



CITY OF DOVER

PLANNING TECHNICAL REVIEW COMMITTEE –AGENDA

Meeting Type: Regular Meeting
Meeting Location: 1st Floor Conference Room – City Hall, Dover NH
Meeting Date: **Thursday, March 7, 2019**
Meeting Time: **10:30 am**

1. 10:30 AM – 11:15 AM: Site Review for One First Dover, LLC, Assessor's Map 6, Lot 20, zoned CDB-G, and located at 1 First Street. (Proposal is to raze the existing building and construct a five to six story building containing 71 residential units and 4 street-level commercial spaces totaling 6,199 sq. ft. The proposal also includes a lower level parking garage containing 29 parking spaces. A CUP application for additional sixth story will also appear before the Planning Board). (P19-16)



City of Dover, New Hampshire SITE REVIEW APPLICATION

[Revision Date: April 02, 2018]

Office Use Only	Project #:	_____	Date Received:	_____
	Amount Paid:	_____	Time Received:	_____

APPLICANT AND OWNER INFORMATION

Name of Applicant: One First Dover, LLC Telephone # 603-402-1446

Address of Applicant: 157 Main Dunstable Road, Suite 102 Nashua, NH 03060

E-Mail Address: tommy@optiline.co

Name of Property Owner (if different from applicant): Same Telephone # _____

Address of Property Owner: _____

PROPERTY INFORMATION

Address of Property: 1 First Street

Assessor's Map # 6 Lot(s) # 20

Zoning District(s) CDBG Overlay District(s) None

Size of Parcel: 23,095 sq. ft. 0.530 ac. Property Deed: Book 4510 Page: 565

Existing Use of Property: Unoccupied, former court house

SITE PLAN INFORMATION

Describe Proposed Use: Multi-family residential with street-level commercial

Area of Parcel to be Developed: 23,095 sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: 71 Units, One Bldg

Number of Parking Spaces: Existing 25 Proposed 29 (parking garage)

Highway Access (check where applicable): ☒ City Street ☐ State Highway

Number of Employees Total: Unknown In Maximum Shift: Unknown

Disposition of Parcel:

Building Footprint 16,867 sq. ft.

Total Building Area 82,648 sq. ft.

Paved Area 3,803 sq. ft.

Building Setbacks:

14.92 (1st St)
Front Yard 5.00 (2nd St) ft.

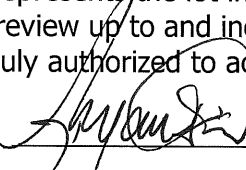
Rear Yard None ft.

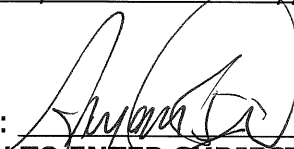
Side Yard: Right 5.93 ft. Left 11.74 ft.

City Water? ☒ Yes ☐ No How far is city water from the property? Along FrontageCity Sewer? ☒ Yes ☐ No How far is city sewer from the property? Along Frontage**BUILDING INFORMATION**Type of Building to be Built: Residential/CommercialHeight of Building: 6 Stories (First St) Finished Floor Elevation: First St 47.5
Second Street 65.5Number of Seats (where applicable) UnknownEstimated value of construction: Unknown Refuse removal: Public Private (circle one)**WAIVER REQUESTS**Site Review Regulations section(s) to be waived: NoneJustification for waiver request(s) (*attach additional sheets as needed*): _____

_____**SURVEYOR INFORMATION**Name of Surveyor and Company (Licensed in N.H.) Michael Dalberg, Keach-Nordstrom Assoc.Address 10 Commerce Park N, Suite 3 Bedford, NH 03110 Telephone #: 603-627-2881Professional License #: 714 E-mail address: mdalberg@keachnordstrom.com**ENGINEER INFORMATION**Name of Engineer and Company (Licensed in N.H.) Brenton Cole, Keach-Nordstrom Assoc.Address 10 Commerce Park N, Suite 3 Bedford, NH 03110 Telephone #: 603-627-2881Professional License #: 14744 E-mail address: bcole@keachnordstrom.com**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. Furthermore, I/we submit that the existing conditions sheet of the plan represents the lot in question, and that no alteration of the site shall take place during Planning Board review up to and including the pre-construction meeting. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

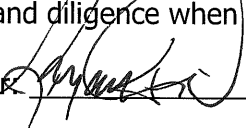
Signature of Property Owner:  Date: 2-7-19Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: 

Date: 2-7-19

AUTHORIZATION TO ENTER SUBJECT PROPERTY

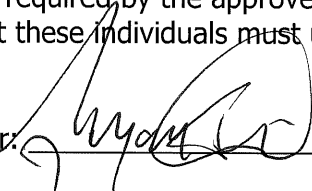
I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: 

Date: 2-7-19

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

I, and my successors, hereby the City of Dover or its assigns to enter my property for the purpose of completing the site work as required by the approved plan should the letter or credit or other surety be called. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: 

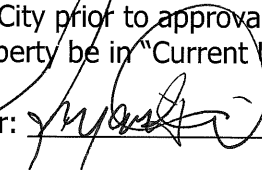
Date: 2-7-19

Signature of Applicant (if different from owner): _____

Date: _____

CERTIFICATION OF FEES

I, and my successors, hereby certify that I understand that the City of Dover collects impact fees, utility investment fees and inspection fees for projects developed in Dover. Said fees must be paid before a Certificate of Occupancy can be obtained for a structure, unless a different payment schedule is agreed to by the applicant and the City prior to approvals being issued by the Dover Planning Board. Additionally, should the property be in "Current Use" it will be subject to the Land Use Change Tax.

Signature of Property Owner: 

Date: 2-7-19

Signature of Applicant (if different from owner): _____

Date: _____



City of Dover, New Hampshire

CONDITIONAL USE PERMIT APPLICATION

[Revision Date: May 18, 2017]

Office Use Only

Project #: _____

Date Received: _____

Amount Paid: _____

Time Received: _____

APPLICANT AND OWNER INFORMATION

Name of Applicant: One First Dover, LLC Telephone # 603-402-1446

Address of Applicant: 157 Main Dunstable Road, Suite 102 Nashua, NH 03060

E-Mail Address: tommy@optiline.co

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Address of Property Owner: _____

PROPERTY INFORMATION

Assessor's Map # 6 Lot(s) # 20

Address of Property: 1 First Street

Zoning District(s) CDB-G Overlay District(s) None

Existing Use of Property: Unoccupied, former court house

CONDITIONAL USE PERMIT INFORMATION

Type of Conditional Use Permit (Check All That Apply):

- | | | |
|--|---|--|
| ☐ Conservation District | ☐ RCM Use Overlay District | ☐ I-1 District Uses |
| ☐ Groundwater Protection | ☐ Off-Street Parking and Loading | ☐ Alternative Treatment Center |
| ☐ Wetland Protection District | ☒ Central Business District | ☐ Heritage Residential District |

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

Based on Section 170-20(D) of the Zoning Ordinance, the Applicant is seeking a CUP for the number of stories of the proposed building. There will be five (5) floors of residential/commercial space and a parking garage. Due to grade differences and the location of the entrance, the parking garage is below grade on Second Street but visible from First Street. Therefore, the parking level creates an additional (6th story) of building height which requires a CUP.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NHDES Sewer Connection Permit - Pending

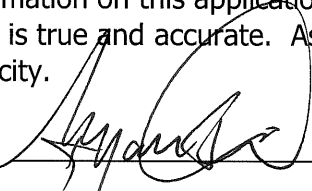
Name of Professional That Prepared Plans: Brenton Cole, Keach-Nordstrom Assoc.

Address 10 Commerce Park N, Suite 3 Bedford, NH 03110 Telephone #: 603-627-2881

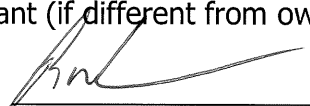
Professional License #: 14744 E-mail address: bcole@keachnordstrom.com

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

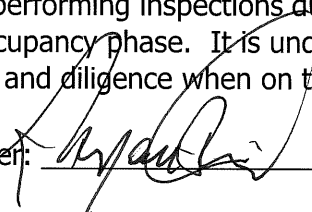
Signature of Property Owner:  Date: 2-7-19

Signature of Applicant (if different from owner): _____ Date: _____

Signature of Agent:  Date: 2/7/19

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner:  Date: 2-7-19



CHRISTOPHER A. SWINIARSKI
Admitted in NH and MA

McLane Middleton, Professional Association
900 Elm Street
Manchester, NH 03105

Direct Dial: 603.628.1322
Email: christopher.swiniarski@mclane.com

February 8, 2018

Christopher G. Parker AICP – Director of Planning
City of Dover
288 Central Avenue
Dover, NH 03820

Re: Redevelopment of 1 First Street, Dover, NH (the “Project”) – Narrative Addressing Conditional Use Permit Criteria under Section 170-20 (B) of the Dover Code

Introduction.

The purpose of this correspondence is to demonstrate the Project’s compliance with the Conditional Use Permit criteria set forth in Section 170-20 (B) of the Dover Code. Specifically, the Project consists of redeveloping the parcel with a structure that will be 5 stories in height on Second Street, and 6 stories in height on First Street. This is due to the relatively steep grade transition on the parcel, whereby the First Street frontage grade is approximately one full story below the Second Street frontage grade.

Pursuant to Section 170-20 (D), the Table of Dimensional Regulations for the CBD General Sub-District allows for 5 story building heights, and further allows for the building height and other standards to be adjusted by Conditional Use Permit pursuant to the criteria set forth in Section 170-20 (B). We address each of these criteria in turn below.

Analysis.

An exact reproduction of the text of Section 170-20 (B) is set forth below in italics. The applicant’s analysis follows each in bold.

(a) That both public and private BUILDINGS and landscaping shall contribute to the physical definition of RIGHTs OF WAY as CIVIC SPACES. The Project provides for RIGHTs of WAY that are CIVIC SPACES on both of its street frontages, i.e., First Street and Second Street. On First Street, the frontage consists of a CIVIC SPACE that is an 8’ wide stamped concrete sidewalk, accessible to the mobility impaired. This sidewalk connects to an open CIVIC SPACE at the building’s entrance that includes a granite bench and bicycle rack, along with walkways and garden plantings. On Second Street, the Project provides a

CIVIC SPACE consisting of an 8' wide brick walkway that is accessible to the mobility impaired.

(b) That development shall adequately accommodate automobiles, while respecting the pedestrian and the spatial form of public areas. The Project provides separate access for automobiles to underground parking via the garage entrance and exit on First Street. In doing so, the Project maintains the spatial form of the public areas and CIVIC SPACES by minimizing interference between the two.

(c) That the design of STREETS and BUILDINGS shall reinforce safe environments, but not at the expense of accessibility. The Project's design creates open CIVIC SPACES that are accessible to bicycles and pedestrians, including the mobility impaired. An appropriate safety barrier between vehicular traffic of both streets and the garage entrance at First Street is maintained by a vertical granite curb.

(d) That architecture and landscape design shall grow from local climate, topography, history, and BUILDING practice. The Project has been designed to accommodate the parcel's natural topography and the neighborhood's character. Specifically, the BUILDING will be finished in brick in keeping with the majority of the Sub-District, but will use modern interior construction methods and materials to maintain climate and energy efficiency. Even though the parcel grade transitions a full story between First Street and Second Street, the BUILDING design maintains a "building front" appearance on both streets.

(e) That BUILDINGS shall provide their inhabitants with a clear sense of geography and climate through energy efficient methods. The Project's BUILDING maintains the sense of geography and climate offered by the historic use of brick construction. However, the BUILDING's design will use modern interior construction materials and methods, along with energy efficient appliances, to achieve modern energy efficiency standards.

(f) That CIVIC BUILDINGS and public gathering places shall be provided as locations that reinforce community identity and activity. This criteria is not applicable because a CIVIC BUILDING is not proposed.

(g) That CIVIC BUILDINGS shall be distinctive and appropriate to a role more important than the other BUILDINGS that constitute the fabric of the city. This criteria is not applicable because a CIVIC BUILDING is not proposed.

(h) That the harmonious and orderly evolution of urban areas shall be advanced by the proposed BUILDING and/or use. The Project's BUILDING honors the historic character of brick facades and walkable mixed use communities. It provides commercial and retail opportunities on ground floors, with residential opportunities above. While maintaining the locations valuable heritage, the proposed BUILDING creates a harmonious evolution by incorporating underground parking without disturbing pedestrian access, and furthers the expansion of this architectural style beyond Main Street.

Summary.

The proposed Project at 1 First Street in Dover, NH was specifically designed to fully address the criteria of the Conditional Use Permit sought herein. When a proposed project, as a whole, meets the foregoing criteria of 170-20 (B), the Dover Code allows for adjustment of the standards of 170-20 (D), which standards impose a maximum building height of 5 stories.

In the case at hand, the proposed building is uniquely situated on a parcel that spans a full city block, having frontage on two prominent streets (First Street and Second Street). The difference in elevation between those two streets constitutes a full story of height, making the building six stories on First Street, and 5 stories on Second Street. As designed, the Project very aptly meets the criteria and objectives of 170-20 (B). A Conditional Use Permit adjusting the height regulation as pertaining to First Street is necessary and warranted, in order to turn this excellent proposal into reality.

Sincerely,

A handwritten signature in black ink, appearing to be 'CS' or similar initials, written in a cursive style.

Christopher Swiniarski

PLANNING BOARD ESTIMATED FEE SCHEDULE

This is only provided to give you an estimate of the application fees. *After you submit an application, staff will invoice you a total.* All fees must be paid two weeks before the Planning Board meeting. **If the Fee has not been paid, the item will not be placed upon the agenda.**

A. TOTAL FEE paid by cash or check made payable to "City of Dover"

1. Application fee for the following:

- SUBDIVISION \$150.00 x # _____ new lots created = \$ N/A
- LOT LINE ADJUSTMENT \$200.00 (if more than two lots involved, add \$100.00 per lot) =
- SITE REVIEW – TRANSFER OF DEVELOPMENT RIGHTS Application fee \$150.00 = \$ N/A
- SITE REVIEW - RESIDENTIAL \$100.00 x # 71 per dwelling unit = 7,100.00 \$ 7,100.00
- SITE REVIEW – NON-RESIDENTIAL (not to exceed \$10,000)
New construction \$.15 sq. ft. x # 6,199 sq. ft. = 929.85 \$ 929.85
Additions (new floor space) \$.10 per sq. ft. x # _____ sq. ft. = \$ N/A
- IMPERVIOUS PAVED AREA (for new development) OR IMPERVIOUS PARKING LOT ADDITIONS (not to exceed \$10,000) \$.07 sq. ft. x # _____ = \$ N/A
- MOTEL/HOTEL \$35.00 x # _____ per lodging unit = \$ N/A
- CHANGE OF USE (not to exceed \$5,000)
Existing floor space \$.10 per sq. ft. x # _____ sq. ft. = \$ N/A
- CONDITIONAL USE PERMIT \$150.00 x # 1 per application = 150.00 \$ 150.00
- GRAVEL PIT/ EXCAVATIONS - Application fee \$50.00 & Permit fee \$75.00 = \$ N/A
- EXTENSIONS OF/AMENDMENTS TO/WAIVERS FOR AN APPROVED PLAN (\$150.00 minimum) \$50.00 x # _____ per hour of review \$ N/A
- REQUEST FOR REZONING \$150.00 = \$ N/A
- DRIVEWAY WAIVER – \$100.00 application fee =
Letter of rejection from Engineering Department, diagram & letter from owner \$ N/A

B. Abutter Notification/Mailing Labels - this office will create and print the abutter list and provide labels in triplicate for each abutter. The applicant/owner will need to provide to this office the engineer, architect, land surveyor or soil scientist whose professional seal appears on the plan with names and addresses for notices. You will be notified with the amount due, once this has been completed.

1. Applicant & Owner, engineer, architect, land surveyor or soil scientist
Certified letters fee # 4 of x \$8.00 = 32.00
2. Certified letters fee: # of abutters 21 X \$8.00 = 168.00 \$ 200.00
3. First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X \$1.00 = \$ N/A
4. Creating/Printing Abutter Labels in triplicate per sheet _____ x \$10.00 = \$ N/A

C. Foster's newspaper public notice fee

\$ 80.00

(Revised October 2, 2018)

TOTAL FEE \$ 8,459.85



City of Dover, New Hampshire

SITE PLAN REVIEW SUBMISSION CHECKLIST

[Revision Date: June 25, 2018]

This site plan review checklist, as required by Chapter 149-6-B(2), should be completed by the applicant. It is intended to assist the applicant in the planning process of preparing a Site Plan Review application for Planning Board action. The size of the project will determine the types of information required for review, therefore, a **pre-application conference** with the Planning Department to determine the list of items that must be completed is strongly encouraged.

Fees will be invoiced and are due along with fifteen (15), folded, copies of the plan set and materials, including response to TRC comments, will be due 3 weeks prior to the Planning Board meeting.

The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan Review Regulations for full details.

APPLICANT: One First Dover, LLC File Number: _____

PROJECT TITLE: One First Dover, LLC

PROPERTY LOCATION: 1 First Street Tax Map: 6 Lot: 20

	Explain How Provided	Reviewed
1. Completed and signed Application form	✓ Hard Copy & CD	
2. Electronic copy of the engineered/surveyed plan layout	✓ CD	
3. Electronic copy of supplementary materials and application	✓ CD	
4. Traffic Impact Assessment and Analysis (Standard or Advanced)	✓ Provided by GPI	
5. Waiver requests to the Site Plan Review Regulations, with written justification	X N/A	
6. Conditional Use Permit applications	✓ Hard Copy & CD	
7. A colored rendering of the streetscape that will be created along the existing public right-of-way	✓ Hard Copy & CD	
8. A colored architectural plan showing all sides of buildings	✓ Provided by DA	
9. List of all professional agents to be notified for Planning Board	✓ Abutters List	
10. Letter to Serve from Public and Private Utilities	✓ Hard Copy & CD	
11. Eight folded copies of site plan w/scale of not less than 1"=50' or 1"=100' for larger site plans, for TRC. Plans shall contain the following items as appropriate:	✓ Hard Copy & CD	
Location map at appropriate scale	✓ Cover + Sheets 1,2	
Proposed Project name and title and Planning File #	✓ Application & Plan	
Date, north arrow and scale	✓ All Plan Sheets	
Names of all abutting property owners	✓ Abutters List & Cover	
Name and address of owners and/or applicants	✓ Application & Plan	
Signature & stamp of NH licensed land surveyor and/or engineer	✓ Plans	
Zoning District boundaries, including any special or overlay districts	✓ Sheet #1, Note #5	
Location of Conservation District areas	X N/A	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	✓ Plans	
Location and widths of existing & proposed easements & right of ways	✓ Plans	
Depict pedestrian walkways and accessible access	✓ Plans	
Location and width of existing and proposed access/egress ways	✓ Plans	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	✓ Plans	
	Explain How Provided	Reviewed

Existing and proposed topographic information at two foot intervals	✓ Plans	
Existing and proposed buildings and structure locations	✓ Plans	
Minimum building setbacks or build to lines on all lots	✓ Sheet #1, Note #5	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	✓ Plans	
Existing and proposed water lines and fire hydrants, including materials and capacity needed	✓ Plans	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	✓ Plans	
Existing and proposed stormwater lines and facilities	✓ Plans, Drain Report	
Lighting plan depicting all existing and proposed exterior light fixtures and a lighting level analysis for parking lots	✓ Sheet #9	
Location of Flood Hazard Zone	✓ Sheet #2, Note #7	
Location of all bodies of water and watercourses	✓ Sheet #1	
Location of wetlands and buffers	X N/A	
Neighborhood plan with aerial underlay showing how project relates to abutting uses within the plan set	✓ Cover	
Existing natural features and/or significant vegetation on property	✓ Sheet #2	
Depict existing contours up to 100 ft. beyond project limits	✓ Plans	
Landscape plan depicting existing and proposed landscaping, prepared by a licensed Professional Landscape Architect	✓ Sheet #8	
Location of parking layout delineating spaces and arrangement; note addressing maximum required spaces	✓ Plans	
Location, material and size of existing and proposed pavement area	✓ Plans	
Location of proposed fire lanes	X N/A	
Specify finished floor elevations of buildings	✓ Plans	
Location of solid waste disposal facilities (dumpster, pad and screening, etc.), including required screening	✓ Plans	
Depict all service, storage, loading bays and utility areas	✓ Plans	
All applicable Dover Common Site Plan notes	✓ Sheet #1	
12. Additional Information if appropriate		
Stormwater Management Plan depicting the existing & proposed storm drainage system and engineered drainage analysis	✓ Drain Report	
Stormwater Management System Operation and Maintenance Plan	✓ Drain Report	
Erosion and Sedimentation Control Plan	✓ Sheet #6	
Landscape Operation and Maintenance Plan	✓ Sheet #8	
Proposed restrictive covenants or homeowners association documents	Provided Upon Final Approval	
Dates and permit numbers of all required state and federal permits	✓ Sheet #1, Note #14	
If wetland buffer, indicate placards locations, as applicable	X N/A	
Depict test boring locations, groundwater elevations and soil profiles and/or soils types call-outs	X N/A	
Location of proposed drive-in facilities	X N/A	
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required	X N/A	

REVIEWED BY: _____ DATE _____ TRC DATE _____

February 5, 2019

Subject: **Dover Heights**
Tax Map 6; Lot 20
1 First Street, Dover, New Hampshire
KNA Project No. 17-1219-1

Project Narrative

The subject property, located between First Street & Second Street in Dover, New Hampshire, is referenced on Tax Map 6 as Lot 20. The parcel, approximately 0.53 acres in area, is located entirely within the Central Business District-General (CBDG). It is currently developed with a three-story brick building, that was previously utilized as a County Court House, a parking lot used for the public, and all associated site appurtenances. The property is serviced by municipal sewer and water, gas, and overhead electric. The site is surrounded by commercial and multi-family residential uses.

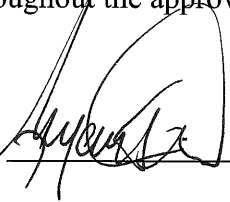
The project proposes to raze the existing building and construct a five to six-story building. Due to the elevation change between First and Second Street, the building will be 6-stories at First Street and 5-stories at Second Street. A Conditional Use Permit has been requested for relief from the 5-story maximum. The new building will contain seventy-one (71) residential units varying in bedroom count with four (4) street-level commercial spaces totaling 6,199 square feet. A lower level parking garage will be accessed off First Street with two garage doors. The garage doors are there as the preference is to 'hide the cars' as much as possible. We find in new urban design, this is something that is most advantageous to the pedestrian experience. The garage door chosen looks more like a storefront to blend with the overall street façade. Garage doors placed on the side of the building does not work with the small parcel and required setbacks. The garage will contain 29 parking spaces and the remaining spaces will be leased from the City. The development will only require 1.5 spaces per unit according to other developments we have designed in New Hampshire. Multi-family developments of this size and bedroom count do not require the maximum that Dover states in their regulations.

Stormwater management provisions, comprised of closed structures (catch basins, drain manholes & area drains) and drainage piping are proposed to collect runoff generated from the site and convey it into the existing closed system within the First Street right-of-way. Almost the entire site is paved or building today but we designed a system to mitigate all design stormwater events. Other site improvements include subsurface utility connections (sewer, water, gas, electric, cable, telephone, etc.), landscaping, and lighting. We continue to work with Eversource to resolve the overhead wiring conflicts that exist on site and are assured by Eversource that they are responsible for the relocation of these utilities.

Owner Affidavit

I, Ryan Gilson, authorized representative of One First Dover, LLC and owner of the property referenced on Tax Map 6 as Lot 20 located at 1 First Street, Dover, New Hampshire, hereby verify that I have authorized Keach-Nordstrom Associates, Inc. to submit on my behalf, any and all applicable State and local permit applications as they pertain to improvements on said properties required by or otherwise associated with Dover Heights.

Additionally, I authorize Keach-Nordstrom Associates, Inc. to aid in the representation of these applications throughout the approval process.

Signature of Owner:  _____

Address of Owner: 157 Main Dunstable Road, Suite 102
Nashua, New Hampshire 03060

Date: 2-6-19



Photo #1 – Aerial image of the subject property.



Photo #2 – Looking south, from Second Street, at the existing Court House.

Civil Engineering

Land Surveying

Landscape Architecture



Photo #3 – Looking northeast, from First Street, at the existing Court House.



Photo #4 – Looking south, toward First Street, at the existing paved parking lot.

Civil Engineering

Land Surveying

Landscape Architecture

10 Commerce Park North, Suite 3B

Bedford, NH 03110

Phone (603) 627-2881

Fax (603) 627-2915



12/21/2018

Keach-Nordstrom Associates
Brent Cole
10 Commerce Park N # 3B
Bedford, NH 03110

RE: 1 First Street LLC

Dear Brent Cole:

Comcast Cable Communications Management, LLC is authorized by the franchise authority of the City of Dover, NH. Comcast is a broadband communications provider capable of providing multi-channel Television, high speed internet, and telephone services. Comcast is looking forward to the opportunity to provide service to the Keach-Nordstrom Associates development project, located at 1 First Street, Dover NH 03820. Comcast will be able to provide these services contingent upon the following term:

- Execution of an Installation and Services Agreement mutually agreeable to Comcast and Keach-Nordstrom Associates

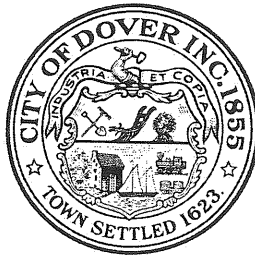
If you have any further questions, please feel free to give me a call at 978-989-4834. I look forward to working with you in the near future.

Sincerely,

Brad M Spellane

Brad M Spellane
Comcast
334 Calef Highway Epping, NH 03042
Brad_Spellane@comcast.com

DAVE WHITE, P.E.
City Engineer
d.white@dover.nh.gov



288 Central Avenue
Dover, New Hampshire 03820-4169
(603) 516-6450
www.dover.nh.gov

City of Dover, New Hampshire
COMMUNITY SERVICES DEPARTMENT

January 3, 2019

Brenton J. Cole, P.E.
Project Manager
Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3
Bedford, NH 03110

RE: Tax Map 6 Lot 20-1 First Street

To Whom It May Concern:

This letter is written confirmation that the City of Dover is able to serve the above referenced development with water and sanitary sewer service. Water and sanitary sewer work shall conform to the City's Water and Sewer Ordinances, as well as the requirements of Dover's Community Services Utilities Division. There is also adequate supply and capacity in the water and sewer system. If you have any questions, please feel free to call me at 516-6450.

Sincerely,

Dave White

Dave White, PE
City Engineer



January 2, 2019

One First Dover, LLC
157 Main Dunstable Rd, Suite 102
Nashua NH 03060

RE: Natural Gas Availability to 1 First St Dover NH

Dear Sir/Madam

Unitil's natural gas division has reviewed the requested site for natural gas service.

Unitil hereby confirms natural gas service will be available to 1 First St, Dover, NH. Installation is pending an authorized installation agreement with One First Dover, LLC and a street opening approval from the City of Dover DPW. This Will Serve letter is not an agreement to install natural gas.

Let me know if you have any questions. You can email me at oliver@unitil.com. My phone number is 603-294-5174.

