PUBLIC MEETING TOWN OF HUDSON, NH **FEBRUARY 26, 2014**

The Town of Hudson Planning Board will hold a regularly scheduled meeting on Wednesday, February 26, 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)

A.	04-10-13 Minutes	-	01-08 & 02-26-14 Packet
B.	04-24-13 Minutes	-	01-08 & 02-26-14 Packet
C.	07-10-13 Minutes	-	01-08 & 02-26-14 Packet
D.	10-23-13 Minutes	-	01-08 & 02-26-14 Packet
E.	11-13-13 Minutes	-	01-08 & 02-26-14 Packet
F.	01-08-14 Minutes	-	02-26-14 Packet
G.	01-22-14 Minutes	-	02-26-14 Packet

- VI. CASES REQUESTED FOR DEFERRAL
- VII. **CORRESPONDENCE**
- VIII. PERFORMANCE SURETIES
 - A. Road Guarantee Estimate Form for Nellie Court.

Reference Memo dated 01-22-14 from Gary Webster, Civil Engineer, to John Cashell, Town Planner.

IX. **ZBA INPUT ONLY**

A. Land of Matarazzo Hudson Associates, Inc. 4 Bockes Road ZI# 01-14 Map 144/Lot 021

Purpose of plan: Wetland buffer impact for the placement of the proposed drainage facilities and fill slopes for the proposed subdivision of 4 Bockes Road. The temporary buffer impact is 2,850 sf, and the permanent buffer impact is 36,900 sf.

X. PUBLIC HEARINGS

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 01-08-14 Planning Board Meeting.

- XII. DESIGN REVIEW PHASE
- XIII. CONCEPTUAL REVIEW ONLY
- XIV. NEW BUSINESS/PUBLIC HEARINGS

XV. OTHER BUSINESS

- A. Discussion on the Cost Allocation Procedure (CAP) Fee Assessment Update Report, prepared by VHB, Inc. Deferred Date Specific from the 01-22-14 Planning Board Meeting.
- B. Discuss Capital Improvements Program (CIP) for Fiscal Year 2016. Deferred Date Specific from the 01-22-14 Planning Board Meeting.

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 - 2-14-14

PUBLIC MEETING TOWN OF HUDSON, NH FEBRUARY 26, 2014 (Addendum #1)

In addition to items already scheduled and posted for review at the February 26, 2014 Planning Board Meeting, the following item is scheduled to be heard:

XIII. CONCEPTUAL REVIEW ONLY

A. Letter dated August 2, 2013, from Hayner/Swanson, Inc. to John Cashell, Town Planner Re: Proposed Site Plan, 55 Executive Drive, Hudson, NH

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 – 02/14/14

Packet: 02/26/2014

Establish Surety for Nellie Court Subdivision

Staff Report February 26, 2014

SITE: Nellie Court (Ledge Rd.) – Map 165/Lot 159-- SB# 04-13

ZONING: T-R

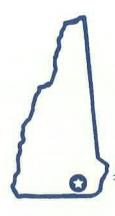
PURPOSE OF PETITION: To establish a surety for the Nellie Court Subdivision, Map 165/Lot 159, in the amount of \$78,500.00, in accordance with Town Civil Engineer, Gary Webster's, attached memo and Road Guarantee Estimate Form, dated January 22, 2014.

RECOMMENDATION: Per the written recommendation of the Town Civil Engineer, the board should vote to establish a surety for this subdivision in the recommended amount of \$78,500.00.

DRAFT MOTION:

I move to establish a surety in the amount of \$78,500.00 for the completion of the Nellie Court Subdivision, Map 165/Lot 159, in its entirety, and in accordance with the written recommendation of the Town Civil Engineer, Gary Webster's Interoffice Memo in file, dated January 22, 2014, together with the Road Guarantee Estimate Form. Note: said surety shall be established in the form of a Hampton-style letter of credit or cash deposit held by the Town.

Motion by:	Second:	Carried/Failed:	
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TOWN OF HUDSON

ENGINEERING DEPARTMENT



12 School Street • Hudson, New Hampshire 03051 603-886-6008 • Fax 603-594-1142

Interoffice Memo

Date:

January 22, 2014

To:

John Cashell, Town Planner

From:

Gary Webster, Civil Engineer

Re:

Road Guarantee Estimate Form for Nellie Court

Attached please find a Road Guarantee Estimate Form to establish a new performance guarantee for Nellie Court.

The Engineering Department has reviewed the form, and we find that the bond amount of \$78,500.00 is appropriate to cover the work for completion of the roads. Please place this on your next available agenda for review and action.

cc: Patrick Colburn, Town Engineer

Enclosure



TOWN OF HUDSON, NH ROAD GUARANTEE ESTIMATE FORM

I hereby certify that, in addition to any work already completed, the following itemized statement and estimate unit costs will complete all improvements required by the Hudson, NH Planning Board for the following Streets:

Owner/Developer Name: 63 Derry Road Realty Trust

Date: January 20, 2014

Project Name: Nellie Court

Map: 165

Lot: 159

Street Name: Nellie Court

Street Length: 450 LF

						Total	Bond Remaining	Date
Clearing, 50' width	1.25 A.C.	@		,500.00	=	\$9,375.00	\$0.00	111
Excavation	440 C.Y.	@	\$	5.00	=	\$2,200.00	\$0.00	
Ledge Removal Mass	0 C.Y.	@	\$	25.00	=	\$0.00		
Trench Ledge	0 C.Y.	@	\$	50.00	=	\$0.00	\$0.00	
Drainage Swales	0 L.F.	@	\$	5.00	=	\$0.00		+
Drainage Swale w/Riprap	0 L.F.	@	\$	7.00	=	\$0.00		
Hay Bale Dike	0 EA	@	\$	4.00	=	\$0.00		1/20/2014
Silt Fence	400 L.F.	@	\$	4.00	=	\$1,600.00	\$1,000.00	1/20/2014
Storm Drains Size/Type							* 0.00	
12" RCP	46 L.F.	@	\$	30.00	=	\$1,380.00		
15" RCP	409 L.F.	@	\$	34.00	=	\$13,906.00		
18" RCP	0 L.F.	@	\$	38.00	=	\$0.00		-
21" RCP	0 L.F.	@	\$	42.00	=	\$0.00		
24" RCP	0 L.F.	@	\$	46.00	=	\$0.00		
30" RCP	0 L.F.	@	\$	54.00	=	\$0.00		
36" RCP	0 L.F.	@	\$	66.00	=	\$0.00		
6" PVC	0 L.F.	@		\$20.00	=	\$0.00	\$0.00	-
6" Underdrain	0 L.F.	@	\$	15.00	=	\$0.00		
8" Underdrain	0 L.F.	@	\$	16.00	=	\$0.00	\$0.00	
Additional Excavation for Structures	0 C.Y.	@	\$	6.00	=	\$0.00	\$0.00	2
4' Catch Basins	44 V.F.	@	\$	250.00	=	\$11,000.00		1/20/2014
5' Catch Basins	0 V.F.	@	\$	275.00	=	\$0.00		
4' Drain Manholes	7 V.F.	@	\$	275.00	=	\$1,925.00		1/20/2014
5' Drain Manholes	0 V.F.	<u>@</u>	\$	310.00	=	\$0.00	\$0.00	
NO.	1 EA.	@	¢.	1,300.00	=	\$1,300.00	\$0.00	
Headwalls	17 S.Y.	@	\$	36.00	=	\$612.00		-
Rip-Rap	1/ 3.15	w	φ	30.00	_	Ψ012.00	, 40,00	

Subdivision Name: Nellie Court						Total	Bond Remaining	Date
Sanitary Sewer Size 6" PVC Service Connection 8" PVC 0' - 12' Depth 12' - 18' Depth 10" PVC Other	290 L.F. 0 L.F. 266 L.F. 0 L.F. 0 L.F.	9 9999	\$ \$ \$	20.00 50.00 75.00 75.00	11 11	\$5,800.00 \$0.00 \$13,300.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Sanitary Sewer Manholes 4' dia. Sanitary Sewer Manholes 5' dia. Service Cleanout	17 V.F. 0 V.F. 0 EA.	000	\$ \$ \$	300.00 325.00 110.00	===	\$5,100.00 \$0.00 \$0.00		1/20/2014
Water Main Size (valves included) 4" DIP Class 52 6" DIP Class 52 8" DIP Class 52 10" DIP Class 52 12" DIP Class 52 T/S&V	0 L.F. 305 L.F. 0 L.F. 0 L.F. 0 L.F. 0 L.F.	000000	\$ \$ \$ \$ \$ \$ \$	53.00 40.00 47.00 52.00 55.00 3,500.00	11 11 11 11 11	\$0.00 \$12,200.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	
Hydrants	1 EA	@	\$ 3	3,000.00	=	\$3,000.00	\$0.00	
1" Copper Service (stops included)	6 EA.	@	\$	400.00	=	\$2,400.00	\$0.00	120
Bank Run Gravel Crushed Bank Run Gravel Sand Cushion	520 C.Y. 278 C.Y. 0 C.Y.	000	\$ \$	14.00 18.00 \$12.00	= =	\$7,280.00 \$5,004.00 \$0.00	\$0.00	
Hot Bituminous Pavement 28' width 2 1/2" Base Course Type C 1 1/2" Wearing Course Type F Cold Planing Tack Coat	195 TONS 115 TONS 60 S.Y. 1550 S.Y.	0000	\$ \$ \$	85.00 85.00 4.00 0.20	= = =	\$16,575.00 \$9,775.00 \$240.00 \$310.00	\$9,775.00 \$240.00	1/20/2014 1/20/2014 1/20/2014
Curbing Granite Cape Cod	1290 L.F. 0 L.F.	@	\$	22.00 6.00	=	\$28,380.00 \$0.00		1/20/2014
Sidewalks 5' Wide bituminous	365 S.Y.	@	\$	30.00	=	\$10,950.00	10, 950 or \$2,980.00 8090	1/20/2014
Loam and Seed Easement areas R.O.W. areas	0 L.F. 500 L.F.	@	\$	6.00 5.00		\$0.00 \$2,500.00		1/20/2014

