CITY OF DOVER

DOVER PLANNING BOARD – AGENDA

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Ave, Dover NH 03820
Meeting Date:	**Tuesday, February 25, 2020**
Meeting Time:	**7:00 pm**

1. **CITIZENS' FORUM**
2. **APPROVAL OF THE PRIOR MINUTES**
   - February 11, 2020 Regular Meeting Minutes
3. **OLD BUSINESS**
4. **NEW BUSINESS**
   A. Consideration and acceptance of a Minor Lot Line Adjustment for Timothy Belanger, (Owner: Sandra G. Nevins), Assessor's Map 27, Lots 165 & 165A, zoned R-12, and located at 17 Hill Street. *(P20-12)
   B. Consideration and acceptance of a Transfer of Development Rights for Timothy Belanger, (Owner: Sandra G. Nevins), Assessor's Map 27, Lot 165, zoned R-12, and located at 17-19 Hill Street. (Proposal is to use TDR to build a duplex where single family dwellings are only permitted). *(P20-13)
   C. Consideration and acceptance of a Conditional Use Permit for Chad & Heather Holleman, Assessor's Map L, Lot 11, zoned R-20, located at 21 Nute Road. (Proposal is for a new single family house and accessory dwelling unit to replace an existing house adjacent to the tidal Bellamy River, with 5,190 sq. ft. of permanent tidal buffer zone impact and 4,167 sq. ft. of temporary tidal buffer zone impact). *(P20-10)
   D. Consideration and acceptance of an Amendment to a previously approved Site Review for Little Bay Marina & Development, LLC., Assessor's Map 8, Lots 9, 10, 11, & 12, zoned LBW, and located at 421, 423, 425, and 427 Dover Point Road. (Proposal is to relocate units per NH DES. The previous approval was for purchasing 2 units through TDR in addition to the 23 units plus marina/marina office with 1 dwelling unit and 27 parking spaces). *(P19-04A)
   E. Consideration and acceptance of a Request to use Transfer of Development Rights for a Subdivision for DRVP Development, LLC., Assessor's Map 14, Lot 10-G, zoned R-12, and located at Cataract Avenue. (Proposal is to subdivide one lot into 12 by purchasing 1.5 units through TDR and building 10 new single family homes). *(P19-80)
   F. Consideration and acceptance of a Conditional Use Permit for DRVP Developers, LLC., Assessor's Map 14, Lot 10-G, zoned R-12, located at 40A Cataract Avenue. (Proposal is for 10 single family units along a 700 foot long road and associated drainage, creating 387 s.f. of wetlands impact and 5,979 s.f. of 50 foot wetland buffer impact. *(P19-81)
   G. Consideration and possible vote on posting the proposed Rezoning and non- syntax/renumbering Amendments to Chapter 170 and the associated Zoning Tables. The full text of the amendments is available in Planning Department & at www.dover.nh.gov located under meeting materials and on the Planning Department page.
5. **STAFF COMMENT**
6. **MEMBER COMMENTS**
7. **ADJOURNMENT**

*Indicates that if the application is accepted for discussion, the public hearing will be held the same evening. Note that some hearings will be continued from one meeting to another and some may be postponed. Since this is only a partial description of the proposal and may change, persons with questions or wishing to see the plans are invited to visit the Planning Office, Monday through Thursday from 8:30 am to 5:30 pm and Friday 8:30 am to 4:00 pm or email Dover-Planning@dover.nh.gov. You may also view materials at www.dover.nh.gov. Follow us on Twitter @DoverNHPlanning and find us on Facebook at https://www.facebook.com/DoverNHPlanning.

CITY OF DOVER

DOVER PLANNING BOARD – MINUTES

Meeting Type: Regular Meeting
Meeting Location: City Council Chamber's 288 Central Avenue
Meeting Date: **Tuesday, February 11, 2020**
Meeting Time: **7:00 pm**

Members Present: Dave Landry, Frank Torr, Dave White, Jackson Kaspari, Erin Allgood (Alternate), Ellen Brooks (Alternate), Lisa McGunnigle (Alternate), Tom Clark, Dennis Ciotti (Councilor)

Members Not Present (excused): Gina Cruikshank (Chair), Hayley Harmon (Vice Chair), Matt Sullivan

Members Not Present (un-excused): None

Staff Present: Christopher Parker, Assistant City Manager

E. Brooks, sitting in for Chair G. Cruikshank called the meeting to order at 7:00 p.m. and noted J. Kaspari is sitting for Vice Chair H. Harmon, L. McGunnigle is sitting for J. Kaspari and E. Allgood is sitting for M. Sullivan.

1. CITIZENS' FORUM

Citizens Forum Open. No One Spoke. *Citizens Forum Closed.*

2. APPROVAL OF THE PRIOR MINUTES

- January 28, 2020 Regular Meeting Minutes

Motion: D. White moved to approve the minutes as submitted. Seconded by F. Torr. Vote U/A

3. OLD BUSINESS

None.

4. NEW BUSINESS

A. Consideration and acceptance of a Minor Lot Line Adjustment for Brian C. Miller, (Owners: Brian C. Miller and Paul A. Rogers), Assessor's Map A, Lots 14H, 13R, & 13A-1, zoned R-12, and located at 10 Comanche St and 10 Philip St. *(P20-08)

C. Parker stated that the applicant is proposing to adjust the lot line between the three existing lots, consolidating area from one of the lots into the remaining two lots. This will eliminate lot 13A-1. Lot 13R will increase in size from 22,071 s.f. to 28,497 s.f. and lot 14H would increase from 10,500 s.f. to 31,102 s.f.

All dimensional regulations and requirements are met and no additional buildable area is being created. Currently, 13A-1 has nonconforming frontage on Philip Street, and this nonconformity will be extinguished.

Steve Haight, Civilworks, represented the applicant and reviewed the project. Three lots will be consolidated to two lots. The middle lot will be apportioned between the other two existing lots increasing their size.

Motion: F. Torr moved to accept the item. Seconded by D. White. Vote U/A

Public hearing reopened. No one spoke. *Public Hearing closed.*

STAFF RECOMMENDATION:
Chapter 155-18 of the Land Subdivision Regulations of the City Code provides for the adjustment of existing lot lines between two or more lots. This Planning Department believes this plan is consistent with those

regulations and recommends that the Planning Board vote to approve the lot line adjustment with the following conditions:

Conditions to Be Met Prior to Signing of Plans:

1. The applicant shall provide the Planning Department with a digital version of the final plat
2. The applicant shall revise the plat to:
   a. Add Planning file number P20-08 to the title block
   b. Add signature and stamp of LLS
   c. Add owners' signatures.

Motion: D. White made a motion that the Board approve the lot line adjustment with staff recommended conditions. Seconded by D. Landry. Vote U/A.

B. Consideration and acceptance of a Conditional Use Permit for Knox Marsh Development, LLC., (Owner: Garrett Paolini), Assessor's Map 10, Lot 149-A, zoned HR, and located at 276 Washington Street. (Proposal is to convert the existing building from 2 units to 4 units). *(P20-09)

C. Parker stated that the applicant proposes to convert and add onto an existing duplex to four unit building with a shared 8-space parking lot.

Conditional Use Permits for this use in the HR do not require Technical Review Committee review, however the Board can place that as a condition of approval if they see any issues they would like staff to review.

Christopher Berry, Berry Surveying and Engineering represented the applicant and reviewed the project. The property is .76 acres. The existing site has a duplex on it that looks like a single-family cape-style home. The owners wish to convert that structure back to a single-family home and add three units to the back of it. The proposal would include three parking spaces in the front and additional parking for eight vehicles around back for the other units.

The architecture will be in character with the neighborhood. The proposed home is New England-style and the addition is carriage-style. Each unit has its own entrance. There is a proposed six-foot stockade fence between the property and the abutters. No lighting should trespass onto abutting properties. A storm water plan will be submitted for review during the permitting process.

D. Landry wondered what the back of the structure will look like.
Mr. Berry said it will have doors and windows, but no protrusions of the structure. The landscape will be grass up to the fence. The back side has a full shed dormer on the second floor.

D. Landry wondered if the lot would support future expansion.
Mr. Berry noted the average open space for the surrounding area is 55% and with this proposal there will be 69% so there could be expansion in the future if allowed. It is not allowed under current restrictions.

Motion: F. Torr moved to accept the item. Seconded by D. Landry. Vote U/A

Public hearing reopened.
Patty Driscoll, 41 Arch St wants to know the plan for the lighting and a privacy fence between the parking area and her yard. She is concerned about the paving and possible drainage onto her property.

Jane Ann Sherwood, 43/45 Arch St was curious about the design and parking. She thought it was apartments, so is glad it is condos. They've done a good job. She would like a privacy fence in the back.

Public Hearing closed.

STAFF RECOMMENDATION:
The Heritage Residential table allows for 4 dwelling units through a CUP which is granted by the Planning Board rather than the Zoning Board of Adjustment.

Chapter 170-20-B(2)&(3) of the City Code states that conditional use approval for relief from the use standards may be granted by the Planning Board provided that the proposed project complies with the standard. This Planning Department believes this plan is consistent with those regulations and recommends that the Planning Board vote to approve the Conditional Use Permit with the following conditions:

Conditions to Be Met Prior to the Issuing Conditional Use Permit:

1. The applicant shall be subject to a formal agreement between the Planning Board and the applicant. Said agreement shall be recorded at the Strafford County Registry of Deeds per Chapter 170-20-B(3)
2. The owner's signature shall be added to the final plan.
3. Add CWS signature and stamp
4. Add the Planning File Number P20-09.
5. The applicant shall provide a digital version of the final plan to the Planning Department.
6. Add landscaping to screen three parking spaces, and increase height of fence to 8' and extend it the length of the Driscoll and Sherwood lots
7. Indicate materials on the architectural renderings or in a narrative to the satisfaction of the Assistant City Manager. Including information about the site lighting.
8. Add a note that a construction sign will go up to the satisfaction of the City Engineer prior to construction and that there shall be no site work on Saturday or Sunday.

Conditions To Be Met Prior to Issuance of a Building Permit:

9. Provide a grading plan, which will be approved by the City Engineer

Conditions To Be Met Prior to Occupancy:

10. Issuance of a Certificate of Occupancy.
11. Impact fees shall be paid per the invoice.
12. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work

D. Ciotti wondered about the driveway conditions. Mr. Berry noted if it needs maintenance, they have the access and rights to do so.

Motion: D. White made a motion that the Board issue the Conditional Use Permit with staff recommended condition. Second by D. Landry. Vote U/A.

C. Consideration and acceptance of a Site Review for One First Dover LLC., Assessor's Map 6, Lot 20, zoned CBD-General, and located at 1 First Street. (Proposal is to raze the existing building and to construct a five to six-story building with 71 residential units and 4 street-level commercial spaces totaling 6,199 s.f and a lower level parking garage off First Street). *(P19-16A)

C. Parker stated that the applicant received conditional approval from the Planning Board on May 28, 2019 but did not submit final plans within the 90 days from the Planning Board meeting and did not request the administrative extension. Therefore, the application expired, with the plans unsigned.

The applicant is requesting the Board re-approve the same application and plan from May 28, 2019 which is to demolish the existing building and construct a new mixed use building including 71 dwelling units and commercial space with garage spaces.

Unlike Site Plans, Conditional Use Permit approvals do not have a 90 day period to meet the conditions. P19-17, the Conditional Use Permit for height, did not expire and would remain in place if this site plan is re-approved.

Matt Peterson, Keach Nordstrom Associates represented the applicant and reviewed the project. Nothing has changed on the plans- they are exactly the same. The conditions to be met have been addressed on the plan sets, they just have to get those submitted.

Motion: D. Ciotti moved to accept the item. Seconded by D. White. Vote U/A

Public hearing reopened. No one spoke. *Public Hearing closed.*

STAFF RECOMMENDATION:
Chapter 149-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. This Planning Department believes this plan is consistent with those regulations and recommends that the Planning Board vote to approve the Conditional Use Permit with the following conditions:

Conditions to Be Met Prior to the Signing of Plans:

1. The applicant shall provide a digital version of plan set
2. The applicant must revise final plan set to:
   a. Combine site plan and architectural plans into one set.
   b. Add the owner's signatures to the final plat submitted for signature to be recorded at the Strafford County Registry of Deeds
   c. Add LLS, PE, Architect, and LA signatures and stamps to final plan
   d. Relocate sewer line to not interfere with transformer pad unless Eversource allows it to remain.

Conditions to Be Met Prior to any Construction Activity:

3. A site construction sign with the contact information for the general contractor must be located and approved by the City Engineer or Assistant City Manager.
4. Applicant shall complete Land Use Development Tracking Form, most recently revised version, utilizing the online Pollution Tracking and Accounting Pilot Project (PTAPP) portal. https://www.unh.edu/unhsc/ptapp
5. Install sinage noting visibility and noise during any earthwork, to the satisfaction of the City Engineer.

Conditions to Be Met Prior to Issuance of a Building Permit:

6. The new building shall be assessed and pay the current water and sewer investment fees in place at the time of application for service.

Conditions to Be Met Prior to Occupancy:

7. Issuance of a certificate of occupancy.
8. Impact fees shall be paid per the invoice included with the Notice of Decision.
9. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

Motion: D. Landry made a motion that the Board reinstate the Site Plan approval with staff recommended conditions. Seconded by D. White. Vote U/A.

D. Consideration and possible vote on posting the proposed Amendments to Chapter 170 and the associated Zoning Tables. The full text of the amendments is available in Planning Department & at www.dover.nh.gov located under meeting materials and on the Planning Department page.

C. Parker reviewed the rezoning process and noted that the proposed amendments in front of the Board tonight are part 1 of 2 proposed list of amendments. This grouping addresses syntax and restacking of items within the zoning chapter that General Code has recommended be accomplished to streamline the code.

C. Parker then reviewed the amendments.

Motion: F. Torr moved to post the amendments and hold a public hearing. Seconded by T. Clark. Vote U/A

5. STAFF COMMENTS

- Blasting has resumed at the waterfront. It must be completed by March 15th to avoid affecting wildlife in the river.
- Spring planning conference: members with a year or less on the board need to attend, or they won't be able to vote on affordable housing projects
- TRC has reviewed projects on Washington Street
- The waterfront plans for phase I have TRC scheduled for later this month

6. MEMBER COMMENTS

D. Ciotti asked about the project on First St- where will the lay down area be? C. Parker said staff is working with them to possibly lease them space. Demo will occur right behind the building. They are not allowed to use the right of way.

D. Ciotti also wondered about downtown parking. C. Parker said discussions are occurring about having those construction vehicles pay the metered rate while they are parked.

7. ADJOURNMENT

Motion: F. Torr made a motion to adjourn at 7:47 p.m. Seconded by D. Landry. Vote U/A

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P20-12

Application Type:	Minor Lot Line Adjustment
Applicant(s):	Timothy Belanger
Owner(s):	Sandra G. Nevins
Location:	17 Hill Street (Map 27, Lots 165 & 165A)
Meeting Date:	February 25, 2020

INTENT: To adjust the lot lines between the two recently restored lots. Lot 165 would decrease from 6,347 s.f. to 5,810 s.f. and lot 165A would increase from 6,600 s.f. to 7,137 s.f.

LOTS/UNITS PROPOSED: N/A

AGENDA ITEM #: 4-A

ACREAGE:	**EXISTING:**	**PROPOSED:**
Lot 165:	0.15 ac	0.13 ac
Lot 165A:	0.15 ac	0.16 ac

ZONING DISTRICT: R-12

EXISTING LAND USE: Residential and vacant

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

ZBA ACTION: None

ATTACHMENTS: Application materials including LLA Plan

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified or first class mail to all abutters for this meeting.

PERMITS REQUIRED: N/A

WAIVERS REQUESTED: N/A

Summary of Request and Background
The applicant is proposing to adjust the lot line between two recently restored lots. Lot 165 will decrease from 6,347 s.f. to 5,819 s.f. and lot 165A will increase from 6,600 s.f. to 7,137 s.f.

The frontage and lot area requirements of the R-12 zone are not met but are vested through the lot restoration statute. Since the lot line would make one lot more confirming and one lot less conforming-staff considers the nonconformity a wash.

Consistency with Land Use Regulations
Chapter 155-18 of the Land Subdivision Regulations of the City Code provides for the adjustment of existing lot lines between two or more lots. This plan is consistent with those regulations.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board accept the application for review, open the public hearing, and vote to approve the minor lot line adjustment with the following conditions:

Conditions to Be Met Prior to Signing of Plans:
1. The applicant shall provide the Planning Department with a digital version of the final plat
2. The applicant shall revise the plat to:
   a. Revise abutting lot owner information so that correct lot and owners align as Dover GIS indicates
   b. Add Planning file number P20-12 to the title block
   c. Add signature and stamp of LLS
   d. Add owners' signatures.

