

1. Planning Board Regular Webex Meeting Agenda - Amended (PDF)

Documents:

[20200618 NCPB AGENDA AMENDED.PDF](#)

2. Planning Board Staff Reports And Plans

Documents:

[20200618 210 DANIEL WEBSTER HWY SITE PLAN STAFF REPORT.PDF](#)

[20200618 210 DANIEL WEBSTER HWY SITE PLAN.PDF](#)



City of Nashua
Planning Department
229 Main Street
Nashua, New Hampshire 03061-2019

Planning & Zoning 589-3090
Fax 589-3119
WEB www.nashuanh.gov

June 10, 2020

AMENDED AGENDA

To: NCPB Members

From: Planning Staff

Re: Regular Meeting and Public Hearing, June 18, 2020

Notice is hereby given that a Public hearing of the City of Nashua Planning Board will meet on Thursday, June 18, 2020 at 7:00 PM via a Webex Meeting. Real-time public comment can be addressed to the Board utilizing Webex virtual meeting software for remote access. This application will allow users to view the meeting and ask questions to the Board via the chat function. The public is also encouraged to submit their comments via email planningdepartment@nashuanh.gov to the Department email or by mail (please make sure to include your name/address and comments) by 5pm on June 18, 2020 and read into the record at the appropriate time. Letters should be addressed to City of Nashua, Planning Department, P.O. Box 2019, Nashua, NH 03061. Plans can be viewed on online starting June 12, 2020 at www.nashuanh.gov in the Calendar or Agendas and Minutes.

To access Webex: <https://nashuanh.webex.com/nashuanh/j.php?MTID=mdef85f5e2287b529043eed7dfb585044>
Meeting number/access code: **129 722 3471**– Password: **69AyAHJCMv5**

To join by phone: **1-(408)-418-9388** - Meeting number/access code: **129 722 3471**

If for some reason you can't connect to Webex, please contact us at **(603) 589-3115**.

- A. Call to Order
- B. Roll Call
- C. Approval of Minutes – May 21, 2020, May 28, 2020 and June 4, 2020
- D. Communications
- E. Report of Chairman, Committee, & Liaison
- F. Executive Session

OLD BUSINESS – CONDITIONAL / SPECIAL USE PERMITS

None

OLD BUSINESS - SUBDIVISION PLANS

None

OLD BUSINESS – SITE PLANS

None

NEW BUSINESS – CONDITIONAL / SPICAL USE PERMITS

None

NEW BUSINESS – SUBDIVISION PLANS

None

NEW BUSINESS – SITE PLANS

1. Appletree Properties, LLC (Owner) BJ's Wholesale Club (Applicant) - Application and acceptance of proposed amendment to NR0113 to develop a 400 sf kiosk supporting a gasoline fueling facility with six dispenser islands and associated site improvements. Property is located at 210 Daniel Webster Highway and 101 Adventure Way. Sheet A - Lots 231 & 167. Zoned "HB" Highway Business. Ward 7.

OTHER BUSINESS

1. Review of tentative agenda to determine proposals of regional impact.
2. Referral from the Board of Aldermen on proposed O-20-023, relative to advertising signage on umbrellas, awnings, and canopies in connection with outdoor dining.

DISCUSSION ITEM

None

NONPUBLIC SESSION

The Planning Board will need to make a motion to enter into a Nonpublic Session under RSA 91-A:3, II (e) for consideration or negotiation of pending claims or litigation which has been threatened in writing or filed against the public body.

NEXT MEETING

July 9, 2020

ADJOURN

WORKSHOP

ACCOMMODATIONS FOR THE SENSORY IMPAIRED

**"SUITABLE ACCOMMODATIONS FOR THE SENSORY IMPAIRED
WILL BE PROVIDED UPON ADEQUATE ADVANCE NOTICE."**

CONDUCT AT PLANNING BOARD MEETING

When the meeting is called to order, the only talking allowed in the Auditorium will be remarks addressed to the Chairman. Except for the original presentation of the subject or application, each person speaking for or against shall be limited to five (5) minutes until all have been given an opportunity to be heard, at which time each person may be allowed additional time if deemed necessary by the Board or the Chairman. When you are recognized by the Chairman, proceed to the podium, using the microphone, state your name and address and then make your comments. Courtesy is shown when you reserve your comments for the proper time.

PLEASE BE COURTEOUS

By Order of the Chair

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Scott McPhie, Planner 1
FOR: June 18, 2020
RE: **New Business #1 - Site Plan**

I. Project Statistics:

Owner: Appletree Properties, LLC
Applicant: BJ's Wholesale Club
Proposal: Site plan amendment to NR0113 to demolish existing building and construct a gas station
Location: 210 Daniel Webster Highway & 101 Adventure Way
Total Site Area: 43,800 square feet
Existing Zoning: HB - Highway Business and TOD – Transit Oriented Development
Surrounding Uses: Commercial/Cemetery

II. Background Information:

The existing parcels consists of a circa 1960 three unit retail building that has contained various tenants throughout the years and has not been updated in quite some time and undeveloped land.

III. Project Description:

The proposal is to consolidate Lots 231 & 167 and construct a BJ's Wholesale Club gas station with a 400 sf kiosk supporting a fueling facility with six dispensing islands, three 20,000 gallon underground fuel storage tanks, three parking spaces, canopy, and a trash enclosure.

A single entrance will be located off of Adventure Way where traffic will follow a circuitous route to access the pump islands. It will be important to paint proper directional arrows, stop lines, with safety signage added accordingly. An exit only onto Daniel Webster Highway will be located at the northwest section of the property.

The stormwater management and drainage plan indicates post stormtech controls will substantially reduce flows from the site up to the 100-year storm event. A geotechnical report is provided to indicate the suitability of the site.

A traffic report has been provided. The report indicates there will be an increase in traffic volumes from the project. The applicant is proposing improvements to the Daniel Webster Highway and Adventure Way intersection to alleviate increased volume. There is a 5 year moratorium on paving which expires on August 6, 2021. The applicant would have to seek relief from the Board of Public Works if they are to do work in the street prior to that date. Staff recommends if any of the remaining sidewalks on Adventure way needs to be connected; the applicant should work with the Division of Public Works to do so.

A site plan suitability report as required is attached. It will address the accessory structures in the front yard and summarizes how the project will fit into the TOD. Three waivers have been requested for the project: The first waiver is for setbacks in the TOD. The other two waivers are for lighting.

Zoning and Fire comments are attached; Engineering comments are pending.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D) and §190-23(E). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, they should state specific reasons. If the Planning Board chooses to approve this plan, staff recommends the following stipulation(s) be made part of that approval:

1. The request for a waiver of NRO § 190-26.1(H)(2), which requires a maximum front setback of 15 feet, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. The request for a waiver of NRO § 190-89 (A), which requires light levels not exceed 0.2 footcandles at property lines, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
3. The request for a waiver of NRO § 190-89(C), which requires any luminaire with a lamp rated more than 1800 should be mounted using a formula where D is the distance to property line with a pole height not to exceed 25 feet, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
4. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final plans.
5. Prior to the Chair signing the plan, minor drafting corrections will be made.
6. Prior to the Chair signing the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer, dated June _____, 2020 shall be addressed to the satisfaction of the Engineering Department.
7. Prior to the issuance of a building permit, all comments in an e-mail from Wayne Husband, P.E. dated June 10, 2020 shall be addressed to the satisfaction of the Engineering Department.
8. Prior to the issuance of a building permit, stormwater documents shall be submitted to Planning Staff for review and recorded at the applicant's expense.
9. Prior to the issuance of a building permit, the lots shall be merged.
10. Prior to any work on site, a pre-construction meeting shall be held and a financial guarantee shall be approved.

11. Prior to the issuance of a Certificate of Occupancy, all off-site and on-site improvements will be completed.

PROPOSED SITE PLAN DOCUMENTS

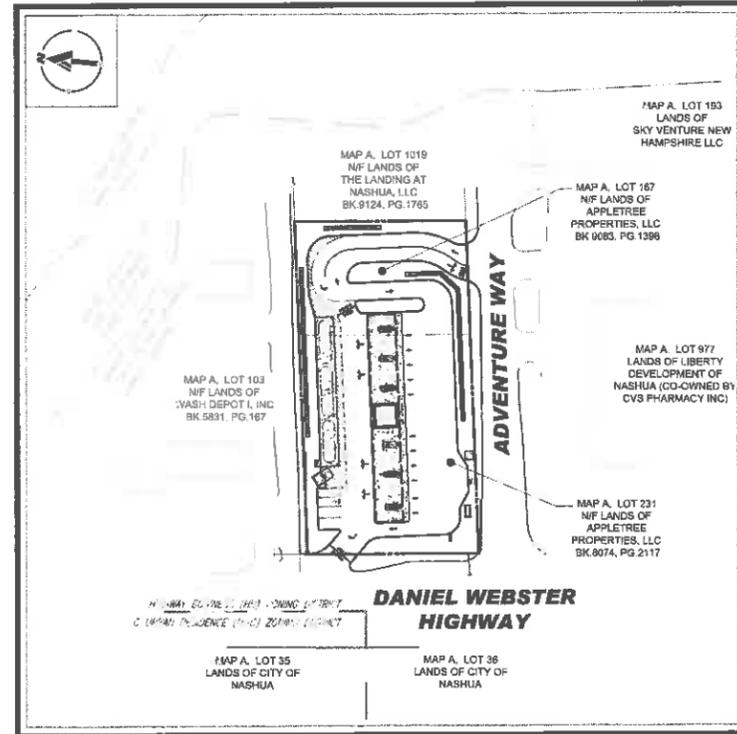
FOR

BJS GAS

210 DANIEL WEBSTER HWY & 101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY, NEW HAMPSHIRE
MAP A, LOTS 231 & 167



USGS MAP
SCALE: 1" = 2,000'
SOURCE: NASHUA SOUTH USGS QUADRANGLE



SITE MAP
SCALE: 1" = 60'

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
GENERAL NOTES SHEET	C-102
DEMOLITION PLAN	C-201
SITE LAYOUT PLAN	C-301
GRADING AND DRAINAGE PLAN	C-401
UTILITY PLAN	C-501
EROSION AND SEDIMENT CONTROL PLAN	C-601
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-602
LANDSCAPE PLAN	C-701
LANDSCAPE NOTES AND DETAILS	C-702
LIGHTING PLAN	C-703
DETAIL SHEET	C-901
DETAIL SHEET	C-902
DETAIL SHEET	C-903
DETAIL SHEET	C-904
BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS)	1 OF 1