Subdivision Name: Nellie Court

						Total	Bond Remainin	g Date
Bounds and Pins Property Pins Road Bounds	11 EA. 9 EA.	@ @	\$ \$	175.00 325.00	=	\$1,925.00 \$2,925.00	\$1,925.00° \$2,925.00	1/20/2014 1/20/2014
Stop Signs Street Signs As-Built Plans	1 EA. 1 EA. 500 L.F.	000	\$ \$ \$	75.00 85.00 4.00	= =	\$75.00 \$85.00 \$2,000.00	\$85.00	1/20/2014 1/20/2014 1/20/2014
Landscaping Trees Bushes	1 EA. 8 EA.	@	\$ \$	375.00 200.00	= =	\$375.00 \$1,600.00		1/20/2014 1/20/2014
Guard Rails	0 L.F.	@	\$	50.00	=	\$0.00	\$0.00	
Utility Trench (Elec/Tel/TV)	300 L.F.	@		\$35.00	=	\$10,500.00	\$0.00	-
Other required improvements (itemize on separate sheet)	0 S.F.,	@		\$0.50	=	\$0.00	\$0.00	
/						\$ 185,597.00 \$ 18,559.70 \$ 204,156.70	\$ 56,800.00 \$ 5,680.00 \$ 62,480.00	64,890 6,499. -1/20/2014 71,379
	10% Maintenanc	e Lev	el:			\$ 20,415.67	\$0.00	7,137.90
	Total Estimate:					\$ 224,572.37	\$ 62,480.00	78,516.90

Preparer's Name: Jeffrey Burd, RJB Engineering, LLC

Date: January 20, 2014

CK 78,500.

rev 7/9/08 rev 11/29/07 excel bond form

Packet: 02/26/2014

4 Bockes Road Land of Matarazzo Hudson Associates, Inc. **ZBA** Input Only

Staff Report February 26, 2014

SITE: 4 Bockes Road Map 144/Lot 021 ZI# 01-14

ZONING: R-2

PURPOSE OF PLAN: Wetland buffer impact for the placement of the proposed drainage facilities and fill slopes for the proposed subdivision of 4 Bockes Road. The temporary buffer impact is 2,850 sf, and the permanent buffer impact is 36,900 sf.

PLAN UNDER REVIEW ENTITLED: Wetland Buffer Impact Plan Land of Matarazzo Hudson Associates, Inc., Map 144; Lot 21Bockes Road, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Nov. 1, 2013, no revision date, consisting of Sheets 1 & 2 and Notes 1 - 10 (said plans are attached hereto).

APPLICANT REPRESENTATIVE: Tony Basso, L.L.S.

ATTACHMENTS:

- ZBA Input Only application date stamped Jan. 21, 2014 "A".
- Motion to Recommend Wetlands Special Exception by the Conservation Commission, dated Jan. 13, 2014 - "B".

OUTSTANDING ISSUES: The attached plans have been submitted with the Planning Board for ZBA Input, relative to the applicant seeking relief for the proposed wetland impacts shown on the plans. Also attached, herewith, is a copy of the Motion to Recommend Wetlands Special Exception "B". In short, the Conservation Commission determined by their review and analysis of the plans, together with other submitted documents, that the proposed stormwater runoff mitigation measures proposed by the applicant will not create an adverse impact on the associated wetlands. Rather, their findings, as cited in their recommendation, conclude that the impacted wetlands will actually benefit by the implementation of the proposed control and treatment facilities.

Taking the above information into account, i.e., that this application pertains to the issues of wetland impacts and measures to mitigate same, and not an application to fully detail the proposed subdivision in accordance with the Planning Board's Land Subdivision Rules and Regulations, there is not much the board can offer the ZBA. That is, other than what the Conservation Commission has cited in their recommendation, and the fact that the submitted plans show only a general layout of the proposed 17lot OSD subdivision, i.e.,

- 1) A proposed 1,000 linear ft. cul-de-sac road coming off Bockes Rd., near the intersection of Robinson Rd./Bockes Rd., showing 14 OSD lots and
- 2) A 250 linear ft. cul-de-sac road off York Dr., showing 3 OSD lots.
- 3) Schematic of the lots and their frontage on said cul-de-sacs.

The attached plans do not include the following details:

- 1) Specific lot sizes and frontage measurements.
- 2) A conventional yield plan.
- 3) Road profiles, etc. Note: the plans do indicate what appears to be a steady 4.6% grade from Bockes Rd. to the end of the cul-de-sac, and the cul-de-sac off York shows less than a 4% grade.

In sum, with the submitted information, the board cannot provide informed comments or concerns to the ZBA, relative to factually determining matters pertaining to the Board's Land Subdivision Rules and Regulations nor the Zoning Ordinance, as same relates to OSD subdivision developments.

RECOMMENDATION: As described in the above OUTSTANDING ISSUES, with the submitted plans only showing the proposed wetland impacts, treatment structures (e.g. retention basins, drainpipes, catch basins, etc.) and a general layout of the proposed 17-Lot Open Space Development, the board may want to consider forwarding the following ZBA Input, as provided in the below DRAFT MOTION.

DRAFT MOTION:

I move for the Planning Board to forward to the ZBA the following recommendation pertaining to the Wetlands Special Exception application, as detailed in the plans entitled: Wetland Buffer Impact Plan Land of Matarazzo Hudson Associates, Inc., Map 144; Lot 21Bockes Road, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: Nov. 1, 2013, no revision date, consisting of Sheets 1 & 2 and Notes 1-10:

At this time, and with the information provided by the applicant concerning the aforementioned plan, the board has no outstanding concerns with the proposed areas of wetland impacts and the proposed measures to mitigate said impacts.

Motion:	Second	Carried/Failed:	
2120 120-27			

A

ZBA INPUT ONLY APPLICATION FOR REVIEW TOWN OF HUDSON, NEW HAMPSHIRE

Date of Applic	cation: 1/21/14	Tax Map # \44 _ Lot #_ _2\
Name of Proje	ect: Land of Matarazzo Hudson I	Associates, Inc.
Zoning Distric	ct: General (For Office Use)	Zoning ID# ZI # 01 - 14 (For Office Use)
7D A Actions		(101 Office ose)
ZBA Action:	PROPERTY OWNER:	DEVELOPER:
Name:	Matarazzo Hudson Assoc., Inc.	Lamontagne Builders, Inc.
Address:	25 Main Street	317 South River Road
Address:	Nashua, NH 03060	Bedford, NH 03110 NDSON
Telephone #		(603) 668-7933
Fax #		JAN 2 1 2014
Email:		\8
	PROJECT ENGINEER	MANUALTY DEVE
Name: Ken	ch Nordstrom Assoc., Inc.	Telephone # (603) 627-2881
	Ammerce Park No., Suite 3	Fax # (603) 627-2915
Address: Bec	Hord, NH 03110	Email: abasso@keachnordstrom.con
PURPOSE OF	FPLAN:	
Wetland b	uffer impact for the place	ment of the proposed drainage
facilities ar	nd fill slopes for the propo	oscd subdivision of 4 bockes Rd.
The tempor	cary buffer impact is 2,85	0 sf, and the permanent buffer
impact is	36,900 st.	
	(For Office	· Use)
Plan Routing I	Date:	Plan Date:
I have	no comments I have	comments (attach to form)
(T. 51.1.)	_ Title:	Date:
(Initials)		
Department:		Deline Planning
	Engineering Assessor	
High	way Consultant Review	Fees Paid

APPLICATION FOR ZBA INPUT ONLY REVIEW TOWN OF HUDSON, NEW HAMPSHIRE

I hereby apply for ZBA Input Only 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 ZBA Input Only 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/her (their) property in connection with this applications.

s ai	nd inspections conducted on his/her (their) property in connection with this applications
	Signature of Owner: (FUR MATTAALZO HADSON ASSOCIA
**	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 individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.
	Technical Review Signature:
	Planner Approval Signature:

Twenty-one days prior to the scheduled Planning Board Meeting, a complete subdivision, or site plan application including all supporting materials/documents must be submitted in final form to the Town Planner's Office.

- Please schedule an appointment with the Town Planner for initial plan submittal.
- * Revisions are due on Tuesday the week prior to the Planning Board deferral date by 10:00AM. Any application/materials received after that time will be deferred until the next available meeting date.



TOWN OF HUDSON

Conservation Commission

Jim Battis, Chairman

Nancy Brucker, Selectmen Liaison

12 School Street ' Hudson, New Hampshire 03051 ' Tel: 603-886-6008 ' Fax: 603-816-1291



Motion to Recommend Wetlands Special Exception

Date:

13 January 2014

Case: Lamontagne Builders, Inc.

4 Bockes Road Map 144 Lot 21

Description of Work to be performed: The Applicant proposes to develop a 17 lot residential subdivision with three conventionally developed lots and 14lots as an open space residential subdivision as laid out in plans submitted with the application and dated November 1, 2013 by Keach-Nordstrom Associates, Inc. The proposed drainage and stormwater system treatment system utilize catch basins with closed piping, sediment forebays for pre-treatment, and wet ponds and a bio-retention pond for treatment and detention. The project has four areas of Wetland Conservation District impact, all located outside the designated wetland areas and within the buffer. The largest is 29,859 SF of impact mainly for detention and treatment ponds and a two minor impacts for road grading. A secondary, also for detention ponds in the wetland buffer, results in 7,050 SF impact. Finally, two small areas of temporary buffer impact, 1,255 SF and 1,595 SF, are required for the installation of a utility line below a wetland by horizontal boring.

Members Present: J Battis, K Dickinson, P Dubay, R Jurewicz.

Members Stepping Down: None

Alternates Seated: None

Motion to Recommend:

With Stipulations:

- 1. Construction and restoration shall comply with: BEST MANAGEMENT PRACTICES TO CONTROL NON-POINT SOURCE POLLUTION: A GUIDE FOR CITIZENS AND TOWN OFFICIALS (NH Dept of Environmental Services - Current Issue.)
- 2. During construction and restoration erosion control barriers shall be installed and maintained to the satisfaction of the Town Engineer.

Motion By: K Dickinson Second By: R Jurewicz Unfavorable 0 Abstain 0 Vote: Favorable 4

Summary of Arguments For Recommending: The proposed wetland buffer impacts are all within the uses permitted by special exception under §334-35 Uses within the Wetland Conservation District of the Hudson Town Code and meet the conditions required to grant a special exception. The proposed impacts are necessary to the development of the site. The existing wetlands are likely the result of past use for agricultural The proposed impacts for detention ponds will enhance the present wetland functions by improved filtration of surface waters before they leave the site.

Summary of Arguments Opposed to Recommending: No arguments were made in opposition.

This motion is based on the plan(s) submitted by the applicant. Additional impacts that result from the relocation of impervious surfaces or structures have not been addressed. It is recommended that if such changes are made the plan be returned to the Conservation Commission for further review.