17-19 Hill Street



Property Information

Property ID	27165-A00000
Location	17 19 HILL ST
Owner	NEVINS SANDRA G
Land Use	104

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

City of Dover, New Hampshire
MINOR LOT LINE ADJUSTMENT APPLICATION

[Revision Date: June 4, 2019]

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

APPLICANT INFORMATION

Name of Applicant: Timothy Belanger Telephone #

Address of Applicant: 13 Hill Street Dover, NH 03820

FIRST PROPERTY OWNER AND PARCEL INFORMATION

Name of 1st Property Owner (*if different from applicant*): Sandra G. Nevins Telephone # N/A

Address of 1st Property Owner: 17 Hill Street Dover, NH 03820

Address of Property: Hill Street

Assessor's Map # 27 Lot(s) # 165A

Property Deed: Book 4406 Page: 19

Zoning District(s) R-12 Overlay District(s) NONE

Size of Existing Parcel (sq. ft.): 6,600 Size of Proposed Parcel (sq. ft.): 7,137

SECOND PROPERTY OWNER AND PARCEL INFORMATION

Name of 2nd Property Owner (*if different from applicant*): Sandra G. Nevins Telephone # N/A

Address of 2nd Property Owner: 17 Hill Street Dover, NH 03820

Address of Property: Hill Street

Assessor's Map # 27 Lot(s) # 165

Property Deed: Book 4406 Page: 19

Zoning District(s) R-12 Overlay District(s) NONE

Size of Existing Parcel (sq. ft.): 6,347 Size of Proposed Parcel (sq. ft.): 5,810

THIRD PROPERTY OWNER AND PARCEL INFORMATION N/A

Name of 3rd Property Owner (*if different from applicant*): Telephone #

Address of 3rd Property Owner:

Address of Property:

Assessor's Map # _____ Lot(s) # _____

Property Deed: Book _____ Page: _____

Zoning District(s) _____ Overlay District(s) _____

Size of Existing Parcel (sq. ft.): _____ Size of Proposed Parcel (sq. ft.): _____

[Use additional application form if more than two lots are being adjusted]

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) McEneaney Survey Associates

Address 24 Chestnut Street Dover, NH 03820 Telephone #: 603-742-0911

Professional License #: Kevin M. McEneaney, LLS NH 661 E-mail address: kevin@surveynh.com

CONSERVATION EASEMENT HOLDER (s) N/A

Name of Easement Holder: _____ Telephone #_____

Address Easement Holder: _____

Name of 2nd Easement Holder: _____ Telephone #_____

Address 2nd Easement Holder: _____

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 First Property Owner: Sandra Reeves Date: 1-26-2020

Signature of Second Property Owner: _____ Date: _____

Signature of Applicant (*if different from owner*): _____ Date: 1/26/2020

Signature of Agent: _____ Date: _____

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I 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: Sandra Reeves Date: 1-26-2020

City of Dover, New Hampshire
LOT LINE ADJUSTMENT SUBMISSION CHECKLIST

[Revision Date: June 4, 2019]

This review checklist is intended to assist the applicant in the planning process of preparing a Subdivision 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.

Plan Review Fees are due along with three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and materials, 3 weeks prior to the Planning Board meeting. Abutter/Notice Fees will be invoiced and are due 28 hours prior to Planning Board.

The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision requirements. Please refer to the Subdivision Regulations for full details.

APPLICANT: Timothy Belanger File Number: P20-

PROPERTY LOCATION: Hill Street Tax Map: 27 Lot: 165 and Lot: 165A

	Where/How Provided	Reviewed
1. Completed and signed Application form	✓	
2. Plan Review Fees are provided	✓	
3. Electronic copy of the surveyed plat layout	✓	
4. Electronic copy of supplementary materials and application	✓	
5. Fifteen copies of LLA plan w/scale of not less than 1"=50' or 1"=100' for larger adjustments. Plans shall contain the following items as appropriate:	✓	
Location map at appropriate scale	✓	
Planning File #	✓	
Date, north arrow and scale	✓	
Names of all abutting property owners	✓	
Name and address of owners	✓	
Signature & stamp of NH licensed land surveyor	✓	
Zoning District boundaries, including any special or overlay districts	N/A	
Location of Conservation District areas	N/A	
Location, names and widths of existing and streets, including pavement widths, grades, curbs and crosswalks	✓	
Location and widths of existing & proposed easements & right of ways	N/A	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	✓	
Existing and proposed lot areas in square feet	✓	
Existing and proposed buildings and structure locations	✓	
Minimum building setbacks or build to lines on all lots	✓	
Map and lot numbers for existing and proposed lots as assigned by Tax Assessor	✓	
Location, material and size of existing and proposed permanent monuments	✓	
All applicable Dover Common Subdivision notes	✓	

REVIEWED BY: _____ DATE_____

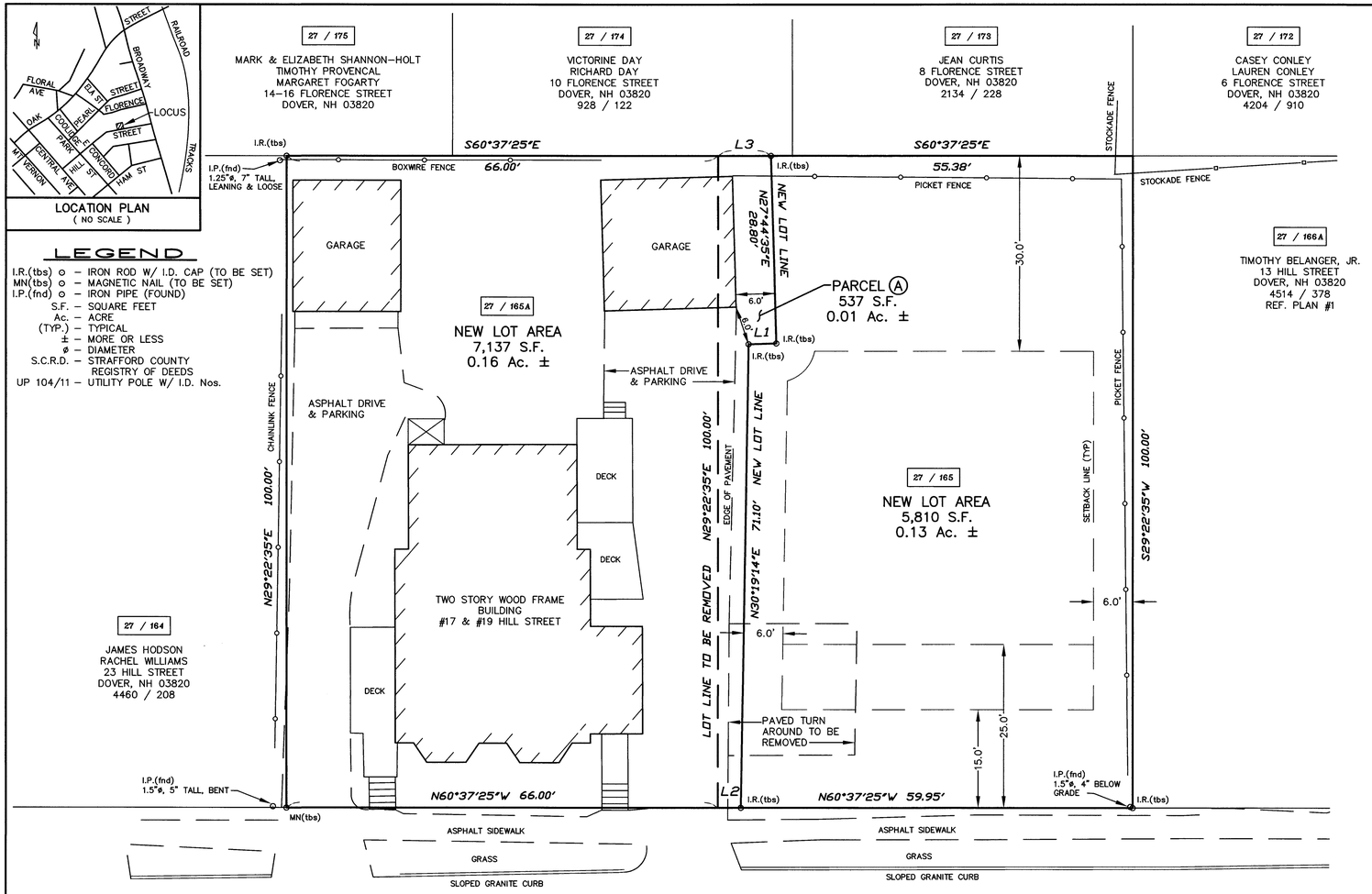
P20-12 & P20-13 17 Hill Street

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
27163-000000	23 1/2 HILL ST	GARDINER RYAN		23 1/2 HILL ST	DOVER	NH	03820
27164-000000	23 HILL ST	HODSON JAMES M &	WILLIAMS RACHEL A	23 HILL ST	DOVER	NH	03820
27166-000000	11 HILL ST	MINOT-SEABROOK JILL		11 HILL STREET	DOVER	NH	03820
27166-A00000	13 HILL ST	BELANGER TIMOTHY D JR		13 HILL ST	DOVER	NH	03820
27167-000000	7 9 HILL ST	TRAN LU T &	NGUYEN DUOC V	7-9 HILL STREET	DOVER	NH	03820
27168-000000	5 HILL ST	RUMINSKI TYLER J		5 HILL ST	DOVER	NH	03820
27171-000000	2 4 FLORENCE ST	CARRIER ROBERT C TRUSTEE	CARRIER ROBERT C REVOCABLE LIVING TRUST	22 HILL ST	DOVER	NH	03820-3111
27172-000000	6 FLORENCE ST	CONLEY CASEY M &	CONLEY LAUREN A	6 FLORENCE ST	DOVER	NH	03820
27173-000000	8 FLORENCE ST	CURTIS JEAN R		8 FLORENCE ST	DOVER	NH	03820
27174-000000	10 FLORENCE ST	DAY VICTORINE M	DAY RICHARD A	10 FLORENCE STREET	DOVER	NH	03820
27175-000000	14 16 FLORENCE ST	SHANNON-HOLT MARK C & ELIZABET	PROVENCAL T AND FOGARTY MARGARET	14-16 FLORENCE ST	DOVER	NH	03820
27176-000000	16 1/2 FLORENCE ST	MILNE KATHRYN A		16 1/2 FLORENCE ST	DOVER	NH	03820
27177-000000	18 FLORENCE ST	RICHER SARAH A &	RICHER DANIEL M	18 FLORENCE ST	DOVER	NH	03820-3169
27178-000000	20 FLORENCE ST	CALABRESE JOHN D &	CALABRESE DEBORAH R	20 FLORENCE ST	DOVER	NH	03820
27181-000000	7 FLORENCE ST	SIEKS DAVID J	SIEKS CHRISTINE M	7 FLORENCE ST	DOVER	NH	03820
27182-000000	5 FLORENCE ST	BELAKONIS ANNE L		5 FLORENCE ST	DOVER	NH	03820
27196-000000	29 BAKER ST	CLINE DANIEL B		PO BOX 1224	DOVER	NH	03821
27197-000000	21 27 BAKER ST	PILLA LAWRENCE V		9 SAMUEL HANSON	DOVER	NH	03820-4115
27198-000000	19 BAKER ST	GAFFNEY JONATHAN J &	STRAUB GALE C	19 BAKER ST	DOVER	NH	03820
27200-000000	13 BAKER ST	ENTREKIN DARREN E		280 OLD CANDIA RD	AUBURN	NH	03032
27206-000000	4 HILL ST	WINWARD DARCY		4 HILL ST	DOVER	NH	03820
27208-000000	14 HILL ST	ORLANDO DAVID KENNETH		14 HILL STREET	DOVER	NH	03820
27211-000000	16 18 HILL ST	RAGAZZO LARISSA L &	RAGAZZO ROBERT	16 HILL STREET	DOVER	NH	03820
27212-000000	22 HILL ST	CARRIER ROBERT C TRUSTEE	CARRIER ROBERT C REVOCABLE LIVING TRUST	22 HILL ST	DOVER	NH	03820-3111
27213-000000	24 28 HILL ST	PRINTY JEANNETTE L TRUSTEE	PRINTY JEANNETTE L REVOCABLE TRUST	28 HILL STREET	DOVER	NH	03820
27214-000000	30 HILL ST	PARENTEAU DORIS A	PARENTEAU MAURICE J	30 HILL STREET	DOVER	NH	03820
27166-A00002	13 1/2 HILL ST	BELANGER TIMOTHY D JR		13 HILL ST	DOVER	NH	03820
27180-003000	13 FLORENCE ST	GOLDSTEIN WILLIAM T		35 THIRD ST	DOVER	NH	03820-3316
27189-001000	9 FLORENCE ST	SHAYO LINA &	CIANO LEONARDO	9 FLORENCE ST	DOVER	NH	03820
27166-A00001	13 HILL ST	BELANGER TIMOTHY D JR		13 HILL ST	DOVER	NH	03820
27180-002000	15 17 FLORENCE ST	FERNALD JAMES H &	ROBIDAS PATRICIA M	39 NORTON RD	HAMPTON	NH	03842
27199-000000	15 17 BAKER ST	ZELLEM THEODORE M	ZELLEM TERESA M	56 ROLLINS RD	ROLLINSFORD	NH	03869
27201-000000	7 BAKER ST	PEAK RENTAL HOLDINGS LLC		PO BOX 253	STRATHAM	NH	03885
27207-000000	10 12 HILL ST	10-12 HILL STREET LLC		2992 LAFAYETTE RD UNIT D	PORTSMOUTH	NH	03801
27165-A00000	17 19 HILL ST	NEVINS SANDRA G		17 HILL STREET	DOVER	NH	03820
		MCENEANEY SURVEY ASSOCIATES	KEVIN MCENEANEY	P.O. BOX 681	DOVER	NH	03820

LOCATION PLAN
(NO SCALE)

LEGEND

I.R.(tbs) o – IRON ROD W/ I.D. CAP (TO BE SET)
MN(tbs) o – MAGNETIC NAIL (TO BE SET)
I.P.(fnd) o – IRON PIPE (FOUND)
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
UP 104/11 – UTILITY POLE W/ I.D. Nos.



No.	Bearing	Distance
L1	S62°15'25"E	4.23'
L2	N60°37'25"W	3.51'
L3	S60°37'25"E	8.09'

HILL STREET
{PUBLIC: 50' WIDE R.O.W.}



NO.	DATE	DESCRIPTION	BY	CHK
		REVISIONS		

19–2250	WORKSHEET	
PROJECT NO	TYPE	FIELDBOOK & PAGES

REFERENCE PLANS:

1.) SITE PLAN OF 13 – 13 1/2 HILL STREET CONDOMINIUMS PREPARED FOR 13 HILL STREET, LLC, TAX MAP 27, LOT No. 166A, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE; SCALE: 1" = 20'; DATED: MARCH 1, 2002; BY: McENEANEY SURVEY ASSOCIATES, INC.; NOT RECORDED.

2.) PLAN OF LOTS, ROBERT E. PRYOR, DOVER, NEW HAMPSHIRE; SCALE: 1" = 20'; DATED: NOV. 1, 1960; BY G.L. DAVIS & ASSOCIATES; RECORDED S.C.R.D. BOOK 726, PAGE 77.

3.) MAP OF PROPERTY IN DOVER, N.H. OWNED BY ALPHONSO A. CHENEY. SCALE: 1" = 50'; DATED: OCTOBER 22, 1897; BY: WM C. OGDEN, C.E. RECORDED S.C.R.D. PLAN 44, POCKET 4, FOLDER 5.

NOTES:

1.) OWNER OF RECORD:
SANDRA G. NEVINS
17 HILL STREET
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 4406, PAGE 19.

OWNER SIGNATURE

2.) 27 / 165A – DENOTES TAX MAP AND PARCEL NUMBER.

3.) THE INTENT OF THIS PLAN IS TO DEPICT THE ADJUSTMENT OF THE LOT LINES BETWEEN PARCELS 27/165 & 27/165A WHEREBY PARCEL (A) (537 S.F.) IS ADDED TO PARCEL 27/165A TO ELIMINATE ENCROACHMENTS.

PARCEL	ORIGINAL AREA	NEW AREA
27 / 165	6,347 S.F., 0.15 Ac.	5,810 S.F., 0.13 Ac.
27 / 165A	6,600 S.F., 0.15 Ac.	7,137 S.F., 0.16 Ac.

4.) REFERENCE IS MADE TO A RESTORATION OF MERGED LOTS, CITY OF DOVER RESOLUTION R–2019.0814–134, DATED AUGUST 8, 2019.

5.) ZONING DISTRICT:

MEDIUM DENSITY RESIDENTIAL DISTRICT (R–12)
DIMENSIONAL REQUIREMENTS:
MINIMUM LOT SIZE = 12,000 S.F.
MAXIMUM LOT COVERAGE = 30 PERCENT
MINIMUM FRONTAGE = 100 FEET
BUILDING SETBACK REQUIREMENTS:
FRONT SETBACK = 15 FEET MIN., 25 FEET MAX.
SIDE SETBACK = 15 FEET
REAR SETBACK = 30 FEET
MAXIMUM BUILDING HEIGHT = 35 FEET MAXIMUM
* NON–CONFORMING LOT SIDE SETBACK = 6 FEET

6.) THE SUBJECT PARCEL IS LOCATED OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 330; SUFFIX E; MAP NUMBER 33017C0330E; EFFECTIVE DATE SEPTEMBER 30, 2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED DECEMBER 12, 2019. VERTICAL DATUM IS NH STATE PLANE (NAVD88) BASED ON GPS OBSERVATION DATED DECEMBER 12, 2019.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND ON DECEMBER 12–17 WITH AN ERROR OF CLOSURE NOT GREATER THAN 1 IN 10,000.

9.) NO WETLANDS WERE OBSERVED ON THE PROPERTY.

"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."

LOT LINE ADJUSTMENT PLAN
PREPARED FOR
SANDRA G. NEVINS
TAX MAP 27, LOT Nos. 165 & 165A
17–19 HILL STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. P 20–__

DRAWN BY: KJF	FILE: MSA\2250\19–2250.DWG
SCALE: 1" = 10'	DATE: JANUARY 13, 2020

10 5 0 5 10 20 30 40

STATE OF NEW HAMPSHIRE No. 661 KEVIN M. McENEANEY LICENSED LAND SURVEYOR SIGNATURE

McENEANEY SURVEY ASSOCIATES of NEW ENGLAND

P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742–0911

SURVEYING – PLANNING – CONSULTING

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P20-13

Application Type:	TDR Request
Applicant(s):	Timothy Belanger
Owner(s):	Sandra G. Nevins
Location:	Hill Street (Map 27, Lot 165)
Meeting Date:	February 25, 2020

INTENT: To purchase one unit through Transfer of Development Rights to build a duplex where only single family is permitted

LOTS/UNITS PROPOSED: Duplex

AGENDA ITEM #: 4-B

ACREAGE: 0.13 ac

ZONING DISTRICT: R-12

EXISTING LAND USE: Residential and vacant

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

ZBA ACTION: None

ATTACHMENTS: Application materials

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified or first class mail to all abutters for this meeting.