APPROVED - NASHUA PLANNING BOARD

CHAIRMAN SIGNATURE	DATE
SECRETARY SIGNATURE	DATE

OWNER SIGNATURE BLOCK

OWNER SIGNATURE	DATE
-----------------	------

SITE ABUTTER INFORMATION

MAP/LOT NASHUA ADDRESS	ZONE/USE	MST_OWNER1	MST_OWNER2	OWNER ADDRESS	OWNER ADDRESS 2	BOOK/PAGE
A/193	100 ADVENTURE WAY	HB / INDUSTRIAL	SKY VENTURE NEW HAMPSHIRE LLC	N/A	100 ADVENTURE WAY	NASHUA NH 03060 7320/669
A/702	217 DANIEL WEBSTER HWY	HB / COMMERCIAL	NP ROYAL RIDGE LLC	AEW CAPITAL MGMT, LP	2 SEAPORT LN	BOSTON MA 02210 9094/1545
A/30	213 DANIEL WEBSTER HWY	GB / COMMERCIAL	NP ROYAL RIDGE LLC	AEW CAPITAL MGMT, LP	2 SEAPORT LN	BOSTON MA 02210 9094/1545
A/167	101 ADVENTURE WAY	HB / UNDEVELOPED	APPLETREE PROPERTIES, LLC	N/A	24 APPLETREE GREEN	NASHUA NH 03062 9063/1398
A/35	1 DANIEL WEBSTER HWY	R-C / CEMETERY	NASHUA, CITY OF	PO BOX 2019	229 MAIN ST	NASHUA NH 03061-0000 0/0
A/36	1 DANIEL WEBSTER HWY	HB / COMMERCIAL	NASHUA, CITY OF	PO BOX 2019	229 MAIN ST	NASHUA NH 03061-0000 0/0
A/231	210 DANIEL WEBSTER HWY	HB / COMMERCIAL	APPLETREE PROPERTIES, LLC	N/A	24 APPLETREE GRN	NASHUA NH 03062-2252 8074/2117
A/965	215 DANIEL WEBSTER HWY	HB & GB / COMMERCIAL	NP ROYAL RIDGE LLC	AEW CAPITAL MANAGEMENT, LP	2 SEAPORT LN	BOSTON MA 02210 9094/1545
A/977	214 DANIEL WEBSTER HWY	HB / COMMERCIAL	LIBERTY DEVELOPMENT OF NASHUA	CVS PHARMACY INC #1003-02	ONE CVS DR	WOONSOCKET RI 02895 5945/1606
A/1019	2 EAST SPIT BROOK RD	HB / UNDEVELOPED	THE LANDING AT NASHUA, LLC	N/A	1662 ELM ST	MANCHESTER NH 03101 N/A
A/103	204 DANIEL WEBSTER HWY	HB / COMMERCIAL	WASH DEPOT I INC	N/A	14 SUMNER ST # 302	MALDEN MA 02148-5706 5831/167

PREPARED BY

BOHLER //

BOHLER //
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	06/04/20	PER STAFF COMMENTS	J.L.D. B.G.D.



Know what's Below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT BEYOND AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201057
DRAWN BY: J.L.O.
CHECKED BY: MKB
DATE: 04/22/2020
CAD L.D.: W201057-CVL-1

PROPOSED SITE PLAN DOCUMENTS FOR

BJS GAS

OWNER ADDRESS
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581

SITE ADDRESS
MAP A, LOTS 231 & 167
210 DANIEL WEBSTER HIGHWAY &
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY,
NEW HAMPSHIRE

BOHLER //

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
Fax: (508) 480-9080
www.BohlerEngineering.com



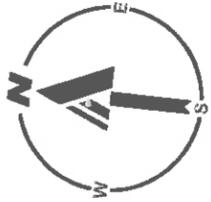
SHEET TITLE:

COVER SHEET

SHEET NUMBER:

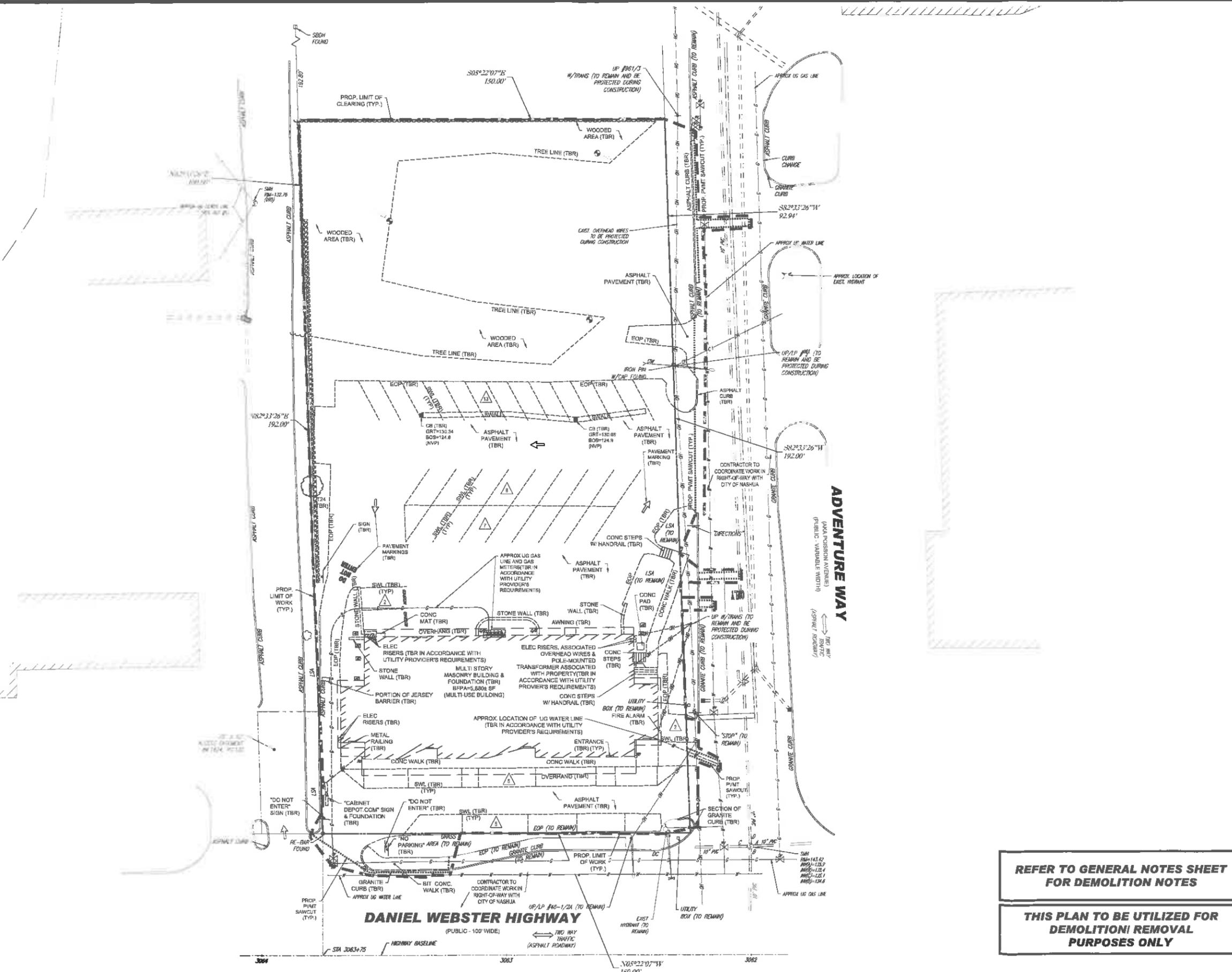
C-101

REVISION 1 - 06/04/2020



APPROX. LOCATION OF
EXISTING CURB AT
FLOORLINE

APPROX. LOCATION OF EXISTING
7' WIDE SIDEWALK
(ADJACENT TO 27A ANNUAL CHANCE
ROADWAY)



REFER TO GENERAL NOTES SHEET
FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR
DEMOLITION/REMOVAL
PURPOSES ONLY



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	08/04/20	PER STAFF COMMENTS	JLO EGD

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS OFFERED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201067
DRAWN BY: JLO
CHECKED BY: MKG
DATE: 04/22/2020
CAD L.D.: W201067-CVL-1

PROPOSED SITE PLAN DOCUMENTS
FOR
BO'S GAS
OWNER ADDRESS
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581

SITE ADDRESS
MAP A, LOTS 231 & 167
210 DANIEL WEBSTER HIGHWAY &
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY,
NEW HAMPSHIRE

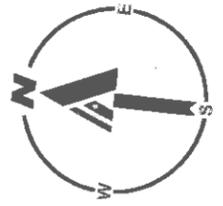
BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
Fax: (508) 480-9980
www.BohlerEngineering.com

J. J. KULACH
Professional Engineer
NEW HAMPSHIRE REG. NO. 6472
CONTRACTING REG. NO. 28177
RHODE ISLAND REG. NO. 2619
NASHUA, NH REG. NO. 12521

SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C-201

REVISION 1 - 06/04/2020



SITE INFORMATION

- PROPOSED GAS STATION USE (PERMITTED AS OF RIGHT)
- APPLICANT:
B.F. WICKESALE CLUB
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581
(774) 512-7898
 - OWNER:
APPLETREE PROPERTIES, LLC
24 APPLETREE GREEN
NASHUA, NH 03082
(603) 888 - 2109
 - PARCEL:
MAP A, LOTS 231 & 157
210 DANIEL WEBSTER HWY &
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY, NEW HAMPSHIRE

ZONING ANALYSIS TABLE			
ZONING DISTRICT	HIGHWAY BUSINESS DISTRICT		
OVERLAY DISTRICT	TRANSIT ORIENTED DEVELOPMENT (TOD) OVERLAY DISTRICT		
REQUIRED PERMIT	SITE PLAN REVIEW APPROVAL FROM PLANNING BOARD		
ZONE CRITERIA	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	20,000 SF	43,771 SF	NO CHANGE
MIN. LOT WIDTH	100 FT	150.0 FT	NO CHANGE
MAX. FLOOR AREA RATIO	0.75	N/A	0.01±
MIN. FRONT SETBACK	20 FT	10.5 FT	27.5 FT
MIN. FRONT SETBACK (TOD)	5 FT	10.5 FT	27.5 FT (W)
MAX. FRONT SETBACK (TOD)	15 FT	10.5 FT	27.5 FT (W)
MIN. SIDE SETBACK	10 FT	8.5 FT	51.2 FT
MIN. REAR SETBACK	30 FT	N/A	N/A
MAX. BUILDING HEIGHT	60 FT	34.6 FT	< 60 FT
MIN. OPEN SPACE AREA	20%	N/A	77%±
PARKING SPACES	1	42	3
ACCESS PARKING SPACES	1	0	1
PARKING STALL CRITERIA STANDARD: 8 FT x 20 FT	USE/CATEGORY: GAS STATIONS REQUIRED PARKING: 1 PER 500 SF INCLUDING SERVICE BAYS AND RETAIL AREAS CALCULATION: 400 SF KIOSK = 1 SPACE REQUIRED		
LOADING CRITERIA	NOT REQUIRED PER TABLE 18B-1 IN CITY OF NASHUA LAND USE CODE		
ACCESSIBLE PARKING CRITERIA STANDARD:	1-25 SPACES = 1 MIN. ACCESSIBLE SPACE 1 ACCESSIBLE VAN SPACE PER 8 STANDARD ACCESSIBLE SPACES (MIN.)		
VAN:	8 FT x 20 FT STALL (MIN.) 8 FT x 20 FT AISLE (MIN.)		

