Figure 2.

Table 1
EXISTING TRAFFIC-VOLUME SUMMARY

Location/Time Period	Daily Volume (vpd) ^a	Peak Hour Volume (vph) ^b	K Factor (%) ^c	Directional Distribution ^d
Robinson Road south of Route 102:				
<i>Weekday</i>	6,520			
<i>Weekday AM Peak Hour</i>		497	7.6	62% NB
<i>Saturday</i>	5,230			
<i>Saturday Midday Peak Hour</i>		496	9.5	58% NB

^a In vehicles per day. Traffic counts upwardly adjusted to reflect 2013 peak-month traffic volumes.

^b In vehicles per hour. Traffic counts upwardly adjusted to reflect 2013 peak-month traffic volumes.

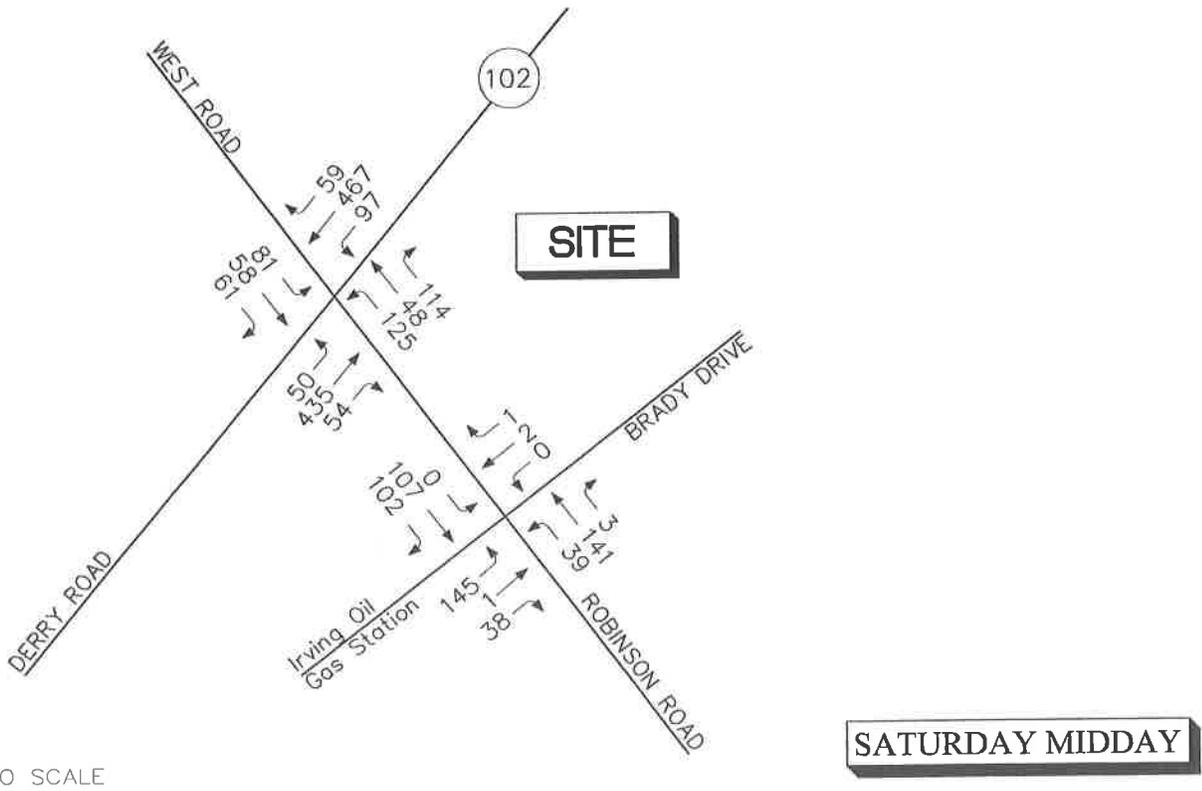
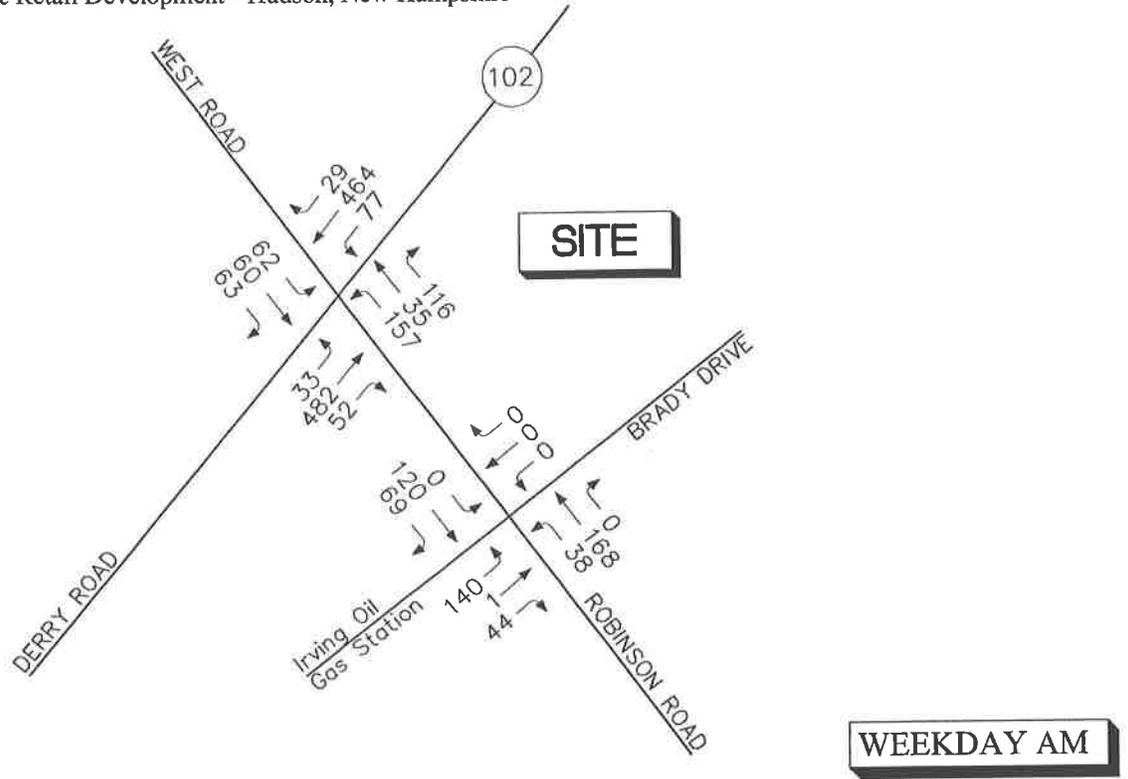
^c Percentage of daily traffic occurring during the peak hour.

^d NB = northbound.

¹ *New Hampshire Department of Transportation Traffic Volume Report, 2012, Group 4 Averages – Urban Highways.*

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts & Retail Development - Hudson, New Hampshire



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Figure 2

2013 Existing Peak Hour Traffic Volumes

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

Collisions

Collision data for the study area intersections were obtained from the Hudson Police Department for the most-recent complete three-year period (2010 through 2012). A summary of the Hudson Police Department collision data is provided in Table 2.

The intersection of NH Route 102, West Road, and Robinson Road has experienced five reported collisions over the three-year study period, averaging 1.67 collisions per year. Two of the five reported collisions resulted in injury and 40 percent of the collisions occurred during commuter peaks. One of the collisions was due to a medical emergency and is not correctable by engineering measures. Two of the reported collisions occurred when a vehicle failed to yield to a through vehicle. This might be due to confusion over the permitted left-turn phasing on Robinson Road and West Road. LEFT TURN YIELD ON GREEN BALL signs (R10-12) should be considered on the Robinson Road northbound and West Road southbound approaches to the intersection. This may reduce the occurrence of this type of collision. Two of the reported collisions are for an unknown cause, but were located at the traffic control device.

The intersection of Robinson Road at the Irving Oil driveway and Brady Drive has not experienced any reported collisions over the three-year study period. In addition, there were no fatalities reported at any of the study area intersections within the time period studied.

Table 2
COLLISION SUMMARY

Location	Number of Collisions		Severity ^a			Percent During ^b	
	Total	Average per Year	PD	PI	F	Wet/Icy Conditions	Commuter Peak
NH Route 102 at Robinson Road and West Road	5	1.67	3	2	0	20%	40%

Source: Town of Hudson Police Department Crash Records (2010 to 2012).

^a PD = property damage only; PI = personal injury; F = fatality.

^b Percent of vehicle incidents that occurred during the weekday AM and weekday PM commuter peak periods.

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

Vehicle Speeds

Vehicle speed measurements were conducted along Robinson Road adjacent to the proposed site driveway by measuring the elapsed time for vehicles traveling a short, pre-measured distance between two checkpoints. The travel time was recorded using ATRs and the speed was derived by dividing the elapsed time into the measured distance between checkpoints. The primary use of this information is explained in the *Sight Distance* section where the speeds are correlated to sight distance measurements taken at the location of the site driveway to assure that adequate sight distances exist at the driveway to provide safe operation. The results of the speed measurements are summarized in Table 3.

Table 3
OBSERVED TRAVEL SPEEDS ^a

Location/Direction	Posted Speed Limit	Average Speed ^b	85 th Percentile Speed ^c
Robinson Road adjacent to the site:			
<i>North of Intersection (southbound)</i>	30	20	27
<i>South of Intersection (northbound)</i>	30	24	30

^a In miles per hour (mph).

^b Average speed of all observed vehicles.

^c Speed at, or below which 85 percent of all observed vehicles travel.

As shown in Table 3, the average speeds on Robinson Road adjacent to the site were found to be between 20 and 24 mph with 85th percentile speeds between 27 and 30 mph. The observed speeds on Robinson Road are consistent with the posted speed limit of 30 mph.

FUTURE CONDITIONS

To estimate the impact of site-generated traffic within the study area, existing traffic volumes were projected to the expected opening year (2014) of the development and to the expected opening year plus ten years (2024). These design horizons were chosen to be consistent with Town of Hudson and NHDOT guidelines for the preparation of a traffic study. Traffic volumes on the roadway network at these times will include existing traffic, new traffic due to normal traffic growth, and traffic related to any significant development by others expected to be

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

completed within the area by the 2014 and 2024 design years. Consideration of these factors resulted in the development of 2014 No-Build and 2024 No-Build traffic volumes, which assume that the proposed development is not built. The incremental impacts of the proposed project may then be determined by adding site-generated traffic volumes (Build conditions) and making comparisons to the No-Build conditions.

Traffic Growth

To develop the 2014 No-Build and 2024 No-Build forecast volumes, two components of traffic growth were considered. First, an annual growth percentage was determined based on the historical traffic-count data obtained from the Nashua Regional Planning Commission (NRPC)² and NHDOT³. The historical traffic-count data indicate that traffic volumes in the area have been decreasing at a rate of 0.64 percent since 1995 and 2.8 percent per year since 2005, respectively. In order to provide a conservative (worse-case) analysis scenario, a compounded annual traffic growth rate of 1.0 percent per year was assumed to account for general population growth and the traffic generated by smaller area developments. The NHDOT and NRPC historical traffic-volume data are provided in the Appendix.

Second, any traffic that may be generated by planned developments that could add a substantial volume of traffic through the study area during the design horizons was considered. Based on discussions with the Town Planner from the Town of Hudson as well as the Town of Litchfield, there are no developments that are planned in the vicinity of the project that will add traffic to the study area roadways. Based on discussions with the Town Planner in Londonderry, there was one development identified; a 98-unit elderly housing project with two commercial frontage lots. The project is located on 61 acres in Londonderry just north of the study area. It has frontage along the north side of NH Route 102 (Nashua Road) and the east side of West Road and is otherwise surrounded by wooded land, residential and commercial development. The development will have one driveway on the north side of NH Route 102 opposite Avery Road and one driveway on the east side of West Road about 3,400 feet north of NH Route 102. Traffic volumes and methodology associated with the development were obtained from the traffic-assessment memorandum (TAM) prepared for that development and distributed along the adjacent roadway system.⁴

² Nashua Regional Planning Commission. *Transportation Planning Traffic Count Data*: ID #229021, ID #229031, ID #229041, ID #229050.

³ NHDOT *Traffic Volume Report*; 2012.

⁴Transportation Engineering, Planning and Policy. *Traffic Assessment Memorandum, Proposed Hickory Woods Development, Londonderry, New Hampshire*. January 8, 2013.

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

Planned Roadway Improvements

The Town Engineer of Hudson was contacted to determine if any roadway improvements are planned within the study area. At the time of this study, there are no known roadway improvement projects planned in the vicinity of the site to be constructed within the design horizons. There is a plan to extend water service along NH Route 102 in the vicinity of the study area that may cause temporary traffic disruption during construction.

No-Build Conditions

The 2014 No-Build peak-hour traffic volumes were accordingly developed by applying a 1.0 percent compounded annual traffic-growth rate (1.0 percent compounded over one year) to the 2013 Existing traffic volumes and adding the traffic to be generated by the elderly housing project. The 2024 No-Build peak-hour traffic volumes were developed by applying a total growth of 11.6 percent (1.0 percent compounded over eleven years) to the 2013 Existing traffic volumes and adding the traffic to be generated by the elderly housing project. The 2014 and 2024 No-Build peak-hour traffic volumes are shown graphically on Figures 3 and 4 for the weekday AM and Saturday midday peak hours.

Trip Generation

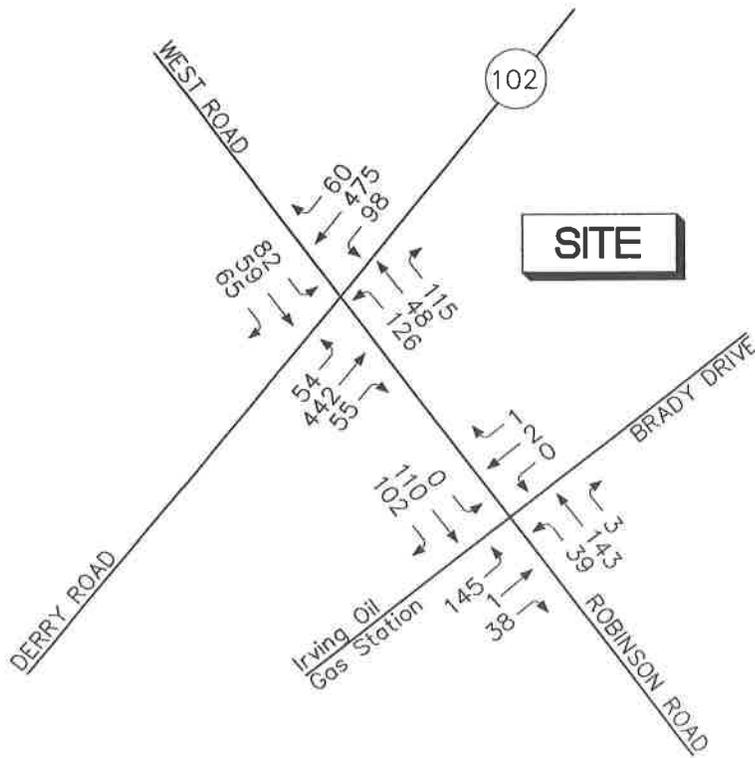
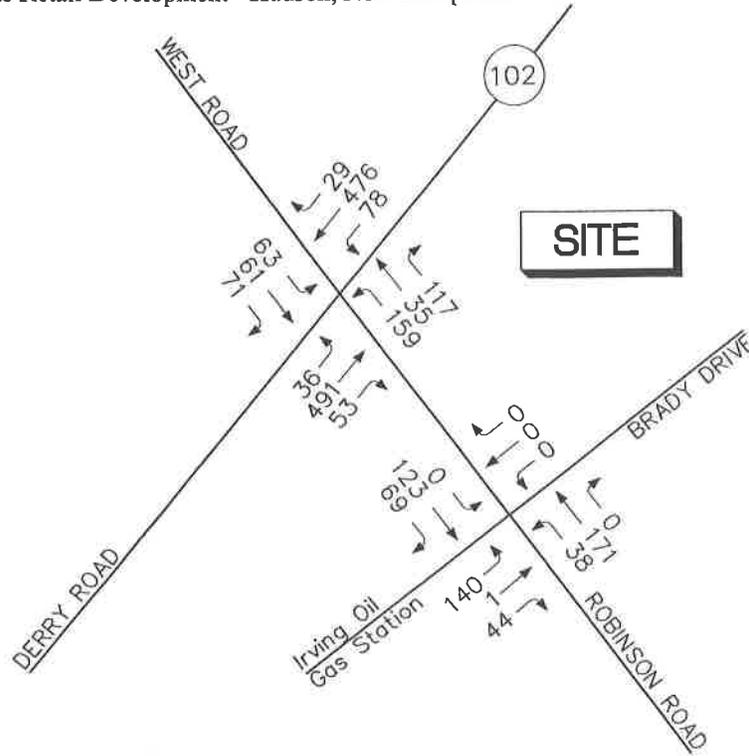
As proposed, the development consists of constructing a ±5,800 square foot building which will include a ±2,500 square foot Dunkin' Donuts with a drive-through window and an additional ±3,400 square feet of retail space. Traffic to be generated by the proposed development was forecast using the trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*⁵ for Land Use Code 937 (Coffee/Donut Shop with Drive-Through Window) and Land Use Code 820 (Shopping Center). Table 4 summarizes the results of the trip-generation estimates. All trip-generation data are provided in the Appendix.

Not all of the vehicle trips expected to be generated by the proposed project represent *new* trips on the study area roadway system. Studies have shown that for developments such as the one proposed, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. Based on data presented in the ITE *Trip Generation Handbook*, the average *pass-by* trip percentage for ITE Land Use Code 934 (Fast-Food Restaurant with Drive-Through Window) is 49 percent and for ITE Land Use Code 820 (Shopping Center) is 26 percent during the weekday AM peak

⁵ *Trip Generation Manual*, 9th Edition; Institute of Transportation Engineers; Washington, DC; 2012.

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts & Retail Development - Hudson, New Hampshire

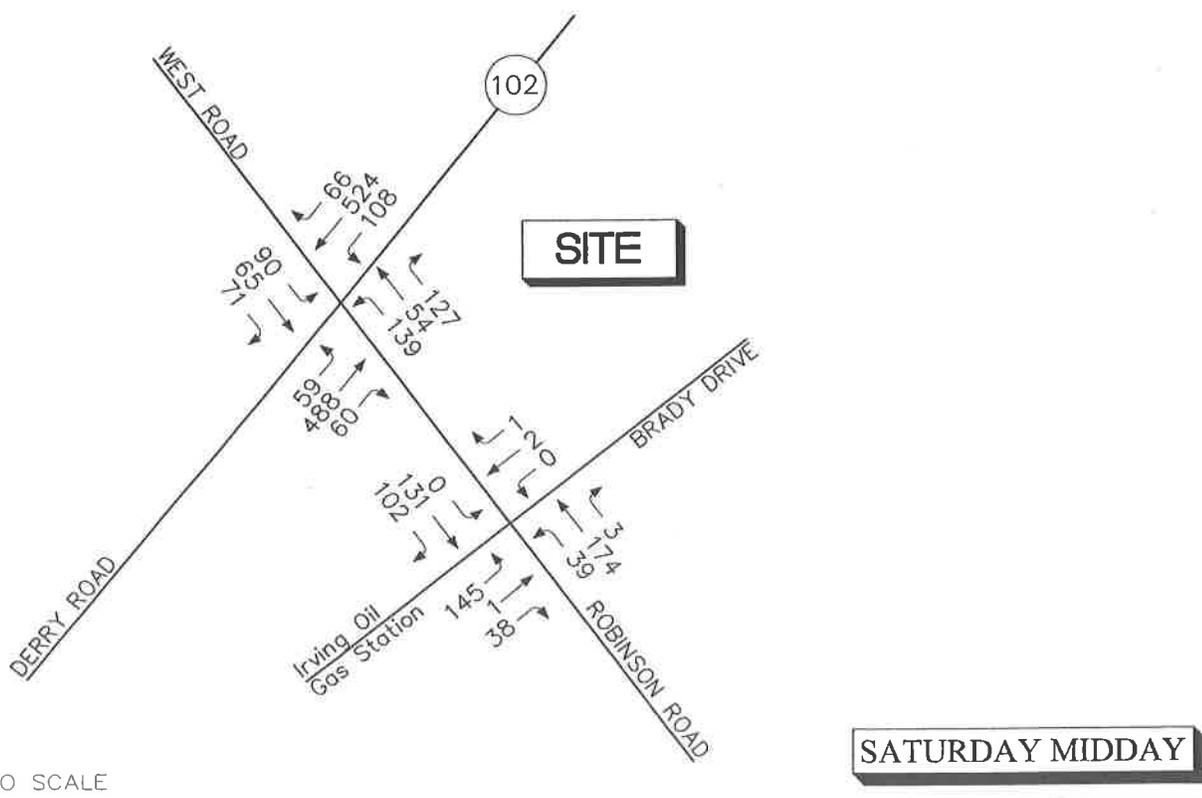
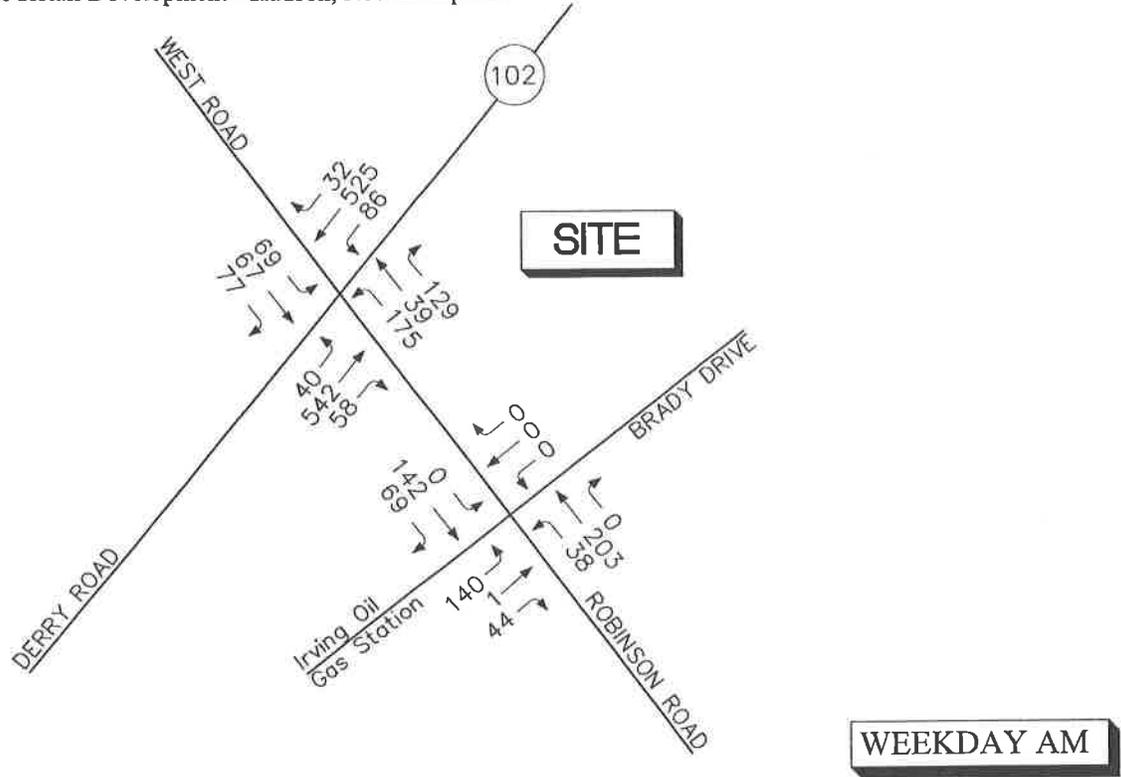


NOT TO SCALE

Figure 3
 2014 No Build
 Peak Hour Traffic Volumes

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts & Retail Development - Hudson, New Hampshire



NOT TO SCALE

Figure 4
 2024 No Build
 Peak Hour Traffic Volumes

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

hour⁶. Specifically for this project, *pass-by* trips would be drawn from Robinson Road. In addition, *diverted linked* trips are projected trips that require a diversion from one roadway to another roadway to gain access to the site. These trips could travel on roadways adjacent to the site, but without having direct access to the site. Specifically for this project, *diverted linked* trips would be drawn from NH Route 102 and West Road. Based on data presented in the ITE *Trip Generation Handbook*, the average *diverted linked* trip percentage for ITE Land Use Code 934 (Fast-Food Restaurant with Drive-Through Window) is 28 percent and for ITE Land Use Code 820 (Shopping Center) is 35 percent during the weekday AM peak hour. To provide a conservative (worse than expected) basis for the analysis, however, only the 49 percent and 26 percent of the restaurant and retail site-generated traffic, respectively, was considered *pass-by/diverted-linked* traffic. Not accounting for additional *diverted linked* trips result in more *new* trips to the study area than expected. Therefore, due to the higher than expected *new* trips on the study area roadways beyond the site driveway, the proposed development could have less impact on the adjacent roadway system than as analyzed. In addition, the proposed Dunkin' Donuts is being relocated from 205 Robinson Road which is within the Circle K/Irving Oil development. Therefore, it is expected that most of the projected site-generated traffic already exists on Robinson Road, NH Route 102, and West Road. Table 4 summarizes the expected trip-generation characteristics of the proposed project.

As shown in Table 4, the proposed Dunkin' Donuts and retail project is expected to generate 131 *new* vehicle trips (69 entering and 62 exiting) during the weekday AM peak hour and 120 *new* vehicle trips (60 entering and 60 exiting) during the Saturday midday peak hour.

⁶ *Trip Generation Handbook*; 2nd Edition; Institute of Transportation Engineers; Washington, DC; June 2004.

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Table 4
PEAK HOUR TRIP-GENERATION SUMMARY

Time Period/Direction	Proposed Restaurant Trips ^a	Proposed Retail Trips ^b	Total Trips ^c	Pass-By Trips ^d	New Trips ^e
Weekday AM Peak Hour:					
<i>Enter</i>	129	2	131	62	69
<i>Exit</i>	<u>123</u>	<u>1</u>	<u>124</u>	<u>62</u>	<u>62</u>
<i>Total</i>	252	3	255	124	131
Saturday Midday Peak Hour:					
<i>Enter</i>	106	8	114	54	60
<i>Exit</i>	<u>106</u>	<u>8</u>	<u>114</u>	<u>54</u>	<u>60</u>
<i>Total</i>	212	16	228	108	120

^a ITE Land Use Code 937 (Coffee/Donut Shop with Drive-Through Window) for 2,500 square feet.

^b ITE Land Use Code 820 (Shopping Center) for 3,400 square feet.

^c Proposed Restaurant Trips plus Proposed Retail Trips.

^d 49% of Proposed Restaurant Trips during the weekday AM peak hour and Saturday midday peak hour and 26% of Proposed Retail Trips during the Weekday AM peak hour and Saturday midday peak hour.

^e Total Trips minus Pass-By Trips.

Trip Distribution

Having estimated project-generated vehicle trips, the next step is to determine the distribution of project traffic and assign these trips to the local roadway network. The directional distribution of site traffic is dependent on expected travel routes to and from the site and existing travel patterns. Accordingly, approximately 40 percent of the site-generated traffic is expected to travel to and from the west along Route 102, 40 percent is expected to and from the east on Route 102, 10 percent is expected to and from the south on Robinson Road, and 10 percent is expected to and from the north on West Road.

Sight Distance

As proposed, access to the site will be provided via Brady Drive off Robinson Road opposite the Irving Oil driveway. To identify potential safety concerns associated with site access and egress, sight distances have been evaluated at the intersection of Brady Drive and Robinson Road to determine if the available sight distances for vehicles exiting the site meet or exceed the minimum distances required for approaching vehicles to safely stop. The available sight distances were compared with minimum requirements, as established by the American

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Association of State Highway and Transportation Officials (AASHTO).⁷ AASHTO is the national standard by which vehicle sight distance is calculated, measured, and reported. In addition, the available sight distances were compared with the Town of Hudson and NHDOT's requirement of 400 feet of All-Season Safe Sight Distance.

Sight distance is the length of roadway ahead that is visible to the driver. Stopping Sight Distance (SSD) is the minimum distance required for a vehicle traveling at a certain speed to safely stop before reaching a stationary object in its path. The values are based on a driver perception and reaction time of 2.5 seconds and a braking distance calculated for wet, level pavements. When the roadway is either on an upgrade or downgrade, grade correction factors are applied. SSD is measured from an eye height of 3.5 feet to an object height of 2 feet above street level, equivalent to the taillight height of a passenger car. The SSD is measured along the centerline of the traveled way of the major road.

Intersection sight distance (ISD) is provided on minor street approaches to allow the drivers of stopped vehicles a sufficient view of the major roadway to decide when to enter the major roadway. By definition, ISD is the minimum distance required for a motorist exiting a minor street to turn onto the major street, without being overtaken by an approaching vehicle reducing its speed from the design speed to 70 percent of the design speed. The ISD is measured from an eye height of 3.5 feet to an object height of 3.5 feet above street level. The use of an object height equal to the driver eye height makes ISDs reciprocal (i.e., if one driver can see another vehicle, then the driver of that vehicle can also see the first vehicle). When the minor street is on an upgrade that exceeds 3 percent, grade correction factors are applied. The ISD design values for right turns from a minor street are less than the design values for left turns because, in making right turns, drivers generally accept gaps that are slightly shorter than those accepted in making left turns.

The SSD is generally more important as it represents the minimum distance required for safe stopping while ISD is based only upon acceptable speed reductions to the approaching traffic stream. The ISD, however, must be equal to or greater than the minimum required SSD in order to provide safe operations at the intersection. In accordance with the AASHTO manual, *"If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, this may require a major-road vehicle to stop or slow to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road."* Accordingly, ISD should be at least equal to the distance required to allow a driver approaching the minor road to safely stop.

⁷ *A Policy on Geometric Design of Highways and Streets*; American Association of State Highway and Transportation Officials (AASHTO); 2004.

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The available SSD and ISD at the proposed site driveway were measured in the field and compared to minimum requirements as established by AASHTO. Since the distance required to stop a vehicle is dependent on the speed of that vehicle, speed studies were conducted as presented in the *Existing Conditions: Vehicle Speeds* section. Based on both the posted speed limit and the observed speeds, the SSD and ISD requirements at the site driveway intersection with Robinson Road were calculated. The required minimum sight distances for each direction are compared to the available distances, as shown in Table 5.

**Table 5
SIGHT DISTANCE SUMMARY**

Location/Direction	Stopping Sight Distance (feet)		Intersection Sight Distance (feet)		
	Measured	Minimum Required ^a	Measured	Minimum Required ^b	Desirable ^c
Robinson Road at Site Driveway:					
<i>North of Intersection (southbound)</i>	470	173	460	173	335
<i>South of Intersection (northbound)</i>	+1,000	200	925	200	335

^a Values based on AASHTO requirements for 85th percentile speeds of 27 mph for Robinson Road southbound travel (north of intersection) and 30 mph for Robinson Road northbound travel (south of intersection).

^b Values based on AASHTO requirements for SSD.

^c Values based on AASHTO requirements for posted speed limit of 30 mph on Robinson Road.

As indicated in Table 5, available sight distances at the proposed site driveway intersection with Robinson Road exceed the minimum and desirable SSD and ISD requirements for safe operation. Additionally, available sight distances exceed the Town of Hudson and the NHDOT's All Season Safe Sight Distance requirement of 400 feet.

To identify potential safety concerns associated with site access and egress on Brady Drive, sight distances have been evaluated at the proposed site driveway intersection with Brady Drive to determine if the available sight distances for vehicles exiting the site meet or exceed the minimum distances required for approaching vehicles to safely stop. The distance from the site driveway to Robinson Road is 317 feet which is entirely visible from the proposed site driveway and is deemed safe for design speeds up to 41 mph. The distance from the site driveway to the end of Brady Drive to the east (Hudson Hilltop Self Storage/ SSI Security System Design Specialists) is 195 feet and is a clear view to the existing fence which ends the roadway. The distance of 195 feet is provided adequate SSD for speeds up to 29 mph. Due to the low travel speeds anticipated on Brady Drive, the sight distances at the proposed driveway are expected to provide safe operation.

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To ensure the safe and efficient flow of traffic to and from the site, it is recommended that any proposed plantings, vegetation, landscaping, and signing along the site frontage be kept low to the ground (no more than 3.0 feet above street level) or set back sufficiently from the edge of Robinson Road and the proposed site driveway so as not to inhibit the available sight lines

Drive-Through Lane Vehicle Queuing

The proposed facility will provide a drive-through window. The drive-through window lane is proposed to be 12-foot wide and provide approximately 280 feet of storage on-site. Based on an average length of vehicle of 20 feet, the drive-through lane provides storage for at least 10 vehicles without interrupting on-site circulation and 4 additional vehicles without disrupting flow on Brady Drive, for a total of 14 vehicles.

Based on the Town of Hudson Zoning Ordinance, eating and drinking establishments having a drive-through window service shall provide a minimum of 12 vehicle stacking spaces. Based on the Site Plan prepared by Keach-Nordstrom Associates, Inc., there is adequate room on-site to accommodate more than 12 vehicles without disrupting flow on Brady Drive which meets the Town of Hudson requirements.

In addition to the Hudson Zoning Ordinance, other drive-through queue information was researched. Based on queue data from similar (Starbucks and other coffee shops) facilities,^{8,9} a queue of 13 vehicles (260 feet) was noted. To provide an alternative method of determining projected vehicular queues at the proposed drive-through lane, project specific information for the proposed facility (i.e., assumption that 72 percent of the Dunkin' Donuts customers would use the drive-through window during the weekday AM peak hour, and 67 percent during the Saturday midday peak hour, and a window service time of 30 seconds) were used to estimate 95th percentile drive-through queues for the weekday AM and Saturday midday peak hours. According to these calculations, a 95th percentile queue of 5 vehicles are projected during the weekday AM and Saturday midday peak hours. All drive-through lane queuing analysis are provided in the Appendix. Based on the vehicle queue data, it is anticipated that the vehicle queue for the drive-through window can be accommodated on site.

⁸ Mark Stuecheli, PTP. *New Drive-Through Stacking Information for Banks and Coffee Shops*. Presented at the 2009 ITE Annual Meeting, August 12, 2009.

⁹ Mike Spack, PR, PTOE, Max Moreland, EIT, Lindsay de Leeuw, Nate Hood. *Drive-Through Queue Generation*. February 2012.

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Build Conditions

Based on the traffic-generation and distribution estimates for this project, the traffic volumes associated with the proposed development were assigned to the roadway network. The site-generated traffic networks are shown on Figure 5 for the weekday AM and Saturday midday peak hours. The site-generated traffic volumes were then added to the No-Build traffic volumes to develop the Build peak-hour traffic-volumes networks. The 2014 and 2024 Build peak-hour flow networks are graphically depicted on Figures 6 and 7.

Traffic Increases

The proposed project will result in increases in traffic on the roadways leading beyond the study area. As shown on Figure 5, peak-hour traffic-volume increases in the range of 12 to 53 vehicles per hour are expected leading beyond the study area. These increases represent, on average, approximately 1 additional vehicle 1 to 5 minutes during the peak hours. It should be noted that the traffic volumes associated with the existing Dunkin' Donuts located at 205 Robinson Road are already on the roadway network and are expected to shift to the proposed site on Brady Drive.

CAPACITY AND QUEUE ANALYSIS

Level-of-service (LOS) analyses were conducted at the study-area intersections under 2013 Existing, 2014 No-Build, 2014 Build, 2024 No-Build, and 2024 Build conditions during the weekday AM and Saturday midday peak hours. The capacity and queue analysis methodology is based on the concepts and procedures in the *Highway Capacity Manual* (HCM) and is described in the Appendix.¹⁰

The queue analysis methodology for signalized and unsignalized intersections is based on the concepts and procedures described in the HCM. The maximum back of queue during a 95th percentile signal cycle was calculated for each critical lane group during the peak periods studied. The back of queue is the length of a backup of vehicles from the stop line of a signalized intersection to the last vehicle in the queue that is required to stop, regardless of the signal indication. The length of this queue depends on a number of factors including signal timing, vehicle arrival patterns, and the saturation flow rate.

¹⁰*Highway Capacity Manual 2000*; Transportation Research Board; Washington, D.C.; 2000.

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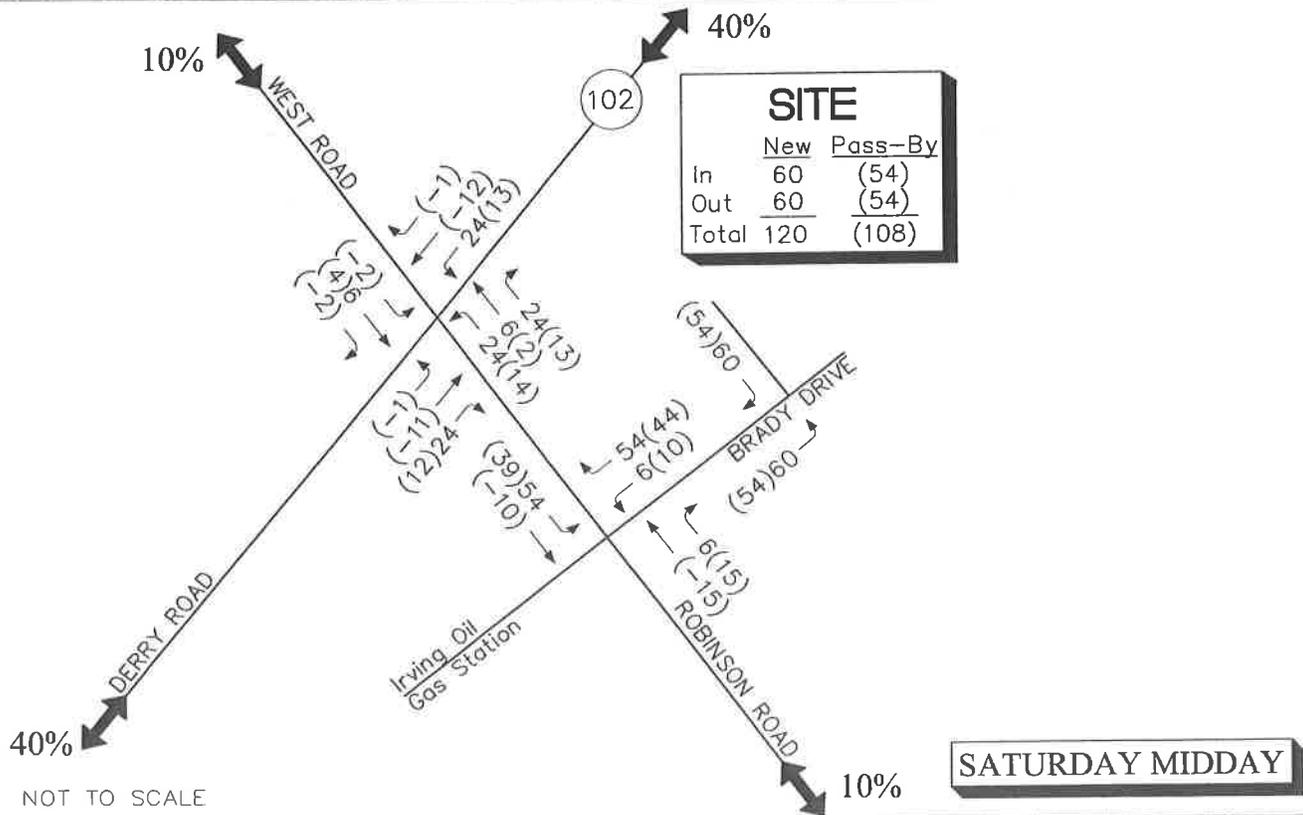
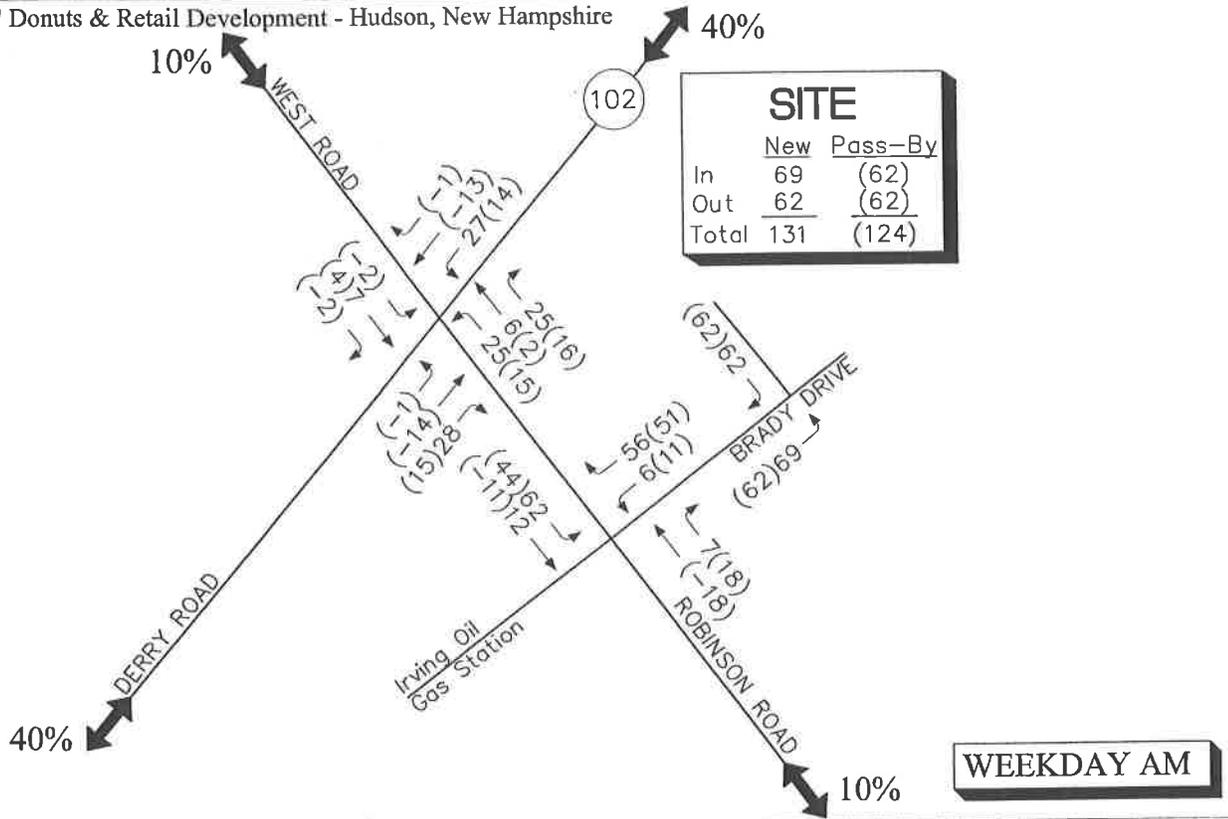
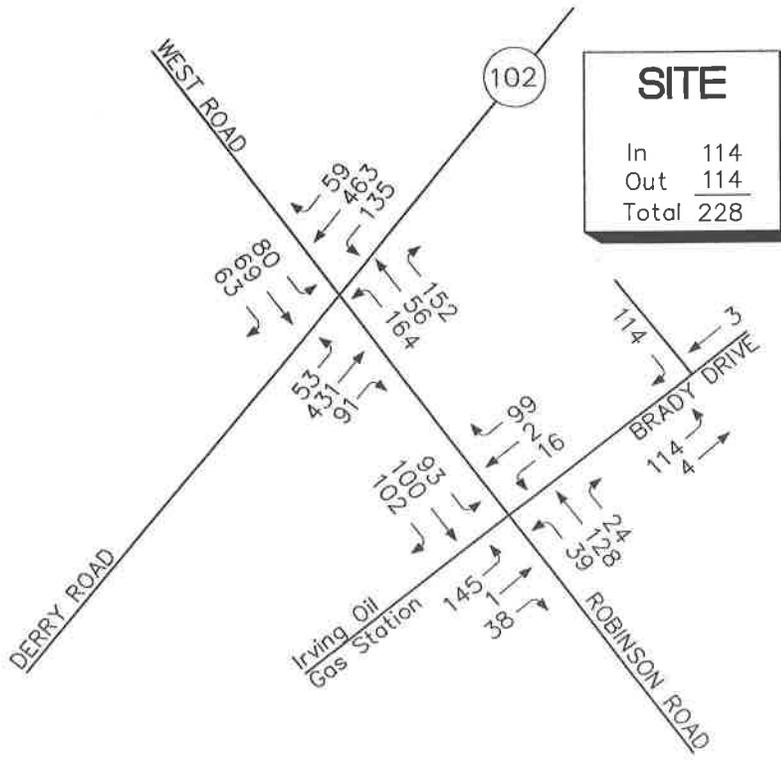
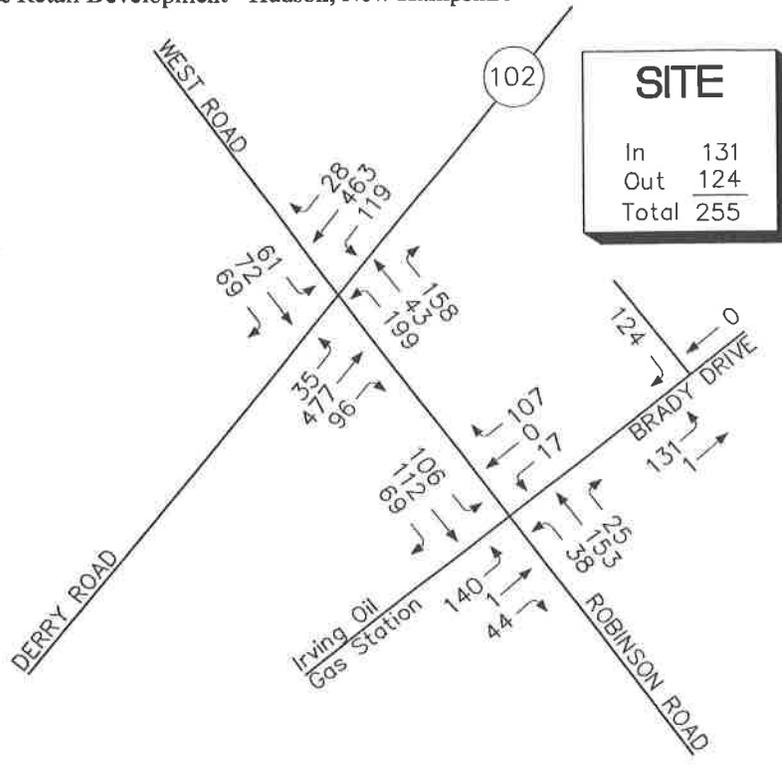