This Wetland Special Exception is recommended to the Zoning Board of Adjustment.

(im Battis, Chairman

Packet: 02/26/2014

Boyer Site Plan - 156 Lowell Road

Staff Report February 26, 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. Application Acceptance & Hearing.

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, latest revision date Feb. 17, 2014, consisting of Sheets 1 - 11 and Notes 1 – 23 (said plans are attached hereto).

ATTACHMENTS:

1) Keach-Nordstrom's Response Letter (dated 02/18/14) to CLD's Initial Comments Report - "A".

ATTACHMENTS INCLUDED IN THE 01/08/14 MEETING PACKETS:

- 1) Project Narrative, Site Plan Application, Checklist and Waiver Forms and aerial site photo date stamped Nov. 19, 2013 Attachment "A".
- 2) CLD's Initial Comments Report, dated Dec. 5, 2013 "B".
- 3) Comments/Memos from Road Agent, Kevin Burns, HFD Deputy Fire Chief, John O'Brien, Zoning Admin., Bill Oleksak, and Asst. Assessor, Jim Michaud "C".

REQUESTED WAIVERS APPROVE 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:

From the initial public hearing held on Jan. 8, 2014, the following issues were requested to be resolved for this meeting:

- 1) Gravel parking area behind 160 Lowell Rd., Map 210/Lot 009 (Boyer house and former Granite State Glass commercial building). These spaces have been moved, as requested by the board, so that now they are located entirely on Map 204/Lot 75. Please refer to Sheet 1 of 11.
- 2) The 12' Wide Future Road Widening Easement is shown on the revised Plans, together with the Access Easement for the benefit of Map 210/Lot 9 and Map 204/Lot 75. See details of said easements on Sheet 1 of 11. The subject easement deeds will be prepared and favorably reviewed by Town Counsel prior to Planning Board endorsement of the Site Plan-of-Record.
- 3) Green space has been added to the Plans to conform to the regulations. See 2 areas to the rear of the parcel labeled: "Loam & Seed...", Sheet 1 of 11.

- 4) Indicate the clean-up of the back area on the site. On the revised Plans, Sheet 1 of 11 a note has been added to this area of the parcel; it reads: "GENERAL AREA TO BE CLEANED AND ORGANIZED.ALL DERELICT EQUIPMENT AND VEHICLES SHALL BE REMOVED."
- 5) Landscaping, Lighting and Snow Storage Areas are all shown on the revised Plans. See Sheet 7 of 11.

As with the initial hearing, at Wednesday night's meeting, the applicant's representatives will be prepared to present the attached revised Site Plans, address all of the aforementioned site development aspects and address any questions/concerns abutters and board members may still have on this proposal.

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.

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, latest revision date Feb. 17, 2014, consisting of Sheets 1 - 11 and Notes 1-23 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 1-23, 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:	
Motion by:	Second.	Carriod/r arrow	





February 19, 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 peer review comments prepared by Heidi J. Marshall, P.E. of CLD Consulting Engineers, Inc. dated December 5, 2013. Ms. Marshall's letter serves to outline the context of her review of the site plan prepared by this office relative to compliance with the Hudson Site Plan Review Codes, Stormwater Codes, Driveway Review Codes and Sewer Use Ordinance 77. In response, we have revised the site plans attached, and below provide a brief summary of our efforts to address each of her concerns as noted. Our response is in *bold italic* following each of her comments.

1. Site Plan Review Codes

a. Hudson Regulations (HR) 275.8.B. (20) The applicant has not provided the existing building heights nor have they shown existing exterior lighting on any of the buildings. The applicant has also not provided any access easement documentation for Lot 9. (The southerly drive for the subject lot crosses a portion of Lot 9.) Lastly a 1.3 foot diameter cover is noted behind existing building "A" with no other indication as to what utilities are linked to it.

The building heights and light locations exist today and not proposed to be modified. An easement for Lot 9 access has been shown on the plan. The water, sewer and gas service cards have been reviewed and known locations have been shown on the plans.

b. HR 275-8.B. (21) The applicant has shown proposed fence around the proposed paved display area; however, no detail was provided for the fence. Additionally, bollard details were provided; however, we were unable to find proposed locations for use.

Fencing can be discussed with the Board at the public hearing. The bollard detail has been removed.

c. HR 275-8.B. (29) The applicant has shown an existing parking area on the southwest side of the site with an aisle width of less than 20 feet with 90 degree parking. We note that on paper larger cars are likely unable to maneuver into or out of these spaces when the parallel spaces are occupied. The applicant should also provide additional information on the types of trucks that may be making deliveries to the existing building onsite. Large trucks (WB-50) may have a hard

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time maneuvering the site especially the area between the proposed paved display area and the existing building "B".

The above referenced parking area is not located on the subject parcel (Lot 75), this is the abutting lot. The existing use of the property is not proposed to change. Truck traffic is not proposed to change. We are unaware of offsite impacts that would require the applicant to modify the existing layout at this time.

d. HR 275-9.A. See comments below.

No comment required

e. HR 275-9.B. A Traffic Impact Study was not provided for review. The applicant has noted on the plan set that a waiver has been requested.

The Board approved this waiver at the January 8, 2014 public hearing.

f. HR 275-9.C. A Noise Study was not provided for review. The applicant has noted on the plan set that a waiver has been requested.

The Board approved this waiver at the January 8, 2014 public hearing.

g. HR 275-9.D. A Fiscal and Environmental Impact Study was not provided for review. The applicant has noted on the plan set that a waiver has been requested.

The Board approved this waiver at the January 8, 2014 public hearing.

h. HR 275-9.E. See comments below.

No comment required

i. HR 275-9.F. Copies of deeds or easements were not received for review as part of the package. We note the applicant has shown an existing 20-foot wide sewer easement since parking for the subject parcel encroaches into Lot 9, the applicant should also provide additional information on any easement(s) for Lot 9.

Copies of deeds and easements are attached. The existing 20-foot wide sewer easement is not located on the lot.

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

No comment required

2. Driveway Review Codes

a. HR 193-10.C. The applicant's existing northern driveway has a stopping platform over 5%.

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We are maintaining the existing conditions at this location.

b. HR 193-10.E. The applicant has not shown any sight distance information on the plan set for the existing driveways proposed to remain.

Both driveway locations are existing and have been in use. Sight distance is not being modified.

c. HR 193-10.G. The applicant has shown two existing driveways for a single parcel.

The two existing driveways have been maintained.

d. HR 193-10.H. The existing southern driveway is in the side yard setback.

The southern driveway continues to be shared with Lot 9, an easement has been provided.

e. HR 193-10.I. Lot 9's primary access for the second building is through use of the southern driveway on Lot 75. No cross easement documentation was provided.

This is an existing condition for Lot 9.

f. HR 275-8.B. (30) The applicant has not labeled any loading areas on the plan set; however, bays are noted in the parking calculations.

A note explaining that all loading and unloading will be conducted at the existing garage bay doors is provided in the parking calculation notes.

3. Utility Design/Conflicts

a. HR 275-9.E. The applicant has only shown existing water and sewer connection to the existing building "B", but has stated that the entire site is serviced by existing municipal water and sewer. The applicant has also not shown the underground electric (UGE) connection for building "C" but has shown a UGE meter on the south side of the building.

We have shown the apparent utilities visible at the time of field survey. Many underground utility locations are unknown. We have reviewed the water, sewer and gas service cards and added the locations noted to the plans. No other records have been discovered at this time so note 16 was added to sheet 1.

b. No additional UGE conduit is shown to supply power to the proposed lighting for the paved display area.

The proposed UGE conduit has been added to the plan, see sheet 5.

c. See sewer manhole concern below.

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See response below

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

a. HR 275-9.A. (3) The applicant should provide test pit and percolation test data in the vicinity of the proposed infiltration system.

The design incorporates soil data from the Natural Resourses Conservation Service.

b. The applicant should provide additional input on the downstream drainage as we note there is a slight Storm/Volume increase (approximately 4%) noted from Pre-Development vs. Post-Development.

Infiltration has been provided to the extent practicable therefore complies with the regulation.

c. The applicant should provide measures to ensure erosion and/or seepage does not occur around the SMH, due to a new point discharge directed at an existing sewer manhole in the easement to the south of the site. We note that there is a SMH at the end of the Proposed Treatment Swale; in existing conditions this is a location of non-point discharge, and in proposed conditions it is a point discharge.

The swale has been relocated as discussed with the Town Engineer.

d. The applicant should provide an infiltration rate conversion calculation to support the use of 3.0 inches per hour utilized within the calculations.

The infiltration rate conversion calculation has been determined by NHDES AoT regulation Env-Wq 1504.14 (c). The underlying soils are Deerfield and Hinckley Soils. The most restrictive Ksat for both soils is 6 inches per hour. By applying the .5 factor of safety as require 3 inches per hour was used in the calculations.

e. The applicant should provide more specific testing and compaction requirements related to drainage systems construction.

The detail has been revised.

f. The applicant should review the snow storage area on the south side of building "B". We note that at a minimum the westerly side of the snow storage area should be revised to avoid storing snow in the proposed treatment swale.

The snow storage area on the south side of building "B" has been revised to avoid storage in the proposed swale.

g. The applicant has provided two catch basin grate details. The applicant should clearly show the location(s) where each specific catch basin grate is intended to be installed.

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The plan has been modified to clarify the location of each type of catch basin grate.

5. Landscaping

a. HR 275-8.B. (31) (a) and HR 275-8.B. (31) (b) The applicant has provided a landscaping plan; however, landscaping calculations were not provided.

Landscaping has been added to the proposal to enhance the site aesthetics but does not bring the existing site into full compliance in regards to the required number of trees and shrubs. Calculations for open space determined that additional area needed to be loamed and seeded to comply with the 35% requirement. The additional area to be seeded has been shown on the plans

b. HR 275-8.B (31) (c) and HR 275-8.B. (31) (d) The applicant has dramatically improved the current landscaping situation, but does not appear to have met the "one shrub or tree" per "x" parking spaces and paved area count criteria.

This statement is correct

6. Erosion Control/Wetland Impacts

a. The applicant should provide an approximate location of a staging and stockpile area(s) on the plan set.

A staging and stockpile area has been added to sheet 6 of the plan set.

b. The applicant has provided a detail for an erosion control blanket; however, we were unable to find the proposed location of its use.

No erosion control blankets are proposed for the site. The detail has been included to assist the contractor if it's needed during the construction process, or if required by the Town.

c. The Town should reserve the right to require additional erosion control measures during construction if needed.