PAINT STRIPING LEGEND

SYSL4"	SINGLE YELLOW SOLID LINE 4 IN. WIDE
SWS4"	SINGLE WHITE SOLID LINE 4 IN. WIDE
SYSL9"	SINGLE YELLOW SOLID LINE 9 IN. WIDE
DYSL4"	DOUBLE YELLOW SOLID LINE 4 IN. WIDE

CITY OF NASHUA SITE NOTES

- ALL SIGNAGE SHALL CONFORM TO APPLICABLE CITY OF NASHUA ZONING REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
- SITE IMPROVEMENTS DEPICTED ON THESE PLANS SHALL CONFORM TO TITLE 111 OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSIONS AND GRADE AND NUMBER OF SPACES.
- BASED ON AVAILABLE GIS MAPPING, THE SITE IS BELIEVED TO BE SERVED BY BOTH MUNICIPAL SEWER AND BY PENNAQUICK WATERWORKS.
- NO VARIANCES OR SPECIAL EXCEPTIONS ARE BEING REQUESTED AS PART OF THESE PLANS.
- PER FEMA FLOOD INSURANCE RATE MAP (FIRM) NUMBER 33010664D, THE SITE IS LOCATED IN FLOOD ZONE X (0.2% ANNUAL CHANCE FLOOD).
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED SITE DESIGN AND ASSOCIATED FEATURES IN SUPPORT OF THE APPLICATION FOR PLANNING BOARD ACTION.
- FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.
- PRIOR TO ANY WORK BEING CONDUCTED, A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE PLANNING STAFF AND OTHER CITY DEPARTMENTS AS NECESSARY TO REVIEW THE PROPOSED WORK.
- UTILITIES, INCLUDING ALL ELECTRIC, TELEPHONE, CABLE TELEVISION, AND OTHER COMMUNICATION LINES, BOTH HARI AND SERVICE CONNECTIONS, SERVING NEW DEVELOPMENTS SHALL BE PROVIDED BY UNDERGROUND WIRING WITHIN EASEMENTS OR DEDICATED PUBLIC RIGHT-OF-WAY, INSTALLED IN ACCORDANCE WITH THE BOARD OF PUBLIC WORKS SPECIFICATIONS.
- STREET RESTORATION WORKS IS TO BE IN ACCORDANCE WITH HRO 265-13 (CITY OF NASHUA ARTICLE II - CONSTRUCTION AND REPAIR).
- THE PRESENCE OF WETLANDS HAVE NOT BEEN OBSERVED ON THE SUBJECT SITE.
- THE PROPOSED SITE PLAN DOCUMENTS, AS DESIGNED, ARE BELIEVED TO COMPLY WITH THE MINIMUM REQUIREMENTS ESTABLISHED IN THE LAND USE CODE, CHAPTER 199 OF THE CITY OF NASHUA'S BY-LAWS.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV.	DATE	COMMENT	DESIGNED BY
1	06/04/20	PER STAFF COMMENTS	JLD EGD

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	W201057
DRAWN BY:	JLO
CHECKED BY:	MKB
DATE:	04/22/2020
CAD I.D.:	W201057-CVL-1

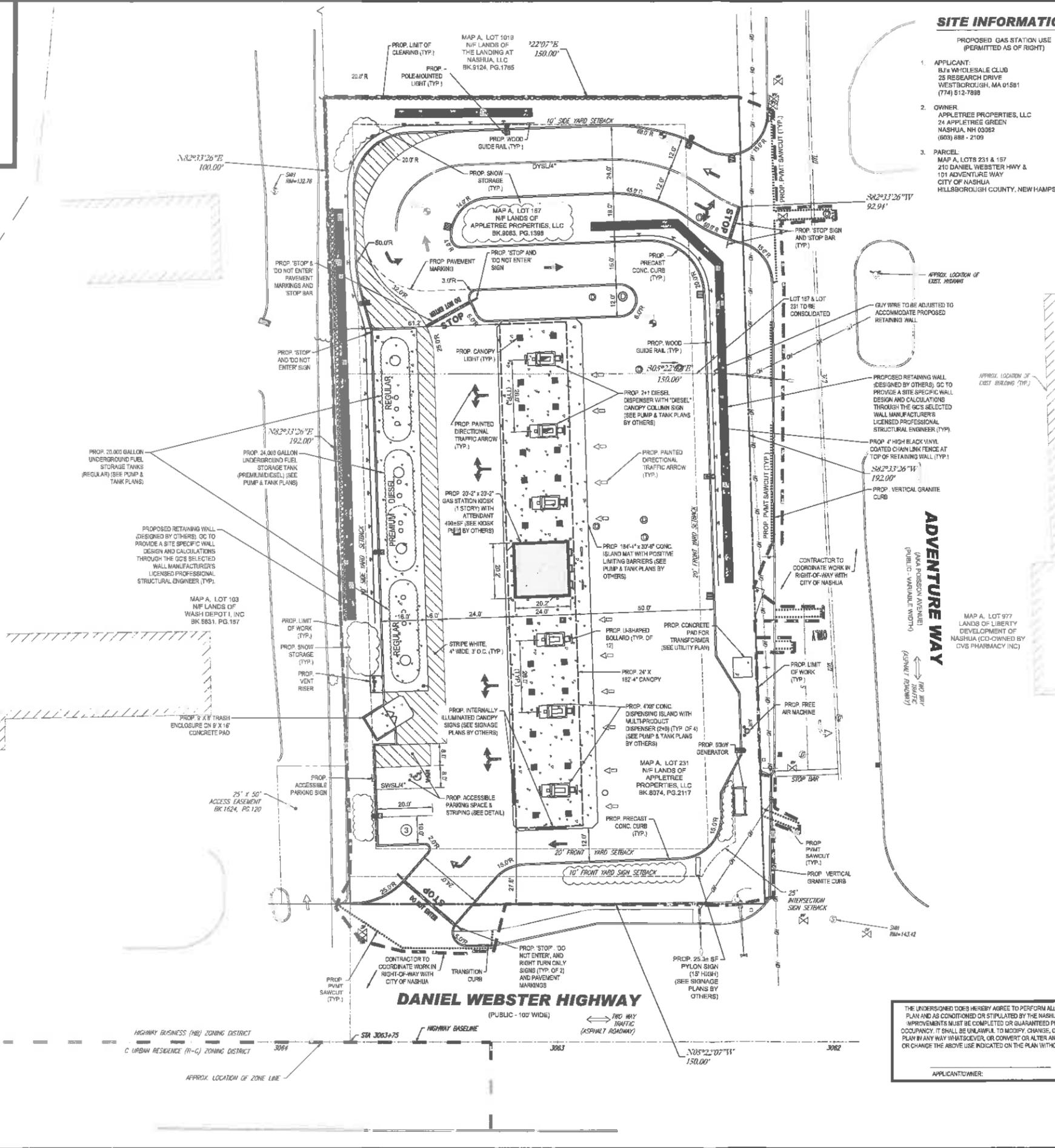
PROPOSED SITE PLAN DOCUMENTS

B'S GAS
OWNER ADDRESS
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581
SITE ADDRESS
MAP A, LOTS 231 & 157
210 DANIEL WEBSTER HIGHWAY &
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY,
NEW HAMPSHIRE

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9000
Fax: (508) 480-9080
www.BohlerEngineering.com

J. KUCIACH
Professional Engineer
No. 28177
MAINE LICENSE No. 12553

SHEET TITLE:
SITE LAYOUT PLAN
SHEET NUMBER:
C-301
REVISION 1 - 06/04/2020



THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL THE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THIS PLAN IN ANY MANNER WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY.

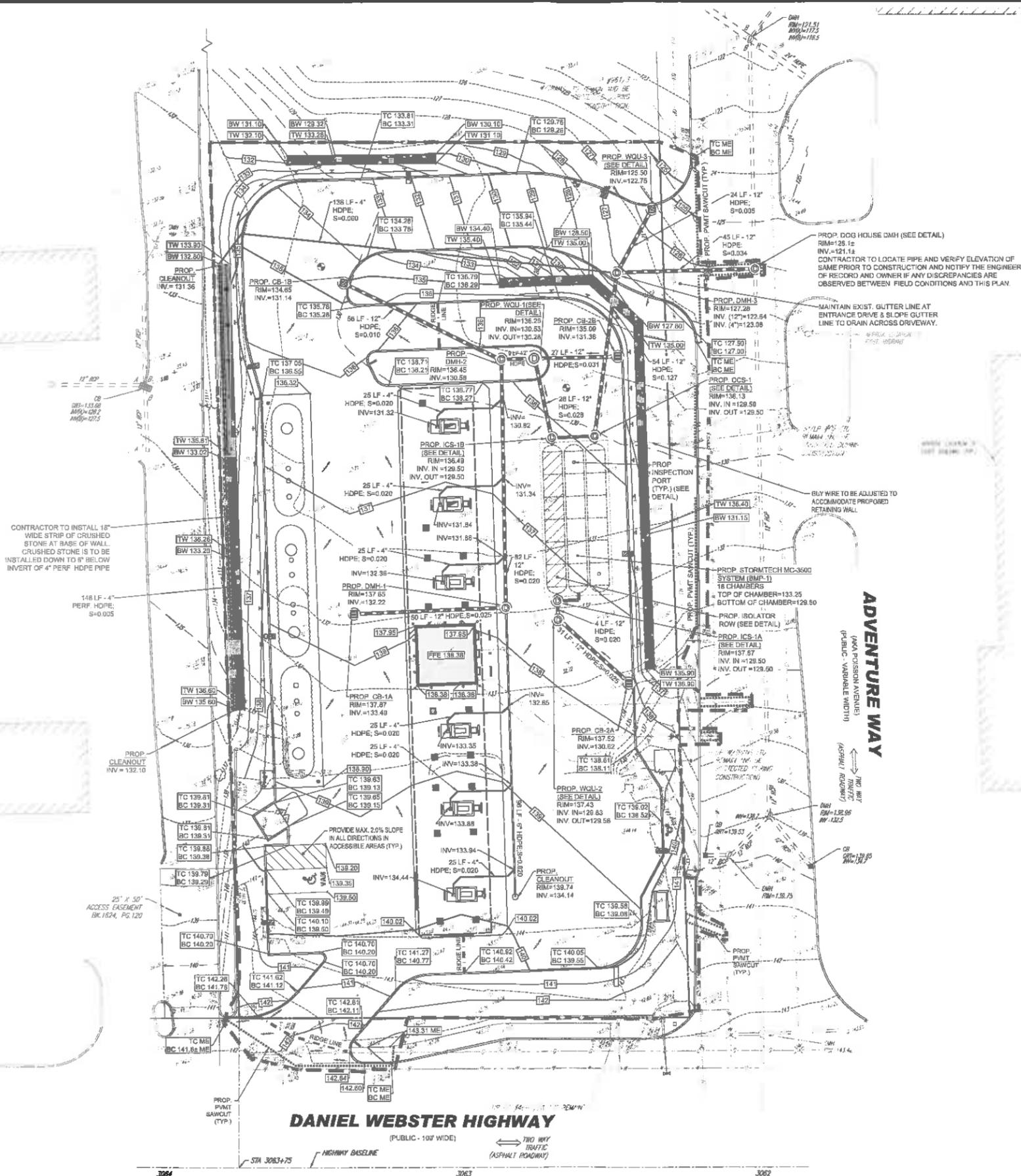
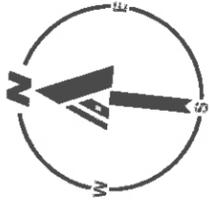
APPLICANT/OWNER: _____ DATE: _____

GENERAL CONTRACTOR TO PROVIDE A SITE SPECIFIC WALL DESIGN AND CALCULATIONS THROUGH THE GENERAL CONTRACTOR'S SELECTED WALL MANUFACTURER'S LICENSED PROFESSIONAL STRUCTURAL ENGINEER.