Figure 5

Site Generated
Peak Hour Traffic Volumes

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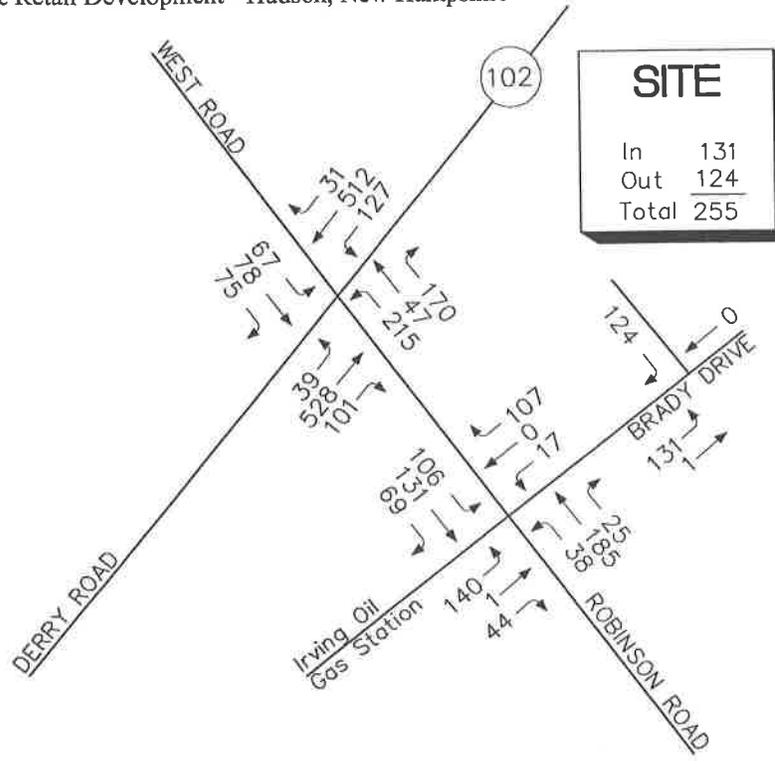
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Figure 6

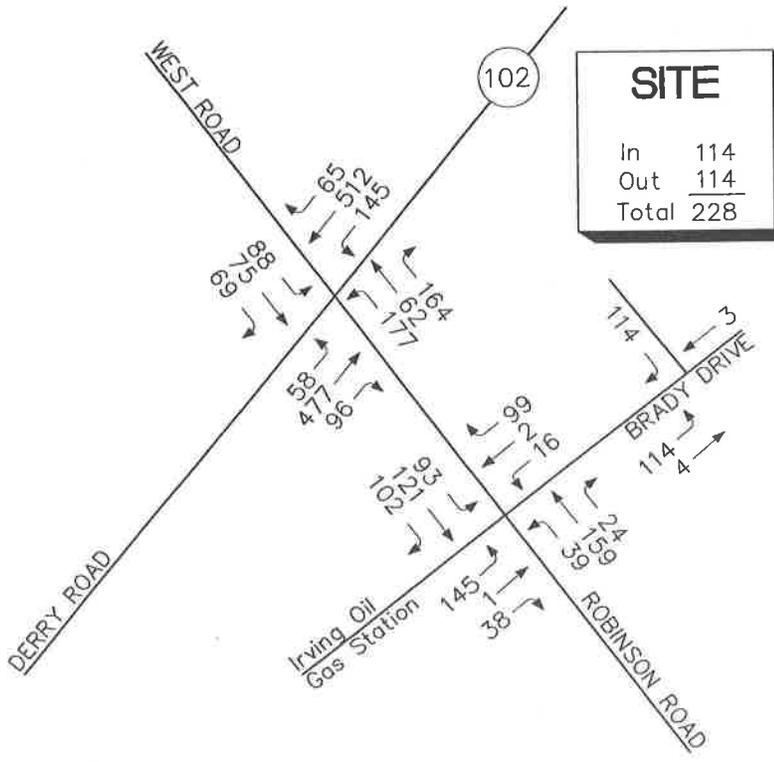
2014 Build
 Peak Hour Traffic Volumes

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WEEKDAY AM



SATURDAY MIDDAY



NOT TO SCALE

Figure 7

2024 Build
Peak Hour Traffic Volumes

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For unsignalized intersections, the 95th percentile queue represents the length of queue of the critical minor-street movement that is not expected to be exceeded 95 percent of the time during the analysis period (typically one hour). In this case, the queue length is a function of the capacity of the movement and the movement's degree of saturation.

Analysis Results

The results of the level-of-service and queue analyses are shown in Table 6 (2014 design year conditions) and Table 7 (2024 design year conditions) and are discussed below. All analysis worksheets are provided in the Appendix.

Capacity and queue analyses were conducted at the study area intersections utilizing Synchro software and the default values in the program. It is expected that motorists typically accept smaller gaps in traffic at unsignalized intersections during peak periods of traffic than reflected in the analysis model and, therefore, do not wait as long to exit into the main line of traffic as shown in the analysis results. Therefore, unsignalized intersection operating results are anticipated to be better than as presented in this memorandum.

NH Route 102 (Derry Road) at Robinson Road and West Road

At the signalized intersection of NH Route 102, Robinson Road, and West Road, the overall intersection is anticipated to operate at acceptable service levels (LOS D or better) under existing and future analysis scenarios. The additional traffic generated by the proposed Dunkin' Donuts and retail development, however, is anticipated to degrade some lane groups to LOS E or F and increase some volume-to-capacity (v/c) ratios to greater than 1.00 under the future Build conditions. Accordingly, improvement measures are recommended at this location in order to improve operations at the intersection. These improvements are described in the *Recommended Improvements* section of this study.

Robinson Road at Irving Oil Driveway and Brady Drive

Under 2014 and 2024 Build traffic conditions, the Robinson Road major street movements at its intersection with the Irving Oil/Circle K driveway and Brady Road are expected to operate at optimal levels (LOS A) during the weekday AM and Saturday midday peak hours. The Brady Drive approach is expected to operate at desirable levels (LOS B) during the weekday AM and Saturday midday peak hours with the proposed development in place. The Irving Oil/Circle K driveway is expected to operate with long delays (LOS E/F) during the weekday AM and Saturday midday peak hours with the addition of future traffic growth in the area. It is important to note that the operations at the 205 Robinson Road driveway under future Build conditions could operate at better LOS if a lower generator re-occupied the existing Dunkin' Donuts space.

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The v/c ratios, however, are expected to be well below 1.00 (0.82 or less) indicating there will be capacity available with the proposed development in place. A queue of approximately 6-7 vehicles or less is anticipated on the Irving Oil/Circle K site driveway and a queue of less than 1 vehicle is anticipated on the Brady Drive approach as well as the Robinson Road approaches during the peak hours analyzed. From this, it can be concluded that the proposed Dunkin' Donuts facility is not expected to have a significant impact on the operations of Robinson Road.

As stated previously, the analysis results are expected to be better than as modeled if motorists accept smaller gaps in traffic along this section of Robinson Road. In addition, the analysis model does not account for the nearby traffic signal located on NH Route 102 at Robinson Road to the north. These traffic signals provide gaps in the traffic stream which allow motorists more opportunity to enter and exit driveways and curb cuts along Robinson Road.

Brady Drive and Site Driveway

All movements at the unsignalized intersection of Brady Drive and the proposed site driveway are anticipated to operate at optimal levels of service (LOS A) under future analysis conditions. The additional traffic generated by the proposed development is not anticipated to change service levels on any given lane group or increase vehicular queues on any given lane by more than one vehicle. Additionally, the v/c ratios are expected to be well below 1.00, indicating there will be adequate capacity to accommodate the anticipated traffic volumes.

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**Table 6
LEVEL-OF-SERVICE AND QUEUE ANALYSIS SUMMARY – 2014 CONDITIONS**

Intersection/Peak Hour/Lane Group	2013 Existing			2014 No-Build			2014 Build					
	V/C ^a	Del. ^b	LOS ^c	Queue ^d	V/C	Del.	LOS	Queue	V/C	Del.	LOS	Queue
NH Route 102 at Robinson Road and West Road												
<i>Weekday AM:</i>												
NH Route 102 EB left-turns	0.27	30.1	C	11/37	0.28	30.4	C	12/39	0.27	29.2	C	10/39
NH Route EB through/right-turns	0.43	15.4	B	81/131	0.44	15.4	B	83/134	0.20	14.7	B	25/53
NH Route WB left-turns	0.31	25.4	C	27/69	0.32	25.6	C	28/70	0.42	24.7	C	36/98
NH Route WB through	0.65	16.0	B	99/288	0.66	16.4	B	102/301	0.67	17.0	B	98/288
NH Route WB right-turns	0.03	9.7	A	0/14	0.03	9.7	A	0/14	0.03	10.1	B	0/14
Robinson Rd. NB left-turns/through	0.77	34.7	C	80/200	0.79	37.0	D	82/205	0.97	64.6	E	93/270
Robinson Rd. NB right-turns	0.18	18.5	B	10/47	0.18	18.6	B	11/48	0.29	18.5	B	19/71
West Rd. SB left-turns/through	0.50	22.6	C	44/110	0.52	23.4	C	46/114	0.59	24.3	C	42/143
West Rd. SB right-turns	0.05	17.5	B	0/27	0.06	17.7	B	0/28	0.06	16.5	B	0/28
Overall Intersection	0.66	19.6	B	--	0.68	20.1	C	--	0.76	26.4	C	--
<i>Saturday Midday:</i>												
NH Route 102 EB left-turns	0.29	28.7	C	21/51	0.31	29.0	C	23/55	0.31	28.9	C	23/54
NH Route EB through/right-turns	0.40	15.3	B	81/127	0.40	15.3	B	82/130	0.43	16.0	B	88/133
NH Route WB left-turns	0.39	26.4	C	45/82	0.40	26.7	C	46/84	0.51	27.6	C	62/111
NH Route WB through	0.70	18.7	B	193/291	0.71	19.0	B	199/302	0.69	18.4	B	191/290
NH Route WB right-turns	0.05	10.9	B	0/19	0.05	11.0	B	0/19	0.05	11.0	B	0/19
Robinson Rd. NB left-turns/through	0.70	31.1	C	88/185	0.72	32.7	C	90/189	0.95	65.0	E	133/256
Robinson Rd. NB right-turns	0.13	18.8	B	7/43	0.13	19.1	B	8/44	0.24	19.9	B	22/65
West Rd. SB left-turns/through	0.59	25.8	C	72/125	0.61	26.9	C	75/136	0.75	35.9	D	81/164
West Rd. SB right-turns	0.05	18.2	B	0/23	0.05	18.4	B	0/24	0.05	18.4	B	0/24
Overall Intersection	0.67	20.2	C	--	0.68	20.6	C	--	0.76	26.0	C	--

^a Volume-to-capacity ratio.

^b Average control delay in seconds per vehicle.

^c Level of service.

^d Maximum queue length in feet per lane during an average/95th percentile cycle (assuming 2.5 feet per vehicle).

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**Table 6 (continued)
LEVEL-OF-SERVICE AND QUEUE ANALYSIS SUMMARY – 2014 CONDITIONS**

Intersection/Peak Hour/Lane Group	2013 Existing				2014 No-Build				2014 Build			
	V/C ^a	Del. ^b	LOS ^c	Queue ^d	V/C	Del.	LOS	Queue	V/C	Del.	LOS	Queue
Robinson Road at Irving Oil Driveway and Brady Drive												
<i>Weekday AM:</i>												
Robinson Road NB approach	0.03	1.7	A	--/3	0.03	1.7	A	--/3	0.03	1.6	A	--/3
Robinson Road SB approach	0.00	0.0	A	--/0	0.00	0.0	A	--/0	0.09	3.4	A	--/7
Irving Oil Driveway EB approach	0.38	15.6	C	--/43	0.38	15.8	C	--/44	0.74	48.5	E	--/135
Brady Drive WB approach	0.00	0.0	A	--/0	0.00	0.0	A	--/0	0.21	11.9	B	--/20
<i>Saturday Midday:</i>												
Robinson Road NB approach	0.03	1.9	A	--/3	0.03	1.9	A	--/3	0.03	1.8	A	--/3
Robinson Road SB approach	0.00	0.0	A	--/0	0.00	0.0	A	--/0	0.08	3.0	A	--/7
Irving Oil Driveway EB approach	0.37	15.4	C	--/43	0.38	15.6	C	--/44	0.70	41.4	E	--/121
Brady Drive WB approach	0.01	11.7	B	--/1	0.01	11.7	B	--/1	0.19	11.5	B	--/17
Brady Drive and Site Driveway												
<i>Weekday AM:</i>												
Brady Drive EB approach	--	--	--	--	--	--	--	--	0.09	7.4	A	--/7
Brady Drive WB approach	--	--	--	--	--	--	--	--	0.00	0.0	A	--/0
Site Driveway SB approach	--	--	--	--	--	--	--	--	0.13	8.8	A	--/11
<i>Saturday Midday:</i>												
Brady Drive EB approach	--	--	--	--	--	--	--	--	0.08	7.2	A	--/6
Brady Drive WB approach	--	--	--	--	--	--	--	--	0.00	0.0	A	--/0
Site Driveway SB approach	--	--	--	--	--	--	--	--	0.12	8.8	A	--/10

^a Volume-to-capacity ratio.

^b Average control delay in seconds per vehicle.

^c Level of service.

^d Maximum queue length in feet per lane during an average/95th percentile cycle (assuming 25 feet per vehicle).

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**Table 7
LEVEL-OF-SERVICE AND QUEUE ANALYSIS SUMMARY – 2024 CONDITIONS**

Intersection/Peak Hour/Lane Group	2013 Existing				2024 No-Build				2024 Build			
	V/C ^a	Del. ^b	LOS ^c	Queue ^d	V/C	Del.	LOS	Queue	V/C	Del.	LOS	Queue
NH Route 102 at Robinson Road and West Road Weekday AM:												
NH Route 102 EB left-turns	0.27	30.1	C	11/37	0.24	28.8	C	16/43	0.24	29.0	C	16/43
NH Route EB through/right-turns	0.43	15.4	B	81/131	0.46	15.5	B	96/151	0.50	16.5	B	104/156
NH Route WB left-turns	0.31	25.4	C	27/69	0.35	26.7	C	38/76	0.47	27.5	C	56/108
NH Route WB through	0.65	16.0	B	99/288	0.75	20.3	C	214/347	0.72	19.2	B	205/334
NH Route WB right-turns	0.03	9.7	A	0/14	0.03	10.5	B	0/15	0.03	10.4	B	0/15
Robinson Rd. NB left-turns/through	0.77	34.7	C	80/200	0.95	66.2	E	135/244	1.21	150.7	F	196/318
Robinson Rd. NB right-turns	0.18	18.5	B	10/47	0.23	20.1	C	20/56	0.35	21.6	C	36/84
West Rd. SB left-turns/through	0.50	22.6	C	44/110	0.68	31.9	C	67/156	0.87	57.9	E	77/190
West Rd. SB right-turns	0.05	17.5	B	0/27	0.06	18.8	B	0/30	0.06	18.9	B	0/30
Overall Intersection	0.66	19.6	B	--	0.77	25.9	C	--	0.80	41.4	D	--
<i>Saturday Midday:</i>												
NH Route 102 EB left-turns	0.29	28.7	C	21/51	0.34	29.6	C	26/58	0.34	30.8	C	25/58
NH Route EB through/right-turns	0.40	15.3	B	81/127	0.43	15.5	B	94/144	0.47	17.3	B	102/148
NH Route WB left-turns	0.39	26.4	C	45/82	0.43	27.4	C	51/92	0.47	26.4	C	68/118
NH Route WB through	0.70	18.7	B	193/291	0.77	21.2	C	232/348	0.71	18.5	B	224/337
NH Route WB right-turns	0.05	10.9	B	0/19	0.06	10.9	B	0/20	0.05	10.3	B	0/20
Robinson Rd. NB left-turns/through	0.70	31.1	C	88/185	0.86	49.3	D	104/222	1.24	164.2	F	170/294
Robinson Rd. NB right-turns	0.13	18.8	B	7/43	0.17	19.9	B	13/51	0.29	22.7	C	28/74
West Rd. SB left-turns/through	0.59	25.8	C	72/125	0.76	36.9	D	86/168	1.09	119.2	F	113/204
West Rd. SB right-turns	0.05	18.2	B	0/23	0.06	19.0	B	0/25	0.06	20.6	C	0/24
Overall Intersection	0.67	20.2	C	--	0.76	24.2	C	--	0.84	46.3	D	--

^a Volume-to-capacity ratio.

^b Average control delay in seconds per vehicle.

^c Level of service.

^d Maximum queue length in feet per lane during an average/95th percentile cycle (assuming 25 feet per vehicle).

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

**Table 7 (continued)
LEVEL-OF-SERVICE AND QUEUE ANALYSIS SUMMARY – 2024 CONDITIONS**

Intersection/Peak Hour/Lane Group	2013 Existing				2024 No-Build				2024 Build			
	V/C ^a	Del. ^b	LOS ^c	Queue ^d	V/C	Del.	LOS	Queue	V/C	Del.	LOS	Queue
Robinson Road at Irving Oil Driveway and Brady Drive												
<i>Weekday PM:</i>												
Robinson Road NB approach	0.03	1.7	A	--/3	0.04	1.5	A	--/3	0.03	1.5	A	--/3
Robinson Road SB approach	0.00	0.0	A	--/0	0.00	0.0	A	--/0	0.09	3.4	A	--/8
Irving Oil Driveway EB approach	0.38	15.6	C	--/43	0.41	17.4	C	--/50	0.82	63.2	F	--/160
Brady Drive WB approach	0.00	0.0	A	--/0	0.00	0.0	A	--/0	0.22	12.5	B	--/21
<i>Saturday Midday:</i>												
Robinson Road NB approach	0.03	1.9	A	--/3	0.03	1.7	A	--/3	0.03	1.6	A	--/3
Robinson Road SB approach	0.00	0.0	A	--/0	0.00	0.0	A	--/0	0.08	2.9	A	--/7
Irving Oil Driveway EB approach	0.37	15.4	C	--/43	0.41	17.2	C	--/50	0.77	52.9	F	--/144
Brady Drive WB approach	0.01	11.7	B	--/1	0.01	12.2	B	--/1	0.20	12.0	B	--/19
Brady Drive and Site Driveway												
<i>Weekday AM:</i>												
Brady Drive EB approach	--	--	--	--	--	--	--	--	0.09	7.4	A	--/7
Brady Drive WB approach	--	--	--	--	--	--	--	--	0.00	0.0	A	--/0
Site Driveway SB approach	--	--	--	--	--	--	--	--	0.13	8.8	A	--/11
<i>Saturday Midday:</i>												
Brady Drive EB approach	--	--	--	--	--	--	--	--	0.08	7.2	A	--/6
Brady Drive WB approach	--	--	--	--	--	--	--	--	0.00	0.0	A	--/0
Site Driveway SB approach	--	--	--	--	--	--	--	--	0.12	8.8	A	--/10

^a Volume-to-capacity ratio.

^b Average control delay in seconds per vehicle.

^c Level of service.

^d Maximum queue length in feet per lane during an average/95th percentile cycle (assuming 25 feet per vehicle).

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

RECOMMENDED IMPROVEMENTS

The final phase of the transportation analysis process is to identify improvement measures necessary to minimize the impact of the project and also improve existing operating conditions on the transportation system. Improvements considered necessary to address existing and future roadway system deficiencies are discussed below as they relate to impacts as a result of background growth and to project-generated impacts.

NH Route 102 (Derry Road) at Robinson Road and West Road

Due to the impacts that the proposed Dunkin' Donuts and retail development would have at the intersection of NH Route 102, Robinson Road, and West Road during the weekday AM and Saturday midday peak hours, improvement measures have been investigated. Accordingly, traffic signal timing modifications are recommended at this location. These modifications include increasing the minimum green time on the Robinson Road approach from 15 seconds to 25 seconds. These modifications can be accomplished by taking time from the other approaches without impacting level-of-service. Specifically, lowering the minimum green time for the West Road southbound approach from 15 seconds to 11 seconds and lowering the minimum green time for the NH Route 102 eastbound approach from 30 seconds to 24 seconds. With the improved timings, the intersection is anticipated to operate at an overall LOS C during the weekday AM and Saturday midday peak hours with all lane groups operating at LOS D or better and all v/c ratios are expected to be below 1.00, indicating there will be adequate capacity to accommodate the anticipated traffic volumes. The capacity analysis results are shown in Tables 8 and 9.

In addition, the collision history at the NH Route 102 intersection with Robinson Road and West Road indicates that collisions may have resulted from driver confusion over the permitted left-turn phasing of Robinson Road and West Road. Therefore, it is recommended that LEFT TURN YIELD ON GREEN BALL signs (R10-12) be posted on the Robinson Road northbound and West Road southbound approaches to the intersection to reduce driver confusion. These signs should be mounted on the overhead traffic signal mast arm adjacent to the traffic signal face on the left (end of mast arm). This places the sign over the lane in which left turns are made from. Some of the emergency pre-emption equipment may have to be relocated on each mast arm in order to accommodate the new sign. Figure 8 below shows the proposed placement of the R10-12 sign for the Robinson Road and West Road approaches.

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

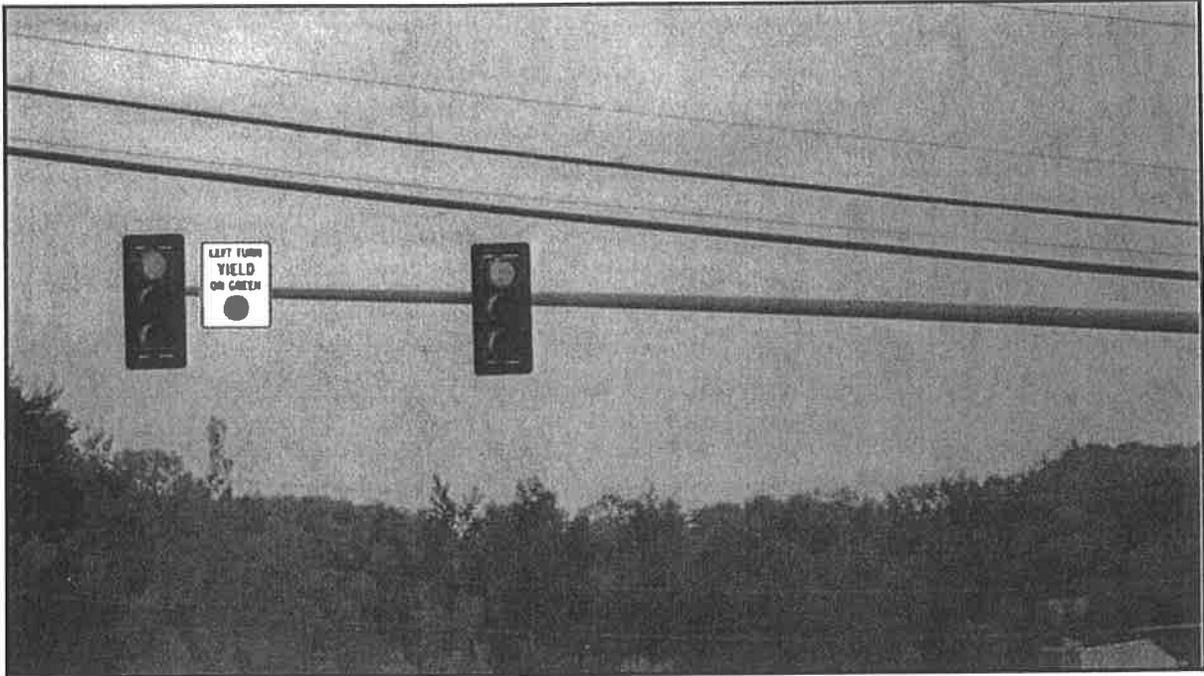


Figure 8
Placement of R10-12 sign on mast arm

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

**Table 8
LEVEL-OF-SERVICE AND QUEUE ANALYSIS SUMMARY – 2014 CONDITIONS WITH IMPROVEMENTS**

Intersection/Peak Hour/Lane Group	2014 No-Build				2014 Build				2014 Build with Improvements			
	V/C ^a	Del. ^b	LOS ^c	Queue ^d	V/C	Del.	LOS	Queue	V/C	Del.	LOS	Queue
NH Route 102 at Robinson Road and West Road Weekday AM:												
NH Route 102 EB left-turns	0.28	30.4	C	12/39	0.27	29.2	C	10/39	0.36	34.5	D	17/45
NH Route EB through/right-turns	0.44	15.4	B	83/134	0.20	14.7	B	25/53	0.21	16.9	B	32/60
NH Route WB left-turns	0.32	25.6	C	28/70	0.42	24.7	C	36/98	0.53	31.1	C	59/110
NH Route WB through	0.66	16.4	B	102/301	0.67	17.0	B	98/288	0.72	21.6	C	207/312
NH Route WB right-turns	0.03	9.7	A	0/14	0.03	10.1	B	0/14	0.03	12.3	B	0/15
Robinson Rd. NB left-turns/through	0.79	37.0	D	82/205	0.97	64.6	E	93/270	0.77	30.5	C	129/211
Robinson Rd. NB right-turns	0.18	18.6	B	11/48	0.29	18.5	B	19/71	0.22	16.2	B	19/51
West Rd. SB left-turns/through	0.52	23.4	C	46/114	0.59	24.3	C	42/143	0.40	18.2	B	57/101
West Rd. SB right-turns	0.06	17.7	B	0/28	0.06	16.5	B	0/28	0.06	14.9	B	0/24
Overall Intersection	0.68	20.1	C	--	0.76	26.4	C	--	0.74	22.0	C	--
<i>Saturday Midday:</i>												
NH Route 102 EB left-turns	0.31	29.0	C	23/55	0.31	28.9	C	23/54	0.56	42.2	D	27/63
NH Route EB through/right-turns	0.40	15.3	B	82/130	0.43	16.0	B	88/133	0.47	18.5	B	106/154
NH Route WB left-turns	0.40	26.7	C	46/84	0.51	27.6	C	62/111	0.64	35.5	D	73/122
NH Route WB through	0.71	19.0	B	199/302	0.69	18.4	B	191/290	0.71	20.5	C	219/302
NH Route WB right-turns	0.05	11.0	B	0/19	0.05	11.0	B	0/19	0.05	12.0	B	0/20
Robinson Rd. NB left-turns/through	0.72	32.7	C	90/189	0.95	65.0	E	133/256	0.71	27.5	C	109/175
Robinson Rd. NB right-turns	0.13	19.1	B	8/44	0.24	19.9	B	22/65	0.17	16.5	B	12/45
West Rd. SB left-turns/through	0.61	26.9	C	75/136	0.75	35.9	D	81/164	0.48	20.1	C	71/109
West Rd. SB right-turns	0.05	18.4	B	0/24	0.05	18.4	B	0/24	0.05	15.6	B	0/20
Overall Intersection	0.68	20.6	C	--	0.76	26.0	C	--	0.68	21.7	C	--

^a Volume-to-capacity ratio.

^b Average control delay in seconds per vehicle.

^c Level of service.

^d Maximum queue length in feet per lane during an average/95th percentile cycle (assuming 25 feet per vehicle).

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

**Table 9
LEVEL-OF-SERVICE AND QUEUE ANALYSIS SUMMARY – 2024 CONDITIONS WITH IMPROVEMENTS**

Intersection/Peak Hour/Lane Group	2024 No-Build				2024 Build				2024 Build with Improvements			
	V/C ^a	Del. ^b	LOS ^c	Queue ^d	V/C	Del.	LOS	Queue	V/C	Del.	LOS	Queue
NH Route 102 at Robinson Road and West Road												
<i>Weekday AM:</i>												
NH Route 102 EB left-turns	0.24	28.8	C	16/43	0.24	29.0	C	16/43	0.41	38.9	D	19/48
NH Route EB through/right-turns	0.46	15.5	B	96/151	0.50	16.5	B	104/156	0.57	20.9	C	127/181
NH Route WB left-turns	0.35	26.7	C	38/76	0.47	27.5	C	56/108	0.59	35.7	D	64/117
NH Route WB through	0.75	20.3	C	214/347	0.72	19.2	B	205/334	0.78	25.0	C	240/376
NH Route WB right-turns	0.03	10.5	B	0/15	0.03	10.4	B	0/15	0.03	12.8	B	0/16
Robinson Rd. NB left-turns/through	0.95	66.2	E	135/244	1.21	150.7	F	196/318	0.86	40.7	D	148/245
Robinson Rd. NB right-turns	0.23	20.1	C	20/56	0.35	21.6	C	36/84	0.25	17.4	B	23/58
West Rd. SB left-turns/through	0.68	31.9	C	67/156	0.87	57.9	E	77/190	0.47	20.3	C	65/114
West Rd. SB right-turns	0.06	18.8	B	0/30	0.06	18.9	B	0/30	0.06	15.7	B	0/24
Overall Intersection	0.77	25.9	C	--	0.80	41.4	D	--	0.77	25.4	C	--
<i>Saturday Midday:</i>												
NH Route 102 EB left-turns	0.34	29.6	C	26/58	0.34	30.8	C	25/58	0.52	40.8	D	30/68
NH Route EB through/right-turns	0.43	15.5	B	94/144	0.47	17.3	B	102/148	0.53	21.0	C	121/171
NH Route WB left-turns	0.43	27.4	C	51/92	0.47	26.4	C	68/118	0.58	33.2	C	79/130
NH Route WB through	0.77	21.2	C	232/348	0.71	18.5	B	224/337	0.78	24.0	C	254/348
NH Route WB right-turns	0.06	10.9	B	0/20	0.05	10.3	B	0/20	0.05	12.6	B	0/21
Robinson Rd. NB left-turns/through	0.86	49.3	D	104/222	1.24	164.2	F	170/294	0.83	39.5	D	125/223
Robinson Rd. NB right-turns	0.17	19.9	B	13/51	0.29	22.7	C	28/74	0.20	18.3	B	17/52
West Rd. SB left-turns/through	0.76	36.9	D	86/168	1.09	119.2	F	113/204	0.60	24.9	C	82/125
West Rd. SB right-turns	0.06	19.0	B	0/25	0.06	20.6	C	0/24	0.06	17.1	B	0/21
Overall Intersection	0.76	24.2	C	--	0.84	46.3	D	--	0.79	25.2	C	--

^a Volume-to-capacity ratio.

^b Average control delay in seconds per vehicle.

^c Level of service.

^d Maximum queue length in feet per lane during an average/95th percentile cycle (assuming 25 feet per vehicle).

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

CONCLUSIONS AND RECOMMENDATIONS

Existing and future conditions in the study area have been described, analyzed, and evaluated with respect to traffic operations and the impact of the proposed self-storage facility. Conclusions of this effort and recommendations are presented below.

- As proposed, the development consists of constructing a $\pm 5,900$ square foot building which will include a $\pm 2,500$ square foot Dunkin' Donuts with a drive-through window and an additional $\pm 3,400$ square feet of retail space. The Dunkin' Donuts facility is being relocated from within the Irving Oil/Circle K gasoline station (205 Robinson Road) onto Brady Drive. Access to the site is proposed via a full-access/egress driveway on Brady Drive. Brady Drive intersects Robinson Road from the east, opposite the Irving Oil/Circle K gasoline station driveway.
- The proposed Dunkin' Donuts and retail development is expected to generate 131 *new* vehicle trips (69 entering and 62 exiting) during the weekday AM peak hour and 120 *new* vehicle trips (60 entering and 60 exiting) during the Saturday midday peak hour. Increases in traffic on roadways leading beyond the study area as a result of the project during the weekday AM and Saturday midday peak hours are expected in the range of 12 to 53 vehicles per hour. These increases represent, on average, approximately 1 additional vehicle every 1 to 5 minutes during the peak hours.
- Available sight distances at the proposed site driveway exceed the minimum and desirable AASHTO requirements for safe operation, as well as the Town of Hudson and NHDOT All Season Safe Sight Distance requirement. To ensure the safe and efficient flow of traffic to and from the site, it is recommended that any proposed plantings, vegetation, landscaping, and signing along the site frontage be kept low to the ground or set back sufficiently from the edge of the Robinson Road and the site driveway so as not to inhibit the available sight lines.
- The collision history at the NH Route 102 intersection with Robinson Road and West Road indicates that collisions may have resulted from driver confusion over the permitted left-turn phasing of Robinson Road and West Road. Therefore, it is recommended that LEFT TURN YIELD ON GREEN BALL signs (R10-12) be posted on the Robinson Road northbound and West Road southbound approaches to the intersection to reduce driver confusion. These signs should be mounted on the overhead traffic signal mast arm.
- The drive-through window lane is proposed to be 12-feet wide and provide approximately 280 feet of storage on-site. Based on an average length of vehicle of 20 feet, the drive-through lane provides storage for at least 10 vehicles without interrupting on-site circulation and 4 additional vehicles without disrupting flow on Brady Drive, for a total of 14 vehicles.

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

Accordingly, there is adequate room on-site to accommodate 12 vehicles which meets the Town of Hudson requirements for drive-through lanes.

- The intersection of NH Route 102, Robinson Road, and West Road is expected to be impacted the most by the proposed development. To mitigate the impacts of the proposed Dunkin' Donuts and retail development, traffic signal timing modifications are recommended at this location. These modifications include increasing the minimum green time on the Robinson Road approach from 15 seconds to 25 seconds. These modifications can be accomplished by taking time from the other approaches without impacting level-of-service. Specifically, lowering the minimum green time for the West Road southbound approach from 15 seconds to 11 seconds and lowering the minimum green time on the NH Route 102 eastbound approach from 30 seconds to 24 seconds. With the improved timings, the intersection is anticipated to operate at an overall LOS C during the weekday AM and Saturday midday peak hours with all lane groups operating at LOS D or better and all v/c ratios are expected to be below 1.00, indicating there will be adequate capacity to accommodate the anticipated traffic volumes.
- Under 2014 and 2024 Build traffic conditions, the Robinson Road major street movements at its intersection with the Irving Oil/Circle K driveway and Brady Road are expected to operate at optimal levels (LOS A) during the weekday AM and Saturday midday peak hours. The Brady Drive approach is expected to operate at desirable levels (LOS B) during the weekday AM and Saturday midday peak hours with the proposed development in place. The Irving Oil/Circle K driveway is expected to operate with long delays (LOS E/F) during the weekday AM and Saturday midday peak hours with the addition of future traffic growth in the area. It is important to note that the operations at the 205 Robinson Road driveway under future Build conditions could operate at better LOS if a lower generator re-occupied the existing Dunkin' Donuts space. The v/c ratios, however, are expected to be well below 1.00 (0.82 or less) indicating there will be capacity available with the proposed development in place. A queue of approximately 6-7 vehicles or less is anticipated on the Irving Oil/Circle K site driveway and a queue of less than 1 vehicle is anticipated on the Brady Drive approach as well as the Robinson Road approaches during the peak hours analyzed. From this, it can be concluded that the proposed Dunkin' Donuts facility is not expected to have a significant impact on the operations of Robinson Road. The analysis results are expected to be better than as modeled if motorists accept smaller gaps in traffic along this section of Robinson Road. In addition, the analysis model does not account for the nearby traffic signal located on NH Route 102 at Robinson Road to the north. These traffic signals provide gaps in the traffic stream which allow motorists more opportunity to enter and exit driveways and curb cuts along Robinson Road.
- All movements at the unsignalized intersection of Brady Drive and the proposed site driveway are anticipated to operate at optimal levels of service (LOS A) under future analysis

TRAFFIC IMPACT AND ACCESS STUDY

Proposed Dunkin' Donuts and Retail Development - Hudson, New Hampshire

conditions. The additional traffic generated by the proposed development is not anticipated to change service levels on any given lane group or increase vehicular queues on any given lane by more than one vehicle. Additionally, the v/c ratios are expected to be well below 1.00, indicating there will be adequate capacity to accommodate the anticipated traffic volumes.

"E"

PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: 1/27/14 Tax Map # 105 Lot # 19
Name of Project: Dunkin Donuts
Zoning District: _____ General SP# 01-14
(For Town Use) (For Town Use)
ZBA Action: _____



PROPERTY OWNER: DEVELOPER:
Name: Noury Investments, LLC Cafua Management Group
Address: 17 Einathans Way 280 Merrimack Street, Suite A
Address: Hollis, NH 03049 Methuen, MA 01844
Telephone # (603) 235-6897 (978) 682-2382
Fax # _____ (978) 683-2634
Email: _____ gnolan@cafua.com

PROJECT ENGINEER SURVEYOR
Name: Keach Nordstrom Assoc., Inc. Keach Nordstrom Assoc., Inc.
Address: 10 Commerce Park No., Suite 3 10 Commerce Park No., Suite 3
Address: Bedford, NH 03110 Bedford, NH 03110
Telephone # (603) 627-2881 (603) 627-2881
Fax # (603) 627-2915 (603) 627-2915
Email: skench@keachnordstrom.com abasso@keachnordstrom.com

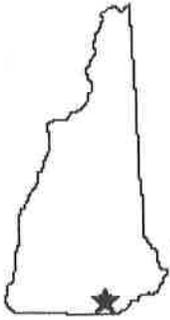
RECEIVED
FEB 04 2014

BY:

PURPOSE OF PLAN:

To illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements.

For Town Use
Plan Routing Date: 2-3-14 Sub/Site Date: 2-25-14 @ 10:00 AM
____ I have no comments I have comments (attach to form)
Job Title: Deputy Fire Chief Date: 2/7/14
(Initials)
DEPT:
____ Zoning ____ Engineering ____ Assessor ____ Police Fire ____ Planning
____ Consultant ____ Highway Department
Fees Paid: _____



TOWN OF HUDSON

FIRE DEPARTMENT

39 FERRY STREET, HUDSON, NEW HAMPSHIRE 03051



Emergency 911
Business 603-886-6021
Fax 603-594-1164

Robert M. Buxton
Chief of Department

TO: John M. Cashell
Town Planner

FR: John J. O'Brien
Deputy Fire Chief

DT: February 7, 2014

RE: Dunkin Donuts Brady Drive Hudson N.H.

A site plan review was conducted for the above proposed development. Fire Dept comments are listed below.

- 1) Addressing of this building shall be completed by the Hudson Fire Prevention Division.
- 2) Hudson Town Code requires that the building be connected to the Municipal Alarm System via master connected box. Contact Fire Prevention Officer Steve Dube for specifics.
- 3) Provide a Fire Hydrant at the entrance off Brady Drive. This is marked on drawings on Page 3 of 12. (NFPA 1141 Fire Protection in planned building groups)

If I can be of any further assistance please call at 886-6021 or e mail jobrien@hudsonnh.gov

John J. O'Brien
Deputy Fire Chief *JOB*

**PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: 1/27/14 Tax Map # 105 Lot # 19
 Name of Project: Dunkin Donuts
 Zoning District: _____ General SP# 01-14
 (For Town Use) (For Town Use)
 ZBA Action: _____



<u>PROPERTY OWNER:</u>	<u>DEVELOPER:</u>
Name: <u>NOURY Investments, LLC</u>	<u>Cafua Management Group</u>
Address: <u>17 Einathans Way</u>	<u>280 Merrimack Street, Suite A</u>
Address: <u>Hollis, NH 03049</u>	<u>Methuen, MA 01844</u>
Telephone # <u>(603) 235-6897</u>	<u>(978) 682-2382</u>
Fax # _____	<u>(978) 683-2634</u>
Email: _____	<u>gnolan@cafua.com</u>

<u>PROJECT ENGINEER</u>	<u>SURVEYOR</u>
Name: <u>Keach Nordstrom Assoc., Inc.</u>	<u>Keach Nordstrom Assoc., Inc.</u>
Address: <u>10 Commerce Park No., Suite 3</u>	<u>10 Commerce Park No., Suite 3</u>
Address: <u>Bedford, NH 03110</u>	<u>Bedford, NH 03110</u>
Telephone # <u>(603) 627-2881</u>	<u>(603) 627-2881</u>
Fax # <u>(603) 627-2915</u>	<u>(603) 627-2915</u>
Email: <u>skeach@keachnordstrom.com</u>	<u>abasso@keachnordstrom.com</u>

PURPOSE OF PLAN:
To illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements.

<i>For Town Use</i>	
Plan Routing Date: <u>2-3-14</u>	Sub/Site Date: <u>2-25-14 @ 10:00 AM</u>
<input checked="" type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
<u>KB</u> (Initials)	Title: <u>ROAD AGENT</u> Date: <u>2/5/14</u>
DEPT: _____ Zoning _____ Engineering _____ Assessor _____ Police _____ Fire _____ Planning _____ _____ Consultant _____ Highway Department _____	
Fees Paid: _____	

**PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: 1/27/14 Tax Map # 105 Lot # 19
 Name of Project: Dunkin Donuts
 Zoning District: _____ General SP# 01-14
 (For Town Use) (For Town Use)
 ZBA Action: _____



<u>PROPERTY OWNER:</u>	<u>DEVELOPER:</u>
Name: <u>NOURY Investments, LLC</u>	<u>Cafua Management Group</u>
Address: <u>17 Einathans Way</u>	<u>280 Merrimack Street, Suite A</u>
Address: <u>Hollis, NH 03049</u>	<u>Methuen, MA 01844</u>
Telephone # <u>(603) 235-6897</u>	<u>(978) 682-2382</u>
Fax # _____	<u>(978) 683-2634</u>
Email: _____	<u>gnolan@cafua.com</u>
<u>PROJECT ENGINEER</u>	<u>SURVEYOR</u>
Name: <u>Keach Nordstrom Assoc., Inc.</u>	<u>Keach Nordstrom Assoc., Inc.</u>
Address: <u>10 Commerce Park No., Suite 3</u>	<u>10 Commerce Park No., Suite 3</u>
Address: <u>Bedford, NH 03110</u>	<u>Bedford, NH 03110</u>
Telephone # <u>(603) 627-2881</u>	<u>(603) 627-2881</u>
Fax # <u>(603) 627-2915</u>	<u>(603) 627-2915</u>
Email: <u>skeach@keachnordstrom.com</u>	<u>abasso@keachnordstrom.com</u>

PURPOSE OF PLAN:

To illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements.