A note reserving this right is located on sheet 6 as construction note #10.

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

a. The applicant should note any permits required or existing for the site on the plan set, such as Sewer Discharge Permits.

No additional permits are required

b. Additional local permitting may be required.

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No comment 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 American Disability Act (ADA) compliant building entrances and provide additional spot grades and ramp details, if necessary. (We were unable to find any ramp detail on the plan set.)

Signs have been added. All building entrances are existing and do not have ramps, therefore a ramp detail is not shown.

b. The applicant has referenced the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the Town of Hudson, New Hampshire, Hillsborough County, Community Panel Number 33011C0508D on the plan set. The applicant should provide a corrected plan reference of Panel Number 33011C0656D on the plan set.

Note #5 on sheet 2 of the plan set has been revised to reference Panel Number 33011C0656D.

I trust the content of this letter and the attached revised site plans will serve to address Ms. Marshall's concerns, as noted above. Should you or she 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: Copies of Deeds and Easements

1- Copy of Revised Plan Set

Cc: KNA File # 06-0808-2

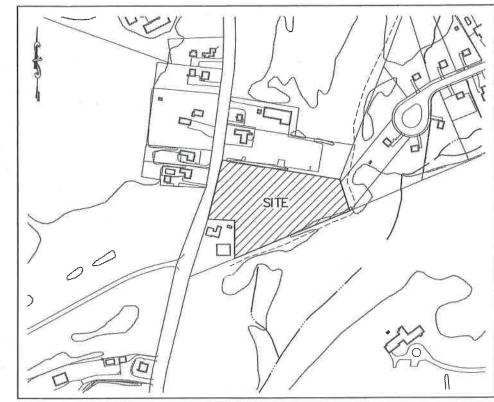


PREPARED FOR:
TODD BOYER
BOYER'S AUTO BODY
156 LOWELL ROAD
HUDSON, NEW HAMPSHIRE 03051

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

THE SITE REVIEW	APPROVED BY THE DATE OF MEETING:				
THE HUDSON PLANNING BOARD,	SIGNATURE				
THE SITE PLAN APPROVAL GRANTED HEREIN	SIGNATURE				
EXPIRES ONE YEAR FROM DATE OF APPROVAL	SITE PLANS ARE VALID FOR BOARD MEETING FINAL APP PLANNING BOARD MEETING APPROVAL	ROVAL FINAL	APPROVAL	_ COMMENC	ES AT THE

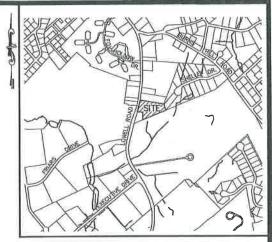
MAP 204; LOT 75 NON-RESIDENTIAL SITE PLAN BOYER SITE 156 LOWELL ROAD HUDSON, NEW HAMPSHIRE