PERMITS REQUIRED: N/A

WAIVERS REQUESTED: N/A

Summary of Request and Background
Per Chapter 170-27.2.G(3)(b), the applicant is requesting that the Board vote on the plan indicating the additional 2 units can be built where only single family is permitted. The applicant is using the non-restricted style of TDR.

The applicant has submitted a rough drawing of where a duplex could fit along with two potential driveway locations. The application materials also show the surrounding lots with the numbers of units on each to demonstrate to the Planning Board why a duplex fits within the neighborhood context.

Consistency with Land Use Regulations
Chapter 170-27.2 of the Zoning Ordinance allows for developments to buy additional units through the process of Transfer of Development Rights. The process allows the applicant to come to the Board with a plan indicating the location of the duplex and related improvements such as parking.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board accept the application, open the public hearing, close the public hearing, and vote to approve the application of TDR to the Site Plan with the following conditions:

Conditions to be Met Prior to Granting the TDR:

1. The LLA adjustment P20-12 be approved.
2. Payment of the TDR fee ($13,402)
3. Revise plan to eliminate one driveway.
4. Add Planning file number P20-13 to the plan set.

Conditions to be Met Prior to the Issuance of a Building Permit:

5. The new dwelling units shall be assessed and pay the current water and sewer investment fees in place at the time of application for service.

Conditions to be Met Prior to Occupancy:

6. Issuance of a Certificate of Occupancy.
7. Impact fees per unit shall be paid per the invoice attached to the Notice of Decision
8. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

17-19 Hill Street



Property Information

Property ID	27165-A00000
Location	17 19 HILL ST
Owner	NEVINS SANDRA G
Land Use	104

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

City of Dover, New Hampshire
TRANSFER OF DEVELOPMENT RIGHTS APPLICATION

[Revision Date: August 16, 2018]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Timothy Belanger Telephone # N/A

Address of Applicant: 13 Hill Street Dover, NH 03820

E-Mail Address: tbelanger13@comcast.net

Name of Property Owner (if different from applicant): Sandra G. Nevins Telephone # N/A

Address of Property Owner: 17 Hill Street Dover, NH 03820

PROPERTY INFORMATION

Assessor's Map # 27 Lot(s) # 165

Address of Property: Hill Street

Zoning District(s) R-12 Overlay District(s) NONE

Existing Use of Property: VACANT / Residential

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION

Type of TRANSFER OF DEVELOPMENT RIGHT REQUEST (Check All That Apply):

☒ Residential ☐ Residential (reduced size) ☐ Industrial | ☐ Purchase ☐ Land Preservation

Relief sought (Check All That Apply):

☐ Lot Size ☐ Frontage ☐ Setback ☒ Increase by 1 units

Describe Proposed Use or Activity that requires TDR; describe any impacts and document mitigation:

The Applicant wishes to build a duplex where single family dwellings only are permitted. A large number of the residential buildings in the immediate area surrounding the subject property contain duplexes and multi-unit buildings, while the buildings directly abutting the subject property fronting on Hill Street, are duplexes.

Additionally, many of the single family structures in this area are pre-1964 construction, so could, by right, be converted into duplexes.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NONE

Name of Professional That Prepared TDR Plans: McEneaney Survey Associates

Address 24 Chestnut Street Dover, NH 03820 Telephone #: 603-742-0911

Professional License #: Kevin M. McEneaney, LLS NH 661 E-mail address: kevin@surveynh.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: Sandra Levesque Date: 1-26-2020

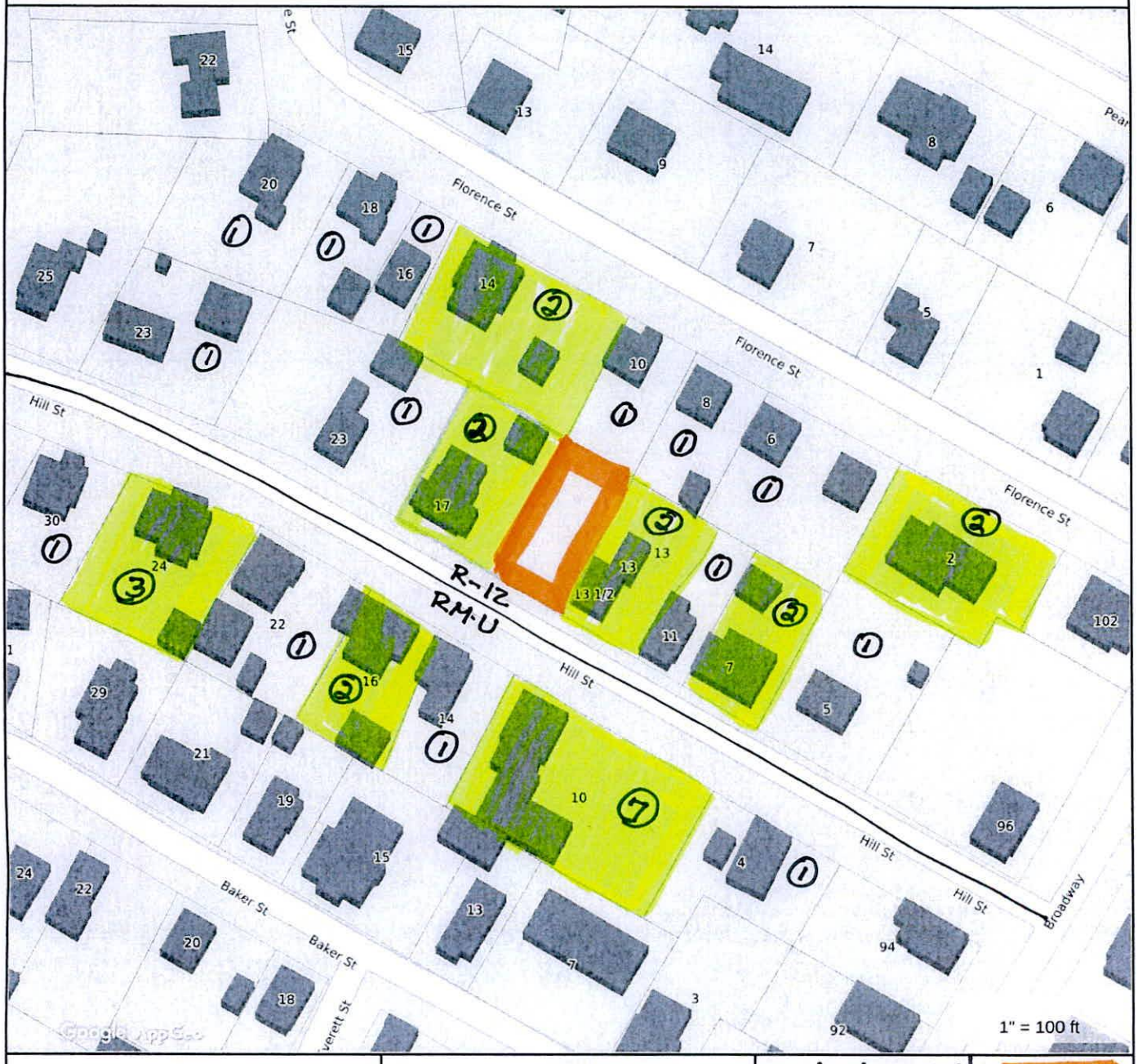
Signature of Applicant (if different from owner): Date: 1/26/2020

Signature of Agent: Date:

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: Sandra Levesque Date: 1-26-2020



Property Information

Property ID	27165-A00000
Location	17 19 HILL ST
Owner	NEVINS SANDRA G
Land Use	104

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

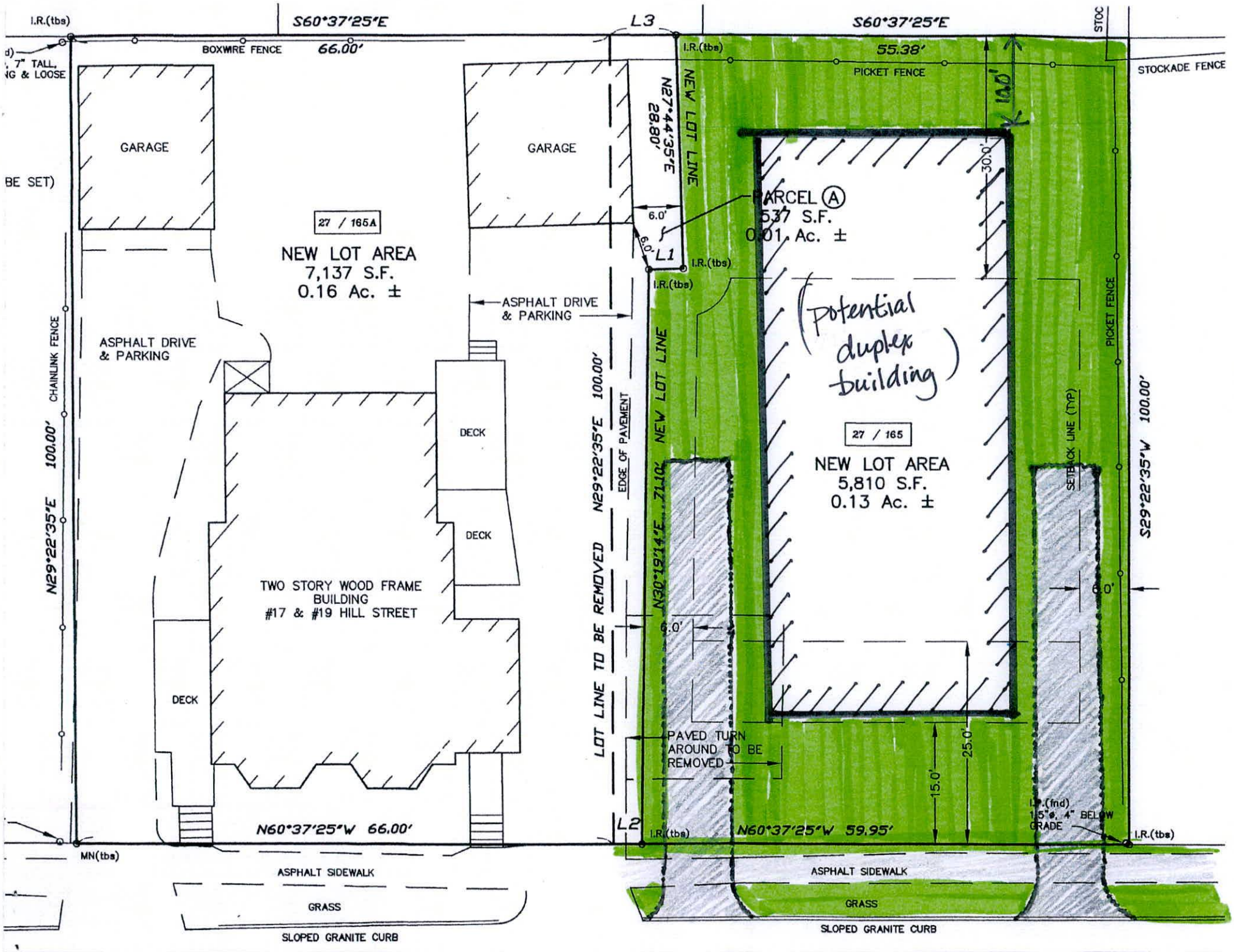
City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

Subject Parcel:

Multi-Units:

No. of Units: (#)


I.R.(tbs)
S60°37'25"E
L3
S60°37'25"E
STOC
BOXWIRE FENCE
66.00'
55.38'
PICKET FENCE
STOCKADE FENCE
7" TALL,
NG & LOOSE
BE SET)
GARAGE
GARAGE
N27°44'35"E
28.80'
NEW LOT LINE
10.0'
30.0'
PARCEL (A)
537 S.F.
0.01 Ac. ±
6.0'
6.0'
L1
I.R.(tbs)
I.R.(tbs)
27 / 165A
NEW LOT AREA
7,137 S.F.
0.16 Ac. ±
ASPHALT DRIVE
& PARKING
ASPHALT DRIVE
& PARKING
(Potential
duplex
building)
CHAINLINK FENCE
N29°22'35"E 100.00'
DECK
DECK
EDGE OF PAVEMENT
N29°22'35"E 100.00'
NEW LOT LINE
PICKET FENCE
S29°22'35"W 100.00'
27 / 165
NEW LOT AREA
5,810 S.F.
0.13 Ac. ±
SETBACK LINE (TYP)
TWO STORY WOOD FRAME
BUILDING
#17 & #19 HILL STREET
N30°19'14"E 71.10'
6.0'
6.0'
DECK
LOT LINE TO BE REMOVED
PAVED TURN
AROUND TO BE
REMOVED
25.0'
15.0'
L2
I.R.(tbs)
N60°37'25"W 66.00'
N60°37'25"W 59.95'
I.R.(fnd)
1.5"ø, 4" BELOW
GRADE
I.R.(tbs)
MN(tbs)
ASPHALT SIDEWALK
GRASS
SLOPED GRANITE CURB
ASPHALT SIDEWALK
GRASS
SLOPED GRANITE CURB

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P20-10

Application Type: Conditional Use Permit
Applicant(s): Chad & Heather Holleman
Owner(s): Chad & Heather Holleman
Location: 21 Nute Road (Tax Map L, Lot 11)
Meeting Date: February 25, 2020

INTENT: Proposal is to build a new single family house and accessory dwelling unit adjacent to the tidal Bellamy River, with 5,190 s.f. of permanent tidal buffer zone impact and 4,167 s.f. of temporary tidal buffer zone impact.

LOTS/UNITS PROPOSED: N/A

AGENDA ITEM: # 4-C

ACREAGE: 0.43 acres

ZONING DISTRICT: Low-Density Residential (R-20)

EXISTING LAND USE: Residential

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential and Bellamy River

ZBA ACTION: N/A

ATTACHMENTS:
Application and materials, 2/10/2020 Conservation Commission minutes

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified mail to all abutters for this meeting

PERMITS REQUIRED:
-Conditional Use Permit
-NHDES Wetlands Permit
-NHDES Shoreland Permit

WAIVERS REQUESTED: None

Summary of Request and Background
The applicant is requesting a Conditional Use Permit to build a new single family house and accessory dwelling unit adjacent to the tidal Bellamy River with 5,190 s.f. of permanent tidal buffer zone impact and 4,167 s.f. of temporary tidal buffer zone impact.

The proposed accessory dwelling unit would still need to be approved through the standard ADU application process through the Planning Department as it is a separate approval from this Conditional Use Permit request.

The Conservation Commission endorsed this new plan on February 10, 2020.

Consistency with Land Use Regulations
The Conservation District ordinance provides for Conditional Use Permits to allow impacts to the Conservation District (within 100' from River) if standards related to demonstration of need, avoidance, minimization, and mitigation are met.

STAFF RECOMMENDATION:

The Planning Department recommends the Planning Board accept the application, open the public hearing, and then approve the application with the following condition:

Condition to Be Met Prior to the Issuance of the Conditional Use Permit:

1. The applicant shall provide a copy of the NHDES Wetland and Shoreland permits to the Planning Department.

21 Nute Road



Property Information

Property ID	L0011-000000
Location	21 NUTE RD
Owner	HOLLEMAN CHAD M &
Land Use	101

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

AMBIT ENGINEERING,INC. CIVIL ENGINEERS AND LAND SURVEYORS
200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

21 January 2020

Gina Cruikshank, Chair
Dover Planning Board
288 Central Avenue
Dover, NH 03820

RE: Conditional Use Permit Application
Residential Site Re-Development
Tax Map L, Lot 11-0
21 Nute Road
Dover, NH

Dear Gina,

This letter transmits a City of Dover Conditional Use Application for construction under the City of Dover Zoning Ordinance *Article VIII, Section 170-27* for work within the Conservation District. It is our understanding that the applicant will need a Conditional Use Permit from the City of Dover for the proposed project.

The project proposes re-development of the site including replacement of the existing residential structure, re-configuration of the existing driveway, installation of pervious surfaces and a a stone drip apron for stormwater management, and associated landscape improvements on the residential lot (see NH DES Permit Plan-Sheet C3).

The proposal includes a stone drip edge around the proposed residential structure as well as porous pavement driveways which will greatly aid in stormwater treatment and infiltration on the site, improving water quality that leaves the site and enters the Bellamy River.

The subject parcel is located directly adjacent to the Bellamy River. The entire lot area is located within the City of Dover Conservation District.

Attached to this transmittal letter please find a Conditional Use Application, a plan set depicting existing and proposed conditions, a signed client authorization form, a photo log, and an abutters list. Please note that a NH DES Wetland Permit Application has been submitted for the proposed project and is currently under review.

According to the City of Dover Zoning Ordinance, *Article VIII, Section 170-27, C.2.A.,* Conditional Use approval may be granted by the Planning Board provided that the proposed construction complies with the following standards:

> **The proposed construction is essential to the productive use of land not in the Conservation District;**

Due to the location of the of the Conservation District on the lot, and zoning setbacks applicable to the lot, it was not feasible to construct a new home on the lot, driveways and accessory structures entirely outside of the Conservation District. The entire lot is located within the 100' Conservation District.