<i>For Town Use</i>	
Plan Routing Date: <u>2-3-14</u>	Sub/Site Date: <u>2-25-14 @ 10:00 AM</u>
<input checked="" type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
(Initials) <u>Jm</u>	Title: <u>Asst. Assessor</u> Date: <u>2-4-14</u>
DEPT: _____ Zoning _____ Engineering _____ Assessor _____ Police _____ Fire _____ Planning _____ _____ Consultant _____ Highway Department	
Fees Paid: _____	

**PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: 1/27/14 Tax Map # 105 Lot # 19
 Name of Project: Dunkin Donuts
 Zoning District: _____ General SP# 01-14
 (For Town Use) (For Town Use)
 ZBA Action: _____



<u>PROPERTY OWNER:</u>	<u>DEVELOPER:</u>
Name: <u>NOURY Investments, LLC</u>	<u>Cafua Management Group</u>
Address: <u>17 Einathans Way</u>	<u>280 Merrimack Street, Suite A</u>
Address: <u>Hollis, NH 03049</u>	<u>Methuen, MA 01844</u>
Telephone # <u>(603) 235-6897</u>	<u>(978) 682-2382</u>
Fax # _____	<u>(978) 683-2634</u>
Email: _____	<u>gnolan@cafua.com</u>

<u>PROJECT ENGINEER</u>	<u>SURVEYOR</u>
Name: <u>Keach Nordstrom Assoc., Inc.</u>	<u>Keach Nordstrom Assoc., Inc.</u>
Address: <u>10 Commerce Park No., Suite 3</u>	<u>10 Commerce Park No., Suite 3</u>
Address: <u>Bedford, NH 03110</u>	<u>Bedford, NH 03110</u>
Telephone # <u>(603) 627-2881</u>	<u>(603) 627-2881</u>
Fax # <u>(603) 627-2915</u>	<u>(603) 627-2915</u>
Email: <u>skeach@keachnordstrom.com</u>	<u>abasso@keachnordstrom.com</u>

PURPOSE OF PLAN:

To illustrate the proposed layout of a Dunkin Donuts and two commercial rental spaces with all associated site improvements.

<i>For Town Use</i>	
Plan Routing Date: <u>2-3-14</u>	Sub/Site Date: <u>2-25-14 @ 10:00 AM</u>
<input checked="" type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
<u>MAO</u> (Initials)	Title: <u>Z.A.</u> Date: _____
DEPT: <input checked="" type="checkbox"/> Zoning <input type="checkbox"/> Engineering <input type="checkbox"/> Assessor <input type="checkbox"/> Police <input type="checkbox"/> Fire <input type="checkbox"/> Planning <input type="checkbox"/> Consultant <input type="checkbox"/> Highway Department	
Fees Paid: _____	

CAP FEE WORKSHEET

“F”

Date: 03/06/14 Sector #: 2 Map/Lot: 105/019

Project Name: **Dunkin Donuts Brady Drive**

Proposed ITE Use #1: Fast-Food W Drive-Thru

Proposed Building Area (square footage): 2,210 S.F.

CAP FEES: (THREE CHECKS NEEDED)

- 1. (Bank 08)
 - (2070-090) Route 3A: \$4,486.30 (Rte. 3A)
 - (2070-091) Route 102: \$10,254.40 (Rte. 102)
 - (2070-086) Route 111: \$5,768.10 (Rte. 111)

Total CAP Fee: **\$20,508.80**

- 2. (2050-182) Recreation: N/A

- 3. (2080-051) School: N/A
- (2080-052) Library: N/A

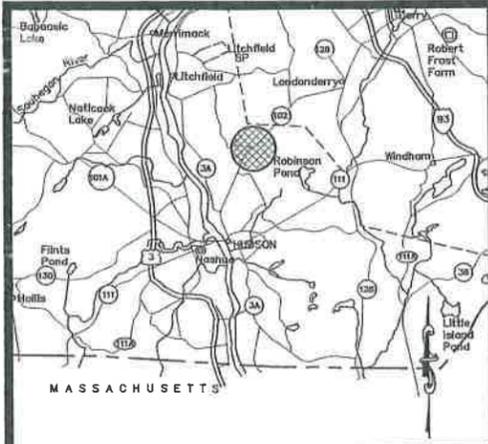
Proposed ITE Use #2: **Retail Use (Shopping Center)**

Proposed Building Area (square footage): 3,250 S.F.

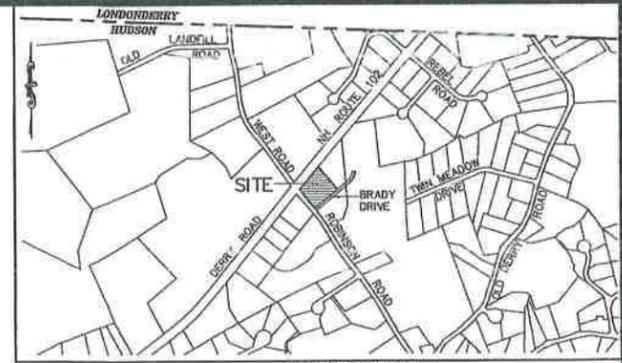
- Route 3A: \$2,502.50
- Route 102: \$5,720.00
- Route 111: \$3,217.50

Total CAP Fee: **\$11,440.00**

TOTAL CAP FEE: **\$31,948.80**



VICINITY PLAN
NOT TO SCALE



VICINITY PLAN
SCALE: 1" = 1,000'

NON-RESIDENTIAL SITE PLAN DUNKIN DONUTS

MAP 105; LOT 19 14 BRADY DRIVE HUDSON, NEW HAMPSHIRE



OWNER OF MAP 105; LOT 19
SIGNATURE: _____
DATE: _____

OWNER:
NOURY INVESTMENTS, LLC.
 17 ELNATHANS WAY
 HOLLIS, NEW HAMPSHIRE 03049

APPLICANT:
CAFUA MANAGEMENT GROUP
 ATTN: GREGORY NOLAN
 280 MERRIMACK STREET, SUITE A
 METHUEN, MASSACHUSETTS 01844

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
 10 COMMERCE PARK NORTH, SUITE 3B
 BEDFORD, NEW HAMPSHIRE 03110
 (603) 627-2881

IN ASSOCIATION WITH:
ADVANCED ONSITE SOLUTIONS, LLC.
 GARY R. SPAULDING
 PO BOX 248
 CANTERBURY, NEW HAMPSHIRE 03224
 (603) 783-8042

<u>SHEET TITLE</u>	<u>SHEET No.</u>
MASTER PLAN	1
EXISTING CONDITIONS PLAN	2
NON-RESIDENTIAL SITE LAYOUT PLAN	3
GRADING AND DRAINAGE PLAN	4
DRAINAGE PROFILES	5
EROSION CONTROL PLAN	6
LANDSCAPE PLAN	7
LIGHTING PLAN	8
CONSTRUCTION DETAILS	9 - 12
SEPTIC DESIGN PLAN & DETAILS (BY ADVANCED ONSITE SOLUTIONS, LLC.)	1 - 2



KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

JANUARY 24, 2014
 PROJECT NO. 13-0304-1

PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.
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MAP 105; LOT 4
WALTER DUCHARME, JR.
78 RIVER ROAD
HUDSON, NH 03051
H.C.R.D. BK. 7559, PG. 244
ZONE: I

MAP 105; LOT 2
L.P. GAS EQUIPMENT, INC.
PO BOX 1800
ROCHESTER, NH 03066-1800
H.C.R.D. BK. 7590, PG. 2291
ZONE: B

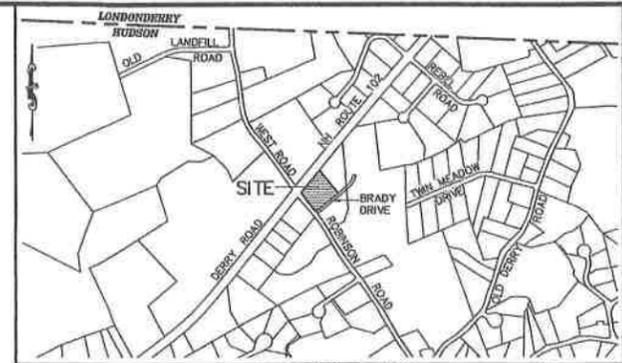
MAP 105; LOT 11
COBALT PROPERTIES NH CORP.
55 UNION STREET, STE. 700
SAINT JOHN, NB E2L 5B7
H.C.R.D. BK. 8043, PG. 1327
ZONE: B

MAP 105; LOT 20
NOURY INVESTMENTS, LLC.
17 ELMATHANS WAY
HOLLIS, NH 03049
H.C.R.D. BK. 8369, PG. 2857
ZONE: G-1

MAP 105; LOT 18
NOURY INVESTMENTS, LLC.
17 ELMATHANS WAY
HOLLIS, NH 03049
H.C.R.D. BK. 8369, PG. 2857
ZONE: G-1

MAP 105; LOT 17
NOURY INVESTMENTS, LLC.
17 ELMATHANS WAY
HOLLIS, NH 03049
H.C.R.D. BK. 8421, PG. 155
ZONE: G-1

MAP 105; LOT 11-1
JAJJ REALTY LLC.
c/o MELISSA HOFFMAN DANCE
40 PARMENTER ROAD
LONDONDERRY, NH 03053
H.C.R.D. BK. 7864, PG. 783
ZONE: B



VICINITY PLAN
SCALE: 1" = 1,000'

REFERENCE PLAN:

1. "MILC SUBDIVISION, DERRY ROAD-RTE. 102 & ROBISON ROAD," HUDSON, NH, PREPARED FOR NOURY INVESTMENTS, LLC., PREPARED BY MAYNARD & PACQUETTE ENGINEERING ASSOCIATES, LLC., DATED JANUARY 10, 2003.
2. "NON-RESIDENTIAL SITE PLAN, ROBISON ROAD SELF STORAGE, MAP 105; LOT 17, ROBISON ROAD & DERRY ROAD (NH ROUTE 102), HUDSON, NEW HAMPSHIRE," DATED: AUGUST 2010, WITH REVISIONS THROUGH 01/03/11, PREPARED BY: KEACH-NORDSTROM ASSOCIATES, INC. (22 SHEETS).

PROJECT NOTES:

1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE PROPOSED LAYOUT OF A DUNKIN DONUTS AND UNSPECIFIED RETAIL SPACE WITH ASSOCIATED SITE APPURTENANCES ON MAP 105; LOT 19.
2. LOT NUMBERS REFER TO THE TOWN OF HUDSON ASSESSORS MAP 105; LOT 19.
3. TOTAL SITE AREA IS 94,981 SF, OR 2.180 ACRES.
4. PRESENT ZONING: GENERAL ONE (G-1)
MINIMUM LOT REQUIREMENTS:
- LOT AREA 97,120 SF
- LOT FRONTAGE 200 FT
MINIMUM BUILDING SETBACK REQUIREMENTS:
- FRONT 50 FT
- SIDE 15 FT
- REAR 15 FT
5. BOUNDARY AND TOPOGRAPHIC INFORMATION IS FROM AN ON THE GROUND FIELD SURVEY PERFORMED BY THIS OFFICE BETWEEN MARCH 2010 AND MAY 2013.
6. PRESENT OWNER OF RECORD:
NOURY INVESTMENTS, LLC.
17 ELMATHANS WAY
HOLLIS, NH 03049
BK. 8369, PG. 2857
7. SITE WILL BE SERVICED BY ON-SITE WELL AND SEPTIC.
8. THE SUBJECT PREMISES IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE, AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 33011C0508D, PANEL 508 OF 701 WITH AN EFFECTIVE DATE OF SEPTEMBER 25, 2009. THE SUBJECT PARCEL IS LOCATED IN ZONE "X".
9. THE CONTRACTOR SHALL ONLY USE BENCHMARKS AS PROVIDED BY THE ENGINEER OF RECORD (KEACH-NORDSTROM ASSOCIATES, INC.).
10. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. LOCATIONS SHOWN WERE TAKEN FROM FIELD SURVEY AND REFERENCE PLANS. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
11. BUILDING AREA:
TENANT A (DUNKIN DONUTS) = 2,210 SF
TENANT B (UNSPECIFIED) = 1,625 SF
TENANT C (UNSPECIFIED) = 1,625 SF
TOTAL BUILDING AREA = 5,460 SF
12. PARKING:
REQUIRED:
DRIVE THROUGH RESTAURANT: 12 STACKING SPACES
RETAIL: 1 SPACE/200 SF = 3,250 SF/200 = 16 SPACES
RESTAURANT WITH NO BAR: 1 SPACE/100 SF = 2,210 SF/100 = 22 SPACES
TOTAL SPACES REQUIRED = 38 SPACES + 12 STACKING SPACES
PROPOSED: 42 SPACES PROVIDED (INCLUDES 2 HANDICAP SPACES) + 12 STACKING SPACES
13. LOADING:
REQUIRED: 1 SPACE/FIRST 5,000 SF + 1 SPACE/10,000 SF
TOTAL SPACES REQUIRED = 1 SPACE
PROPOSED: 1 SPACE PROVIDED
14. OPEN SPACE:
REQUIRED = 35.0%
PROVIDED = 58.2%
15. SITE LIGHTING SHALL BE AS SHOWN ON THE PLAN, DIRECTED ONTO SITE, AND SHALL CONFORM WITH ALL APPLICABLE TOWN OF HUDSON ZONING REGULATIONS.
16. PROPOSED IDENTIFICATION SIGNAGE SHALL BE LOCATED AS SHOWN AND SHALL BE IN COMPLIANCE WITH ARTICLE 12 OF THE HUDSON ZONING ORDINANCE WITH REGARD TO DIMENSIONS AND LIGHTING. SIGNAGE DESIGN, DETAILS, AND NOTES TO BE PROVIDED BY OWNER/CONTRACTOR DURING THE BUILDING APPLICATION PROCESS. ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON PLANNING BOARD PRIOR TO INSTALLATION THERE OF.
17. SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADE.
18. IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE TOWN OF HUDSON PLANNING BOARD.
19. TRASH PICK-UP SHALL NOT OCCUR EARLIER THAN 7:00 AM NOR LATER THAN 7:00 PM, MONDAY THROUGH FRIDAY ONLY.
20. CONSTRUCTION ACTIVITIES ON THE SITE SHALL BE LIMITED TO BETWEEN 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY. NO CONSTRUCTION ACTIVITIES SHALL OCCUR ON SUNDAYS.
21. IF LOT DEVELOPMENT INVOLVES BLASTING AND/OR RAMMING OF BEDROCK MATERIALS, SAID ACTIVITIES SHALL BE LIMITED TO THE HOURS BETWEEN 7:00 AM AND 5:00 PM MONDAY THROUGH SATURDAY ONLY. SAID BLASTING/RAMMING ACTIVITIES SHALL BE PROHIBITED ON SUNDAYS AND NATIONAL HOLIDAYS.

(I) INDUSTRIAL DISTRICT
(B) BUSINESS DISTRICT

(B) BUSINESS DISTRICT
(G-1) GENERAL 1

LEGEND

- STONE BOUND FOUND
- IRON PIN FOUND
- ABUTTER LINE
- PROPERTY LINE
- CHAIN LINK FENCE
- GUARDRAIL
- TREELINE
- EDGE OF PAVEMENT
- STONEWALL
- BUILDING SETBACK
- EXISTING EASEMENT
- PROP. EDGE OF PAVEMENT
- PROP. BITUMINOUS CURB
- PROPOSED EASEMENT
- ZONE LINE
- PROPOSED GUARDRAIL

PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.



NOTES (CONTINUED):

22. REQUIRED STATE PERMITS FOR CONSTRUCTION:
NHDES INDIVIDUAL SUBSURFACE SEPTIC DISPOSAL SYSTEM APPROVAL STATUS: PENDING
NHDES ALTERATION OF TERRAIN PERMIT STATUS: PENDING
NHDES NON-COMMUNITY PUBLIC WATER SYSTEMS PERMIT STATUS: PENDING
23. WAIVERS REQUESTED:
HTC 275-B(C) - NOISE STUDY
HTC 275-B(D) - FISCAL/ENVIRONMENTAL IMPACT STUDY
24. PRIOR TO THE ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY, AN L.L.S. CERTIFIED "AS-BUILT" SITE PLAN SHALL BE PROVIDED TO THE TOWN OF HUDSON COMMUNITY DEVELOPMENT DEPARTMENT, CONFIRMING THAT THE SITE CONFORMS WITH THE PLANNING BOARD APPROVED SITE PLAN.
25. PLOWED SNOW FROM THE FACILITIES, DRIVEWAY, PARKING LOTS AND SIDEWALK 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 IN AN ENVIRONMENTALLY SOUND FASHION IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
26. THE ON-SITE DRAINAGE SYSTEM SHALL BE CONSTRUCTED AND MAINTAINED IN COMPLIANCE WITH NHDES REQUIREMENTS FOR SUCH SYSTEMS.
27. THIS PLAN SHALL BE SUBJECT TO FINAL ENGINEERING REVIEW AND APPROVAL, INCLUDING APPROVAL OF THE SWPPP.
28. THE APPLICANT'S ENGINEER AND/OR CONTRACTOR SHALL CONTACT THE TOWN OF HUDSON TO SCHEDULE A PRECONSTRUCTION MEETING, WHICH WILL BE HELD WITH STAFF PRIOR TO STARTING CONSTRUCTION.
29. ALL IMPROVEMENTS SHOWN ON THE SITE PLAN OF RECORD, INCLUDING NOTES 1-29 ON THIS SHEET, SHALL BE COMPLETED IN THEIR ENTIRETY AT THE EXPENSE OF THE APPLICANT OR HIS ASSIGNS.

GRAPHIC SCALE



1/27/14
DATE

MASTER SITE PLAN
DUNKIN DONUTS

MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
NOURY INVESTMENTS, LLC.
17 ELMATHANS WAY
HOLLIS, NH 03049
BK. 8369, PG. 2857

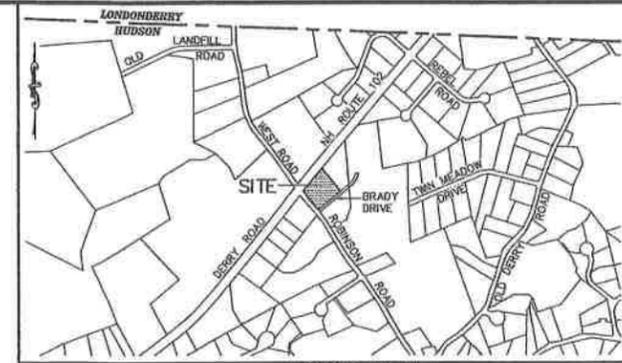
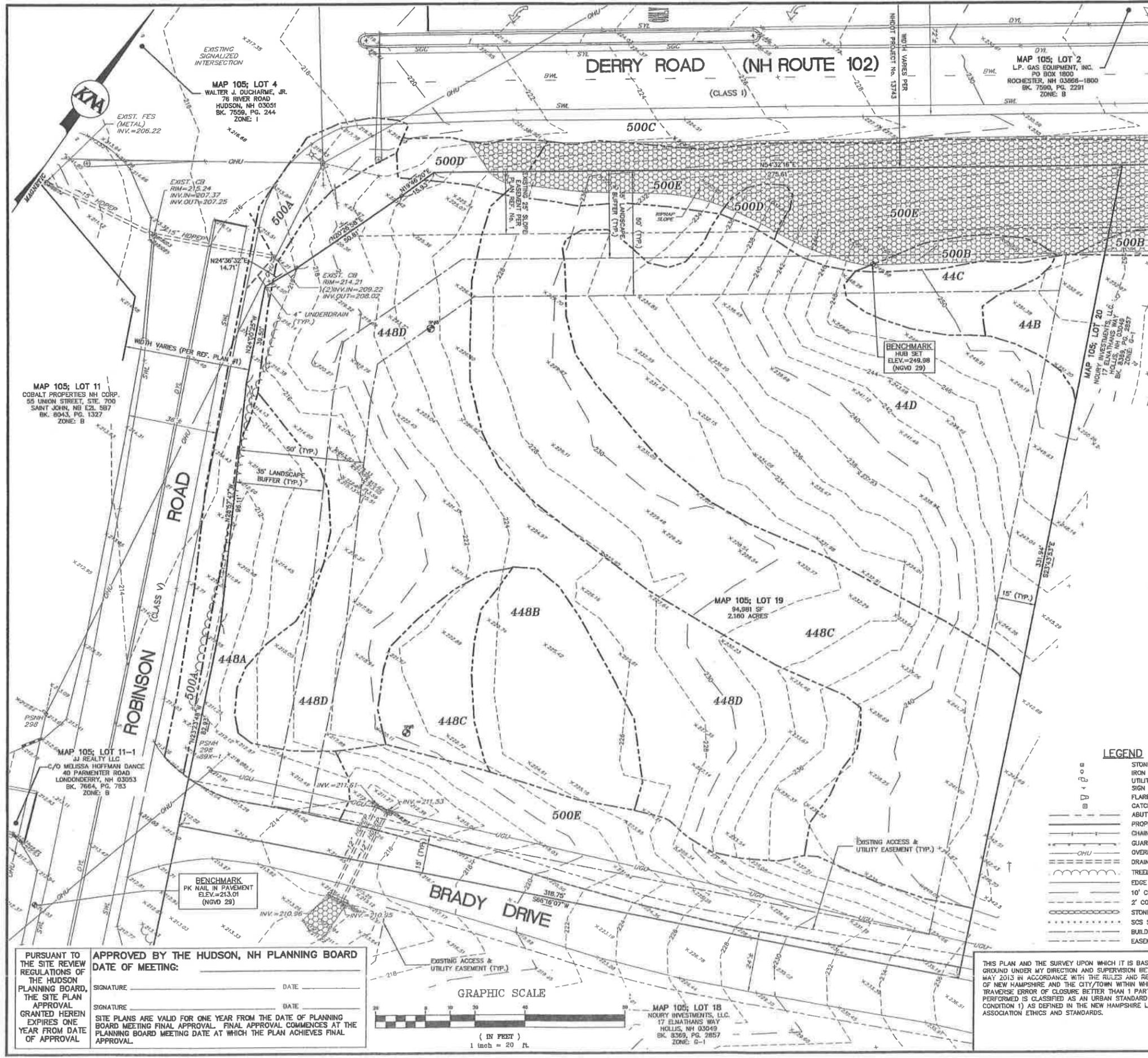
APPLICANT:
CAFUA MANAGEMENT GROUP
ATTN: GREGORY NOLAN
280 MERRIMACK STREET, SUITE A
METHUEN, MA 01844

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 38, Bedford, NH 03110 Phone (603) 627-2881



REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 24, 2014 SCALE: 1" = 40'
PROJECT NO: 13-0304-1 SHEET: 1 OF 12



REFERENCE PLAN:
 1. "MILC SUBDIVISION, DERRY ROAD-RTE. 102 & ROBINSON ROAD," HUDSON, NH, PREPARED FOR NOURY INVESTMENTS, LLC., PREPARED BY MAYNARD & PAQUETTE ENGINEERING ASSOCIATES, LLC., DATED JANUARY 10, 2003.
 2. "NON-RESIDENTIAL SITE PLAN, ROBINSON ROAD SELF STORAGE, MAP 105; LOT 17, ROBINSON ROAD & DERRY ROAD (NH ROUTE 102), HUDSON, NEW HAMPSHIRE," DATED: AUGUST 2010, WITH REVISIONS THROUGH 01/03/11, PREPARED BY: KEACH-NORDSTROM ASSOCIATES, INC. (22 SHEETS).

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON MAP 105; LOT 19.
 - LOT NUMBERS REFER TO THE TOWN OF HUDSON ASSESSORS MAP 105; LOT 19.
 - TOTAL SITE AREA IS 84,981 SF, OR 2.180 ACRES.
 - PRESENT ZONING: GENERAL ONE (G-1)
 MINIMUM LOT REQUIREMENTS:
 - LOT AREA 87,120 SF
 - LOT FRONTAGE 200 FT
 - REAR 15 FT
 MINIMUM BUILDING SETBACK REQUIREMENTS:
 - FRONT 50 FT (ARTERIAL & COLLECTOR ROADWAYS)
 - SIDE 15 FT
 - REAR 15 FT
 - BOUNDARY AND TOPOGRAPHIC INFORMATION IS FROM AN ON THE GROUND FIELD SURVEY PERFORMED BY THIS OFFICE BETWEEN MARCH 2010 AND MAY 2013.
 - SEE REFERENCE PLAN #2 FOR WETLAND DELINEATION AND SITE SPECIFIC SOILS INFORMATION.
 - PRESENT OWNER OF RECORD:
 NOURY INVESTMENTS, LLC.
 17 ELNATHANS WAY
 HOLLIS, NH 03049
 BK. 8369, PG. 2857
 - THE SUBJECT PREMISES IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 33011C0508D, PANEL 508 OF 701, EFFECTIVE DATE SEPTEMBER 25, 2009. THE SUBJECT PARCEL IS LOCATED IN ZONE "X".
 - IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE ACCURACY OF THE EXISTING TOPOGRAPHY PRIOR TO EARTHWORK OPERATIONS. NO CLAIM FOR EXTRA WORK DUE TO TOPOGRAPHIC INACCURACY SHALL BE CONSIDERED AFTER EARTHWORK HAS COMMENCED.
 - THE CONTRACTOR SHALL ONLY USE BENCHMARKS AS PROVIDED BY THE ENGINEER OF RECORD, KEACH-NORDSTROM ASSOCIATES, INC.
 - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. TAKES NO RESPONSIBILITY FOR THE ACCURACY OF UNDERGROUND UTILITIES DEPICTED, LOCATIONS SHOWN WERE TAKEN FROM FIELD SURVEY AND REFERENCE PLANS. CONTRACTOR TO VERIFY UNDERGROUND UTILITY LOCATIONS AND NOTIFY ENGINEER OF ANY CONFLICTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
 - THE SUBJECT PREMISES IS ENCUMBERED BY THE FOLLOWING EASEMENTS:
 - DECLARATION OF COMMON DRIVEWAY, DRAINAGE, UTILITY EASEMENTS AND MAINTENANCE AGREEMENT (BK.8544 PG.2695).
 - 15 FOOT WIDE UTILITY EASEMENT CENTERED UPON AS-BUILT LOCATION OF UNDERGROUND UTILITIES. (BK.8569 PG.2857).
 - SITE DEVELOPMENT AGREEMENT RECORDED IN BK. 5329, PG. 1249.



SOIL TYPE	SOIL TAXONOMIC NAME	SLOPE
44B	MONTAUK	3 TO 8%
44C	MONTAUK	8 TO 15%
44D	MONTAUK	15 TO 25%
44A	SCITUATE	0 TO 3%
44B	SCITUATE	3 TO 8%
44C	SCITUATE	8 TO 15%
44D	SCITUATE	15 TO 25%
44E	SCITUATE	25 TO 50%
500A	UDORTHENTS, LOAMY	0 TO 3%
500B	UDORTHENTS, LOAMY	3 TO 8%
500C	UDORTHENTS, LOAMY	8 TO 15%
500D	UDORTHENTS, LOAMY	15 TO 25%
500E	UDORTHENTS, LOAMY	25% TO 50%

- LEGEND**
- STONE BOUND FOUND
 - IRON PIN FOUND
 - UTILITY POLE
 - SIGN
 - FLARED END SECTION
 - CATCH BASIN
 - ABUTTER LINE
 - PROPERTY LINE
 - CHAIN LINK FENCE
 - GUARDRAIL
 - OVERHEAD UTILITIES
 - DRAINAGE LINE
 - TREELINE
 - EDGE OF PAVEMENT
 - 10' CONTOUR
 - 2' CONTOUR
 - STONEWALL
 - SOS SOIL LINE
 - BUILDING SETBACK
 - EASEMENT

EXISTING CONDITIONS PLAN
DUNKIN DONUTS
 MAP 105; LOT 19
 14 BRADY DRIVE
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER OF RECORD: NOURY INVESTMENTS, LLC. 17 ELNATHANS WAY HOLLIS, NH 03049 BK. 8369, PG. 2857	APPLICANT: CAFUA MANAGEMENT GROUP ATTN: GREGORY NOLAN 280 MERRIMACK STREET, SUITE A METHUEN, MA 01844
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KN KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phans (603) 627-2881

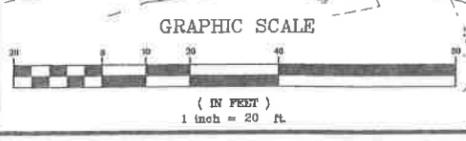
REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 24, 2014 SCALE: 1" = 20'
 PROJECT NO: 13-0304-1 SHEET 2 OF 12

PURSUANT TO THE SITE 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 _____

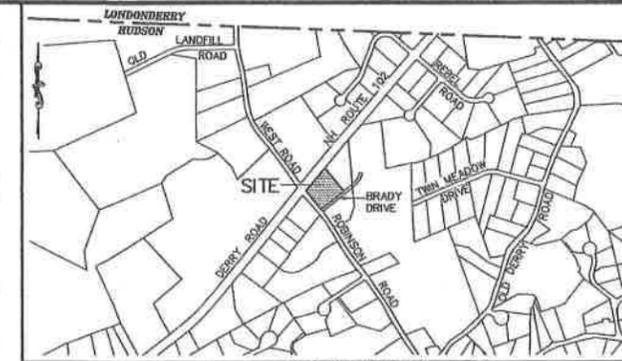
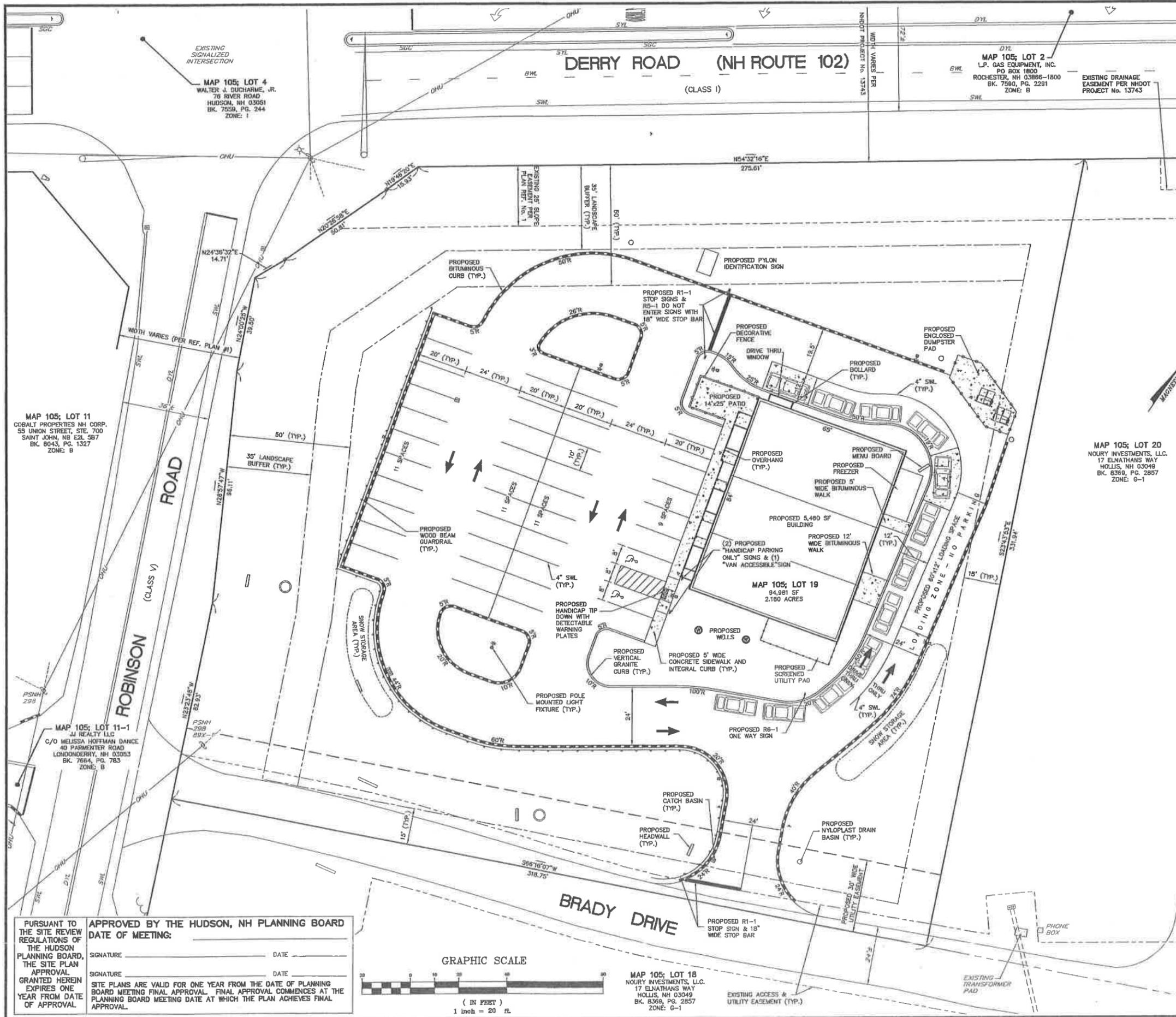
SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.



MAP 105; LOT 18
 NOURY INVESTMENTS, LLC.
 17 ELNATHANS WAY
 HOLLIS, NH 03049
 BK. 8369, PG. 2857
 ZONE: G-1

THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED WAS MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION BETWEEN MARCH 2010 AND MAY 2013 IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE STATE OF NEW HAMPSHIRE AND THE CITY/TOWN WITHIN WHICH IT IS LOCATED WITH A TRAVERSE ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000. THE SURVEY PERFORMED IS CLASSIFIED AS AN URBAN STANDARD SURVEY, (CATEGORY 1, CONDITION 1) AS DEFINED IN THE NEW HAMPSHIRE LAND SURVEYORS ASSOCIATION ETHICS AND STANDARDS.

1/27/14
 DATE



VICINITY PLAN
SCALE: 1" = 1,000'

SEE SHEET 1 FOR PROJECT NOTES

LEGEND

- STONE BOUND FOUND
- IRON PIN FOUND
- UTILITY POLE
- SIGN
- ▭ FLARED END SECTION
- ▭ CATCH BASIN
- ▭ ABUTTER LINE
- ▭ PROPERTY LINE
- ▭ CHAIN LINK FENCE
- ▭ GUARDRAIL
- ▭ OVERHEAD UTILITIES
- ▭ TREE LINE
- ▭ EDGE OF PAVEMENT
- ▭ STONE WALL
- ▭ BUILDING SETBACK
- ▭ EXISTING EASEMENT
- ▭ PROP. EDGE OF PAVEMENT
- ▭ PROP. BITUMINOUS CURB
- ▭ PROPOSED EASEMENT
- ▭ PROPOSED GUARDRAIL



NON-RESIDENTIAL SITE LAYOUT PLAN

DUNKIN' DONUTS

MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
NOURY INVESTMENTS, LLC.
40 PARMENTER ROAD
LONDONDERRY, NH 03053
BK. 7664, PG. 753
ZONE: B

APPLICANT:
CAFUA MANAGEMENT GROUP
ATTN: GREGORY NOLAN
280 MERRIMACK STREET, SUITE A
METHUEN, MA 01844

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881



REVISIONS			
No.	DATE	DESCRIPTION	BY

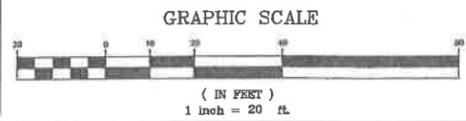
DATE: JANUARY 24, 2014 SCALE: 1" = 20'
PROJECT NO: 13-0304-1 SHEET 3 OF 12

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

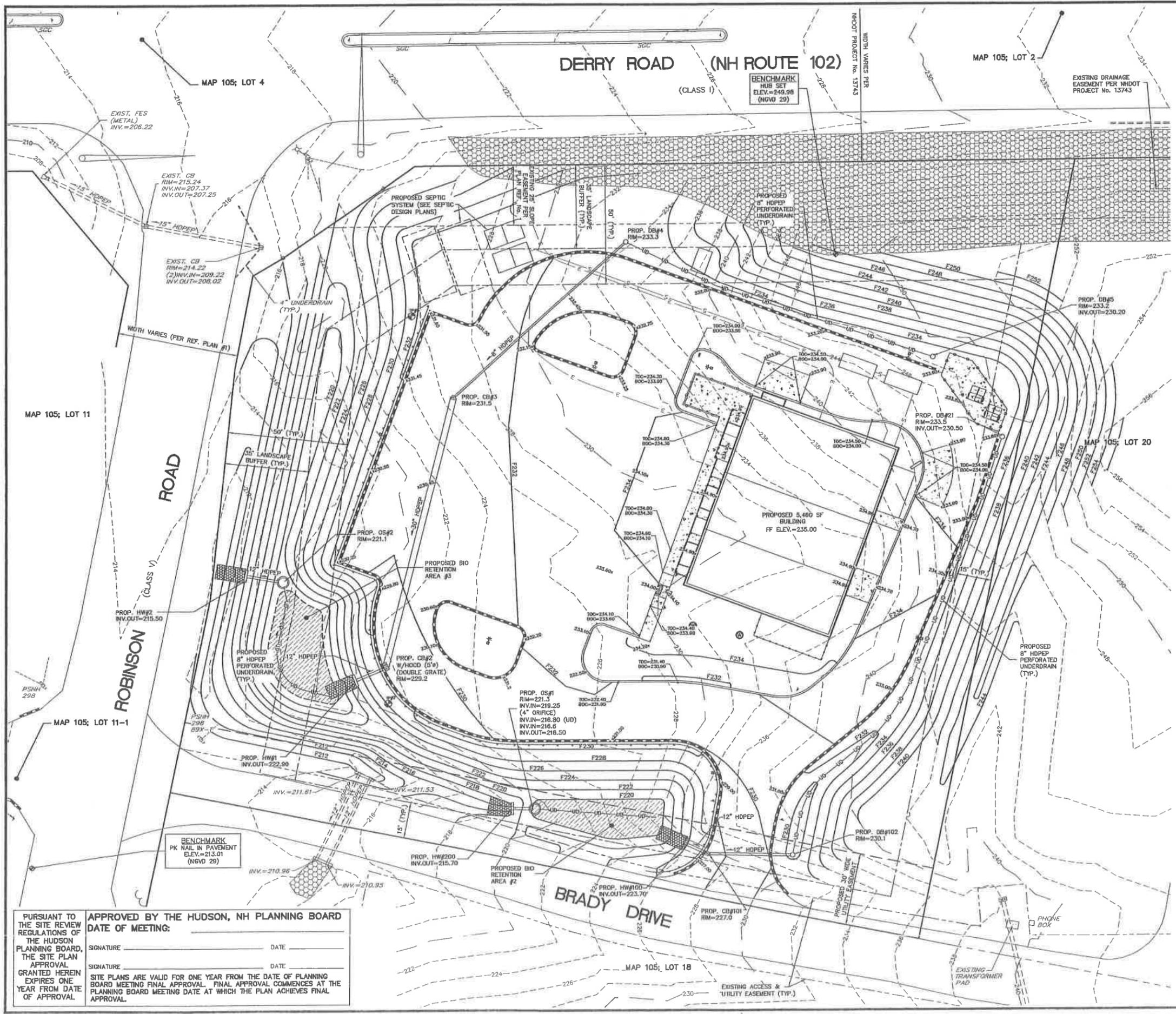
APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____
SIGNATURE _____ DATE _____

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



MAP 105; LOT 18
NOURY INVESTMENTS, LLC.
17 ELMATHANS WAY
HOLLIS, NH 03049
BK. 8369, PG. 2857
ZONE: G-1



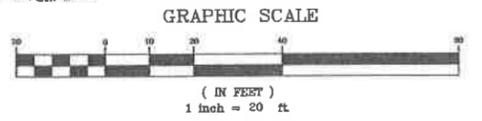
- CONSTRUCTION NOTES:**
1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF HUDSON, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
 2. SITE CONSTRUCTION SHALL CONFORM TO THE APPROVED PLANS AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, PUBLIC WORKS DEPARTMENT, HUDSON, NEW HAMPSHIRE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
 3. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 4. ALL DRAINAGE PIPES SHOWN SHALL BE HDPEP.
 5. CATCH BASINS SHALL BE TYPE B, AND HAVE 3' SUMPS UNLESS OTHERWISE NOTED.
 6. SEE DRAINAGE PROFILES AND CONSTRUCTION DETAILS FOR SPECIFIC CONSTRUCTION INFORMATION.
 7. CONTRACTOR TO COORDINATE UTILITY WORK WITH LOCAL PROVIDER.

LOAM & SEED ALL DISTURBED AREAS (TYP.)