Sincerely,

Janet Oliver
Business Development Representative

Abutter's List
One First Dover, LLC
Dover, NH
KNA # 17-1219-1

Tax Map	Lot	Owner/Applicant
6	20	One First Dover, LLC 157 Main Dunstable Rd, Suite 102 Nashua, NH 03060
Tax Map	Lot	Abutter
6	1	Brian & Stephanie Fischer 46 North River Road Lee, NH 03824
6	3	Riparia-One Hundred First Street, LLC 466 Central Ave, Suite 12 Dover, NH 03820
6	15	KAB Realty Management, LLC 35 Third Street Dover, NH 03820
6	16	Colleen F. & Aillinn Connors 21 First Street Dover, NH 03820
6	17	Holgate Limited Partnership 130 Central Ave Dover, NH 03820
6	18	Soudakim, LLC 310 Dover Point Road Dover, NH 03820
6	19	Troy S. & Roxane E. Dillow PO Box 1464 Rochester, NH 03866
6	21-A	Peter T. & Joan Henry 454 Central Ave Dover, NH 03820
6	21-1	Build Upon, LLC 56 Summer Street Dover, NH 03820

6	21-2	Marker 21 Holdings, LLC 130 Central Ave Dover, NH 03820
6	21-3	Cartelli's, LLC 356 Tolend Road Dover, NH 03820
6	22	West Concord Investments, LLC 222 Cass Street Portsmouth, NH 03801
6	24, 25	David R. & Stacey L. Camire 281 Washington Street Dover, NH 03820
6	26	Jean Field 24 Second Street Dover, NH 03820
6	33, 38, 39	Ross Furniture Company, Inc. 38 Third Street Dover, NH 03820
6	34	Phyllis L. Woods, Trustee Phyllis L. Woods Rev Trust 1 Barry Street Dover, NH 03820
6	35A, 36, 36A	Bamford Investment Co., LLC 466 Central Ave, Suite 12 Dover, NH 03820
6	35	Soudakim, LLC P.O. Box 1813 Dover, 03821
6	37	Anbelwold, LLC 334 Route 108 Madbury, NH 03823
3	64	Pillar Investment Corp. 340 Central Ave #202 Dover, NH 03820

Cocheco Mills Holdings, LLC
3 Penstock Way
Newmarket, NH 03857

Professionals to be notified:

Engineer/Surveyor

Keach-Nordstrom Associates Inc.
10 Commerce Park North, Suite 3B
Bedford, NH 03110

Traffic Engineer

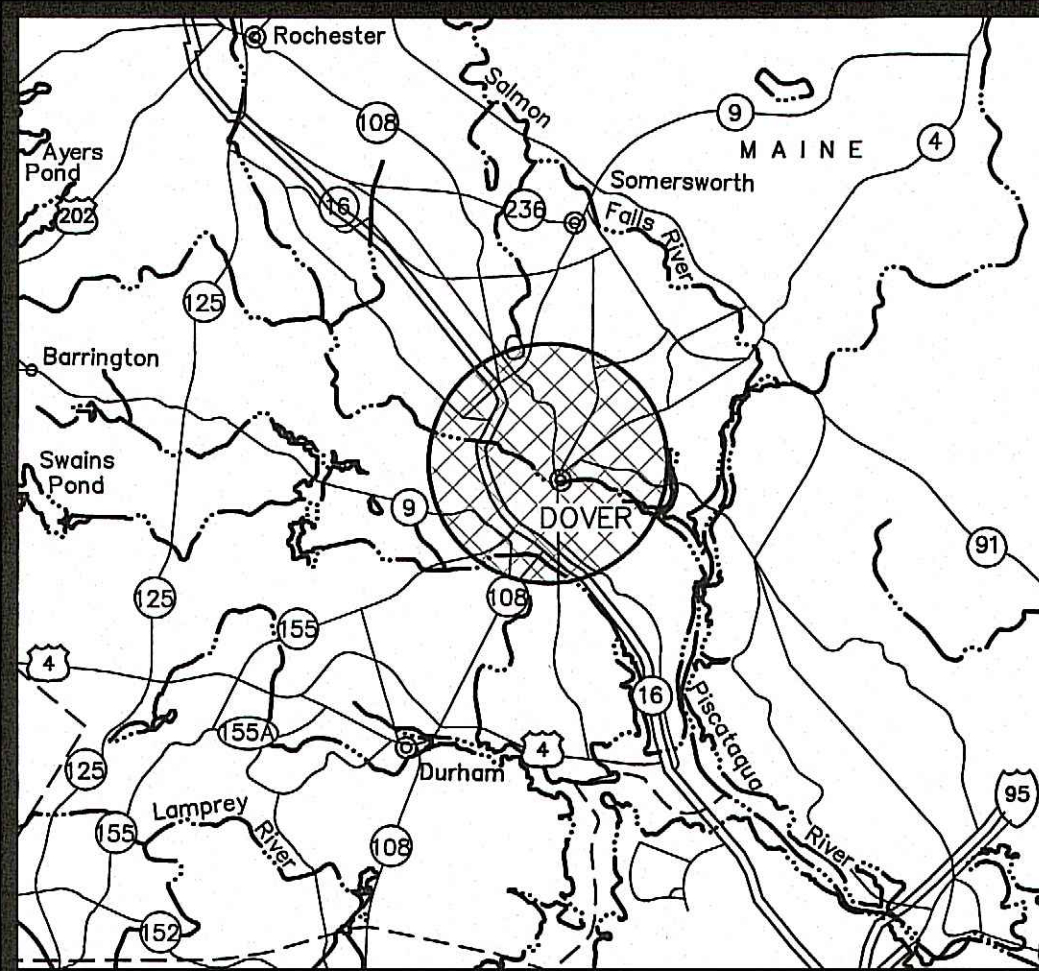
Greenman-Pedersen, Inc.
181 Ballardvale Street, Suite 202
Wilmington, MA 01887

Architect

DeStefano Architects
22 Ladd Street
Portsmouth, NH 03801

P19-16 & P19-17 1 First Street

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
03064-000000	451 457 CENTRAL AV	PILLAR INVESTMENT CORP		340 CENTRAL AVE #202	DOVER	NH	03820
03066-000000	427 CENTRAL AV	COCHeco MILLS HOLDINGS LLC		3 PENSTOCK WAY	NEWMARKET	NH	03857-4416
03067-000000	421 CENTRAL AV	421 CENTRAL AVENUE LLC		113 BUNKER HILL AVENUE	STRATHAM	NH	03885
06001-000000	432 CENTRAL AV	FISCHER BRIAN &	FISCHER STEPHANIE	46 NORTH RIVER ROAD	LEE	NH	03824
06003-000000	100 FIRST ST	RIPARIA - ONE HUNDRED FIRST STREET LLC		466 CENTRAL AVE STE 12	DOVER	NH	03820
06015-000000	23 25 FIRST ST	KAB REALTY MANAGEMENT LLC		35 THIRD ST	DOVER	NH	03820-3316
06016-000000	21 FIRST ST	CONNORS COLLEEN F &	CONNORS AILLINN	21 FIRST ST	DOVER	NH	03820
06017-000000	19 FIRST ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06018-000000	17 FIRST ST	SOUDAKIM LLC		310 DOVER POINT RD	DOVER	NH	03820
06019-000000	13 15 FIRST ST	DILLOW TROY S &	DILLOW ROXANE E	PO BOX 1464	ROCHESTER	NH	03866
06021-001000	436 CENTRAL AV	BUILD UPON LLC		56 SUMMER ST	DOVER	NH	03820
06021-002000	442 CENTRAL AV	MARKER 21 HOLDINGS LLC		130 CENTRAL AVE	DOVER	NH	03820
06021-003000	446 448 CENTRAL AV	CARTELLI'S LLC		356 TOLEND RD	DOVER	NH	03820-5604
06021-A00000	450 CENTRAL AV	HENRY PETER T &	HENRY JOAN	454 CENTRAL AVE	DOVER	NH	03820
06022-000000	14 16 SECOND ST	WEST CONCORD INVESTMENTS LLC		222 CASS ST	PORTSMOUTH	NH	03801-4945
06024-000000	18 20 SECOND ST	CAMIRE DAVID R &	CAMIRE STACEY L	281 WASHINGTON ST	DOVER	NH	03820-3608
06025-000000	22 SECOND ST	CAMIRE DAVID R &	CAMIRE STACEY L	281 WASHINGTON ST	DOVER	NH	03820-3608
06026-000000	24 26 SECOND ST	FIELD JEAN		24 SECOND ST	DOVER	NH	03820
06033-000000	23 SECOND ST	ROSS FURNITURE COMPANY INC		38 THIRD STREET	DOVER	NH	03820
06034-000000	17 19 SECOND ST	WOODS PHYLLIS L TRUSTEE	WOODS PHYLLIS L REV TRUST	1 BARRY STREET	DOVER	NH	03820
06035-000000	11 13 SECOND ST	SOUDAKIM LLC	C/O ARTHUR THOMAS PROPERTIES	278 WASHINGTON ST	DOVER	NH	03820
06035-A00000	SECOND ST	BAMFORD INVESTMENT CO LLC		466 CENTRAL AVE SUITE 12	DOVER	NH	03820
06036-000000	456 478 CENTRAL AV	BAMFORD INVESTMENT CO LLC		466 CENTRAL AVE SUITE 12	DOVER	NH	03820
06036-A00000	4 THIRD ST	BAMFORD INVESTMENT CO LLC		466 CENTRAL AVE SUITE 12	DOVER	NH	03820
06037-000000	18 THIRD ST	ANBELWOLD LLC		334 ROUTE 108	MADBURY	NH	03823
06038-000000	22 THIRD ST	ROSS FURNITURE COMPANY INC		38 THIRD STREET	DOVER	NH	03820
06039-000000	30 THIRD ST	ROSS FURNITURE COMPANY INC		38 THIRD STREET	DOVER	NH	03820
		ONE FIRST DOVER, LLC		157 MAIN DUNSTABLE ROAD, SUITE 102	NASHUA	NH	03060
		KEACH-NORDSTROM ASSOCIATES	BRENTON COLE	10 COMMERCE PARK N, SUITE 3	BEDFORD	NH	03110
		GREENMAN-PEDERSEN, INC		181 BALLARDVALE STREET, SUITE 202	WILMINGTON	MA	01887
		DESTEFANO ARCHITECTS		22 LADD STREET	PORTSMOUTH	NH	03801



VICINITY PLAN
NOT TO SCALE

ABUTTERS:

- 3-64 PILLAR INVESTMENT CORP
340 CENTRAL AVENUE #202, DOVER, NH 03820
- 3-66 COCHECO MILLS HOLDINGS LLC
3 PENSTOCK WAY, NEWMARKET, NH 03857-4416
- 3-67 421 CENTRAL AVENUE LLC
113 BUNKER HILL AVENUE, STRATHAM, NH 03885
- 6-1 BRIAN & STEPHANIE FISCHER
46 NORTH RIVER ROAD, LEE, NH 03824
- 6-3 RIPARIA-ONE HUNDRED FIRST STREET, LLC
446 CENTRAL AVENUE, STE 12 DOVER, NH 03820
- 6-15 KAB REALTY MANAGEMENT LLC
35 THIRD STREET, DOVER, NH 03820-3316
- 6-16 CONNORS COLLEEN F & CONNORS AILLINN
21 FIRST STREET, DOVER, NH 03820
- 6-17 HOLGATE LIMITED PARTNERSHIP
130 CENTRAL AVENUE, DOVER, NH 03820
- 6-18 SOUDAKIM LLC
310 DOVER POINT ROAD, DOVER, NH 03820
- 6-19 TROY S. & ROXANE E. DILLOW
P.O. BOX 1464, ROCHESTER, NH 03866
- 6-21-1 BUILD UPON, LLC
56 SUMMER STREET, DOVER, NH 03820
- 6-21-2 MARKER 21 HOLDINGS, LLC
130 CENTRAL AVENUE, DOVER, NH 03820
- 6-21-3 CARTELLI'S, LLC
356 TOLEND ROAD, DOVER, NH 03820
- 6-21A PETER T. & JOAN HENRY
454 CENTRAL AVENUE, DOVER, NH 03820
- 6-22 WEST CONCORD INVESTMENTS, LLC
222 CASS STREET, PORTSMOUTH, NH 03801-4945
- 6-24, 25 DAVID R. & STACEY L. CAMIRE
281 WASHINGTON STREET, DOVER, NH 03820
- 6-26 JEAN FIELD
24 SECOND STREET, DOVER, NH 03820
- 6-33, 38 ROSS FURNITURE COMPANY INC.
38 THIRD STREET, DOVER, NH 03820
- 6-34 WOODS PHYLLIS L TRUSTEE WOODS PHYLLIS L REV TRUST
1 BARRY STREET, DOVER, NH 03820
- 6-35 SOUDAKIM, LLC
P.O. BOX 1813, DOVER, 03821-1813
- 6-35A, BAMFORD INVESTMENT CO., LLC
36 & 36A 466 CENTRAL AVENUE, SUITE 12, DOVER, NH 03820
- 6-37 ANBELWOLD LLC
334 ROUTE 108, MADBURY, NH 03823

OWNER/APPLICANT:

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE ROAD
SUITE 102
NASHUA, NH 03060

PREPARED BY:

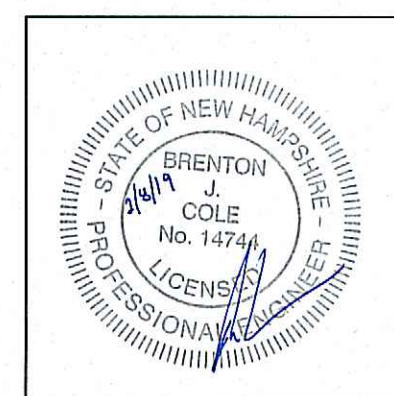
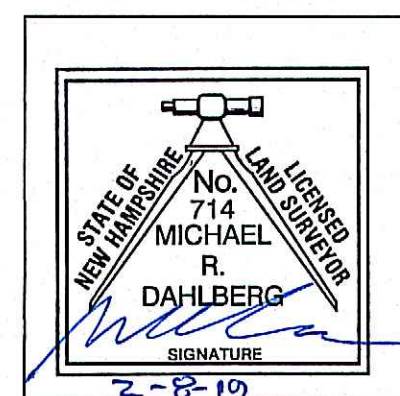
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881

ARCHITECT:

DESTEFANO ARCITECTS
22 LADD STREET
PORTSMOUTH, NH 03801



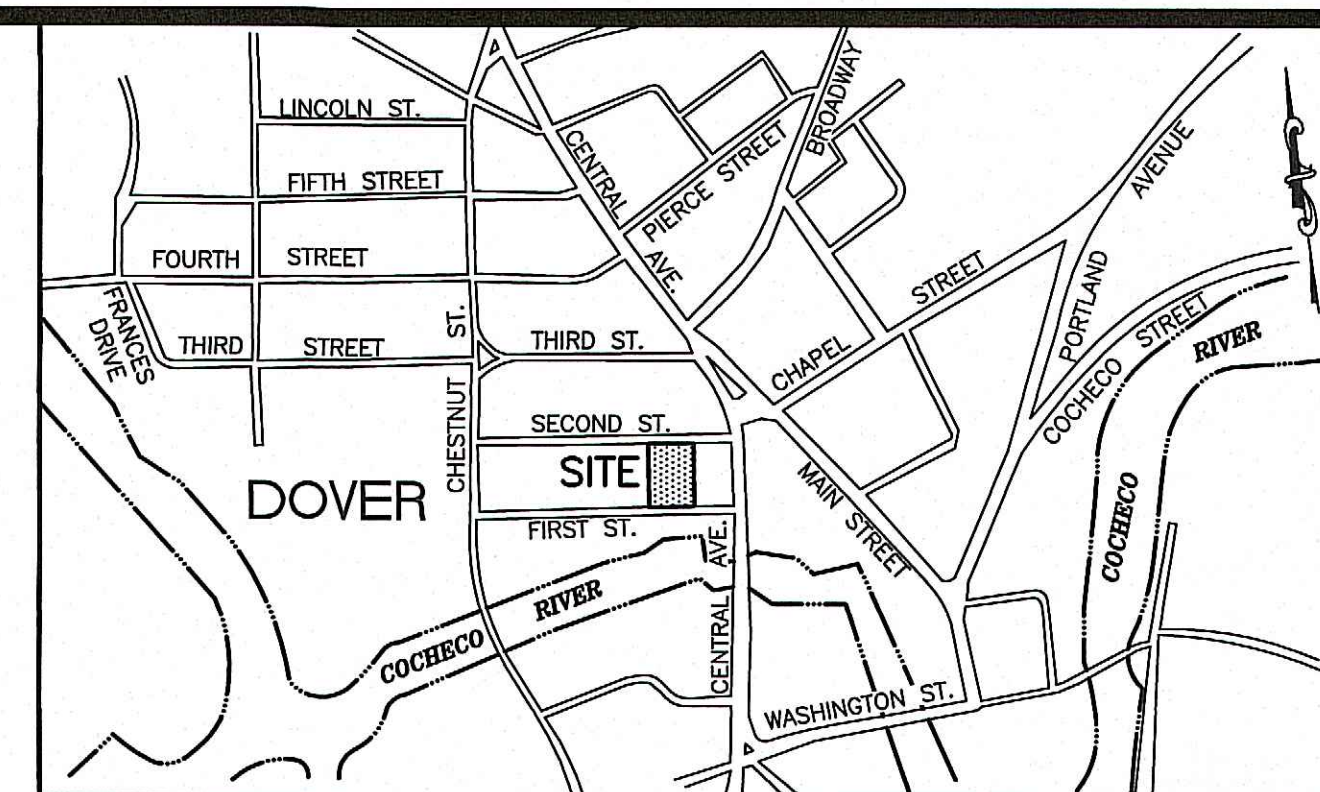
NEIGHBORHOOD MAP
SCALE: 1" = 200'±



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

JANUARY 22, 2019

PROJECT NO. 17-1219-1



VICINITY MAP
SCALE: 1"=500'±



SHEET TITLE

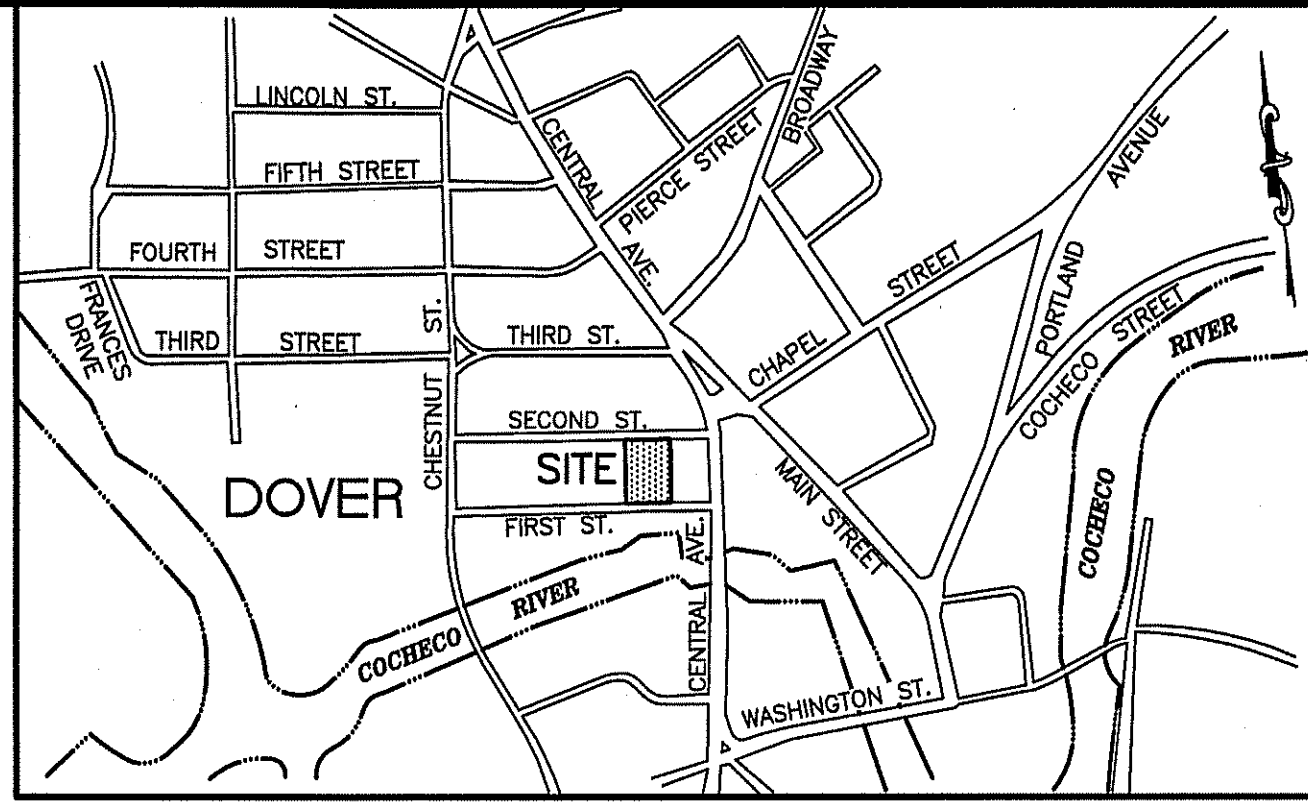
MASTER PLAN
EXISTING CONDITIONS PLAN
REMOVALS / DEMOLITION PLAN
SITE LAYOUT PLAN
GRADING & DRAINAGE PLAN
EROSION CONTROL PLAN
UTILITY PLAN
LANDSCAPE PLAN
LIGHTING PLAN
PROFILES
CONSTRUCTION DETAILS

SHEET No.

1
2
3
4
5
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11 - 15

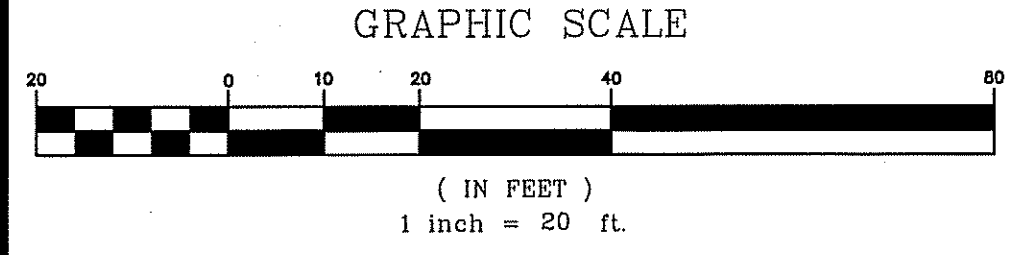
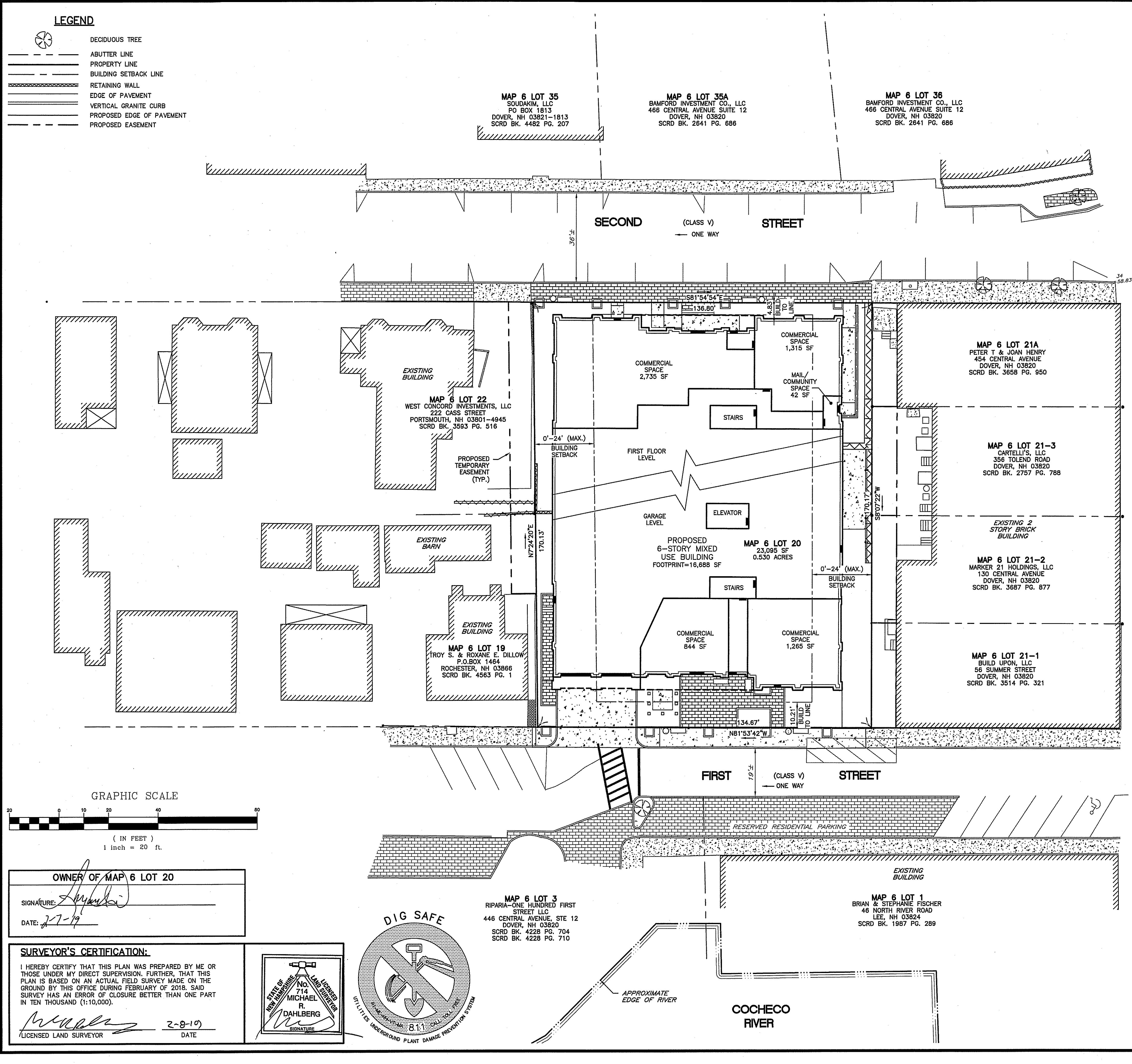
T:\project\1712191.dwg Production Drawings\1712191-SITEPLAN.dwg, MASTER, 2/8/2019 9:20:03 AM, bscale, \\kno-nevsever\SAVIN MP W6700 PS 22" x 34" 1:1

- LEGEND**
- DECIDUOUS TREE
 - ABUTTER LINE
 - PROPERTY LINE
 - BUILDING SETBACK LINE
 - RETAINING WALL
 - EDGE OF PAVEMENT
 - VERTICAL GRANITE CURB
 - PROPOSED EDGE OF PAVEMENT
 - PROPOSED EASEMENT



VICINITY PLAN
SCALE: 1"=500'±

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED SIX-STORY 71-UNIT RESIDENTIAL BUILDING WITH STREET LEVEL COMMERCIAL SPACE AND A LOWER LEVEL PARKING GARAGE OFF FIRST STREET ON MAP 6 LOT 20.
 - OWNER OF RECORD:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE ROAD, STE. 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565
 - REFERENCE SUBJECT PARCEL AS MAP 6 LOT 20 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.
 - AREA OF PARCEL = 0.5301 ACRES OR 23,095 SQUARE FEET.
 - CURRENT ZONING: CENTRAL BUSINESS DISTRICT (CBD) GENERAL SUB-DISTRICT
MINIMUM LOT REQUIREMENTS: MINIMUM PROPOSED
LOT SIZE: N/A 23,095 SF
LOT COVERAGE: 75% 75.3%
FRONTAGE BUILD OUT: 70% MINIMUM 87% (FIRST ST.), 84% (SECOND ST.)
MINIMUM BUILDING SETBACKS: FRONT BUILD TO LINE 10.21 FT (FIRST ST.), 14.92 FT (FIRST ST.)
4.83 FT (SECOND ST.), 5.00 FT (SECOND ST.)
0 FT - 24 FT (MAXIMUM) 5.93 FT (WEST), 11.74 FT (EAST)
SIDE REAR N/A
MAXIMUM BUILDING HEIGHT: 5 STORIES 6 STORIES *
* CONDITIONAL USE PERMIT REQUIRED
 - PARKING:
MAXIMUM ALLOWED:
RESIDENTIAL (CBD-G):
1.25 SPACES/UNIT x 71 UNITS + 0.4 VISITOR SPACES/UNIT x 71 UNITS = 117.15 SPACES
RETAIL/SERVICE:
6,199 SF @ 1 SPACE/275 SF = 22.54 SPACES
MAXIMUM TOTAL SPACES ALLOWED: = 117 SPACES **
TOTAL SPACES PROVIDED:
1.1 SPACE/UNIT x 71 UNITS + 0.4 VISITOR SPACE/UNIT x 71 UNITS = 106.5 SPACES
~ 107 SPACES
29 SPACES PROVIDED IN GARAGE (INCLUDES 2 HANDICAP SPACES)
78 SPACES LEASED FROM CITY WITH 5 YEAR AGREEMENT
** WHERE COMMERCIAL AND RESIDENTIAL USES ARE CO-LOCATED ONLY THE RESIDENTIAL PARKING SHALL BE PERMITTED.
 - THE APPLICANT SHALL REQUIRE THAT STREET PARKING IS PROHIBITED FOR RESIDENTIAL TENANTS, GUESTS AND COMMERCIAL SPACE EMPLOYEES. STREET PARKING IS INTENDED FOR COMMERCIAL CUSTOMERS ONLY.
 - ANY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A NH LICENSED LAND SURVEYOR AFTER ALL CONSTRUCTION ACTIVITY WHICH COULD FURTHER DISTURB THEM HAS BEEN COMPLETED.
 - THE SITE IS SERVICED BY MUNICIPAL WATER AND SEWER.
 - COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
 - THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS.
 - AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF THE PROJECT AS SPECIFIED IN THE REGULATIONS.
 - A CONDITIONAL USE PERMIT IS REQUESTED FOR SECTION 170-20.D BUILDING HEIGHT.
 - REQUIRED PERMITS PERMIT STATUS PERMIT EXPIRES
NHDES SEWER CONNECTION PERMIT
FAA NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION (FORM 7460-1)
15. SHOULD THE VOLUME OF SNOW EXCEED THE CAPACITY OF THE ON-SITE STORAGE AS SHOWN, THE EXCESS SNOW SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE, LOCAL AND FEDERAL LAWS.
 - THE PROJECTED DISTURBANCE IS LESS THAN 1 ACRE, THEREFORE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT IS NOT REQUIRED.
 - TEMPORARY CONSTRUCTION EASEMENTS LISTED ON PLANS HAVE BEEN DISCUSSED WITH ABUTTERS, FORMAL AGREEMENTS WILL BE FINALIZED PRIOR TO FINAL APPROVAL.
 - DUMPSTERS TO BE SIZED TO MEET ADA REACH REGULATION.