Is located and constructed to minimize any detrimental impact of such use upon the surface waters or other environmentally sensitive areas;

This proposal replaces an existing single family home, four (4) storage sheds, two (2) paver patios, a wood deck, and a gravel driveway with a new single family home with attached garage, patio, deck and associated landscaping. The proposal also includes an accessory structure with associated driveway. Proposed stone drip aprons around the proposed home will capture and infiltrate stormwater from the roof of the structure. Additionally, the pervious driveways and pervious patio will capture, infiltrate and treat stormwater on the property, improving water quality that leaves the site and enters the Bellamy River.

The existing home is located approximately 20 feet from the wetland resource, while the proposed home is located 34 feet away. The proposal reduces the impervious surface coverage on the lot from 29.8% to 21.5%. The proposed design proposes less structure (home, deck, patios, sheds) and driveway within the 50' NH DES Primary Structure Setback than under existing conditions (See attached NH DES Impact Exhibit Within 50' Primary Structure Setback). Lastly, the proposed design maintains tree scores of all grids within the 50' wetland buffer, a requirement of NH DES and the City of Dover Zoning Ordinance.

Where it is physically impossible to locate such use on land not in the district;

Due to the configuration of the lot, location of the tidal wetland resource, and zoning setbacks applicable to the lot, relocating the use outside the district is not feasible. The entire lot is located within the 100' Conservation District.

Economic advantage alone shall not be deemed a sufficient reason for such a proposed use.

The proposal is to re-develop the lot including replacement of the existing single family residential structure with an attached garage, re-configuration of the existing driveway, stormwater management structures, and associated landscape improvements on the residential lot. The need for the proposed use does not improve the applicant's financial position.

According to the City of Dover Zoning Ordinance, *Article VIII, Section 170-27.1,* Conditional Use approval may be granted by the Planning Board provided that the proposed construction complies with the following standards:

a. ***Demonstration of Need:*** **The proposed construction is essential to the productive use of land or water outside the Wetlands Protection District.**

Due to the location of the of the Wetlands Protection District on the lot, and zoning setbacks applicable to the lot, it is not feasible to construct a new home and associated driveways and accessory structures entirely outside of the Wetland Protection District. The entire lot is located within the 100' Wetland Protection District.

b. ***Avoidance*****: The potential impacts have been avoided to the maximum extent practicable.**

The existing home is located approximately 20 feet from the wetland resource, while the proposed home is located 34 feet away. The proposal reduces the impervious surface coverage on the lot from 29.8% to 21.5%. The proposed design proposes less structure (home, deck, patios, sheds) and driveway within the 50' NH DES Primary Structure Setback than under existing conditions (See attached NH DES Impact Exhibit Within 50' Primary Structure Setback).

c. ***Minimization:*** **Any unavoidable impacts have been minimized. No reasonable alternative to the proposed construction exists which does not impact a wetland, or which has less detrimental impact on a wetland. Design, construction and maintenance methods will be prepared by a registered engineer to minimize detrimental impacts to the wetlands and will include restoration of the site as nearly as possible to its original grade.**

Proposed stone drip aprons around the proposed home will capture and infiltrate stormwater from the roof of the structure. Additionally, the pervious driveways and pervious patio will capture, infiltrate and treat stormwater on the property, improving water quality that leaves the site and enters the Bellamy River. Lastly, the proposed design maintains tree scores of all grids within the 50' wetland buffer, a requirement of NH DES and the City of Dover Zoning Ordinance.

Given the nature of the project, it is my opinion that there will be no detrimental impacts to adjacent wetlands. Site plans prepared by Ambit Engineering, Inc. have been designed and stamped by a Licensed Professional Engineer.

d. ***Mitigation:*** **Mitigation for this project is not required by NH DES.**

However; the owner/applicant is proposing a significant reduction of 1,654 square feet of impervious surface on the lot (29.8% to 21.5%. It is our opinion that the reduction of impervious surface on the site and use of pervious technology will greatly aid in stormwater treatment and infiltration on the site, improving water quality that leaves the site and enters the Bellamy River. This method of stormwater treatment and infiltration is a function that does not exist under existing conditions.

To ensure the functionality of the stormwater management structures, attached is a Stormwater Management Inpsection & Maintenance Plan. This plan will serve as a guidance doucment for the property owners providing them with inspection and maintenance guidelines for the porous pavement and pervious paver surfaces to maintain their functionality as designed.

e. **Approval for the wetlands impact has been received from NH DES Wetlands Bureau.**

A NH DES Wetland Permit Approval will be required for this project for impacts to the previously developed tidal buffer zone. This application was submitted to NH DES and accepted on December 6, 2019 and assigned File #: 2019-03760. Anticipated approval date is on or before February 19, 2020.

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,



Steven D. Riker
NH Certified Wetland Scientist/Environmental Permitting Specialist
Ambit Engineering, Inc.

Cc: Chad M. & Heather A. Holleman-Owners/Applicant

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: Chad M. & Heather A. Holleman Telephone # 970-376-6476

Address of Applicant: PO Box 924, Avon, CO 01827

E-Mail Address: chad.holleman@gmail.com

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

Address of Property Owner: _____

PROPERTY INFORMATION

Assessor's Map # L Lot(s) # 11-0

Address of Property: 21 Nute Road, Dover, NH

Zoning District(s) Low Density Residential (R-20) Overlay District(s) Conservation/Wetland Conservation/Riverfront Residential

Existing Use of Property: Residential

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:

Please see attached letter.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NH DES Wetlands (File: 2019-03760, under review)

Name of Professional That Prepared Plans: John R. Chagnon, Ambit Engineering, Inc., PE 7651

Address 200 Griffin Road, Unit 3, Portsmouth, NH 03801 Telephone #: 603-430-9282

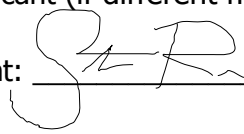
Professional License #: NH PE 7651, NH LLS 738 E-mail address: jrc@ambitengineering.com

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.

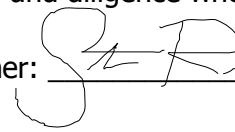
Signature of Property Owner: _____ Date: _____

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

Signature of Agent:  Agent-See Authorization Date: 1/20/20

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:  Agent-See Authorization Date: 1/20/20

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 = $ _____
   - 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 = $ _____
   - SITE REVIEW - RESIDENTIAL $100.00 x # ____ per dwelling unit = $ _____
   - SITE REVIEW – NON-RESIDENTIAL (not to exceed $10,000)
     New construction $.15 sq. ft. x # _____ sq. ft. = $ _____
     Additions (new floor space) $.10 per sq. ft. x # _____sq. ft. = $ _____
   - IMPERVIOUS PAVED AREA (for new development) OR IMPERVIOUS PARKING LOT ADDITIONS (not to exceed $10,000) $.07 sq. ft. x # _____ = $ _____
   - MOTEL/HOTEL $35.00 x # ___ per lodging unit = $ _____
   - CHANGE OF USE (not to exceed $5,000)
     Existing floor space $.10 per sq. ft. x # ____ sq. ft. = $ _____
   - CONDITIONAL USE PERMIT $150.00 x # 1 per application = $ 150.00
   - GRAVEL PIT/ EXCAVATIONS - Application fee $50.00 & Permit fee $75.00 = $ _____
   - EXTENSIONS OF/AMENDMENTS TO/WAIVERS FOR AN APPROVED PLAN ($150.00 minimum) $50.00 x # ____ per hour of review $ _____
   - REQUEST FOR REZONING $150.00 = $ _____
   - DRIVEWAY WAIVER – $100.00 application fee =
     Letter of rejection from Engineering Department, diagram & letter from owner $ _____

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 # 2 of x $8.00 =
2. Certified letters fee: # of abutters 2 X $8.00 = $ 32.00
3. First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00 = $ _____
4. Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00 = $ _____

C. Foster's newspaper public notice fee **$ 80.00**

(Revised October 2, 2018)

TOTAL FEE $ 262.00

CITY OF DOVER CONDITIONAL USE
LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS
L	11-0	Chad M. & Heather A. Holleman	PO Box 924, Avon, CO 01827

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Steven D. Riker, CWS	Ambit Engineering, Inc.	200 Griffin Road, Unit 3, Portsmouth, NH 03801

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

22 March, 2019

To Whom It May Concern

RE: New Hampshire Department of Environmental Services Application and City of Dover Conditional Use Permit Application for residential site re-development for Chad M. & Heather A. Holleman, 21 Nute Road, Dover, NH.

This letter is to inform the New Hampshire Department of Environmental Services and the City of Dover, in accordance with State Law that Ambit Engineering is authorized to obtain approvals in regards to the above referenced property.

Please feel free to call me if there is any question regarding this authorization.

Sincerely,

Heather Holleman Chad Holleman

Chad M. & Heather A. Holleman
21 Nute Road
Dover, NH 03820

STORMWATER MANAGEMENT
INSPECTION & MAINTENANCE PLAN
FOR
CHAD M. & HEATHER A. HOLLEMAN
PROPERTY LOCATED AT
21 Nute Road, Dover, NH
January 21, 2020

Introduction

The intent of this plan is to provide Chad M. & Heather A. Holleman, owners of property located at 21 Nute Road, Dover, NH, with a list of procedures that cover the inspection and maintenance requirements of the stormwater management system for the proposed construction at the site.

The following inspection and maintenance plan is necessary to keep the stormwater management system functioning properly. These measures will also help minimize potential environmental impacts. By following the enclosed procedures, Chad M. & Heather A. Holleman will be able to maintain the functional design of the stormwater management system and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

Stormwater Management System Components

The Stormwater Management System design components are a Stone Drip Apron, Porous Pavement, and a Pervious Paver Patio/Walkways.

The proposed construction includes demolition of the existing home, and the construction of a new home with deck, patio, accessory structure, and re-configuration of the existing driveway. The proposed stormwater structures will provide treatment for the proposed improvements, under this application.

The Stone Drip Aprons will capture runoff from the structure overhangs and provide storage and percolation into the soil. The Porous Pavement and Pervious Paver Patio/Walkways will provide stormwater infiltration for precipitation following storm events.

Inspection & Maintenance Checklist/Log

The following pages contain maintenance specifications, a Stormwater Management System Inspection & Maintenance Checklist, and a blank copy of the Stormwater Management System Inspection & Maintenance Log. The forms are provided to Chad M. & Heather A. Holleman and should be transferred to future homeowners as they will serve as a guideline for performing the inspection and maintenance of the Stormwater Management System. This is a guideline and should be periodically reviewed for conformance with current practice and standards.

Stone Drip Apron Design

The intent of the stone drip edge is to provide for storage and percolation of roof runoff from structures. Stone Drip Aprons are meant to provide a porous medium (stone, 6" depth) that can withstand water velocity from the roof above, eliminating erosion at the point of contact. The base (24"-36" depth) of the drip edge is backfilled with coarse sand or gravel which allows the stormwater to quickly infiltrate into the ground where it is stored and slowly percolated into the surrounding subsoil. Stone Drip Aprons typically extend 2 feet from the edge of the building foundation to effectively capture runoff from the roof edge above.

Stone Drip Apron Maintenance

In order to keep the Stone Drip Aprons functioning properly, it is important to keep the filter surface porous and unplugged by debris.

Remove any debris that may clog the stone surface.

After leaf fall (i.e. in November), remove large accumulations of leaves. It is not necessary to remove every leaf but at the same time it is not desirable to have the stone surface completely covered with leaves to the point of plugging the stone surface.

Replace the stone surface with new stone as needed.

Porous Pavement Maintenance

In order to keep the porous pavement functioning properly, it is important to keep the surface porous and unplugged by debris. After installation of the porous pavement, perform the following inspections on a annual basis:

Monitor for excessive or concentrated accumulations of debris, or excessive erosion. Remove debris as required.

Vacuum the surface once annually. This will remove organic buildup within the void space and restore/maintain permeability.

Repair any damages to original condition.

Pervious Paver/Walkway Maintenance

In order to keep the pervious paver surface functioning properly, it is important to keep the surface porous and unplugged by debris. After installation of the pervious pavers, perform the following inspections on a semi-annual basis:

Monitor for excessive or concentrated accumulations of debris, or excessive erosion. Remove debris as required.

Remove debris from the paver void space twice annually. This will remove organic buildup within the void space and restore/maintain permeability. Replace void space aggregate as needed.

Stormwater Management System
Chad M. & Heather A. Holleman

Inspection & Maintenance Checklist

BMP/System Component	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance/Cleanout Threshold
Stone Drip Aprons	Twice Yearly	Remove leaves / debris from surface	Clean and/or replace stone as needed
Porous Pavement	Once Yearly	Inspect for debris or sediment accumulation Inspect for damage to original condition	Vacuum once a year Repair surface as needed
Pervious Paver Surface	Twice Yearly	Inspect for debris or sediment accumulation Inspect for adequate void space aggregate material	Remove debris from void space as needed Replace void space aggregate as needed

Stormwater Management System
Chad M. & Heather A. Holleman

Inspection & Maintenance Log

BMP/System Component	Date Inspected	Inspector	Cleaning/Repair Needed *(List Items/Comments)*	Date of Cleaning/Repair	Performed By

AMBIT ENGINEERING,INC. CIVIL ENGINEERS AND LAND SURVEYORS
200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

5 December 2019

Wetland Inspector
New Hampshire Department of Environmental Services
Wetlands Bureau
29 Hazen Drive / P.O. Box 95
Concord, New Hampshire 03302

Re: NHDES Minor Impact Expedited Wetland Application
Tax Map L, Lot 11-10
21 Nute Road
Dover, New Hampshire

Dear Wetland Inspector:

This letter transmits a New Hampshire Department of Environmental Services (NHDES) Minor Impact Expedited Wetland Application request to permit 5,190 sq. ft. of permanent impact and 4,167 sq. ft. of temporary construction impact for demolition of the existing residential structures and accessory structures, and construction of a single family residential structure, a detached garage, a driveway, a pervious paver patio, deck, stormwater management structures, and associated landscaping. The proposed structures, driveway and garage are entirely within the 100' previously developed Tidal Buffer Zone.

The proposal results in a reduction of 1,304 sq. ft. (29.8% to 23.3%) of impervious surface on the site under proposed conditions. Pervious technologies proposed for the site include the driveway to be constructed using porous pavement.

The proposal includes stormwater management structures including a stone drip apron around the proposed home.

The areas where new structures are proposed consist of previously developed tidal buffer zone, and there is no disturbance of any Natural Woodland. The project does require the removal of thirteen (13) trees located within the 50' Waterfront Buffer to achieve construction goals.

Ambit Engineering, Inc. verified the location of the Highest Observable Tide Line (HOTL) on the above referenced property on April 29, 2019. The subject parcel is located directly adjacent to the Bellamy River.

Attached to this application you will find a plan set which depicts the existing lot, jurisdictional areas, abutting parcels, existing structures, proposed structures, and temporary impact areas.

In order to complete the application package for this project, the DES Wetlands Bureau rules in Chapter Env-Wt 300 have been thoroughly reviewed, specifically Env-Wt 302.04 (b) and Env-Wt 302.04(c). Items listed in rule Env-Wt 302.04 (b) are addressed below.

1. The need for the proposed impact;
   The impacts are needed for re-development on the subject lot.

2. The alternative proposed by the applicant is the one with the least impact to wetlands or surface waters on site;

The project proposes no wetland impacts. The impacts are to the previously developed 100' Tidal Buffer Zone. A majority of the proposed work is within areas that are previously developed/altered. The proposal decreases the impervious surface on the lot by 1,304 sq. ft.

3. The type and classification of the wetlands involved;

The tidal wetlands associated with the site would be classified as estuarine intertidal emergent persistent wetland system that is irregularly flooded by the tides (E2EM1P).

4. The relationship of the proposed wetlands to be impacted relative to nearby wetlands and surface waters;

The project proposes no wetland impacts. The impacts are to the previously developed 100' Tidal Buffer Zone. The wetlands located adjacent to the property are part of a larger tidal wetland system, the Bellamy River, the Piscataqua River and the Atlantic Ocean.

5. The rarity of the wetland, surface water, sand dunes, or tidal buffer zone area;

The tidal buffer zone and the adjacent wetlands are not locally rare or unique.

6. The surface area of the wetlands that will be impacted;

The project proposes no wetland impacts. The impacts are to the previously developed 100' Tidal Buffer Zone.

7. The impact on plants, fish and wildlife including, but not limited to;
   a. Rare, special concern species;
   b. State and federally listed threatened and endangered species;
   c. Species at the extremities of their range;
   d. Migratory fish and wildlife;
   e. Exemplary natural communities identified by the DRED-NHB; and
   f. Vernal pools.

A review of the New Hampshire Natural Heritage Bureau (NHB) was performed and it was determined that although there was a NHB record present in the vicinity, it is not expected to be impacted by the proposed project.

8. The impact of the proposed project on public commerce, navigation and recreation;

The project is not located on public property and will have no impact on navigation.

9. The extent to which the project interferes with the aesthetic interests of the general public;

The project does not interfere with any aesthetic interests of the public or abutters. The surrounding land use is residential and is also previously developed.

10. The extent to which a project interferes with or obstructs public rights of passage or access;

The project does not interfere with any rights of passage or access.

11. The impact to abutting owners pursuant to RSA 482-A:11, II;

The specific location of the proposed improvements does not interfere with any abutters.

12. The benefit of a project to the health, safety, and well being of the general public;

The project reduces the amount of impervious surface on the lot and will improve stormwater quality that leaves the site and enters the adjacent wetland resource.

13. The impact of the proposed project on quantity or quality of surface and ground water;

The project will not have any impact on quantity or quality of surface and ground water.

14. The potential of a proposed project to cause or increase flooding, erosion or sedimentation;
The proposed project will not increase flooding, erosion or sedimentation.

15. The extent to which a project that is located in surface waters reflects or redirects current or wave energy which might cause damage or hazards;
The project proposes no impacts to surface waters. The impacts are to the previously developed 100' Tidal Buffer Zone.