MAINTENANCE OF A CLEAR SIGHT LINE IS THE RESPONSIBILITY OF THE PROPERTY OWNER

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL NOTES





BOHLER
 SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	06/04/20	PER STAFF COMMENTS	JLC EGD

811
 Know what's below.
 Call before you dig.
 ALWAYS CALL 811
 It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201067
 DRAWN BY: JLC
 CHECKED BY: MKB
 DATE: 04/22/2020
 CAD L.D.: W201057-CVL-1

PROPOSED SITE PLAN DOCUMENTS
 FOR
N GAS
 OWNER ADDRESS
 25 RESEARCH DRIVE
 WESTBOROUGH, MA 01581

SITE ADDRESS
 MAP A, LOTS 231 & 167
 210 DANIEL WEBSTER HIGHWAY &
 181 ADVENTURE WAY
 CITY OF NASHUA
 HILLSBOROUGH COUNTY,
 NEW HAMPSHIRE

BOHLER

352 TURNPIKE ROAD
 SOUTHBOROUGH, MA 01772
 Phone: (508) 480-9800
 Fax: (508) 480-9080
 www.BohlerEngineering.com

J. KULICH
 PROFESSIONAL ENGINEER
 LICENSE NO. 10000
 EXPIRES 12/31/2025
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF NEW HAMPSHIRE
 CONTRACT NO. 20177
 PROJECT NO. 2016
 DRAWING NO. 2016

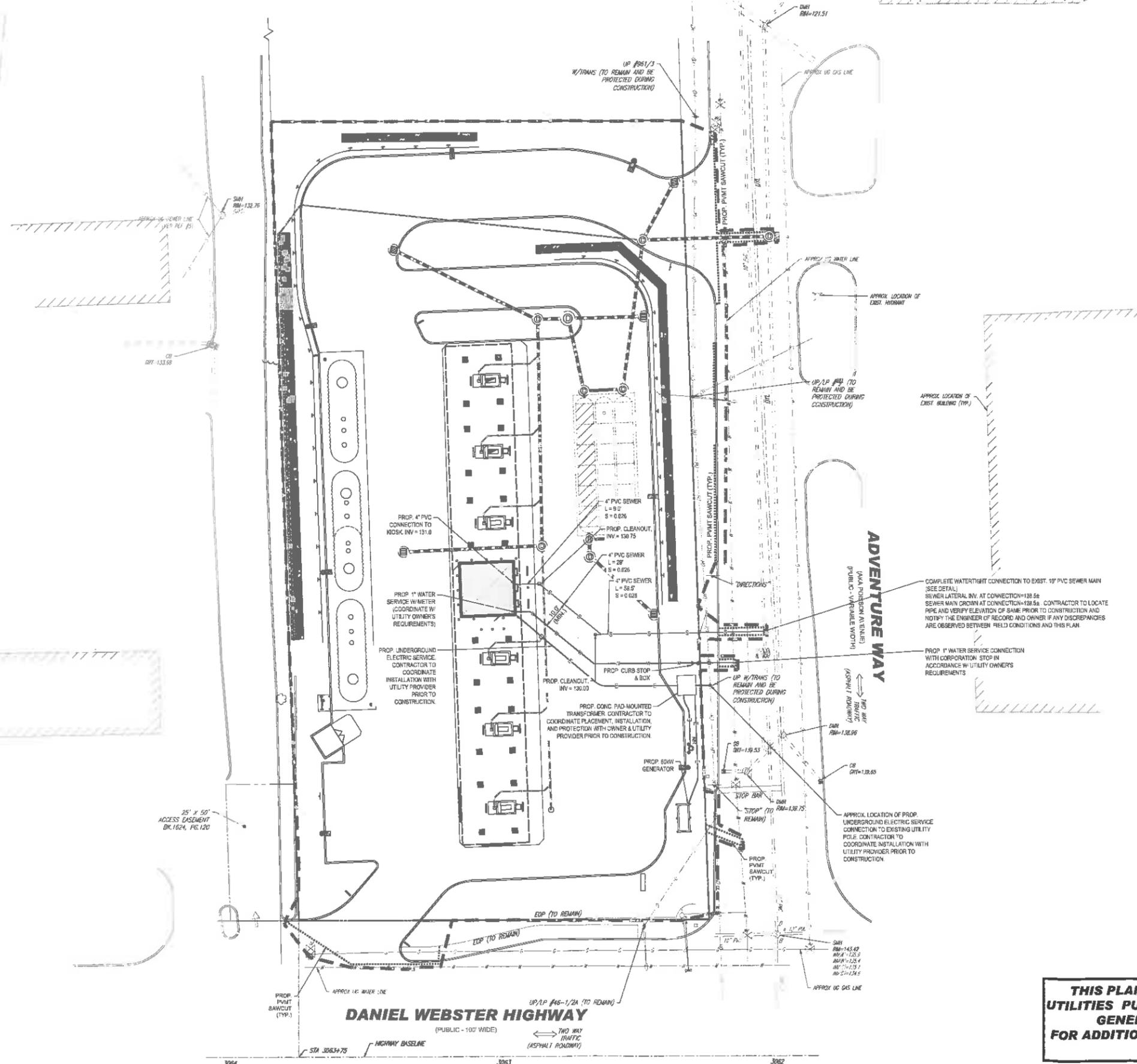
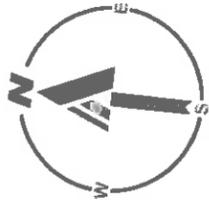
ROOF DRAIN TIE-INS AND DRAIN LINES SHALL BE INSPECTED PRIOR TO BACKFILLING AND PAVING

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES

SHEET TITLE:
GRADING AND DRAINAGE PLAN

SHEET NUMBER:
C-401





BOHLER
 SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CREATED BY
1	06/04/20	PER STAFF COMMENTS	JLO EGD

811
 Know what's below.
 Call before you dig.
 ALWAYS CALL 811
 It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS OFFERED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201057
 DRAWN BY: JLO
 CHECKED BY: MKB
 DATE: 04/22/2020
 CAD I.D.: W201057-CVL-1

PROPOSED SITE PLAN DOCUMENTS
 FOR
US GAS
 OWNER ADDRESS
 25 RESEARCH DRIVE
 WESTBOROUGH, MA 01581
 SITE ADDRESS
 MAP A, LOTS 231 & 167
 210 DANIEL WEBSTER HIGHWAY &
 101 ADVENTURE WAY
 CITY OF NASHUA
 HILLSBOROUGH COUNTY,
 NEW HAMPSHIRE

BOHLER

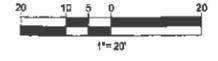
352 TURNPIKE ROAD
 SOUTHBOROUGH, MA 01772
 Phone: (508) 480-9900
 Fax: (508) 480-9080
 www.BohlerEngineering.com

J. KUCIUCH
 PROFESSIONAL ENGINEER
 MASS. REG. NO. 12553
 N.H. REG. NO. 26177
 PHONE: (508) 862-8516
 MOBILE: (508) 251-1255

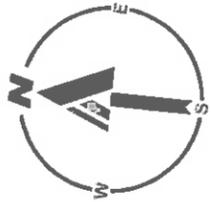
SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C-501
 REVISION 1 - 06/04/2020

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES

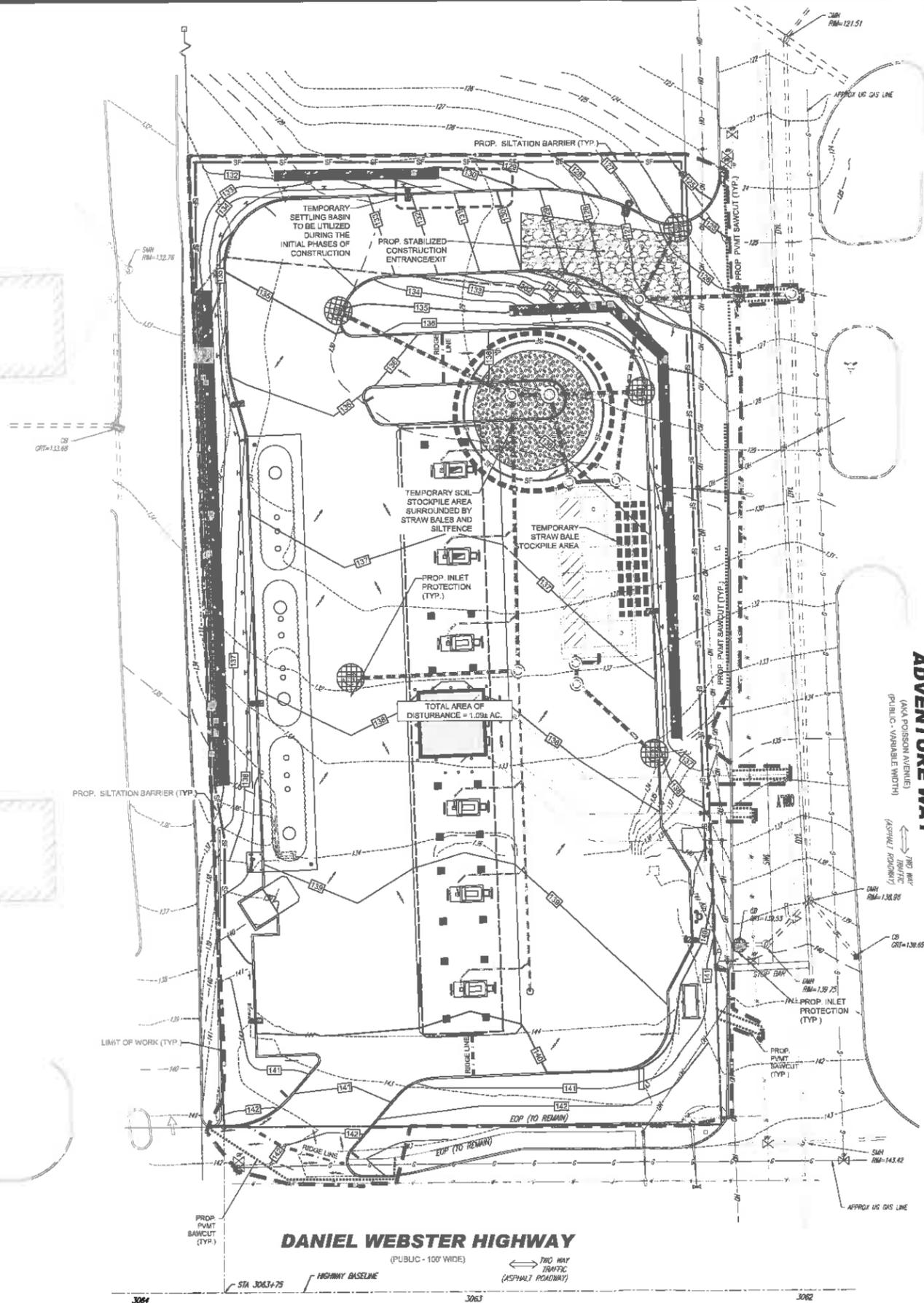


P:\2020\1057\1057-CVL-1.dwg, 06/04/2020, 10:58:10 AM, JLO



APPROX. LOCATION OF
EXISTING UTILITY LINES
(SEE SHEET C-601)