OWNER OF MAP 6 LOT 20

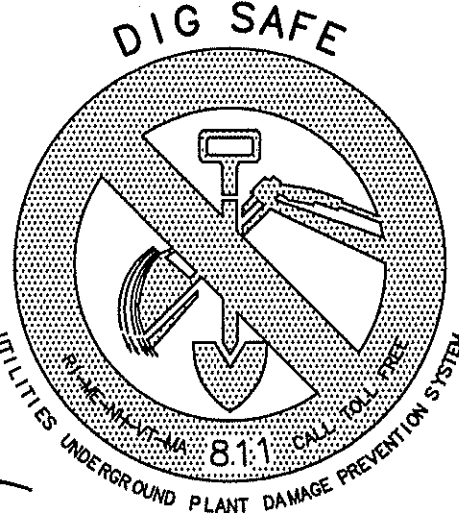
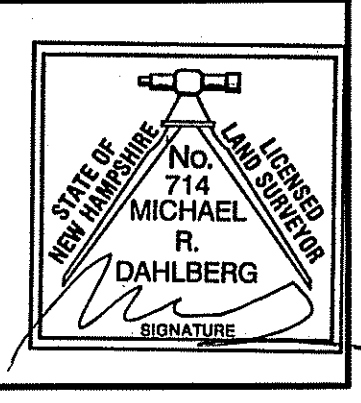
SIGNATURE: *[Signature]*

DATE: 2-7-19

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND BY THIS OFFICE DURING FEBRUARY OF 2018. SAID SURVEY HAS AN ERROR OF CLOSURE BETTER THAN ONE PART IN TEN THOUSAND (1:10,000).

[Signature] 2-8-19
LICENSED LAND SURVEYOR DATE



MAP 6 LOT 3
RIPARIA-ONE HUNDRED FIRST STREET LLC
446 CENTRAL AVENUE, STE 12
DOVER, NH 03820
SCRD BK. 4228 PG. 704
SCRD BK. 4228 PG. 710

MAP 6 LOT 1
BRIAN & STEPHANIE FISCHER
46 NORTH RIVER ROAD
LEE, NH 03824
SCRD BK. 1987 PG. 289

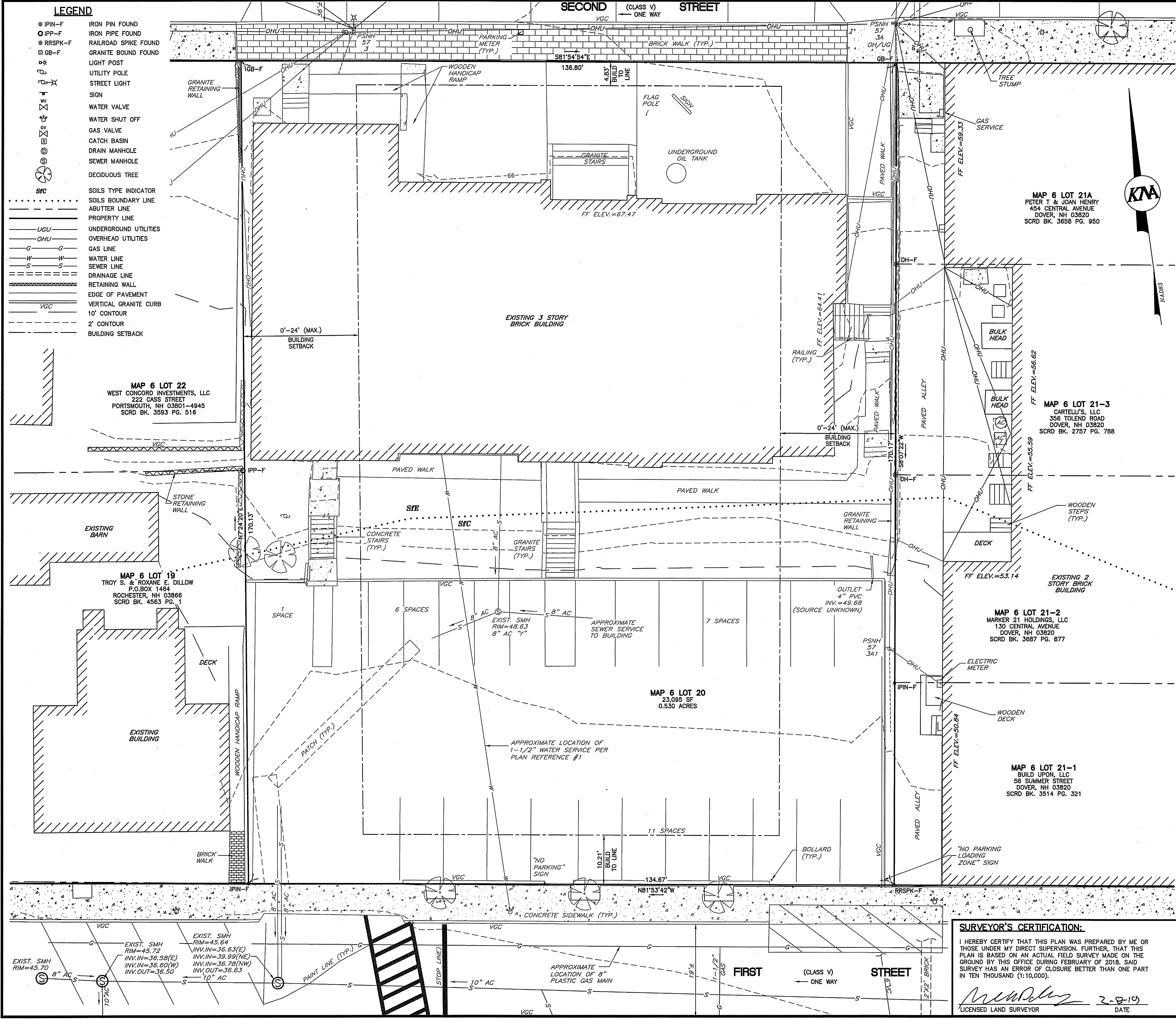
**MASTER PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #**

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

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

REVISIONS			
No.	DATE	DESCRIPTION	BY
DATE: JANUARY 22, 2019		SCALE: 1" = 20'	
PROJECT NO: 17-1219-1		SHEET 1 OF 15	

T:\project\1712191.dwg (Production Drawings) 1712191-1 SITE PLAN.dwg, EXIST. 2/8/2019 9:20:37 AM, bcolor, \\kna-news\server\SAVIN MP W6700 PS, 22" x 34", 1:1



VICINITY PLAN
SCALE: 1"=500'±

REFERENCE PLANS:

- STANDARD PROPERTY / EXISTING CONDITIONS SURVEY, LAND OF FREEBOARD PROPERTIES. FIRST STREET, MAP 6, LOT 20, DOVER, N.H. SCALE: 1"=10'. DATED: SEPTEMBER 22, 2016. PREPARED BY CIVIL CONSULTANTS OF SOUTH BERWICK, MAINE. UNRECORDED.
- SUBDIVISION PLAN PREPARED FOR: ROGERS LIVING TRUST "NATIONAL BLOCK", 436-446 CENTRAL AVENUE, DOVER, NEW HAMPSHIRE. SCALE: 1"=10'. DATED: OCTOBER 3, 1996. PREPARED BY MCNEANEY SURVEY ASSOCIATES, INC. SCRD PLAN 49-18.

NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS FOR ASSESSOR'S MAP 6 LOT 20 IN DOVER, NEW HAMPSHIRE AND NO OTHER PURPOSE.
- AREA OF PARCEL = 23,095 SF, OR 0.5301 ACRES
- OWNER OF RECORD: ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE ROAD, STE. 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565
- CURRENT ZONING: CENTRAL BUSINESS DISTRICT (CBD) GENERAL SUB-DISTRICT
MINIMUM LOT REQUIREMENTS:
LOT SIZE: N/A
LOT COVERAGE: 75%
FRONTAGE BUILD OUT: 70% MINIMUM
MINIMUM BUILDING SETBACKS:
FRONT BUILD TO LINE: 10.21 FT (FIRST ST.), 4.83 FT (SECOND ST.)
SIDE: 0 FT - 24 FT (MAXIMUM)
REAR: N/A
MAXIMUM BUILDING HEIGHT: 5 STORIES
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS THE RESULT OF AN ACTUAL FIELD SURVEY PERFORMED BY THIS OFFICE IN FEBRUARY OF 2018.
- HORIZONTAL DATUM IS NAD83. NORTH ORIENTATION IS NAD83. VERTICAL DATUM IS NAVD88.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE CITY OF DOVER NEW HAMPSHIRE, STRAFFORD COUNTY, COMMUNITY PANEL NUMBERS 330145 0310E PANEL NUMBER 310 OF 405. EFFECTIVE DATE: SEPTEMBER 30, 2015 AND 330145 0330E PANEL NUMBER 330 OF 405 INDICATE THAT A PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN ZONE X WITH A 0.2% ANNUAL CHANCE OF FLOOD.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE STRAFFORD COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.

DIG SAFE

SCS SOILS LEGEND

SFC SUFFIELD SILT LOAM, 8 TO 15% SLOPES

SFE SUFFIELD SILT LOAM, 15 TO 35% SLOPES

SOURCE: USDA-SCS WEB SOIL SURVEY STRAFFORD COUNTY

GRAPHIC SCALE

10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

EXISTING CONDITIONS PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

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

SURVEYOR'S CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND BY THIS OFFICE DURING FEBRUARY OF 2018. SAID SURVEY HAS AN ERROR OF CLOSURE BETTER THAN ONE PART IN TEN THOUSAND (1:10,000).

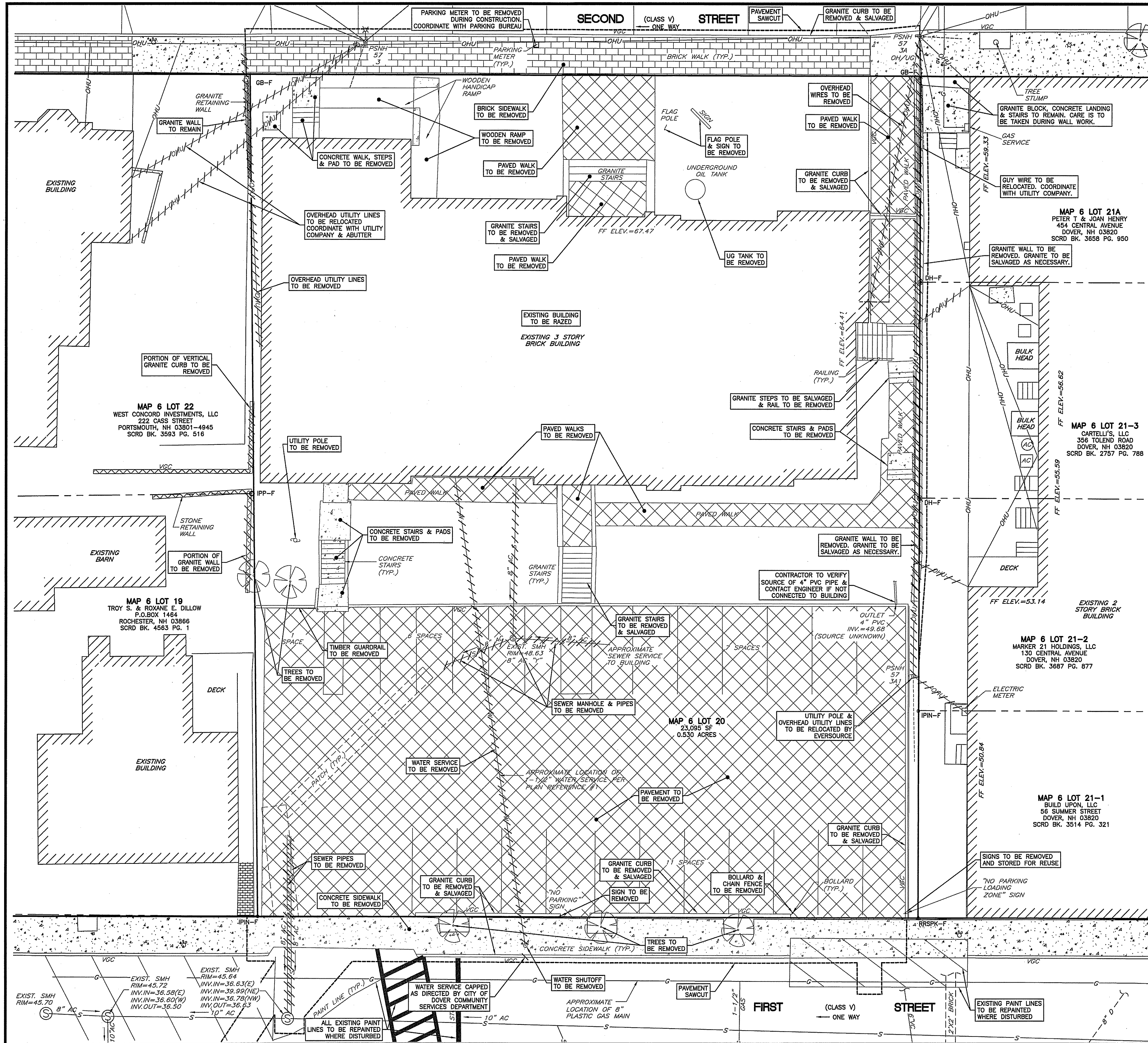
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: JANUARY 22, 2019 **SCALE:** 1" = 10'

PROJECT NO: 17-1219-1 **SHEET** 2 OF 15

T:\project\1712191.dwg Production Drawings\1712191-SITEPLAN.dwg, REMOVALS, 2/8/2019 9:21:16 AM, bcole, \\nro-newservers\SAVIN MP, W6700 PS, 22" x 34", 1:1



REMOVALS/DEMOLITION NOTES:

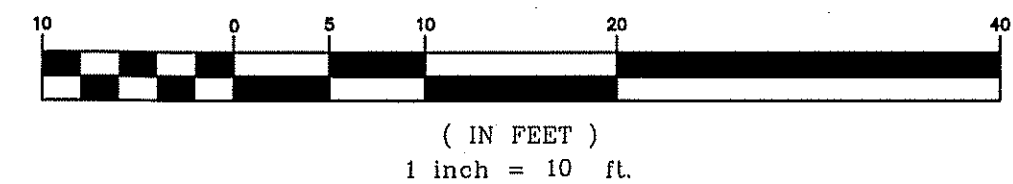
1. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING FEATURES ON SITE TO BE REMOVED, SALVAGED OR REPLACED.
2. ALL STUMPS, ROOTS, BRANCHES, BRUSH, WOODS AND OTHER PERISHABLE MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF BY AN APPROVED METHOD.
3. ITEMS TO BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE CITY OF DOVER REQUIREMENTS, UNLESS OTHERWISE SHOWN HEREON OR DIRECTED BY OWNER.
4. ALL EXISTING PAVEMENT AND GRAVEL WITHIN THE CROSS HATCHED AREA IS TO BE REMOVED DURING THE DEMOLITION PHASE OF THE PROJECT. EXCESS MATERIAL FROM THESE AREAS SHALL BE APPROPRIATELY DISPOSED OF OFFSITE BY AN APPROVED METHOD.
5. THE CONTRACTOR SHALL CONTROL ALL DUST GENERATED DURING THE REMOVAL PHASE AND CONSTRUCTION PHASE SO THAT NO DUST LEAVES THE SITE.
6. ANY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AT THE SITE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
8. DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
9. GRANITE STEPS, CURBING AND WALL ELEMENTS TO BE SALVAGED AND STORED FOR REUSE IN PROPOSED HARDSCAPE.
10. REMOVAL AND DISPOSAL OF EXISTING OIL TANK TO BE DONE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
11. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE AND APPROVED CONSTRUCTION SIGN SHALL BE IN PLACE PRIOR TO ANY EARTH DISTURBING ACTIVITY.
12. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE CITY ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
13. AN EXCAVATION PERMIT IS REQUIRED TO GRADE, FILL, DISTURB, EXCAVATE OR OPEN THE GROUND OR PAVEMENT IN ANY PUBLIC ROAD, SIDEWALK, OR ON CITY PROPERTY OR CITY RIGHT-OF-WAY.
14. AN OBSTRUCTION PERMIT IS REQUIRED PRIOR TO OBSTRUCTING A PUBLIC ROAD, CITY RIGHT-OF-WAY, OR SIDEWALK.
15. ACCESS TO ADJUTING PROPERTIES AND SHARED LOADING AREA TO BE MAINTAINED. WHEN OBSTRUCTION IS UNAVOIDABLE, CONTRACTOR SHALL NOTIFY ADJUTING PROPERTIES AT LEAST 24 HOURS IN ADVANCE.

DEMOLITION SEQUENCE:

1. OBTAIN OBSTRUCTION AND EXCAVATION PERMITS FROM THE CITY OF DOVER.
2. PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE CITY ENGINEER.
3. CONTACT DIGSAFE AT 811.
4. CONTINUE COORDINATION WITH EVERSOURCE TO REMOVE POLE PSNH 57/3A1 AND RELOCATE THE LINES.
5. CONTACT UTILITY COMPANIES TO ARRANGE REMOVAL OF OVERHEAD LINES TO BUILDING AND RELOCATION OF LINES TO 14 SECOND STREET.
6. INSTALL DANDY BAGS CATCH BASIN INLET PROTECTION (5 CATCH BASINS ON FIRST STREET, 5 CATCH BASINS ON SECOND STREET).
7. REMOVE PARKING METER AND COORDINATE WITH DOVER POLICE DEPARTMENT PARKING BUREAU FOR DISPOSITION.
8. REMOVE AND DISPOSE OF 3 STREET TREES ON FIRST STREET, 2 TREES ALONG THE SECOND STREET SIDE, AND 2 TREE CLUSTERS ALONG THE WEST SIDE. REMOVE SHRUBS. ALL TREES AND SHRUBS SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:63 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
9. REMOVE BRICK SIDEWALK ON SECOND STREET, SALVAGE, AND STOCKPILE VERTICAL GRANITE CURB.
10. REMOVE PAVED WALKS, SALVAGE AND STOCKPILE GRANITE STEPS.
11. PEST ANALYSIS TO BE COMPLETED PRIOR TO OBTAINING DEMOLITION PERMIT.
12. OBTAIN TRAFFIC CONTROL PLAN IS NECESSARY TO IMPEDE TRAFFIC ON SECOND OR FIRST STREETS.
13. CONTACT DOVER BUILDING DEPARTMENT TO OBTAIN DEMOLITION PERMIT.
14. DEMOLISH BUILDING. MAINTAIN SUPPORT FOR ADJUTING PROPERTIES AND SECOND STREET WHEN REMOVING FOUNDATION.
15. CONTACT DOVER COMMUNITY SERVICES REGARDING REMOVAL OF THE EXISTING WATER AND SEWER SERVICES.
16. REMOVE PAVED PARKING AREA AND CONCRETE SIDEWALK ALONG FIRST STREET, SALVAGE AND STOCKPILE VERTICAL GRANITE CURBING.
17. INSTALL SILTATION CONTROL MEASURES WHERE NECESSARY FOR SEDIMENT CONTROL. SEE EROSION CONTROL PLAN.
18. DUST SHALL BE CONTROLLED THROUGHOUT THE DEMOLITION PHASE, IN ACCORDANCE WITH Env-A 1002.
19. PERIODICALLY SWEEP FIRST & SECOND STREETS AND ALLEY TO LIMIT SEDIMENT MIGRATION.



GRAPHIC SCALE



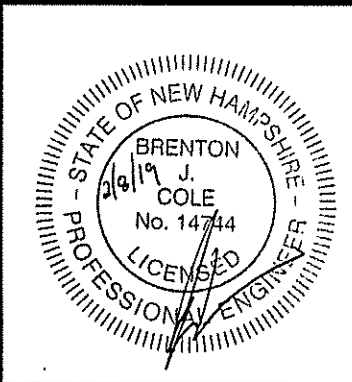
REMOVALS/DEMOLITION PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #

OWNER OF RECORD & APPLICANT:

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

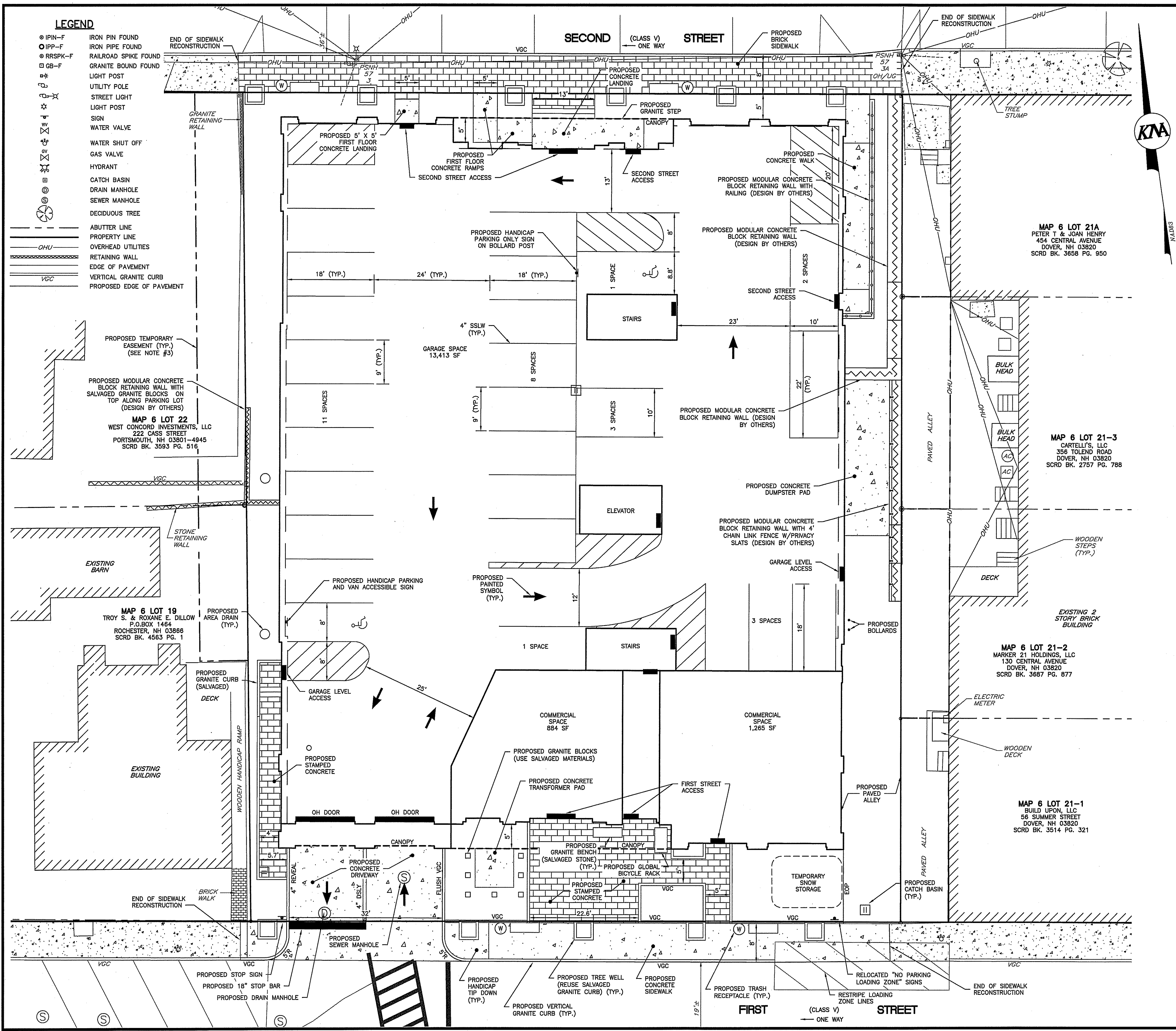


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10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

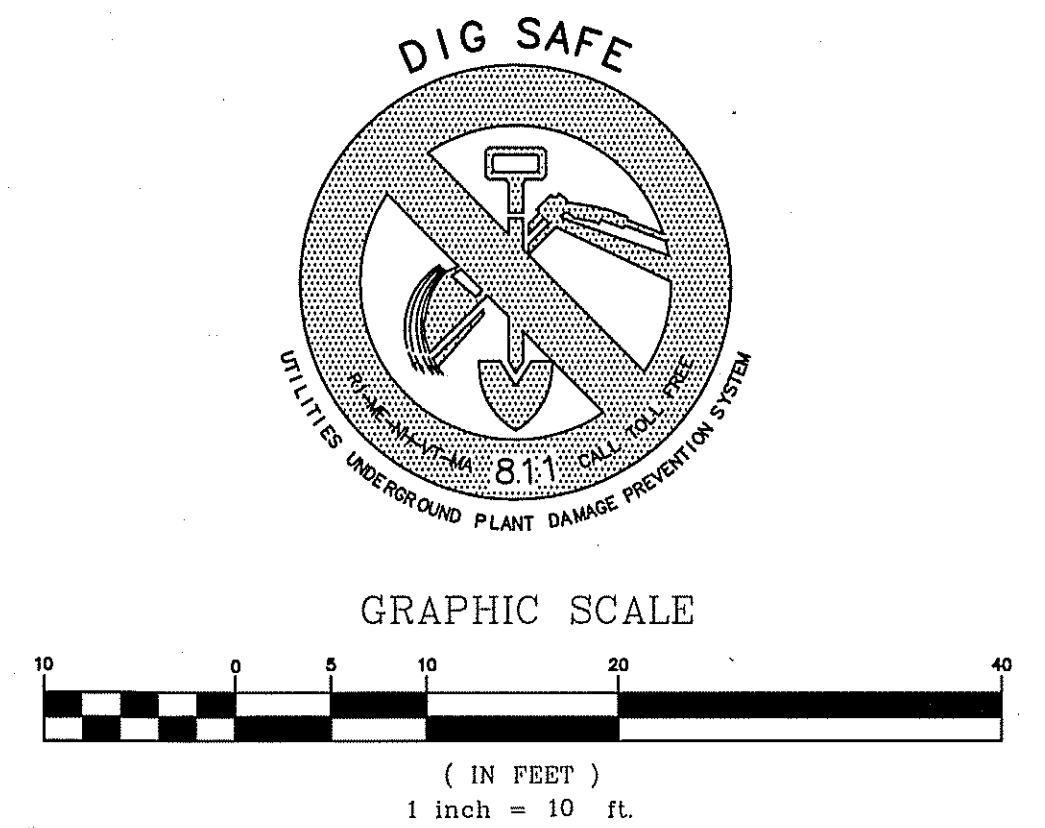


REVISIONS			
No.	DATE	DESCRIPTION	BY
DATE: JANUARY 22, 2019		SCALE: 1" = 10'	
PROJECT NO: 17-1219-1		SHEET 3 OF 15	

T:\project\1712191.dwg Production Drawings\1712191-SITEPLAN.dwg SITE, 2/6/2019 9:21:34 AM, bcole, \\krc-newserver\SAVIN MP, W670D PS, 22" x 34", 1:1



- NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS AND THE PARKING GARAGE LAYOUT.
 2. A DRIVEWAY PERMIT IS REQUIRED TO MODIFY DRIVEWAY.
 3. TEMPORARY EASEMENTS ON ABUTTER PROPERTIES HAVE BEEN DISCUSSED WITH EACH ABUTTER. FINAL AGREEMENT TO BE SIGNED PRIOR TO FINAL APPROVAL. THE FOLLOWING SHALL BE INCLUDED:
 - NO DISRUPTION TO ONGOING BUSINESSES OR USE OF ALLEY DURING WORKING HOURS;
 - NOTIFY INDIVIDUALS PRIOR TO USE OF TEMPORARY EASEMENT;
 - USE OF TEMPORARY EASEMENT IS FOR INCIDENTAL CONSTRUCTION ACTIVITIES ONLY;
 - MEASURES TO BE IN PLACE TO PREVENT DUST;
 - MEASURES TO BE TAKEN TO DOCUMENT CURRENT ABUTTING PROPERTY CONDITIONS AND ANY ACCIDENTAL DAMAGE WILL BE UPON THE OWNER/APPLICANT AND CONTRACTOR TO FIX.