16. The cumulative impact that would result if all parties owning or abutting a portion of the affected wetland or wetland complex were also permitted alterations to the wetland proportional to the extent of their property rights;
The adjacent properties are residential and are also located in the previously developed 100' Tidal Buffer Zone.

17. The impact of the proposed project on the functions and values of the total wetland or wetland complex;
The project will have no significant impact on the functions and values of the adjacent tidal wetland.

18. The impact upon the value of the sites included in the latest published edition of the National Register of Natural Landmarks, or sites eligible for such publication;
There are no such sites located in close enough proximity to the project to be impacted.

19. The impact upon the value of areas named in acts of congress or presidential proclamations as national rivers, national wilderness areas, national lakeshores, and such areas as may be established under federal, state, or municipal laws for similar and related purposes such as estuarine and marine sanctuaries;
There are no such sites located in close enough proximity to the project to be impacted.

20. The degree to which a project redirects water from one watershed to another;
The project does not redirect water to another watershed.

Items listed in rule Env-Wt 302.04 (c) are addressed below.

1. The extent to which a project impacts beach or tidal flat sediment replenishment and movement of sediments along a shore;
The project proposes no impact to a beach or tidal flat. There will be no impacts to sediment replenishment or the movement of sediments along a shore.

2. The impact on a tidal wetlands ability to dissipate wave energy and storm surge;
There will be no impacts to the tidal wetland that exists on site which functions to dissipate wave energy and/or storm surge.

3. The impact of project runoff on salinity levels in tidal environments.
The project will have no impact on the lots ability to contain stormwater or runoff and provide treatment before it enters adjacent resource areas.

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,

Steven D. Riker, CWS
NH Certified Wetland Scientist/Permitting Specialist
Ambit Engineering, Inc.

22 March, 2019

To Whom It May Concern

RE: New Hampshire Department of Environmental Services Application and City of Dover Conditional Use Permit Application for residential site re-development for Chad M. & Heather A. Holleman, 21 Nute Road, Dover, NH.

This letter is to inform the New Hampshire Department of Environmental Services and the City of Dover, in accordance with State Law that Ambit Engineering is authorized to obtain approvals in regards to the above referenced property.

Please feel free to call me if there is any question regarding this authorization.

Sincerely,

Heather Holleman Chad Holleman

Chad M. & Heather A. Holleman
21 Nute Road
Dover, NH 03820

NHDES-W-06-012

WETLANDS PERMIT APPLICATION

Water Division/ Wetlands Bureau
Land Resources Management

Check the status of your application: www.des.nh.gov/onestop

RSA/Rule: RSA 482-A/ Env-Wt 100-900

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

1. REVIEW TIME: Indicate your Review Time below. To determine review time, refer to Guidance Document A for instructions.

☒ Standard Review (Minimum, Minor or Major Impact) ☐ Expedited Review (Minimum Impact only)

2. MITIGATION REQUIREMENT:

If mitigation is required a Mitigation-Pre Application meeting must occur prior to submitting this Wetlands Permit Application. To determine if Mitigation is Required, please refer to the Determine if Mitigation is Required Frequently Asked Question.

Mitigation Pre-Application Meeting Date: Month: __ Day: __ Year: ____

☒ N/A - Mitigation is not required

3. PROJECT LOCATION:

Separate wetland permit applications must be submitted for each municipality that wetland impacts occur within.

ADDRESS: **21 Nute Road**		TOWN/CITY: **Dover**	
TAX MAP: **L**	BLOCK:	LOT: **11-0**	UNIT:
USGS TOPO MAP WATERBODY NAME: **Bellamy River** ☐ NA		STREAM WATERSHED SIZE: ☒ NA	
LOCATION COORDINATES (If known): **X:1,201,631.6058 Y:240,021.5121**		☐ Latitude/Longitude ☐ UTM ☒ State Plane	

4. PROJECT DESCRIPTION:

Provide a brief description of the project outlining the scope of work. Attach additional sheets as needed to provide a detailed explanation of your project. DO NOT reply "See Attached" in the space provided below.

The project proposes 5,190 sq. ft. of permanent impact and 4,167 sq. ft. of temporary construction impact for construction of a single family residential structure, an attached garage, a driveway, a patio, stormwater management structures, and associated landscaping.

5. SHORELINE FRONTAGE:

☐ NA This does not have shoreline frontage. SHORELINE FRONTAGE: **268 feet**

Shoreline frontage is calculated by determining the average of the distances of the actual natural navigable shoreline frontage and a straight line drawn between the property lines, both of which are measured at the normal high water line.

6. RELATED NHDES LAND RESOURCES MANAGEMENT PERMIT APPLICATIONS ASSOCIATED WITH THIS PROJECT:

Please indicate if any of the following permit applications are required and, if required, the status of the application.

To determine if other Land Resources Management Permits are required, refer to the Land Resources Management Web Page.

Permit Type	Permit Required	File Number	Permit Application Status
Alteration of Terrain Permit Per RSA 485-A:17	☐ YES ☒ NO	_____	☐ APPROVED ☐ PENDING ☐ DENIED
Individual Sewerage Disposal per RSA 485-A:2	☐ YES ☒ NO	_____	☐ APPROVED ☐ PENDING ☐ DENIED
Subdivision Approval Per RSA 485-A	☐ YES ☒ NO	_____	☐ APPROVED ☐ PENDING ☐ DENIED
Shoreland Permit Per RSA 483-B	☐ YES ☒ NO	_____	☐ APPROVED ☐ PENDING ☐ DENIED

7. NATURAL HERITAGE BUREAU & DESIGNATED RIVERS:

See the Instructions & Required Attachments document for instructions to complete a & b below.

a. Natural Heritage Bureau File ID: NHB **19** - **3248** .

b. ☐ Designated River the project is in ¼ miles of: _____ ; and
date a copy of the application was sent to the Local River Management Advisory Committee: Month: __ Day: __ Year: ____
☒ N/A

8. APPLICANT INFORMATION (Desired permit holder)

LAST NAME, FIRST NAME, M.I.: **Chad M. & Heather A. Holleman**

TRUST / COMPANY NAME:	MAILING ADDRESS: **PO Box 924**	
TOWN/CITY: **Avon**	STATE: **CO**	ZIP CODE: **01827**
EMAIL or FAX: **chad.holleman@gmail.com**	PHONE: **970-376-6476**	

ELECTRONIC COMMUNICATION: By initialing here: _____, I hereby authorize NHDES to communicate all matters relative to this application electronically.

9. PROPERTY OWNER INFORMATION (If different than applicant)

LAST NAME, FIRST NAME, M.I.:

TRUST / COMPANY NAME:	MAILING ADDRESS:	
TOWN/CITY:	STATE:	ZIP CODE:
EMAIL or FAX:	PHONE:	

ELECTRONIC COMMUNICATION: By initialing here _____, I hereby authorize NHDES to communicate all matters relative to this application electronically.

10. AUTHORIZED AGENT INFORMATION

LAST NAME, FIRST NAME, M.I.: **Riker, Steven, D.**	COMPANY NAME: **Ambit Engineering, Inc.**	
MAILING ADDRESS: **200 Griffin Road, Unit 3**		
TOWN/CITY: **Portsmouth**	STATE: **NH**	ZIP CODE: **03801**
EMAIL or FAX: **sdr@ambitengineering.com**	PHONE: **603-430-9282**	

ELECTRONIC COMMUNICATION: By initialing here SR, I hereby authorize NHDES to communicate all matters relative to this application electronically.

11. PROPERTY OWNER SIGNATURE:
See the Instructions & Required Attachments document for clarification of the below statements

By signing the application, I am certifying that:

1. I authorize the applicant and/or agent indicated on this form to act in my behalf in the processing of this application, and to furnish upon request, supplemental information in support of this permit application.
2. I have reviewed and submitted information & attachments outlined in the Instructions and Required Attachment document.
3. All abutters have been identified in accordance with RSA 482-A:3, I and Env-Wt 100-900.
4. I have read and provided the required information outlined in Env-Wt 302.04 for the applicable project type.
5. I have read and understand Env-Wt 302.03 and have chosen the least impacting alternative.
6. Any structure that I am proposing to repair/replace was either previously permitted by the Wetlands Bureau or would be considered grandfathered per Env-Wt 101.47.
7. I have submitted a Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) to the NH State Historic Preservation Officer (SHPO) at the NH Division of Historical Resources to identify the presence of historical/ archeological resources while coordinating with the lead federal agency for NHPA 106 compliance.
8. I authorize NHDES and the municipal conservation commission to inspect the site of the proposed project.
9. I have reviewed the information being submitted and that to the best of my knowledge the information is true and accurate.
10. I understand that the willful submission of falsified or misrepresented information to the New Hampshire Department of Environmental Services is a criminal act, which may result in legal action.
11. I am aware that the work I am proposing may require additional state, local or federal permits which I am responsible for obtaining.
12. The mailing addresses I have provided are up to date and appropriate for receipt of NHDES correspondence. NHDES will not forward returned mail.

Agent-See Authorization	**Steven D. Riker**	12 / 5 / 2019
Property Owner Signature	Print name legibly	Date

MUNICIPAL SIGNATURES

12. CONSERVATION COMMISSION SIGNATURE

The signature below certifies that the municipal conservation commission has reviewed this application, and:

1. Waives its right to intervene per RSA 482-A:11;
2. Believes that the application and submitted plans accurately represent the proposed project; and
3. Has no objection to permitting the proposed work.

⇨	Print name legibly	Date

DIRECTIONS FOR CONSERVATION COMMISSION

1. Expedited review ONLY requires that the conservation commission's signature is obtained in the space above.

2. Expedited review requires the Conservation Commission signature be obtained **prior** to the submittal of the original application to the Town/City Clerk for signature.

3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will be reviewed in the standard review time frame.

13. TOWN / CITY CLERK SIGNATURE

As required by Chapter 482-A:3 (amended 2014), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

⇨ Town/City Clerk Signature	Print name legibly	Town/City	Date

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3,I

1. For applications where "Expedited Review" is checked on page 1, if the Conservation Commission signature is not present, NHDES will accept the permit application, but it will NOT receive the expedited review time.
2. IMMEDIATELY sign the original application form and four copies in the signature space provided above;
3. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
4. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board; and
5. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

1. Submit the single, original permit application form bearing the signature of the Town/ City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery.

14. IMPACT AREA:
For each jurisdictional area that will be/has been impacted, provide square feet and, if applicable, linear feet of impact
Permanent: impacts that will remain after the project is complete.
Temporary: impacts not intended to remain (and will be restored to pre-construction conditions) after the project is complete.

JURISDICTIONAL AREA	PERMANENT Sq. Ft. / Lin. Ft.		TEMPORARY Sq. Ft. / Lin. Ft.	
Forested wetland		☐ ATF		☐ ATF
Scrub-shrub wetland		☐ ATF		☐ ATF
Emergent wetland		☐ ATF		☐ ATF
Wet meadow		☐ ATF		☐ ATF
Intermittent stream		☐ ATF		☐ ATF
Perennial Stream / River	/	☐ ATF	/	☐ ATF
Lake / Pond	/	☐ ATF	/	☐ ATF
Bank - Intermittent stream	/	☐ ATF	/	☐ ATF
Bank - Perennial stream / River	/	☐ ATF	/	☐ ATF
Bank - Lake / Pond	/	☐ ATF	/	☐ ATF
Tidal water	/	☐ ATF	/	☐ ATF
Salt marsh		☐ ATF		☐ ATF
Sand dune		☐ ATF		☐ ATF
Prime wetland		☐ ATF		☐ ATF
Prime wetland buffer		☐ ATF		☐ ATF
Undeveloped Tidal Buffer Zone (TBZ)		☐ ATF		☐ ATF
Previously-developed upland in TBZ	5,190	☐ ATF	4,167	☐ ATF
Docking - Lake / Pond		☐ ATF		☐ ATF
Docking - River		☐ ATF		☐ ATF
Docking - Tidal Water		☐ ATF		☐ ATF
Vernal Pool		☐ ATF		☐ ATF
TOTAL	5,190 /		4,167 /	

15. APPLICATION FEE: See the Instructions & Required Attachments document for further instruction

☐ Minimum Impact Fee: Flat fee of $ 200
☒ Minor or Major Impact Fee: Calculate using the below table below

Permanent and Temporary (non-docking)	**9,357** sq. ft.	X	$0.20 =	$ **1,871.40**
Temporary (seasonal) docking structure:	sq. ft.	X	$1.00 =	$
Permanent docking structure:	sq. ft.	X	$2.00 =	$
Projects proposing shoreline structures (including docks) add $200 =				$
			Total =	$ **1,871.40**
The Application Fee is the above calculated Total or $200, whichever is greater =				$

SHORELAND APPLICATION WORKSHEET

Calculating Impervious Area

This form must be submitted to the NHDES Wetlands Bureau accompanied with a Shoreland Permit Application. Instructions for completing this form are available on the Shoreland Program web page.

For the purposes of this worksheet, "**Pre-Construction**" impervious surface area[1] means all human made impervious surfaces[2] currently present on the property, whether to be removed or to remain after the project is completed. "**Post-Construction**" impervious area means all impervious surfaces that will exist on the property upon completion of the project, including both new and any remaining pre-existing impervious surfaces. All answers shall be given in square feet.

CALCULATING IMPERVIOUS AREA WITHIN 250 FEET OF THE REFERENCE LINE			
	STRUCTURE DESCRIPTION	**PRE-CONSTRUCTION IMPERVIOUS AREAS**	**POST-CONSTRUCTION IMPERVIOUS AREAS**
PRIMARY STRUCTURE(S) House and all attached decks and porches.	**Main/Deck**	**883** FT^2	**3,636** FT^2
ACCESSORY STRUCTURES All other impervious surfaces excluding lawn furniture, well heads, and fences. Common accessory structures include, but are not limited to: driveways, walkways, patios, and sheds.	**Sheds**	**366** FT^2	**0** FT^2
	Gravel Drive	**3,861** FT^2	**495** FT^2
	Patios	**633** FT^2	**254** FT^2
	Stairs/ramps	**82** FT^2	**84** FT^2
	Ret walls	**78** FT^2	**21** FT^2
	Conc/walkway/access	**73** FT^2	**182** FT^2
TOTAL:		**(A) 5,976** FT^2	**(B) 4,672** FT^2
Area of the lot located within 250 feet of reference line:			**(C) 20,070** FT^2
Percentage of lot covered by pre-construction impervious area within 250 feet of the reference line: *[divide (a) by (c) x 100]*			**(D) 29.8 %**
Percentage of lot to be covered by post-construction impervious area within 250 feet of the reference line upon completion of the project: *[divide (b) by (c) x 100]*			**(E) 23.3 %**

[1] **"Impervious surface area"** as defined in Env-Wq 1402.15 means, for purposes of the impervious surface limitation specified in RSA 483-B:9, V(g), the sum total of the footprint of each impervious surface that is located within the protected shoreland.

[2] **"Impervious Surface"** as defined in RSA 483-B:4, VII-b means any modified surface that cannot effectively absorb or infiltrate water. Examples of impervious surfaces include, but are not limited to, roofs, and unless designed to effectively absorb or infiltrate water, decks, patios, and paved, gravel, or crushed stone driveways, parking areas, and walkways.

Stormwater Management Requirements

The Impervious Area Thresholds
☒ A net *decrease* in impervious area is proposed (If **Calculation E** is less than **Calculation D**).
☐ The percentage of post-construction impervious area **(Calculation E)** is less than or equal to 20%. This project **does not** require a stormwater management plan and **does not** require a plan demonstrating that each waterfront buffer grid segment at least meets the minimum required tree and sapling point score.
☐ A net increase in impervious area is proposed and the percentage of post-construction impervious area **(Calculation E)** is greater than 20%, but less than 30%. This project **requires** a stormwater management but, **does not** require a plan demonstrating that each waterfront buffer grid segment at least meets the minimum required tree and sapling point score. See details on the *Checklist of Required Items* on page 6
☐ A net increase in impervious area is proposed and the percentage of post-construction impervious area **(Calculation E)** is greater than 30%. This project **requires** a stormwater management plan designed and certified by a professional engineer **and requires** plans demonstrating that each waterfront buffer grid segment meets at least the minimum required tree and sapling point score. See details on the *Checklist of Required Items* on page 6

Natural Woodland Area Requirement

DETERMINING THE AREA TO REMAIN AS NATURAL WOODLAND	
Total area of the lot between 50 feet and 150 feet of the reference line within which the vegetation currently exists as natural woodland[3] **(see definition below)**.	**(F)** **0 sq. ft.**
Total area of the lot between 50 feet and 150 feet from the reference line.	**(G)** **7,665 sq. ft.**
At least 25% of area **(G)** must remain in as natural woodland. [.25 x G]	**(H)** **1,916 sq. ft.**
Place the lesser of area **(F)** and calculation **(H)** on this line. In order to remain compliant with the **natural woodland area requirement**, this is the minimum area that must remain as natural woodland between 50 feet and 150 feet from the reference line. This area **must** be represented on all plans and this area, exclusive of existing lawn, must remain in an unaltered state[4].	**(I)** **0 sq. ft.**
Name of person who prepared this worksheet: **Steven D. Riker**	
Name and date of the plan this worksheet is based upon: **DES Permit Plan 11/5/19**	
SIGNATURE: Agent-See Authorization	DATE: 12/5/19

[3] **"Natural Woodland"** means a forested area consisting of various species of trees, saplings, shrubs, and ground covers in any combination and at any stage of growth.

[4] **"Unaltered State"** means native vegetation allowed to grow without cutting, limbing, trimming, pruning, mowing, or other similar activities except as needed for renewal or to maintain or improve plant health.