SEE AOS PLANS FOR SEPTIC DESIGN, LAYOUT, DIMENSION, AND NOTES



- LEGEND**
- STONE BOUND FOUND
 - IRON PIN FOUND
 - UTILITY POLE
 - SIGN
 - FLARED END SECTION
 - CATCH BASIN
 - ABUTTER LINE
 - PROPERTY LINE
 - CHAIN LINK FENCE
 - GUARDRAIL
 - OHU — OVERHEAD UTILITIES
 - DRAINAGE LINE
 - TREELINE
 - EDGE OF PAVEMENT
 - 10' CONTOUR
 - 2' CONTOUR
 - STONEWALL
 - BUILDING SETBACK
 - EXISTING EASEMENT
 - PROP. BITUMINOUS CURB
 - PROPOSED EASEMENT
 - PROPOSED 2' CONTOUR
 - PROPOSED GUARDRAIL



GRADING AND DRAINAGE PLAN

DUNKIN DONUTS

MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD: NOURY INVESTMENTS, LLC. 17 ELNATHANS WAY HOLLIS, NH 03049 BK. 8369, PG. 2857	APPLICANT: CAFUA MANAGEMENT GROUP ATTN: GREGORY NOLAN 280 MERRIMACK STREET, SUITE A METHUEN, MA 01844
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KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 24, 2014 SCALE: 1" = 20'
PROJECT NO: 13-0304-1 SHEET 4 OF 12

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

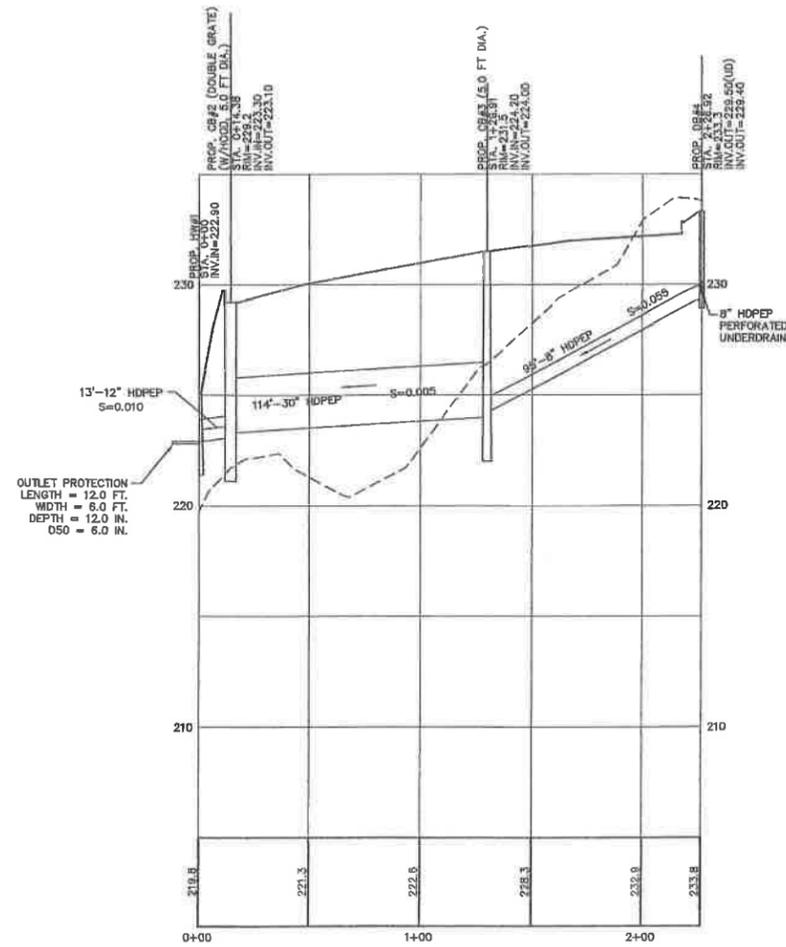
APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

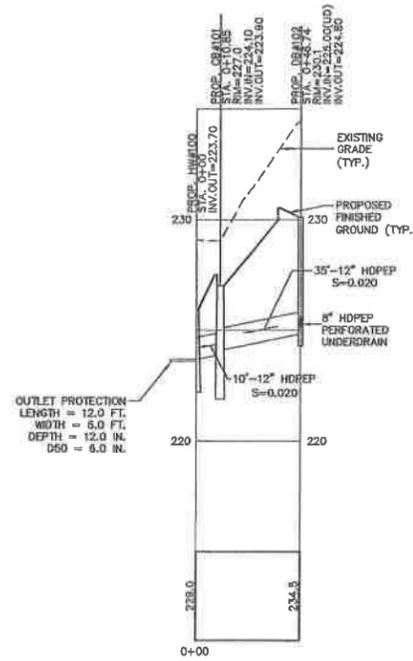
SIGNATURE _____ DATE _____

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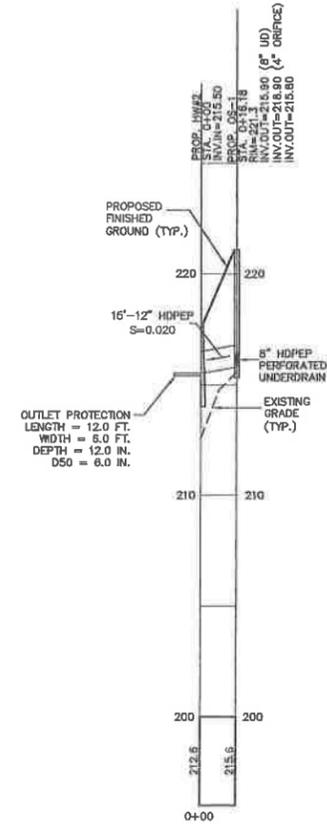
P:\projects\130304\130304.dwg, 1/27/2014, 3:55:43 PM, ml



DRAINAGE PROFILE (PROP. HW#1 TO PROP. DB#4)
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)



DRAINAGE PROFILE (PROP. HW#100 TO PROP. DB#102)
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)



DRAINAGE PROFILE (PROP. HW#2 TO PROP. OS-1)
 SCALE: 1" = 40' (HORIZ.)
 1" = 4' (VERT.)

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DRAINAGE PROFILES
DUNKIN DONUTS
 MAP 105; LOT 19
 14 BRADY DRIVE
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER OF RECORD:
 NOURY INVESTMENTS, LLC.
 17 ELNATHANS WAY
 HOLLIS, NH 03049
 BK. 8368, PG. 2857

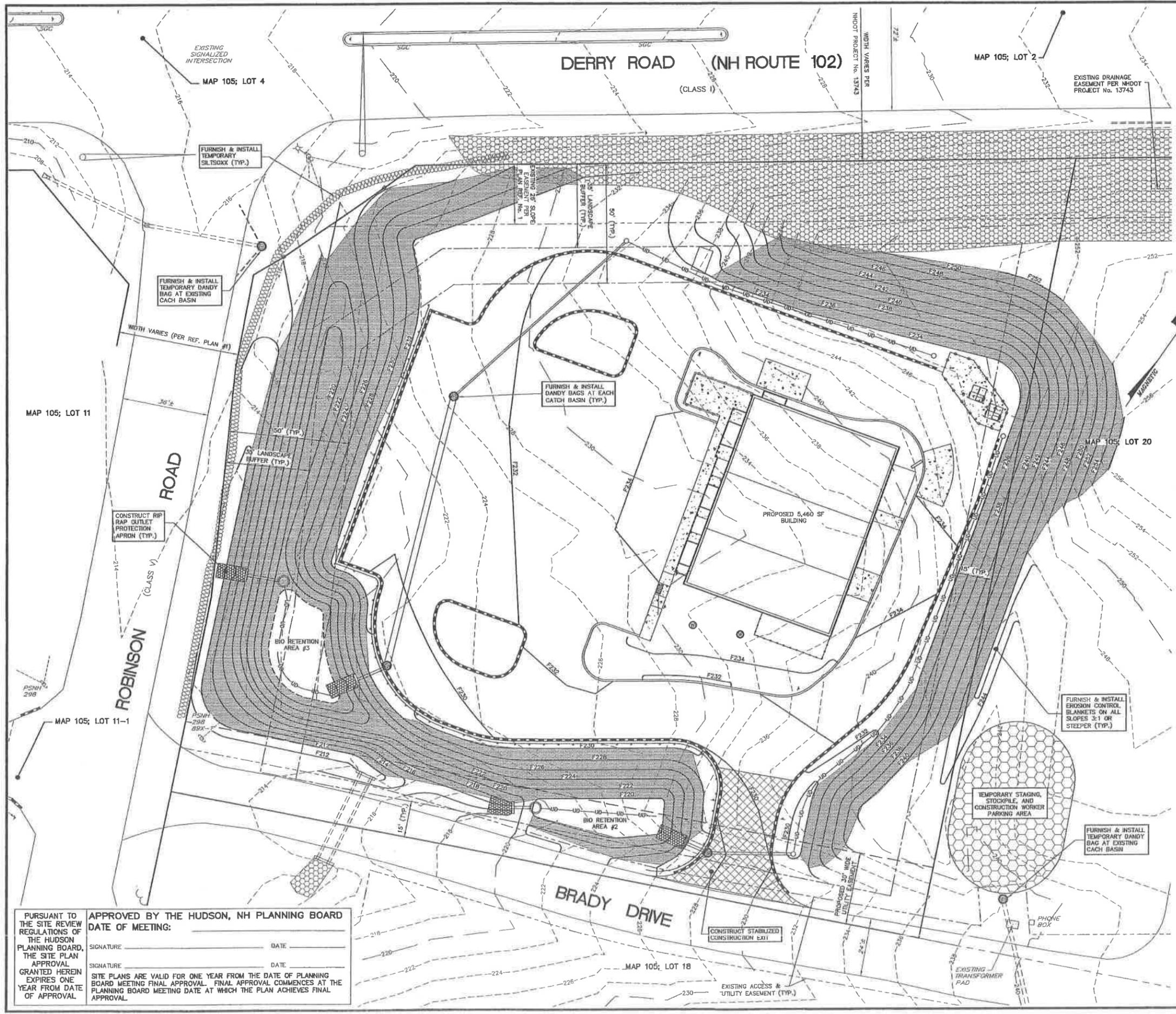
APPLICANT:
 CAFUA MANAGEMENT GROUP
 ATTN: GREGORY NOLAN
 280 MERRIMACK STREET, SUITE A
 METHUEN, MA 01844

KM KEACH-NORDSTROM ASSOCIATES, INC.
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REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 24, 2014 SCALE: AS SHOWN
 PROJECT NO: 13-0304-1 SHEET 5 OF 12

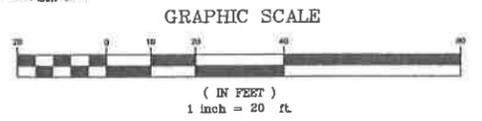


- NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ONSITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
 2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2008, AS AMENDED FROM TIME TO TIME.
 3. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
 4. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
 5. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
 6. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
 7. OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-CROSSLY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
 8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
 9. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
 10. THE TOWN OF HUDSON SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.

LOAM & SEED ALL DISTURBED AREAS (TYP.)

EROSION & SEDIMENT CONTROL LEGEND

- PERMANENT OUTLET PROTECTION APRON (RIP RAP)
- DANDY BAGS AT ALL CATCH BASINS
- TEMPORARY SILTISOXX
- STABILIZED CONSTRUCTION EXIT
- STAGING AND STOCKPILE AREA
- EROSION CONTROL BLANKETS



EROSION CONTROL PLAN

DUNKIN DONUTS
MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

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REVISIONS

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PROJECT NO: 13-0304-1 SHEET 6 OF 12

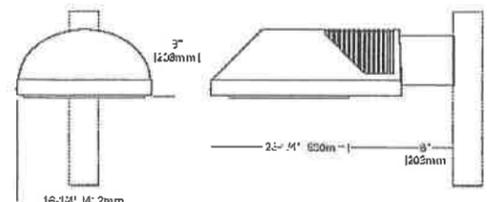
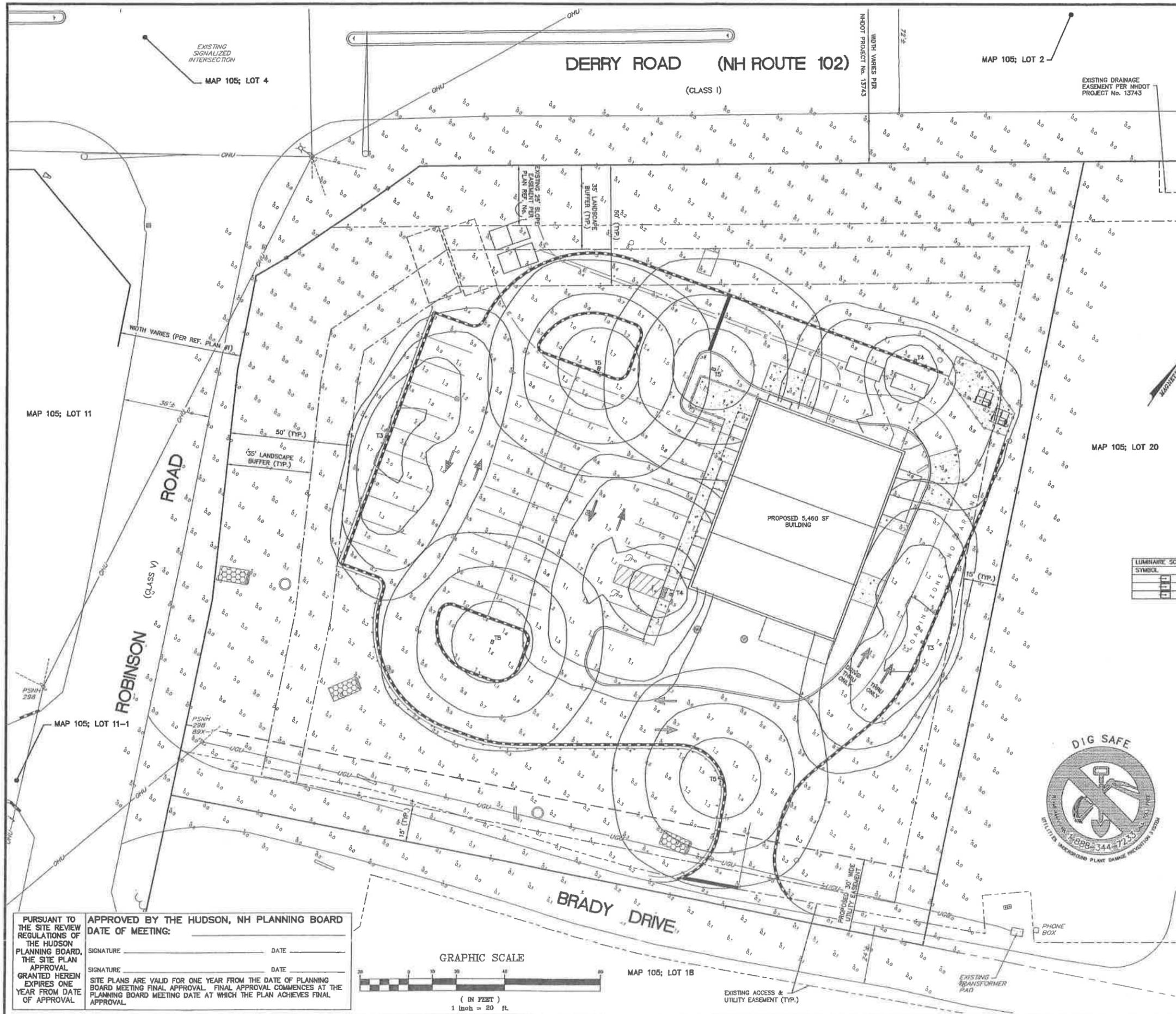
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THE TALOND LED
NOT TO SCALE

LIGHTING NOTES:

1. THE PURPOSE OF THIS PLAN IS TO GRAPHICALLY REPRESENT THE PROPOSED ILLUMINATION LEVELS ASSOCIATED WITH THE PROPOSED SITE LIGHTING LAYOUT AND CONFIGURATION.
2. FOR ADDITIONAL INFORMATION REGARDING LIGHT INSTALLATION AND WIRING REQUIREMENTS (DESIGN BY OTHERS).
3. SEE ARCHITECTURAL PLANS FOR SPECIFIC FIXTURE/POLE DETAILS (BY OTHERS).

STATAREA-1
PAVED DRIVES AND PARKING
ILLUMINANCE (Fc)
AVERAGE = 0.99
MAXIMUM = 3.5
MINIMUM = 0.3
AVG./MIN. RATIO = 3.30
MAX./MIN. RATIO = 11.67

SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION
	2	T3	SINGLE	TLM-B03-LED-E1-SL3/ 20' AFG
	2	T4	SINGLE	TLM-B03-LED-E1-SL4/ 20' AFG
	4	T5	SINGLE	TLM-B03-LED-E1-SX0/ 20' AFG



CHARRON
INCORPORATED
P.O. BOX 4950
MANCHESTER, NH 03106
(603) 654-4827
FAX (603) 654-6764

LIGHTING PLAN
DUNKIN DONUTS

MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

<p>OWNER OF RECORD: NOURY INVESTMENTS, LLC. 17 ELNATHANS WAY HOLLIS, NH 03049 BK. 8369, PG. 2857</p>	<p>APPLICANT: CAFUA MANAGEMENT GROUP ATTN: GREGORY NOLAN 280 MERRIMACK STREET, SUITE A METHUEN, MA 01844</p>
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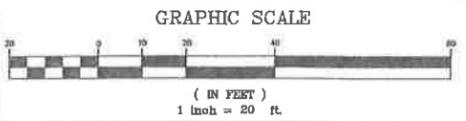
DATE: JANUARY 24, 2014 SCALE: 1" = 20'
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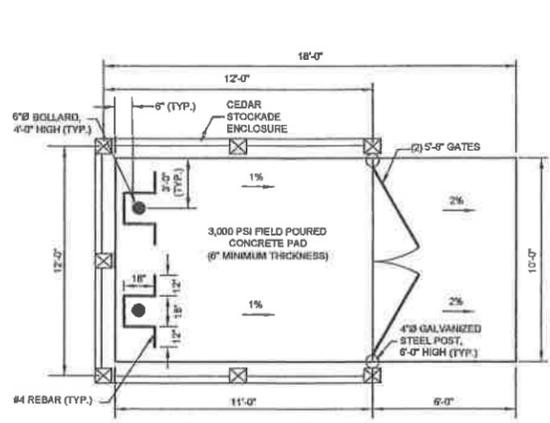
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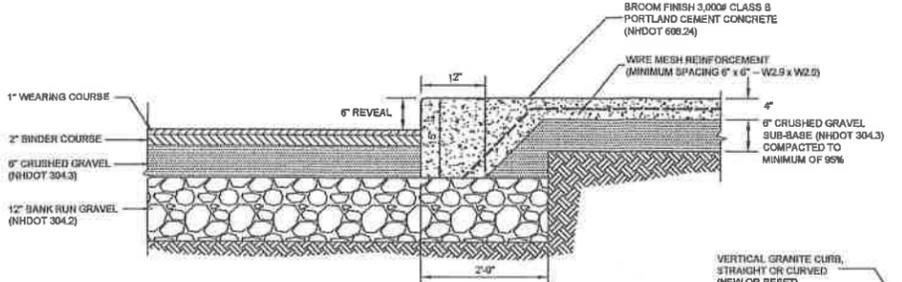
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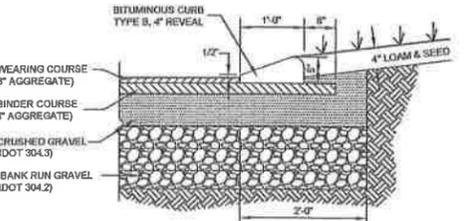
P:\13-0304-1\13-0304-1.dwg 13-0304-1 LIGHTING.dwg LIGHTING 1/27/2014 3:48:15 PM HP4002.dwt



WOOD STOCKADE TRASH ENCLOSURE DETAIL
NOT TO SCALE
(MARCH 2008)



INTEGRAL CURB AND WALK DETAIL
NOT TO SCALE
(MARCH 2008)



BITUMINOUS CURB TYPE B DETAIL
NOT TO SCALE
(MARCH 2008)

SITE IDENTIFICATION SIGNAGE DESIGN, DETAILS, AND NOTES TO BE PROVIDED BY OWNER/CONTRACTOR DURING THE BUILDING APPLICATION PROCESS.



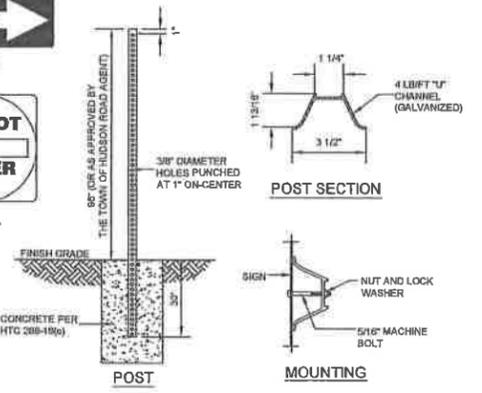
STOP SIGN DETAIL
NOT TO SCALE
(MARCH 2008)



DO NOT ENTER
NOT TO SCALE
(MARCH 2008)



RESERVED PARKING SIGN DETAIL
NOT TO SCALE
(MARCH 2008)



STEEL SIGN POST DETAIL
NOT TO SCALE
(MARCH 2008)

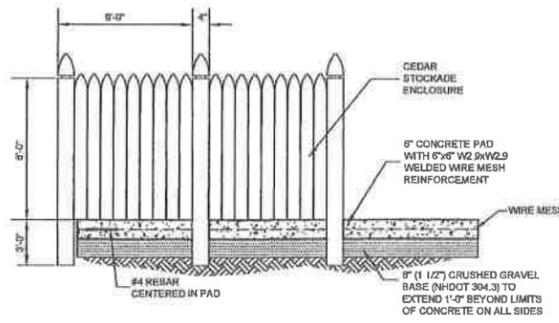
- TRAFFIC SIGN NOTES:**
1. ALL TRAFFIC SIGN FACES AND SHAPES SHALL CONFORM WITH THE MUTCO.
 2. ALL SIGN POST MOUNTS SHALL CONFORM WITH THE AASHTO AND NHDOT SPECIFICATIONS.



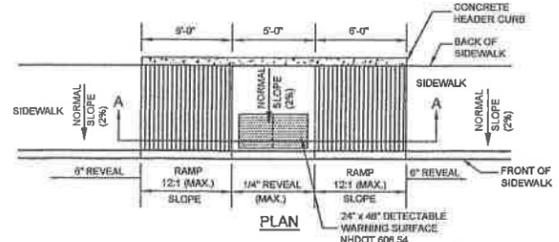
STOP BAR
NOT TO SCALE

- STRIPING NOTES:**
1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCO.
 2. WIDTH OF LINES SHALL VARY NO MORE THAN 1/4 INCH FROM THAT SPECIFIED.
 3. THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
 4. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

SEE ARCHITECTURAL & ELECTRICAL PLANS FOR SPECIFIC LIGHT POLE & FIXTURE DESIGN INFORMATION (DESIGN BY OTHERS)



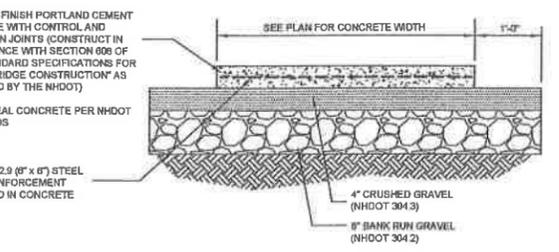
WOOD STOCKADE TRASH ENCLOSURE DETAIL
NOT TO SCALE
(MARCH 2008)



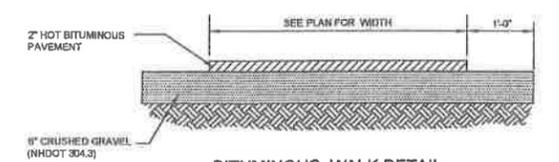
SIDEWALK RAMP WITH DETECTABLE WARNING SURFACE
NOT TO SCALE
(JUNE 2012)



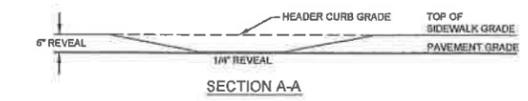
HANDICAP STRIPING DETAIL
NOT TO SCALE
(MARCH 2012)



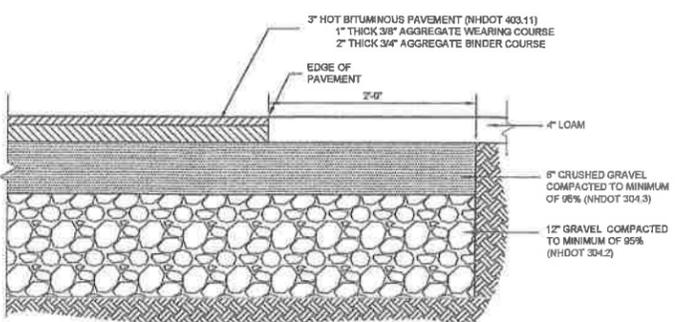
CONCRETE WALK DETAIL
NOT TO SCALE
(MARCH 2008)



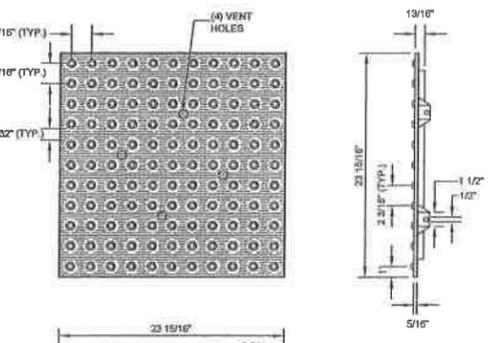
BITUMINOUS WALK DETAIL
NOT TO SCALE
(MARCH 2008)



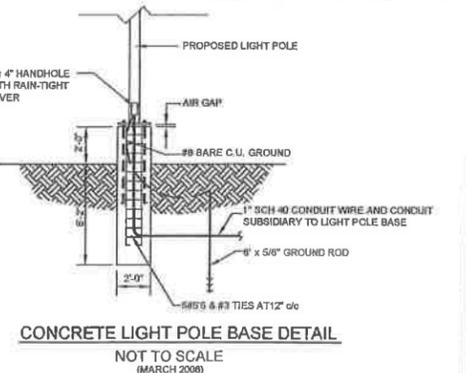
SECTION A-A
NOT TO SCALE



DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE
(MARCH 2008)



24"x24" DETECTABLE WARNING PLATE DETAIL
NOT TO SCALE
(MARCH 2009)



CONCRETE LIGHT POLE BASE DETAIL
NOT TO SCALE
(MARCH 2008)

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CONSTRUCTION DETAILS
DUNKIN DONUTS

MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
NOURY INVESTMENTS, LLC.
17 ELNATHANS WAY
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BK. 8369, PG. 2857

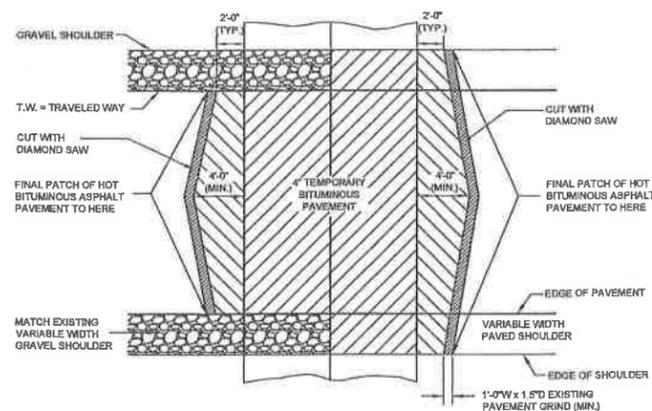
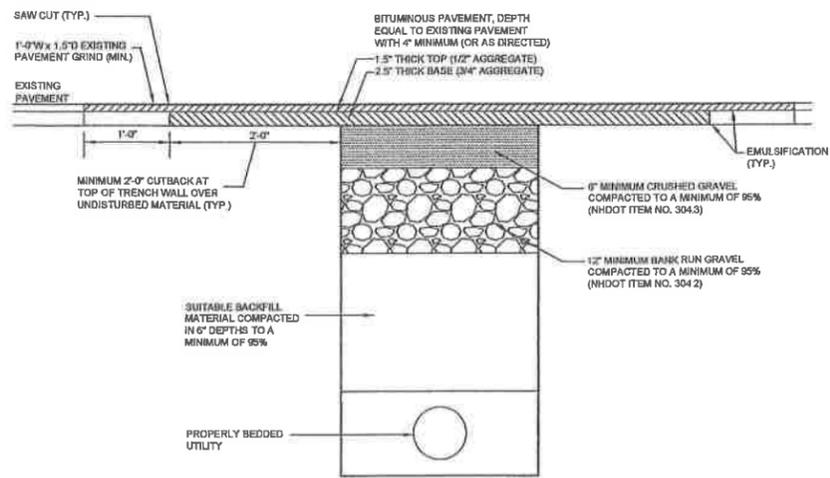
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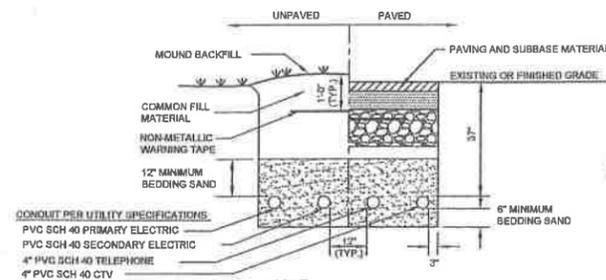
REVISIONS

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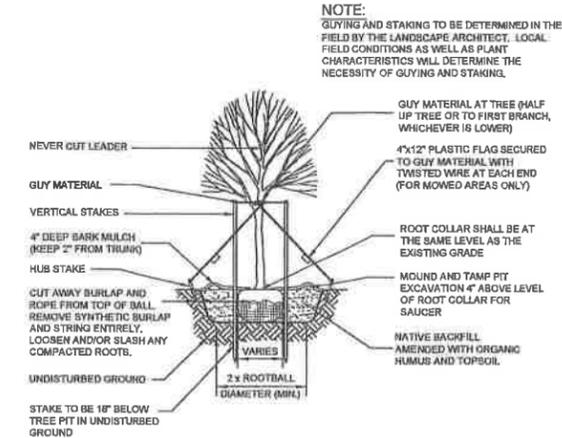
DATE: JANUARY 24, 2014 SCALE: AS SHOWN
PROJECT NO: 13-0304-1 SHEET 9 OF 12



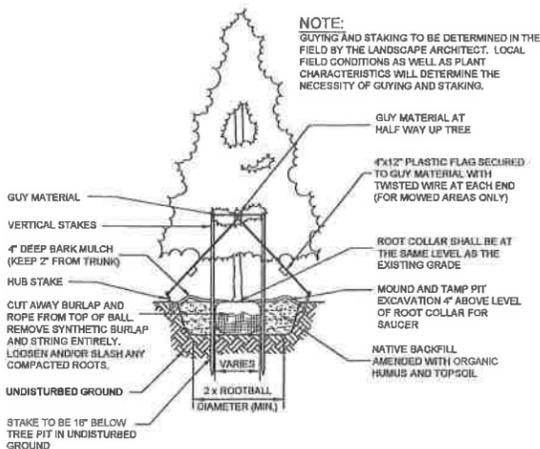
PERMANENT PAVEMENT REPAIR
NOT TO SCALE
(MARCH 2006)



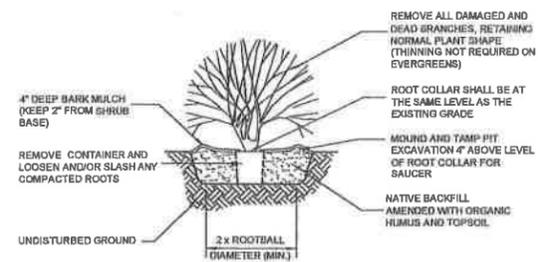
UTILITY TRENCH DETAIL
NOT TO SCALE
(MARCH 2006)



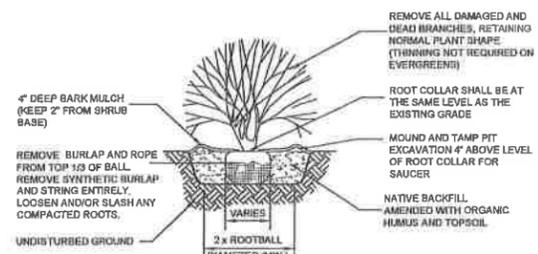
DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



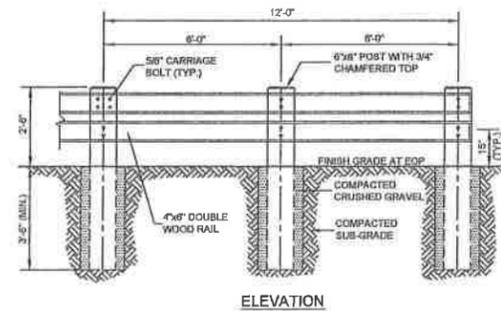
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



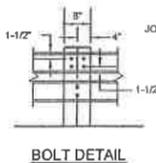
CONTAINER SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



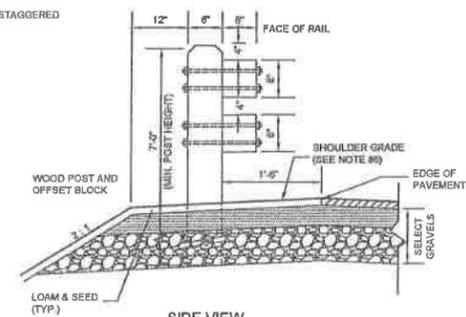
BALLED & BURLAP SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



ELEVATION



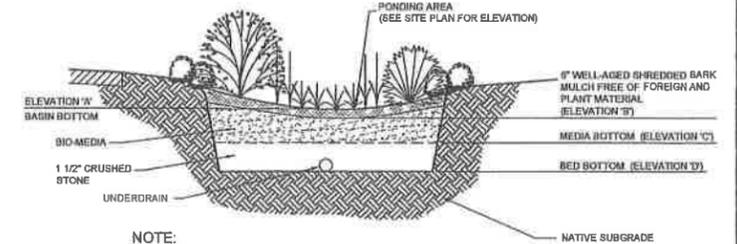
BOLT DETAIL



SIDE VIEW

- NOTES:
1. ALL TIMBERS SHALL BE PRESSURE TREATED.
2. PAY LIMIT = PER LINEAR FOOT INCLUDING END SECTION.
3. ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED.

WOOD BEAM GUARDRAIL
NOT TO SCALE
(AUGUST 2011)



NOTE:
THIS SYSTEM SHALL NOT BE IN SERVICE UNTIL THE SPECIFIED PLANTINGS ARE INSTALLED AND THE CONTRIBUTING SURFACE AREA IS STABILIZED.

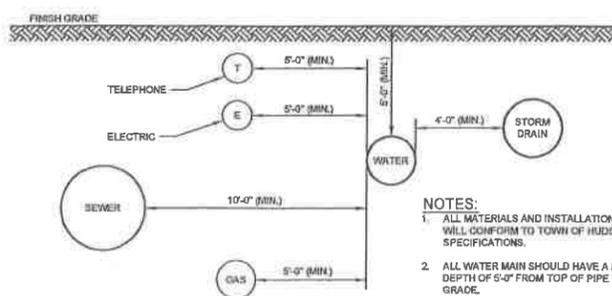
BIO-RETENTION MEDIA SUMMARY:

COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	PERCENT BY WEIGHT PASSING STANDARD SIEVE
FILTER MEDIA OPTION A			
ASTM C-33 CONCRETE SAND	50 TO 55		
LOAMY SAND TOPSOIL, WITH FINES AS INDICATED	20 TO 30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	<5
FILTER MEDIA OPTION B			
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	<5
LOAMY COARSE SAND	70 TO 80	10	65 TO 100
		20	70 TO 100
		60	15 TO 40
		200	8 TO 15

TYPICAL BIORETENTION POND SECTION
NOT TO SCALE

BIORETENTION ELEVATION TABLE

LOCATION	A	B	C	D
BIO-RET. #2	216.50	218.00	217.00	216.00
BIO-RET. #3	216.50	218.00	217.00	216.50



UTILITY SEPARATION (MAIN) DETAIL
NOT TO SCALE
(MARCH 2006)

PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

CONSTRUCTION DETAILS

DUNKIN DONUTS

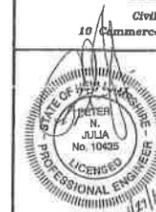
MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
NOURY INVESTMENTS, LLC.
17 ELNATHANS WAY
HOLLIS, NH 03049
BK. 8369, PG. 2857

APPLICANT:
CAFUA MANAGEMENT GROUP
ATTN: GREGORY NOLAN
280 MERRIMACK STREET, SUITE A
METHUEN, MA 01844

KM KEACH-NORDSTROM ASSOCIATES, INC.

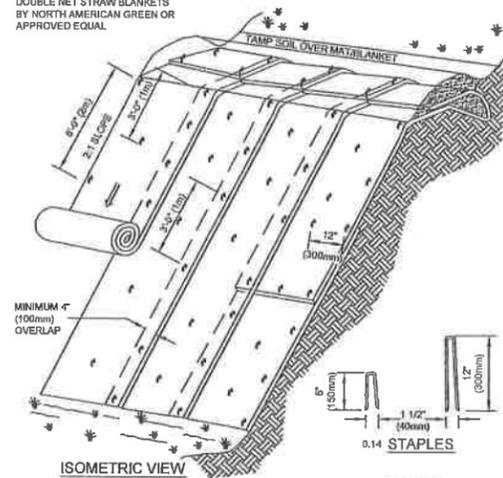
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881



REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 24, 2014 SCALE: AS SHOWN
PROJECT NO: 13-0304-1 SHEET 10 OF 12

MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE AND SHALL BE DOUBLE NET STRAW BLANKETS BY NORTH AMERICAN GREEN OR APPROVED EQUAL.

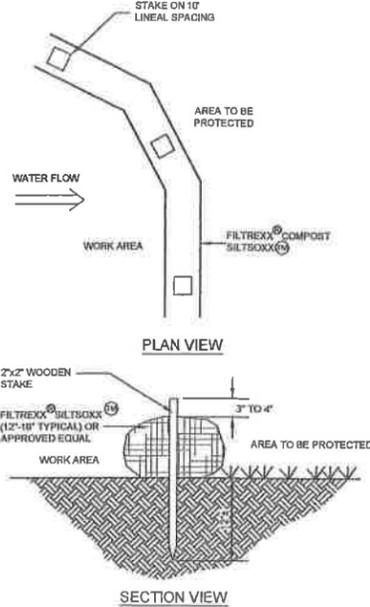


NOTES:

- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
- APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

EROSION CONTROL BLANKETS - SLOPE INSTALLATION

NOT TO SCALE
(AUGUST 2011)



NOTES:

- ALL MATERIAL TO MEET FILTRESS® SPECIFICATIONS.
- SILTSOXX® COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
- SILTSOXX® DEPICTED IS FOR MINIMUM SLOPES. GREAT SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
- COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTRESS® SILTSOXX® DETAIL

NOT TO SCALE
(AUGUST 2011)

TURF ESTABLISHMENT SCHEDULE

PURPOSE:
TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTORE GROWTH TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL EROSION.

PREPARATION AND EXECUTION:

- RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH.
- PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
- FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED. TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
- APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.
- APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
- DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF, HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
- SEEDING FOR PERMANENT COVER SHALL OCCUR BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND BETWEEN APRIL 15 AND JUNE 15. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER, WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET OR OTHERWISE UNTILTABLE.
- WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH HAY. ANCHOR MULCH ON ALL SLOPES EXCEEDING 3:1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
- PROTECT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEED.
- WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OCTOBER 15, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

MAINTENANCE:

ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH HEALTHY UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA. MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.

APPLICATION RATES:

- LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
- LIME SHALL BE APPLIED AT A RATE OF 75 TO 100 POUNDS PER 1,000 S.F.
- FERTILIZER SHALL BE APPLIED AT A RATE OF 30 POUNDS PER 1,000 S.F.
- SEED MIXTURE FOR LAWN AREAS SHALL BE APPLIED AT A RATE OF AT LEAST 80 POUNDS PER ACRE OR 2 POUNDS PER 1,000 S.F.
- TEMPORARY SEED MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 S.F.
- SEED MIXTURE FOR LAWN AREAS SHALL BE APPLIED AT A RATE OF 80 POUNDS PER ACRE OR 2 POUNDS PER 1,000 S.F.
- SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS SHALL BE APPLIED AT A RATE OF 70 POUNDS PER ACRE OR 1.5 POUNDS PER 1,000 S.F.
- MULCH SHALL BE APPLIED AT A RATE OF 80 POUNDS PER 1,000 S.F.

MATERIALS:

- LOAM USED FOR TOPSOIL SHALL BE FRABLE, FERTILE, NATURAL FREE-DRAINING LOAM; FREE OF ROOTS, GRASS, STICKS, WEEDS, CLAY, SOIL LUMPS, DEBRIS AND STONES LARGER THAN 1 INCH IN ANY DIMENSION. SOIL SHALL NOT BE EXCESSIVELY ACID OR ALKALINE AND CONTAIN NO TOXIC MATERIALS.
- LIME SHALL BE GROUND LIMESTONE CONTAINING NO LESS THAN 85% CALCIUM AND MAGNESIUM CARBONATES.
- FERTILIZER SHALL BE 10-20-20 COMMERCIAL GRADE.
- SEED MIXTURE FOR LAWN AREAS SHALL BE 99% PURE LIVE SEED AND CONSIST OF THE FOLLOWING:
20% CREEPING RED FESCUE
25% KENTUCKY BLUEGRASS
25% REDTOP
25% MANHATTAN PERENNIAL RYEGRASS
USED
CONSIST OF THE FOLLOWING:
15% BLACKWELL OR SHELTER SWITCHGRASS
30% NIAGARA OR HAW BIG BLUESTEM
30% CAMPER OR BLAZE LITTLESTEM
15% NE-27 OR BLAZE SAND LOVEGRASS
10% VIKING BIRDSFOOT TREFLOID
INOCULUM SPECIFIC TO BIRDSFOOT TREFLOID MUST BE USED WITH THIS MIXTURE. IF SEEDING BY HAND, A STICKING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR TIMES THE RECOMMENDED AMOUNT OF INOCULUM.
- SEED MIXTURE FOR SLOPE AREAS SHALL BE 99% PURE LIVE SEED AND SHALL CONSIST OF THE FOLLOWING:
20% CREEPING RED FESCUE
40% PERENNIAL RYE GRASS
15% REDTOP
15% BIRDSFOOT TREFLOID
IN ADDITION TO THE MIX SPECIFIED ABOVE, CROWN VETCH SHALL BE USED ON ALL SLOPES STEEPER THAN 3:1. CROWN VETCH SHALL BE APPLIED AT A RATE OF 10 POUNDS PER ACRE AND INOCULUM SPECIFIC TO CROWN VETCH MUST BE USED.
- SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT SWALES SHALL CONSIST OF THE FOLLOWING:
20% CREEPING RED FESCUE
15% SWITCH GRASS
15% FOX SEDGE
15% CREEPING BENTGRASS
10% FLATPEA
20% WILD FLOWER VARIETY
- HAY USED FOR MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME MOWINGS, FREE FROM WEEDS, TWIGS, DEBRIS OR OTHER DELETERIOUS MATERIAL AND ROT OR MOLD.

CONSTRUCTION SEQUENCE

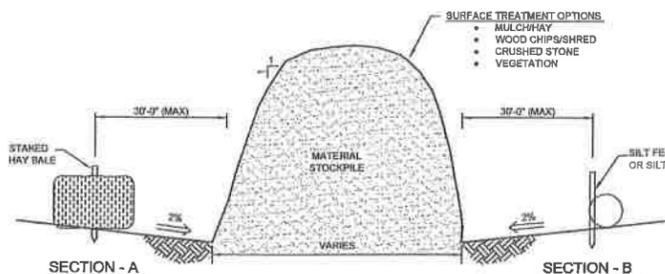
- FIRST CUT AND CLEAR TREES AND BRUSH ONLY WITHIN DESIGNATED LIMITS OF CLEARING AS NECESSARY TO FACILITATE PROPOSED CONSTRUCTION. ALL TREES, BRANCHES AND OTHER VEGETATIVE MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 400:3 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO COMMENCEMENT OF ANY EARTH-MOVING OPERATIONS, ALL APPLICABLE TEMPORARY EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SILTATION FENCES AND STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
- COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND SIMILAR ORGANIC DEBRIS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR. NATIVE ORGANIC SOIL MATERIALS SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTION ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDED WITH WINTER VETCH AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION FENCE IN ORDER TO PREVENT LOSS DUE TO EROSION.
- BEGIN EARTH-MOVING OPERATIONS, COMMENCING WITH WORK NEEDED TO BALANCE SITE AND FACILITATE BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION. PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTHEN DIKES OR EXCAVATED SWALES.
- ONCE BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTH-MOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
- INSTALL DRAINAGE SWALE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME FULLY STABILIZED.
- PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESS.
- COMPLETE EXCAVATION/STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS. STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FINE GRADE.
- FINE GRADE ALL FUTURE TURF AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- INSTALL THE REMAINING COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
- CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGHOUT THE BINDER COURSE.
- COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.

EROSION CONTROL NOTES

- EXPOSED EARTHWORK SHALL BE CONFINED TO AS LIMITED AN AREA AS IS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF TIME EXCEEDING FORTY-FIVE (45) CALENDAR DAYS.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OF RAINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
- ALL DISTURBED AREAS DESIGNATED TO BE TURF SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
- ALL SWALES AND DITCHES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION. ALL SWALES AND DITCHES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.
- IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENR-A 1000.
- IN NO WAY ARE THESE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
- AREAS HAVING FINISH GRADE SLOPES OF 3:1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION".
- ALL DETENTION PONDS AND TREATMENT SWALES SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL INFLUENCE STORMWATER RUNOFF.
- ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

WINTER CONSTRUCTION NOTES:

- ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NPOT ITEM 304.3 OR, IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.