SITE LAYOUT PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #

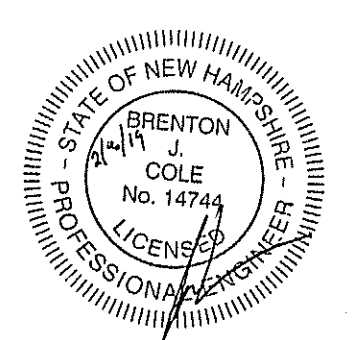
OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
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NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

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

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: JANUARY 22, 2019 SCALE: 1" = 10'
PROJECT NO: 17-1219-1 SHEET 4 OF 15



LEGEND

- LIGHT POST
- UTILITY POLE
- STREET LIGHT
- LIGHT POST
- SIGN
- WATER VALVE
- WATER SHUT OFF
- GAS VALVE
- HYDRANT
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- DECIDUOUS TREE
- ABUTTER LINE
- PROPERTY LINE
- OVERHEAD UTILITIES
- RETAINING WALL
- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- 10' CONTOUR
- 2' CONTOUR
- PROPOSED SEWER MANHOLE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED EDGE OF PAVEMENT
- PROP. VERTICAL GRANITE CURB
- PROPOSED 2' CONTOUR
- PROPOSED SWALE

SECOND STREET (CLASS V) ONE WAY

FIRST STREET (CLASS V) ONE WAY

NOTES:

- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE GRADING AND PARKING GARAGE GRADING.
- ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.

CONSTRUCTION SEQUENCE:

- PERFORM EARTHWORK TO PREPARE FOR BUILDING FOUNDATION AND RETAINING WALLS.
- BEGIN BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION.
- ONCE BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTHMOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
- INSTALL DRAINAGE SWALE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME FULLY STABILIZED.
- CONSTRUCT BUILDING.
- PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESSES.
- COMPLETE EXCAVATION/STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FRABLE 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.
- INSTALL CONCRETE WALKS AND PADS, BRICK WALKS AND CURBING.
- CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGH ONE WINTER.
- INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
- COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.
- INSTALL SILTATION CONTROL MEASURES WHERE NECESSARY FOR SEDIMENT CONTROL.
- DUST SHALL BE CONTROLLED THROUGHOUT THE DEMOLITION PHASE, IN ACCORDANCE WITH ENV-A 1002.
- PERIODICALLY SWEEP FIRST & SECOND STREETS AND ALLEY TO LIMIT SEDIMENT MIGRATION.

MAP 6 LOT 21A
PETER T & JOAN HENRY
454 CENTRAL AVENUE
DOVER, NH 03820
SCRD BK. 3658 PG. 950

MAP 6 LOT 21-3
CARTELLI'S, LLC
356 TOLAND ROAD
DOVER, NH 03820
SCRD BK. 2757 PG. 788

MAP 6 LOT 21-2
MARKER 21 HOLDINGS, LLC
130 CENTRAL AVENUE
DOVER, NH 03820
SCRD BK. 3657 PG. 877

MAP 6 LOT 21-1
BUILD UPON, LLC
56 SUMMER STREET
DOVER, NH 03820
SCRD BK. 3514 PG. 321

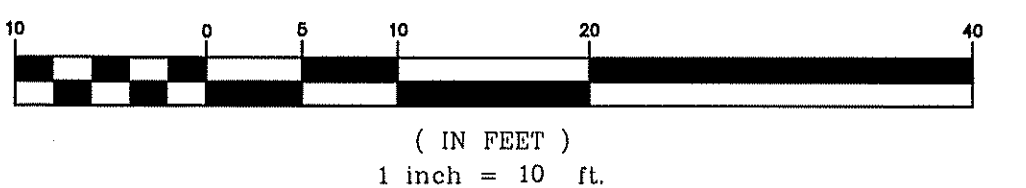
MAP 6 LOT 22
WEST CONCORD INVESTMENTS, LLC
222 CASS STREET
PORTSMOUTH, NH 03801-4945
SCRD BK. 3593 PG. 516

MAP 6 LOT 19
TROY S. & ROXANE E. DILLOW
P.O. BOX 1464
ROCHESTER, NH 03866
SCRD BK. 4563 PG. 1

SEE SHEET 6 FOR GARAGE
DRAIN SEWER TIE-IN



GRAPHIC SCALE

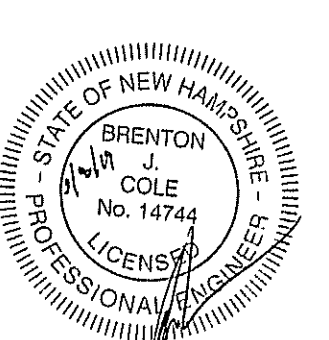


GRADING & DRAINAGE PLAN DOVER HEIGHTS MAP 6 LOT 20 1 FIRST STREET DOVER, NEW HAMPSHIRE STRAFFORD COUNTY PLANNING FILE

OWNER OF RECORD & APPLICANT:

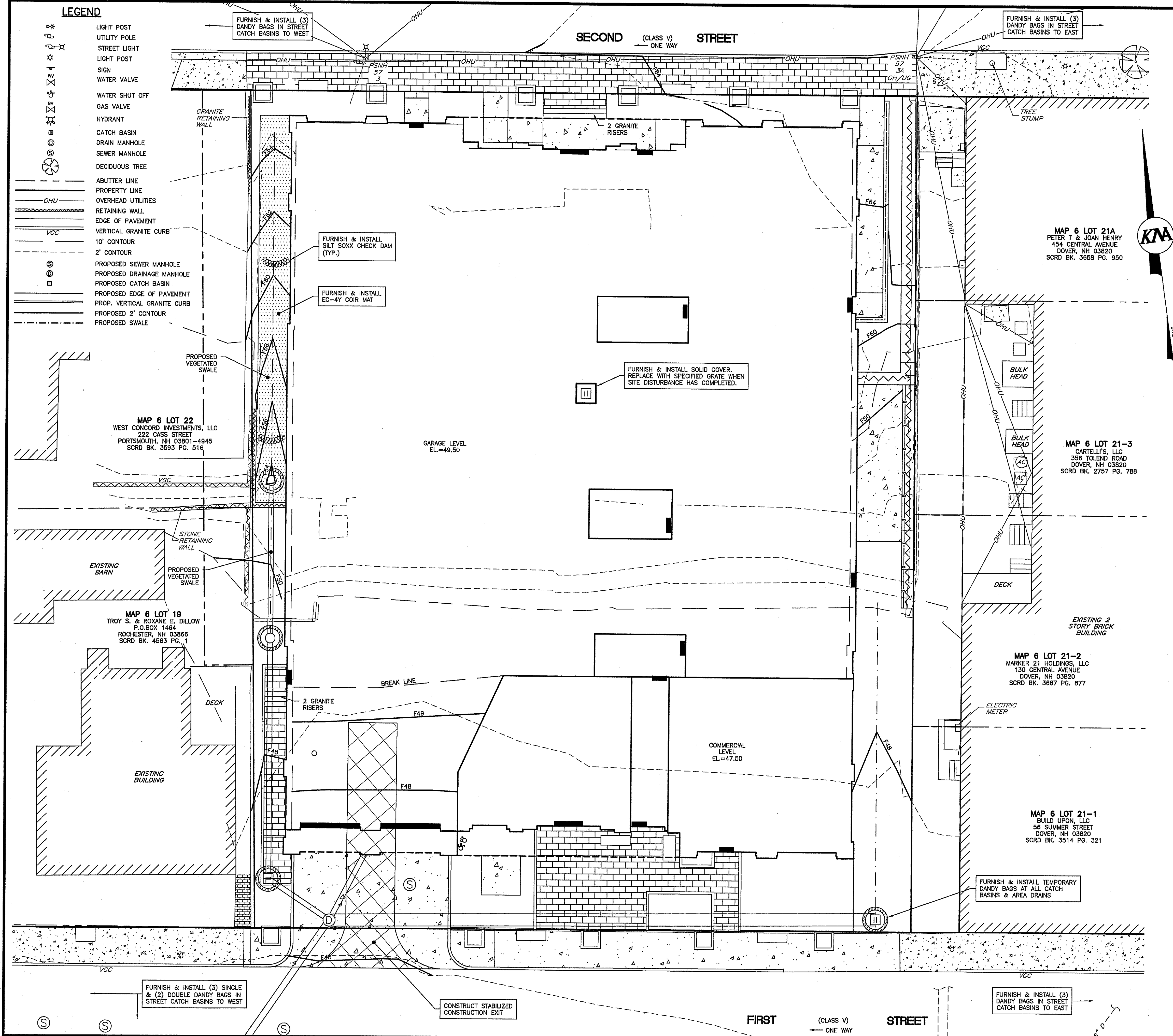
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KM KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
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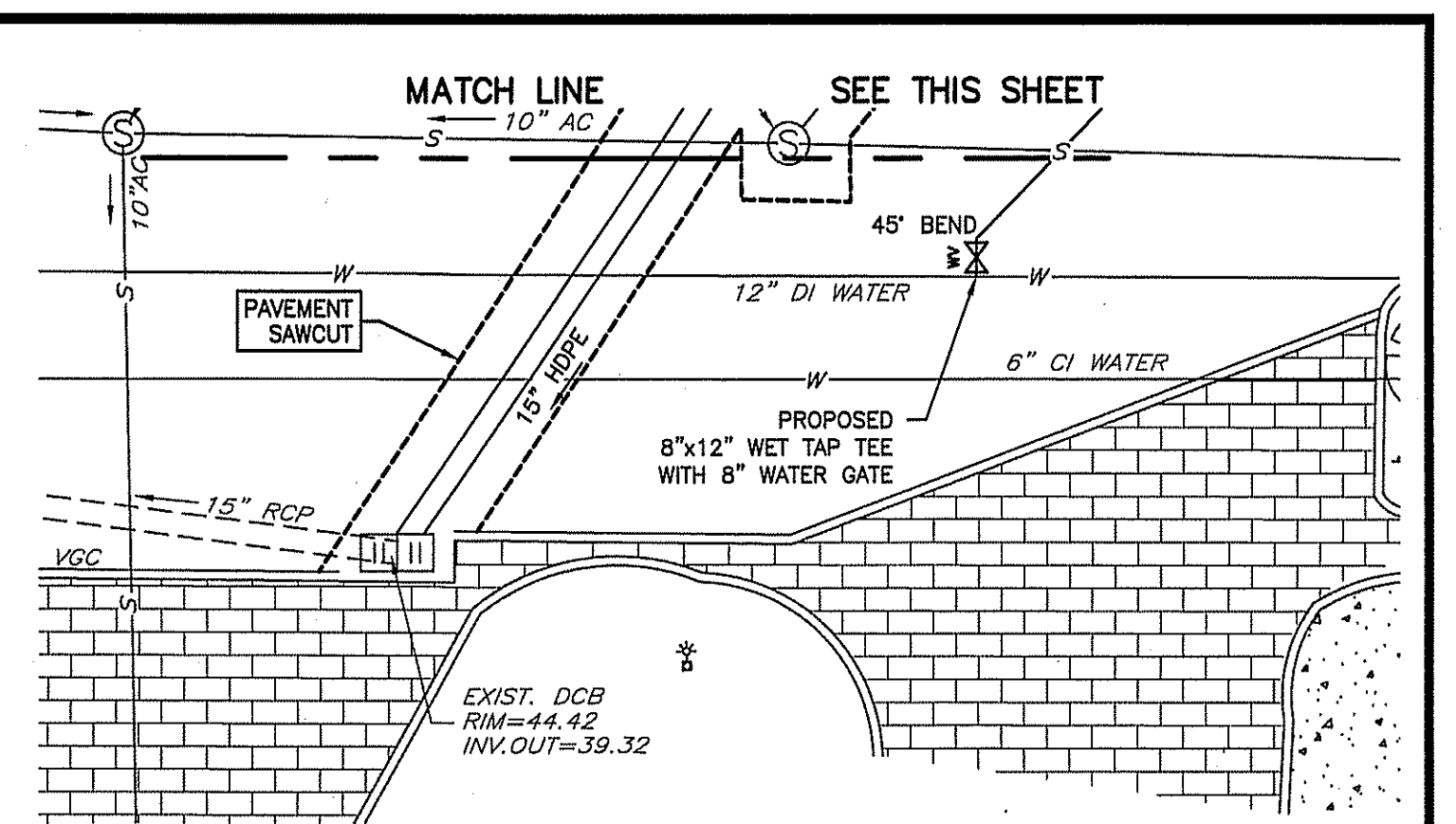
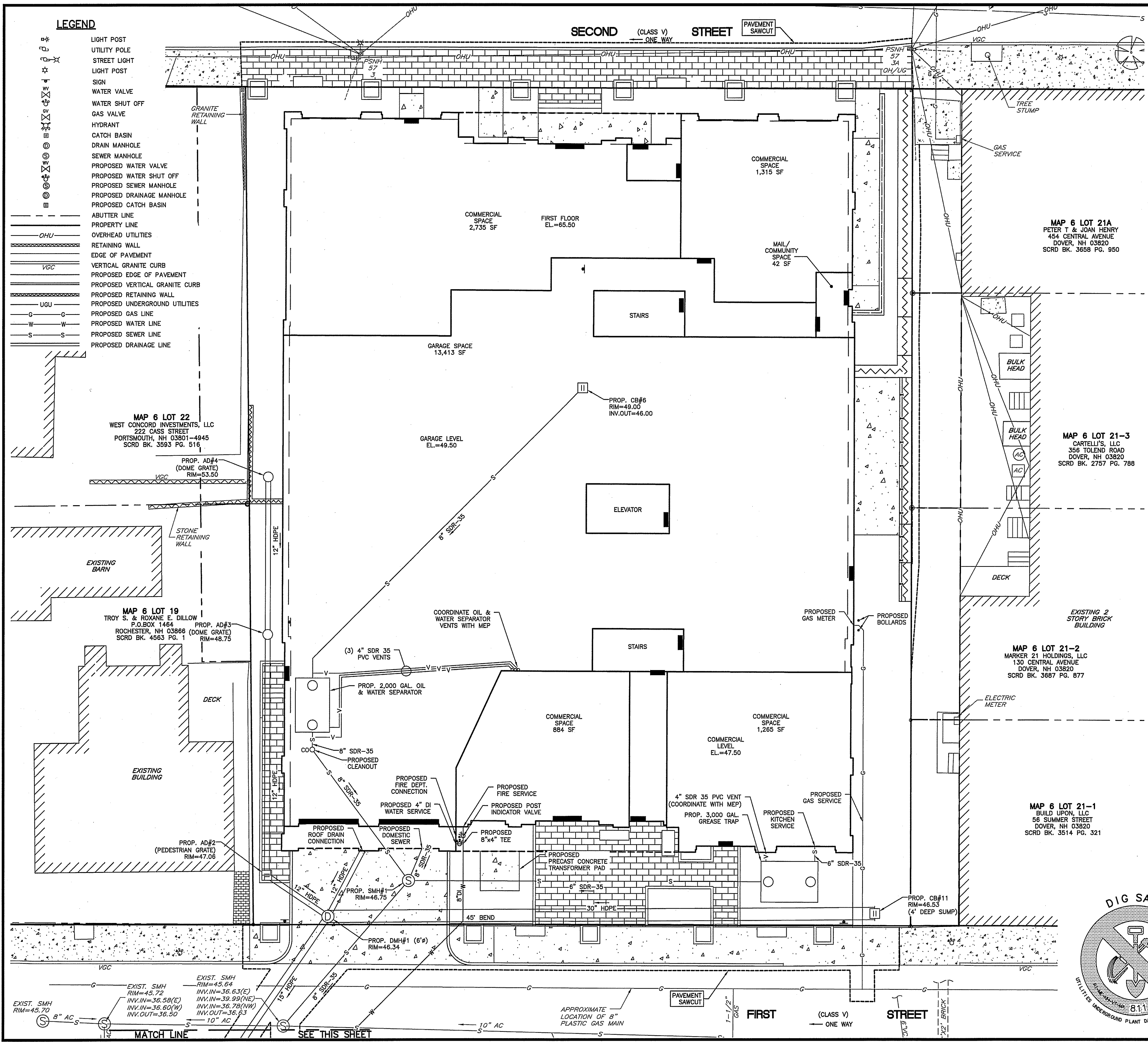


REVISIONS			
No.	DATE	DESCRIPTION	BY
DATE: JANUARY 22, 2019		SCALE: 1" = 10'	
PROJECT NO: 17-1219-1		SHEET 5 OF 15	

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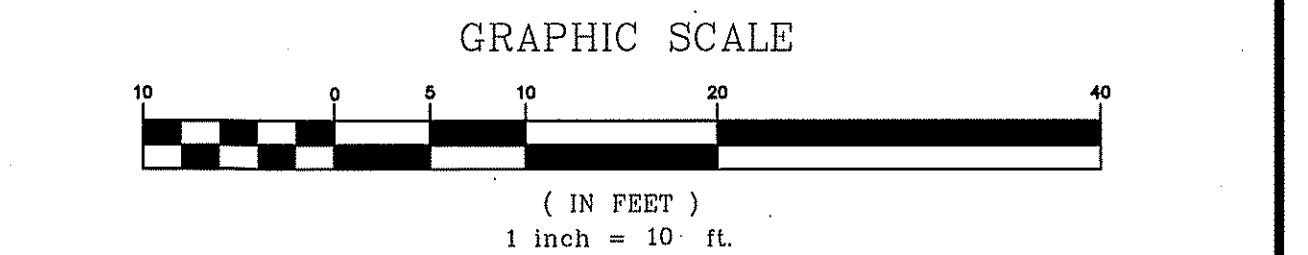


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- NOTES:**
1. ALL WORK SHALL CONFORM TO THE CITY OF DOVER, LATEST EDITION, CONSTRUCTION STANDARDS AND DETAILS. IN THE ABSENCE OF A CITY STANDARD/SPECIFICATION, WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED BY THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, ARE HEREBY INCORPORATED BY REFERENCE.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 3. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 4. CONTRACTOR TO VERIFY SIZE OF WATER AND GAS SERVICE LINES WITH MECHANICAL CONTRACTOR/FIRE SUPPRESSION ENGINEER PRIOR TO THE START OF CONSTRUCTION.
 5. PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING ANY WATER SYSTEM/SERVICE PARTS, THE PROPOSED SIZE OF THE VARIOUS WATER SERVICES SHALL BE CONFIRMED BY THE PROJECT FIRE SUPPRESSION ENGINEER. ANY ADJUSTMENTS TO THE DESIGN MUST BE APPROVED BY THE CITY OF DOVER.
 6. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
 7. THE PROPOSED STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 109-30 OF THE CODE OF THE CITY OF DOVER AND THE 2015 STATE BUILDING CODES.
 8. SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED.
 9. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
 10. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
 11. CB #11 TO RECEIVE A SNOOT OIL AND DEBRIS STOP.
 12. UNDERGROUND UTILITIES TO BE PROPOSED BY EVERSOURCE. COORDINATION TO CONTINUE. FINAL LOCATION TO BE APPROVED BY THE CITY PRIOR TO FINAL APPROVAL.

- WATER & SEWER:**
1. FLOW RATE DETERMINED BASED ON NHDES EnvWq 1000 TABLE 1008-1 PER DOVER UTILITIES COMMISSION RULES.
 2. EXISTING USE DATA FROM CITY OF DOVER COMMERCIAL PROPERTY RECORD CARD.
 3. FLOW CALCULATION:
PROPOSED COMMERCIAL:
UNSPECIFIED OFFICE SPACE = 5 GPD/100 SF
6,199 SF x 5 GPD/100 SF = 310 GPD
PROPOSED RESIDENTIAL:
APARTMENT - (STUDIO OR ONE BR) = 225 GPD
38 UNITS (1 STUDIO & 37 1 BR) x 225 GPD/UNIT = 8,550 GPD
APARTMENT - (TWO OR MORE BR) = 150 GPD/BR
33 UNITS (24 1+ BR & 9 2 BR) x 300 GPD/UNIT = 9,900 GPD
TOTAL PROPOSED FLOW = 18,760 GPD
EXISTING FLOW = 17,709 SF x 5 GPD/100 SF (UNSPECIFIED OFFICE SPACE) = 885 GPD
+ 1 ONE BEDROOM APARTMENT = 225 GPD
TOTAL EXISTING FLOW = 1,110 GPD
INCREASED FLOW SUBJECT TO INVESTMENT FEES = 17,650 GPD



**UTILITY PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #**

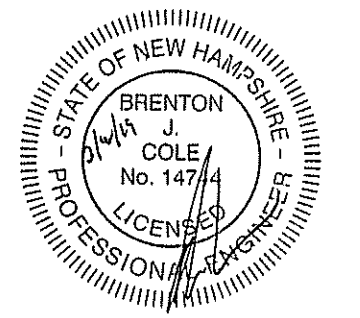
OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

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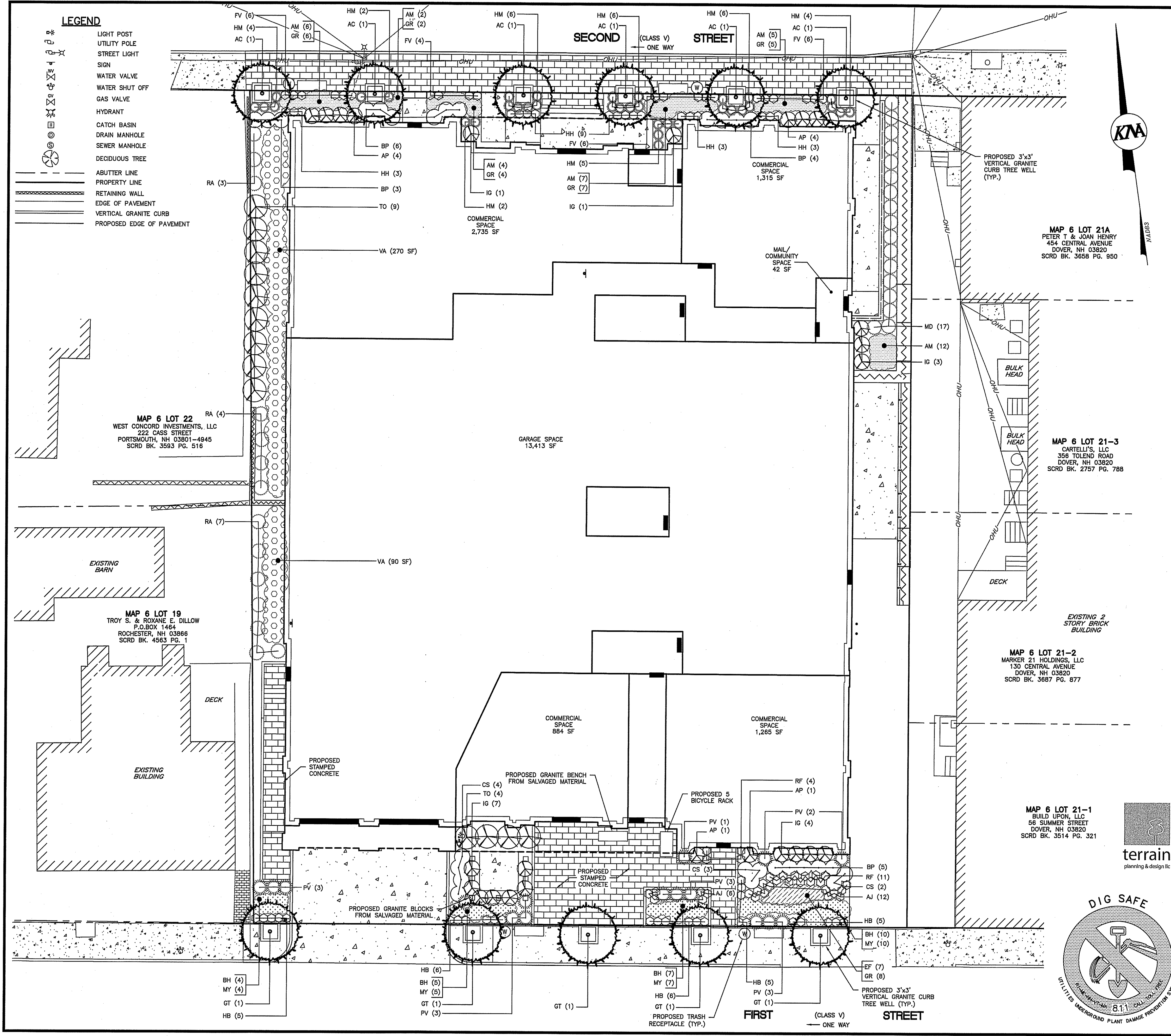
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: JANUARY 22, 2019 **SCALE: 1" = 10'**
PROJECT NO: 17-1219-1 **SHEET 7 OF 15**



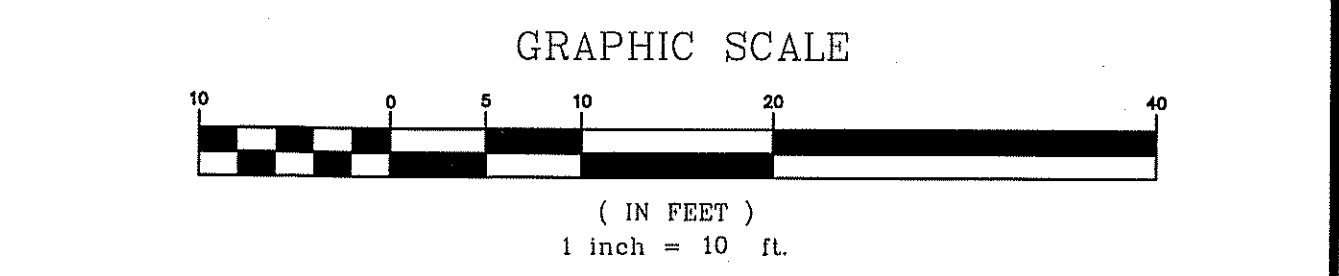
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- ### LANDSCAPE NOTES:
- ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR DOES NOT SHOW HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL WARRANTIES. TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (I.E. SNOW STORAGE).
 - IF THE SOIL CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SIDEWALLS SHALL BE OVER EXCAVATED BY AN ADDITIONAL 12" BEYOND THE NORMAL OUTSIDE RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS: ORGANIC TOPSOIL, AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% COMPOST AND A GRANULAR HYDROGEL TO ABSORB AND RETAIN WATER.
 - PLANTING BEDS AND SAUCERS SHALL RECEIVE A FOUR INCH (4") MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 5 OZ. POLYPROPYLENE WEED CONTROL FABRIC.
 - PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOIL INSTALLED AS SPECIFIED ABOVE.
 - NOT LESS THAN SIX INCHES (6") OF LOAM SHALL BE RESTORED TO ALL DISTURBED AREAS INTENDED FOR LAWNS, PLANTING BEDS OR FOR NATURAL RE-GROWTH.
 - LANDSCAPING PLAN TO MEET ALL APPLICABLE CITY REGULATIONS IN SECTION 149-14.2(B)(7) OF THE CITY OF DOVER SITE REVIEW REGULATIONS.