APPROX. LOCATION OF FUTURE DRAIN
AGE STRUCTURE
(SEE SHEET C-602)



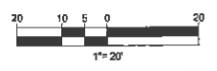
DANIEL WEBSTER HIGHWAY
(PUBLIC - 100' WIDE)

ADVENTURE WAY
(ANA POISSON AVENUE)
(PUBLIC - VARIABLE WIDTH)

STATIONING: STA 3063+75, 3063, 3062

**THIS PLAN TO BE UTILIZED FOR SITE
SOIL AND EROSION CONTROL
PURPOSES ONLY**

**REFER TO SOIL EROSION CONTROL
NOTES & DETAIL SHEET FOR EROSION
NOTES AND DETAILS**



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	06/04/20	PER STAFF COMMENTS	JLO EGD

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201057
DRAWN BY: JLO
CHECKED BY: MKB
DATE: 04/22/2020
CAD L.D.: W201057-CVL-1

**PROPOSED SITE
PLAN DOCUMENTS
FOR**

BIG GAS

OWNER ADDRESS
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581

SITE ADDRESS
MAP A, LOTS 231 & 167
210 DANIEL WEBSTER HIGHWAY
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY,
NEW HAMPSHIRE

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
Fax: (508) 480-9080
www.BohlerEngineering.com

J. J. KULSICH
PROFESSIONAL ENGINEER
NEW HAMPSHIRE LICENSE NO. 5476
CONTRACT NO. 2019-00177
PROJECT NO. 2019
MAINE LICENSE No. 12553

SHEET TITLE:
**SOIL EROSION &
SEDIMENT
CONTROL PLAN**

SHEET NUMBER:
C-601

REVISION 1 - 06/04/2020

EROSION AND SEDIMENT CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POOL, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
- SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST. THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UP-SLOPE ARE STABILIZED BY TURF.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).
- IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RINOFF PROBLEMS.
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
- REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
 - SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SF).
 - FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.33 LBS PER 1,000 SF LAWN QUALITY 500 MAY BE SUBSTITUTED FOR SEED.
 - STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
- WETLANDS WILL BE PROTECTED BY STRAW, COMPOST, AND/OR SILT FENCE BARRIERS INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED.

MULCH

LOCATION PROTECT AREA	MULCH STRAW	RATE (1000 SF)
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS STRAW (ANCHORED)*	185-275 POUNDS 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED

* A HYDRO APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON STRAW MULCH FOR WIND CONTROL.

MULCH ANCHORING
ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD. BLOCK), MULCH NETTING (AS PER MANUFACTURER), WOOD CELLULOSE FIBER (750 LBS/ACRE), CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS), USE OF A SEPARATED STRAIGHT DISK, WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

EROSION CONTROL NOTES DURING WINTER CONSTRUCTION

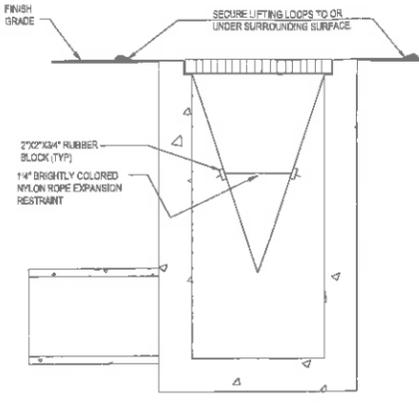
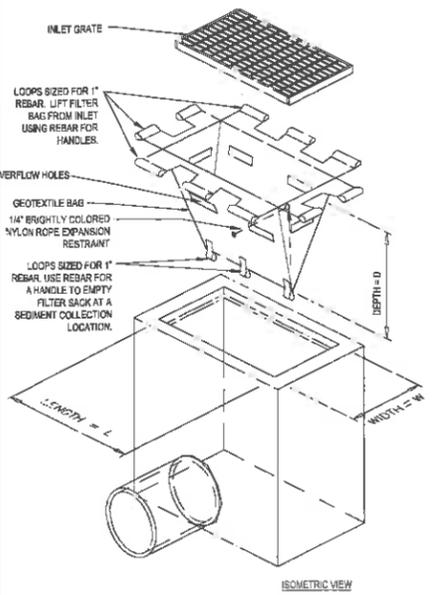
- WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
- WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
- CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR STRAW AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDS, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
- BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPE SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDS AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 15 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDS AT A RATE OF 200-300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT. EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF STRAW OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.

- MULCHING REQUIREMENTS:
 - BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE MULCH NETTING OR WOOD CELLULOSE FIBER.
 - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGEWAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
 - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST. THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- AFTER NOVEMBER 15 THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
- STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
- EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.

- THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:
- INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE EXIT (AS SHOWN)
 - INSTALLATION OF EROSION CONTROL BARRIER (STRAW BALES AND SILT FENCE) (AS SHOWN)
 - INSTALLATION OF INLET PROTECTION IN STREET (AS SHOWN)
 - DEMOLITION OF EXISTING SITE STRUCTURES (SEE DEMOLITION PLAN)
 - DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)
 - CLEARING AND GRUBBING
 - INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS
 - EARTHWORK AND EXCAVATION/FILLING AS NECESSARY
 - CONSTRUCTION OF UTILITIES
 - STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING
 - INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)
 - CONSTRUCTION OF BUILDINGS
 - CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS
 - SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH
 - FINAL GRADING OF ALL SLOPED AREAS
 - PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED AS REQUIRED.
 - REMOVAL OF THE TEMPORARY SEDIMENT BASINS
 - PAVE PARKING LOT
 - LANDSCAPING PER LANDSCAPING PLAN
 - REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER

CONSTRUCTION SEQUENCE

N.T.S.



INLET PROTECTION

N.T.S.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE

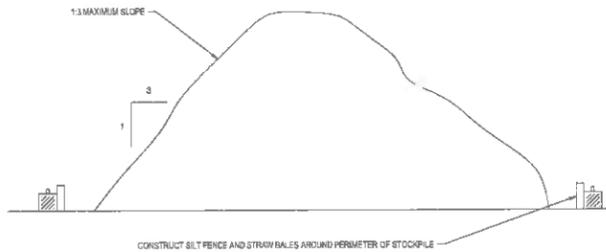
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4532	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4532	20 %
PUNCTURE	ASTM D-4533	120 LBS
MULLEN BURST	ASTM D-3786	600 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4555	80 %
APARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4481	40 GAL/MIN/SQ FT
PERMEABILITY	ASTM D-4481	0.55 SEC -1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4692	365 LBS
GRAB TENSILE ELONGATION	ASTM D-4692	20 %
PUNCTURE	ASTM D-4693	135 LBS
MULLEN BURST	ASTM D-3786	620 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4555	80 %
APARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4481	200 GAL/MIN/SQ FT
PERMEABILITY	ASTM D-4481	1.5 SEC -1

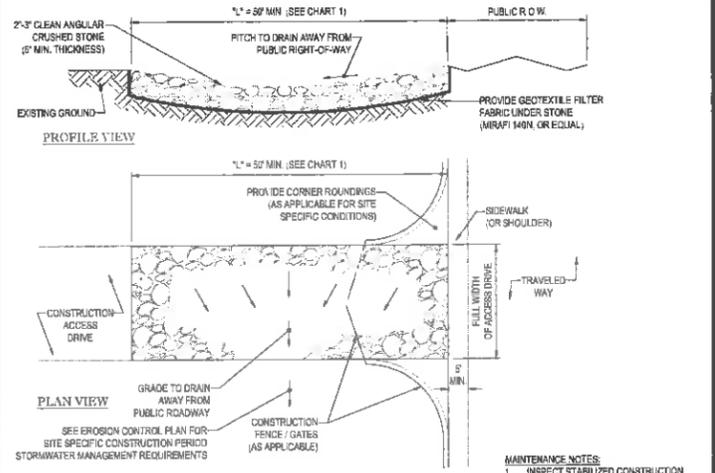
- REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
- GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
- PLACE AN OIL ADSORBENT PAD OR PLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
- INSPECT PER REGULATORY REQUIREMENTS.
- THE WIDTH "W" OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
- THE DEPTH "D" OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
- THE LENGTH "L" OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS TO BE USED IN EXISTING RIGHT OF WAY



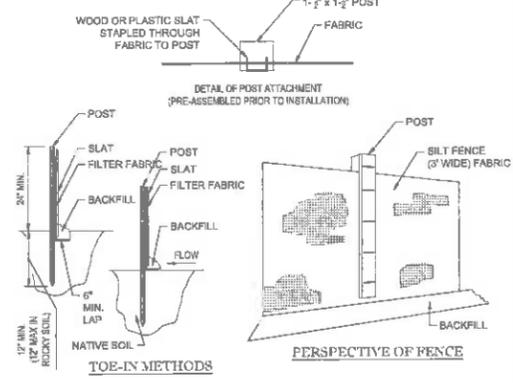
TEMPORARY STOCKPILE DETAIL

N.T.S.



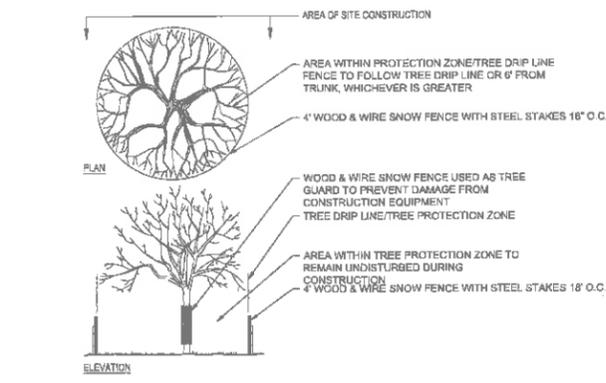
STABILIZED CONSTRUCTION EXIT

N.T.S.



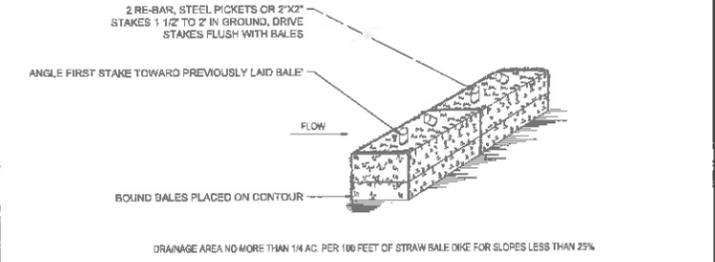
TYP. SILTATION FENCE DETAIL

N.T.S.



TREE PROTECTION DURING CONSTRUCTION

N.T.S.



STRAW BALE DETAIL

N.T.S.