PLAN - A

STOCK PILE STABILIZATION MEASURE A:
TEMPORARY HAY BALE PERIMETER

PLAN - B

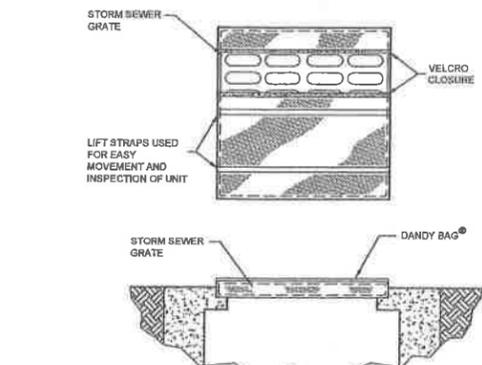
STOCK PILE STABILIZATION MEASURE B:
TEMPORARY SILT FENCE PERIMETER

GENERAL NOTES:

- THIS PROJECT DOES ANTICIPATE THE NEED OR USE OF STANDING STOCKPILES FOR GREATER THAN 24 HOURS. ALL MATERIALS WILL EITHER BE IMMEDIATELY REMOVED OR PLACED WITHIN THE ACTIVE LIMIT OF PROJECT.
- ALL MATERIAL STOCKPILES LEFT STANDING GREATER THAN 72 HOURS WILL REQUIRE PERIMETER MEASURES (A OR B), AS NOTED ABOVE.
- NO TEMPORARY OR PERMANENT MATERIAL STOCKPILES WILL BE PERMITTED WITHIN THE PROJECT LIMITS FOLLOWING PROJECT SUBSTANTIAL COMPLETION.

STOCKPILE STABILIZATION

NOT TO SCALE



HI-FLOW DANDY BAG® (SAFETY ORANGE)

MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	NH (lbs)	1.42 (100) x 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 x 10
PUNCTURE STRENGTH	ASTM D 4633	kN (lbs)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	kPa (psi)	3007 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	NH (lbs)	0.51 (115) x 0.33 (75)
UV RESISTANCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	mm (US Std Sieve)	0.425 (#40)
FLOW RATE	ASTM D 4491	L/min (US gal/min)	5922 (1.45)
PERMITTIVITY	ASTM D 4491	Sec-1	3.1

DANDY BAG®

NOT TO SCALE
(APRIL 2010)

MAINTENANCE:

MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

CONSTRUCTION SPECIFICATIONS:

- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED EXIT 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 STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER 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 RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE EXIT 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 OF 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.

CONSTRUCTION DETAILS

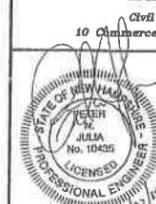
DUNKIN DONUTS

MAP 105; LOT 19
14 BRADY DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
NOURY INVESTMENTS, LLC.
17 ELNATHANS WAY
HOLLIS, NH 03049
BK. 8369, PG. 2857

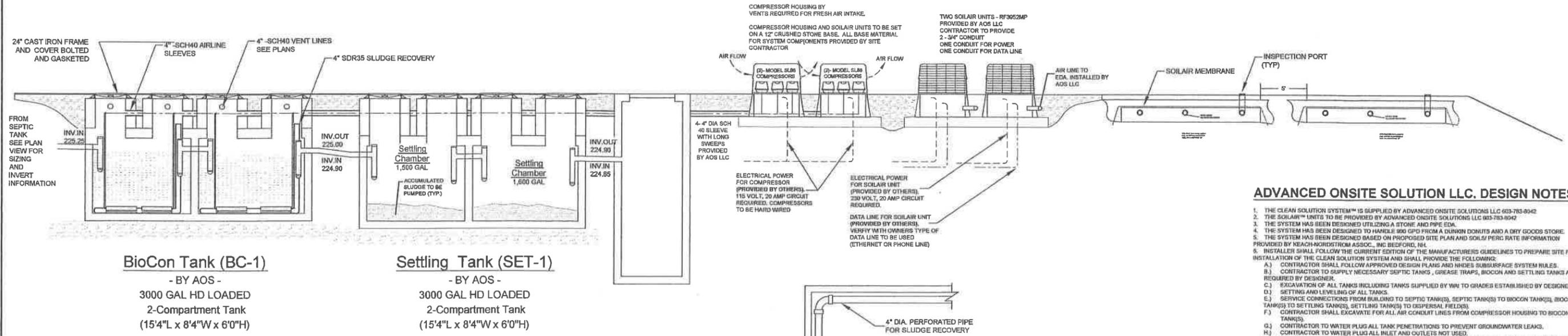
APPLICANT:
CAPUA MANAGEMENT GROUP
ATTN: GREGORY NOLAN
280 MERRIMACK STREET, SUITE A
METHUEN, MA 01844

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Lead Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-8881



REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 24, 2014 SCALE: AS SHOWN
PROJECT NO: 13-0304-1 SHEET 12 OF 12



FLOW PROFILE OF THE CLEAN SOLUTION
SCALE: N.T.S.

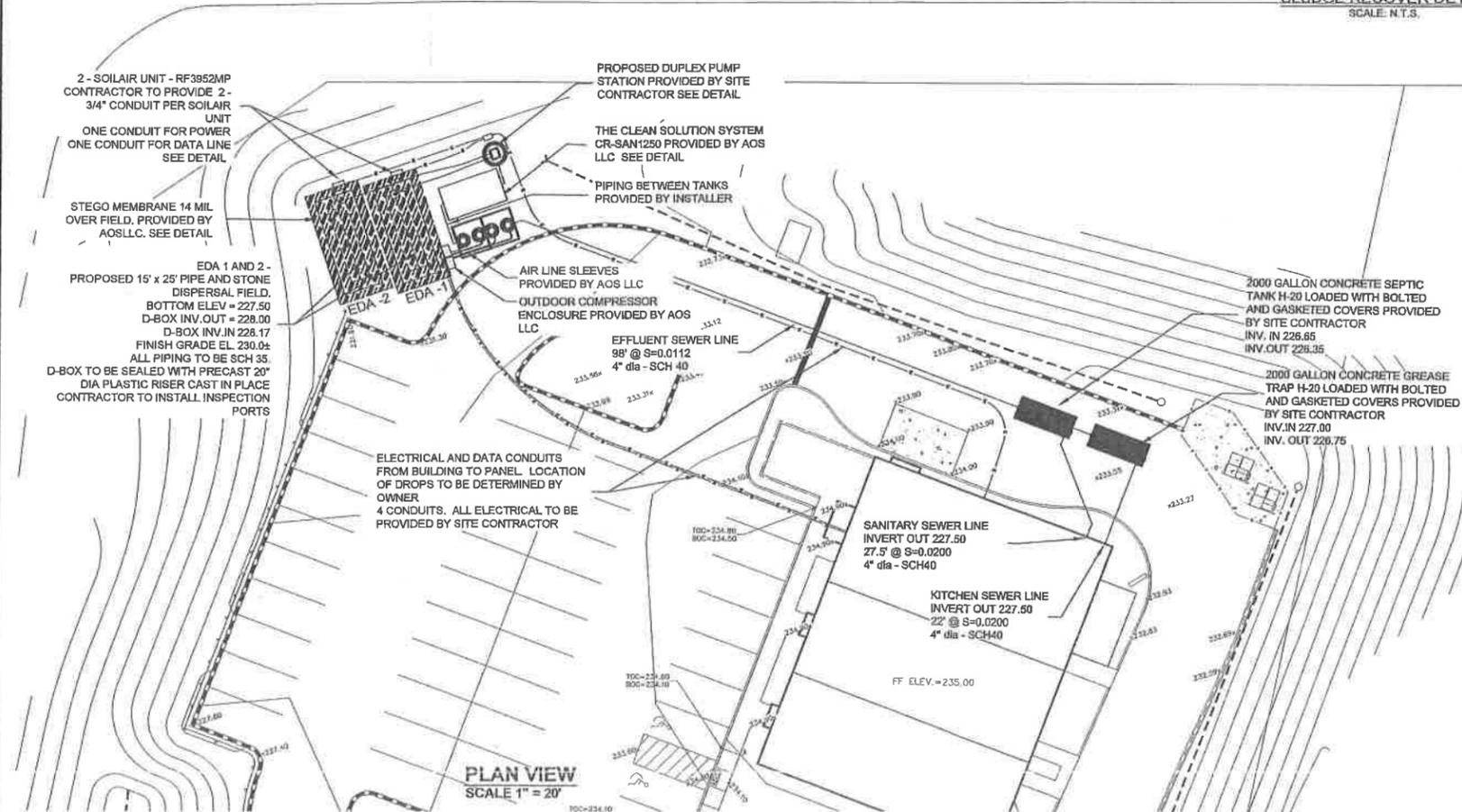
SLUDGE RECOVER DETAIL
SCALE: N.T.S.

ADVANCED ONSITE SOLUTION LLC. DESIGN NOTES

- THE CLEAN SOLUTION SYSTEM™ IS SUPPLIED BY ADVANCED ONSITE SOLUTIONS LLC 603-783-8042
- THE SOLAIR™ UNITS TO BE PROVIDED BY ADVANCED ONSITE SOLUTIONS LLC 603-783-8042
- THE SYSTEM HAS BEEN DESIGNED UTILIZING A STONE AND PIPE EDA.
- THE SYSTEM HAS BEEN DESIGNED TO HANDLE 990 GPD FROM A DUNKIN DONUTS AND A DRY GOODS STORE.
- THE SYSTEM HAS BEEN DESIGNED BASED ON PROPOSED SITE PLAN AND SOLAIR PERC RATE INFORMATION PROVIDED BY NEACH-NORDSTROM ASSOC., INC BEDFORD, NH.
- INSTALLER SHALL FOLLOW THE CURRENT EDITION OF THE MANUFACTURERS GUIDELINES TO PREPARE SITE FOR INSTALLATION OF THE CLEAN SOLUTION SYSTEM AND SHALL FOLLOW THE FOLLOWING:
 - CONTRACTOR SHALL FOLLOW APPROVED DESIGN PLANS AND NHDES SUBSURFACE SYSTEM RULES.
 - CONTRACTOR TO SUPPLY NECESSARY SEPTIC TANKS, GREASE TRAPS, BIOCON AND SETTLING TANKS AS REQUIRED BY DESIGNER.
 - EXCAVATION OF ALL TANKS INCLUDING TANKS SUPPLIED BY WAI TO GRADES ESTABLISHED BY DESIGNER.
 - SETTING AND LEVELING OF ALL TANKS.
 - SEPTIC CONNECTIONS FROM BUILDING TO SEPTIC TANK(S), SEPTIC TANK(S) TO BIOCON TANK(S), BIOCON TANK(S) TO SETTLING TANK(S), SETTLING TANK(S) TO DISPERSAL FIELD(S).
 - CONTRACTOR SHALL EXCAVATE FOR ALL AIR CONDUIT LINES FROM COMPRESSOR HOUSING TO BIOCON TANK(S).
 - CONTRACTOR TO WATER PLUG ALL TANK PENETRATIONS TO PREVENT GROUNDWATER LEAKS.
 - CONTRACTOR TO WATER PLUG ALL INLET AND OUTLETS NOT USED.
 - CONTRACTOR SHALL SET ALL RISERS TO GRADES ESTABLISHED BY DESIGNER. CONTRACTOR TO INSTALL ACCESS STACKS PER THE MANUFACTURERS INSTALLATION GUIDELINE. CONTRACTOR TO ENSURE THAT RUBBER GASKET O-RING IS IN PLACE PRIOR TO SECURING SECTIONS. ALL SCREWS/HEADS TO BE USED TO SECURE SECTIONS TO EACH OTHER.
 - CONTRACTOR TO BUILD / MODIFY OVERBOARD DISCHARGE LINE AS REQUIRED BY DESIGNER.
 - CONTRACTOR SHALL CALL NHDES AND LOCAL BOARDS (IF REQUIRED) FOR SYSTEM INSPECTION.
 - CONTRACTOR TO PROVIDE OWNER AND WAI WITH TIES FROM TWO FIXED POINTS TO ACCESS COVERS.
 - CONTRACTOR SHALL BACKFILL SYSTEM AFTER APPROVAL FOR OPERATION BY NHDES.
- THE OWNER/CONTRACTOR SHALL PROVIDE THE FOLLOWING:
 - OWNER/CONTRACTOR SHALL SUPPLY NECESSARY OUTLETS CAPABLE OF 4.5 AMPS AND 120 WATTS FOR EACH COMPRESSOR. 20 AMP CIRCUITS REQUIRED. **NON GFI PROTECTED.**
 - COMPRESSOR(S) LOCATION TO BE MUTUALLY DETERMINED BY OWNER / REPRESENTATIVE AND WAI.
 - MAXIMUM DISTANCE FROM COMPRESSOR(S) TO BIOCON TANK IS 50'. FOR DISTANCES GREATER THAN 50' CONTACT AOS.
 - CONTRACTOR SHALL PROVIDE SLEEVES FOR AIR LINES TO EACH CHAMBER ACCESS.
- REQUIRED MAINTENANCE BY OWNER:
 - SIGN SYSTEM INSPECTION AGREEMENT FOR THE CLEAN SOLUTION SYSTEM. INSPECTION AGREEMENT IS PROVIDED BY AOSI.
 - SEPTIC TANK(S) AND SETTLING TANK(S) TO BE INSPECTED EVERY 6 MONTHS AND PUMPED OUT AS NEEDED.
 - GREASE TRAPS TO BE PUMPED OUT EVERY 2 MONTHS.
 - BIOCON TANK(S) TO BE INSPECTED EVERY 6 MONTHS BY APPROVED AOS TECHNICAL.
 - OWNER SHALL KEEP ALL PUMPING RECORDS.
 - WASTEWATER SAMPLE WILL BE REQUIRED AT A MINIMUM OF TWICE A YEAR.
 - TESTING MAY BE REVISED AFTER FIRST FULL YEAR IN USE.
 - SEE SALES AGREEMENT AND INSPECTION AGREEMENT FOR ADDITIONAL INSPECTION REQUIREMENTS BY OWNER(S).
 - FAILURE TO COMPLY WITH "A" - "G" ABOVE WILL VOID WARRANTY OF THE CLEAN SOLUTION SYSTEM AND AOS.

ADVANCED ONSITE SOLUTION LLC. NOTES

DESIGN BASED ON INFORMATION PROVIDED TO AOS, LLC BY KNA KEACH - NORDSTROM ASSOC, INC. PRIOR TO INSTALLING SYSTEM CONTRACTOR SHALL HAVE ONSITE A COPY OF THE NHDES APPROVED PLAN



PROPOSED ISDS PLAN FOR FAILED SYSTEM
Tax Map 105 Lot 19
14 BRADY DRIVE
HUDSON, NH
SCALE: NTS DATE: 01-XX-2014

OWNER: **CAFUA REALITY TRUST LIV, LLC**
280 MERRIMACK STREET
METHUEN, MA 01844

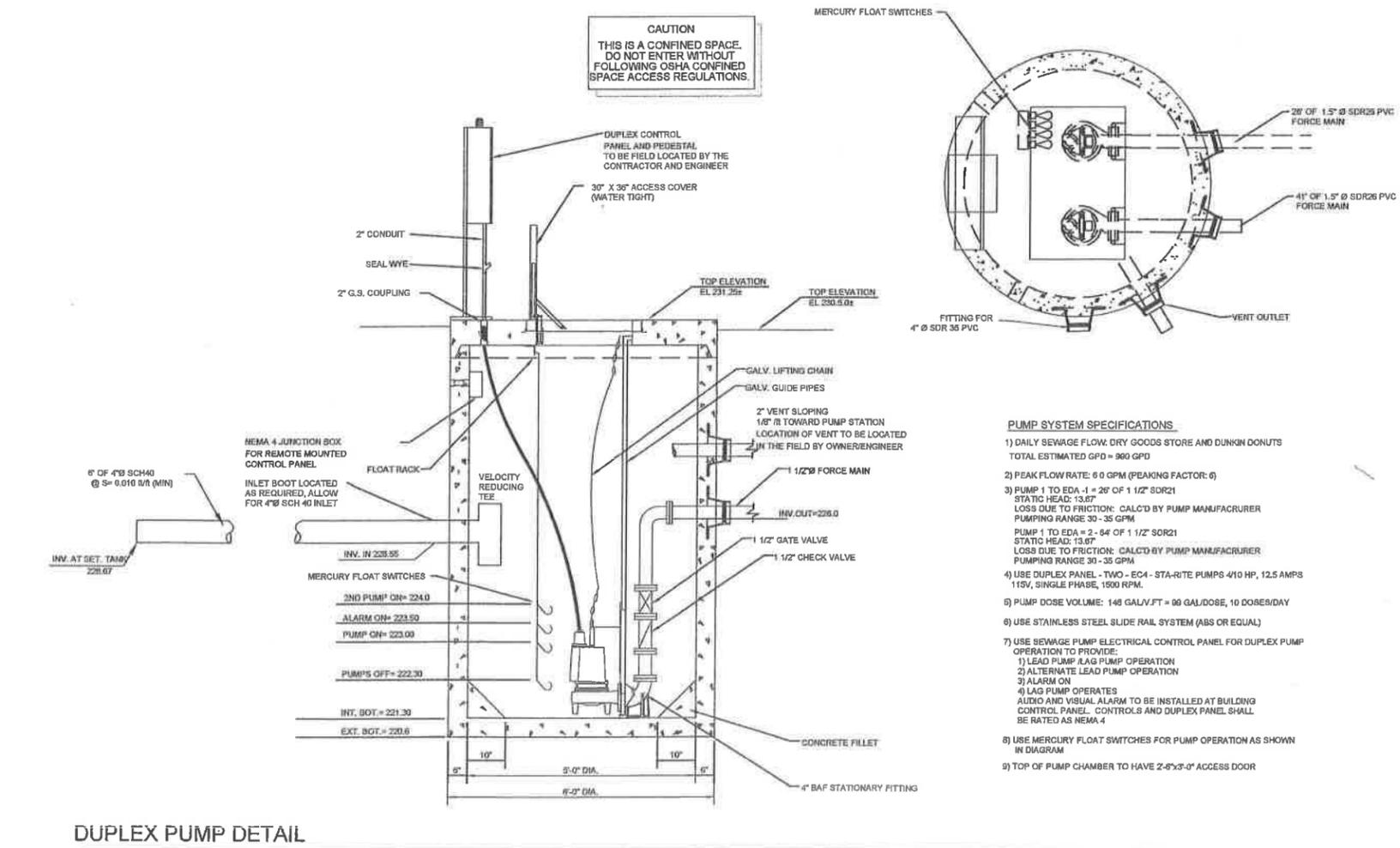
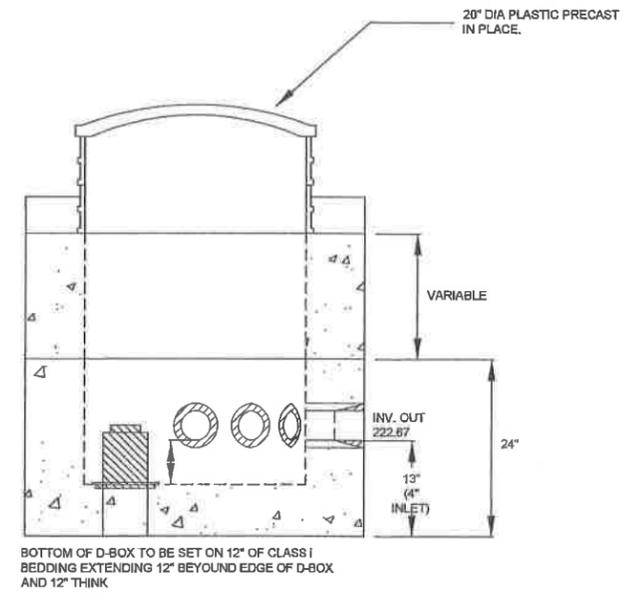
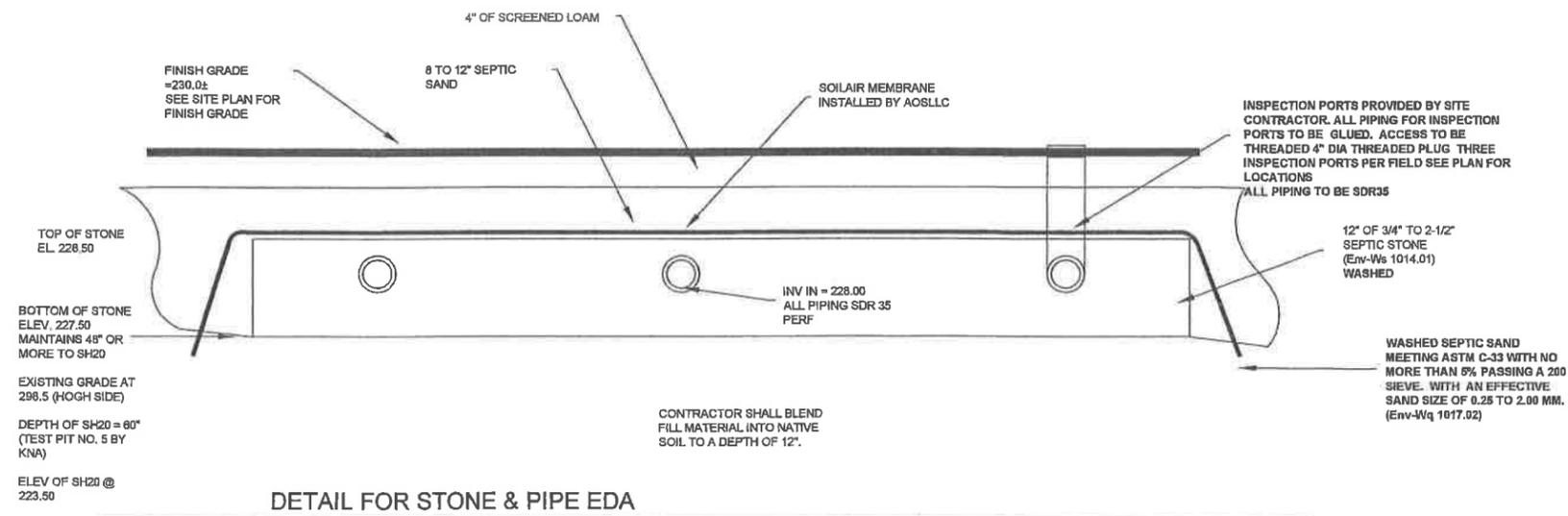


Advanced Onsite Solutions, LLC
Innovative wastewater solutions with sustainable results
2 Wilbury Road - Concord - NH
P.O. Box 248 - Canterbury - NH 03224
Phone (603) 783-8042 web: aosone.com

REV.	DATE	DESCRIPTION	XX	XX	FILE
1	XX.XX.XXXX	XXXXXXXX			
			XX	XX	
			CG	DR	CK

SHEET 1 OF 2

P:\project\13030141\13030141.dwg (Submittal) From AOS 01-09-14\AOS-DETAILS-HUDSON-19-2014-acad 2007.dwg, 1/27/2014, 10:56:59 AM, ml



DUPLIX PUMP DETAIL

STANDARD DUTY LOADED- "D" BOX - 7 OUTLET (USE 3 OUTLETS)

PROPOSED ISDS PLAN FOR FAILED SYSTEM
 Tax Map 105 Lot 19
 14 BRADY DRIVE
 HUDSON, NH

SCALE: NTS DATE: 01-XX-2014

OWNER: **CAFUA REALITY TRUST LIV, LLC**
 280 MERRIMACK STREET
 METHUEN, MA 01844

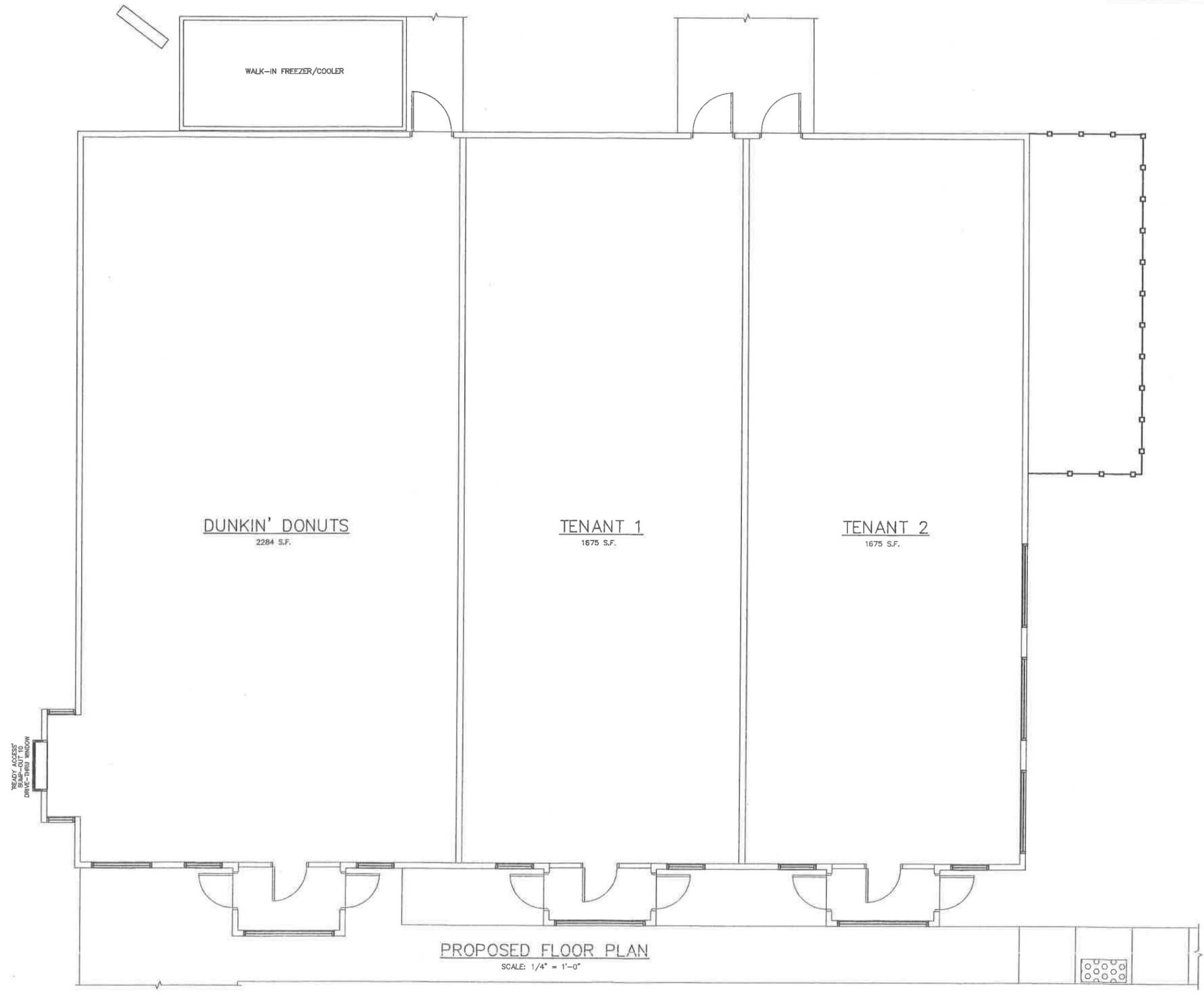
 **Advanced Onsite Solutions, LLC**
Innovative wastewater solutions with sustainable results
 2 Whitney Road - Concord - NH
 P.O. Box 248 - Canterbury - NH 03224
 Phone (603) 783-8042 web: aosna.com

REV.	DATE	DESCRIPTION	XX	XX	XX	FILE
1	08.30.2008	ISSUED				
			C/O	DR	CK	

SHEET 2 OF 2

P:\projects\130304\130304.dwg (Submittal) from AOS 01-09-14 10:55:47 FAX: 603-783-8042 2007.dwg, 1/27/2014 10:32:59 AM, int

P:\projects\13020111\13020111.dwg, 1/23/2014 3:51:08 PM, pt



WALK-IN FREEZER/COOLER

DUNKIN' DONUTS
2284 S.F.

TENANT 1
1675 S.F.

TENANT 2
1675 S.F.

READY ACCESS
BUMP-OUT TO
DRIVE-THRU WINDOW

PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"



**JAMES D. SMITH,
ARCHITECT, AIA**
35 LOTHROP'S LN.
W. BARNSTABLE, MA 02668
PHONE: 508-367-8820
EMAIL: JAMESDSMITH@COMCAST.NET

REVISIONS		
NO.	DESCRIPTION	DATE
1	INITIAL ISSUE	11/21/13

JOB LOCATION:
HUDSON, NH
XXXX
PROPOSED FLOOR PLAN
IMAGE TYPE: T.B.D.

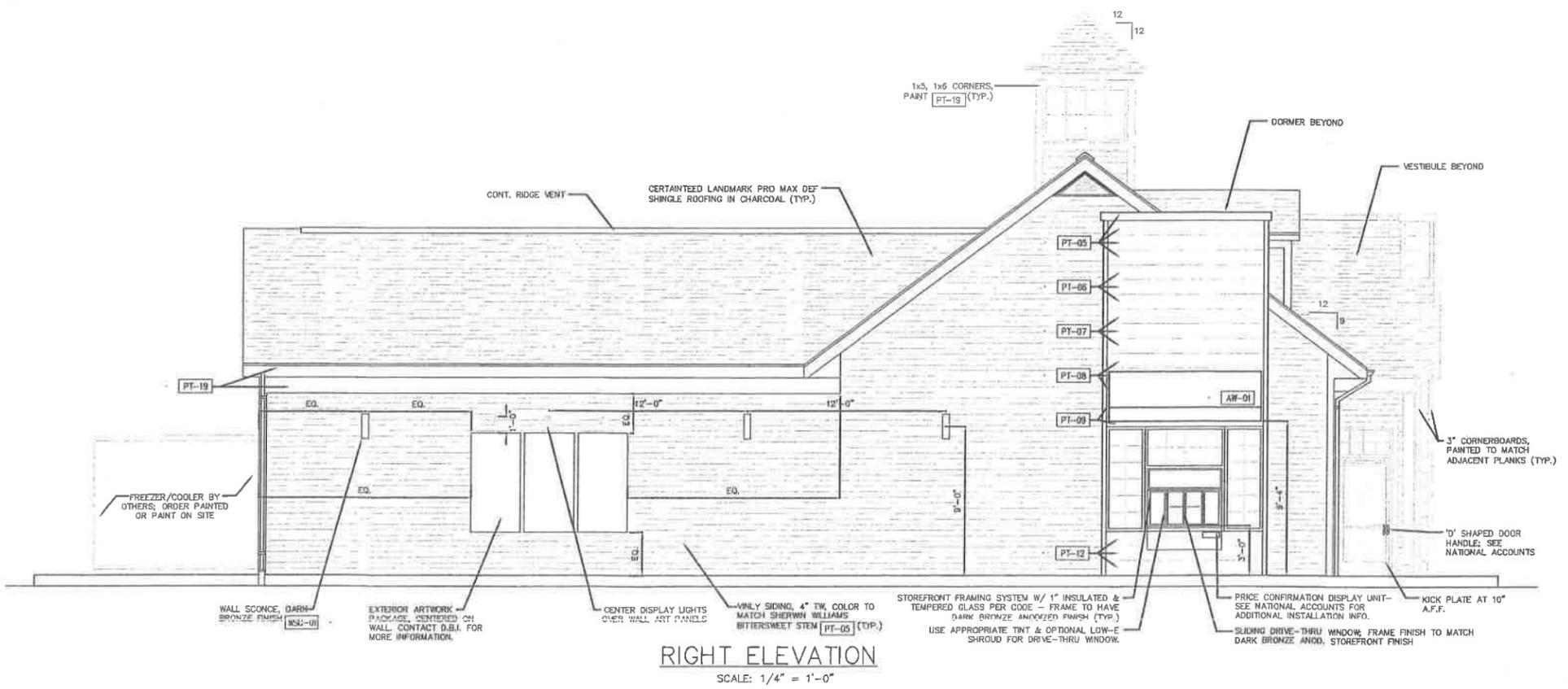
SHEET
A1
JOB#: D13143
DATE: 11/21/13
PC#:
C.M.

NO.	DESCRIPTION	BY	DATE
1	INITIAL ISSUE	JS	11/21/13

JOB LOCATION:
HUDSON, NH
XXXX
EXTERIOR ELEVATIONS

IMAGE TYPE: T.B.D.

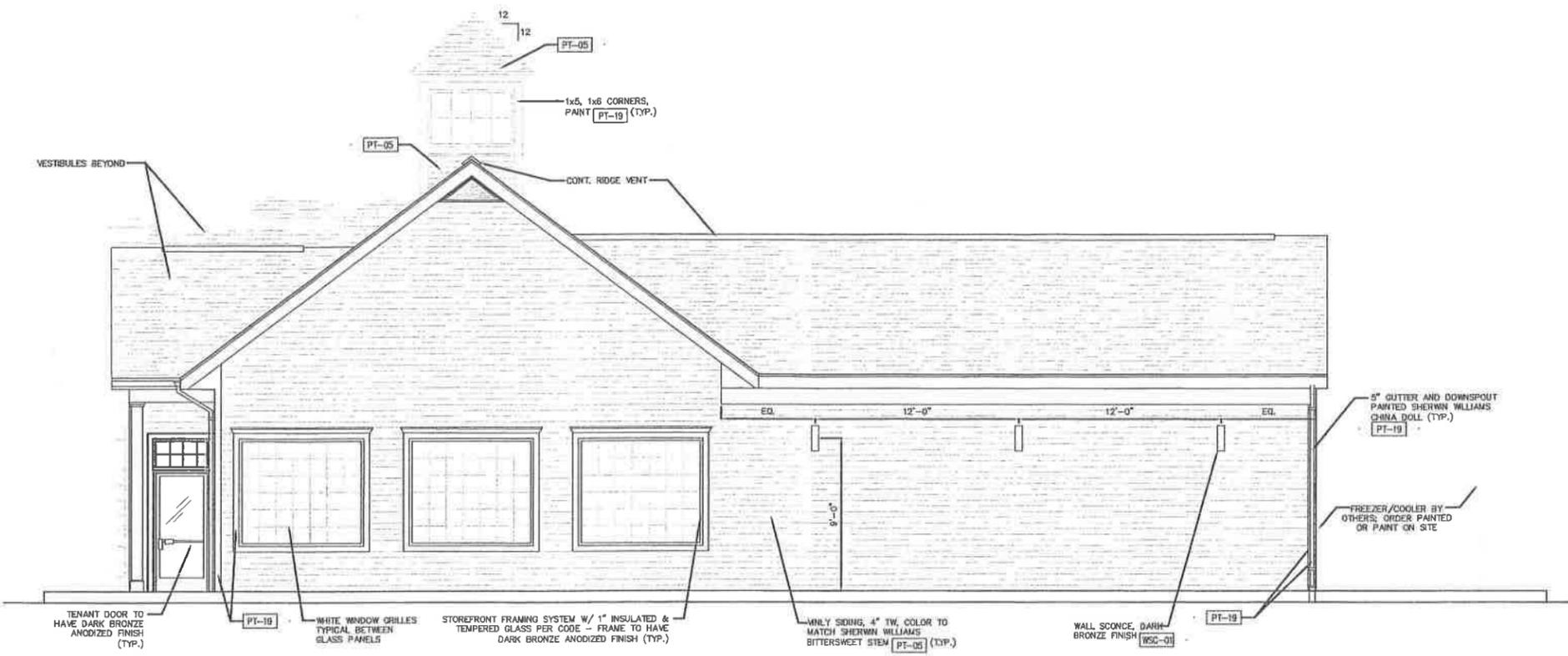
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A2
JOB#: D13143
DATE: 11/21/13
PC#:
C.M.



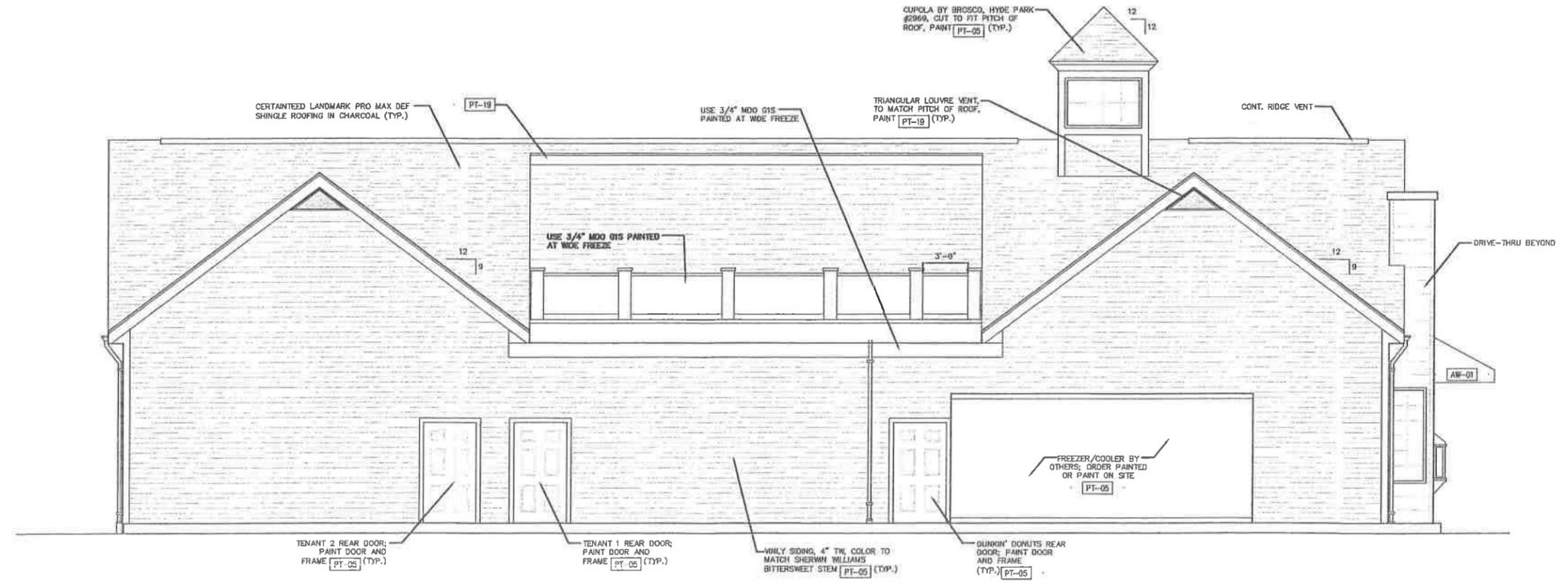
NO.	DESCRIPTION	BY	DATE
1	INITIAL ISSUE	JS	11/21/13

JOB LOCATION:
HUDSON, NH
XXXX
EXTERIOR ELEVATIONS

SHEET
A3
JOB#: D13143
DATE: 11/21/13
PC#:
C.M.



LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



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

Pine Road 2-Lot Subdivision

STAFF REPORT

March 12, 2014

SITE: Pine Road -- Map 252/Lot 044 -- SB# 01-14

ZONING: G-1 (2 acre minimum lot size and 200 ft. of constructed street frontage)

PURPOSE OF PLAN: to show Map 252/Lot 44 a 10.32 acre parcel, being subdivided into two lots. Lot 44-1 consists of 5.27 +/- acres with 232.40 ft. frontage along Pine Road, and Lot 44-2 consists of 5.05 acres with 233.62 frontage along Pine Road. Application Acceptance & Hearing.

PLAN UNDER REVIEW ENTITLED: Pine Road Subdivision, Map 252/Lot 44, Hudson, NH, prepared by, Cuoco & Cormier Engineering Associates, Inc., dated: December 5, 2013 last revised Feb. 24, 2014, consisting of Sheets C1, C-2, V-1, C-3 & C-4 and Notes 1 – 9 (said plans are attached hereto).

APPLICANT/DEVELOPER: Red Oak Property Management, Inc.

PROJECT ENGINEERING CONSULTANTS: Jeffrey Rider, P.E., Cuoco & Cormier, Inc.

ATTACHMENTS:

- 1) Project Narrative, Subdivision Plan application (date stamped 1/27/14) and aerial photo of the site - Attachment "A".
- 2) CLD Initial Comments Report and Check-off List, dated 2/¹⁹~~21~~/14 – "B".
- 3) Cuoco & Cormier Response Letter, re: CLD's Initial Report, dated 2/26/14 – "C".
- 4) Comment Forms/Memoranda from Fire Dept., Road Agent, Zoning and Assessing - "D".

REQUESTED WAIVERS: N/A.

OUTSTANDING ISSUES:

Please read CLD's attached Initial Comments report "B" and Cuoco & Cormier's Response Letter "C" and see that all of the outstanding items cited in the former are addressed in the latter.

The 2 lots proposed in this Plan exceed both the minimum lot size (2 acres) and minimum frontage (200 ft.). That is, proposed Lot 44-1 has 5.16 acres (224,872 sf) of contiguous upland and proposed Lot 44-2 has 5.05 acres (219,981 sf) of contiguous upland. Please refer to the Hall Chart on the lower right corner of Sheet V-1. Also, proposed Lot 44-1 has 232.4 ft. of constructed street frontage on Pine St. and proposed Lot 44-2 has 233.62 ft. of frontage along said street (i.e., 187.02' + 46.6 ft. = 233.62). In regard to clear sight distance, Sheet C-4 of the Plan set shows that each lot provides same, i.e., 400 ft. with clearing of brush within the ROW and in the immediate vicinity of each driveway.

No outstanding issues are cited in the attached Town Dept. Comments Reports "D". That is, except for that of the Assistant Town Assessor, which the applicant will address at the meeting. Jim Michaud's comments read: "Keep Map 252 Lot 44 = 5.27 acres site. Map 252 Lot 044 Sub-lot 1 =

5.05 acres site.” Mr. Michaud’s cited comment will be addressed in the revised plans that will be provided for Planning Board endorsement, i.e., if the Plan is approved.

NOTE: The submitted full-size set of plans do have a NH LLS stamp and signature. Your copies do not. Also, for the meeting, the Applicant agreed to have the owner(s) signature(s) inscribed on the Plans.

RECOMMENDATION: With the application complete, staff recommends its acceptance at the commencement of the hearing. Taking into consideration that all of the review items have been rectified, as cited above, staff recommends for Planning Board approval of this application in accordance with the below DRAFT MOTIONS.

APPLICATION TRACKING:

- 01/27/14 – Application submitted
- 03/12/14 - Initial public hearing scheduled.

DRAFT MOTIONS:

I move to accept the 2-Lot Pine Road Subdivision Plan application, Map 252/Lot 044.

Motion by: _____ Second: _____ Carried/Failed: _____

I move to defer further review of the 2-Lot Pine Road Subdivision Plan application, Map 252/Lot 044, date specific, to the April 9, 2014 Planning Board meeting.

Motion by: _____ Second: _____ Carried/Failed: _____

DRAFT MOTION TO APPROVE:

I move to approve the Pine Road Subdivision, Map 252/Lot 44, Hudson, NH, prepared by, Cuoco & Cormier Engineering Associates, Inc., dated: December 5, 2013 last revised Feb. 24, 2014, consisting of Sheets C1, C-2, V-1, C-3 & C-4 and Notes 1 – 9, in accordance with the following terms and conditions:

- 1) All stipulations of approval shall be incorporated into the Notice of Approval, which shall be recorded at the HCRD, together with the Plan.
- 2) Prior to Planning Board endorsement of the Subdivision Plan-of-Record, Town Counsel shall favorably recommend on the covenants to the deeds of both lots shown on the Plan, as cited in CLD's Initial Comments Report, dated Feb. 19, 2014 (see item #4, page 2 of said report).
- 3) A CAP amount of \$975.26, per residential unit, shall be paid prior to the issuance of a Certificate of Occupancy.
- 4) A public school impact fee in the amount of \$3,578.00, per residential unit, shall be paid prior to the issuance of a Certificate of Occupancy.
- 5) A public library impact fee in the amount of \$124.00, per residential unit, shall be paid prior to the issuance of a Certificate of Occupancy.
- 6) A recreation contribution in the amount of \$400.00, per residential unit, shall be paid prior to the issuance of a Certificate of Occupancy.
- 7) All monumentation shall be set or bonded prior to the Planning Board endorsing the Plan-of -Record.
- 8) This approval is subject to final engineering review.

Motion by: _____ Second: _____ Carried/Failed: _____

NOTE: there is no mention in the above terms of approval for conservation demarcation emblems, etc. That is, because the wetland area associated with the proposed 2 lots is located at the far end of Lot 44-1, and as such, for all intents and purposes it's virtually isolated from any mankind impacts.