NHDES-W-06-036

SHORELAND MORE NEARLY CONFORMING REQUEST FORM

Land Resources Management

RSA/ Rule: RSA 483-B/ Env-Wq 1400

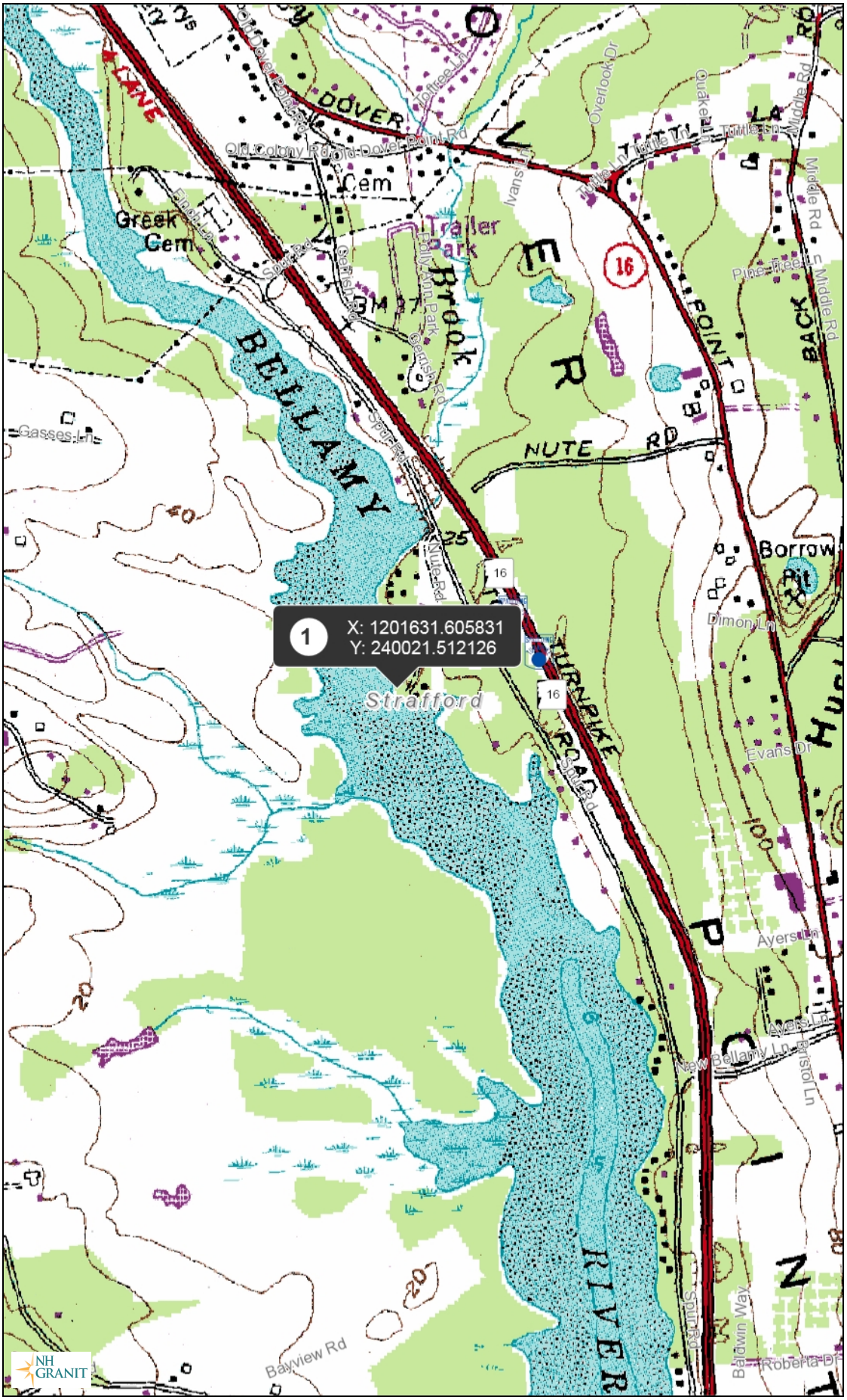
In accordance with RSA 483-B:11 of the Shoreland Water Quality Protection Act (SWQPA), when altering or expanding the footprint of nonconforming structures within 50 feet of the reference line, this form can be used to demonstrate how the project proposal will allow the property to become *more nearly conforming* than the existing site conditions. Use the areas provided below to demonstrate how this project will become more nearly conforming:

1. SIGNIFICANT CHANGES TO THE LOCATION OR SIZE OF EXISTING STRUCTURES
This includes moving the primary structure back from the reference line to attain greater conformity with the 50 foot primary building setback, removal of accessory structures within the waterfront buffer, reducing the size of structures (such as driveways and parking areas), removal of other pre-existing structures and utilizing pervious technologies that result in a significant reduction in total impervious area. The project proposes moving the primary structure from~20' from HOTL to 34' from HOTL. The project removes 366 sq. ft. of shed(s) from the waterfront buffer. The project reduces primary structure within the waterfront buffer from 575 sq. ft. to 527 sq. ft. The project reduces accessory structure (deck & patio) from the waterfront buffer from 939 sq. ft. to 785 sq. ft. The project reduces gravel drive on the lot from 1,361 sq. ft. to 0 sq. ft. The project utilizes a porous pavement driveway and reduces the impervious surface on the lot by 1,304 sq. ft.
2. SIGNIFICANT IMPROVEMENTS TO WILDLIFE HABITIAT
This includes planting native trees, saplings, shrubs and natural ground covers, preferably within the 50 foot waterfront buffer, to create multiple canopy layers and provide greater stability, stormwater absorption and significant benefits to surrounding wildlife.
3. STORMWATER MANAGEMENT
Stormwater management can be achieved by directing stormwater via gutters to dry wells and installing infiltration trenches, drainage swales, rain gardens, and water bars. These systems have the ability to intercept and infiltrate stormwater. The project proposes a stone drip apron around the proposed home and a porous pavement driveway.
4. WASTEWATER MANAGEMENT
This includes replacement of, or modifications to, existing wastewater treatment systems (*septic systems*) to provide a greater level of resource protection. The current on site septic system details are unknown. However, the project will tie into the municipal sewer system, a function that does not currently exist.
5. OTHER
This may include a proposal to improve traffic flow or volume, regrading areas to better manage stormwater, improvements to existing erosion problems, allowing other managed lawn areas, particularly within the woodland buffer to revert to natural woodland or other proposals that significantly improve wildlife habitat and resource protection.

lrm@des.nh.gov or (603) 271-2147
NHDES Shoreland Program, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095
www.des.nh.gov

The project was designed to maintain as many of the trees on the lot as possible. The new residential structure and detached garage was placed to avoid tree removal to the greatest extent practicable. While the project does require the removal of 34 trees on the lot, it does maintain 102 trees on the lot, of which 73 are located within the 50' waterfront buffer.

Map by NH GRANIT



Legend

- State
- County
- City/Town

Map Scale

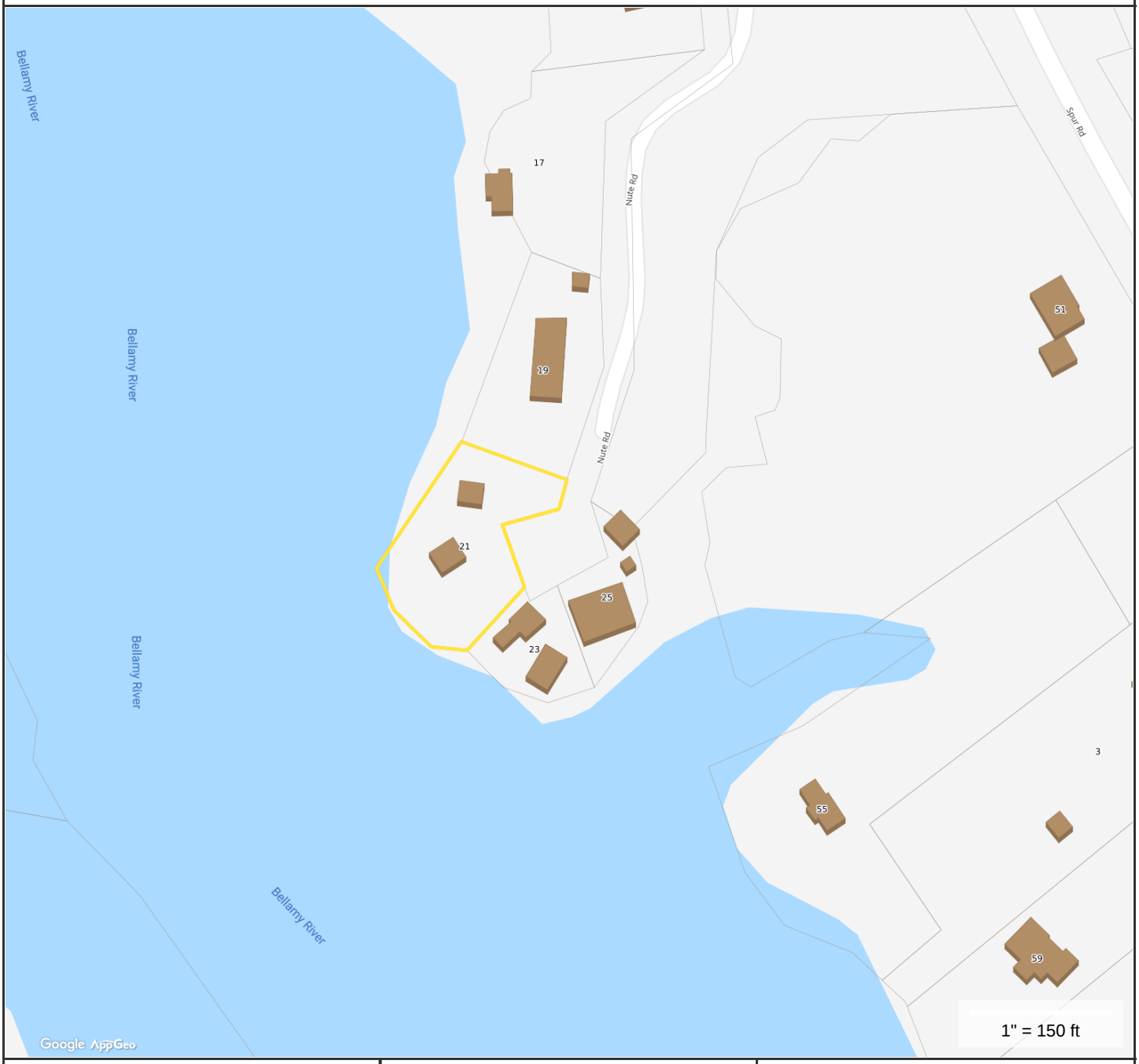
1: 12,988

© NH GRANIT, www.granit.unh.edu

Map Generated: 10/10/2019

Notes





Property Information

Property ID	L0011-000000
Location	21 NUTE RD
Owner	HOLLEMAN CHAD M &
Land Use	101

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 5/3/2019
Data updated Daily

ABUTTER'S LIST

JN 3052
Client: Chad & Heather Holleman
Project Address: 21 Nute Road, Dover, NH.

MAP	LOT	NAME(S)	PO BOX	STREET ADDRESS	CITY/STATE/ZIP
L	10	Donna P. Sears Revocable Trust Donna P. & Mark F. Sears Trustees		19 Nute Road	Dover, NH 03820
L	12	Russell E. Charleston & Stephanie Leflem		23 Nute Road	Dover, NH 03820

AMBIT ENGINEERING,INC. CIVIL ENGINEERS AND LAND SURVEYORS
200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

5 December, 2019

Russell E. Charleston & Stephanie Leflem
23 Nute Road
Dover, NH 03820

RE: New Hampshire Wetland Application for site development for Chad M. & Heather A. Holleman, 21 Nute Road, Dover, NH.

Dear Property Owner,

Under NH RSA 482-A this letter is to inform you in accordance with State Law that a NH DES Wetlands Permit will be filed with the New Hampshire Department of Environmental Services (DES) Wetlands Bureau for a permit to **impact the previously developed 100' Tidal Buffer Zone** on behalf of your abutter, **Chad M. & Heather A. Holleman.**

This letter is sent to inform you as an abutter to the above-referenced property (according to local Municipal records) that **Chad M. & Heather A. Holleman,** proposes a project that requires construction in jusridictional areas.

Plans are on file at this office, and once the application is filed, plans that show the proposed project and wetland and other jurisdictional impacts will be available for viewing during normal business hours at the office of the **Dover** clerk, **Dover city offices**, or once received by DES, at the offices of the DES Wetlands Bureau, (8 a.m. to 4 p.m.) (603) 271-2147. It is suggested that you call ahead to the appropriate office to ensure the application is available for review.

Please feel free to call if you have any questions or comments.

Sincerely,

Steven D. Riker
NH Certified Wetland Scientsist/Permitting Specialist

CERTIFIED MAIL/Return Receipt Requested

J:\JOBS3\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Applications\NH Wetlands Bureau\Abutters Letters\Charleston Abutter Letter 3052.docx

AMBIT ENGINEERING,INC. CIVIL ENGINEERS AND LAND SURVEYORS
200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

5 December, 2019

Donna P. Sears Revocable Trust
Donna P. & Mark F. Sears Trustees
19 Nute Road
Dover, NH 03820

RE: New Hampshire Wetland Application for site development for Chad M. & Heather A. Holleman, 21 Nute Road, Dover, NH.

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Please feel free to call if you have any questions or comments.

Sincerely,

Steven D. Riker
NH Certified Wetland Scientsist/Permitting Specialist

CERTIFIED MAIL/Return Receipt Requested

J:\JOBS3\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Applications\NH Wetlands Bureau\Abutters Letters\Sears Abutter Letter 3052.docx

7015 0640 0004 2882 9453

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- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

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SEARS
Street and Apt. No., or PO Box No.
19 NUTE ROAD
City, State, ZIP+4®
DOVER, NH 03820

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7015 0640 0004 2882 9446

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- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$

Postmark Here
USPS 03801 PORTSMOUTH NH DEC 2019

Sent To
CHARLESTON
Street and Apt. No., or PO Box No.
22 NUTE ROAD
City, State, ZIP+4®
DOVER, NH 03820

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

NH DES Permit Application
Holleman Residence
Site Re-Development

SITE PHOTOGRAPHS
Dover, NH

Site Photograph #1 April 2019



Site Photograph #2 April 2019



Site Photograph #3 April 2019



Site Photograph #4 April 2019



Site Photograph #5 April 2019



Site Photograph #6 April 2019



Site Photograph #7 April 2019



Site Photograph #8 April 2019



Site Photograph #9 April 2019



To: John Chagnon, Ambit Engineering, Inc.
200 Griffin Road
Unit 3
Portsmouth, NH 03801

From: NH Natural Heritage Bureau

Date: 10/21/2019 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau of request submitted 10/10/2019

NHB File ID: NHB19-3248 **Applicant:** Chad & Heather Holleman

Location: Dover
Tax Maps: Tax Map L, Lot 11-10

Project Description: The project proposes to raze the existing main structure and accessory structures and build a new single family residential home with detached garage, associated driveway, deck, patio, and landscaping.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

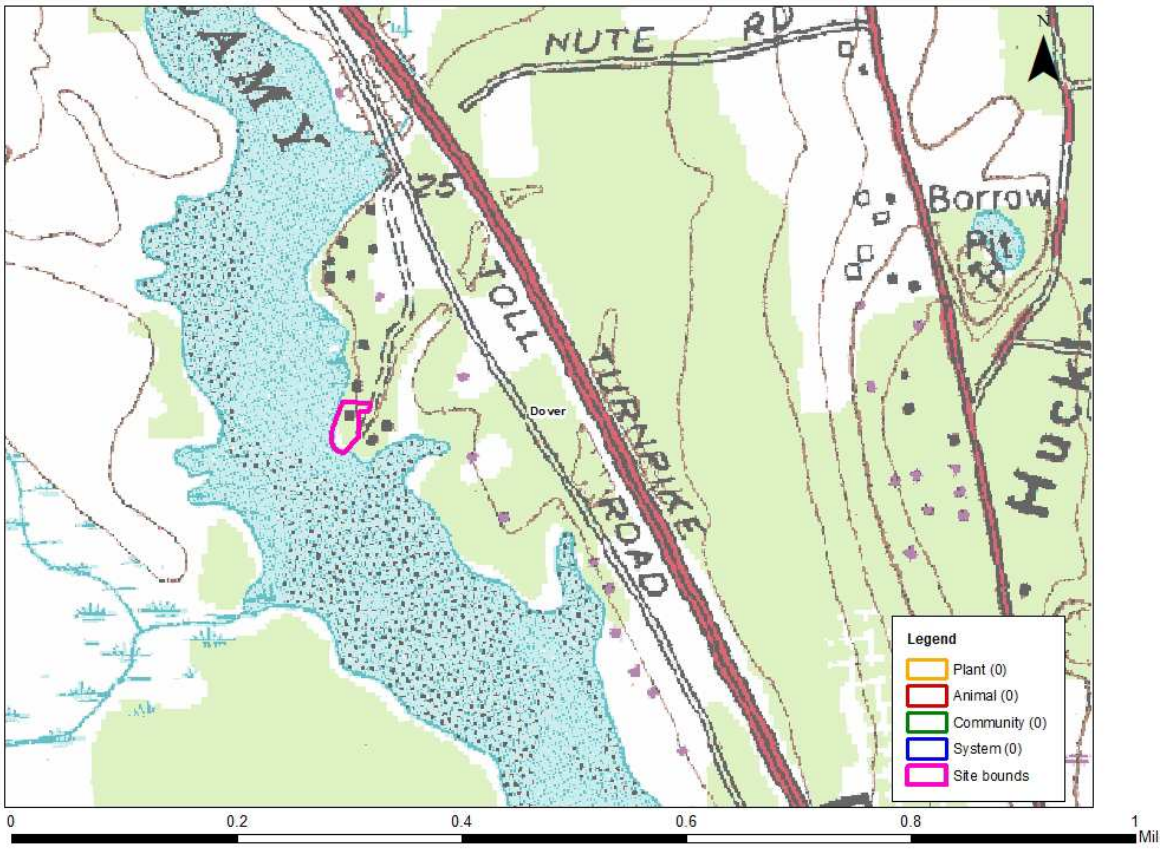
It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 10/10/2019, and cannot be used for any other project.

Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

MAP OF PROJECT BOUNDARIES FOR: **NHB19-3248**

NHB19-3248



Department of Natural and Cultural Resources
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DNCR/NHB
172 Pembroke Rd.
Concord, NH 03301

P20-10 **21 Nute Road**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
L0002-000000	43 SPUR RD	ERICKSON CALVIN J &	ERICKSON LYNETTE C	43 SPUR RD	DOVER	NH	03820
L0009-000000	17 NUTE RD	HEWITT ROBBIE		17 NUTE RD	DOVER	NH	03820
L0010-000000	19 NUTE RD	SEARS MARK F & DONNA P TRUSTEES	SEARS DONNA P REVOCABLE TRUST	19 NUTE ROAD	DOVER	NH	03820
L0012-000000	23 NUTE RD	CHARLESTON RUSSELL E &	LEFLEM STEPHANIE	23 NUTE RD	DOVER	NH	03820
L0013-000000	25 NUTE RD	FOGG ADAM R &	NAGLE PATRICIA	25 NUTE RD	DOVER	NH	03820
L0014-F00000	51 SPUR RD	ROEMER DALE S D TRUSTEE	ROEMER DALE S D REV TRUST	51 SPUR RD	DOVER	NH	03820
L0011-000000	21 NUTE RD	HOLLEMAN CHAD M &	HOLLEMAN HEATHER A	PO BOX 924	AVON	CO	81620
		AMBIT ENGINEERING INC., PE 7651	JOHN R. CHAGNON	200 GRIFFIN ROAD, UNIT 3	PORTSMOUTH	NH	03801

DOVER CONSERVATION COMMISSION – MINUTES

CITY OF DOVER

Meeting Type:	Regular Meeting
Meeting Location:	**First Floor Conference Room** - 288 Central Avenue, Dover, NH
Meeting Date:	Monday, February 10, 2020
Meeting Time:	5:30 pm

MEMBERS PRESENT: Bill Hunt (Chair), Steve Fellows (Vice Chair), Robert Atwood (Secretary), Jason Aube, Richard Erickson (5:35), Amy Kramer-Perry, Zach Schmidt (Alternate)

Absent (Excused): Piper Bartlett-Browne (Alternate)

Absent (Un-excused): Abby Lyon

STAFF PRESENT: Steve Bird (City Planner)

OTHERS PRESENT: Lindsey Williams (City Council Liaison), Chris Berry, Steve Riker, Shawn Moriarty

1. **The meeting was convened at 5:32 PM and a roll call was done.**
2. **APPROVAL OF THE PRIOR MEETING MINUTES** – January 13, 2020

Kramer-Perry moved to approve the January 13, 2020 minutes, Fellows seconded. Vote: 5 in favor, Aube abstained

3. **OLD BUSINESS:** NONE
4. **NEW BUSINESS:**

A. City of Dover Conditional Use Permit and NHDES Expedited Wetland Permit for DRVP Developers, LLC, Assessor's Map 14, Lot 10-G, zoned R-12, located at 40A Cataract Avenue.

Chris Berry was present to explain the proposal for 10 single family units along a 700 foot long road and associated drainage, creating 312 sq. ft. of wetlands impact and 5,869 sq. ft. of 50 foot wetland buffer impact. We have had two TRC meetings. We completed a storm water analysis. Wetland and buffer impacts have been reduced. There are no impacts to the Conservation District, but we will need a Shoreland Permit and an AOT permit.

Fellows: Did TRC have any concerns about the location of the road being adjacent to Sunset Drive?

Berry: No concerns were noted. It is a fairly low volume road and we are generating minimal traffic.

Fellows: I appreciate you adding additional vegetation and the rain garden.

Bird: What is the status of the DES Wetlands Permit?

Berry: We have most of it ready to submit, but it is not final. It is an expedited permit but we may go with a standard permit because we won't be able to get your approval until March 9th. It would add 20 days to review period.

Fellows moved to endorse the Conditional Use Permit as presented, Schmidt seconded. Vote: 7 in favor

B. City of Dover Conditional Use Permit and NHDES Expedited Wetland Permit for Chad & Heather Holleman, Assessor's Map L, Lot 11, zoned R-20, located at 21 Nute Road.

Steve Riker of Ambit Engineering was present to explain the proposal for a new single family house and accessory dwelling unit to replace an existing house adjacent to the tidal Bellamy River, with 5,190 sq. ft. of permanent tidal buffer zone impact and 4,167 sq. ft. of temporary tidal buffer zone impact. The entire lot is within the 100 foot tidal buffer zone. All existing structures will be removed. We are proposing an Accessory Dwelling Unit (ADU) in a separate building above a garage. There is another garage in the main house. There is an existing dock on lot. The house has a deck, patio and pervious driveway. We have applied for a driveway permit and it was approved. We will tie into city water and sewer. Patio is now pervious. DES requested more information and I will be submitting a

DRAFT

response tomorrow. We did a 50 foot grid plan to demonstrate compliance with tree score requirement. We will ask DES for a waiver for the impact within 20 feet of an abutter for the Charleston lot. We do need a Shoreland Permit for the deck. The house is not in a floodplain so the 2 foot freeboard elevation requirement does not apply.

Fellows: How much of the house is occupied by the garage?

Riker: It is the size of a two car garage.

The issue of the status of the end of Nute Road was discussed. Riker says that the area is owned by 3 property owners, but there are municipal water and sewer lines in the area and the City plows use the area to turn around. The configuration was created by a 1926 subdivision plan.

Bird: I am not sure the City would agree that the area is privately owned given the municipal uses. Given the minimization and avoidance criteria, I am not sure how the second structure containing the ADU meets that criteria.

Riker: We covered the criteria in the letter to the Planning Board.

Hunt: The ADU is not a necessity for the owner's use of the property. Removing the building would reduce the impacts by about 15%.

Schmidt: Did the owners indicate if the removal of the ADU building would be a deal breaker?

Riker: I don't know how they would feel about that.

Fellows: Would it be appropriate for us to recommend that the second building be removed?

Bird: The Conservation Commission can make whatever recommendation to the Planning Board that it feels is appropriate.

Aube: How much of an increase is the impact to the area?

Riker: The proposal has less impact because the existing impact is spread out and the proposed is more compact. We are proposing les impervious and adding a drip edge to the house to collect storm water.

Aube: There is a big improvement going from an outhouse to City sewer.

Riker: You could require that the storm water inspection and maintenance plan be recorded.

Fellows: The ADU structure does cause be heartburn but I am inclined to agree that the overall improvements such as connecting to sewer and storm water design are an overall improvement to parcel.

Aube moved to endorse the DES Wetlands Permit and City of Dover Conditional Use Permit as presented, Kramer-Perry seconded. Vote: 6 in favor, 1 (Hunt) opposed.

C. Vote on request for expenditure from the Conservation Fund for:

1. Expenditure for Change Order for Forest Land Improvement, Inc. for preparation of an expanded Forest Management Plan for City Parcels off Tolend Road - $910

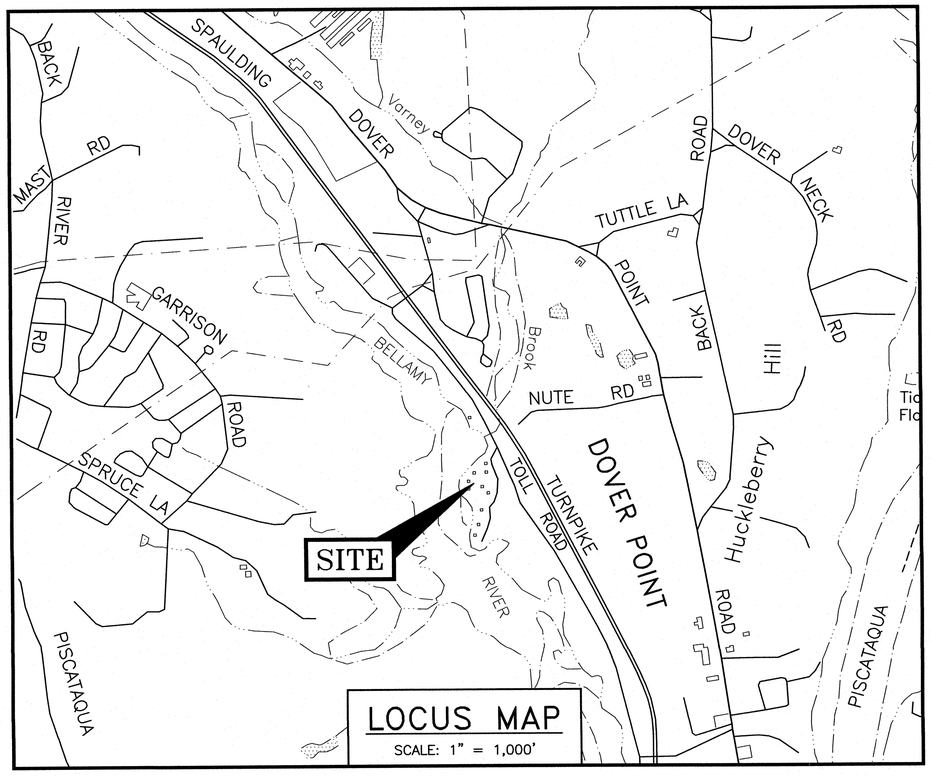
DRAFT

PROPOSED STRUCTURE REPLACEMENT
21 NUTE ROAD
DOVER, NEW HAMPSHIRE
PERMIT PLANS

OWNERS:
CHAD & HEATHER HOLLEMAN
PO BOX 924
AVON, CO. 01827
Tel (970) 376-6476

CIVIL ENGINEER & LAND SURVEYOR:
AMBIT ENGINEERING, INC.
200 GRIFFIN ROAD, UNIT 3
PORTSMOUTH, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

RESIDENTIAL DESIGNER:
BROTHERS DESIGN BUILD LLC
181 MICA POINT ROAD
BARRINGTON, N.H. 03825
Tel (603) 219-5432



INDEX OF SHEETS

C1	EXISTING CONDITIONS PLAN
C2	DEMOLITION PLAN
C3	NHDES PERMIT PLAN
~~C4~~	GRADING AND UTILITY PLAN
D1-D2	DETAILS

UTILITY CONTACTS

ELECTRIC:
EVERSOURCE
1700 LAFAYETTE ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 436-7708, Ext. 555.5678
ATTN: MICHAEL BUSBY, P.E. (MANAGER)

SEWER & WATER:
CITY OF DOVER
271 MAST ROAD
DOVER, N.H. 03820-4169
TEL. (603) 516-6459
ATTN: BILL BOULANGER, DEPUTY DIRECTOR
COMMUNITY SERVICES

COMMUNICATIONS:
CONSOLIDATED
COMMUNICATIONS
JOE CONSIDINE
1575 GREENLAND ROAD
GREENLAND, N.H. 03840
Tel. (603) 427-5525

CABLE:
COMCAST
155 COMMERCE WAY
PORTSMOUTH, N.H. 03801
Tel. (603) 679-5695 (X1037)
ATTN: MIKE COLLINS

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1-888-344-7233
CALL TOLL FREE

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
SCRD	STRAFFORD COUNTY REGISTRY OF DEEDS
11/21	MAP 11/LOT 21
IR FND	IRON ROD FOUND
IP FND	IRON PIPE FOUND
IR SET	IRON ROD SET
DH FND	DRILL HOLE FOUND
DH SET	DRILL HOLE SET
	GRANITE BOUND w/IRON ROD FOUND
MSL	MEAN SEA LEVEL
HOTL	HIGHEST OBSERVABLE TIDE LINE
1	PHOTO LOCATION

EXISTING	PROPOSED	
		PROPERTY LINE
		SETBACK LINE
FM	FM	FORCE MAIN
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	PG	GAS LINE
D	D	STORM DRAIN
FD	FD	FOUNDATION DRAIN
W	W	WATER LINE
FS	FS	FIRE SERVICE LINE
UE	UGE	UNDERGROUND ELECTRIC SUPPLY
		UNDERGROUND ELECTRIC SERVICE
OHW	OHW	OVERHEAD ELECTRIC/WIRES
		RETAINING WALL
		EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97x3	98x0	SPOT ELEVATION
		UTILITY POLE
E	E	ELECTRIC METER
		TRANSFORMER ON CONCRETE PAD
		ELECTRIC HANDHOLD/PULLBOX
		WATER SHUT OFF/CURB STOP
C.O.	C.O.	PIPE CLEANOUT
	GV	GATE VALVE
S	SMH	SEWER MANHOLE
	HYD	HYDRANT
D	DMH	DRAIN MANHOLE
CB	CB	CATCH BASIN
	WMH	
W		WATER METER MANHOLE
#5		TEST BORING
TP 1		TEST PIT
LA		LANDSCAPED AREA
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
CMP	CMP	CORRUGATED METAL PIPE
DI	DI	DUCTILE IRON PIPE
PVC	PVC	POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
HYD	HYD	HYDRANT
℄	℄	CENTERLINE
EP	EP	EDGE OF PAVEMENT
EL.	EL.	ELEVATION
INV	INV	INVERT
FF	FF	FINISHED FLOOR
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL

PERMIT PLANS
STRUCTURE REPLACEMENT
HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, NEW HAMPSHIRE

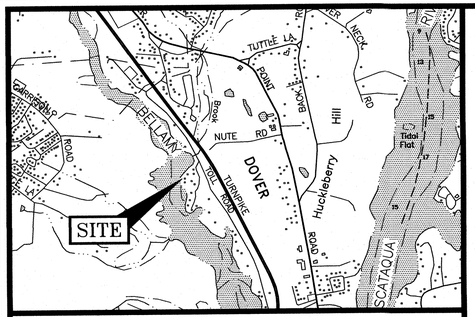
AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

PLAN SET SUBMITTAL DATE: 5 NOVEMBER 2019

CITY OF DOVER FILE NO. PB _____

L-11-0 | 3052

J:\JOBS3\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 Cover 2019.dwg, 2429 COVER SHEET



LOCATION MAP SCALE:1"=2,000'

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
SCRD	STAFFORD COUNTY REGISTRY OF DEEDS
11/21	MAP 11/LOT 21
IP FND	IRON PIPE FOUND
IR FND	IRON ROD FOUND
IR SET	IRON ROD SET
DH SET	DRILL HOLE SET
RR SPK SET	RAILROAD SPIKE SET
BND w/DH	BOUND WITH DRILL HOLE
ST BND w/DH	STONE BOUND w/ DRILL HOLE
	WOODS / TREE LINE
	UTILITY POLE (w/ GUY)
WSO	WATER SHUT OFF/CURB STOP
GV	GATE VALVE
HYD	HYDRANT
G W E	METER (GAS, WATER, ELECTRIC)
	CATCH BASIN

WETLAND NOTES:

1) HIGHEST OBSERVABLE TIDE LINE DELINEATED BY STEVEN D. RIKER, CWS ON 4/29/19 IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

A) U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. TECHNICAL REPORT Y-87-1 (JAN. 1987). AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012.

B) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.1, USDA-NRCS, 2017 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEIWPCC WETLANDS WORK GROUP (2017).

C) NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). USFWS (MAY 1988).

D) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL FWS/OBS-79/31 (1997).

E) ''IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE'' (1997). NEW HAMPSHIRE FISH AND GAME DEPARTMENT.

2) WETLAND FLAGS WERE FIELD LOCATED BY AMBIT ENGINEERING, INC.

STATE OF NEW HAMPSHIRE — No. 1000 — LICENSED LAND SURVEYOR — PAUL A. DOBBERSTEIN — SIGNATURE

''I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000.''