- ### PLANTING NOTES:
- CONTRACTOR SHALL OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO PURCHASING AND/OR INSTALLING SUBSTITUTE PLANT MATERIAL.
 - LAYOUT OF ALL PLANTING BEDS AND LOCATION OF PLANTS TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO CONSTRUCTION AND INSTALLATION.
 - CONTRACTOR TO REMOVE ALL DEBRIS GENERATED BY PLANT INSTALLATION. DEBRIS TO BE DISPOSED OF IN A LEGAL MANNER.
 - ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR ONE (1) YEAR FROM THE DATE OF FINAL INSTALLATION APPROVAL BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE, WITHOUT COST TO OWNER, AND AS SOON AS WEATHER CONDITIONS PERMIT, ALL DEAD AND NON-FLOURISHING PLANTS AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACEMENT PLANTS SHALL BE GUARANTEED IDENTICALLY TO ORIGINAL PLANTS, TIME PERIOD COMMENCING FROM DATE OF REPLACEMENT PLANTING APPROVAL BY LANDSCAPE ARCHITECT.
 - ALL BEDS TO BE MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.
 - CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.

PLANTING SCHEDULE		Size	Label	Quantity	Mature Height
Botanical Name / Common Name					
Trees					
<i>Amelanchier canadensis</i> / Serviceberry		2.5-3" CAL.	AC	6	40-60'
<i>Gleditsia triacanthos</i> / Skyline Honeylocust		2.5-3" CAL.	GT	5	20-30'
Shrubs					
<i>Azalea poukhanensis</i> 'Compact' / Compact Korean Azalea		#3	AP	10	2-3'
<i>Cornus sericea</i> 'Kelsey' / Kelsey Red-Osier Dogwood		#3	CS	9	2-3'
<i>Hydrangea paniculata</i> 'Bobo' / Bobo Panicle Hydrangea		#3	BP	18	2-3'
<i>Ilex glabra</i> 'Shamrock' / Shamrock Inkberry		#5	IG	16	4-5'
<i>Thuja occidentalis</i> 'Smaragd' / Emerald Green Arborvitae		#10	TO	13	15'
Perennials					
<i>Achillea</i> 'Moonshine' / Moonshine Yarrow		#1	MY	26	18-24"
<i>Alchemilla mollis</i> / Lady's Mantle		#1	AM	36	18"
<i>Echinacea</i> 'Flamenco Orange' / Flamenco Orange Coneflower		#1	EF	7	22-24"
<i>Geranium</i> 'Rozanne' / Rozanne Cranesbill		#1	GR	32	18-24"
<i>Hemerocallis</i> 'Big Time Happy' / Big Time Happy Daylily		#1	HB	27	18-24"
<i>Heuchera</i> 'Frosted Violet' / Frosted Violet Coral Bells		#1	FV	22	12-18"
<i>Hosta</i> 'Halcyon' / Halcyon Plantain Lily		#1	HH	18	24"
<i>Rudbeckia hirta</i> 'Goldsturm' / Goldsturm Black-Eyed Susan		#1	RF	15	24"
<i>Salvia</i> 'Blue Hill' / Blue Hill Sage		#1	BH	26	18"
<i>Sedum spectabile</i> 'Autumn Joy' / Autumn Joy Stonecrop		#1	AJ	18	18-24"
Grasses					
<i>Hakonechloa macra</i> 'All Gold' / All Gold Japanese Forest Grass		#2	HM	35	12-18"
<i>Pericum virgatum</i> 'Shenandoah' / Shenandoah Switch Grass		#2	PV	15	3-4'
Ground Cover					
<i>Microbiota decussata</i> / Russian Cypress		#3	MD	17	18-24"
<i>Rhus aromatica</i> 'Grow Low' / Grow Low Sumac		#3	RA	14	18-24"
<i>Vaccinium angustifolium</i> / Lowbush Blueberry		Sod	VA	360 SF	12"



LANDSCAPE PLAN

DOVER HEIGHTS

MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

PLANNING FILE #

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: JANUARY 22, 2019
PROJECT NO: 17-1219-1

SCALE: 1" = 10'
SHEET 8 OF 15

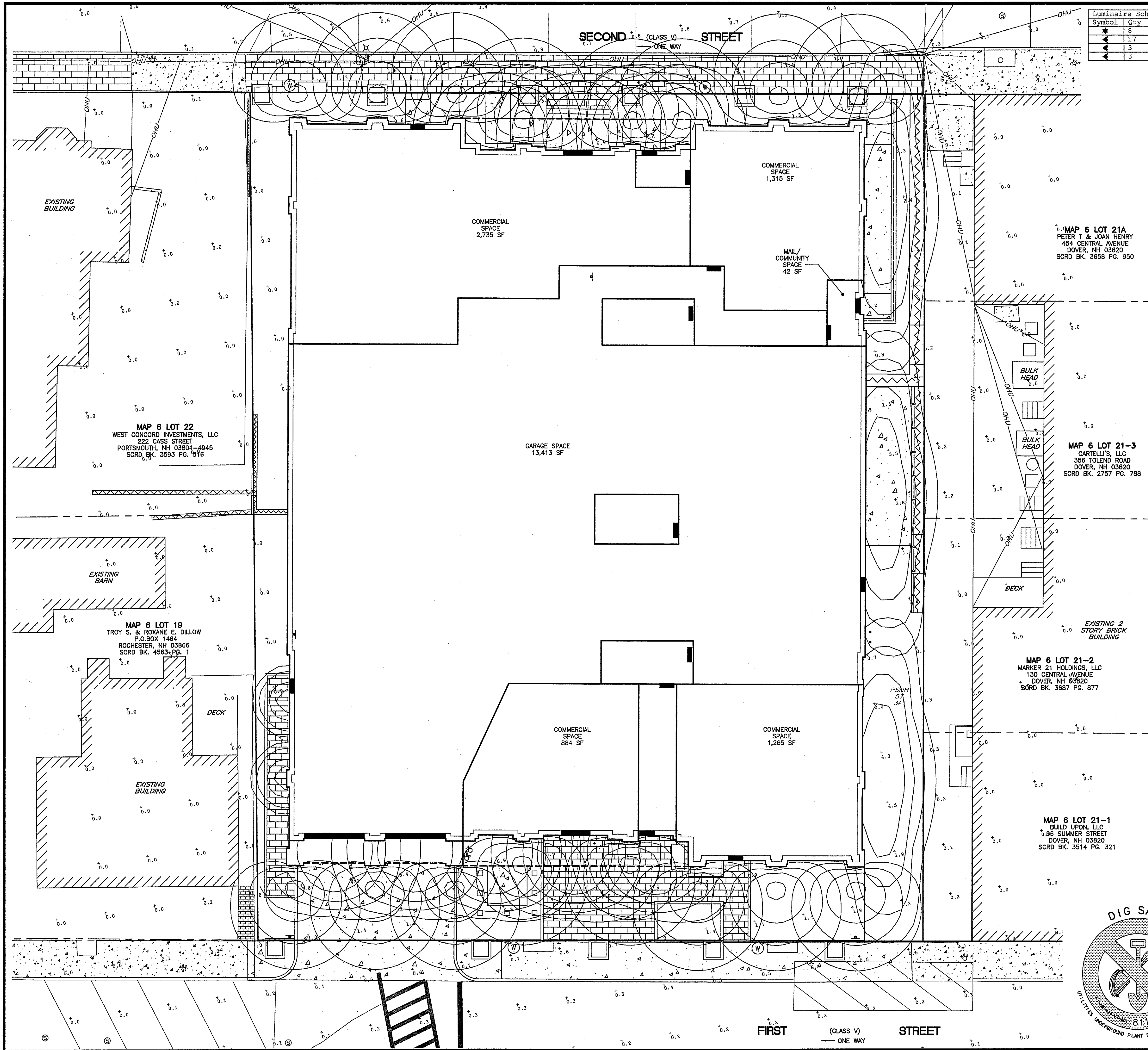
KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

terrain
planning & design llc

DIG SAFE
UTILITY UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

STATE OF NEW HAMPSHIRE
BRENTON J. COLE
No. 14744
LICENSED PROFESSIONAL ENGINEER

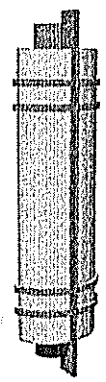
T:\project\1712191\dwg\Production Drawings\1712191-LAND-LIGHT.dwg, LIGHTING, 2/9/2019 9:25:22 AM, boole, \\kva-news\server\SAVIN MP W6700 PS, 22" x 34", 1:1



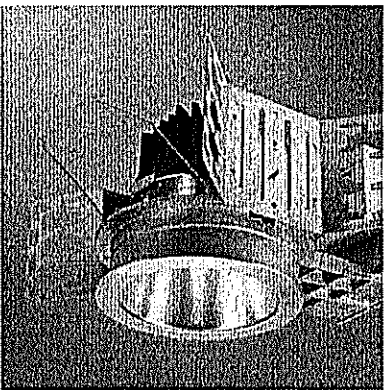
Luminaire Schedule					
Symbol	Qty	Label	Lamp	Arrangement	Description
▲	8	C	LED-19W	SINGLE	LD4B15D010 E04B10208035 4LBDWILI/ CANOPY MOUNTED
▲	17	S	LED-14W	SINGLE	674-31-WP-L3-835-UNV-ALP/ WALL MTD 7' CENTER OF FIXTURE AFG
▲	3	W	LED-4.6W	SINGLE	MERU-LED-AC-DB/ WALL MTD 12' AFG
▲	3	W1	LED-17W	SINGLE	33579-4K / WALL MTD 10' AFG

LIGHTING NOTES:

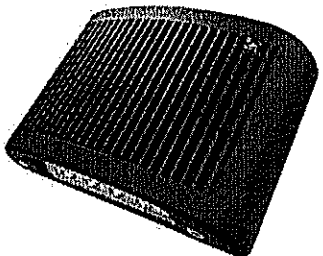
- 1. ALL LIGHTS/FIXTURES SHALL BE AS SPECIFIED BY CHARRON LLC.
- 2. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.



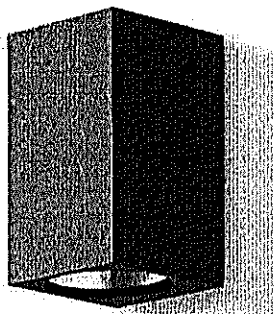
**SHAPER 674-WP
WALL SCONCE**
NOT TO SCALE



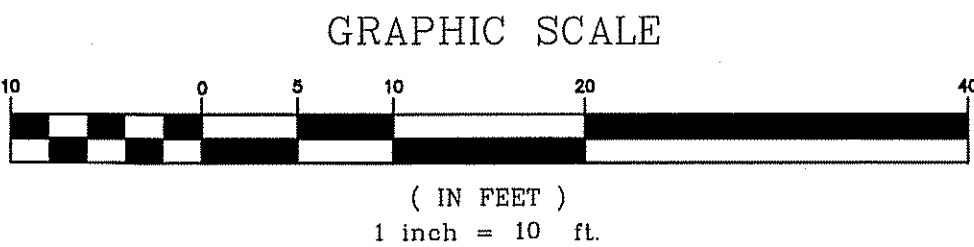
**PORTFOLIO
RECESSED DOWNLIGHT**
NOT TO SCALE



**MULE MERU-LED
WALL LIGHT**
NOT TO SCALE



**BEGA 33579
WALL LUMINAIRE**
NOT TO SCALE



IN ASSOCIATION WITH:

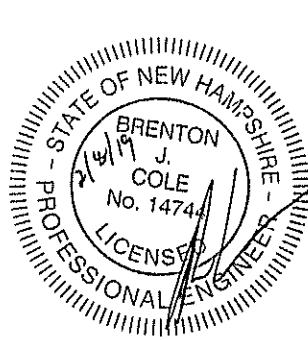


P.O. BOX 4550
MANCHESTER, NH 03108
(603) 624-4827
FAX (603) 624-8764
SALES@CHARRONINC.COM

LIGHTING PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #

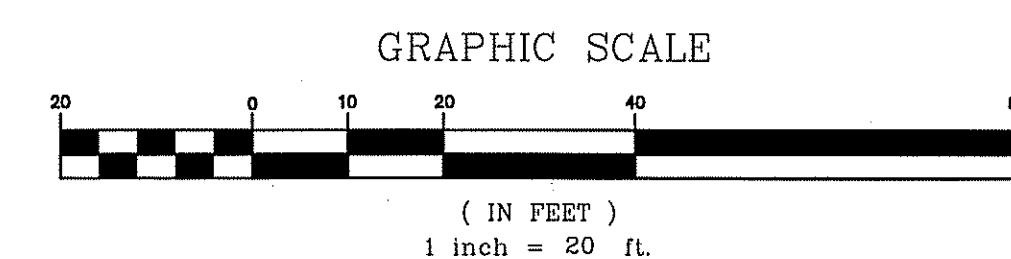
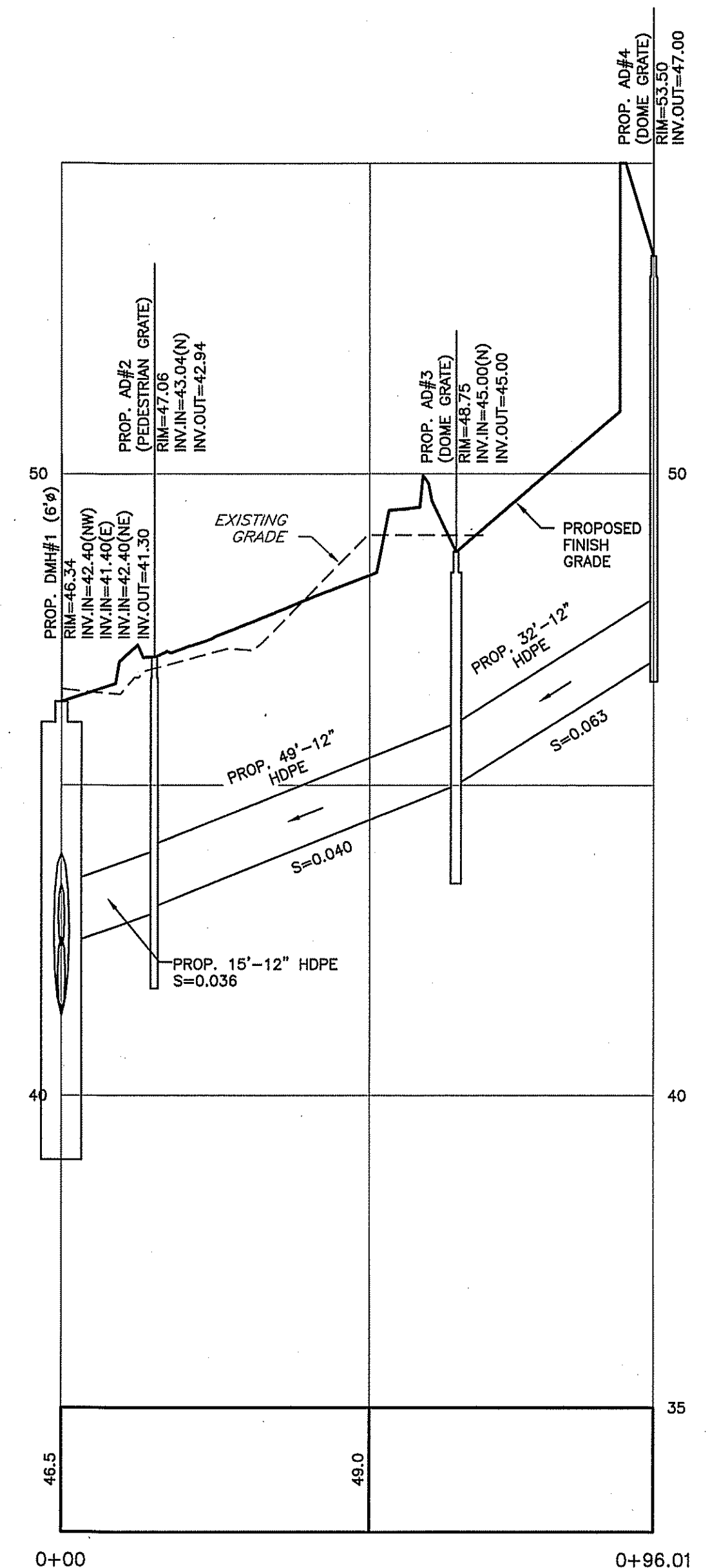
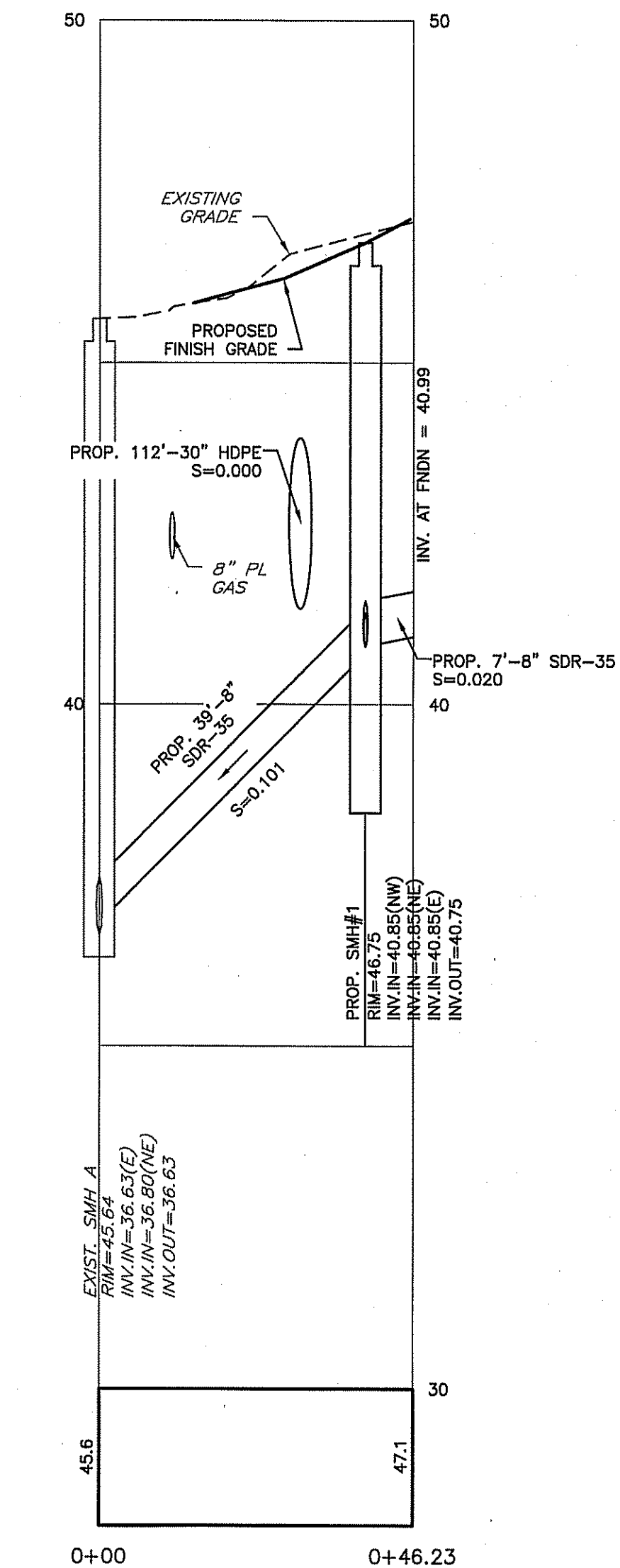
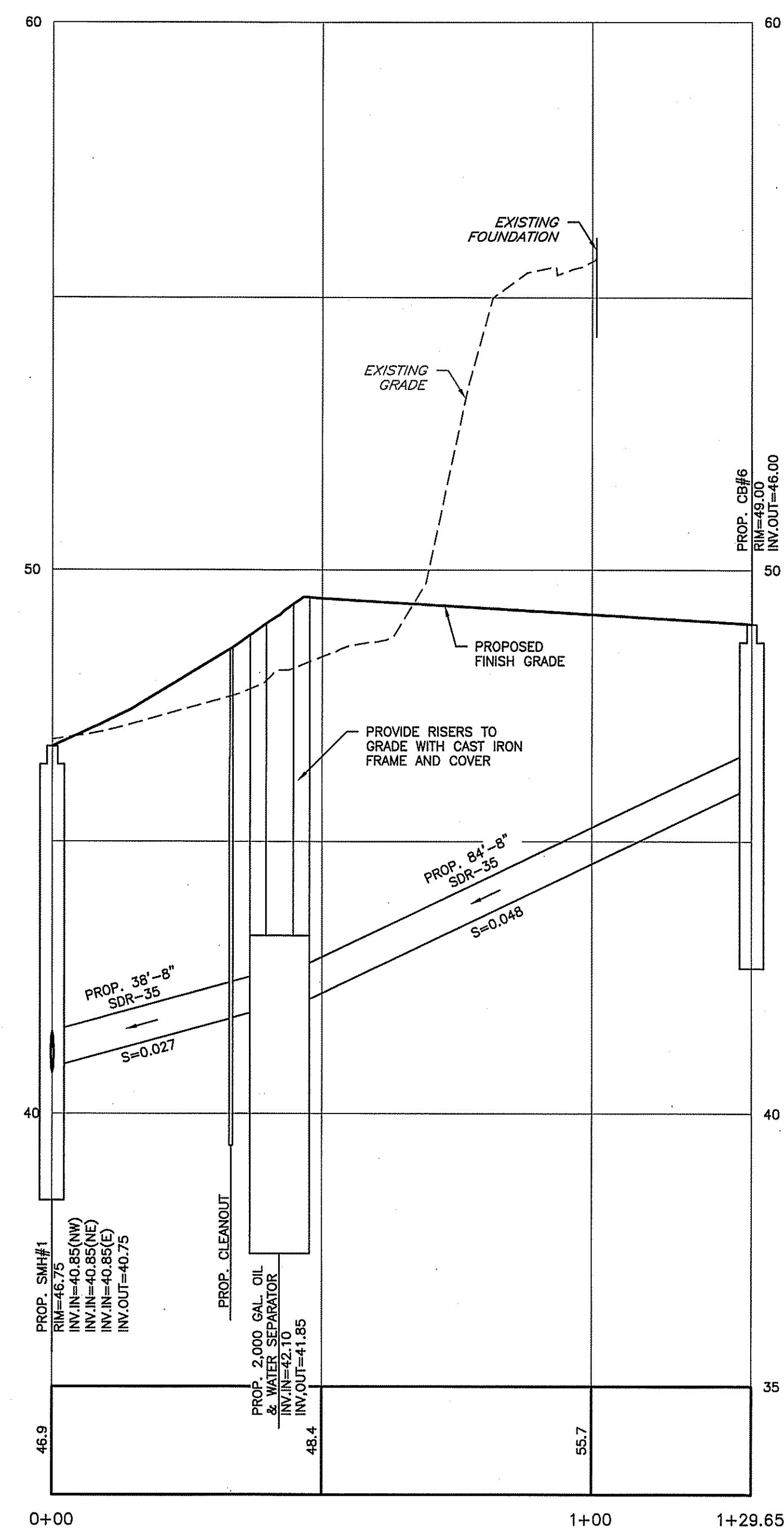
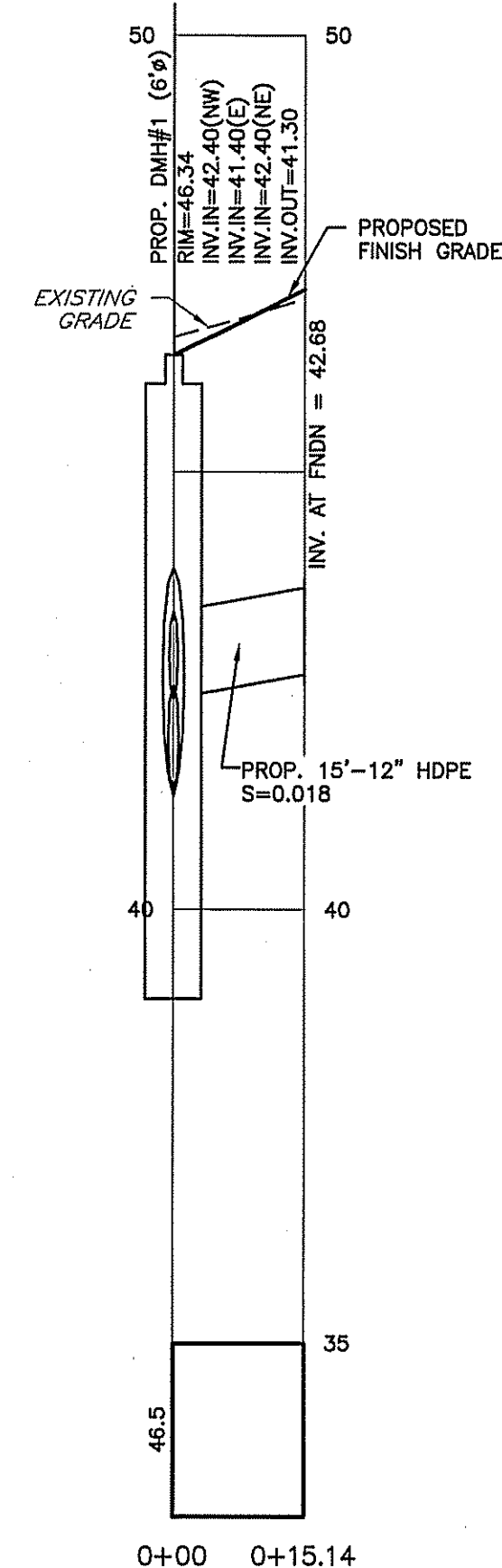
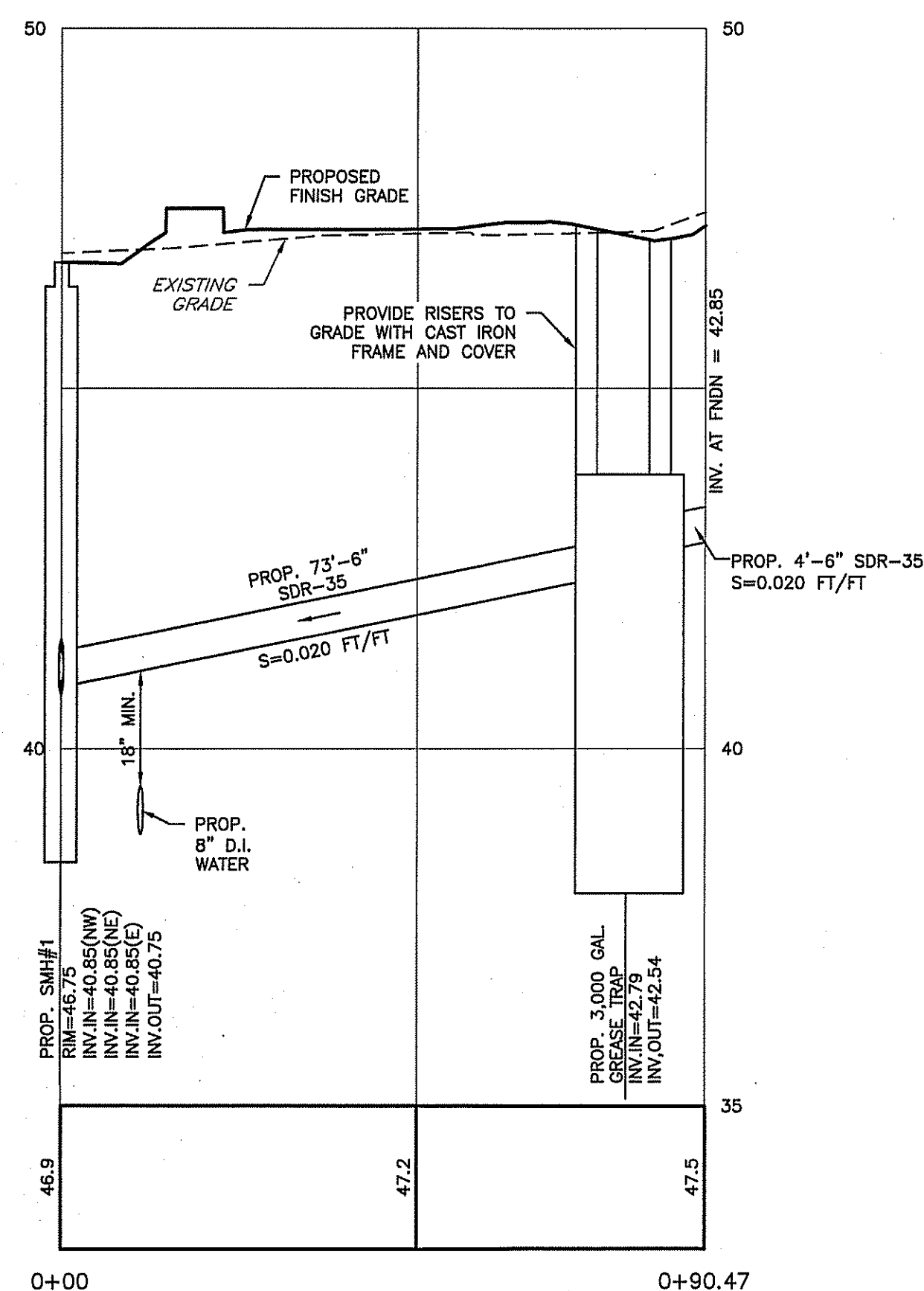
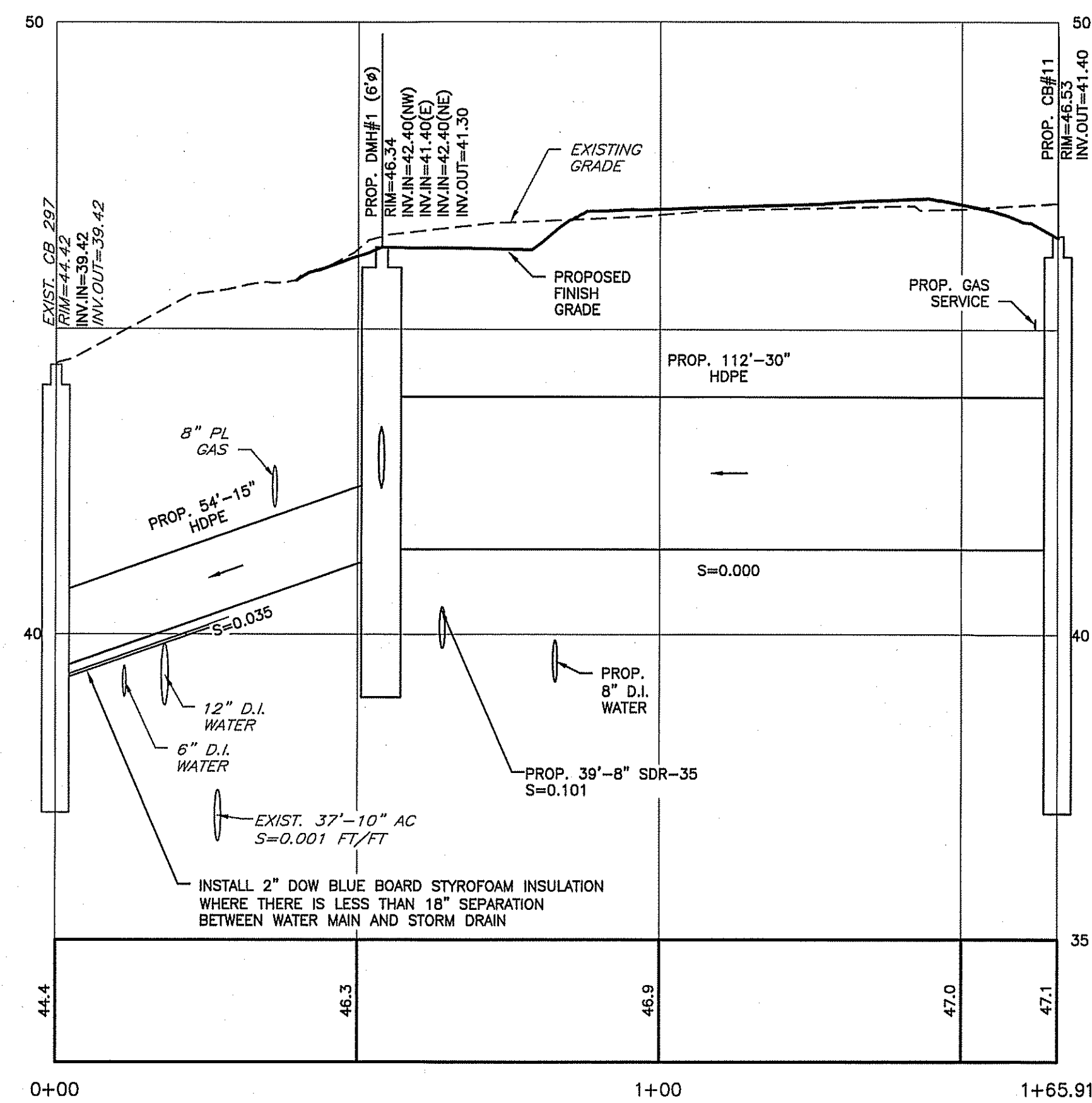
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REVISIONS			
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PROJECT NO: 17-1219-1		SHEET 9 OF 15	