"A"

Pine Road Subdivision Project Narrative

The property consists of 10.32 acres+/- situated on the southeast side of Pine Road, Hudson, NH, Tax Map 252 Lot 44. The property is in the General I" (G-I) Zoning District. The site is situated in a Federal Flood Hazard Area, Zone 'X', an area determined to be outside the 0.2% annual chance floodplain. The easterly portion of the property contains a small wetlands area. These wetlands were delineated by A&D Klumb Environmental, LLC. in June 27, 2013 and field located by this office. NH Natural Heritage Bureau has no recorded occurrences for sensitive species near the project site as indicated in the NH Natural Heritage Bureau report dated July 15, 2013.

The property is currently vacant with majority of the lot being wooded with some meadow patches. The soils on the site consists of Deerfield Loamy Sand and Windsor Loamy Sand with moderate to mild slope. The site has 466.36 feet frontage on Pine Road.

The proposed subdivision plan calls for subdividing the 10.32 acres parcel to two building lots (5 acres plus each). The two lots utilize the existing frontage on Pine Road and conform to all the dimension requirements in the G-I Zone. The two proposed driveways comply with the minimum sight distance requirements. The lots will have their own individual sewage disposal system and drinking well, electric power and cable utilities are available from Pine Road. Two infiltration basins are proposed to recharge and mitigate the increased surface runoff. There is no works proposed within the wetland and the 50 ft. buffer area. Both lots exceed 5 acres of land, therefore, no State Subdivision Permit is required.

This two lots subdivision utilizes existing frontage on Pine Road, no new roadway is proposed. The two dwelling units would generate less than 20 trips (10 trips per dwelling unit, ITE 7th Edition) of daily traffic on a collector street "Pine Road". Each lot would be serviced by individual sewage disposal system and drinking well. Therefore, this development would have minimal impacts on traffic, schools, and utilities.

'A' cont.
COPY

**SUBDIVISION PLAN APPLICATION FOR PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: December 30, 2013 Tax Map # 252 Lot # 44

Name of Project: Pine Road Subdivision

Zoning District: _____ (For Town Use) General SB# 01-14 (For Town Use)

ZBA Action: N/A

PROPERTY OWNER:

DEVELOPER:

Name: Geraldine Dupont Red Oak Property Management, Inc.

Address: 5 Fireside Drive 289 Pine Street

Address: Nashua, NH 03063 Manchester, NH 03103

Telephone # _____ 603-668-6262

Fax # _____

Email: _____ Ron@redoak.mv.com



PROJECT ENGINEER

Name: Cuoco and Cormier Engineering Associates, Inc. Telephone # 603-882-1812

Address: 74 Northeastern Blvd. Unit 10A Fax # 603-882-3352

Address: Nashua, NH 03062 Email: j rider@cuocoandcormier.com

PURPOSE OF PLAN:

The purpose of this Subdivision Plan is to show Map 252 Lot 44, a 10.32 acres parcel, being subdivided into two Lots. Lot 44-1 consists of 5.27+/- acres with 232.40 ft frontage along Pine Road and Lot 44-2 consists of 5.05 acres with 233.62 ft frontage along Pine

(FOR TOWN USE)

Plan Routing Date: _____ Sub/Site Date: _____

_____ I have no comments _____ I have comments (attach to form)

(Initials) _____ Title: _____ Date: _____

DEPT:

_____ Zoning _____ Engineering _____ Assessor _____ Police _____ Fire _____ Planning

_____ Consultant _____ Highway Department

Fees Paid _____

SITE DATA SHEET

Plan Name: Pine Road Subdivision

Plan Type: Subdivision Plan

Legal Description: Map 252 Lot 44

Map _____ Lot _____

Date: December 5, 2013



Location: Pine Road

Total Area: S.F. 449,352 s.ft. Acres: 10.32 ac.

Area in Wetlands: 3,116 s.f.

Zoning: G-1

Lots Not Meeting Required Dimensions: None

Required Area: 87,120 s.ft.

Required Frontage: 200 ft.

Water and Waste System Proposed: On-site Individual Sewage Disposal System and individual Drinking Well.

Number of Lots With Existing Buildings: None

Existing Buildings To Be Removed: None

Flood Zone Reference: Zone 'X', outside the 0.2% annual chance floodplain.

Proposed Linear Feet Of New Roadway: 0 ft. utilizing existing Pine Road Frontages

LOT AREA CALCULATION TABLE

LOT #	TOTAL AREA	WETLAND AREA	AREA > 25% SLOPE	BUILDABLE AREA (net contiguous upland useable)	FRONTAGE
44-1.	229,354 s.ft.	3,116 s.ft.	1,366 s.ft.	224,872 s.ft.	232.40 ft. (Pine Road)
44-2.	220,000 s.ft.	0 s.ft.	19 s.ft.	219,981 s.ft.	233.62 ft. (Pine Road)
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Data Sheets Checked By: _____ Date: _____

SUBDIVISION PLAN DATA SHEET

Dates/Case #/Description/
Stipulations of ZBA,
Conservation Commission,
NH Wetlands Board Action:

N/A

(Attach Stipulations on
Separate Sheet)

List Permits Required:

None

*Waivers Requested:

Hudson Town Code
Reference

Regulation Description

	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
	7.	

**(Left Column for Town Use)*

	<u>Amount</u>	<u>Account</u>
Impact Fees	_____	_____
	_____	_____
	_____	_____
Cap Fees	_____	_____
	_____	_____

Development Agreement
Proposed:
If Yes Endorsed

Yes
 Yes

No
Date _____

No

**APPLICATION FOR SUBDIVISION PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Twenty one (21) days prior to Planning Board Meeting, a complete subdivision plan to include all supporting materials/documents must be submitted in final form. The subdivision plan shall comply with the following specifications/requirements:

**Applicant
Initials**

**Staff
Initials**

- | | | | |
|--------------|----|--|-------|
| <u> X </u> | a) | Submission of eight (8) full sets of Site Plans (sheet size: 22" x 34") shall be submitted at the time of application filing, followed by the submission of seventeen (17) 11" X 17" plan sets (revised if applicable) to the Community Development Department no later than 10:00 A.M. Tuesday the week prior to the scheduled public hearing/conceptual review date. | _____ |
| <u> X </u> | b) | Seventeen (17)-subdivision narratives, describing the project. | _____ |
| <u> X </u> | c) | Plan scale at not less than one inch equals fifty feet (example: 1" = 50' acceptable). | _____ |
| <u> X </u> | d) | Locus plan with 1,000 minimum radius of site to surrounding area. | _____ |
| <u> X </u> | e) | Plan dated by day/month/year. | _____ |
| <u> X </u> | f) | Revision block. | _____ |
| <u> X </u> | g) | Planning Board approval block. | _____ |
| <u> X </u> | h) | Title of project inscribed on plan. | _____ |
| <u> X </u> | i) | Name(s) and address of property owner(s) and signature(s) shall be inscribed on plan. | _____ |
| <u> X </u> | j) | North point shall be inscribed on plan. | _____ |
| <u> X </u> | k) | Property lines-exact locations and dimensions. | _____ |
| <u> X </u> | l) | Acreage/sq. ft. of entire subdivision. | _____ |
| <u> X </u> | m) | Proposed lots, with lot numbers and area of each lot. Note: each proposed Lot shall be listed on the plan, in chart form, indicating in square feet/ acreage the total lot area, wetland, slope area greater than 25% and total net contiguous useable upland area. | _____ |

Applicant
Initials

Staff
Initials

- | | | |
|--------------------|--|-------|
| <u> X </u> n) | Certified list of names and addresses of bordering abutters, shown on Tax Assessor's records not more than five (5) days prior to application date to be listed on plan. | _____ |
| <u> X </u> o) | Location of all structures, roads, wetlands, hydrants, wells, septic systems, 4k reserve area, floodways/floodplains, driveways, travel areas, parking areas, natural features within 200 feet of the tract. | _____ |
| <u> X </u> p) | Locations of existing and proposed permanent monuments and benchmarks within 200 feet of the tract. | _____ |
| <u> N/A </u> q) | Pertinent highway projects. | _____ |
| <u> X </u> r) | Assessor map and lot number. | _____ |
| <u> N/A </u> s) | Waiver application form shall be submitted with subdivision application, Note on plan listing waivers requested/granted; and all waivers granted to the subdivision regulations shall be listed on the final plan. | _____ |
| <u> X </u> t) | Delineate zoning. | _____ |
| <u> X </u> u) | Storm water drainage plan. | _____ |
| <u> X </u> v) | Topographical contours at 2-foot intervals existing and proposed. | _____ |
| <u> X </u> w) | Utilities: existing and proposed. | _____ |
| <u> X </u> x) | Building and wetland setback lines. | _____ |
| <u> X </u> y) | Rights of way, existing and proposed. | _____ |
| <u> N/A </u> z) | Location of dedicated recreational public use land(s) proposed. | _____ |
| <u> N/A </u> aa) | Detailed designs of bridges and culverts. | _____ |
| <u> N/A </u> ab) | Typical roadway cross-section, road profile, stationing, and curve data, etc. | _____ |

Applicant
Initials

Staff
Initials

- X ac) Proposed location of water supply and sewage disposal systems, including perk test data, test-pit logs and locations; wells, (proposed and existing) 75' protective well radii and attached copies of any required well protection easements. _____
- X ad) All notes from plats. _____
- X ae) Buffers as required by subdivision regulations. _____
- X af) Soil types and boundaries, Note: If site contains marginal or questionable soils, a High Intensity Soil Survey (HISS) may be deemed necessary to submit as part of the application. Said HISS, if required, shall be performed by a State of New Hampshire Certified Soil Scientist, who shall affix his/her stamp and signature and this shall be inscribed on the plan. _____
- X ag) Wetlands (and poorly-drained and very poorly-drained soils), also identified as Class 5 and Class 6 High Intensity Soil Survey (HISS soils), and permanent and seasonal wetlands shall be identified on the plan by a New Hampshire Certified Wetland or Soil Scientist, who shall affix his/her stamp and signature to the respective plan. _____
- N/A ah) Easements, existing and proposed. _____
- X ai) State of New Hampshire Engineer's seal and signature.
Surveyor's seal and signature. _____
- X aj) Error of closure (1 in 10,000 or better). _____
- ak) Drafting errors/omissions. _____
- N/A al) Note outlining phasing schedule. _____
- X am) Narrative description stating the purpose, location, long range plans impacts on traffic, schools, and utilities. _____
- X an) Aerial photograph of site and area within 200 feet of the subdivision parcel. _____
- N/A ao) Fiscal impact study. _____
- N/A ap) Traffic study. _____
- X aq) Drainage calculations and supporting data. _____

Applicant
Initials

Staff
Initials

N/A ar) Copies of any proposed or existing easements, covenants, deed restrictions, right of way agreements or other similar documents. _____

N/A as) Copy of applicable town, state, federal approval/permits to include but not limited to the following: _____

- sewer applications
- flood plain permit
- wetlands special exception
- variance
- erosion control permit (149:8a)
- WSPCC subdivision approval (septic)
- dredge and fill permit
- curb cut/driveway permit
- shore land protection certification in accordance with RSA483-B.
- if applicable, review application with Lower Merrimack River Local Advisory Committee (LMRLAC) and attach LMRLAC project comments hereto.

N/A at) Off-site agreement(s). _____

N/A au) Presentation plan (colored, with color-coded bar chart). _____

X av) Fees paid to clerk. _____

N/A aw) Plans that include relocation of lot lines shall clearly delineate the former (old) lot lines from proposed (new) lot lines. _____

- Any or all items may be waived under the purview of the Planning Board.

Wavier for color-coded presentation plan requested. (au) _____

**APPLICATION FOR SUBDIVISION PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

I hereby apply for Subdivision Plan Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the Subdivision Plan specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s), by the filing of this application as indicated above, hereby give permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and inspections conducted on his (their) property in connection with this applications.

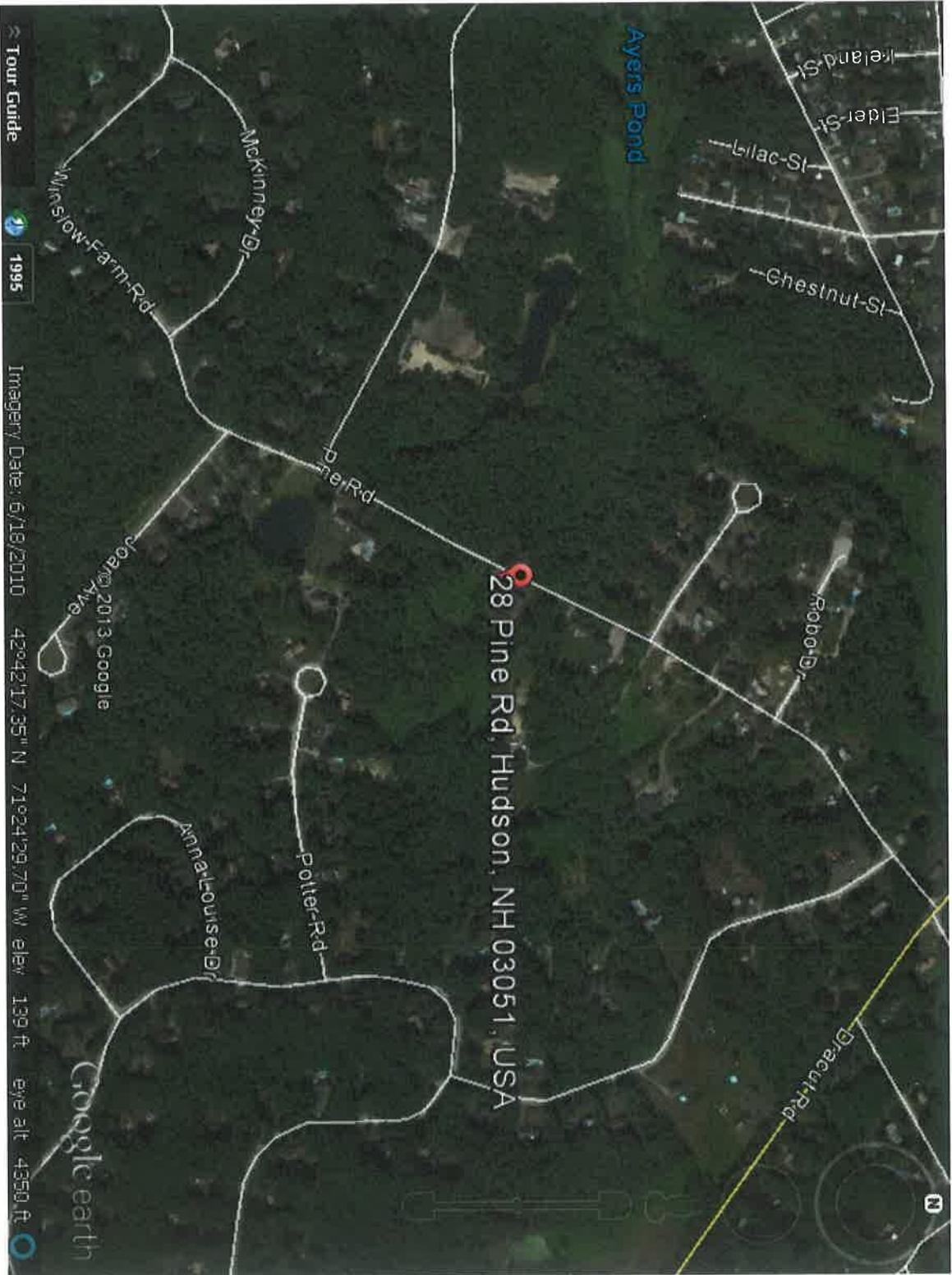
Signature of Owner: x *Heraldine M. Dupont*

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: x *[Signature]* PRES. RFD 2411
TOW DUBONT

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The Code Enforcement Officer/Building Inspector must be notified within two (2) working days of any change by the individual in charge of the project.

Technical Review Signature: _____
Planner Approval Signature: *[Signature]*





February 19, 2014

Mr. John Cashell, Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
Pine Road Subdivision, Pine Road
Tax Map 252, Lot 44, PO #1350-829
CLD Reference No. 03-0249.1320

Dear Mr. Cashell:

CLD Consulting Engineers, Inc. (CLD) has reviewed the first submission of materials related to the above-referenced project received on February 7, 2014. A list of items reviewed is enclosed. The scope of our review is based on the Subdivision Plan Review Codes, Driveway Review Codes, Stormwater Management Codes, and criteria outlined in the CLD Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007 and September 3, 2008.

We have included a copy of CLD's evaluation of the checklist for your reference. We did not receive a copy of the applicant's checklist. We note that several items could not be verified by CLD and require action by the Town.

The project consists of creating two (2) single-family, approximately 5-acre buildable lots from one larger lot. The 10.32-acre subdivision is located on Pine Road. No road construction is proposed. All lots are proposed to be serviced by individual sewerage disposal system and private drinking water wells.

The following items are noted:

1. Subdivision Review Codes

- a. Hudson Regulations (HR) 289-15 The proposed subdivision is not located within the 100-year flood zone.
- b. HR 289-26.B.(5) The applicant has not provided a plan that shows the location of all intersecting roads, driveways, wetlands, hydrants, septic systems, and natural features within 200 feet of the parcel.
- c. HR 289-27.B. (7) The applicant has not provided any benchmarks on the plan set.
- d. HR 289-28.A. The applicant has shown iron rods to be set at the right-of-way property corners instead of the required monuments. The applicant should also provide specific details for the proposed monuments and pins to be set.



Mr. John Cashell
CLD Reference No. 03-0249.1320
February 19, 2014
Page - 2

2. Driveway Review Codes (HR 193-10)

- a. HR 193-10.E. The applicant has shown existing sight distance information; however, the plan does not show whether the existing trees to remain will affect the line of sight.
- b. The applicant has not shown the intent to install driveway culverts.

3. Roadway Design

- The applicant is not proposing any streets.

4. Drainage Design /Stormwater Management (HR 289-20.C. /Chapter 290)

- a. HR 289-20.A. We note that the basement floor elevations of Lots 44-1 and 44-2 are 2.71 feet and 1.66 feet, respectively, lower than the grade of Pine Road. The applicant has not proposed any mechanical drains.
- b. We suggest that the applicant connects a legal requirement (deed, easement, etc.) that carries from landowner to landowner (in the case of a sale) to prohibit dumping of yard waste, re-grading of property, placement of permanent or temporary structures (swing set, children's clubhouse, shed, planting of trees, excavation of any kind, etc.) within the areas of the basin and swales for both Lots 44-1 and 44-2. The Inspection and Maintenance Manual discusses this within the "Grass Landscaping" section but it is not linked to the plan or legal document. Previous experience with individual yard-specific drainage features consisting of shallow swales and basins, typically result in the property owner re-grading and/or slowly filling the basin with yard waste (leaves, grass clippings, etc.); thus, reducing the storage volume or reducing the ability of infiltration and ultimately increasing off-site runoff downstream.

5. Sewer/Septic Design/Conflicts & Utility Design/Conflicts

- a. HR 289-19.A. and HR 289-21. The applicant has not shown any existing or proposed easements on the plans. The need for a well easement related to Lot 63 should be evaluated.
- b. HR 289-19.D., HR 289-26.B. (4) and HR 289-27.B. (5) The applicant has not provided typical designs of proposed on-lot water and sewerage systems. The applicant has shown a designated area and test pit location for a proposed subsurface disposal system, but has not provided test pit data in the plan set. The Regulations require a Certificate of Approval from the Board of Health of the Town of Hudson when on-lot utilities must be installed.
- c. A septic review was not performed as part of this review.



Mr. John Cashell
CLD Reference No. 03-0249.1320
February 19, 2014
Page - 3

6. Erosion Control/Wetland Impacts

- a. HR 290-4.A.(4) The applicant should add a note to the plans that disturbed areas should be stabilized within 30 days of being idle and disturbance should be kept to a minimum.
- b. HR 290-5.B.(1) The applicant should identify any stockpile locations on-site on the plan and provide specific erosion control measures for the stockpile(s). Also a note should be added to the plan about stump disposal.
- c. The applicant should provide a construction sequence for the proposed subdivision.
- d. The Town should reserve the right to require additional erosion control during construction, if needed.

7. State and Local Permits

- a. The applicant should add a note the need for a NHDES Individual Subsurface Septic Disposal System Approval.
- b. HR 193-10.C. The applicant should note the need for Town-issued Driveway Permits.
- c. Additional local permitting may be required.

8. Other

- No comments at this time.

Please feel free to call if you have any questions.

Very truly yours,

A handwritten signature in blue ink that reads 'Heidi Marshall'.

Heidi J. Marshall, P.E.

A handwritten signature in blue ink that reads 'Paul Konieczka'.

Paul Konieczka, AICP

HJM/PK;jt

Enclosure

cc: Town of Hudson Engineering Division – File
Cuoco & Cormier Engineering Associates, Inc.
74 Northeastern Blvd, Unit 10A
Nashua, NH 03062
Phone (603) 882-1812
Fax (603) 882-3352



540 Commercial Street Manchester, NH 03101
(603) 668-8223 • Fax: (603) 668-8802
cld@cldengineers.com • www.cldengineers.com
New Hampshire • Vermont • Maine

TO: File

FROM: Kelsey M. Gagnon *KMG*

DATE: February 19, 2014

RE: Town of Hudson Planning Board Review
Pine Road Subdivision, Pine Road
Tax Map 252, Lot 44, PO #1350-829
CLD Reference No. 03-0249.1320

The following list itemizes the documents reviewed related to the Pine Road Subdivision Plan review comments.

- Letter from the Town of Hudson to CLD, dated February 3, 2014 and received February 7, 2014, including the following:
 1. Copy of *Subdivision Plan Application for Plan Review*, dated January 31, 2014.
 2. Copy of *Pine Road Subdivision, Project Narrative*, not dated.
 3. Copy of *Drainage Calculations for Stormwater Management, Pine Road Subdivision*, prepared by Cuoco & Cormier Engineering Associates, Inc., dated December 27, 2013, with no revisions noted, including the following:
 - a. *Pre-Watershed Map*, dated December 5, 2013.
 - b. *Post-Watershed Map*, dated December 5, 2013.
 4. Copy of *Pine Road Subdivision, Hudson, New Hampshire Plan Set*, prepared by Cuoco & Cormier Engineering Associates, Inc., dated December 5, 2013, with no revisions noted, including the following:
 - a. Cover Sheet, Sheet C-1.
 - b. *Existing Conditions Plan*, Sheet C-2.
 - c. *Subdivision Plan*, Sheet V-1.
 - d. *Development Plan*, Sheet C-3.
 - e. *Sight Distance Plan and Erosion Control Details*, Sheet C-4.

KMG:jt

cc: John Cashell – Town of Hudson Planner
Town of Hudson Engineering Division – File

**APPLICATION FOR SUBDIVISION PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Twenty one (21) days prior to Planning Board Meeting, a complete subdivision plan to include all supporting materials/documents must be submitted in final form. The subdivision plan shall comply with the following specifications/requirements:

Applicant Initials		Staff Initials
_____ a)	Submission of eight (8) full sets of Site Plans (sheet size: 22" x 34") shall be submitted at the time of application filing, followed by the submission of seventeen (17) 11" X 17" plan sets (revised if applicable) to the Community Development Department no later than 10:00 A.M. Tuesday the week prior to the scheduled public hearing/conceptual review date.	
_____ b)	Seventeen (17) subdivision narrative, describing the project.	
_____ c)	Plan scale at not less than one inch equals fifty feet (example: 1" = 50' acceptable).	<u>CLD/KMG</u>
_____ d)	Locus plan with 1,000 minimum radius of site to surrounding area.	<u>CLD/KMG</u>
_____ e)	Plan dated by day/month/year.	
_____ f)	Revision block.	<u>CLD/KMG</u>
_____ g)	Planning Board approval block.	<u>CLD/KMG</u>
_____ h)	Title of project inscribed on plan.	<u>CLD/KMG</u>
_____ i)	Name(s) and address of property owner(s) and signature(s) shall be inscribed on plan.	<u>PENDING</u>
_____ j)	North point shall be inscribed on plan.	<u>CLD/KMG</u>
_____ k)	Property lines, exact locations and dimensions.	<u>CLD/KMG</u>
_____ l)	Acreage/sq. ft. of entire subdivision.	<u>CLD/KMG</u>
_____ m)	Proposed lots, with lot numbers and area of each lot. Note: each proposed lot shall be listed on the plan, in chart form, indicating in square feet/acreage the total lot area, wetland, slope area greater than 25% and total net contiguous useable upland area.	<u>CLD/KMG</u>

Applicant
Initials

Staff
Initials

_____ n) Certified list of names and addresses of bordering abutters, shown on Tax Assessor's records not more than five (5) days prior to application date to be listed on plan.

CLD/KMG

_____ o) Location of all structures, roads, wetlands, hydrants, wells, septic systems, 4k reserve area, floodways/floodplains, driveways, travel areas, parking areas, natural features within 200 feet of the tract.

[Handwritten Signature]

_____ p) Locations of existing and proposed permanent monuments and benchmarks within 200 feet of the tract.

[Handwritten Signature]

_____ q) Pertinent highway projects.

N/A

_____ r) Assessor map and lot number.

CLD/KMG

_____ s) Waiver application form shall be submitted with subdivision application, note on plan listing waivers requested/granted; and all waivers granted to the subdivision regulations shall be listed on the final plan.

[Handwritten Signature]

_____ t) Delineate zoning.

CLD/KMG

_____ u) Stormwater drainage plan.

CLD/KMG

_____ v) Topographical contours at 2-foot intervals existing and proposed.

CLD/KMG

_____ w) Utilities: existing and proposed.

ONSITE SEPTIC & WATER
[Handwritten Signature]

_____ x) Building and wetland setback lines.

CLD/KMG

_____ y) Rights-of-way, existing and proposed.

N/A

_____ z) Location of dedicated recreational public use land(s) proposed.

N/A

_____ aa) Detailed designs of bridges and culverts.

N/A

_____ ab) Typical roadway cross section, road profile, stationing and curve data, etc.

N/A

Applicant
Initials

Staff
Initials

_____ ac) Proposed location of water supply and sewage disposal systems, including perc test data, test pit logs and locations; wells, (proposed and existing) 75' protective well radii and attached copies of any required well protection easements.

JK

_____ ad) All notes from plats.

CLD/KMG

_____ ae) Buffers as required by subdivision regulations.

CLD/KMG

_____ af) Soil types and boundaries, Note: If site contains marginal or questionable soils, a High Intensity Soil; Survey (HISS) may be deemed necessary to submit as part of the application. Said HISS, if required, shall be performed by a State of New Hampshire Certified Soil Scientist, who shall affix his/her stamp and signature shall be inscribed on the plan.

CLD/KMG

_____ ag) Wetlands (and poorly drained and very poorly drained soils, also identified as Class 5 and Class 6 High Intensity Soil Survey (HISS soils), and permanent and seasonal wetlands shall be identified on the plan by a New Hampshire certified wetland or soil scientist, who shall affix his/her stamp and signature to the respective plan.

N/A

_____ ah) Easements, existing and proposed.

PENDING

_____ ai) State of New Hampshire Engineer's seal and signature.
Surveyor's seal and signature.

CLD/KMG

_____ aj) Error of closure (1 in 10,000 or better).

CLD/KMG

_____ ak) Drafting errors/omissions.

CLD/KMG

_____ al) Note outlining phasing schedule.

JK

_____ am) Narrative description stating the purpose, location, long-range plans impacts on traffic, schools, and utilities.

CLD/KMG

_____ an) Aerial photograph of site and area within 200 feet of the subdivision parcel.

JK

_____ ao) Fiscal impact study.

N/A W

Applicant
Initials

Staff
Initials

_____ ap) Traffic study.

N/A W

_____ aq) Drainage calculations and supporting data.

CLD/KMG

_____ ar) Copies of any proposed or existing easements, covenants, deed restrictions, right-of-way agreements or other similar documents.

PENDING

_____ as) Copy of applicable Town, State, Federal approval/permits to include but not limited to the following:

R

- sewer applications
- floodplain permit
- wetlands special exception
- variance
- erosion control permit (149:8a)
- WSPCC subdivision approval (septic)
- dredge and fill permit
- curb cut/driveway permit
- shoreland protection certification in accordance with RSA483-B
- if applicable, review application with Lower Merrimack River Local Advisory Committee (LMRLAC) and attach LMRLAC project comments hereto.

_____ at) Off-site agreement(s).

N/A

_____ au) Presentation plan (colored, with color-coded bar chart).

PENDING
HEARINGS

_____ av) Fees paid to clerk.

R

_____ aw) Plans that include relocation of lot lines shall clearly delineate the former (old) lot lines from proposed (new) lot lines.

CLD/KMG

- Any and all items may be waived under the purview of the Planning Board.



LAND PLANNING SERVICES
c NASHUA, NH
c TEWKSBURY, MA

74 Northeastern Blvd. - Unit 10A
Nashua, NH 03062-3142
Tel. (603) 882-1812
Fax. (603) 882-3352
www.cuocoandcormier.com

26 February 2014
C&C # 3177

Community Development Dept.
12 School Street
Hudson, NH 03051
ATTN: John Cashell, Town Planner

RE: Pine Road Subdivision, Tax Map 252, Lot 44



Dear Mr. Cashell:

On behalf of our client Red Oak Property Management, Inc., Cuoco & Cormier Engineering Associates, Inc, respectfully submits the following responses to the review comments contained in the February 19, 2014 letter to you from CLD. The comments are listed below with our response shown in italics.

1. Subdivision Review Codes

- a. Hudson Regulations (HR) 289-15 The proposed subdivision is not located within the 100-year flood zone.

Informational statement, no response needed.

- b. HR 289-26.B.(5) The applicant has not provided a plan that shows the location of all intersecting roads, driveways, wetlands, hydrants, septic systems, and natural features within 200 feet of the parcel.

An aerial photograph of the area was submitted as part of the application package.

- c. HR 289-27.B. (7) The applicant has not provided any benchmarks on the plan set.

The plans have been revised to show the benchmark.

- d. HR 289-28.A. The applicant has shown iron rods to be set at the right-of-way property corners instead of the required monuments. The applicant should also provide specific details for the proposed monuments and pins to be set.

The regulations do not specify the type of monument to be set at property line corners and angle points. Iron rods are a standard monument used in the surveying profession to mark property line corners and angle points. The plans have been revised to describe the iron rods that will be set.

2. Driveway Review Codes (HR 193-10)

- a. HR 193-10.E. The applicant has shown existing sight distance information; however, the plan does not show whether the existing trees to remain will affect the line of sight.

A note has been added to the plans stating that the brush and trees are to be trimmed as needed to maintain the sight distance.

- b. The applicant has not shown the intent to install driveway culverts.

There is no intent to install culverts under the driveways. The area is extremely flat; if culverts were installed they could not be day-lighted.

3. Roadway Design

- The applicant is not proposing any streets.

Both lots front on an existing street, no new street is needed.

4. Drainage Design /Stormwater Management (HR 289-20.C. /Chapter 290)

- a. HR 289-20.A. We note that the basement floor elevations of Lots 44-1 and 44-2 are 2.71 feet and 1.66 feet, respectively, lower than the grade of Pine Road. The applicant has not proposed any mechanical drains.

The plans note that the garage floor for Lot 44-1 is 4.8 ft. above the road grade and the first floor is 7.8 ft. above the road. The garage floor for Lot 44-2 is 5.8 ft. above the adjacent road elevation and the first floor is 8.8 ft. above the road. The proposed grading for both lots directs the runoff around the buildings to the retention/infiltration basins behind the buildings. C&C does not believe that mechanical drains are needed for this project.

- b. We suggest that the applicant connects a legal requirement (deed, easement, etc.) that carries from landowner to landowner (in the case of a sale) to prohibit dumping of yard waste, re-grading of property, placement of permanent or temporary structures (swing set, children's clubhouse, shed, planting of trees, excavation of any kind, etc.) within the areas of the basin and swales for both Lots 44-1 and 44-2. The Inspection and Maintenance Manual discusses this within the "Grass Landscaping" section but it is not linked to the plan or legal document. Previous experience with individual yard-specific drainage features consisting of shallow swales and basins, typically result in the property owner re-grading and/or slowly filling the basin with yard waste (leaves, grass clippings, etc.); thus, reducing the storage volume or reducing the ability of infiltration and ultimately increasing off-site runoff downstream.

The applicant proposes to add covenants to the deeds to address this issue.

5. Sewer/Septic Design/Conflicts & Utility Design/Conflicts

- a. HR 289-19.A. and HR 289-21. The applicant has not shown any existing or proposed easements on the plans. The need for a well easement related to Lot 63 should be evaluated.

There are no existing easements on the lots. These two sections of the regulations are for public utilities. The well referenced in the review comment is an existing private well located on the abutting property and therefore not subject to these regulations.

- b. HR 289-19.D., HR 289-26.B. (4) and HR 289-27.B. (5) The applicant has not provided typical designs of proposed on-lot water and sewerage systems. The applicant has shown a designated area and test pit location for a proposed subsurface disposal system, but has not provided test pit data in the plan set. The Regulations require a Certificate of Approval from the Board of Health of the Town of Hudson when on-lot utilities must be installed.

The plans show the required 4K area for each lot. The test pit data was provided in the application package. A note was added to the plans stating that State Subdivision approval and approval of the individual septic systems will be required.

- c. A septic review was not performed as part of this review.

Informational comments, no response required.

6. Erosion Control/Wetland Impacts

- a. HR 290-4.A.(4) The applicant should add a note to the plans that disturbed areas should be stabilized within 30 days of being idle and disturbance should be kept to a minimum.

A note has been added to the plans.

- b. HR 290-5.B.(1) The applicant should identify any stockpile locations on-site on the plan and provide specific erosion control measures for the stockpile(s). Also a note should be added to the plan about stump disposal.

Stockpile locations and erosion control measures have been added to the plans.

- c. The applicant should provide a construction sequence for the proposed subdivision.

A construction sequence has been added to the plans

- d. The Town should reserve the right to require additional erosion control during construction, if needed.

The applicant has no objection to this recommendation.

7. State and Local Permits

- a. The applicant should add a note the need for a NHDES Individual Subsurface Septic Disposal System Approval.

A note has been added to the plans.

- b. HR 193-10.C. The applicant should note the need for Town-issued Driveway Permits.

- c. Additional local permitting may be required.

A note has been added to the plans.

8. Other

- No comments at this time.

If you have any questions regarding these responses, or need additional information please do not hesitate to contact us.

Sincerely,
Cuoco & Cormier Engineering Associates, Inc.



Jeffrey S. Rider, P. E., P.L.S.

cc: CLD

"D"

**SUBDIVISION PLAN APPLICATION FOR PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: December 30, 2013 Tax Map # 252 Lot # 44

Name of Project: Pine Road Subdivision

Zoning District: _____ General SB# 01-14
(For Town Use) (For Town Use)

ZBA Action: N/A

PROPERTY OWNER:

DEVELOPER:

Name: Geraldine Dupont

Red Oak Property Management, Inc.

Address: 5 Fireside Drive

289 Pine Street

Address: Nashua, NH 03063

Manchester, NH 03103

Telephone # _____

603-668-6262

Fax # _____

Email: _____

Ron@redoak.mv.com



PROJECT ENGINEER

Name: Cuoco and Cormier Engineering Associates, Inc.

Telephone # 603-882-1812

Address: 74 Northeastern Blvd. Unit 10A

Fax # 603-882-3352

Address: Nashua, NH 03062

Email: jrider@cuocoandcormier.com

PURPOSE OF PLAN:

The purpose of this Subdivision Plan is to show Map 252 Lot 44, a 10.32 acres parcel, being subdivided into two Lots. Lot 44-1 consists of 5.27+/- acres with 232.40 ft frontage along Pine Road and Lot 44-2 consists of 5.05 acres with 233.62 ft frontage along Pine

(FOR TOWN USE)

Plan Routing Date: 1-31-14 Sub/Site Date: 3/12/14

I have no comments I have comments (attach to form)

JOB Title: Deputy Fire Chief Date: 2/3/2014

(Initials)

DEPT:

Zoning Engineering Assessor Police Fire Planning

Consultant Highway Department

Fees Paid _____

RECEIVED
JAN 31 2014

BY:

**SUBDIVISION PLAN APPLICATION FOR PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: December 30, 2013 Tax Map # 252 Lot # 44

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289 Pine Street

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Telephone # _____

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Fax # _____

Ron@redoak.mv.com

PROJECT ENGINEER

Name: Cuoco and Cormier Engineering Associates, Inc.

Telephone # 603-882-1812

Address: 74 Northeastern Blvd. Unit 10A

Fax # 603-882-3352

Address: Nashua, NH 03062

Email: jrider@cuocoandcormier.com

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(FOR TOWN USE)	
Plan Routing Date: <u>1-31-14</u>	Sub/Site Date: <u>3/12/14</u>
<input checked="" type="checkbox"/> I have no comments	<input type="checkbox"/> I have comments (attach to form)
<u>KB</u> Title: <u>ROAD ACCT</u>	Date: <u>2/5/14</u>
(Initials)	
DEPT:	
<input type="checkbox"/> Zoning	<input type="checkbox"/> Engineering
<input type="checkbox"/> Assessor	<input type="checkbox"/> Police
<input type="checkbox"/> Fire	<input type="checkbox"/> Planning
<input type="checkbox"/> Consultant	<input checked="" type="checkbox"/> Highway Department
Fees Paid _____	

**SUBDIVISION PLAN APPLICATION FOR PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: December 30, 2013 Tax Map # 252 Lot # 44

Name of Project: Pine Road Subdivision

Zoning District: _____ General SB# 01-14
(For Town Use) (For Town Use)

ZBA Action: N/A

PROPERTY OWNER:

DEVELOPER:

Name: Geraldine Dupont

Red Oak Property Management, Inc.

Address: 5 Fireside Drive

289 Pine Street

Address: Nashua, NH 03063

Manchester, NH 03103

Telephone # _____

603-668-6262

Fax # _____

Email: _____

Ron@redoak.mv.com



PROJECT ENGINEER

Name: Cuoco and Cormier Engineering Associates, Inc.

Telephone # 603-882-1812

Address: 74 Northeastern Blvd. Unit 10A

Fax # 603-882-3352

Address: Nashua, NH 03062

Email: jrider@cuocoandcormier.com

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(FOR TOWN USE)	
Plan Routing Date: <u>1-31-14</u>	Sub/Site Date: <u>3/12/14</u>
<input checked="" type="checkbox"/> I have no comments	<input type="checkbox"/> I have comments (attach to form)
<u>WAO</u> Title: <u>Z.A</u>	Date: <u>2/3/14</u>
(Initials)	
DEPT:	
<input checked="" type="checkbox"/> Zoning	<input type="checkbox"/> Engineering
<input type="checkbox"/> Assessor	<input type="checkbox"/> Police
<input type="checkbox"/> Fire	<input type="checkbox"/> Planning
<input type="checkbox"/> Consultant	<input type="checkbox"/> Highway Department
Fees Paid _____	

**SUBDIVISION PLAN APPLICATION FOR PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

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(For Town Use) (For Town Use)

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PROPERTY OWNER:

DEVELOPER:

Name: Geraldine Dupont Red Oak Property Management, Inc.
Address: 5 Fireside Drive 289 Pine Street
Address: Nashua, NH 03063 Manchester, NH 03103
Telephone # _____ 603-668-6262
Fax # _____
Email: _____ Ron@redoak.mv.com



PROJECT ENGINEER

Name: Cuoco and Cormier Engineering Associates, Inc. Telephone # 603-882-1812
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(FOR TOWN USE)

Plan Routing Date: 1-31-14 Sub/Site Date: 3/12/14

I have no comments I have comments (attach to form)

(Initials) JA Title: Assistant Assessor Date: 2-4-14

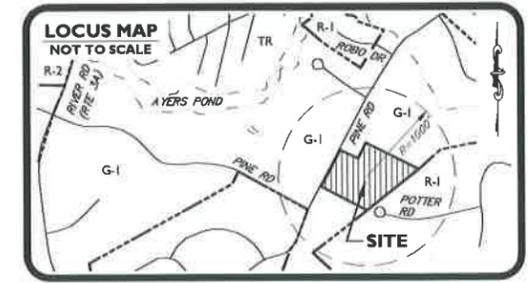
DEPT: _____

Zoning Engineering Assessor Police Fire Planning
 Consultant Highway Department

Fees Paid _____

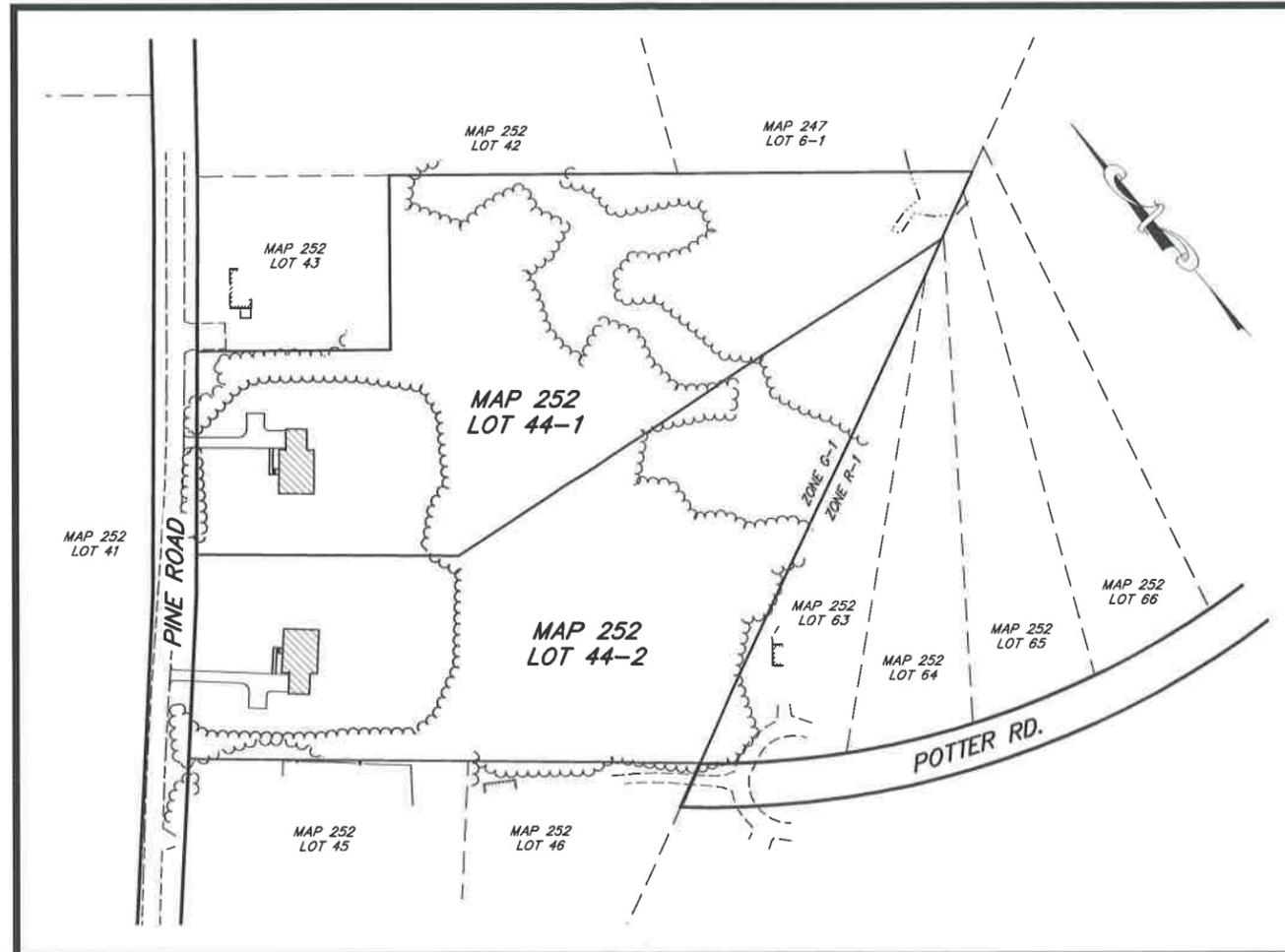
Keep Map 252 Lot 44 = 5.27 Acres site
Map 252 Lot 044 subplot 1 = 5.05 Acres site

PINE ROAD SUBDIVISION HUDSON, NH



LEGEND

- IRON PIN (TO BE SET)
- STONE BOUND (TO BE SET)
- IRON PIPE (I.P.)
- ⊙ DRILL HOLE (DH)
- STONE BOUND (SB)
- ⊕ BENCHMARK
- PROPERTY LINE
- MIN. BUILDING SETBACK LINE
- R.O.W. LINE
- ZONE LINE
- ABUTTING PROPERTIES
- EXISTING CONTOUR (INTERMEDIATE)
- PROPOSED CONTOUR (MAJOR)
- 122 x 123 EXISTING SPOT GROUND ELEVATION
- 123.45 SPOT GROUND ELEVATION
- OHW OVERHEAD LINES (OHW)
- UTILITY POLE
- GUY POLE OR STUB
- LUMINARE (EXISTING)
- SILT FENCE
- EDGE OF PAVEMENT (EXISTING)
- EDGE OF PAVEMENT (PROPOSED)
- ▨ BUILDING LINE (EXISTING)
- ▨ BUILDING LINE (PROPOSED)
- ▨ STEPS AND WALK
- SHORE LINE
- EDGE OF FLAGGED WETLANDS
- BRUSH (WOODS) LINE
- WETLANDS
- WELL
- MONITORING WELL
- TEST PIT
- STOCKADE FENCE
- CHAIN LINK FENCE
- SIGNS
- MAIL BOX
- WdB SOILS BOUNDARY AND DESIGNATION
- DeA
- 30+00 31+00 SIGHT DISTANCE BASELINE
- PAVEMENT MARKINGS:
- DYL: DOUBLE YELLOW SOLID LINE
- SWL: SINGLE SOLID WHITE LINE
- DRAINAGE FLOW DIRECTION



INDEX OF SHEETS

- C-1. COVER
- C-2. EXISTING CONDITIONS PLAN
- V-1. SUBDIVISION PLAN
- C-3. DEVELOPMENT PLAN
- C-4. SIGHT DISTANCE PLAN & EROSION CONTROL DETAILS

OWNER'S ACKNOWLEDGMENT

OWNER: _____ DATE: _____

PREPARED FOR:

RED OAK PROPERTY MANAGEMENT, INC
289 PINE STREET
MANCHESTER, NH 03103

SCALE 1" = 100' DECEMBER 5, 2013
100 0 100 200 300 400
SCALE IN FEET

PREPARED BY:

CUOCO & CORMIER
ENGINEERING ASSOCIATES, INC.