OVERVIEW PLAN SCALE: 1" = 200'±

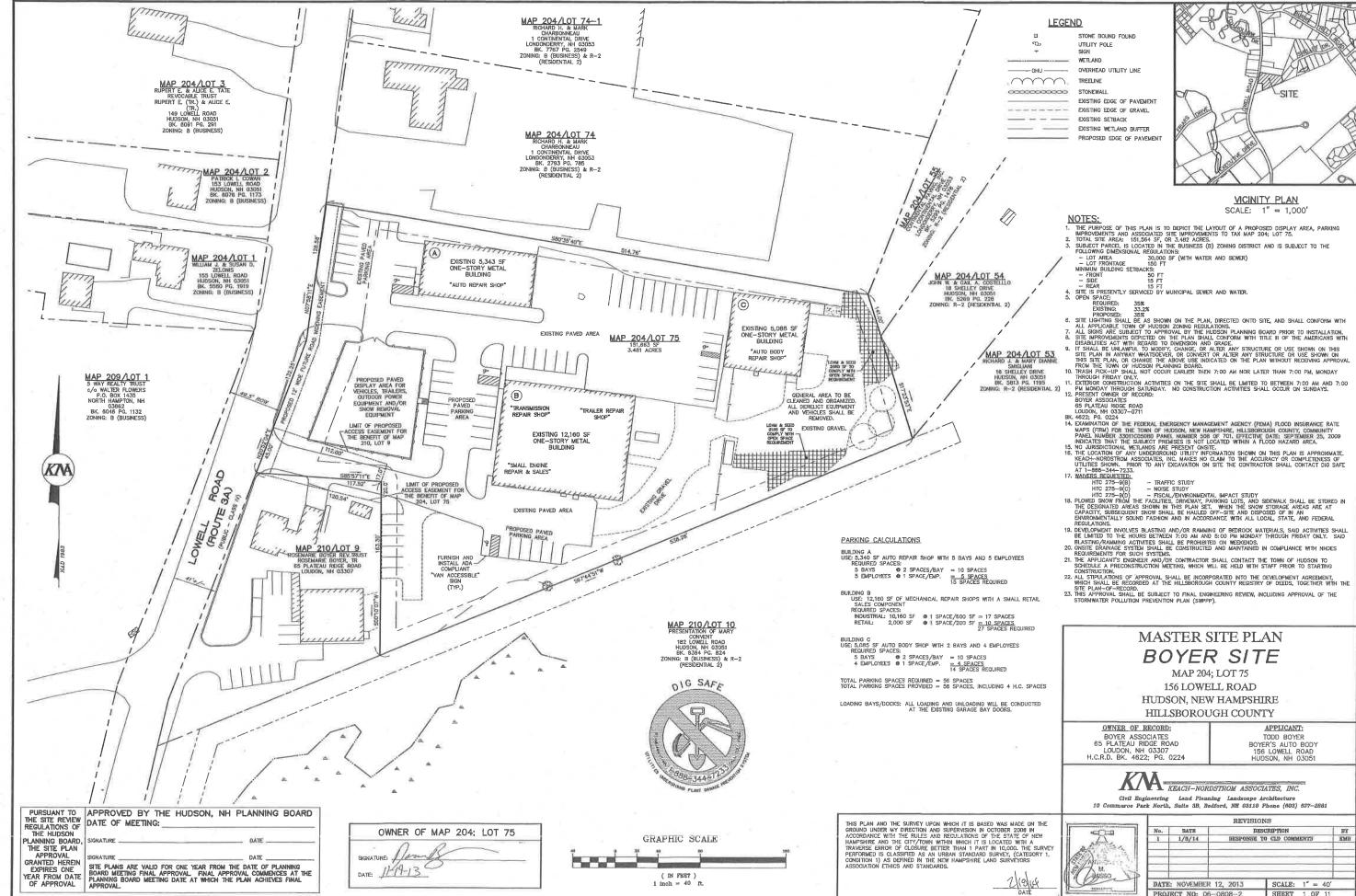


NOVEMBER 12, 2013 REVISED JANUARY 8, 2014 PROJECT NO. 06-0808-2



LOCATION PLAN
SCALE: 1" = 1,000'±





(IN FEET) 1 inch = 40 ft

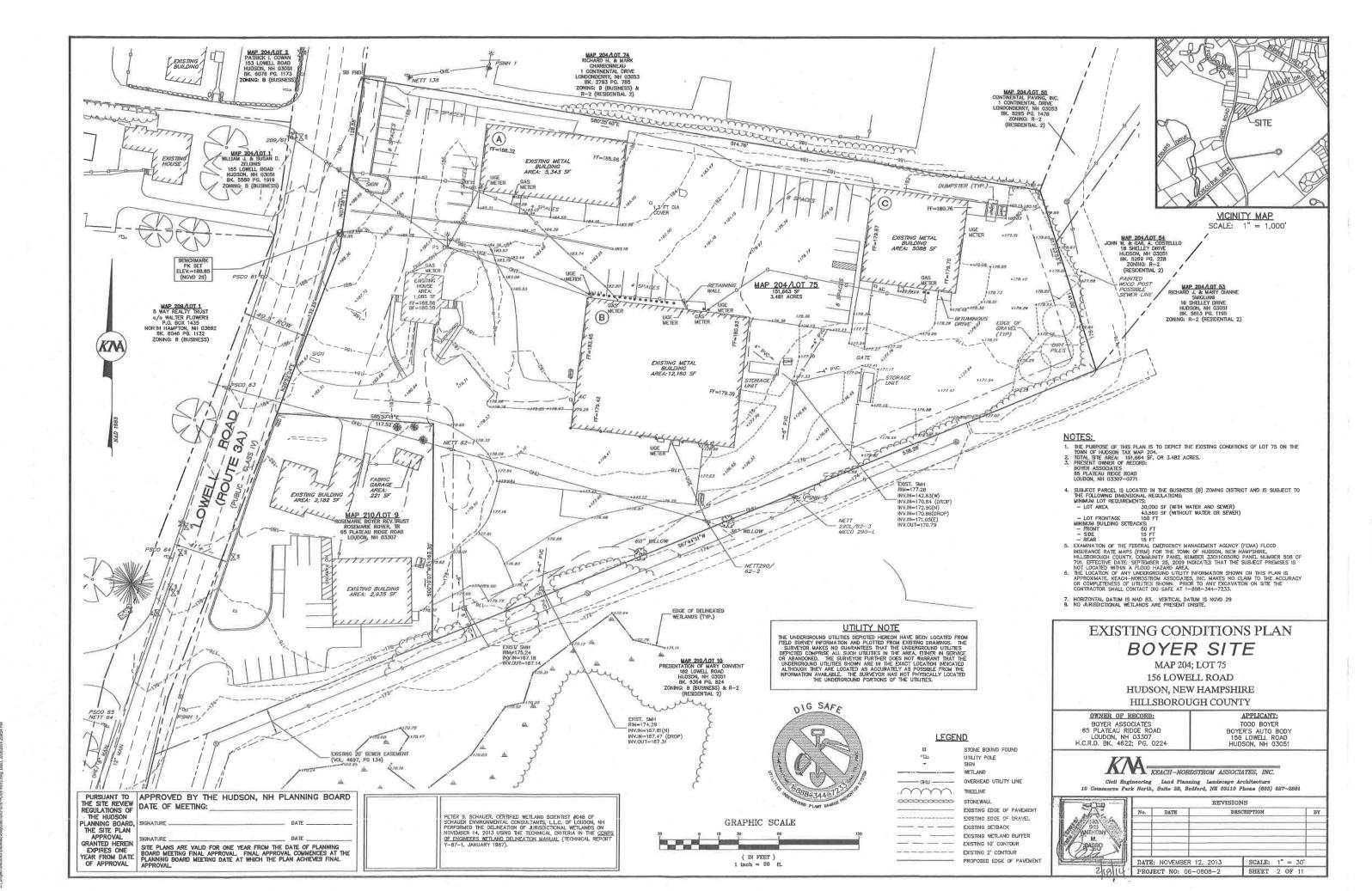
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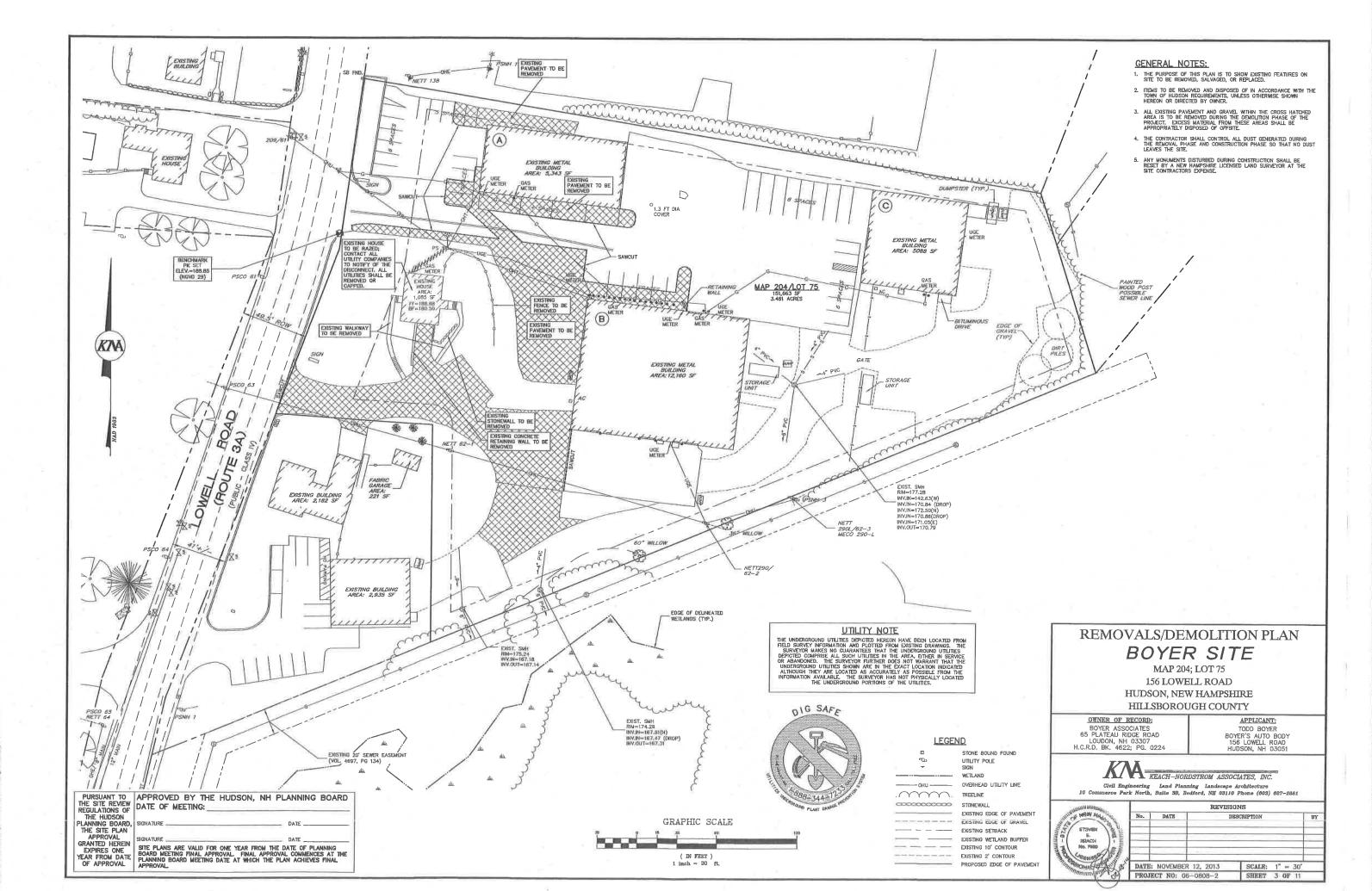
THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED WAS MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION IN OCTOBER 2008 IN ACCORDANCE WITH THE RULES AND RECLAILATIONS OF THE STATE OF NEW HAMPSHIRE AND THE CITY/TOWN WITHIN WHICH IT IS LOCATED WITH A TRAVERSE ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000. THE SURVEY PERFORMED IS CLASSIFIED AS AN URBAN STANDARD SURVEY, (CATEGORY 1, CONDITION 1) AS DEFINED IN THE NEW HAMPSHIRE LAND SURVEYORS