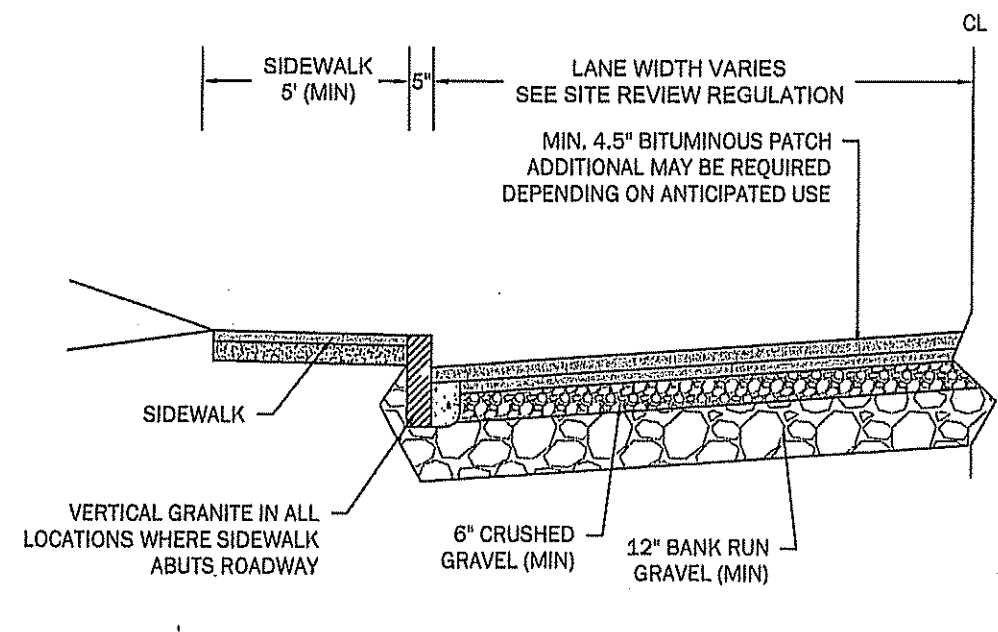


PROFILES
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE #

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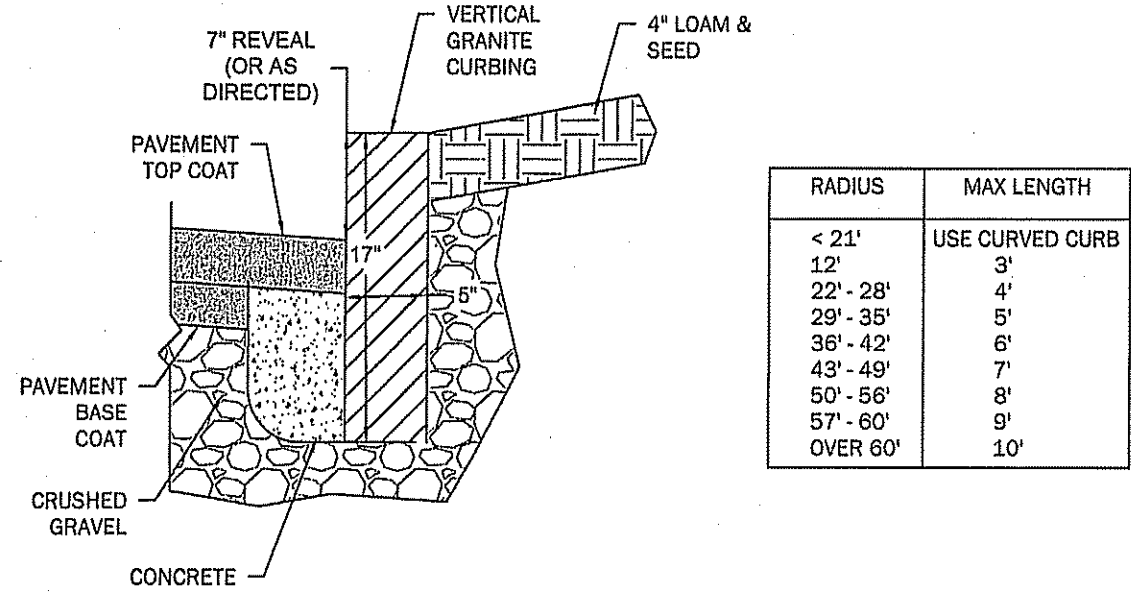
KMA **KEACH-NORDSTROM ASSOCIATES, INC.**
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REVISIONS			
No.	DATE	DESCRIPTION	BY
DATE: JANUARY 22, 2019		SCALE: 1" = 20'	
PROJECT NO: 17-1219-1		SHEET 10 OF 15	



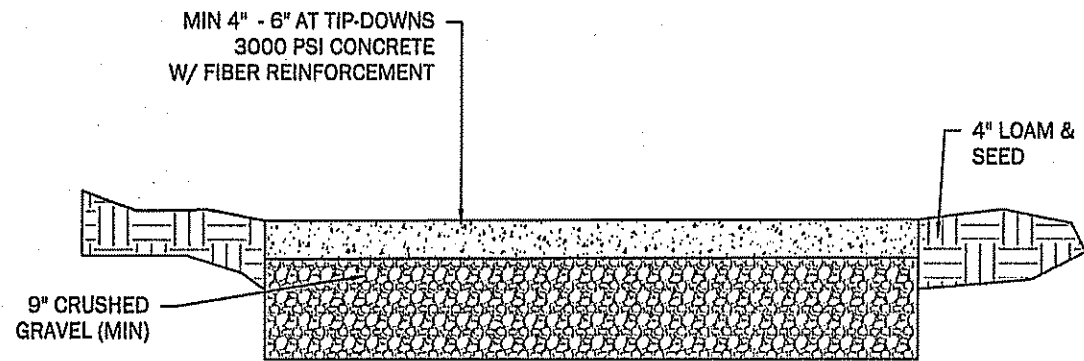
PUBLIC ROADWAY CROSS SECTION

CITY OF DOVER
NOT TO SCALE



VERTICAL GRANITE CURB

CITY OF DOVER
NOT TO SCALE



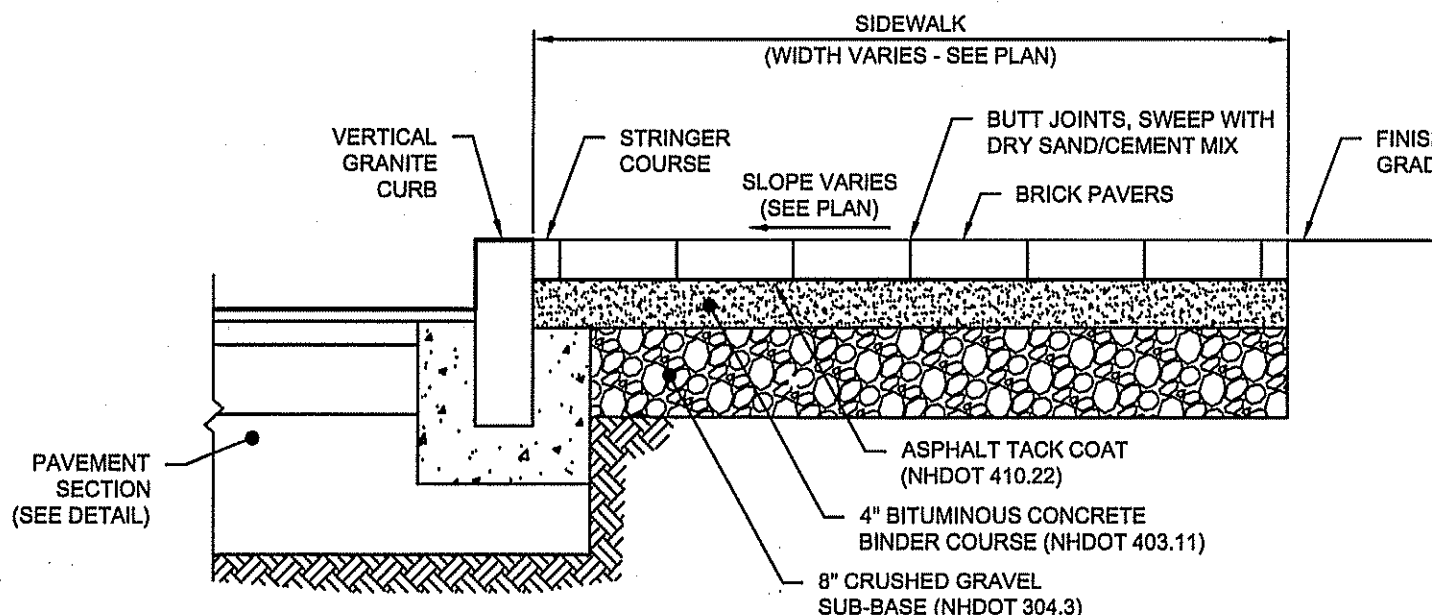
CONCRETE SIDEWALK

NOTES:

1. MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS SPECIFICATIONS.
2. SIDEWALK AND DRIVEWAY WIDTHS SHALL BE EQUAL TO EXISTING WIDTHS OR AS APPROVED AND SHALL SLOPE TO MATCH EXISTING ELEVATIONS.
3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.
4. DETECTABLE WARNING STRIPS SHALL BE CAST IRON.

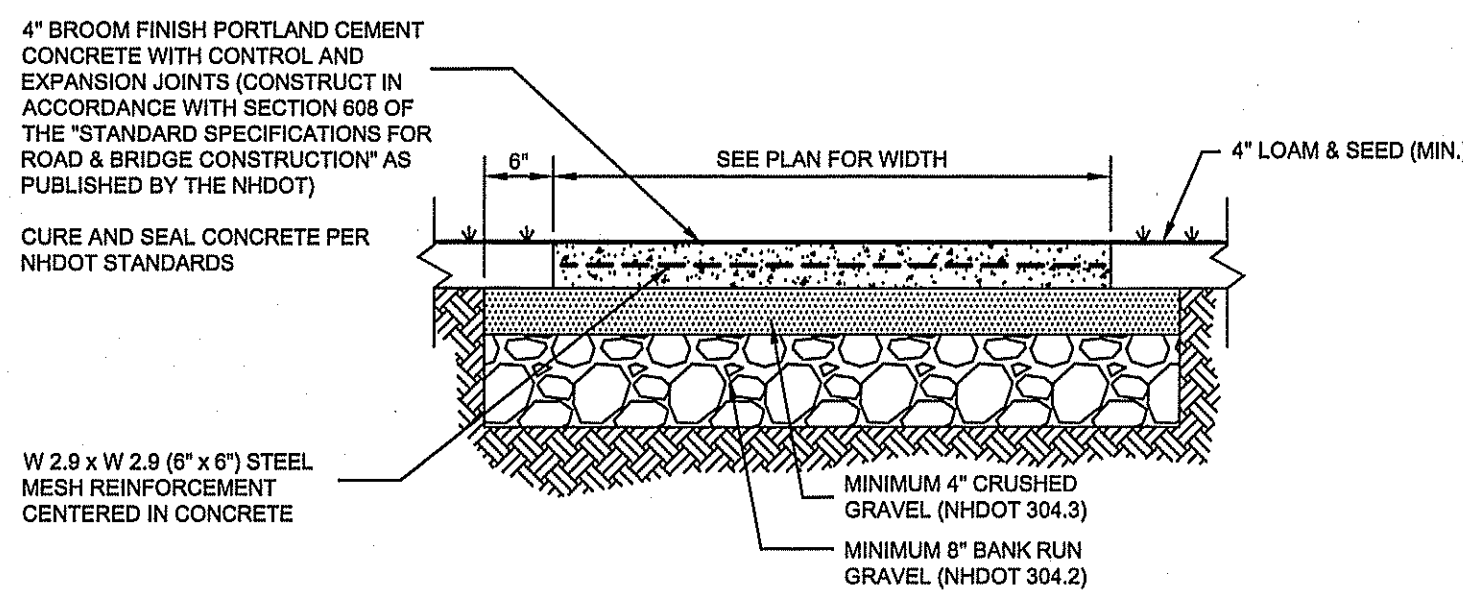
STANDARD CONCRETE SIDEWALK

CITY OF DOVER
NOT TO SCALE



BRICK SIDEWALK

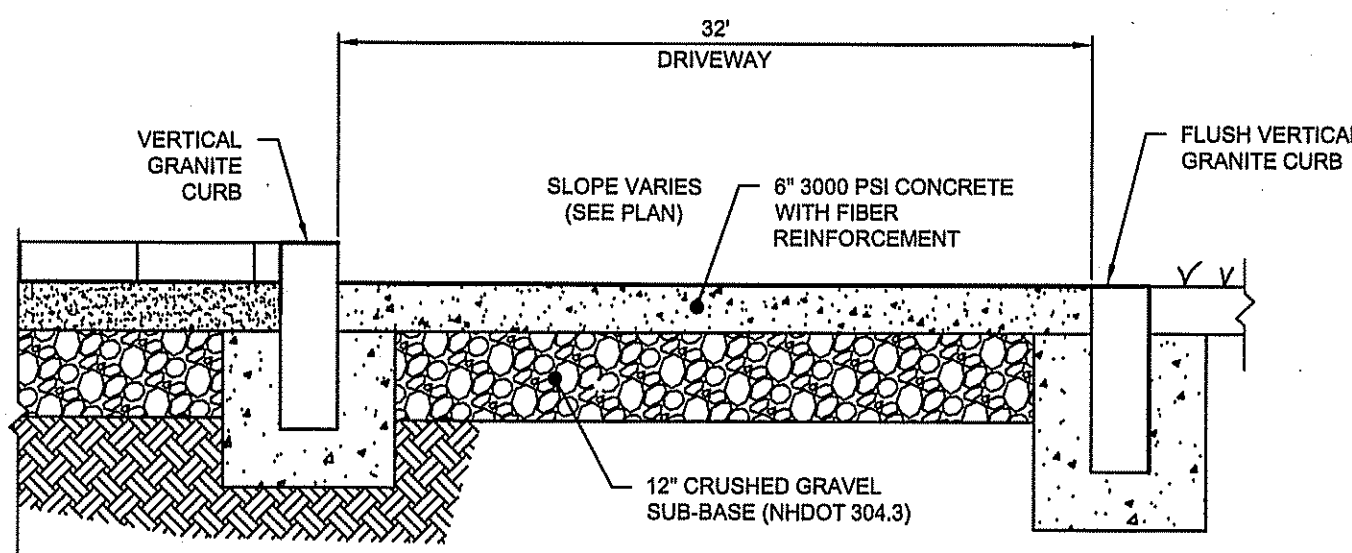
NOT TO SCALE



CONCRETE PAD DETAIL

NOT TO SCALE

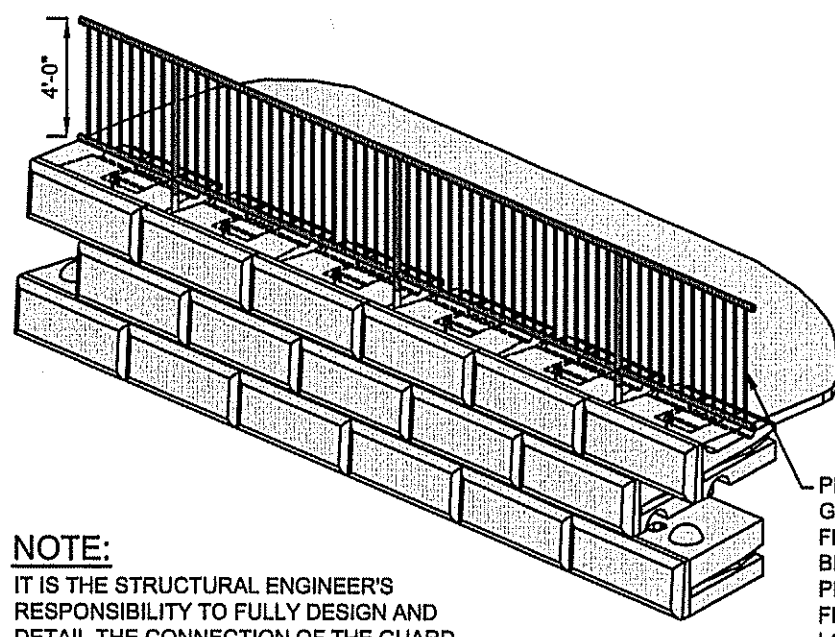
(MARCH 2008)



CONCRETE DRIVEWAY

NOT TO SCALE

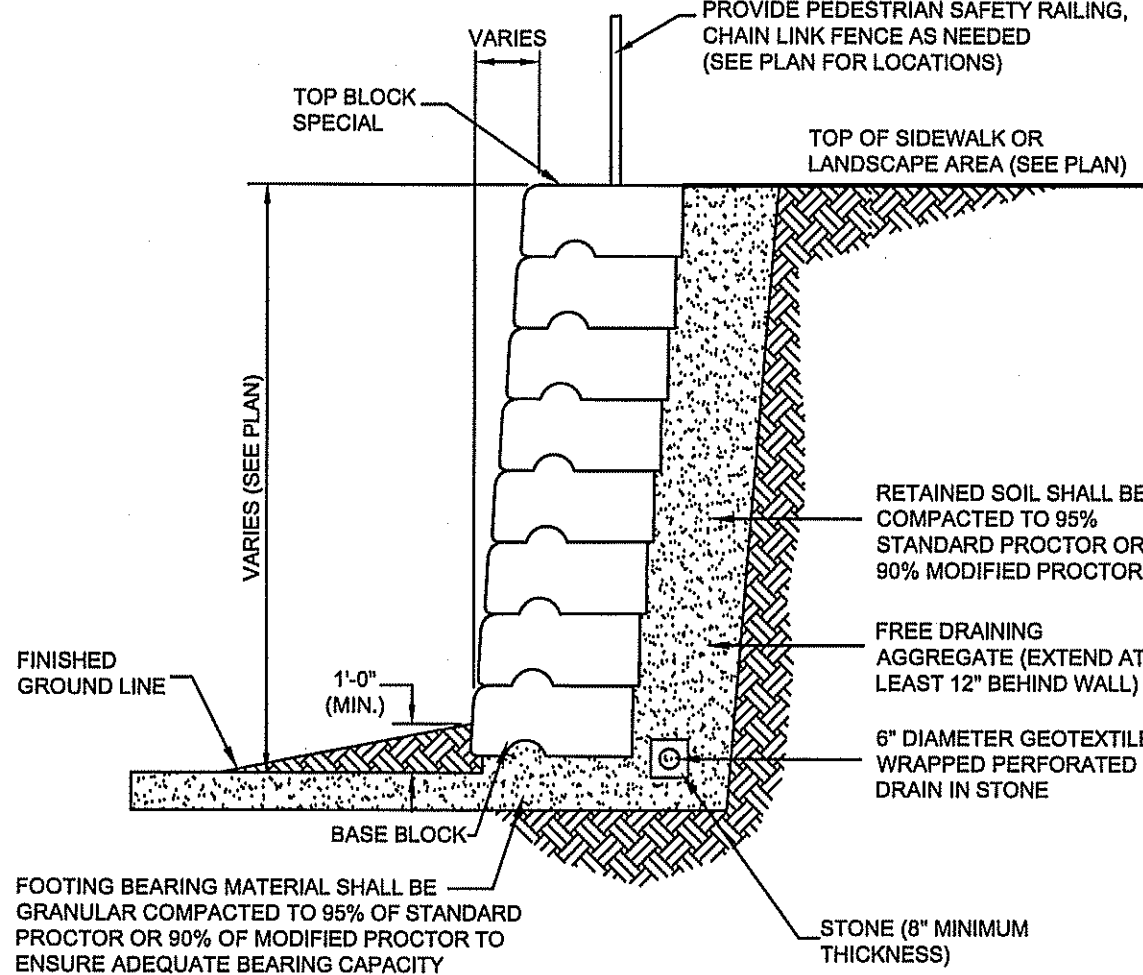
NOTES:
DRIVEWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 92 OF THE CITY OF DOVER, NH ORDINANCES. DRIVEWAY SHALL MEET THE DRIVEWAY REQUIREMENTS OUTLINED IN CHAPTERS 149 AND 155 OF THE CITY OF DOVER, NH ORDINANCES.