74 NORTHEASTERN BLVD, UNIT 10A
NASHUA, NH 03063-3142 (603) 882-1812
www.cuococormier.com

LAND PLANNING SERVICES: CIVIL ENGINEERING - LAND SURVEYING - ENVIRONMENTAL SCIENCES

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MAY 252 / LOT 44
COVER
PINE ROAD SUBDIVISION
PINE ROAD
HUDSON, NH

SHEET NO.
C-1
FILE 3177

APPROVED BY THE HUDSON, NH PLANNING BOARD

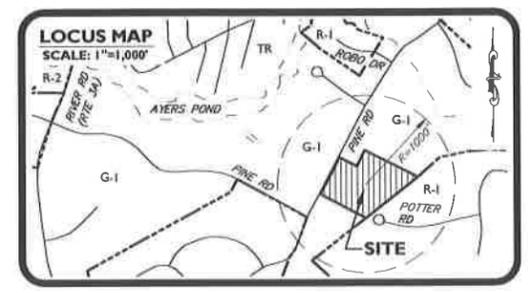
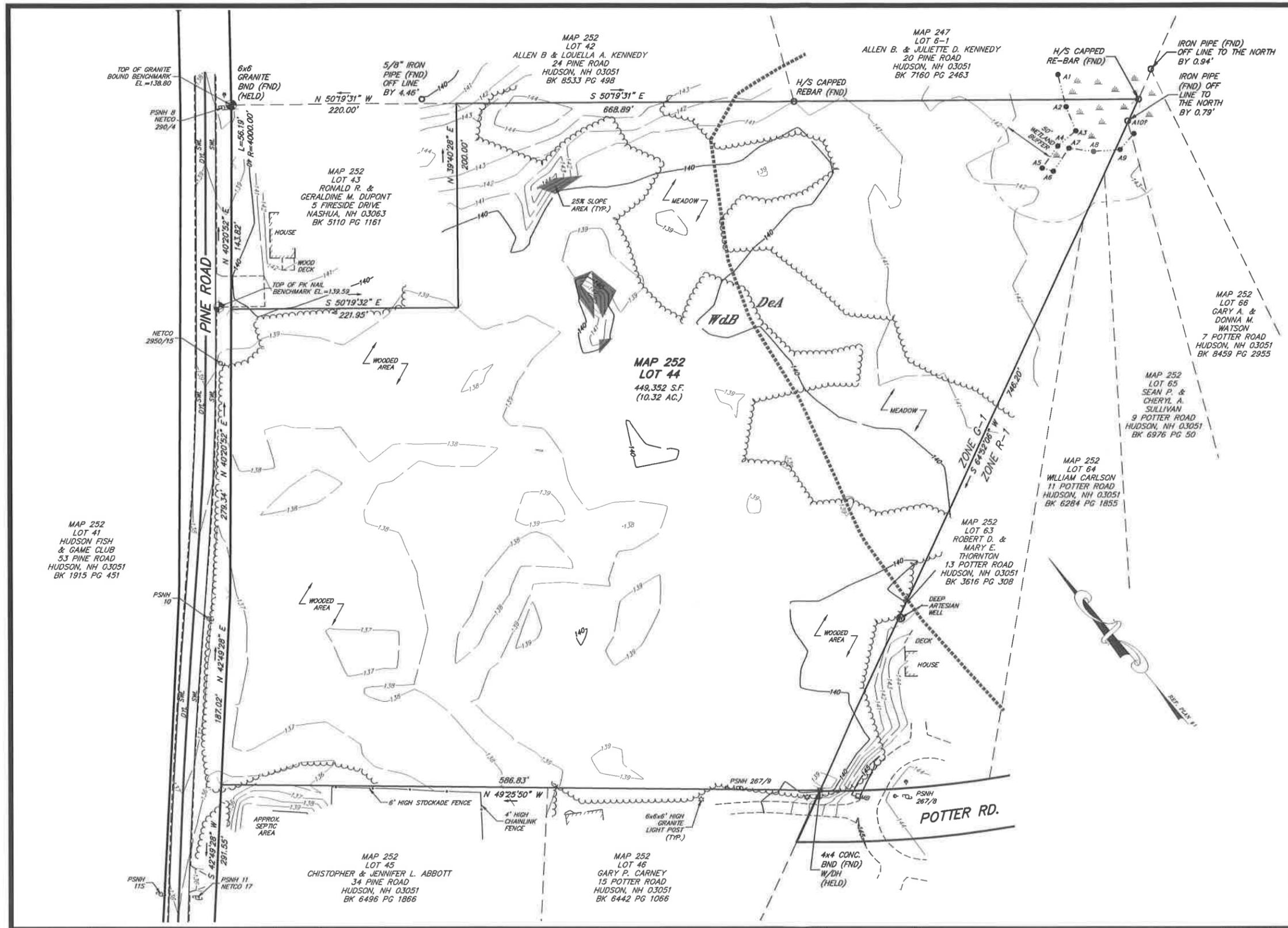
DATE OF MEETING: _____

PLANNING BOARD CHAIRMAN: _____ SIGNATURE
DATE: _____

PLANNING BOARD SECRETARY: _____ SIGNATURE
DATE: _____

SUBDIVISIONS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS AND CHANGES TO THE ZONING ORDINANCE, SEE NH RSA 674:39.

TOWN COMMENTS				
REVISION	DATE	DESCRIPTION	BY	
ENGINEER	SURVEYOR	DRAFTER	PLAN CHECK	MAP CHECK
AMA	CDB	MJR	JSR	PW



- REFERENCE PLANS:**
- SUBDIVISION PLAN (LOTS 47 & 48, MAP 5), KENNEDY SUBDIVISION, PINE ROAD, HUDSON, NH, PREPARED FOR ALLEN KENNEDY, PREPARED BY HAYNER SWANSON INC, PLAN DATED NOV. 10, 2003, LAST REVISED 12/19/03. RECORDED HC RD PLAN 32928 DWR 153.
 - SUBDIVISION PLAN (MAP 5 LOT 49-2), WALTER POND ESTATES, PINE, POTTER, & WINSLOW FARM ROADS AND JOAN DRIVE, HUDSON, NH, PREPARED FOR WALTER POND REALTY TRUST, PREPARED BY MAYNARD & PAQUETTE ENGINEERING ASSOC., LLC, PLAN DATED FEBRUARY 10, 2000, LAST REVISED 7/27/00. RECORDED HC RD PLAN 30728 DWR 141.
 - RESUBDIVISION PLAN OF LAND, PINE ROAD, HUDSON, NH, PREPARED FOR WALTER KENNEDY, PREPARED BY A.E. MAYNARD CIVIL ENGINEER, DATED JUNE 1981, RECORDED HC RD PLAN 14386 DWR 67.
 - SUBDIVISION PLAN OF LAND, POTTER ROAD, HUDSON, NH, PREPARED FOR THOMAS J. POTTER, PREPARED BY SURVEY FIELD SERVICES DATED NOVEMBER 1984, RECORDED HC RD PLAN 18534 DWR 79.

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF MAP 252 LOT 44.
 - MAP 252 / LOT 44 - 449,352 S.F. (10.32 AC.)
 - MAP AND LOT NUMBERS REFER TO THE TOWN OF HUDSON ASSESSORS MAPS.
 - CURRENT OWNER OF RECORD: GERALDINE DUPONT 5 FIRESIDE DRIVE NASHUA, NH 03063 BOOK 3350 PAGE 758
 - CURRENT ZONING IS GENERAL (G-1).
 - THE WETLAND BOUNDARIES SHOWN ON THIS PLAN WERE MAPPED BY A&D KLUMB ENVIRONMENTAL, LLC ON JUNE 27, 2013 AND LOCATED BY THIS OFFICE ON JULY 2, 2013.
 - SETBACKS: FRONT YARD = 30 FEET SIDE AND REAR = 15 FEET.
 - THE SITE IS NOT WITHIN THE 100 YEAR FLOOD ZONE PER FEMA MAP #33011C0658D, EFFECTIVE DATE: SEPTEMBER 25, 2009.

AUDRA L. KLUMB, NH CERTIFIED WETLAND SCIENTIST #222 OF A&D KLUMB ENVIRONMENTAL, LLC, WEBSTER, NH, PERFORMED THE WETLAND MAPPING FOR THIS SITE ON JUNE 27, 2013 ACCORDING TO THE TECHNICAL CRITERIA OF THE OF THE US ARMY CORPS OF ENGINEERS REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0 (JANUARY 2012) AND NH STATUTE RSA482-A:2 X.

REVISION	DATE	DESCRIPTION	BY
1	2/24/2014	TOWN COMMENTS	JSR
ENGINEER		SURVEYOR	DRAFTER
		PW	MJR
		PLAN CHECK	MAP CHECK
		JSR	PW

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING: _____

PLANNING BOARD CHAIRMAN _____ SIGNATURE DATE: _____

PLANNING BOARD SECRETARY _____ SIGNATURE DATE: _____

SUBDIVISIONS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS AND CHANGES TO THE ZONING ORDINANCE, SEE NH RSA 674:39.

I HEREBY CERTIFY THAT THIS PLAN IS PREPARED FROM AN ACTUAL FIELD SURVEY MADE ON THE GROUND WHOSE ERROR OF CLOSURE DOES NOT EXCEED ONE (1) IN 10,000 OR BETTER, AS DESCRIBED IN ARTICLE V, SECTION B(6) OF THE TOWN OF HUDSON SUBDIVISION & SITE PLAN REGULATIONS. I FURTHER CERTIFY THAT THIS PLAN WAS PREPARED FROM AN ON THE GROUND SURVEY PERFORMED BY THIS COMPANY, JUNE 2013

DATE _____

PREPARED FOR:
RED OAK PROPERTY MANAGEMENT, INC
 289 PINE STREET
 MANCHESTER, NH 03103

SCALE: 1" = 50'

DECEMBER 5, 2013

SCALE IN FEET

50 0 50 100 150 200

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PREPARED BY:

CUOCO CORMIER & ENGINEERING ASSOCIATES, INC.

74 NORTHEASTERN BLVD., UNIT 10A
 NASHUA, NH 03062-3142 (603) 882-1812
 www.cuococormier.com

EXISTING CONDITIONS PLAN
 MAP 252 / LOT 44
 PINE ROAD SUBDIVISION
 PINE ROAD
 HUDSON, NH

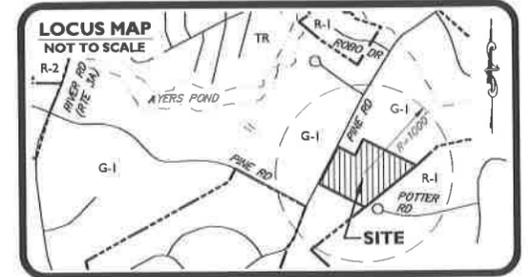
LAND PLANNING SERVICES: CIVIL ENGINEERING - LAND SURVEYING - ENVIRONMENTAL SCIENCES

3177-FNL-EXDWG

SHEET NO. **C-2**

FILE 3177

I:\Users\pjs117\Documents\2014\20140217\20140217.dwg (Plot Date: 2/24/2014 10:58:14 AM)



REFERENCE PLANS:

1. SUBDIVISION PLAN (LOTS 47 & 48, MAP 5), KENNEDY SUBDIVISION, PINE ROAD, HUDSON, NH, PREPARED FOR ALLEN KENNEDY, PREPARED BY HAYNER SWANSON INC, PLAN DATED NOV. 10, 2003, LAST REVISED 12/19/03. RECORDED HCRD PLAN 32928 DWR 153.
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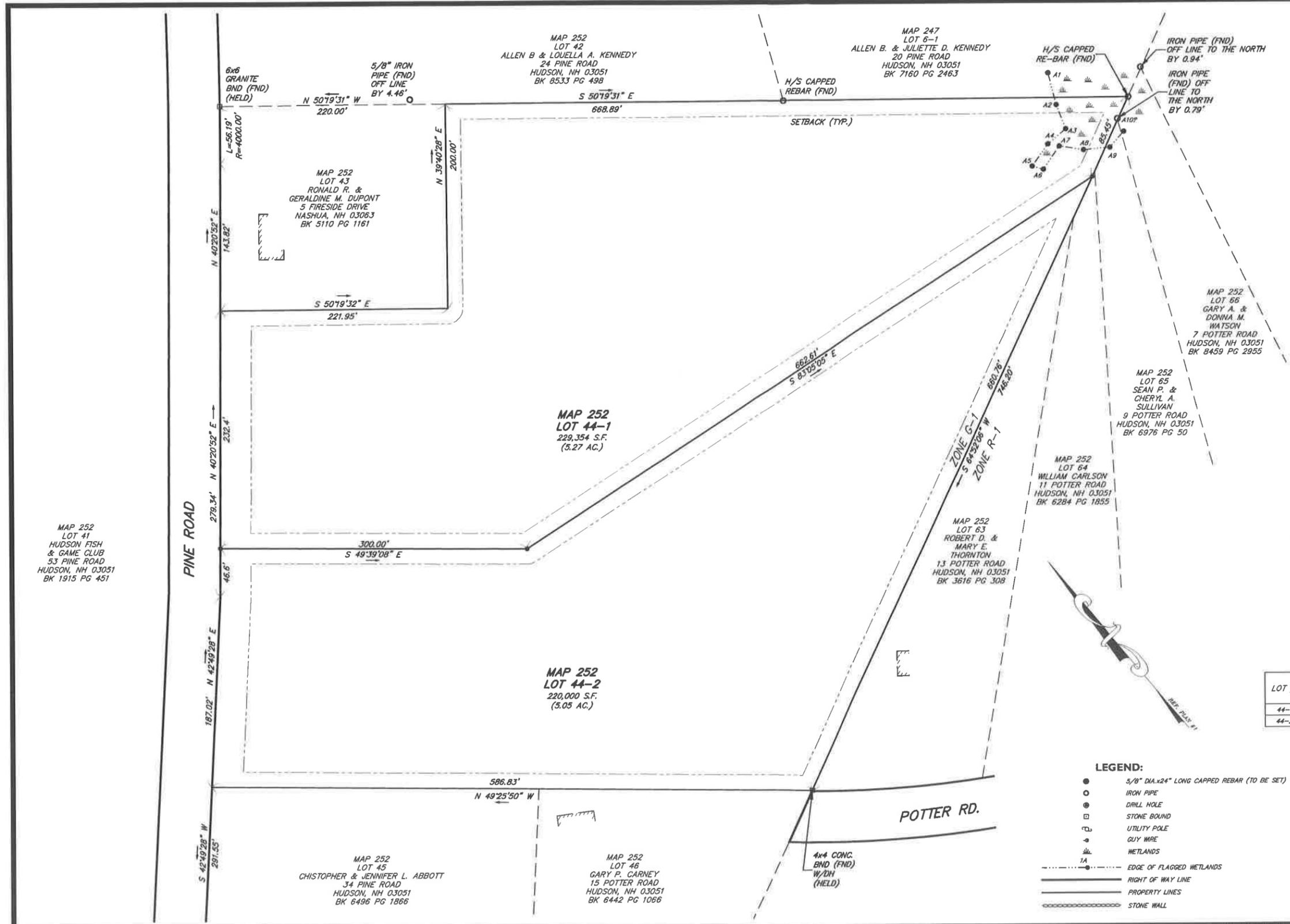
NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING MAP 252 LOT 44, SUBDIVIDED INTO TWO LOTS.
2. EXISTING MAP 252 / LOT 44 449,352 S.F. (10.32 AC.)
3. MAP AND LOT NUMBERS REFER TO THE TOWN OF HUDSON ASSESSORS MAPS.
4. CURRENT OWNER OF RECORD: GERALDINE DUPONT 5 FIRESIDE DRIVE NASHUA, NH 03063 BOOK 3350 PAGE 758
5. CURRENT ZONING = GENERAL 1 (G-1).
6. THE WETLAND BOUNDARIES SHOWN ON THIS PLAN WERE MAPPED BY A&D KLUMB ENVIRONMENTAL, LLC ON JUNE 27, 2013 AND LOCATED BY THIS OFFICE ON JULY 2, 2013.
7. SETBACKS: FRONT YARD = 30 FEET SIDE AND REAR = 15 FEET.
8. THE SITE IS NOT WITHIN THE 100 YEAR FLOOD ZONE PER FEMA MAP #33011C06580, EFFECTIVE DATE: SEPTEMBER 25, 2009.

LOT #	LOT AREA (MIN.=87,120 S.F.)	LOT FRONTAGE (MIN.=200 FT.)	25% SLOPE AREA	WETLAND AREA	NET CONTIGUOUS USABLE UPLAND AREA
44-1	228,354 S.F.	232.4 FT.	1,386 S.F.	3,116 S.F.	224,872 S.F.
44-2	220,000 S.F.	233.6 FT.	19 S.F.	-	218,981 S.F.

LEGEND:

- 5/8" DIA. x 24" LONG CAPPED REBAR (TO BE SET)
- IRON PIPE
- ⊙ DRILL HOLE
- STONE BOUND
- ⊕ UTILITY POLE
- ⊖ GUY WIRE
- ⊗ WETLANDS
- ⊘ EDGE OF FLAGGED WETLANDS
- RIGHT OF WAY LINE
- PROPERTY LINES
- ⊘ STONE WALL



APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING: _____

PLANNING BOARD CHAIRMAN: _____ SIGNATURE DATE: _____

PLANNING BOARD SECRETARY: _____ SIGNATURE DATE: _____

SUBDIVISIONS ARE VALID FOR ONE (1) YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS AND CHANGES TO THE ZONING ORDINANCE, SEE NH RSA 674:39.

I HEREBY CERTIFY THAT THIS PLAN IS PREPARED FROM AN ACTUAL FIELD SURVEY MADE ON THE GROUND, PERFORMED BY THIS COMPANY, JUNE 2013, WHOSE ERROR OF CLOSURE DOES NOT EXCEED ONE (1) IN 10,000 OR BETTER, AS DESCRIBED IN ARTICLE V, SECTION B(6) OF THE TOWN OF HUDSON SUBDIVISION & SITE PLAN REGULATIONS.

I FURTHER CERTIFY THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE UNIFORM INSTRUCTIONS FOR THE PREPARATION OF PLANS AS SET FORTH BY THE REGISTER OF DEEDS.

DATE: _____

PREPARED FOR:
RED OAK PROPERTY MANAGEMENT, INC
 289 PINE STREET
 MANCHESTER, NH 03103

SCALE: 1" = 50' **DECEMBER 5, 2013**

50 0 50 100 150 200
 SCALE IN FEET

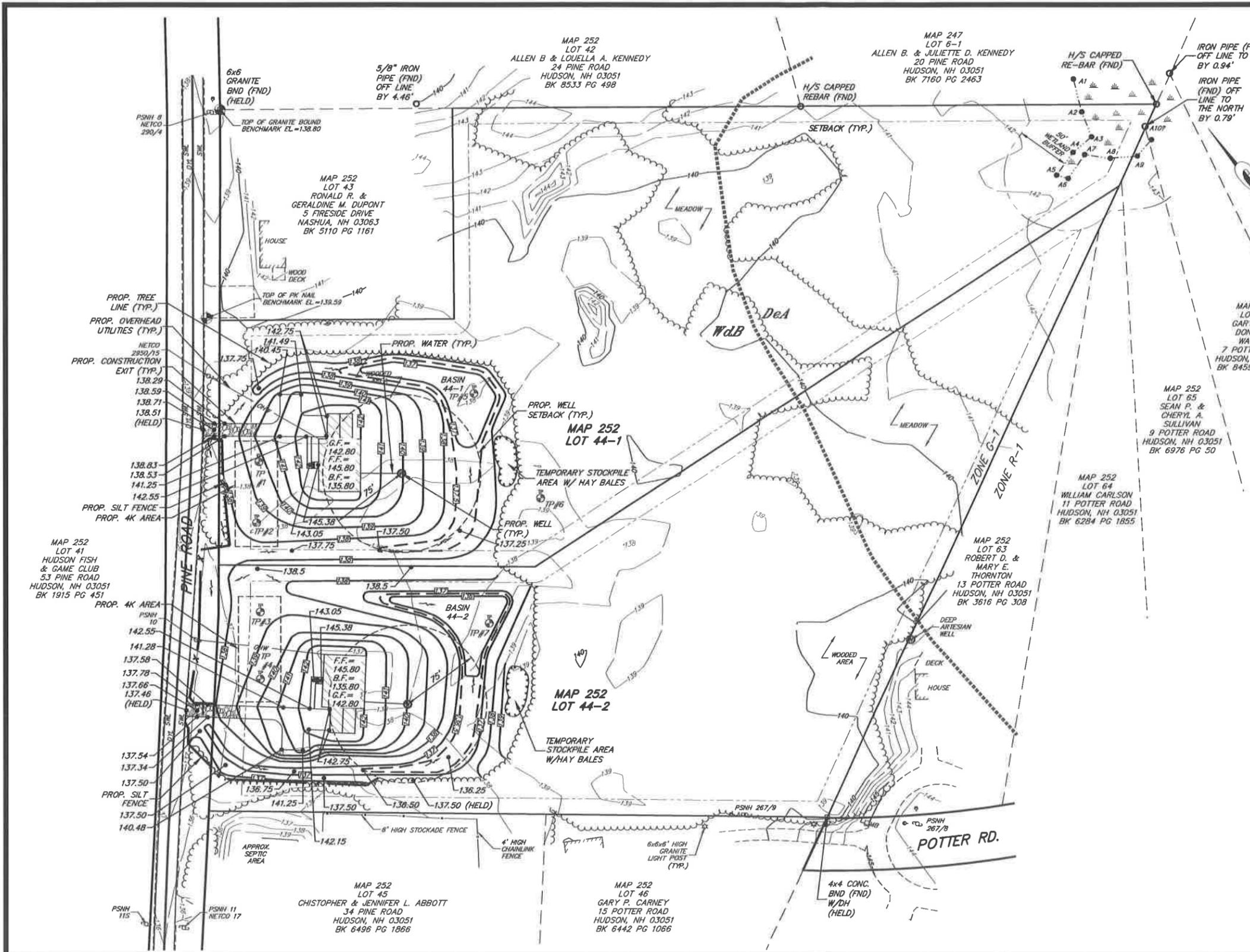
PREPARED BY:
CUOCO CORMIER & ENGINEERING ASSOCIATES, INC.

74 NORTHEASTERN BLVD., UNIT 10A
 NASHUA, NH 03063-3142 (603) 882-1812
 www.cuococormier.com

LAND PLANNING SERVICES: CIVIL ENGINEERING - LAND SURVEYING - ENVIRONMENTAL SCIENCES

SUBDIVISION PLAN
MAP 252 / LOT 44
PINE ROAD SUBDIVISION
 PINE ROAD
 HUDSON, NH

SHEET NO. **V-1**
 FILE 3177



- NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED DEVELOPMENT OF MAP 252 LOTS 44-1 & 44-2.
 2. MAP 252 / LOT 44-1
229,354 S.F. (5.27 AC.)
MAP 252 / LOT 44-2
220,000 S.F. (5.05 AC.)
 3. MAP AND LOT NUMBERS REFER TO THE TOWN OF HUDSON ASSESSORS MAPS.
 4. CURRENT OWNER OF RECORD:
GERALDINE DUPONT
5 FRESIDE DRIVE
NASHUA, NH 03063
BOOK 3350 PAGE 758
 5. CURRENT ZONING IS GENERAL (G-1).
 6. THE WETLAND BOUNDARIES SHOWN ON THIS PLAN WERE MAPPED BY A&D KLUMB ENVIRONMENTAL, LLC ON JUNE 27, 2013 AND LOCATED BY THIS OFFICE ON JULY 2, 2013.
 7. SETBACKS:
FRONT YARD = 30 FEET
SIDE AND REAR = 15 FEET.
 8. THE SITE IS NOT WITHIN THE 100 YEAR FLOOD ZONE PER FEMA MAP #33011C0658D, EFFECTIVE DATE: SEPTEMBER 25, 2009.
 9. ALL DISTURBED AREAS TO BE STABILIZED WITHIN 30 DAYS OF BEING IDLE.
 10. NO STUMPS TO BE BURIED ON SITE.
 11. STATE SUBDIVISION APPROVAL AND INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM APPROVALS REQUIRED.
 12. TOWN DRIVEWAY PERMITS REQUIRED.

- CONSTRUCTION SEQUENCE**
- BEFORE COMMENCEMENT, DURING CONSTRUCTION, AND AT THE COMPLETION OF WORK ON THE SITE:
1. THIS PROJECT IS SUBJECT TO A TOWN OF HUDSON NH PLANNING BOARD APPROVAL. THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THIS APPROVAL AS WELL AS THE TOWN'S DEPARTMENTAL REGULATIONS FOR DRIVEWAY CONSTRUCTION, DRAINAGE CONSTRUCTION AND UTILITY INSTALLATION AT ALL TIMES PRIOR TO STARTING, DURING, AND AT THE COMPLETION OF THE WORK ON SITE.
 2. THE OWNER AND/OR CONTRACTOR ARE RESPONSIBLE FOR COMPLYING WITH ALL OTHER LOCAL, STATE, AND FEDERAL REGULATIONS THAT MAY APPLY TO THE WORK ON THIS SITE.
- BEFORE COMMENCEMENT OF EARTHWORK ON THE SITE:
1. SURVEY, FLAG, AND/OR OTHERWISE MARK THE LIMITS OF THE WORK SITE AREA.
 2. BEGIN MINOR TREE CLEARING. GRUBBING IS NOT TO BEGIN UNTIL THE NEXT PHASE AFTER EROSION CONTROLS ARE IN PLACE.
 3. CONSTRUCT THE STABILIZED CONSTRUCTION EGRESS FOR THE SITE ACCESS. VEHICLE ACCESS SHALL BE LIMITED TO THE TEMPORARY STONE APRON. SEDIMENT REMOVAL AND/OR STREET SWEEPING SHALL BE PERFORMED REGULARLY AND AS NEEDED.
 4. INSTALL THE PERIMETER EROSION CONTROL PROTECTION AS SHOWN ON THE PLAN.
- EARTHWORK ON THE SITE:
1. BEGIN GRUBBING OPERATIONS FOR THE ENTIRE WORK AREA.
 2. BEGIN TOPSOIL STRIPPING AND SITE FILLING, GRADING AND EXCAVATION.
 3. ESTABLISH TOPSOIL STOCKPILE(S). INSTALL SILT FENCES AROUND THE STOCKPILES. TEMPORARILY STABILIZE THE STOCKPILES WITH TEMPORARY VEGETATIVE COVER OR COVER WITH TARP(S) OR OTHER APPROPRIATE MATERIAL TO AVOID DIRECT CONTACT WITH PRECIPITATION.
 4. INITIATE SOILS STABILIZATION MEASURES IMMEDIATELY WHENEVER EARTH FILLING/GRADING HAS PERMANENTLY OR TEMPORARILY CEASED ON THE SITE OR PORTIONS THEREIN. ALL STEEP SLOPE LANDSCAPE AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY AFTER COMPLETION OF THE FINAL GRADING. AN ADDITIONAL ROW OF FILTER SOCK, HAY BALES, OR SILT FENCING SHALL BE PLACED AT THE TOP OF THE STEEP SLOPE AREAS.
- HOUSES CONSTRUCTION:
1. VEHICLE ACCESS SHALL BE LIMITED TO THE TEMPORARY STONE APRON. SEDIMENT REMOVAL AND/OR STREET SWEEPING SHALL BE PERFORMED REGULARLY AND AS NEEDED.
 2. CONSTRUCT A TEMPORARY CONCRETE WASHOUT AREA.
 3. BEGIN FOUNDATION CONSTRUCTION, AND INDIVIDUAL UTILITY CONNECTIONS.
 4. WHEN THE FOUNDATION AND UNDERGROUND UTILITIES ARE COMPLETED, THE FINAL GRADING AND TEMPORARY AND/OR PERMANENT LOAM AND SEEDING SHALL BE COMPLETED AS SOON AS POSSIBLE ON ALL AREAS AROUND THE BUILDING.
 5. THE BASE COURSE OF PAVEMENT SHALL BE INSTALLED ON ALL PROPOSED ASPHALT AREAS.
 6. CONTINUE WITH EXTERIOR/ANTERIOR BUILDING WORK.
 7. WHEN THE BUILDING CONSTRUCTION NEARS COMPLETION, THE FINAL SEEDING AND LANDSCAPING SHALL BE INSTALLED.
 8. THE FINAL COURSE OF PAVEMENT SHALL BE INSTALLED ON ALL ASPHALT AREAS.
 9. MONITOR AND MAINTAIN ALL LOT PERIMETER EROSION CONTROL MEASURES UNTIL GOOD VEGETATIVE GROUND COVER HAS BEEN ESTABLISHED ON THE LOT.
- PROJECT COMPLETION:
1. CONTINUE TO INSPECT, MAINTAIN, AND REPAIR AS NEEDED ALL COMPLETED CONSTRUCTION AND PERMANENTLY VEGETATED AREAS WITHIN THE WORK AREA.
 2. REMOVE ANY REMAINING BMP'S (IF ANY) FROM STORM DRAIN INLETS/OUTLETS.
 3. REMOVE ANY REMAINING TEMPORARY PERIMETER EROSION CONTROL MEASURES AND STABILIZE ANY AREAS DISTURBED BY THEIR REMOVAL WITH PROPER SEEDING, MULCH, OR OTHER APPROPRIATE MEASURE.
 4. COMPLETE THE TERMS AND CONDITIONS OF THE LOCAL AND STATE PERMITS AS APPLICABLE TO THE PROJECT END.

APPROVED BY THE HUDSON, NH PLANNING BOARD

DATE OF MEETING: _____

PLANNING BOARD CHAIRMAN _____ SIGNATURE DATE: _____

PLANNING BOARD SECRETARY _____ SIGNATURE DATE: _____

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PREPARED FOR:
RED OAK PROPERTY MANAGEMENT, INC
289 PINE STREET
MANCHESTER, NH 03103

SCALE: 1" = 50'
DECEMBER 5, 2013

SCALE IN FEET

PREPARED BY:
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DEVELOPMENT PLAN
MAP 252 / LOT 44
PINE ROAD SUBDIVISION
PINE ROAD
HUDSON, NH

LAND PLANNING SERVICES: CIVIL ENGINEERING - LAND SURVEYING - ENVIRONMENTAL SCIENCES

FILE 3177

REVISION	DATE	DESCRIPTION	BY	
1	2/24/2014	TOWN COMMENTS	JSR	
ENGINEER	SURVEYOR	DRAFTER	PLAN CHECK	MAP CHECK
AMA	PW	MJR	CDB	PW

CUOCO CORMIER & ENGINEERING ASSOCIATES, INC. 74 NORTHEASTERN BLVD, UNIT 10A, NASHUA, NH 03062-3142 (603) 882-1812 www.cuococormier.com

Granite State Indoor Range & Gun Shop (Change of Use)

Site Plan

STAFF REPORT

March 12, 2014

SITE: 2-4 Hampshire Drive -- Map 221/Lot 004 -- SB# 01-14

ZONING: Industrial (I)

PURPOSE OF PLAN: To show the proposed change of use of 12,700 sq. ft. of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop. Application Acceptance & Hearing.

PLAN UNDER REVIEW ENTITLED: Change of Use Plan Granite State Indoor Range & Gunshop, Map 221 Lot 4, 2 -4 Hampshire Drive, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Jan. 12, 2014 (no revision date), consisting of Sheet 1 of 1 and Notes 1 – 15 (said plans are attached hereto).

ATTACHMENTS:

- 1) Project Narrative, Site Plan Application, Checklist, Waiver Forms, and an aerial site photo date stamped Feb.18, 2014 – Attachment “A”.
- 2) Comments/Memos from Zoning Administrator, Bill Oleksak, Road Agent, Kevin Burns, HFD Deputy Fire Chief, John O’Brien, , and Asst. Assessor, Jim Michaud, date stamped Feb. 18, 2014 – “B”.
- 3) Most Recent Amended Site Plan for 2 – 4 Hampshire Drive – “C”.

REQUESTED WAIVERS (see Note 12):

1. HTC 275-9(A) -- Drainage Study
2. HTC 275-9(B) -- Traffic Study
3. HTC 275-9(C) -- Noise Study
4. HTC 275-9(D) -- Fiscal Impact Study
5. HTC 275-9(H) -- HISS Mapping
6. HTC 275-6 -- Development Agreement

STAFF COMMENTS/OUTSTANDING ISSUES:

1. Other than the proposed use calling for Planning Board approval, i.e., to amend a previously approved Site Plan (“C”), no building addition, no parking alterations, no onsite travel lane changes, no landscaping, no exterior lighting or sign changes are proposed. What will change on this site pertains to the proposed interior fit-up of 50% of the existing building, i.e., to transform said area into an indoor shooting range and a retail gun shop. Hence, the need for Planning Board Approval of this proposed Amended Site Plan Application.

2. Even though this proposal calls for no exterior changes, the Applicant has applied for the above-cited waivers. In staff's opinion, because this is an existing developed site, with no proposed exterior changes, waivers do not apply. However, the board, at its discretion, can vote or not vote for the requested waivers. DRAFT MOTIONS are provided below in case the board decides the waivers should be voted on.
3. With no exterior changes proposed and no anticipated traffic concerns involved with this application, it (was not forwarded to CLD for review and comment).
4. With no new building area, additional parking or added PM Peak Hour traffic than what already exists on this site, a CAP Fee is not applicable.
5. In regard to the most recent Site Plan the board reviewed concerning an interior fit-up of an existing industrial building for a shooting range and gun shop, i.e., 13 River Rd. in 2012, please note the board took the following action on same, as applicable to this application:

- a) The board requested to have Police Chief, Jason Lavoie, submit a signed copy of his letter in support of the 13 River Rd. project. Note: the Applicant for said project requested the Police Chief's support for same. **Status:** for this application, 2 -4 Hampshire Drive, the Applicant has not requested the Police Chief's support. At Wed. night's meeting, at the board's discretion, it can be voted on whether or not to seek the Police Chief's input on this application.

NOTE: the 2 – 4 Hampshire Dr application was forwarded to all appropriate Town Dept's. for input, with the HPD choosing not to offer input/comments/concerns.

- b) The board requested that a note be added to the 13 River Rd. Site Plan, stating: Noise originating from the interior shooting range to the exterior of the shooting range shall not exceed the allowed decibel level prescribed in the Town's Noise Ordinance. **Status:** this note, nor language to this effect, has yet to be added to the present 2 – 4 Hampshire Dr. Plan.
- c) The applicant was required to have at a meeting a certified expert in the field of interior shooting ranges, and for this person to address the board on noise related issues of the shooting range. **Status:** this person is scheduled to be in attendance for Wednesday night's meeting.
- d) The board required that a note be added to the 13 River Rd. Site Plan, stating: The Hrs. of operation. 10:00 A.M. to 9:00 P.M. Monday thru Saturday. No Sunday Hrs. **Status:** this note is on the 2 – 4 Hampshire Drive Plan, with requested hrs. of operation being 10 A.M. to 10 P.M., 7 days per week.

- e) The board required information, relative to how the wastewater associated with the shooting range is disposed of. **Status:** to-date this information has not been submitted with the present 2 – 4 Hampshire Dr. application.

NOTE: at this time, no other issues remain outstanding with this application.

APPLICATION TRACKING:

- 02/18/2014 – Amended Site Plan application submitted.
- 03/12/14 - Initial Public Hearing scheduled.

RECOMMENDATION: This application is ready for acceptance, as such, for this meeting staff recommends:

- (i) Board vote for application acceptance;
- (ii) Open and conduct the public hearing;
- (iii) Allow the applicant to present the project and address all of the issues involved in this application, including those cited-above, your own and those of the public, if provided.
- (iv) Defer further review of this site plan, date specific to the either the April 9th or 23d meeting.
- (v) In the event the board moves to approve the waivers (even though not required) DRAFT MOTIONS for same have been provided below, together with application approval, in case the board finds same to be warranted at this hearing.

DRAFT MOTIONS:

I move for the Planning Board to defer further review of this Site Plan Application, date specific, to the April 9th or 23d meeting.

Motion by: _____ Second: _____ Carried/Failed: _____

REQUESTED WAIVERS:

- 1) HTC 275-9(A) -- Drainage Study
- 2) HTC 275-9(B) -- Traffic Study
- 3) HTC 275-9(C) -- Noise Study
- 4) HTC 275-9(D) -- Fiscal Impact Study
- 5) HTC 275-9(H) -- HISS Mapping
- 6) HTC 275-6 -- Development Agreement

1) HTC 275-9(A) -- Drainage Study

I move to grant the requested waiver - HTC 275-9(A) -- Drainage Study - because this application does not propose to change the existing impervious surfaces of the site and existing drainage infrastructure, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

2) HTC 275-9B - Traffic Study

I move to grant the requested waiver HTC 275-9B - Traffic Study - because this project is expected to create less PM Peak Hour traffic than the previous use of the site, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____.

3) HTC 275-9C – Noise Study

I move to grant the requested waiver: HTC 275-9C - Noise Study - because such a study is unnecessary, taking into consideration the proposed use is not expected to create noise levels that would violate Town noise ordinances, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan regulations.

Motion by: _____ Second: _____ Carried/Failed: _____.

4) HTC 275-9D – Fiscal Impact Study

I move to grant the requested waiver: HTC 275-9D - Fiscal Impact Study - because said study is not necessary to evaluate the fiscal and environmental impact of this development, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan regulations.

Motion by: _____ Second: _____ Carried/Failed: _____.

7) HTC 275-6 -- Development Agreement

I move to grant the requested waiver: HTC 275-6 - Development Agreement - because said agreement is not necessary taking into consideration the site is existing, fully developed and all sight work is complete, as approved, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

NOTE: HISS Mapping waiver not provided because it is no longer required.

DRAFT MOTION TO APPROVE:

I move to approve the Site Plan entitled: Change of Use Plan Granite State Indoor Range & Gunshop, Map 221 Lot 4, 2 -4 Hampshire Drive, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Jan. 12, 2014 (no revision date), consisting of Sheet 1 of 1 and Notes 1 – 15, in accordance with the following terms and conditions:

Note: condition “1” below is applicable if the above-cited Development Agreement waiver is not granted.

- 1) All stipulations of 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).

Note: condition “2” below is applicable because no “As Built” Plan of the site is on file/.

- 2) Prior to the issuance of a final certificate of occupancy, a L.L.S. certified "As Built" Site Plan shall be provided to the Town of Hudson Community Development Department, confirming that the site conforms with the Planning Board approved Plan.

- 3) Hours of operation shall be limited to: Mon. – Sun. A.M. to P.M.

Note: all of the other “typical” terms and conditions of Site Plan approval do not apply to this application, because of the existing nature of this site. At the meeting the board may decide to add a terms and conditions, per its determination of applicability.

Motion by: _____ Second: _____ Carried/Failed: _____.

"A"

PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: February 18, 2014 Tax Map # 221 Lot # 4

Name of Project: Granite State Indoor Range + Gun Shop (Chg of Use)

Zoning District: _____ General SP# 02-14
(For Town Use) (For Town Use)



ZBA Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Nash Family Investment Properties

Granite State Indoor Range & Gun Shop

Address: 91 Amherst Street

PO Box 11

Address: Nashua, NH 03064

Durham, NH 03824

Telephone # _____

(603) 321-5041

Fax # _____

Email: _____

neartho@comcast.net

PROJECT ENGINEER

SURVEYOR

Name: Keach-Nordstrom Assoc., Inc.

Keach-Nordstrom Assoc., Inc.

Address: 10 Commerce Park No., Suite 3

10 Commerce Park No., Suite 3

Address: Bedford, NH 03110

Bedford, NH 03110

Telephone # (603) 627-2881

(603) 627-2881

Fax # (603) 627-2915

(603) 627-2915

Email: abasso@keachnordstrom.com

abasso@keachnordstrom.com

PURPOSE OF PLAN:

To show the proposed change of use of 12,700 sf of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop.