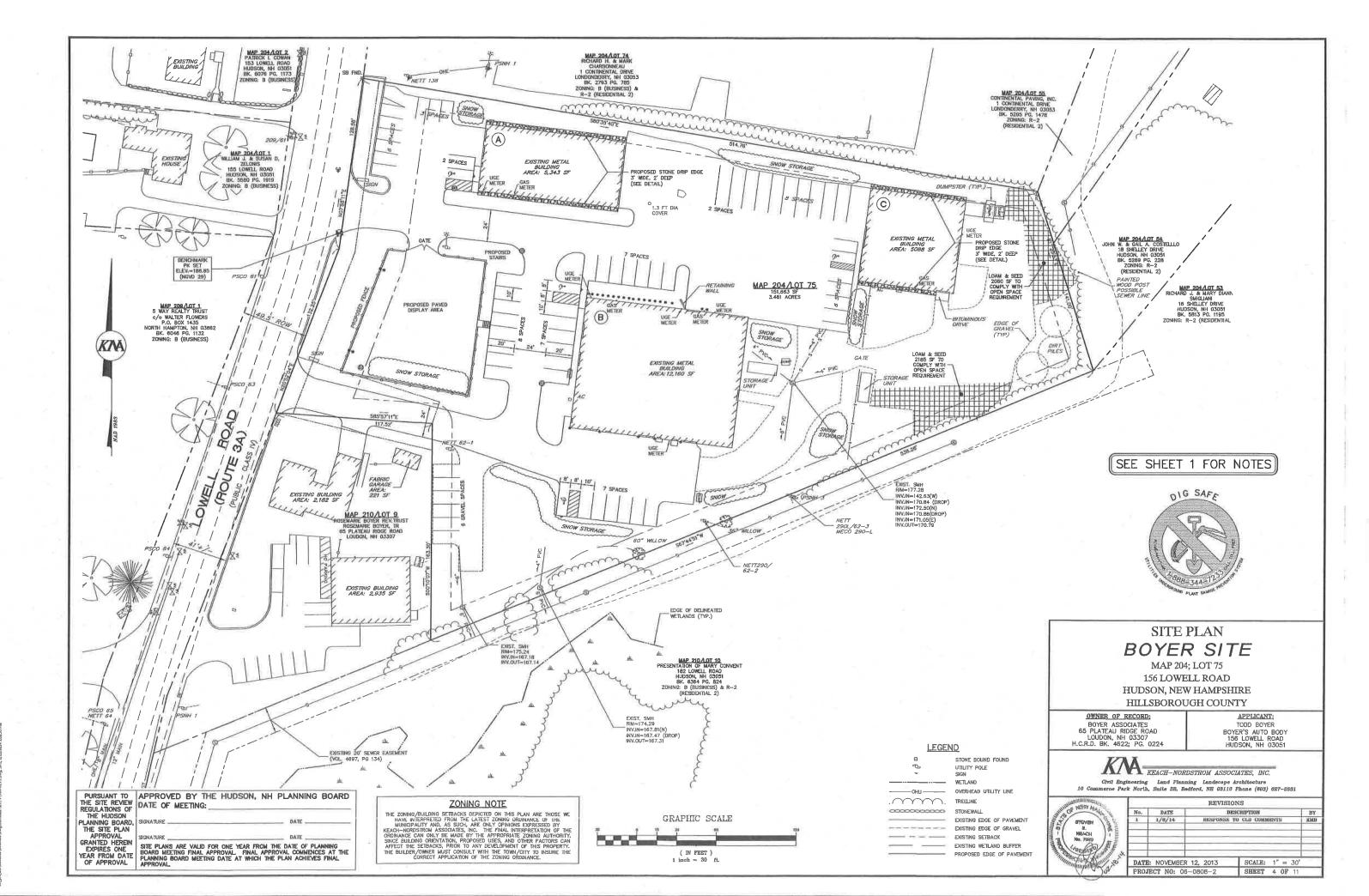


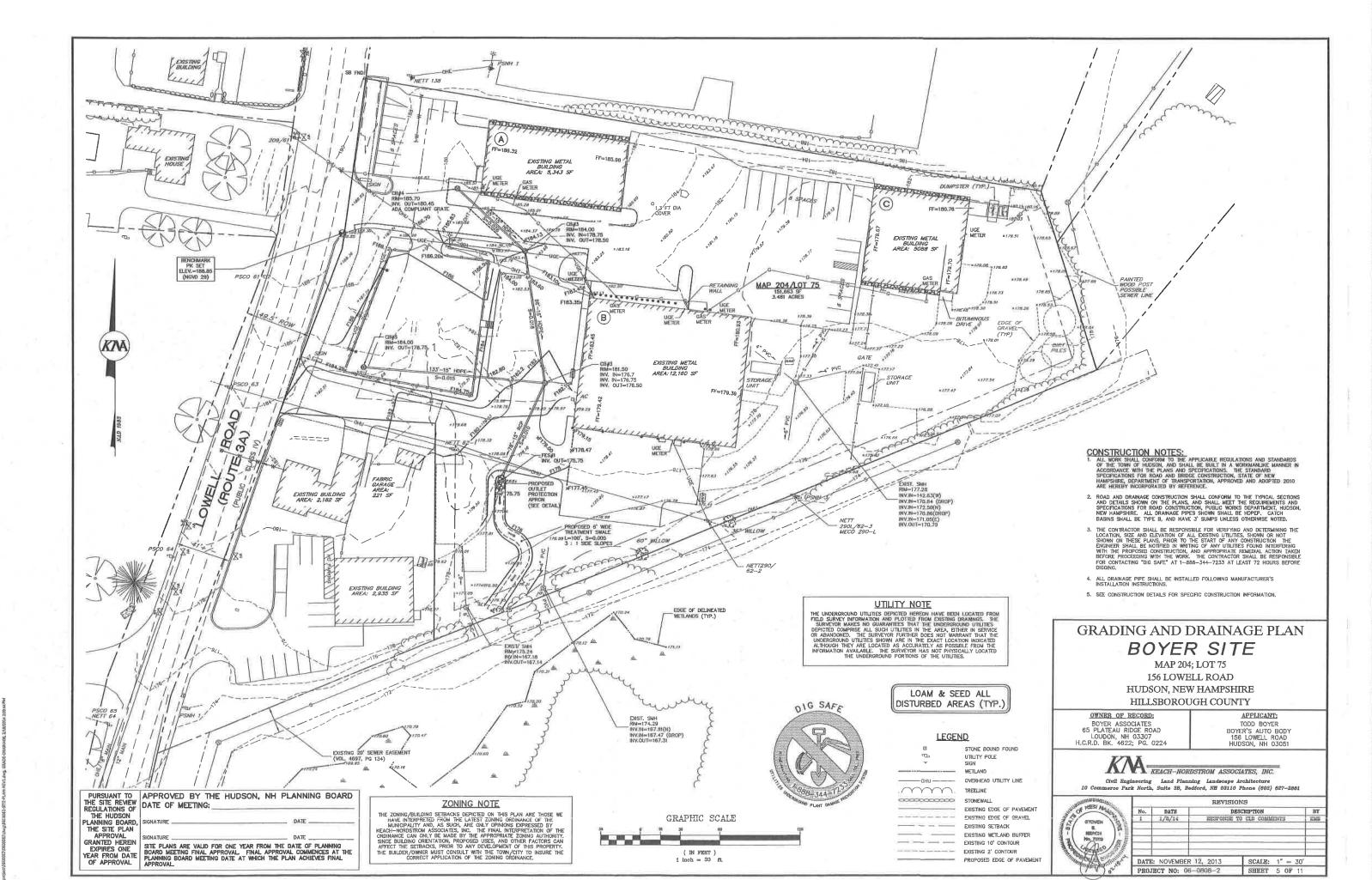


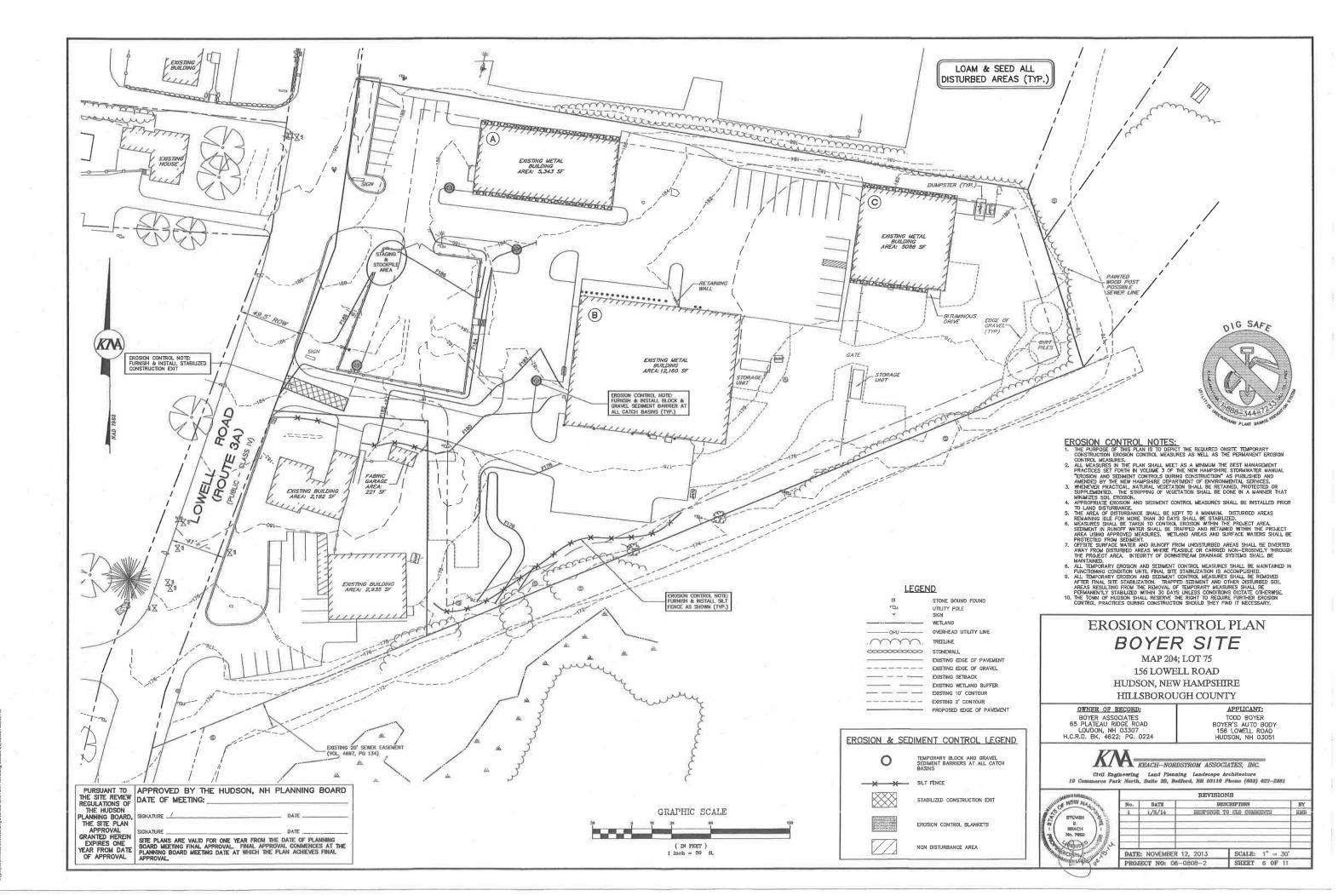
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No.	DATE	Di	ESCRIPTION	BY
1	1/8/14	RESPONSE	TO CLD COMMENTS	100
DATE	: NOVEMBER	12, 2013	SCALE: 1" = 40'	
	ECT NO: Of		SHEET 1 OF 11	_

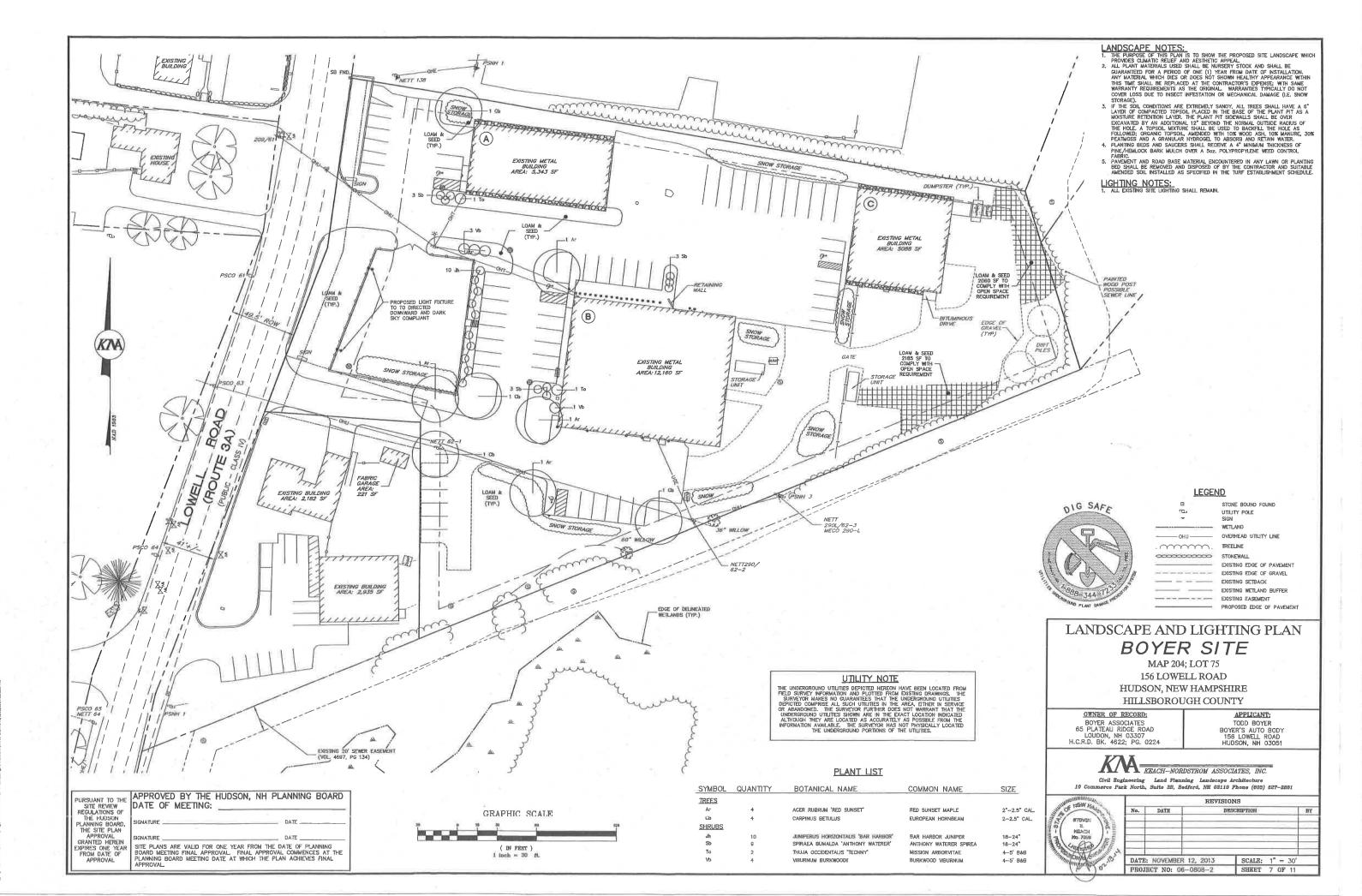








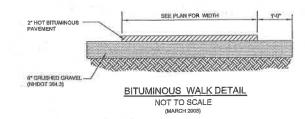


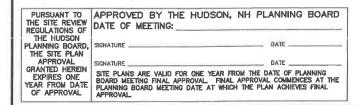


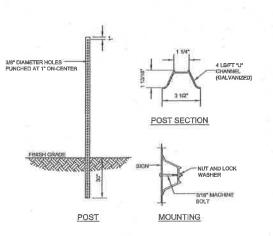
NOT TO SCALE



VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL NOT TO SCALE

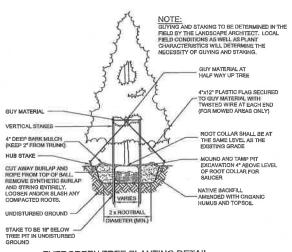




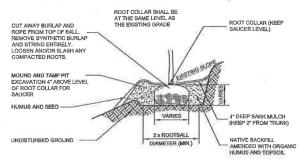


NOTE: POST SHALL CONFORM TO NHDOT 815.2.5.3

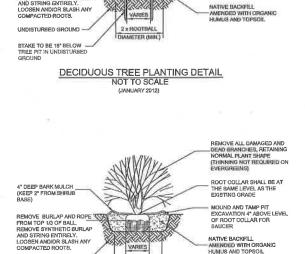
STEEL SIGN POST DETAIL NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL NOT TO SCALE