NOTE:
IT IS THE STRUCTURAL ENGINEER'S RESPONSIBILITY TO FULLY DESIGN AND DETAIL THE CONNECTION OF THE GUARD POSTS TO THE RETAINING WALL BLOCKS AND ASSURE ACCEPTABLE RESISTANCE TO THE APPLIED FORCES.

FENCE OR PEDESTRIAN RAILING

NOT TO SCALE

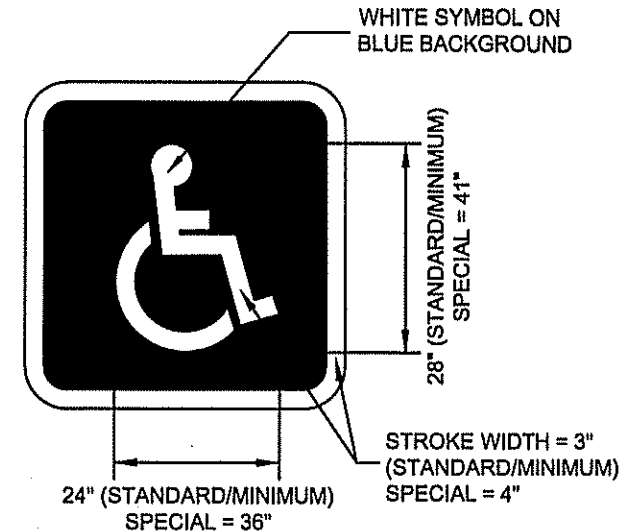


- NOTES:
1. AS PERMISSIBLE, THE STRUCTURAL ENGINEER CHARGED WITH RETAINING WALL DESIGN SHALL SPECIFY SALT RESISTANT BLOCK CONSTRUCTION WHERE WALLS ARE TO BE CONSTRUCTED NEAR ROADWAYS OR PARKING AREAS.
 2. RETAINING WALL DRAIN TO "DAYLIGHT" AT LOW POINT OR TIE TO DRAIN STRUCTURE AS SHOWN IN PLAN VIEW.
 3. THE STAMPED SHOP DRAWINGS AND CALCULATIONS FOR THE ACTUAL RETAINING WALL MUST BE PROVIDED FOR REVIEW AND APPROVAL AT OR PRIOR TO THE PROJECT'S REQUIRED PRE CONSTRUCTION MEETING.
 4. THE PROVIDED PLANS AND SUPPORTING CALCULATIONS MUST ADDRESS THE FOLLOWING CRITERIA:
 - 4.a. DESIGN CALCULATIONS STAMPED BY QUALIFIED PE LICENSE IN NH
 - 4.b. STABILITY CALCULATIONS (INCLUDING BEARING CAPACITY, GLOBAL STABILITY, OVERTURNING & SLIDING, IMPACT)
 - 4.c. GEOGRID PULLOUT AND OTHER PERTINENT DATA & ELEVATIONS
 - 4.d. CONSTRUCTION INSTALLATION SPECIFICATION
 - 4.e. LATERAL EARTH PRESSURE COEFFICIENT
 - 4.f. SURCHARGE LOAD, EMBEDMENT DEPTH
 - 4.g. BOTH A PLAN AND PROFILE OF EACH WALL SECTION

REDI-ROCK RETAINING WALL

(TO BE DESIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN NEW HAMPSHIRE)

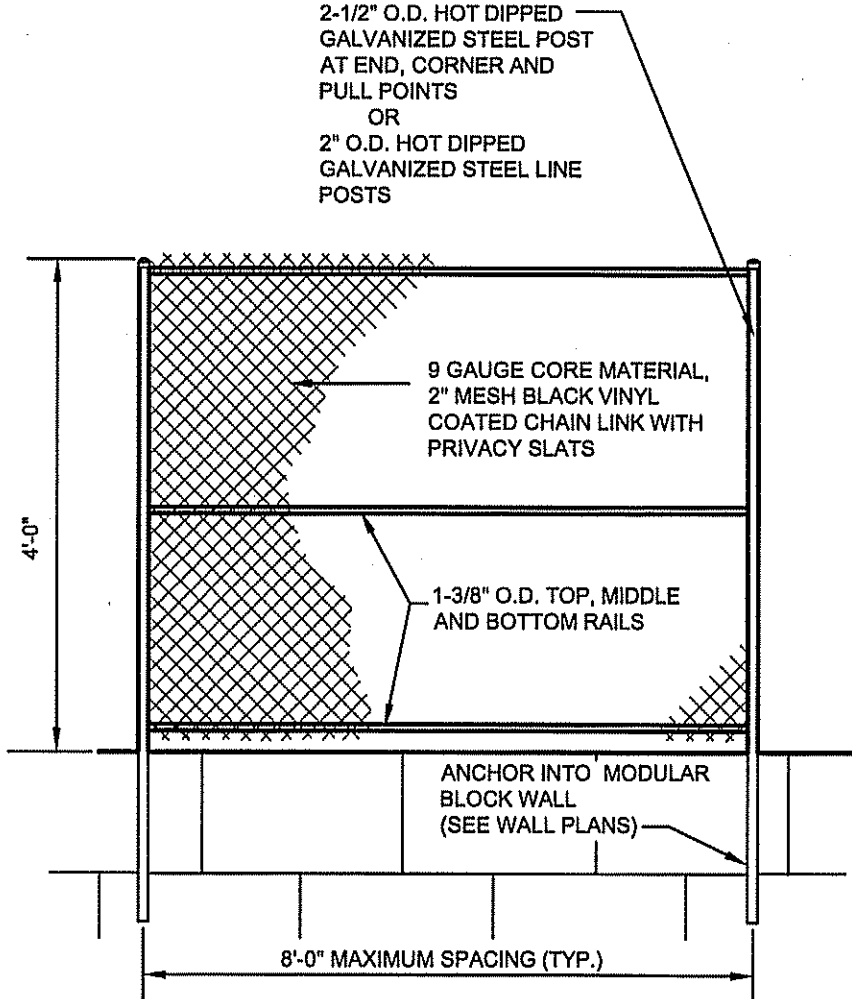
NOT TO SCALE



HANDICAP STRIPING DETAIL

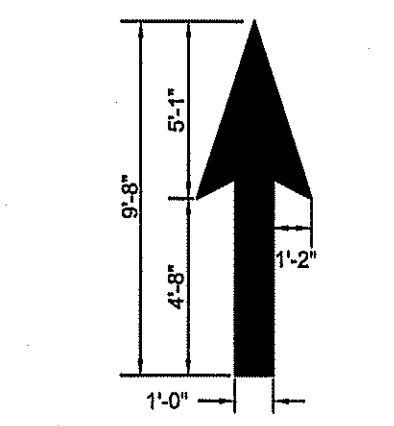
NOT TO SCALE

(MARCH 2012)



CHAIN LINK FENCE DETAIL

NOT TO SCALE



THROUGH (STRAIGHT) ARROW

VARIES

STOP BAR

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

PAVEMENT MARKINGS

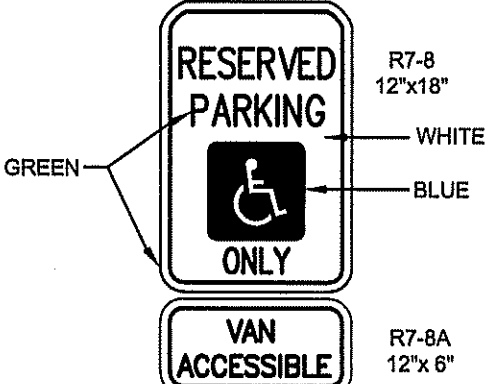
NOT TO SCALE



STOP SIGN DETAIL

NOT TO SCALE

(MARCH 2008)

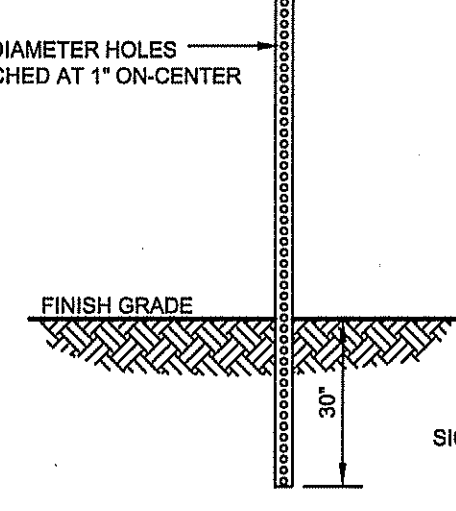


VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL

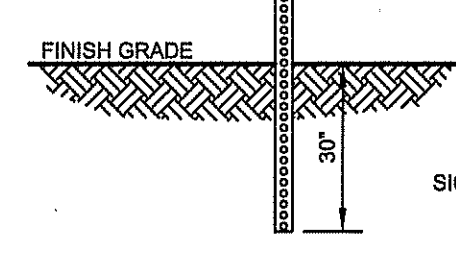
NOT TO SCALE

(MARCH 2008)

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



POST SECTION



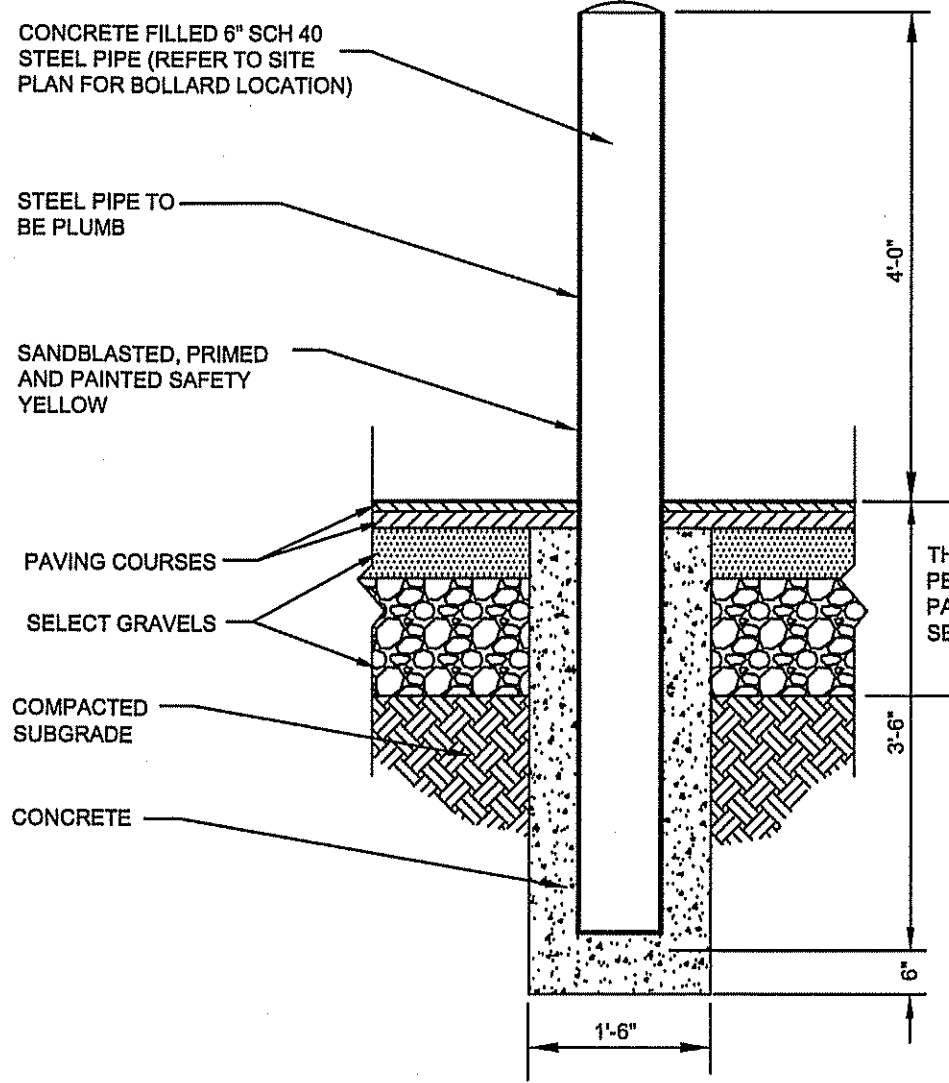
POST MOUNTING

NOTE:
POST SHALL CONFORM TO NHDOT 615.2.5.3

STEEL SIGN POST DETAIL

NOT TO SCALE

(MARCH 2008)



BOLLARD DETAIL

NOT TO SCALE

(MARCH 2008)

CONSTRUCTION DETAILS

DOVER HEIGHTS

MAP 6 LOT 20

1 FIRST STREET

DOVER, NEW HAMPSHIRE

STRAFFORD COUNTY

PLANNING FILE #

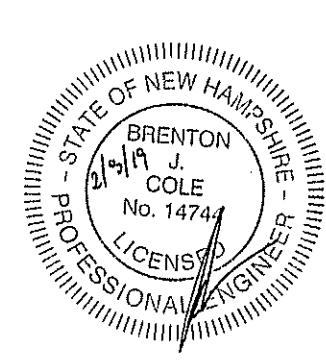
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REVISIONS			
No.	DATE	DESCRIPTION	BY
DATE: JANUARY 22, 2019		SCALE: AS SHOWN	
PROJECT NO: 17-1219-1		SHEET 11 OF 15	

NAME OF PROJECT _____

PER PLANNING BOARD APPROVAL
WORKING HOURS ARE:

MONDAY - FRIDAY _____

SATURDAY _____

NO SUNDAY OR HOLIDAY HOURS

NAME OF DEVELOPER/SITE CONTRACTOR _____

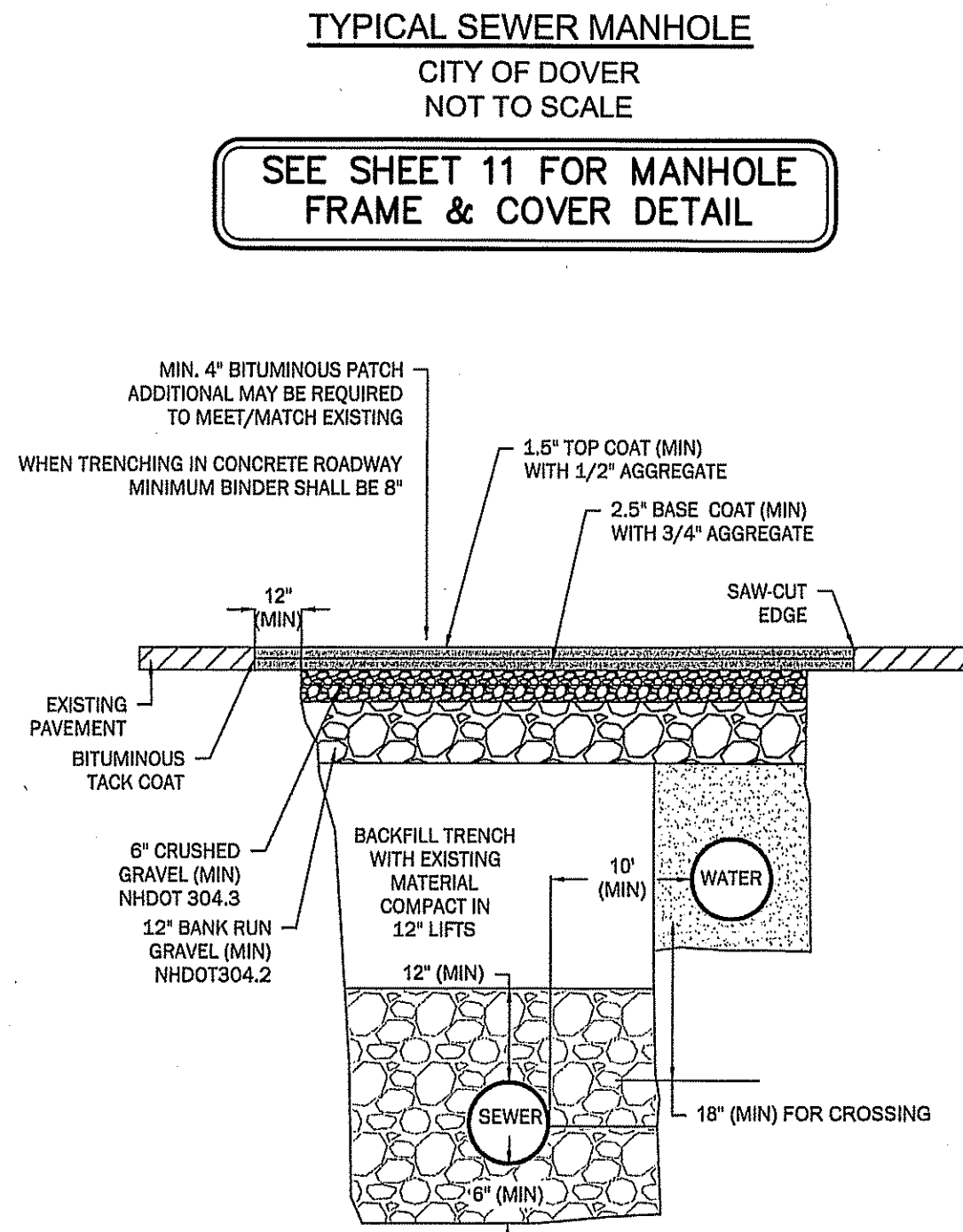
24HR REACHABLE PHONE NUMBER _____

NOTES:
1. SIGN SHALL HAVE BLACK LETTERS ON A WHITE BACKGROUND

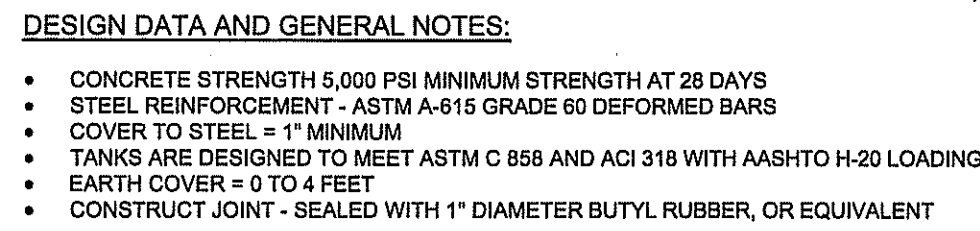
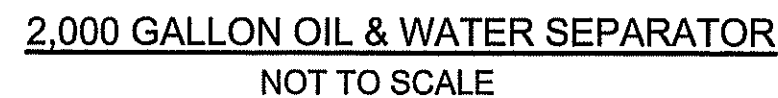
SITE CONSTRUCTION SIGN

CITY OF DOVER
NOT TO SCALE

1. ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.
2. MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.
3. MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H2O LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.
4. BARRELS, CONCRETE GRADE RINGS AND CONE SECTIONS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE AND SHALL CONFORM TO ASTM C478.
5. BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33
100% PASSING 1 INCH SCREEN
90% PASSING 3/4 INCH SCREEN
0-10% PASSING #4 SIEVE
0-5% PASSING #8 SIEVE
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.
6. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
7. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER-TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
8. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
 - A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
 - B. CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
 - C. ELASTOMERIC SEALING RING CAST AT THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
 - D. NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
9. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
10. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
11. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
12. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
13. MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS.
 - A. CONCRETE FOR PRECAST BASES OR GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
 - B. REINFORCING FOR PRECAST CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
 - C. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM C478;
 - D. THE MANHOLE FRAME AND COVER SHALL PROVIDE A 30-INCH DIAMETER CLEAR OPENING;
 - E. THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3-INCH LETTERS CAST INTO THE TOP SURFACE;
 - F. THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LUMPS, BLISTERS, AND HOLES;
 - G. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;
 - H. CASTINGS SHALL BE EQUAL TO CLASS 30, BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM A818M;
 - I. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM C32, CLAY OR SHALE, FOR GRADE SS HARD BRICK;
 - J. MORTAR SHALL BE COMPOSED OF PARTS BY VOLUME: PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION;
 - K. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
 1. 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
 2. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;
 - L. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150/C150M;
 - M. HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES";
 - N. SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";
 - O. CONCRETE FOR GRADE ADJUSTMENT SHALL CONFORM TO THE REQUIREMENT FOR CLASS AA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
 - P. SUBJECT TO (Q) BELOW, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONSTRUCTION:
 1. WITHIN 48-INCHES FOR REINFORCED CONCRETE (RC) PIPE; AND
 2. WITHIN 60-INCHES FOR PVC PIPE LARGER THAN 15-INCH DIAMETER;
 - Q. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR D.I. PIPE OR FOR PVC PIPE UP THROUGH 15-INCH DIAMETER; AND
 - R. WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND IS CAPABLE OF SUPPORTING H2O LOADS.
14. MANHOLE STEPS SHALL:
 - A. BE PERMITTED ONLY AT THE REQUEST OF THE SYSTEM OWNER;
 - B. BE MANUFACTURED OF STAINLESS, PLASTIC-COVERED STEEL OR PLASTIC;
 - C. BE SHAPED SO THAT THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL INTO WHICH THEY ARE SECURED;
 - D. BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM C478 FOR LOAD CARRYING CAPACITY AND PULL-OUT RESISTANCE;
 - E. NOT BE SECURED WITH MORTAR;
 - F. BE APPROXIMATELY 14-INCHES BY 10-INCHES IN DIMENSION;
 - G. HAVE A DEEP SECTION OR RAISED SUBMENTS TO PREVENT SIDEWAYS SLIPPING OFF THE STEP; AND
 - H. HAVE NON-SKID SAFETY SERRATIONS ON THE FOOT CONTACT SURFACES.
15. MANHOLE TESTING:
 - A. MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.
 - B. THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
 1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES HG; AND
 2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH HG PRESSURE DROP TO 9 INCH HG SHALL BE:
 - a. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;
 - b. NOT LESS THAN 25 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND
 - c. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
 - C. THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIME FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B) ABOVE.
 - D. FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE. THE HOME OWNER SHALL BE NOTIFIED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENTS TO GRADE.



TYPICAL TRENCH DETAIL
CITY OF DOVER
NOT TO SCALE



3,000 GALLON GREASE TRAP (H-20)
NOT TO SCALE

NOTE:

1. MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 4 INCHES. MINIMUM SIZE PIPE FOR STREET SEWER LINES SHALL BE 8 INCHES.
2. **PIPE AND JOINT MATERIALS:**
 - A. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA):
 - 1. AWWA C151/A21.51-02 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND-LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
 - 2. AWWA C150/A21.50-02 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A536-84 (2004) DUCTILE IRON CASTINGS;
 - B. JOINTS SHALL BE MECHANICAL, PUSH-ON OR BALL-AND-SOCKET TYPE.
3. PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL COMPLY WITH THE FOLLOWING STANDARDS:
 - A. ASTM D3034-04A - PVC, SOLID WALL;
 - B. AT LEAST 46 PSI AT 5% PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2414-02 DURING MANUFACTURING; AND
 - C. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212-98A(2003)E1 AND SHALL BE PUSH-ON OR BALL-AND-SPIGOT TYPE.
4. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
5. JOINTS SHALL BE DEPENDENT ON THE SERVICE MATERIALS (SEE NOTE #2) FOR WATER TIGHTNESS, AND ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED, WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
6. SERVICE CONNECTIONS SHALL BE MADE BY A WYE OR WYE FITTINGS FOR ALL NEW CONSTRUCTION, THE CENTERLINE OF ALL BUILDING CONNECTIONS SHALL ENTER THE TOP HALF OF THE SEWER. ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 4 FEET MAY HAVE THE SEWER FITTING SET VERTICALLY, ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 12 FEET SHALL EMPLOY AN ENLARGED SADDLE THAT PROTECTS AGAINST THE RISE OF THE PIPE AT THE FITTING BY THE USE OF BELL-ON-BELL CONNECTIONS. FOR EXISTING SEWER WHERE FITTINGS CANNOT BE INSTALLED, SADDLE CONNECTIONS SHALL BE USED. PRESSURE SEWERAGE SHALL HAVE AN ISOLATION VALVE OR CURB STOP VALVE INSTALLED AT THE PROPERTY LINE, IF A CHIEFLY USED FOR THE TRENCH, THE VALVE SHALL BE INSTALLED INSIDE A VAULT TO FACILITATE MAINTENANCE. ROOF DOWNSPOUTS, EXTERIOR OR INTERIOR FOUNDATION DRAINS, SUMP PUMPS OR OTHER SOURCE OF SURFACE WATER RUN-OFF OR GROUND WATER SHALL NOT BE DIRECTLY OR INDIRECTLY CONNECTED TO A PUBLIC SEWER.
7. **PIPE INSTALLATION:**
 - A. THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER.
 - B. PIPES SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL.
 - C. BEDDING AND RE-PILE, FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE, SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRIATE MECHANICAL DEVICES.
 - D. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT.
 - E. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
8. **TESTING:** THE COMPLETED HOUSE SEWER SHALL BE SUBJECT TO A LEAKAGE TEST OF THE FOLLOWING TYPE:
 - A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE TRENCH.
 - B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE TOP OF THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE THROUGH THE CLEAN OUT WITH A FLASHLIGHT.
 - C. DRY FLUORESCENCE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWNSTREAM MANHOLE.
 - D. LEAKAGE OBSERVED IN ANY OF THE ABOVE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP, IF NECESSARY, AND RE-DO AS TO ADDRESS THE TIGHTENING OF THE JOINTS.
9. **ILLEGAL CONNECTIONS:** NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEAKS, FOOTING DRAINS, SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE OR GROUND WATER, SHALL NOT BE PERMITTED.
10. **WATER SERVICE:** SHALL NOT BE ALLOWED TO BE CONNECTED TO THE SEWER SERVICE, UNLESS NECESSARY AND APPROVED BY THE A.H.J. WHEN NECESSARY, THE WATER SERVICE SHALL BE PLACED ABOVE AND TO ONE SIDE OF THE SEWER SERVICE, AS SHOWN.
11. **LOCATION:** THE LOCATION OF THE WYE SHALL BE RECORDED AND NOTED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS MATERIAL ROD OR PIPE SHALL BE PLACED OVER THE WYE TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPE FINDER.
12. **CHIMNEY CONNECTIONS** ARE ONLY PERMITTED IF ALLOWED BY THE A.H.J. ANY TRENCH DEEPER THAN 4 FEET SHALL BE PROVIDED WITH ADDED SUPPORT BY ENSURING THE TRENCH IS PROPERLY BEDDED AND PROTECTED UP TO 12 FEET OF VERTICAL RISE. CAN ALSO BE SECURED BY PROPER MEANS AS LONG AS IT CONSISTS OF A BELL-ON-BELL CONNECTION PROPERLY PROTECTED AGAINST PIPE PENETRATION AND IF IT IS ALLOWED BY THE A.H.J.
13. **WALLS:** OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST DENSITY.