- NOTES:
- BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
 - EACH BALE SHALL BE PLACED SO THE BINDINGS ARE HORIZONTAL.
 - BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
 - INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE PROMPTLY AS NEEDED.
 - BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	06/04/20	PER STAFF COMMENTS	JLO	EGG

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	W201057
DRAWN BY:	JLO
CHECKED BY:	MKB
DATE:	04/22/2020
CAD I.D.:	W201057-CV-1

PROPOSED SITE PLAN DOCUMENTS

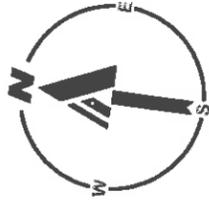
FOR GAS
OWNER ADDRESS
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581
SITE ADDRESS
MAP A, LOTS 231 & 167
210 DANIEL WEBSTER HIGHWAY &
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY,
NEW HAMPSHIRE

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
Fax: (508) 480-9090
www.BohlerEngineering.com

J. KUCIUCH
PROFESSIONAL ENGINEER
MAINE LICENSE NO. 12553

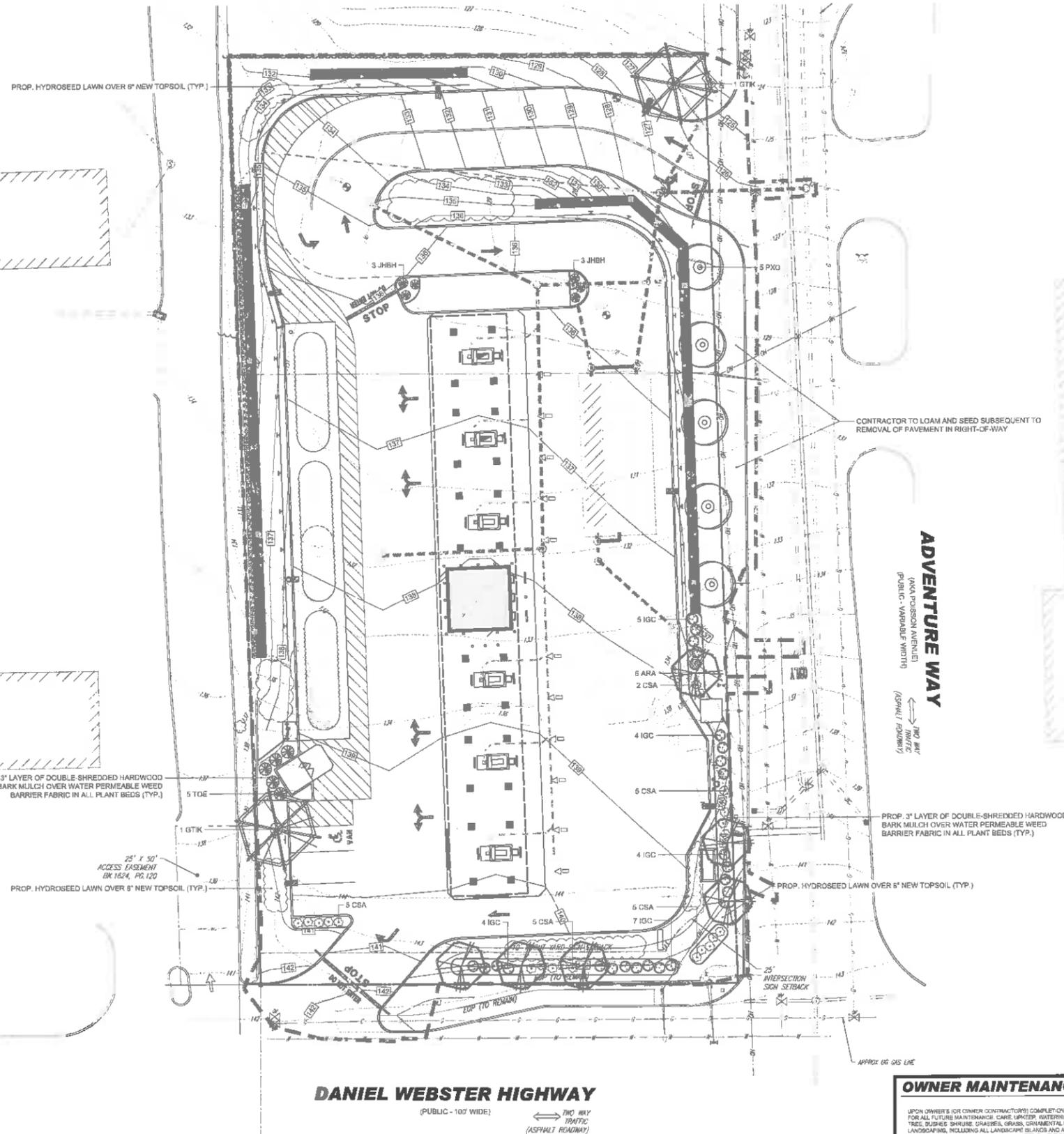
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:
C-602



APPROX. LOCATION OF
EXISTING UTILITY LINES
(SEE PLAN FOR
LOCATION)

APPROX. LOCATION OF
EXISTING DRIVEWAY
(SEE PLAN FOR
LOCATION)



PROP. HYDROSEED LAWN OVER 8" NEW TOPSOIL (TYP.)

PROP. 3" LAYER OF DOUBLE-SHREDDED HARDWOOD BARK MULCH OVER WATER PERMEABLE WEED BARRIER FABRIC IN ALL PLANT BEDS (TYP.)

25' X 50' ACCESS EASEMENT BK 1624, PG. 120

PROP. HYDROSEED LAWN OVER 8" NEW TOPSOIL (TYP.)

CONTRACTOR TO LOAM AND SEED SUBSEQUENT TO REMOVAL OF PAVEMENT IN RIGHT-OF-WAY

ADVENTURE WAY
(PUBLIC - VARIABLE WIDTH)
(SEE PLAN FOR
LOCATION)

APPROX. GAS LINE

DANIEL WEBSTER HIGHWAY
(PUBLIC - 100' WIDE)

← TWO WAY TRAFFIC (ASPHALT ROADWAY)

CITY OF NASHUA LANDSCAPE REQUIREMENTS		
SECTION	REQUIREMENTS	CALCULATIONS/PROPOSED
190-194 SURFACE PARKING LOTS	C. PERIMETER LANDSCAPING (1) A MINIMUM FIVE-FOOT BUFFER STRIP ABUTTING A PUBLIC RIGHT-OF-WAY SHALL BE LANDSCAPED. THIS REQUIREMENT DOES NOT APPLY TO AREAS WITHIN REQUIRED DRIVEWAY OR OTHER ACCESS POINTS. (2) IN ALL ZONING DISTRICTS LANDSCAPING SHALL BE REQUIRED ALONG ALL SIDES OF A PARKING LOT OR PAVED DRIVE THAT ABUTS ADJOINING PROPERTY OR A PUBLIC RIGHT-OF-WAY. (3) THE PERIMETER LANDSCAPE BUFFER ALONG A STREET SHALL CONSIST OF PLANTING MATERIALS OR PLANTING MATERIALS AND MAN-MADE FEATURES TO CREATE AT A MINIMUM THREE-FOOT HIGH VISUAL RELIEF SCREEN IN THE FORM OF A HEDGE, FENCE, PLANTER BOX, BERM, DIVIDERS, SHRUBBERY OR TREES, OR A COMBINATION THEREOF. ALL LANDSCAPING TO FORM SUCH VISUAL RELIEF SHALL CREATE A TWO-FOOT-TALL MINIMUM SCREEN AT PLANTING.	PROVIDED
190-195 LANDSCAPED YARD AREA REQUIREMENTS	B. THE LANDSCAPING SHALL INCLUDE A MIX OF TREE SPECIES WITH A MINIMUM TRUNK CALIPER OF 2 1/2 INCHES. THE TOTAL NUMBER OF TREES NECESSARY WILL BE DETERMINED AS FOLLOWS: (1) THERE SHALL BE ONE SHADE PER 40 LINEAR FOOT OF FRONTAGE ALONG PUBLIC STREETS AND MAJOR PRIVATE STREETS. (2) TWO ORNAMENTAL TREES PER 40 LINEAR FOOT OF FRONTAGE MAY BE USED AS ACCENT TREES IN THE FRONT YARDS.	TREES REQUIRED: 10 TREES PROVIDED: 10 (8 SHADE TREES, 2 ORNAMENTAL TREES) CALCULATION: 380740 ÷ 8.75 OR 10

LANDSCAPE SCHEDULE					
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONT.
SHADE TREES					
ARA	6	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG COLUMNAR RED MAPLE	2 1/2" CAL.	B/B
GTRK	2	QUERCUS TRICANTHOS 'HERMES SKYCYCLE'	SKYLINE THORNLESS HONEYLOCUST	2 1/2" CAL.	B/B
SUBTOTAL: 8					
ORNAMENTAL TREES					
PXO	5	PRUNUS X 'OKAME'	OKAME CHERRY	2 1/2" CAL.	B/B
SUBTOTAL: 5					
EVERGREEN TREES					
TOE	5	THUJA OCCIDENTALIS 'EMERALD'	EMERALD GREEN ARBORVITAE	5-6'	B/B
SUBTOTAL: 5					
DECIDUOUS SHRUBS					
CSA	22	CORNUS STOX 'ONICRA' 'ARCTIC FIRE'	COMPACT RED TWIG DOGWOOD	14-24"	B/B
SUBTOTAL: 22					
EVERGREEN SHRUBS					
IGC	24	ILEX GLABRA 'COMPACTA'	DWARF HEDGEHOLLY	24-32"	B/B
SUBTOTAL: 24					
GROUND COVERS					
JHBH	6	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	15-18" SPD	CONTAINER
SUBTOTAL: 6					

SEED MIX KEY	
	PROPOSED HYDROSEED

OWNER MAINTENANCE RESPONSIBILITIES

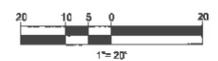
UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION PLANTS, TREES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVERS, AND LANDSCAPING, INCLUDING ALL LANDSCAPING ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. FROM ALL PEDESTRIAN SURFACES, OR TRIMMED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITH VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. FROM ALL PAVED TRAVELED SURFACES, OR AS OTHERWISE INDICATED ON THE PLAN.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 36 INCHES ABOVE GRADE, OF ALL PAVED, TRAVEL SURFACES, ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND HIGHWAYS/STREETS.
- FALLEN PLANT PLUMBERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEE. THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROMOTE.

THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

REFER LANDSCAPE NOTES & DETAILS SHEET FOR LANDSCAPE NOTES AND DETAILS



BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

PERMITTING AND INSPECTION SERVICES FOR THE STATE OF NEW HAMPSHIRE
REGISTERED PROFESSIONAL ENGINEER AND SURVEYOR
STATE OF NEW HAMPSHIRE
C. BOHLER

REVISIONS				
REV.	DATE	COMMENT	DESIGNED BY	CHECKED BY
1	08/04/20	PER STAFF COMMENTS	JLO	EGD

811

Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201057
DRAWN BY: JLO
CHECKED BY: MKB
DATE: 04/22/2020
CAD LO.: W201057-LND-1

PROPOSED SITE PLAN DOCUMENTS

FOR

B'S GAS

OWNER ADDRESS
25 RESEARCH DRIVE
WESTBOROUGH, MA 01581

SITE ADDRESS
MAP A, LOTS 231 & 167
210 DANIEL WEBSTER HIGHWAY &
101 ADVENTURE WAY
CITY OF NASHUA
HILLSBOROUGH COUNTY,
NEW HAMPSHIRE

BOHLER

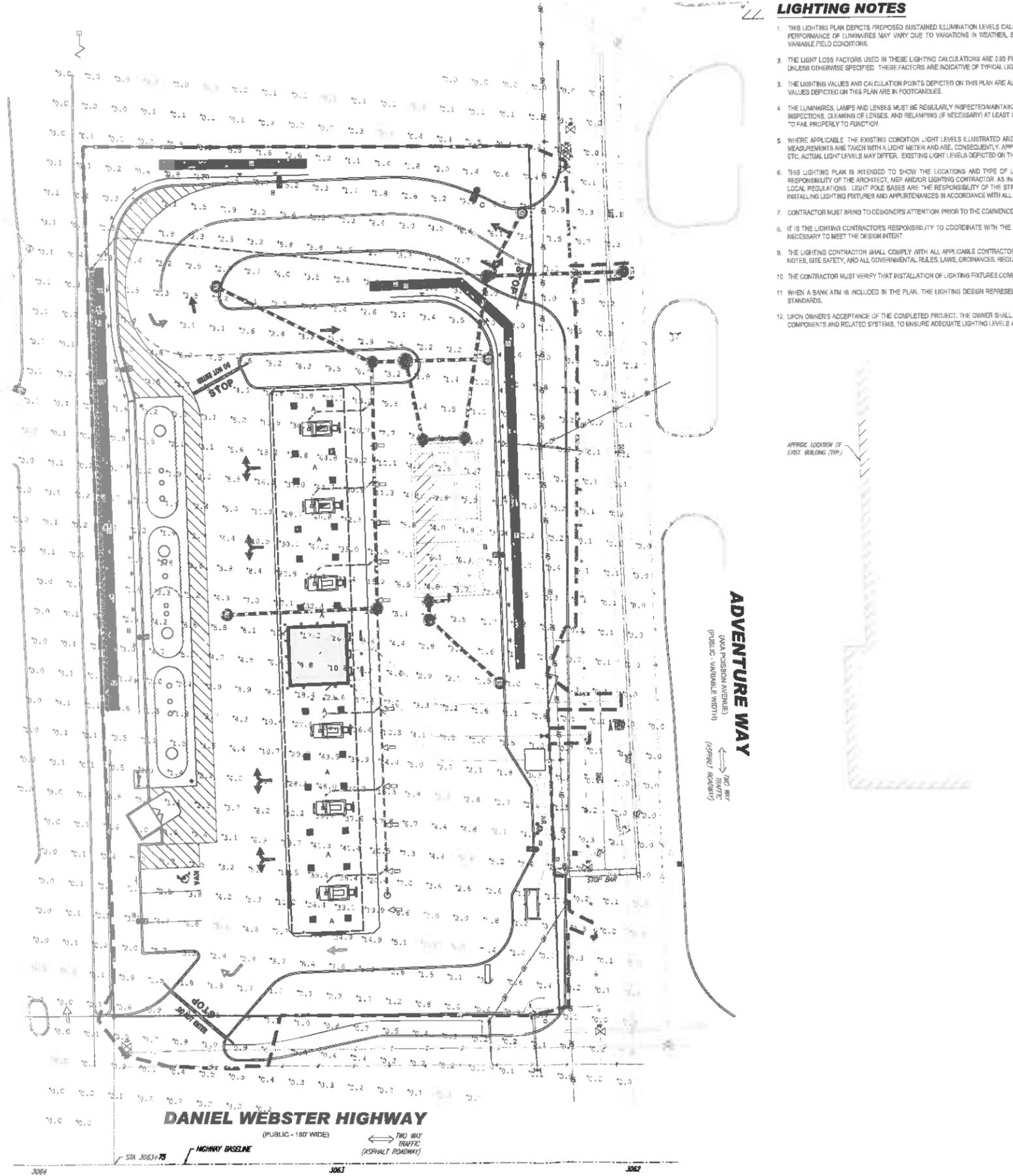
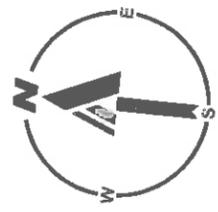
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9800
Fax: (508) 480-9080
www.BohlerEngineering.com



SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
C-701

REVISION 1 - 06/04/2020



LIGHTING NOTES

1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.80 FOR ALL LED LUMINAIRES, 0.85 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOT-CANDLES.
4. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC. ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
7. CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
8. IT IS THE LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TRING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
9. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITIES NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
10. THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
11. WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
12. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

NUMERIC SUMMARY [1]

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
AREA SUMMARY	ILLUMINANCE	FC	2.1	8.3	0.2	10.3	44.5

[1] ANALYSIS DOES NOT INCLUDE CANOPY LIGHTS

NUMERIC SUMMARY [1]

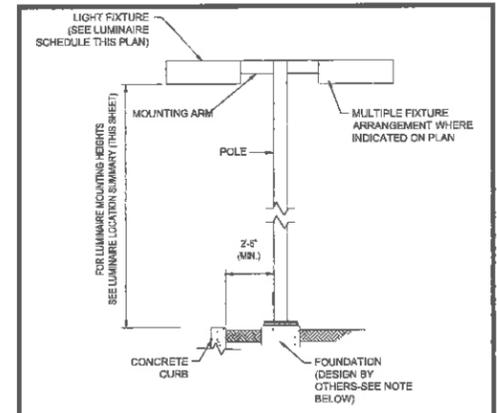
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
AREA SUMMARY	ILLUMINANCE	FC	8.4	47.2	0.7	11.9	67.4

[1] ANALYSIS INCLUDES CANOPY LIGHTS

LUMINAIRE SCHEDULE

SYMBOL	QTY	ARRANGEMENT	LUMENS	LLF	DESCRIPTION
A	24	SINGLE [1]	10871	0.90	CRUS-SC-LED-LW-CW-HSS-14" MOUNTING HEIGHT [1]
B	8	SINGLE W/SHIELD	15,576	0.90	XL-CM-3-LED-SS-CW-HSS, 22" MOUNTING HEIGHT [1]
C	1	SINGLE W/SHIELD	15,559	0.90	XL-CM-FT-LED-SS-CW-HSS, 22" MOUNTING HEIGHT [1]

- [1] MOUNTING HEIGHT ASSUMES 20 FT POLE WITH 2 FT CONCRETE BASE REVEAL
- [2] REFER TO ELECTRICAL PLANS BY OTHERS FOR FINAL CANOPY LIGHTING SPECIFICATIONS

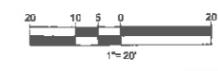


AREA LIGHT DETAIL N.T.S.

NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY



BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DESIGNED BY	CHECKED BY
1	06/04/20	PER STAFF COMMENTS	J.L.O.	E.G.D.

811

Know what's below.
 Call before you dig.
 ALWAYS CALL 811
 It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W201057
 DRAWN BY: J.L.O.
 CHECKED BY: MKB
 DATE: 04/22/2020
 CAD L.D.: W201057-CVL-1

PROPOSED SITE PLAN DOCUMENTS FOR

BIG GAS

OWNER ADDRESS
 25 RESEARCH DRIVE
 WESTBOROUGH, MA 01581

SITE ADDRESS
 MAP A, LOTS 231 & 167
 DANIEL WEBSTER HIGHWAY &
 101 ADVENTURE WAY
 CITY OF NASHUA
 HILLSBOROUGH COUNTY,
 NEW HAMPSHIRE

BOHLER

352 TURNPIKE ROAD
 SOUTHBOROUGH, MA 01772
 Phone: (508) 480-9000
 Fax: (508) 480-9080
www.BohlerEngineering.com

J. K. KUTCH

PROFESSIONAL ENGINEER
 MA LICENSE NO. 10433
 NH LICENSE NO. 4478
 CONTRACTOR LICENSE NO. 26177
 ROAD NO. 101
 MAINE LICENSE NO. 12553