TYPICAL PLANTING PIT ON SLOPE 4:1 OR GREATER NOT TO SCALE



NEVER CUT LEADER

4" DEEP BARK MULCH (KEEP 2" FROM TRUNK) HUB STAKE -

UNDISTURBED GROUND

NOTE:
GUYING AND STAKING TO BE DETERMINED IN THE
FIELD BY THE LANDSCAPE ARCHITECT, LOCAL
FIELD CONDITIONS AS WELL AS PLANT
CHARACTERISTICS WILL DETERMINE THE
NECESSITY OF GUYING AND STAKING,

UP TREE OR TO FIRST BRANCH, WHICHEVER IS LOWER)

4"x12" PLASTIC FLAG SECURED

BALLED & BURLAP SHRUB PLANTING DETAIL NOT TO SCALE



HANDICAP STRIPING DETAIL NOT TO SCALE

STRIPING NOTES:

ALI, 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.
- 4. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM,
- BROKEN LINES SHALL BEGIN AND END WITH THE NEAREST FULL CYCLE OF BROKEN LINE.
- 5 SOLID LONGITUDINAL LINES SHALL BEGIN AND END WITHIN + 2 INCHES OF A LAYOUT SYMBOL INDICATING THE END OF THE LINE, OR WITH A FULL CYCLE OF BROKEN LINE (IF APPROPRIATE).

CONSTRUCTION DETAILS BOYER SITE

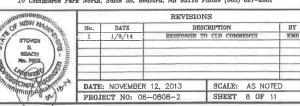
NATIVE BACKFILL AMENDED WITH ORGANIC HUMUS AND TOPSOIL

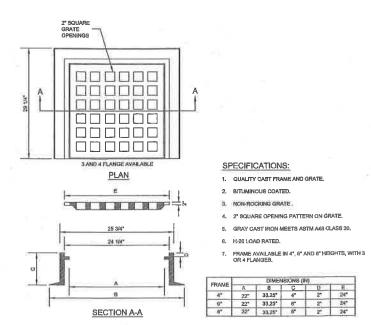
MAP 204; LOT 75 156 LOWELL ROAD HUDSON, NEW HAMPSHIRE HILLSBOROUGH COUNTY

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

KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Planning Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2861

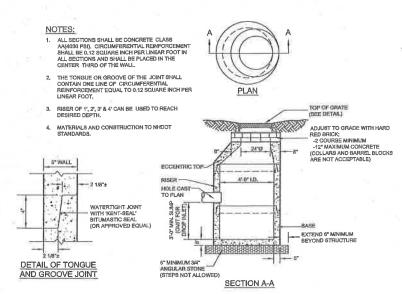




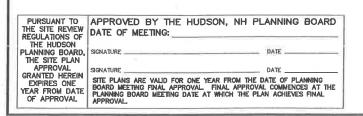
HEAVY DUTY CATCH BASIN WITH 2"

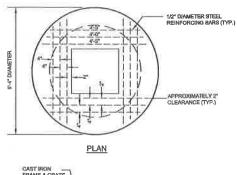
SQUARE OPENINGS

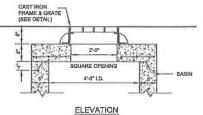
NOT TO SCALE



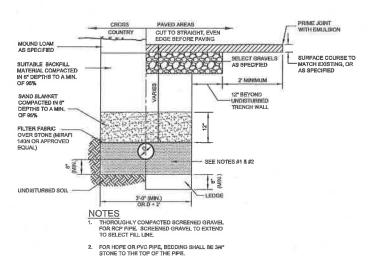
PRECAST REINFORCED CATCH BASIN NOT TO SCALE



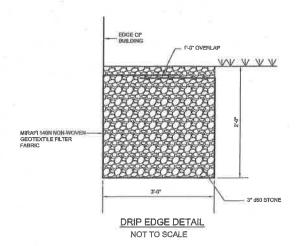


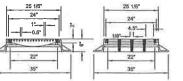


REINFORCED CONCRETE TOP SLAB (4'-0" I.D.) NOT TO SCALE



STORM DRAINAGE TRENCH DETAIL NOT TO SCALE



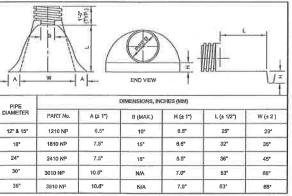




NOTES:
CONTRACTOR TO USE CATCH BASIN GRATE AS SHOWN, OR EQUAL, WITH OPENINGS LESS THAN OR EQUAL TO 1/2" PER AMERICANS WITH OBABILITIES ACT REGULATIONS.

ADA CATCH BASIN FRAME & GRATE

NOT TO SCALE
JUNE 2012



ADS END SECTION DETAIL
NOT TO SCALE
(MARCH 2008)

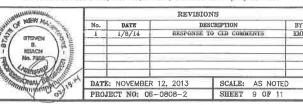
CONSTRUCTION DETAILS BOYER SITE

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

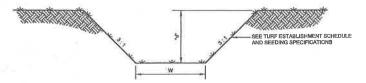
OWNER OF RECORD: BOYER ASSOCIATES 65 PLATEAU RIDGE ROAD LOUDON, NH 03307 H.C.R.D. BK. 4622; PG. 2240

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

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Planning Landscape Architecture
10 Commerce Park North, Suite 39, Bodford, NH 03110 Phone (603) 627-2881



082\0608032\dwg\06Gil002-DETAILS-REV1_dwg, Layouti, 2/18/2014 12-29:05 AM



LOCATION	PEAK FLOW	PEAK VELOCITY	SWALE WIDTH W	SWALE LENGTH	SWALE SLOPE	DEPTH "d"	PEAK DEPTH OF RUNOFF
SWALE #1	2.67 CFS	0.67 FPS	6'	100'	0.005	1.6'	7*

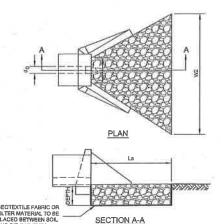
MAINTENANCE

- AINT LENVANCE.

 TIMELY MANIFEANICE 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



PIPE OUTLET TO WELL DEFINED CHANNEL NOT TO SCALE

LOCATION	la l	W1	W2	d50	DEPTH
FES#1	12'	4"	8*	4"	10"

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
- 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 PABRIC 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.

MAIN'L ENVANCE.

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 REPARED 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, DESRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATERIAN AMOINT ALLWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGET OT THE OUTLET PROTECTION APPORTED.

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:

1. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH

- 2. PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
- 3. 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,
- 4. 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.
- 5. APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
- 6. DETERMINE APPROFRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY PAKE INTO THE PREPARED BURFACE AND ROLL. IF, HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INCOLLANT. 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 16. 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 MILCH OR ALL SLOPES EXCEEDING 3:1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MARIFACTURED.
- 9) PROTECT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESERVED.
- 10. 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 MOHES 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 UNITH, HINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPARRS FOR DAMAGE CAUSED BY ERGSION.

APPLICATION RATES:

1. LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.

- 2. LIME SHALL BE APPLIED AT A RATE OF 75 TO 100 POUNDS PER 1,000 S.F.
- 3. 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.
- 5. 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 AGRE 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.
- 8. MULCH SHALL BE APPLIED AT A RATE OF 90 POUNDS PER 1,000 9,F.

- MATERIALS:

 1. LOAM USED FOR TOPSOIL SHALL BE FRIABLE, FERTILE, NATURAL FREE-DRAINING LOAM; FREE OF ROOTS, GRASS, STICKS, WEEDS, CLAY, SOO LUMPS, DEBRIS AND STONES LARGER THAN 1 WICH IN ANY DIMENSION. SOIL SHALL NOT BE EXCESSIVELY ACID OR ALKALINE AND CONTRIAN NO TOXIC MATERIALS.
- 2. LIME SHALL BE GROUND LIMESTONE CONTAINING NO LESS THAN 85% CALCIUM AND
- 3, FERTILIZER SHALL BE 10-20-20 COMMERCIAL GRADE.
- 4. SEED MIXTURE FOR LAWN AREAS SHALL BE 99% PURE LIVE SEED AND CONSIST OF THE

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% NAGRA OR KAW BE BLUESTEM 30% CAMPER OR BLAZE LITTLESTEM 15% NE-27 OR BLAZE SAND LOVEGRASS 10% VIKING BIRDSFOOT TREFOIL

INOCULUM SPECIFIC TO BIRDSFOOT TREFOIL 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.

6. SEED MIXTURE FOR SLOPE AREAS SHALL BE 99% PURE LIVE SEED AND SHALL CONSIST

30% CREEPING RED FESCUE
40% PERENNIAL RYE GRASS
10% REDTOP
13% BIRDSFOOT TREFOIL
14% RIDSFOOT TREFOIL
14% ADDITION TO THE MIX SPECIFIED ABOVE, CROWN VETCH SHALL BE USED ON
ALL SLUPES STEEPER THAN 3:1. CHOWN VETCH STALL BE APPLED AT A RATE OF
10 POUNDS PER POR FACE AND INCICLULUS SPECIFIED TO GROWN VETCH MUST BE

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 16% FOX SEDGE 15% CREEPING BENTGRASS 10% FLATPEA 20% WILDFLOWER 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.

SOD SPECIFICATIONS:
1. 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. 3. SOD PADS SHALL BE OF UNIFORM SIZE AND COMPOSED OF AT LEAST TWO LOCAL GRASS
- 4. 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 WITH SOLI.
- 5. WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.