REVISIONS			
No.	DATE	DESCRIPTION	

DATE: JANUARY 22, 2019	SCALE: AS SHOWN
PROJECT NO: 17-1219-1	SHEET 13 OF 15

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

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 SEEDING.
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 EXPOSED TO WET OR FROZEN.
4. IF THE PH OF THE SOIL NEEDS TO BE RAISED, 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 MIXTURE WITH THE UPPER 2 INCHES OF LOAM.
6. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THE TERRACE WITH A GENTLE SPRAY.
7. SEEDING AND INITIAL FERTILIZING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND OCTOBER 14, OR AS PERMITTED. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER OR WHEN THE GROUND IS FROZEN, EXCESSIVELY WET OR OTHERWISE UNFITS SEEDING.
8. WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH STRAW. ANCHOR MULCH ON ALL SLOPES EXCEEDING 3 : 1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
9. PROTECT AND PREVENT AGAINST RABBIT, SQUIRRELS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEEDED.
10. WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OCTOBER 14, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING IS NECESSARY TO ESTABLISH COVER ON THE DISTURBED AREA, SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

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

1. LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
2. LIME SHALL BE USED WHEN NECESSARY TO RAISE THE pH OF THE SOIL AND APPLIED AT ONE OF THE FOLLOWING RATES:

3. FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:

REFERTILIZATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-3-6	20.0	1.0
12-2-8	16.7	1.2
12-4-8	16.7	1.2

4. MULCH SHALL BE APPLIED AT A RATE OF 13 CUBIC YARDS PER 1,000 S.F. OF LANDSCAPE BED

1. LOAM SHALL CONSIST OF LOOSE, FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TEND TO CLOG GROWTH. LOAM SHALL BE FREE OF Viable PARTS OF PROHIBITED INVASIVE PLANTS AND BE GENERALLY FREE OF STONES, LIMBS, STUMPS AND SIMILAR DEBRIS. THE PHOSPHORUS AND POTASH RICHES SHALL BE WITHIN THE FOLLOWING RANGES: THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.8.
2. LIME SHALL BE A CALCIC OR DOLOMITIC GROUND AGRICULTURAL LIMESTONE CONTAINING NOT MORE THAN 1% SULFUR AND 1% CHLORINE. IT SHALL BE FREE OF ALL FOREIGN MATTER AND CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL COMPLY WITH ALL STATE AND FEDERAL RULES AND REGULATIONS.
3. FERTILIZER SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FEDERAL RULES AND REGULATIONS. IT SHALL BE FREE OF ALL FOREIGN MATTER AND SHALL COMPLY WITH ALL STATE AND FEDERAL RULES AND REGULATIONS. THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. EXCEPT AS PERMITTED, THE ANALYSIS RATIO SHALL BE 1:1:1 FOR INITIAL APPLICATION AND 3:1:2 FOR REFERTILIZATION APPLICATION.
4. GRASS SEED SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE AGRICULTURAL AND FORESTRY SEED ACT AND SHALL BE FREE OF ALL FOREIGN MATTER AND INFECTION OF SEED SEEDS.
5. SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF THE FOLLOWING:

6. SEED MIXTURE FOR SLOPE AREAS SHALL CONSIST OF THE FOLLOWING

7. TEMPORARY SEEDING MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 SF AND

SHALL BE AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING:

- 15% BLACKWELL OR SHELTER SWITCHGRASS
- 30% NIAURA OR KAW BIG BLUESTEM
- 30% CAMPER OR BLAZE LITTLESTEM
- 15% NE-Z7 OR BLAZE SAND LOVEGRASS
- 10% VIKING HYPOCHOERIS TREFOIL

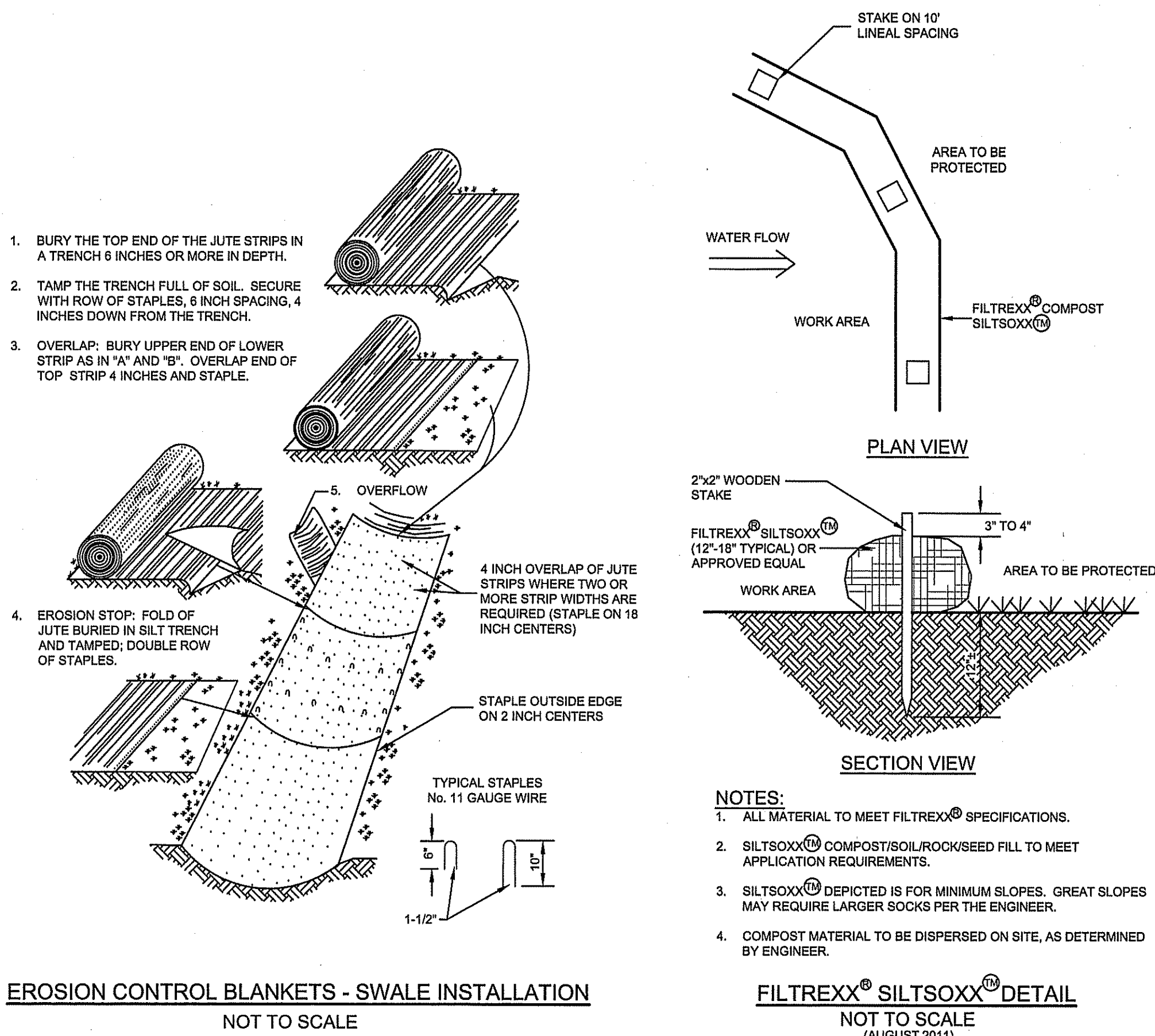
INCOCULUM SPECIFIC TO BIRDPOOT TREFOIL MUST BE USED WITH THIS MIXTURE. IF SEEDING BY HAND, A STICKING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR TIMES THE RECOMMENDED AMOUNT OF INCOCULUM.

8. SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT POND, SHALL BE APPLIED AT A RATE OF 70 POUNDS PER ACRE OR 1.6 POUNDS PER 1,000 SF, AND SHALL CONSIST OF THE FOLLOWING:

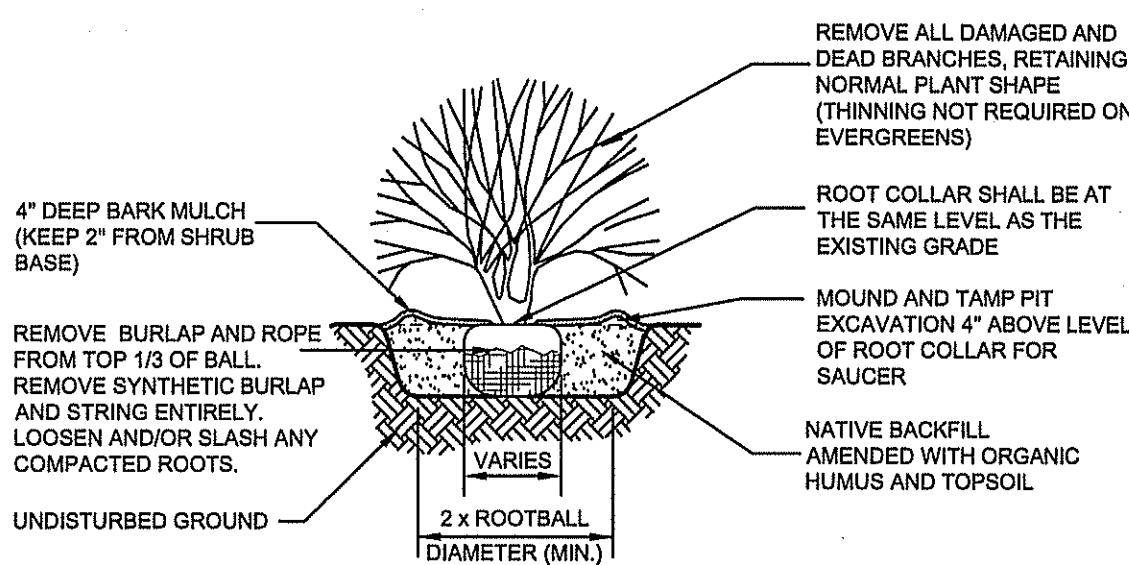
- 25% CREEPING RED FESCUE
- 15% SWITCH GRASS
- 15% FOX SEDGE
- 15% CREEPING BENTGRASS
- 10% FLATPEA
- 20% WILDFLOWER VARIETY

9. STRAW USED FOR MULCH SHALL CONSIST OF MOVED AND PROPERLY CURED GRASS OR LEGUME CROPPINGS. FRESH CROPPINGS, TWIGS, DEBRIS, INVASIVE SPECIES OR OTHER DELETERIOUS MATERIAL AND ROT OR MOLD.

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.
2. SOD SHALL BE MACHINE CUT TO A THICKNESS NOT LESS THAN 3/4", EXCLUDING THATCH, AND SHALL BE FREE OF VIGOROUS GRASSES WHEN PLANTED.
3. SOD PADS SHALL BE OF UNIFORM SIZE AND COMPOSED OF AT LEAST TWO LOCAL GRASS VARIETIES.
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 SOIL.
5. WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.

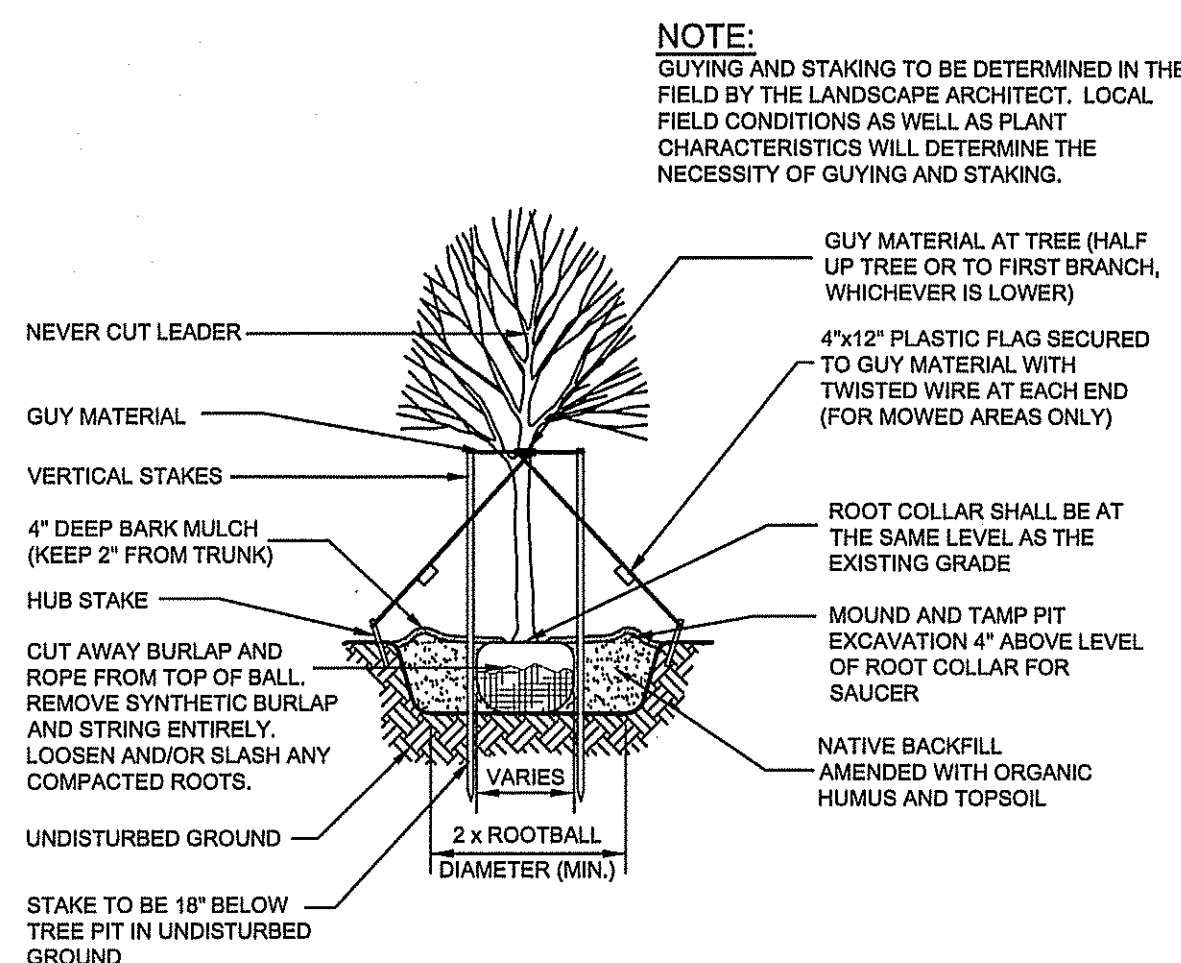


EROSION CONTROL BLANKETS - SWALE INSTALLATION



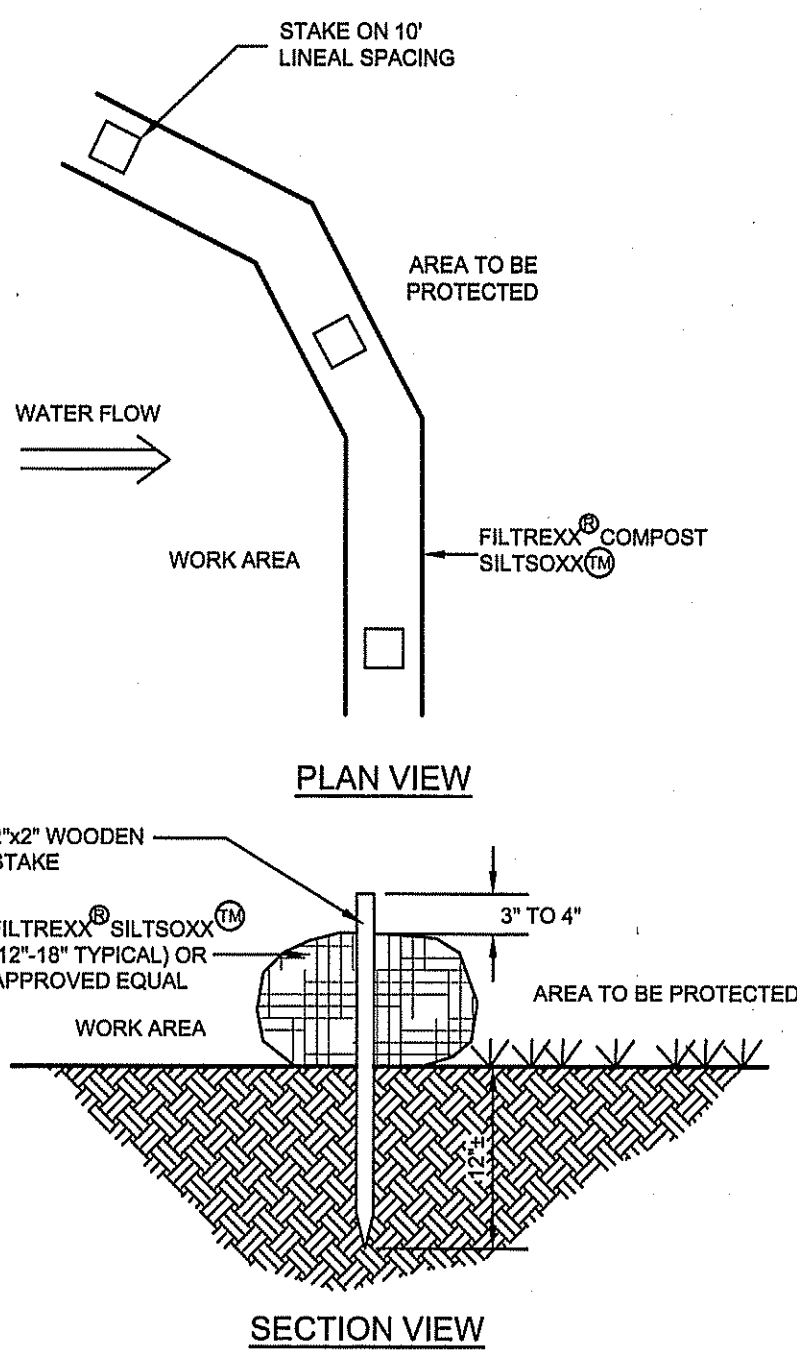
BALLED & BURLAP SHRUB PLANTING DETAIL

NOT TO SCALE
(JANUARY 2012)



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE
(JANUARY 2012)



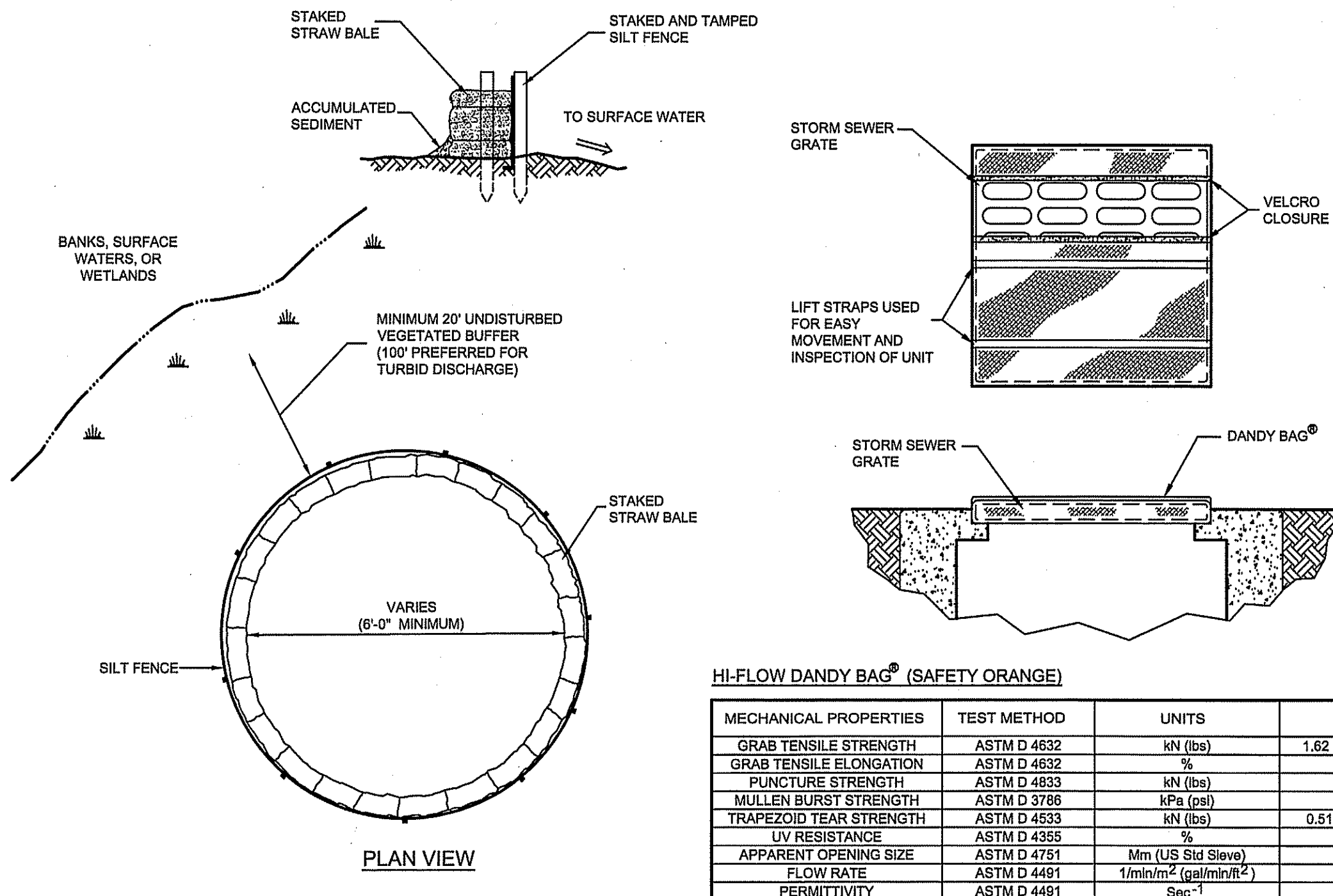
SECTION VIEW

NOTES:

1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. SILTXXX™ COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
3. SILTXXX™ DEPICTED IS FOR MINIMUM SLOPES. GREAT SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

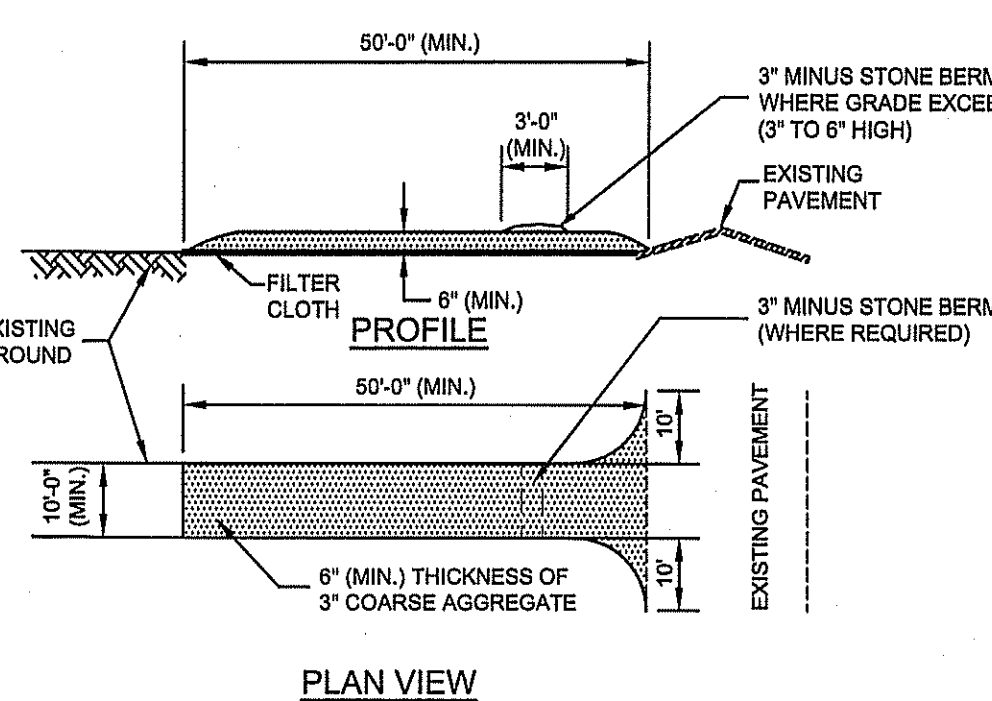
Eli TREXX® SU TSOXX™ DETAIL

NOT TO SCALE
(AUGUST 2011)



SEDIMENT RETENTION BASIN

NOT TO SCALE
(AUGUST 2013)



STABILIZED CONSTRUCTION EXIT DETAIL

NOT TO SCALE
(APRIL 2018)

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

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

1. STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
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.
6. 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.
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANUP 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. IF IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP, IT SHALL BE DONE PRIOR TO THE TRAP.

1. 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 OF THE CALIFORNIA WATERWAYS ACT AND THE FEDERAL NAVIGATION CHANNELS ACT. SPECIFIC REQUIREMENTS OF THE ACT WILL BE PROVIDED TO THE CONTRACTOR BY THE OWNER.
2. PRIOR TO COMMENCEMENT OF ANY EARTHMOVING OPERATIONS, AN APPLICABLE TEMPORARY EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SILTATION FENCING AND STABILIZED CONSTRUCTION ERTI 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. ALL EXISTING SOILS AND MATERIALS SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTIONS ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION FENCE IN ORDER TO PREVENT LOSS DUE TO EROSION.
4. PERFORM EARTHMOVING OPERATIONS TO PREPARE THE GROUND FOR THE WORK NEEDED TO BALANCE SITE AND FACILITATE BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION. PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTH DIKES OR EXCAVATED SWALES.
5. AFTER BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTHMOVING OPERATIONS UNTIL DESIGN GRADE IS ACHIEVED.
6. INSTALL DRAINAGE SWALE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BEEN FULLY STABILIZED.
7. PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESS.
8. COMPLETE EXCAVATIONS/STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILE LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FRIABLE LOAM.
9. 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.
10. PERFORM EROSION CONTROL OVER ALL AREAS OF EXPOSED SOIL.
11. CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGH ONE WINTER.
12. INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT AND FINISH CURB AND GUTTER COURSE.
13. COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.

1. EXPOSED EARTHWORK SHALL BE CONFINED TO AS LIMITED AN AREA AS IS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF TIME EXCEEDING THIRTY (30) 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 FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OF RAINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
3. 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.
4. 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 MAINTENANCE OF THE ROADWAY.
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 ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
6. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS AS SHOWN.
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3% OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
7. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENR 102.
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 SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
9. ALL EXPOSING FINISHED GRADE SLOPES OF 3:1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION."
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 SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. ELSEWHERE, THE PLACEMENT OF EROSION CONTROL BLANKETS SHALL BE REQUIRED ONLY WHERE THERE IS NO EXISTING VEGETATION, SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF HURV OR SPRING MELT EVENTS.
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 WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. ALL EXPOSED EROSION CONTROL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER MDOT 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:
 - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 65% VEGETATIVE GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
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[illegible]





FIRST STREET ELEVATION
1/8" = 1'-0"



SECOND STREET ELEVATION
1/8" = 1'-0"

DOVER HEIGHTS
ONE FIRST STREET, DOVER, NH

BUILDING ELEVATION
1/8" = 1'-0"

02/08/2019



WEST ELEVATION
 $\frac{1}{8}" = 1'-0"$
 (EAST ELEVATION SIMILAR)



SECOND