For Town Use PR Mtg Date:

Plan Routing Date: 2-21-14 Sub/Site Date: 3-12-14

I have no comments I have comments (attach to form)

(Initials) Title: _____ Date: _____

DEPT:
 Zoning Engineering Assessor Police Fire Planning
 Consultant Highway Department

Fees Paid: _____

SITE DATA SHEET

PLAN NAME: Change of Use - Granite State Indoor Range & Gun Shop

PLAN TYPE: SITE PLAN

LEGAL DESCRIPTION: MAP 221 LOT 4

DATE: February 18, 2014

Location by Street 2-4 Hampshire Drive

Zoning: I-Industrial

Proposed Land Use: Gun Range & shop

Existing Use: Industrial

Surrounding Land Use(s): Industrial

Number of Lots Occupied: One

Existing Area Covered by Building: 25,400 sf

Existing Buildings to be removed: None

Proposed Area Covered by Building: N/A

Open Space Proposed: 38%

Open Space Required: 35%

Total Area: S.F.: 117,379 Acres: 2.694

Area in Wetland: ∅ Area Steep Slopes: ∅

Required Lot Size: 1 acre

Existing Frontage: 285 ft

Required Frontage: 150 ft

Building Setbacks:	Required*	Proposed
Front:	<u>50</u>	<u>67</u>
Side:	<u>15</u>	<u>78</u>
Rear:	<u>15</u>	<u>112</u>

**SITE PLAN DATA SHEET
(Continued)**

Flood Zone Reference: None

Width of Driveways: 24'

Number of Curb Cuts: 2

Proposed Parking Spaces: _____

Required Parking Spaces: _____

Basis of Required Parking (Use): _____

Dates/Case #/Description/Stipulations
of ZBA, Conservation Commission,
NH Wetlands Board Actions:
(Attach stipulations on separate sheet)

Hudson Town Code

<u>Waivers Requested:</u>	<u>Reference</u>	<u>Regulation Description</u>
_____	1. <u>275-9A</u>	<u>Drainage study</u>
_____	2. <u>275-9B</u>	<u>Traffic study</u>
_____	3. <u>275-9C</u>	<u>Noise study</u>
_____	4. <u>275-9D</u>	<u>Fiscal Impact Study</u>
_____	5. <u>275-9H</u>	<u>HISS Mapping</u>
_____	6. <u>275-6</u>	<u>Development Agreement.</u>
_____	7. _____	_____
_____	8. _____	_____

(Left column for Town Use)

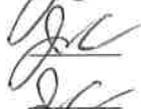
Impact Fees:
C.A.P Fee: _____

Development Agreement
Proposed: Waiver Requested

<i>For Town Use</i>	
Data Sheet Checked By: _____	Date: _____

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Thirty (30) days prior to Planning Board Meeting, a complete site plan to include all supporting materials/documents must be submitted in final form. The site plan shall comply with the following specifications/requirements:

Applicant Initials		Staff Initials
<u>AMB</u>	a) Submission of nine (9) full sets of Site Plans (sheet size: 22" x 34") shall be submitted at the time of application filing, followed by the submission of seventeen (17) 11" X 17" plan sets (revised if applicable) to the Community Development Department no later than 10:00 A.M., Tuesday the week prior to the scheduled public hearing/conceptual review date.	
<u>AMB</u>	b) A Site Plan narrative, describing the purpose, locations, long-range plans, impacts on traffic, schools, and utilities	
<u>AMB</u>	c) Plan scale at not less the one inch equals fifty feet (1" = 50')	
<u>AMB</u>	d) Locus plan with 1,000' minimum radius of site to surrounding area	
<u>AMB</u>	e) Plan date by day/month/year	
<u>AMB</u>	f) Revision block inscribed on the plan	
<u>AMB</u>	g) Planning Board approval block inscribed on the plan	
<u>AMB</u>	h) Title of project inscribed on the plan	
<u>AMB</u>	i) Names and addresses of property owners and their signatures inscribed on the plan	
<u>AMB</u>	j) North point inscribed on the plan	
<u>AMB</u>	k) Property lines: exact locations and dimensions	
<u>AMB</u>	l) Square feet and acreage of site	
<u>AMB</u>	m) Square feet of each building (existing and proposed)	
<u>AMB</u>	n) Names and addresses of bordering abutters, as shown on Tax Assessor's records not more than five (5) days prior to application date to be listed on the plan.	

Applicant
Initials

Staff
Initials

<u>AMB</u> ak)	Buffer as required by site plan regulations	<u>jc</u>
<u>AMB</u> al)	Green and open space requirements met with both types of spaces inscribed on the plan	<u>jc</u>
<u>W</u> am)	Soil types and boundaries, Note: If site contains marginal or questionable soils, a High Intensity Soil, Survey (HISS) may be deemed necessary to submit as part of the application. Said HISS, if required, shall be performed by a State of New Hampshire Certified Soil Scientist, who shall affix his/her stamp and signature shall be inscribed on the plan.	<u>W</u>
<u>AMB</u> an)	Wetlands (and poorly-drained and very poorly-drained soils, also identified as Class 5 and Class 6 High Intensity Soil Survey (HISS soils), and permanent and seasonal wetlands shall be identified on the plan by a New Hampshire certified wetland or soil scientist, who shall affix his/her stamp and signature to the respective plan.	<u>jc</u>
<u>AMB</u> ao)	"Valid for one year after approval" statement inscribed on the plan.	<u>jc</u>
<u>AMB</u> ap)	Loading bays/docks	<u>jc</u>
<u>AMB</u> aq)	State of New Hampshire engineer's stamp, signature, surveyor's stamp, and signature	<u>jc</u> ILLS only ENG. NOT A/CQ.
<u>AMB</u> ar)	Error of closure (1 in 10,000 or better)	<u>jc</u>
<u>AMB</u> as)	Drafting errors/omissions	<u>jc</u>
<u>AMB</u> at)	Developer names, addresses, telephone numbers and signatures	<u>OWNERS CITED ON PLAN. jc PROVIDED. jc</u>
<u>AMB</u> au)	Photographs, electronic/digital display or video of site and area	<u>jc</u>
<u>AMB</u> av)	Attach one (1) copy of the building elevations	<u>jc</u>
<u>W</u> aw)	Fiscal impact study	<u>W</u>
<u>W</u> ax)	Traffic study	<u>W</u>
<u>W</u> ay)	Noise study	<u>W</u>

Applicant
Initials

Staff
Initials

AMB az)

Copies of any proposed or existing easements, covenants, deed restrictions, right of way agreements or other similar documents

JU
JU

AMB ba)

Copy of applicable Town, State, Federal approval/permits to include but not limited to the following:

- industrial discharge application
- sewer application
- flood plain permit
- wetlands special exception
- variance
- erosion control permit (149:8a)
- septic construction approval
- dredge and fill permit
- curb cut permit
- shore-land protection certification in accordance with RSA483-B
- if applicable, review application with Lower Merrimack River Local Advisory Committee (LMRLAC) and attach LMRLAC project comments hereto.

AMB bb)

Presentation plan (colored, with color-coded bar chart)

PLANNING

AMB bc)

Fees paid to clerk

JU

AMB bd)

Five (5) 22" x 34" copies of the plan shall be brought to the Planning Board meeting and distributed to the Planning Board members at the meeting. Note: for all subsequent meetings involving revised plans, five 22" x 34" copies of said plan shall be brought to the meeting for distribution to the board members.

JU

*Under the purview of the Planning Board, any and all items may be waived.

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

I hereby apply for Site Plan Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the Site Plan specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s) by the filing of this application as indicated above, hereby given permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim to or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and/or inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner: Debra C. Trask, Partner

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: [Signature], Manager

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The Code Enforcement Officer/Building Inspector must be notified within two (2) working days of any change by the individual in charge of the project.

APPLICATION IS DUE AT NOON 21 days prior to the Planning Board Meeting. (The date the Agenda is CLOSED.) Any applications received after that time will be deferred until the next available meeting.

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

Name of Subdivision/Site Plan: Change of Use – Granite State Indoor Range & Gun Shop
Street Address: 2-4 Hampshire Drive, Hudson, NH 03051

I Rick Bishop hereby request that the Planning Board waive the requirements of item Hudson Land Use Code 275-9, A the Subdivision/Site Plan Checklist in reference to a plan presented by Keach-Nordstrom Assoc., Inc. (name of surveyor and engineer) dated January 12, 2014 for property tax map(s) 221 and lot(s) 4 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

A Drainage Study would cause unnecessary financial burden to the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

The ordinance is in place to mitigate an increase in stormwater runoff due to new development. The project proposes a change of use for a portion of a pre-existing industrial building. Changes to the exterior of the site are minimal and will not increase the overall amount of impervious area, therefore the runoff is not expected to increase pre to post development. Performing a detailed drainage analysis should be unnecessary for the site.

Signed:  _____
Applicant or Authorized Agent

Planning Board Action:

Waiver Granted _____

Waiver Not Granted _____

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

Name of Subdivision/Site Plan: Change of Use – Granite State Indoor Range & Gun Shop
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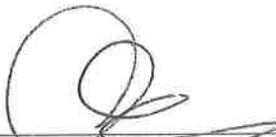
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Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

A Traffic Study would cause unnecessary financial burden to the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

The ordinance is in place to prevent traffic issues from arising due to new developments. The project proposes a change of use for a portion of an existing industrial building. A significant increase in traffic to this location is not to be expected.

Signed:  _____
Applicant or Authorized Agent

Planning Board Action:
Waiver Granted _____
Waiver Not Granted _____

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

Name of Subdivision/Site Plan: Change of Use – Granite State Indoor Range & Gun Shop
Street Address: 2-4 Hampshire Drive, Hudson, NH 03051

I Rick Bishop hereby request that the Planning Board waive the requirements of item Hudson Land Use Code 275-9, C the Subdivision/Site Plan Checklist in reference to a plan presented by Keach-Nordstrom Assoc., Inc. (name of surveyor and engineer) dated January 12, 2014 for property tax map(s) 221 and lot(s) 4 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

A Noise Impact Study would cause unnecessary financial burden to the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

The ordinance is in place to prevent noise pollution from abutting zoning districts and conflicting land uses. The subject project is proposed within the Industrial (I) Zone, and is surrounded by industrial properties on all sides. The waiver request is not violating the spirit and intent due to the fact that the project proposes a change of use to only a portion of an existing facility that abuts properties within the same zoning district.

Signed: _____

Applicant or Authorized Agent

Planning Board Action:

Waiver Granted _____

Waiver Not Granted _____

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

Name of Subdivision/Site Plan: Change of Use – Granite State Indoor Range & Gun Shop
Street Address: 2-4 Hampshire Drive, Hudson, NH 03051

I Rick Bishop hereby request that the Planning Board waive the requirements of item Hudson Land Use Code 275-9, D the Subdivision/Site Plan Checklist in reference to a plan presented by Keach-Nordstrom Assoc., Inc. (name of surveyor and engineer) dated January 12, 2014 for property tax map(s) 221 and lot(s) 4 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e. (For Subdivisions) and RSA 674:44, III (e) (For Site-Plans). Without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

A Fiscal and Environmental Impact Study beyond what we have provided through our Best Management Practices and with the CAP that this project is subject to would cause unnecessary financial burden to the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

This waiver request is not violating the spirit and intent of the ordinance due to the fact that the site is currently developed and the proposed changes to the exterior are minimal. Fiscally, the project is subject to a C.A.P. fee to be determined.

Signed: _____

Applicant or Authorized Agent

Planning Board Action:

Waiver Granted _____

Waiver Not Granted _____

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

Name of Subdivision/Site Plan: Change of Use – Granite State Indoor Range & Gun Shop
Street Address: 2-4 Hampshire Drive, Hudson, NH 03051

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Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

HISS Mapping would cause unnecessary financial burden to the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

This waiver request is not violating the spirit and intent of the ordinance due to the fact that the site is currently developed. Few changes to the exterior are proposed, so the existing soils at the site will remain undisturbed.

Signed: _____

Applicant or Authorized Agent

Planning Board Action:

Waiver Granted _____

Waiver Not Granted _____

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

Name of Subdivision/Site Plan: Change of Use – Granite State Indoor Range & Gun Shop
Street Address: 2-4 Hampshire Drive, Hudson, NH 03051

I Rick Bishop hereby request that the Planning Board waive the requirements of item Hudson Land Use Code 275 - 6 the Subdivision/Site Plan Checklist in reference to a plan presented by Keach-Nordstrom Assoc., Inc. (name of surveyor and engineer) dated January 12, 2014 for property tax map(s) 221 and lot(s) 4 in the Town of Hudson, NH.

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Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

A Development Agreement would cause unnecessary financial burden to the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

This waiver request is not violating the spirit and intent of the ordinance due to the fact that the site is currently developed.

Signed: _____

Applicant or Authorized Agent

Planning Board Action:

Waiver Granted _____

Waiver Not Granted _____

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

SCHEDULE OF FEES

A. Review Fees

1. <u>Site Plan Use</u>	<u>Project Size/Fee</u>	
Multi-Family	\$105/unit for 3-50 units \$78.50/unit for each additional unit over 50	\$ _____
Commercial/Semi Public/Civic or Recreational	\$157/1,000 sq. ft. for first 100,000 sq.ft. (bldg area); \$78.50/1,000 sq.ft. thereafter.	\$ _____
Industrial	\$150/1,000 sq.ft for first 100,000 sq.ft. (bldg. area);\$78.50/1,000 sq.ft thereafter	\$ <u>300.00</u>
No Buildings	\$30.00 per 1,000 sq.ft. of proposed developed area	\$ _____

Plus Consultant Review Fee:

Total _____ acres @ \$600.00
per acre or \$1,250.00, whichever is greater

\$ N/A

This is an estimate for cost of consultant review. The fee is expected to cover the amount. A complex project may require additional funds. A simple project may result in a refund.

Legal Fee:

The applicant shall be charged attorney costs billed to the Town for the Town's attorney review of any application plan set documents.

2. Conceptual Review Only	\$100.00	\$ _____
3. ZBA Input Only	\$100.00	\$ _____

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

SCHEDULE OF FEES
(Continued)

B. Postage

Current "certified mail" postage rate per abutter to proposed Site Plan and current first class postage rate per property Owner within 200 feet of proposed site plan.

	\$3.79	
<u>8</u> Abutters @ \$3.56 (Certified Mail)		\$ <u>30.32</u>
<u> </u> Property owners within 200 feet @.46 (First class)		\$ <u> </u>

C. On Site Signs \$ 15.00

D. Advertising (PUBLIC NOTICE) For all site plans \$ 40.00

E. Tax Map Updating Fee (FLAT FEE) \$ 275.00

TOTAL \$ 660.32

<i>For Town Use</i>	
AMOUNT DUE	\$ <u> </u> DATE RECEIVED <u> </u>
AMOUNT RECEIVED	\$ <u> </u> RECEIPT NO. <u> </u>
	RECEIVED BY: <u> </u>

F. Recording Fees

The applicant shall pay the costs of recording the final site plan layout prior to final site plan approval, in accordance with fees established by the County.

Recording of Plan	@\$24.00/sheet	\$ <u> </u>
	+\$2.00/surcharge plan	\$ <u> </u>
Land & Community Heritage Investment Program (LCHIP) fee	+25.00	\$ <u> </u>
Easements/Agreements (if applicable)	@\$10.00/first sheet	\$ <u> </u>
	@\$ 4.00/each sheet	\$ <u> </u>
Thereafter	+\$2.00/surcharge/doc.	\$ <u> </u>
	+First Class return postage rate	
TOTAL		\$ <u> </u>

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

**SCHEDULE OF FEES
(Continued)**

PLEASE NOTE: RECORDING FEES SHALL BE COMPUTED WHEN PLANS ARE FINALIZED FOR RECORDING. RECORDING FEES MUST BE PAID BY THE APPLICANT PRIOR TO RECORDING.

THE APPLICANT SHALL BE RESPONSIBLE FOR ALL FEES INCURRED BY THE TOWN FOR PROCESSING AND REVIEW OF THE APPLICANT'S APPLICATION, PLAN AND RELATED MATERIALS. ALL SUCH FEES MUST BE PAID PRIOR TO RECORDING.

E. COST ALLOCATION PROCEDURE AMOUNT CONTRIBUTION AND OTHER IMPACT FEE PAYMENTS:

TO BE DETERMINED BY VOTE OF THE PLANNING BOARD AND SHALL BE PAID BY THE APPLICANT AT THE TIME OF SUBMITTAL OF CERTIFICATE OF OCCUPANCY PERMIT REQUEST.

Abutters List
Granite State Indoor Range & Gun Shop
Hudson, NH
KNA#14-0203-1

Tax Map	Lot	Owner/Applicant
221	4	Nash Family Investment Properties 91 Amherst Street Nashua, NH 03064
Tax Map	Lot	Abutter
221	3	21 Flagstone Drive, LLC 21 Flagstone Drive Hudson, NH 03051
221	2	Danville Realty, LLC 25 Flagstone Drive Hudson, NH 03051
221	5	Prestigious Investment Properties, LLC 8 Hampshire Drive Hudson, NH 03051
221	6	Parker-Hannifin Chomerics Corporation 16 Flagstone Drive Hudson, NH 03051
222	9	14 Flagstone, LLC 14 Flagstone Drive Hudson, NH 03051
222	11	Winters Family Realty Co. 13 Flagstone Drive Hudson, NH 03051
222	10	1987 Tamposi Limited Partnership 20 Trafalgar Square, Suite 602 Nashua, NH 03063

Professionals to be notified:

Engineer & Surveyor
Keach-Nordstrom Associates, Inc.
10Commerce Park North, Suite 3
Bedford, NH 03110

Nash Family Investment Properties
91 Amherst Street
Nashua, NH 03064

Nash Family Investment Properties
91 Amherst Street
Nashua, NH 03064

Nash Family Investment Properties
91 Amherst Street
Nashua, NH 03064

21 Flagstone Drive, LLC
21 Flagstone Drive
Hudson, NH 03051

21 Flagstone Drive, LLC
21 Flagstone Drive
Hudson, NH 03051

21 Flagstone Drive, LLC
21 Flagstone Drive
Hudson, NH 03051

Danville Realty, LLC
25 Flagstone Drive
Hudson, NH 03051

Danville Realty, LLC
25 Flagstone Drive
Hudson, NH 03051

Danville Realty, LLC
25 Flagstone Drive
Hudson, NH 03051

Prestigious Investment Properties, LLC
8 Hampshire Drive
Hudson, NH 03051

Prestigious Investment Properties, LLC
8 Hampshire Drive
Hudson, NH 03051

Prestigious Investment Properties, LLC
8 Hampshire Drive
Hudson, NH 03051

Parker-Hannifin Chomerics
Corporation
16 Flagstone Drive
Hudson, NH 03051

Parker-Hannifin Chomerics
Corporation
16 Flagstone Drive
Hudson, NH 03051

Parker-Hannifin Chomerics
Corporation
16 Flagstone Drive
Hudson, NH 03051

14 Flagstone, LLC
14 Flagstone Drive
Hudson, NH 03051

14 Flagstone, LLC
14 Flagstone Drive
Hudson, NH 03051

14 Flagstone, LLC
14 Flagstone Drive
Hudson, NH 03051

Winters Family Realty Co.
13 Flagstone Drive
Hudson, NH 03051

Winters Family Realty Co.
13 Flagstone Drive
Hudson, NH 03051

Winters Family Realty Co.
13 Flagstone Drive
Hudson, NH 03051

1987 Tamposi Limited Partnership
20 Trafalgar Square, Suite 602
Nashua, NH 03063

1987 Tamposi Limited Partnership
20 Trafalgar Square, Suite 602
Nashua, NH 03063

1987 Tamposi Limited Partnership
20 Trafalgar Square, Suite 602
Nashua, NH 03063

Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3
Bedford, NH 03110

Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3
Bedford, NH 03110

Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3
Bedford, NH 03110

"B"

PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: February 18, 2014 Tax Map # 221 Lot # 4

Name of Project: Granite State Indoor Range + Gun Shop (Chg of Use)

Zoning District: _____ General SP# 02-14
(For Town Use) (For Town Use)



ZBA Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Nash Family Investment Properties

Granite State Indoor Range & Gun Shop

Address: 91 Amherst Street

PO Box 11

Address: Nashua, NH 03069

Durham, NH 03824

Telephone # _____

(603) 321-5041

Fax # _____

Email: _____

neartho@comcast.net

PROJECT ENGINEER

SURVEYOR

Name: Keach-Nordstrom Assoc., Inc.

Keach-Nordstrom Assoc., Inc.

Address: 10 Commerce Park No., suite 3

10 Commerce Park No., suite 3

Address: Bedford, NH 03110

Bedford, NH 03110

Telephone # (603) 627-2881

(603) 627-2881

Fax # (603) 627-2915

(603) 627-2915

Email: abasso@keachnordstrom.com

abasso@keachnordstrom.com

PURPOSE OF PLAN:

To show the proposed change of use of 12,700 sf of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop.

Plan Routing Date: <u>2-21-14</u>	For Town Use <u>P/B Mtg Date:</u>	Sub/Site Date: <u>3-12-14</u>
<input type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)		
<u>MAO</u> (Initials)	Title: <u>2.A</u>	Date: <u>2/21/14</u>
<u>#20 Indoor Commercial Rezoning</u>		<u>PERMITTED</u>
DEPT:		
<input checked="" type="checkbox"/> Zoning	<input type="checkbox"/> Engineering	<input type="checkbox"/> Assessor
<input type="checkbox"/> Consultant	<input type="checkbox"/> Highway Department	<input type="checkbox"/> Police
		<input type="checkbox"/> Fire
		<input type="checkbox"/> Planning
Fees Paid: _____		

**PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: February 18, 2014 Tax Map # 221 Lot # 4
 Name of Project: Granite State Indoor Range + Gun Shop (Chg of Use)
 Zoning District: _____ General SP# 02-14
 (For Town Use) (For Town Use)



ZBA Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Nash Family Investment Properties
 Address: 91 Amherst Street
 Address: Nashua, NH 03064
 Telephone # _____
 Fax # _____
 Email: _____

Name: Granite State Indoor Range & Gun Shop
 Address: PO Box 11
 Address: Durham, NH 03824
 Telephone # (603) 321-5041
 Fax # _____
 Email: neartho@comcast.net

PROJECT ENGINEER

SURVEYOR

Name: Keach-Nordstrom Assoc., Inc.
 Address: 10 Commerce Park No., suite 3
 Address: Bedford, NH 03110
 Telephone # (603) 627-2881
 Fax # (603) 627-2915
 Email: abasso@keachnordstrom.com

Name: Keach-Nordstrom Assoc., Inc.
 Address: 10 Commerce Park No., suite 3
 Address: Bedford, NH 03110
 Telephone # (603) 627-2881
 Fax # (603) 627-2915
 Email: abasso@keachnordstrom.com

PURPOSE OF PLAN:

To show the proposed change of use of 12,700 sf of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop.

For Town Use <u>PR Mtg Date:</u>	
Plan Routing Date: <u>2-21-14</u>	Sub/Site Date: <u>3-12-14</u>
<input checked="" type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
<u>RB</u> (Initials)	Title: <u>ROAD AGENT</u> Date: <u>2/24/14</u>
DEPT: <input type="checkbox"/> Zoning <input type="checkbox"/> Engineering <input type="checkbox"/> Assessor <input type="checkbox"/> Police <input type="checkbox"/> Fire <input type="checkbox"/> Planning <input type="checkbox"/> Consultant <input type="checkbox"/> Highway Department	
Fees Paid: _____	

**PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: February 18, 2014 Tax Map # 221 Lot # 4
 Name of Project: Granite State Indoor Range + Gun shop (Chg of use)
 Zoning District: _____ General SP# 02-14
 (For Town Use) (For Town Use)



ZBA Action: _____

PROPERTY OWNER: DEVELOPER:

Name: Nash Family Investment Properties Granite State Indoor Range & Gun Shop
 Address: 91 Amherst Street PO Box 11
 Address: Nashua, NH 03064 Durham, NH 03824
 Telephone # _____ (603) 321-5041
 Fax # _____
 Email: _____ neartho@comcast.net

PROJECT ENGINEER

SURVEYOR

Name: Keach-Nordstrom Assoc., Inc. Keach-Nordstrom Assoc., Inc.
 Address: 10 Commerce Park No., suite 3 10 Commerce Park No., suite 3
 Address: Bedford, NH 03110 Bedford, NH 03110
 Telephone # (603) 627-2881 (603) 627-2881
 Fax # (603) 627-2915 (603) 627-2915
 Email: abasso@keachnordstrom.com abasso@keachnordstrom.com

PURPOSE OF PLAN:

To show the proposed change of use of 12,700 sf of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop.

For Town Use <u>P/B Mtg Date:</u>	
Plan Routing Date: <u>2-21-14</u>	Sub/Site Date: <u>3-12-14</u>
<input checked="" type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
<u>Job</u> (Initials)	Title: <u>Deputy Fire Chief</u> Date: <u>2/21/14</u>
DEPT: <input type="checkbox"/> Zoning <input type="checkbox"/> Engineering <input type="checkbox"/> Assessor <input type="checkbox"/> Police <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Planning <input type="checkbox"/> Consultant <input type="checkbox"/> Highway Department	
Fees Paid: _____	



BY:

**PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE**

Date of Application: February 18, 2014 Tax Map # 221 Lot # 4
 Name of Project: Granite State Indoor Range + Gun Shop (Chg of Use)
 Zoning District: _____ General SP# 02-14
 (For Town Use) (For Town Use)



ZBA Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Nash Family Investment Properties
 Address: 91 Amherst Street
 Address: Nashua, NH 03064
 Telephone # _____
 Fax # _____
 Email: _____

Name: Granite State Indoor Range & Gun Shop
 Address: PO Box 11
 Address: Durham, NH 03824
 Telephone # (603) 321-5041
 Fax # _____
 Email: neartho@comcast.net

PROJECT ENGINEER

SURVEYOR

Name: Keach-Nordstrom Assoc., Inc.
 Address: 10 Commerce Park No., suite 3
 Address: Bedford, NH 03110
 Telephone # (603) 627-2881
 Fax # (603) 627-2915
 Email: abasso@keachnordstrom.com

Name: Keach-Nordstrom Assoc., Inc.
 Address: 10 Commerce Park No., suite 3
 Address: Bedford, NH 03110
 Telephone # (603) 627-2881
 Fax # (603) 627-2915
 Email: abasso@keachnordstrom.com

PURPOSE OF PLAN:

To show the proposed change of use of 12,700 sf of the existing industrial building at 2-4 Hampshire Drive to an indoor gun range and gun shop.

For Town Use <u>P/B Mtg Date:</u>	
Plan Routing Date: <u>2-21-14</u>	Sub/Site Date: <u>3-12-14</u>
<input checked="" type="checkbox"/> I have no comments <input type="checkbox"/> I have comments (attach to form)	
(Initials) <u>[Signature]</u>	Title: <u>Asst. Assessor</u> Date: <u>2-24-14</u>
DEPT: _____ Zoning _____ Engineering _____ Assessor _____ Police _____ Fire _____ Planning _____ _____ Consultant _____ Highway Department	
Fees Paid: _____	

UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

ZONING NOTE

THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY KEACH-NORDSTROM ASSOCIATES, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

LEGEND

- STONE BOUND FOUND
- IRON PIN FOUND
- UTILITY POLE
- SIGN
- LIGHT
- GAS VALVE
- WATER VALVE
- HYDRANT
- WATER SHUT OFF
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- ADJUTER PROPERTY LINE
- PROPERTY LINE
- OVERHEAD UTILITIES
- GAS LINE
- WATER LINE
- BRUSHLINE
- EDGE OF PAVEMENT
- 5' CONTOUR
- 1' CONTOUR
- SETBACK
- EASEMENT



EXISTING BUILDING

MAP 221; LOT 5
PRESTIGIOUS INVESTMENT PROPERTIES, LLC
8 HAMPSHIRE DRIVE
HUDSON, NH 03051
BK. 8020, PG. 911

EXISTING DRAINAGE EASEMENT
(BK. 3217; PG. 749)
(REF. PLAN NO. 2)

MAP 221; LOT 4
117,379 S.F.
2.694 ACRES

(12,700 S.F. TO REMAIN INDUSTRIAL)

EXISTING 1-STORY CONCRETE BLOCK BUILDING
(TOTAL ≈ 25,400 S.F.)

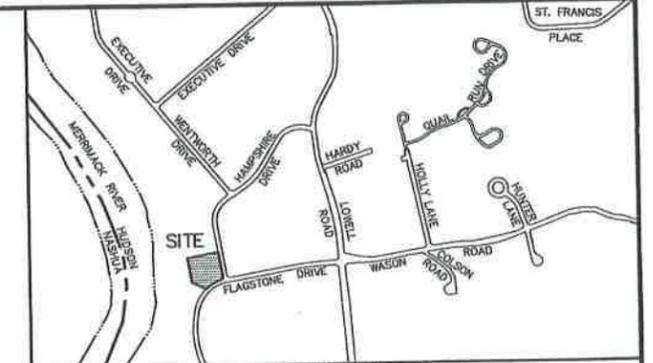
(12,700 S.F. TO BE USED FOR INDOOR RANGE AND GUN SHOP)

MAP 221; LOT 3
21 FLAGSTONE DRIVE, LLC
21 FLAGSTONE DRIVE
HUDSON, NH 03051
BK. 6956, PG. 2730

MAP 221; LOT 6
PARKER-HANNAFIN CHEMICALS CORPORATION
16 FLAGSTONE DRIVE
HUDSON, NH 03051
BK. 4885, PG. 255

SCS SOILS LEGEND

- WdA WINDSOR LOAMY SAND, 3 TO 8% SLOPES
- WdB WINDSOR LOAMY SAND, 8 TO 15% SLOPES



VICINITY MAP
SCALE: 1"=1,000'

REFERENCE PLANS:

1. "LOT LINE RELOCATION - LOVELL ROAD - HUDSON, NH"; PREPARED FOR: GERALD Q. NASH, 40 TEMPLE STREET, NASHUA, NH; PREPARED BY: A.E. MAYNARD CIVIL ENGINEER, 12 PROGRESS AVE., NASHUA, NH; SCALE: 1" = 100', DATED: SEPT. 1980, H.C.R.D. PLAN NO. 13476.
2. "DRAINAGE EASEMENT PLAN - LOTS 10-7-3, 10-35 & 10-58 - HAMPSHIRE DRIVE, HUDSON, NH"; PREPARED BY: THOMAS F. MORAN, INC.; SCALE: 1" = 100'; DATED: JAN. 17, 1983, H.C.R.D. PLAN NO. 18827.
3. "SITE PLAN - 8 HAMPSHIRE DRIVE - MAP 221 LOT 5 - HUDSON, NEW HAMPSHIRE"; PREPARED FOR: PRESTIGIOUS INV. PROP., LLC, 8 HAMPSHIRE DRIVE, HUDSON, NEW HAMPSHIRE 03051; PREPARED BY: MAYNARD & PAQUETTE ENGINEERING ASSOCIATES, LLC; SCALE: 1" = 50'; DATED: AUGUST 9, 2011; H.C.R.D. PLAN NO. 37340.
4. "SUBDIVISION PLAN - SAGAMORE INDUSTRIAL PARK - SAGAMORE PARK ROAD - HUDSON, N.H."; PREPARED BY: A.E. MAYNARD CIVIL ENGINEER, 12 PROGRESS AVE., NASHUA, NH; SCALE: 1" = 100'; DATED: AUGUST 1974; H.C.R.D. PLAN NO. 14855.

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS ON THE SUBJECT PREMISES IN SUPPORT OF A PROPOSED CHANGE OF USE ON THE PROPERTY.
2. TOTAL SITE AREA: 117,379 SQ. FT., 2.694 ACRES
3. PRESENT ZONING: INDUSTRIAL (I)
4. MINIMUM LOT REQUIREMENTS:
 - LOT AREA: 30,000 SQ. FT.
 - LOT FRONTAGE: 150 FT.
 - MINIMUM BUILDING SETBACKS:
 - FRONT: 50 FT.
 - SIDE: 15 FT.
 - REAR: 15 FT.
5. MAP 221; LOT 4 INDICATES TOWN OF HUDSON TAX ASSESSOR'S MAP AND LOT NUMBER.
6. OPEN SPACE REQUIRED: 35% PROVIDED: 36%
7. PARKING:
 - INDUSTRIAL USE: 1 SPACE/800 S.F. x 12,700 S.F. = 21 SPACES
 - GUN RANGE/SHOP:
 - RANGE: 15 LANES @ 1 SPACE/LANE = 15 SPACES
 - RETAIL: 200 S.F. @ 1 SPACE/200 S.F. = 10 SPACES
 - STORAGE: 960 S.F. @ 1 SPACE/1,000 S.F. = 1 SPACES
 - ASSEMBLY: 42 SEATS @ 1 SPACE/4 SEATS = 10 SPACES
 - REQUIRED = 68 SPACES EXISTING: PROVIDED = 68 SPACES EXISTING.
8. EXAMINATION OF THE FEDERAL EMERGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF HUDSON, NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 330092 06560 PANEL NUMBER 055 OF 701, EFFECTIVE DATE: SEPTEMBER 25, 2009 INDICATES THAT THE SUBJECT PREMISES IS NOT LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
9. BENCHMARKS SET AS NOTED, BASED ON NGVD 1929.
10. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
11. BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN JANUARY, 2014. HORIZONTAL DATUM IS NAD 83. VERTICAL DATUM IS NGVD 29.
12. PRESENT OWNER OF RECORD: NASH FAMILY INVESTMENT PROPERTIES 91 AMHERST STREET NASHUA, NH 03064 BK. 7018, PG. 1960
13. EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS, AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES WOULD DETERMINE.
14. WAIVERS APPROVED:
 - 275-9A DRAINAGE STUDY
 - 275-9B TRAFFIC STUDY
 - 275-9C NOISE STUDY
 - 275-9D FISCAL IMPACT STUDY
 - 275-9H HISS MAPPING
 - 275-9 DEVELOPMENT AGREEMENT
15. BOOK 2831; PAGE OF THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS CONVEYS RIGHTS TO PLACE UTILITIES ACROSS, OVER AND UNDER THE PRIVATE WAYS IN THE "HAMPSHIRE DRIVE DEVELOPMENT OFF FLAGSTONE DRIVE". THE DOCUMENT FURTHER RESERVES 10 FOOT WIDE STRIPS "ALONG THE LOT LINES ADJACENT TO STREETS OR PUBLIC WAYS" AS DEPICTED HEREON.
16. NO MONUMENT OR FREE STANDING SIGN PROPOSED.
17. HOURS OF OPERATION: 10 AM TO 10 PM; 7 DAYS PER WEEK.

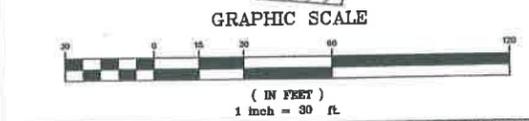


**CHANGE OF USE PLAN
GRANITE STATE INDOOR RANGE
AND GUN SHOP
MAP 221; LOT 4
2 - 4 HAMPSHIRE DRIVE
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY**

OWNER OF RECORD:
NASH FAMILY INVESTMENT PROPERTIES
91 AMHERST STREET
NASHUA, NH 03064
BK. 7018, PG. 1960

APPLICANT:
GRANITE STATE INDOOR RANGE
AND GUN SHOP
PO BOX 11
DURHAM, NH 03824

KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



PURSUANT TO THE SITE 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 YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

CERTIFICATION:
THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED WAS MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION DURING JANUARY, 2014 IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE STATE OF NEW HAMPSHIRE AND THE CITY/TOWN WITHIN WHICH IT IS LOCATED WITH A TRAVERSE ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000. THE SURVEY PERFORMED IS CLASSIFIED AS AN URBAN STANDARD SURVEY, (CATEGORY 1, CONDITION 1) AS DEFINED IN THE NEW HAMPSHIRE LAND SURVEYORS ASSOCIATION ETHICS AND STANDARDS.

2/10/14
DATE

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: JANUARY 12, 2014 SCALE: 1" = 30'
PROJECT NO: 14-0203-1 SHEET 1 OF 1

2 - 4 Hampshire Drive Most Recent Amended Site Plan, dated Oct. 6, 1997, latest revision date Jan. 26, 1998.

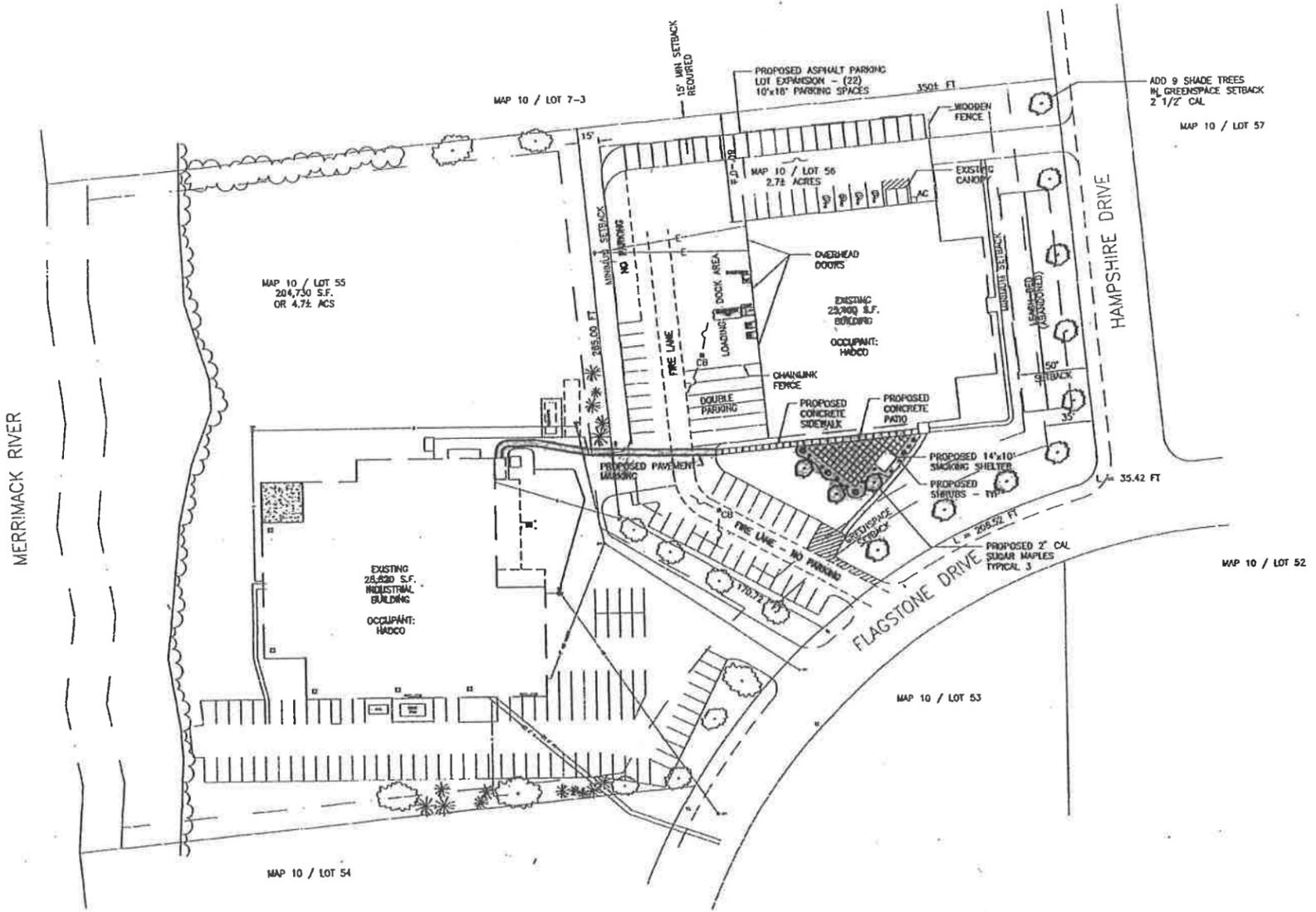
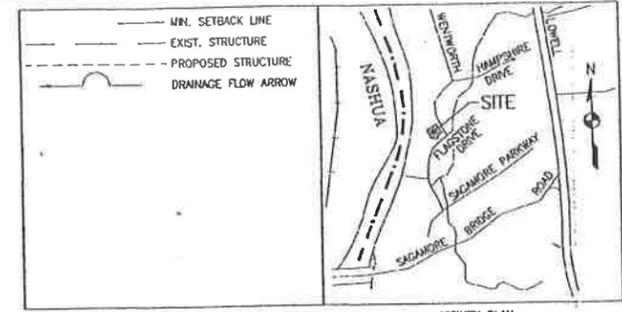
2
C
3

- ADJACENTS**
- MAP 10/LOTS 55 & 56
SAGAMORE INDUSTRIAL PR. ERITES
40 TEMPLE STREET
NASHUA, NH 03060
 - MAP 10/LOT 7-3
LOWELL SHOE, INC.
8 HAMPSHIRE DRIVE
HUDSON, NH 03051
 - MAP 10/LOT 53
PARKER HANBEN CORP.
CHOMERICS, INC.
17325 EXCLUD AVENUE
CLEVELAND, OH 44112
 - MAP 10/LOT 54
DIXASA REALTY LLC
25 FLAGSTONE DRIVE
HUDSON, NH 03051
 - MAP 10/LOT 52
FLAG REALTY TRUST, LLC
12-14 FLAGSTONE DRIVE
HUDSON, NH 03051
 - MAP 10/LOT 57
WRITERS FAMILY REALTY COMPANY
13 FLAGSTONE DRIVE
HUDSON, NH 03051



PLAN REFERENCE

- SITE PLAN - LOT 4343-019 - SAGAMORE INDUSTRIAL PARK, FLAGSTONE DRIVE, HUDSON, NH PREPARED FOR G.O. NASH AND S.A. TAMPOSI - SCALE: 1"=50' - DATED MAY 1980, BY A.E. MAYNARD, CIVIL ENGINEER, I.L.C.R.D. NO. 13845.
- MAP 10 / LOT 55 - HADCO CORPORATION AMENDED SITE PLAN, PREPARED FOR HADCO CORP. BY MAYNARD & PAQUETTE, INC. SCALE: 1"=50', DATED: JUNE 24, 1996, LAST REVISED AUG. 19, 1996, I.L.C.R.D. # _____
- MAP 10 / LOT 55 - HADCO CORPORATION AMENDED SITE PLAN, PREPARED BY ST. JOHN ASSOCIATES, ENGINEERS P.C. SCALE: 1"=50', DATED 7-15-97



NOTES:

- PRESENT ZONING - "I" INDUSTRIAL
- PURPOSE OF THIS PLAN IS TO PROPOSE THE FOLLOWING SITE IMPROVEMENTS FOR SITE PLAN APPROVAL:
 - NEW PATIO WITH NEW LANDSCAPING AND TREES.
 - NEW SIDEWALK TO ADJACENT LOT.
 - NEW 14'x10' SMOKING SHELTER AT PATIO.
 - ADDITION OF APPROXIMATELY 22 NEW PARKING SPACES.
- SITE IS SERVICED BY EXISTING TOWN SEWER AND CONSUMER'S NH WATER.
- TOTAL AREA OF PARCEL: 2.7± ACRES (APPROX 117,000 SF)
- PARKING REQUIREMENTS: 1 SP/600 SF = 25,400 SF = 43 SPACES
EXISTING PARKING PROVIDED: 54 SPACES
PROPOSED NEW PARKING: 22 SPACES
TOTAL PARKING: 76 SPACES
- ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON PLANNING BOARD PRIOR TO INSTALLATION THEREOF.
- MINIMUM OPEN SPACE REQUIRED: 35%
OPEN SPACE PROPOSED: 36%
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATIONS OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THIS PLAN PRIOR TO THE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTIONS WILL BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- EXTERIOR LIGHTING: NO NEW EXTERIOR LIGHTING PROPOSED.
- NOTE THAT THIS DRAWING IS NOT A SURVEY.

WORKERS REQUESTED:

- 275-B-U DEVELOPMENT AGREEMENT
- 275-B-B (9) SURVEYOR CERTIFICATION
- 275-B-B (11) H.I.S.S.
- 275-B-B (17) EXISTING TOPOGRAPHY
- 275-B-B (18) PROPOSED TOPOGRAPHY
- 275-B-B (28) PARKING DIMENSIONS
- 275-9-A STORM WATER DRAINAGE PLAN
- 275-9-B TRAFFIC STUDY
- 275-9-C NOISE STUDY
- 275-9-D FISCAL IMPACT STUDY

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
DATE OF MEETING: DECEMBER 10, 1997
Henry R. Nash SIGNATURE DATE: 2/4/98
Karl M. Path SIGNATURE DATE: 2-4-98
SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

Diana A. Frost
Raymond J. ...
HADCO CORPORATION
10 MANOR PARKWAY
SALEM, N.H. 03079
DATE: 2/4/98

MAP 10 / LOT 56
HADCO CORPORATION
4 HAMPSHIRE DRIVE
HUDSON, NEW HAMPSHIRE
AMENDED SITE PLAN



PREPARED FOR:
HADCO CORPORATION
10 MANOR PARKWAY
SALEM, N.H. 03079

SCALE: 1" = 50' DATE: OCT 6, 1997

REVISIONS:	SJA ST. JOHN ASSOCIATES ENGINEERS P.C.		1115 FRONT ST. BINGHAMTON NEW YORK
ADD 8 TREES, REVISE WALKER 1/26/98	DRAWN BY: J.J.P.	CHECKED BY: F.M.F.	SITE PLAN SUBMISSION
	SCALE: 1"=50'	APPROVED BY: E.P.S.	SITE PLAN
	DATE: 1-28-98	PROJECT NO. 97-00.1	
	PLAT DATE: 1-28-98	FILE: 9701551	DIRECTORY: J:\HADCO\97-00.1