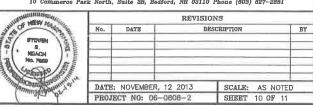
CONSTRUCTION DETAILS BOYER SITE MAP 204; LOT 75

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

KA KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Pienning Landscape Architecture umerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627–2881



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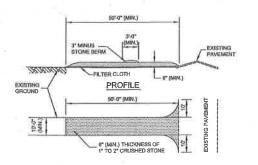
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PLAN VIEW STABILIZED CONSTRUCTION EXIT DETAIL

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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 TOPPORESSED WITH THE CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD WAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY

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:

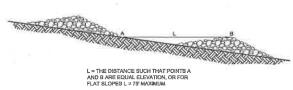
- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED
 STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED
- THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 60 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- 3. 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
 DICTURS OR 16 FEET. WHICHEVER IS GREATER.
- 5. 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 RECUIRE PERIODIC TOPPRESSING 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.
- 8. 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

CONSTRUCTION SPECIFICATIONS:

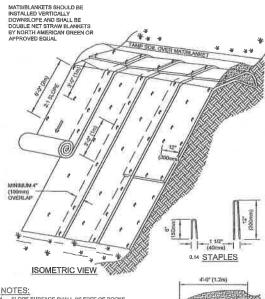
- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- 2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC,
- WOVEN WIRE FENCE SHALL, BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIE OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
- FILTER CLOTH SHALL BE FABTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MIDSECTION AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND
- FENCE POSTS SHALL BE A MINIMUM OF 38 INCHES LONG AND DRIVEN A MINIMUM OF 18 INCHES INTO THE GROUND, WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT

MAINTENANCE:

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



STONE CHECK DAM SPACING DETAIL NOT TO SCALE (MARCH 2008)



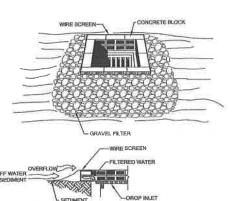


2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.

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

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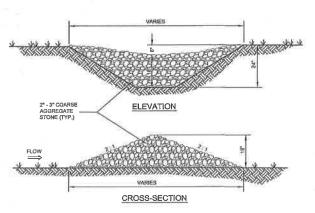


NOTES:

- I. CONCRETE BLOCKS SHOULD BE PLACED LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET. THE BUILDS OF EACH BLOCK SHOULD BE ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED DEPENDING ON THE DESIGN BY STACKING VARIOUS COMBINATIONS OF DIFFERENT SIZED BLOCKS. THE BARRIER SHOULD BE A MINIMUM OF 12 INCHES HIGH AND AWXIMUM OF 2 KINCHES HIGH.
- HARDWARE CLOTH OR WIRE MESH SHOULD BE PLACED OVER OPENINGS OF THE CONCRETE BLOCKS AND EXTENDED AT LEAST 12 INCHES AROUND THE OPENING TO PREVENT AGGREGATE FROM BEING TRANSPORTED THROUGH THE OPENINGS IN THE BLOCK.
- SEWER STONE OR OTHER CLEAN COARSE AGGREGATE SHOULD BE PLACED AGAINST THE BLOCK TO THE TOP OF THE BARRIER.

BLOCK & GRAVEL DROP INLET SEDIMENT FILTER

NOT TO SCALE



STONE CHECK DAM DETAIL NOT TO SCALE

WINTER CONSTRUCTION NOTES:

- 1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% YEGETATIVE 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 41, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON PROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT
- 2. 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 WITI STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED AFTER ROYEMBER 13 IT, INCOME THE ROYAL OF PREMISE AND INTERESTALL BE PROTECTIVE WITH A MINIMUM OF 3 INCHES OF GRUSHED GRAVEL PER NIHDOT ITEM 304.3 OR, IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- 4. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED
- REA SPULL BE COUSSIDERED 3 TABLE IF VINE OF THE PLOT WING PAGE OCCUPIED:

 A BASE CONTRES GRAVES ARE INSTALLED IN AREAS TO BE PAVED;

 B A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;

 C A MINIMUM OF 3° OF NON-PROSIDE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR

 BEEN INSTALLED; OR

 EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

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 430:35 AND AGR 3000 RELATIVE TO WASSIVE SPECIES.
- 2 PRIOR TO COMMENCEMENT OF ANY EARTHMOVING OPERATIONS, ALL APPLICABLE TEMPORARY EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SILITATION FENCING AND STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
- 3. COMPLETE GRUBBING OPERATIONS, ALL STUMPS AND SIMILAR ORGANIC DEBRIS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR. NATIVE ORGANIC SOIL MATERIALS SUTTABLE FOR USE AS TORSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTIONS ACTIVITIES AND DRAWAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES ANDIOR FABRIC SILTATION FERDE IN ORDIER TO PREVENT LOSS DUE TO ERGOSIO.
- BEGIN EARTHMOVING OPERATIONS UNTIL SUBGRADE IS ACHEIVED. PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTHEN DIKES OR EXCAVATED SWALES.
- INSTALL DRAINAGE SYSTEMS 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.
- 8. 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 TURN AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF A INCHES OF FINALE LOAM.
- 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.
- 9 INSTALL THE BINDER COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
- 10, 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 SILTATIONERCOSION CONTROL MEASURES THROUGH ONE WINTER.
- 11. INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
- 12. 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 UNSTRUCE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTRUCE CONDITION FOR A PERIOD OF TIME EXCEEDING FORTY-FIVE (45) CALENDAR DAYS.
- 2. 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 RELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRARM, T.L. TEMPORARY BROISION CONTROL. MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25° OF RANFALL 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 DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN
 EFFECTIVE GRADE AND CROSS SECTION, ALL SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO
 HAVING STORMWATER DIRECTED TOWARDS THEM.
- 5. 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 FORER TO ELIMINATE SHEET FLOW ACROSS FROZEN SUBFACES.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED;
 A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;

 - BASE CUDINGS GRAVELS ARE INSTALLED IN AGEAS TO BE PAVEL):
 A MINIMUM OF 85% VEGETATED GROWTH ANS BEEN BISTALUSHED;
 A MINIMUM OF 87 OF RON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 7. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD.
- 8. IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTAR EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
- 8. 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 MANAGE TEROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.*
- 10, ALL DETENTION PONDS AND TREATMENT SWALES SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL INFLUENCE STORMWATER RUNOFF.
- 11. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE,
- 12. ALL CUT AND FILL 9LOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

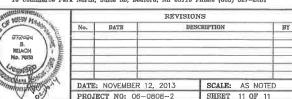
CONSTRUCTION DETAILS BOYER SITE

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

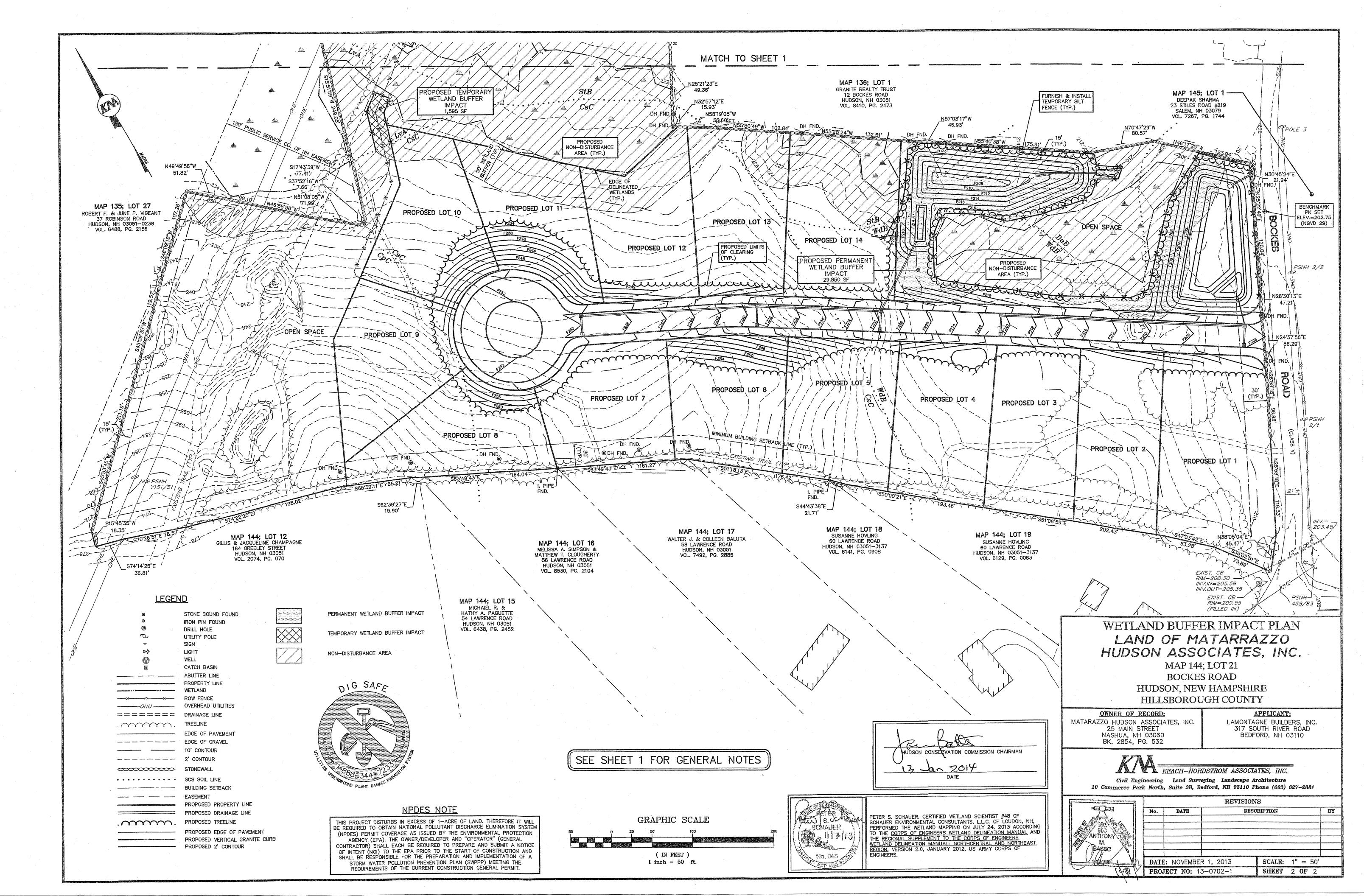
OWNER OF RECORD: BOYER ASSOCIATES 65 PLATEAU RIDGE ROAD LOUDON, NH 03307 H.C.R.D. BK. 4622; PG. 2240

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









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