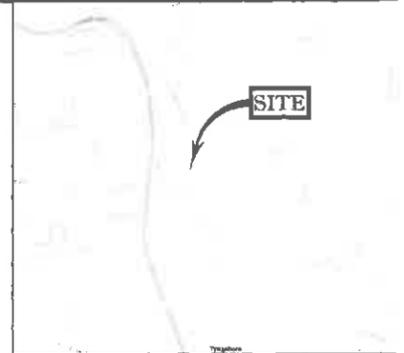
SHEET TITLE:
LIGHTING PLAN

SHEET NUMBER:
C-703

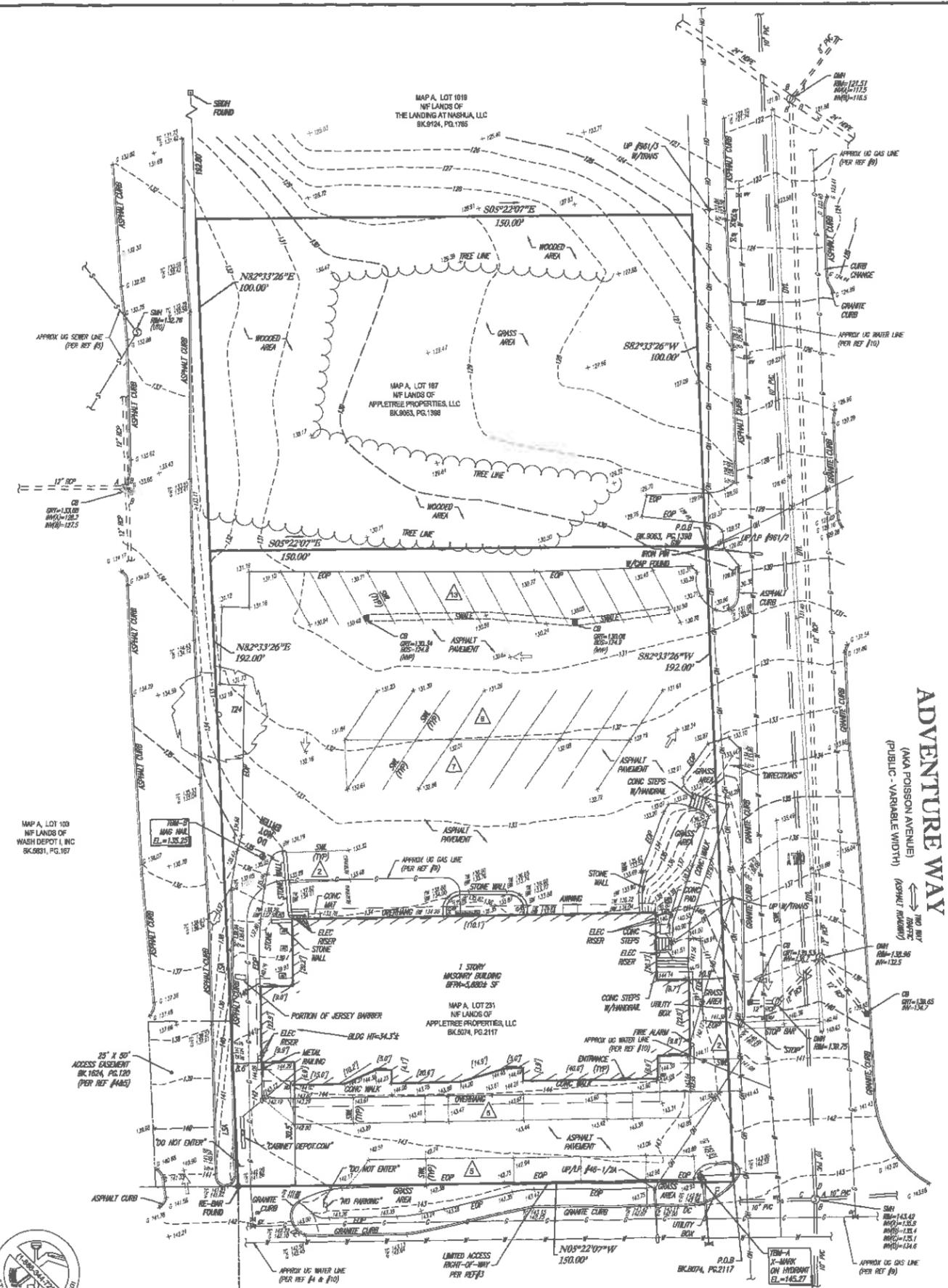
REVISION 1 - 06/04/2020

LEGEND	
	EXISTING CONTOUR
	EXISTING SPOT ELEVATION
	EXISTING TOP OF CURB ELEVATION
	EXISTING GUTTER ELEVATION
	EXISTING TOP OF WALL ELEVATION
	EXISTING BOTTOM OF WALL ELEVATION
	HYDRANT
	WATER VALVE
	GAS VALVE
	GAS METER
	OVERHEAD WIRES
	APPROX. LOC. UNDERGROUND GAS LINE
	APPROX. LOC. UNDERGROUND SANITARY / SEWER LINE
	APPROX. LOC. UNDERGROUND WATER LINE
	UTILITY POLE
	UTILITY POLE/LIGHT POLE
	GLY WIRE
	STREET LIGHT
	TRAFFIC SIGNAL POLE
	CLEAN OUT
	SIGN
	PAINTED ARROWS
	UNDER GROUND
	DEPRESSED CURB
	EDGE OF CONCRETE
	EDGE OF PAVEMENT
	LANDSCAPED AREA
	TYPICAL
	SANITARY/SEWER MANHOLE
	UNKNOWN MANHOLE
	CATCH BASIN OR INLET
	TREE & TRUNK SIZE
	SHRUBS
	SOLID WHITE LINE
	DOUBLE YELLOW LINE
	HEIGHT
	BUILDING
	BUILDING FOOTPRINT AREA
	NO VISIBLE PIPE
	ELEVATION
	POLYVINYL CHLORIDE PIPE
	HIGH DENSITY POLYETHYLENE PIPE
	INVERT ELEVATION
	GRATE ELEVATION
	BOTTOM OF STRUCTURE

NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM - NAD 83



LOCUS MAP
© 2013 ESRI WORLD STREET MAPS
NOT TO SCALE



ADVENTURE WAY
(AKA POISSON AVENUE)
(PUBLIC - VARIABLE WIDTH)
(ASPHALT ROADWAY)

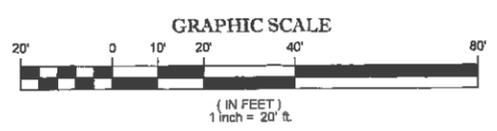
DANIEL WEBSTER HIGHWAY

NOTES:

- PROPERTY KNOWN AS LOTS 231 & 167 AS SHOWN ON THE CITY OF NASHUA, HILLSBOROUGH COUNTY, STATE OF NEW HAMPSHIRE, MAP A.
 - LOT 231 AREA = 28,781 SQUARE FEET OR 0.661 ACRES
LOT 167 AREA = 14,990 SQUARE FEET OR 0.344 ACRES.
TOTAL AREA = 43,771 SQUARE FEET OR 1.005 ACRES.
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARK-OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES' CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
 - THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
 - THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
 - BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2
 - ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD83), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETOPS) TAKEN AT THE TIME OF THE FIELD SURVEY.
- TEMPORARY BENCH MARKS SET:
- TBM-A: X-MARK ON HYDRANT BOLT AT ELEVATION 145.27.
 - TBM-B: MAG NAIL SET IN PAVEMENT AT ELEVATION 135.25.
- PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.

REFERENCES:

- THE TAX ASSESSOR'S MAP OF CITY OF NASHUA, HILLSBOROUGH COUNTY, MAP A.
- MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, HILLSBOROUGH COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS) PANEL 664 OF 701," COMMUNITY-PANEL NUMBER 330097 0654 D, EFFECTIVE DATE: SEPTEMBER 25, 2008.
- MAP ENTITLED "PLANS OF PROPOSED FEDERAL AID PROJECT NO. F 03-1(2) - LS185(1), N.H. NO. P-2850-M, F.E. EVERETT TURNPIKE" DATED DECEMBER 20, 1954, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 1417.
- MAP ENTITLED "BOUNDARY PLAN - LOT 103/SHEET A, 204 DANIEL WEBSTER HIGHWAY NASHUA, N.H." DATED SEPTEMBER 1, 1988, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 22521 IN DRAWER 93.
- MAP ENTITLED "ALTA SURVEY SITE PLAN, LOT 103 / SHEET A, 204 D.W. HIGHWAY, NASHUA, NEW HAMPSHIRE," DATED JUNE 5, 1987, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 28674 IN DRAWER 128.
- MAP ENTITLED "NASHUA LANDING SUBDIVISION, TAX MAP A, LOT 218" DATED JANUARY 2019, REVISED APRIL 11, 2019, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 40195 IN DRAWER 195.
- MAP ENTITLED "BOUNDARY PLAN, LOTS 39, 172 & 450 / SHEET A, POISSON AVENUE AND DANIEL WEBSTER HIGHWAY, NASHUA, NEW HAMPSHIRE" DATED FEBRUARY 9, 1996, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 29180 IN DRAWER 151.
- MAP ENTITLED "SEWER EASEMENT PLAN" DATED JUNE 2011, REVISED SEPTEMBER 27, 2011, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 37238 IN DRAWER 173.
- UNDERGROUND GAS MAPPING PROVIDED BY LIBERTY UTILITIES DATED FEBRUARY 26, 2020.
- UNDERGROUND WATER MAPPING PROVIDED BY PENNICHUCK WATER WORKS GIS DATED FEBRUARY 26, 2020.



UTILITIES

THE FOLLOWING COMPANIES WERE NOTIFIED BY NEW HAMPSHIRE ONE-CALL SYSTEM (1-888-344-7233) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST. REQUEST NUMBER: 20200902190

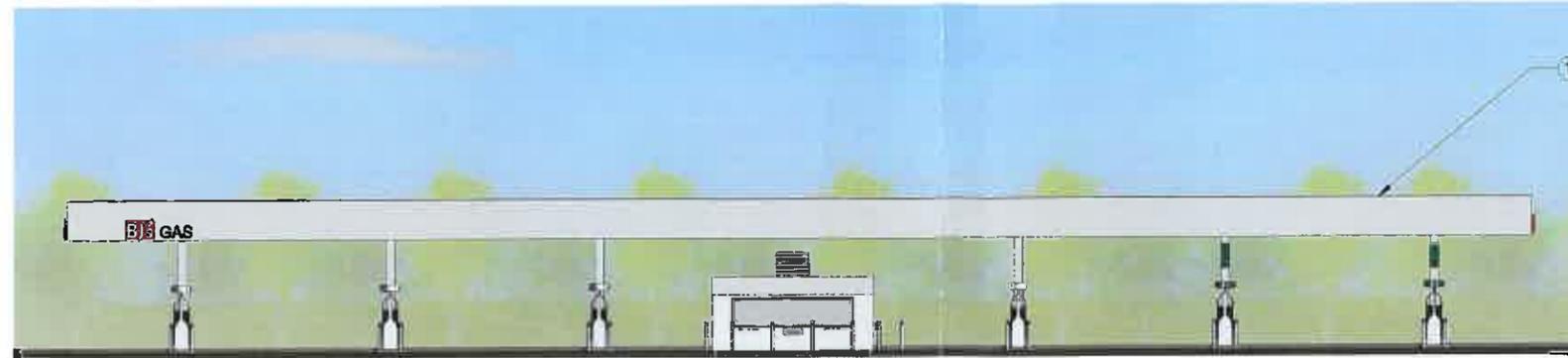
UTILITY COMPANY	PHONE NUMBER
LIBERTY UTILITIES - ENERGY NORTH GAS	800.938.7000
WCI	603.524.9522
NEW HAMPSHIRE DOT	603.271.3704
CONSOLIDATED COMMUNICATIONS	844.968.7224
EVERSOURCE - ELECTRIC	800.286.2000



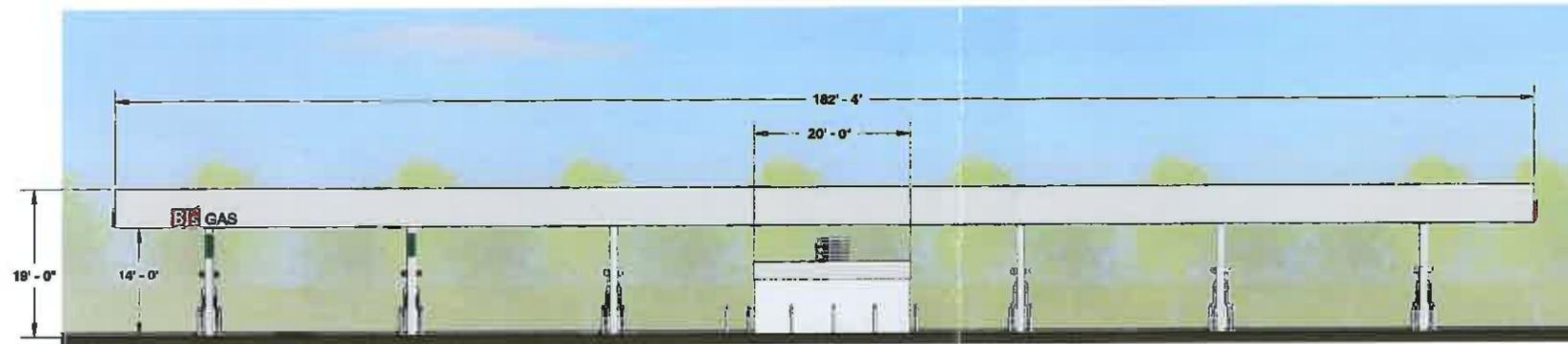
THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR STAMPED WITH A BLUE INK SEAL

FIELD DATE	2-26-2020	BOUNDARY & TOPOGRAPHIC SURVEY BJS GAS 210 DANIEL WEBSTER HIGHWAY & 101 ADVENTURE WAY LOTS 231 & 167, MAP A CITY OF NASHUA, HILLSBOROUGH COUNTY STATE OF NEW HAMPSHIRE
FIELD BOOK NO.	19-21MA	
FIELD BOOK PG.	68	
FIELD CREW	J.S.A.	
DRAWN		CONTROL POINT ASSOCIATES, INC. 332 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 ALBANY, NY 518-217-5 CHALFONT, PA 215-712-6 HAUPPAUGE, NY 631-580-2 MANHATTAN, NY 646-780-2 MT LAUREL, NJ 609-857-2



1 FRONT ELEVATION



2 BACK ELEVATION



3 LEFT ELEVATION



4 RIGHT ELEVATION

LEGEND	
1	CANOPY FASCIA - ANODIZED CLEAR
2	KIOSK EXTERIOR - REPOSE GRAY
3	KIOSK FASCIA - ANODIZED CLEAR
4	DISPENSERS (6 TOTAL)

PROPOSED FUELING FACILITY
NASHUA, NEW HAMPSHIRE