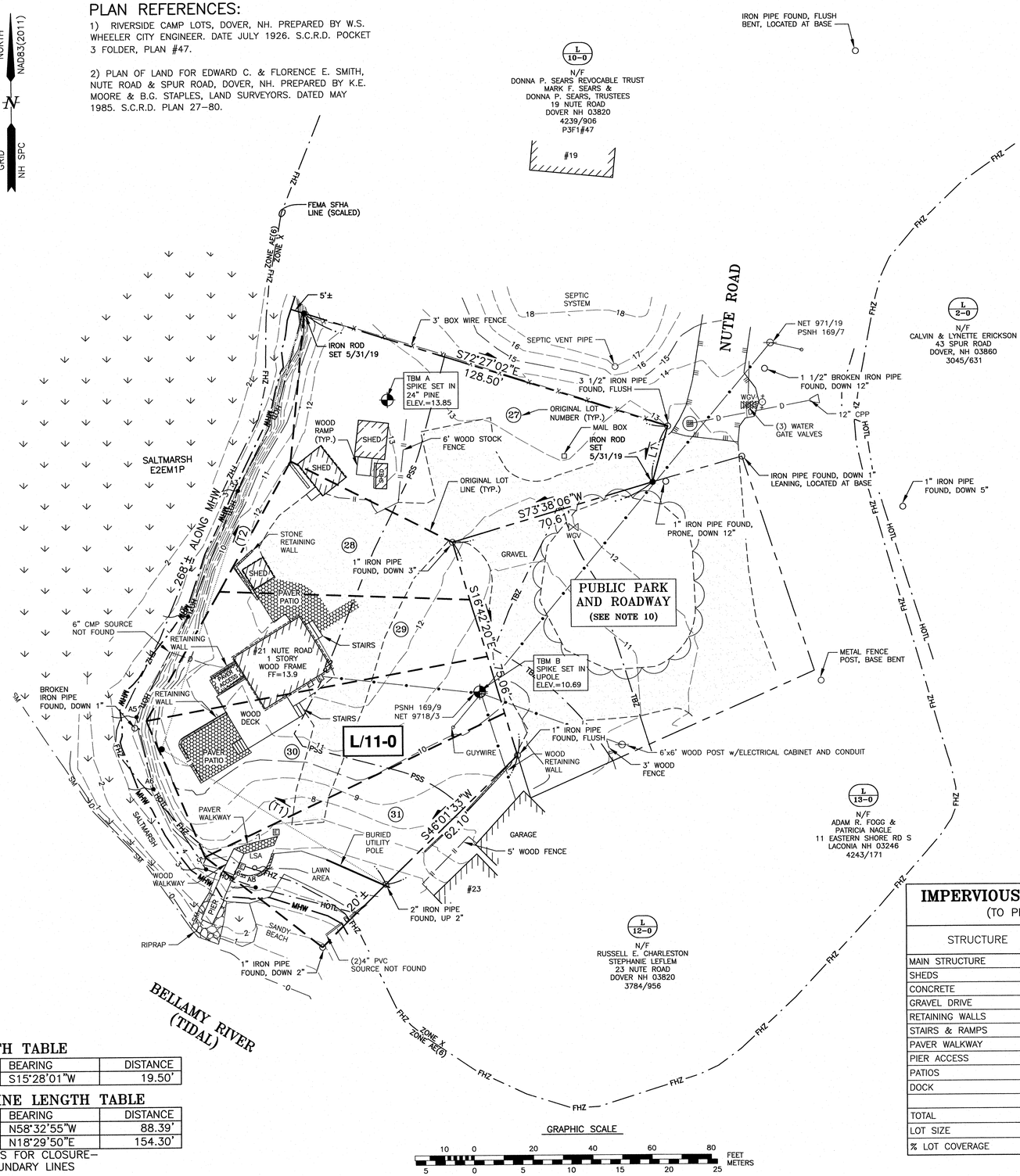
PAUL A DOBBERSTEIN, LLS — 11/8/19 DATE

PLAN REFERENCES:

1) RIVERSIDE CAMP LOTS, DOVER, NH. PREPARED BY W.S. WHEELER CITY ENGINEER. DATE JULY 1926. S.C.R.D. POCKET 3 FOLDER, PLAN #47.

2) PLAN OF LAND FOR EDWARD C. & FLORENCE E. SMITH, NUTE ROAD & SPUR ROAD, DOVER, NH. PREPARED BY K.E. MOORE & B.G. STAPLES, LAND SURVEYORS. DATED MAY 1985. S.C.R.D. PLAN 27-80.

NORTH NAD83(2011) — GRID NH SPC



GRAPHIC SCALE
10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	S15°28'01"W	19.50'

TIE LINE LENGTH TABLE

LINE	BEARING	DISTANCE
T1	N58°32'55"W	88.39'
T2	N18°29'50"E	154.30'

TIE LINES FOR CLOSURE-NOT BOUNDARY LINES

IMPERVIOUS SURFACE AREAS
(TO PROPERTY LINE)

STRUCTURE	PRE-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	577
SHEDS	366
CONCRETE	8
GRAVEL DRIVE	3,861
RETAINING WALLS	78
STAIRS & RAMPS	82
PAVER WALKWAY	34
PIER ACCESS	31
PATIOS	633
DOCK	306
TOTAL	5,976
LOT SIZE	20,070
% LOT COVERAGE	29.8%

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF DOVER ASSESSOR'S MAP L AS LOT 11-0.

2) OWNERS OF RECORD:
CHAD M. HOLLEMAN AND
HEATHER A. HOLLEMAN
P.O. BOX 924
2365 FOX LANE
AVON, CO 81 01827
4605/217
P3F1#47 (LOTS 27, 28, 29, 30, AND 31)

3) PORTIONS OF THE PARCEL ARE IN A SPECIAL FLOOD HAZARD AREA, ZONE AE (EL.6) AS SHOWN ON FIRM PANEL 33017C0340E. EFFECTIVE DATE SEP. 30, 2015.

4) EXISTING LOT AREA:
20,070± S.F. (TO MEAN HIGH WATER)
0.4607± ACRES (TO MEAN HIGH WATER)

5) PARCEL IS LOCATED IN THE LOW DENSITY RESIDENTIAL, ZONING DISTRICT (R-20) AND IS SUBJECT TO THE CONSERVATION DISTRICT, WETLAND CONSERVATION DISTRICT, THE RIVERFRONT RESIDENTIAL DISTRICT, AND THE FLOODPLAIN DEVELOPMENT RULES.

6) DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:	20,000 S.F.
FRONTAGE:	125 FEET
SETBACKS (PRINCIPAL):	
FRONT:	20 FT. MIN, 35 FT MAX
SIDE:	20 FEET
REAR:	30 FEET
SETBACKS (OUTBUILDINGS/ACCESSORY USE):	
FRONT:	NO CLOSER THAN THE PRINCIPAL BUILDING OR 35 FT, WHICHEVER IS LESS
SIDE:	10 FEET
BACK:	10 FEET
MAXIMUM STRUCTURE HEIGHT:	35 FEET
MAXIMUM LOT COVERAGE:	30%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULT OF A STANDARD BOUNDARY AND TOPOGRAPHIC SURVEY OF TAX MAP L LOT 11-0 IN THE CITY OF DOVER.

8) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS (±0.2').

9) MEAN HIGH WATER LINE (MHW) IS SHOWN AT ELEVATION 3.37 PER NOAA STATION 8420411-DOVER, COCHECO RIVER.

10) THIS AREA IS SHOWN ON PLAN REFERENCE 1 AS "PUBLIC PARK AND ROADWAY". PARCEL HAS A 1/3 INTEREST IN THIS AREA IN COMMON WITH ASSESSOR'S MAP L LOTS 12-0 & 13-0.

HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/5/19

REVISIONS

STATE OF NEW HAMPSHIRE — STEVEN D. RIKER — No. 219 — CERTIFIED WETLAND SCIENTIST

SCALE: 1"=20' MAY 2019

EXISTING CONDITIONS PLAN

C1

FB 180 PG 57

3052

J:\JOBS\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 EXIST 2019.dwg, C1 EXIST

DEMOLITION NOTES

A) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE DESIGNER. IT IS THE CONTRACTORS' RESPONSIBILITY TO LOCATE UTILITIES AND ANTICIPATE CONFLICTS. CONTRACTOR SHALL REPAIR EXISTING UTILITIES DAMAGED BY THEIR WORK AND RELOCATE EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED PRIOR TO COMMENCING ANY WORK IN THE IMPACTED AREA OF THE PROJECT.

B) ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTORS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES. THE CONTRACTOR SHALL COORDINATE REMOVAL, RELOCATION, DISPOSAL, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.

C) ANY EXISTING WORK INTENDED TO REMAIN OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO THE ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D) THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.

E) IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL THE PERMIT APPROVALS.

F) THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL CONSTRUCTION PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR ANY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK.

G) THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE, UTILITIES, VEGETATION, PAVERS, AND SOIL NOT SUITABLE FOR RE-USE WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.

H) ALL WORK WITHIN THE CITY OF DOVER RIGHT OF WAY SHALL BE COORDINATED WITH THE CITY OF DOVER DEPARTMENT OF PUBLIC WORKS (DPW)

I) REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL SLUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

J) CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED, THE CONTRACTOR SHALL EMPLOY A NH LICENSED LAND SURVEYOR TO REPLACE THEM.

K) THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFELY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.

L) ANY CONTAMINATED MATERIAL REMOVED DURING THE COURSE OF THE WORK WILL REQUIRE HANDLING IN ACCORDANCE WITH NHDES REGULATIONS. CONTRACTOR SHALL HAVE A HEALTH AND SAFETY PLAN IN PLACE, AND COMPLY WITH ALL APPLICABLE PERMITS, APPROVALS, AUTHORIZATIONS, AND REGULATIONS

LEGEND:

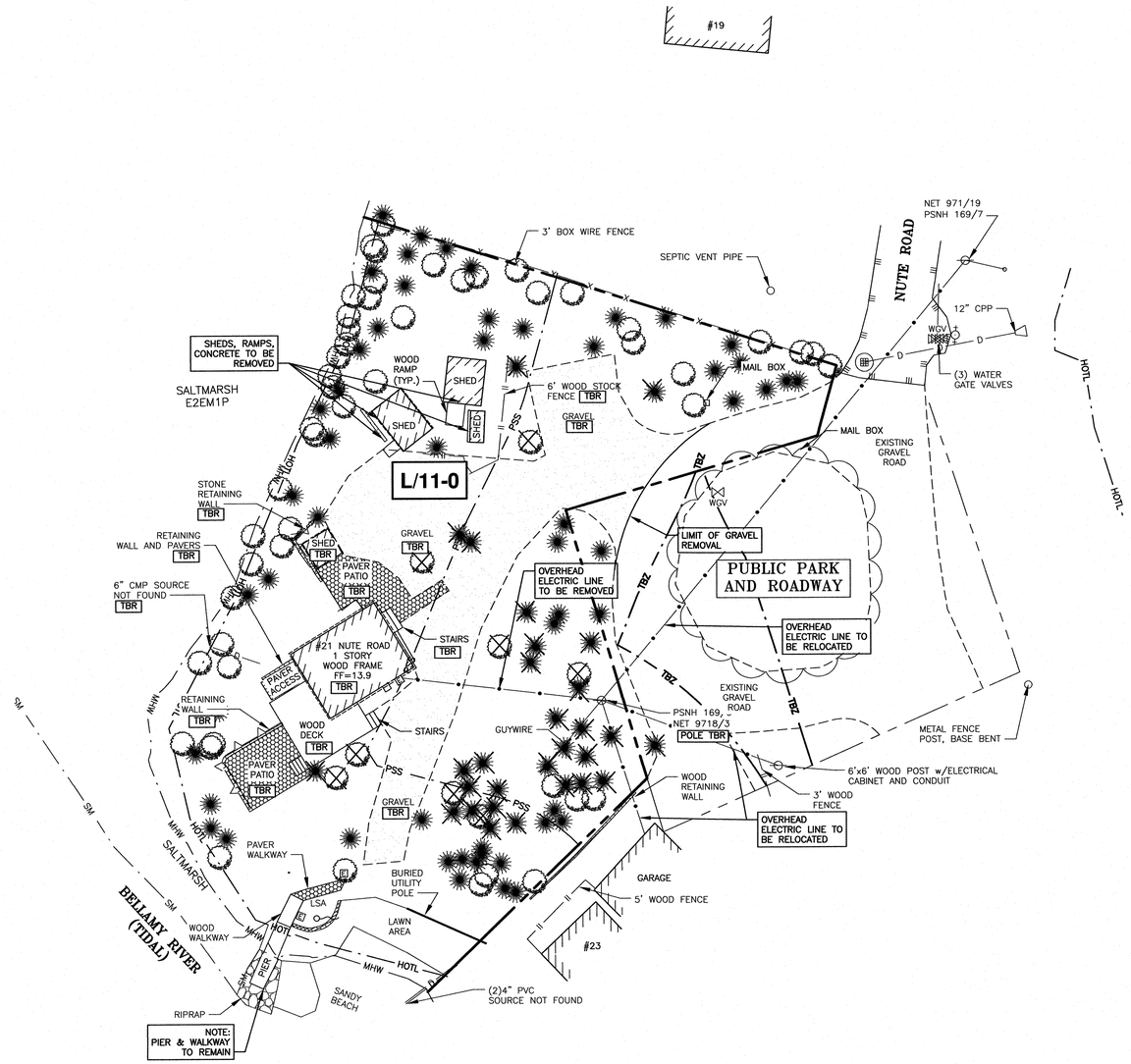
- RAILROAD SPIKE SET
- BOUNDARY LINE
- ORIGINAL LOT LINE POCKET 3 FOLDER 1 PLAN #47
- MHW — MEAN HIGH WATER LINE
- HOTL — HIGHEST OBSERVABLE TIDE LINE
- FHZ — FEMA SPECIAL FLOOD HAZARD AREA LINE
- PSS — NH DES PRIMARY STRUCTURE SETBACK
- TBZ — NH DES TIDAL BUFFER ZONE
- WOODS / TREE LINE
- UTILITY POLE (w/ GUY)
- WSO — WATER SHUT OFF/CURB STOP
- GV — GATE VALVE
- HYD — HYDRANT
- G W E — METER (GAS, WATER, ELECTRIC)
- CATCH BASIN
- EXISTING TREES
- EXISTING TREES TO BE REMOVED

CITY OF DOVER PLANNING BOARD

CHAIRMAN _____ DATE _____

NORTH NAD83(2011)

GRID NH SPC



GRAPHIC SCALE

10 0 20 40 60 80 FEET

5 0 5 10 15 20 25 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTE:

1) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/5/19

REVISIONS

STATE OF NEW HAMPSHIRE STEVEN D. BIKER 12/5/19 NO. 219 CERTIFIED WETLAND SCIENTIST

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 7651 LICENSED PROFESSIONAL ENGINEER

SCALE: 1"=20' AUGUST 2019

DEMOLITION & TREE REMOVAL PLAN C2

FB 180 PG 57 | CITY OF DOVER FILE NO. PB ____ | 3052

J:\JOBS\N 3000's\N 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 SITE 2019.dwg, C2 DEMO

LEGEND:

- BOUNDARY LINE
- MHW — MEAN HIGH WATER LINE
- HOTL — HIGHEST OBSERVABLE TIDE LINE
- FHZ — FEMA SPECIAL FLOOD HAZARD AREA LINE
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- GV — GATE VALVE
- HYD — HYDRANT
- G W E — METER (GAS, WATER, ELECTRIC)
- CATCH BASIN
- EXISTING TREES

IMPERVIOUS SURFACE AREAS
(TO PROPERTY LINE – ENTIRE LOT IS IN SHORELAND ZONE)

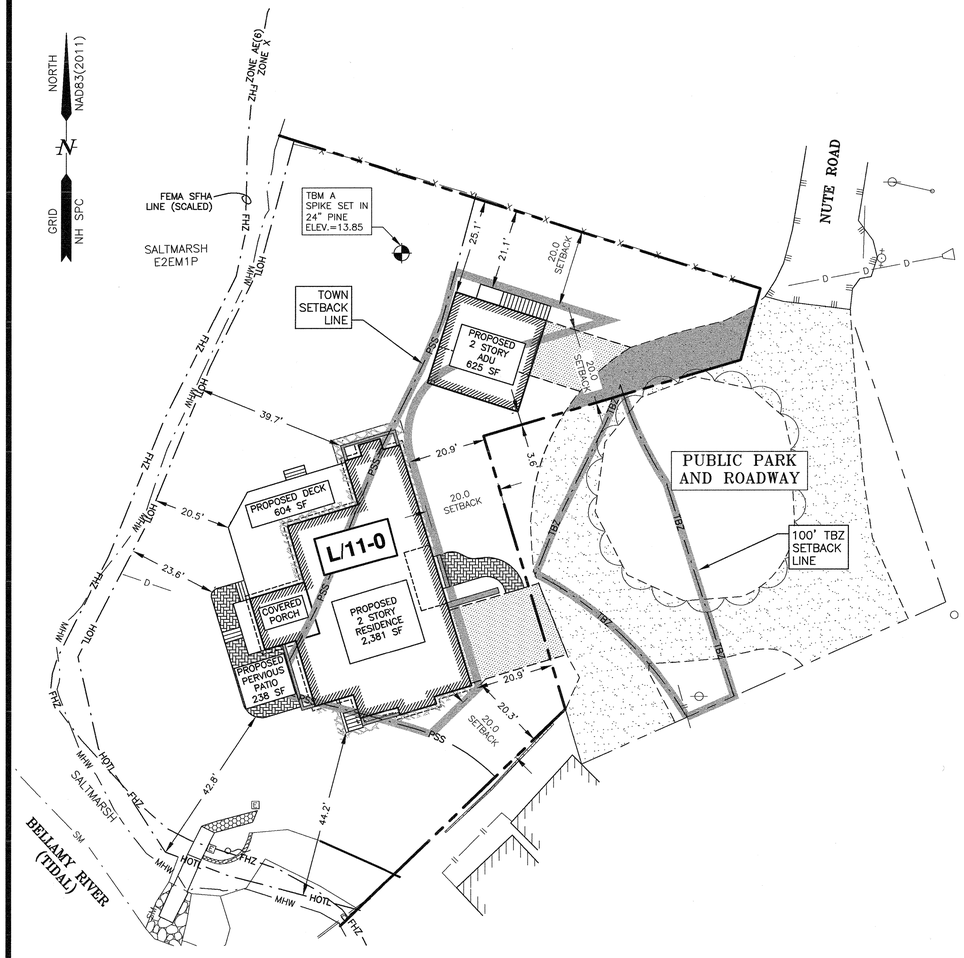
STRUCTURE	PRE–CONSTRUCTION IMPERVIOUS (S.F.)	POST–CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE(S)	577	3,006
SHEDS	366	0
CONCRETE WALL	8	55
GRAVEL DRIVE	3,861	495
RETAINING WALLS	78	21
STAIRS & RAMPS	82	84
PAVER WALKWAY	34	0
PIER ACCESS	31	31
PATIO	633	0
DECK	306	630
TOTAL	5,976	4,322
LOT SIZE	20,070	20,070
% LOT COVERAGE	29.8%	21.5%

NHDES IMPACT AREAS
IN S.F.

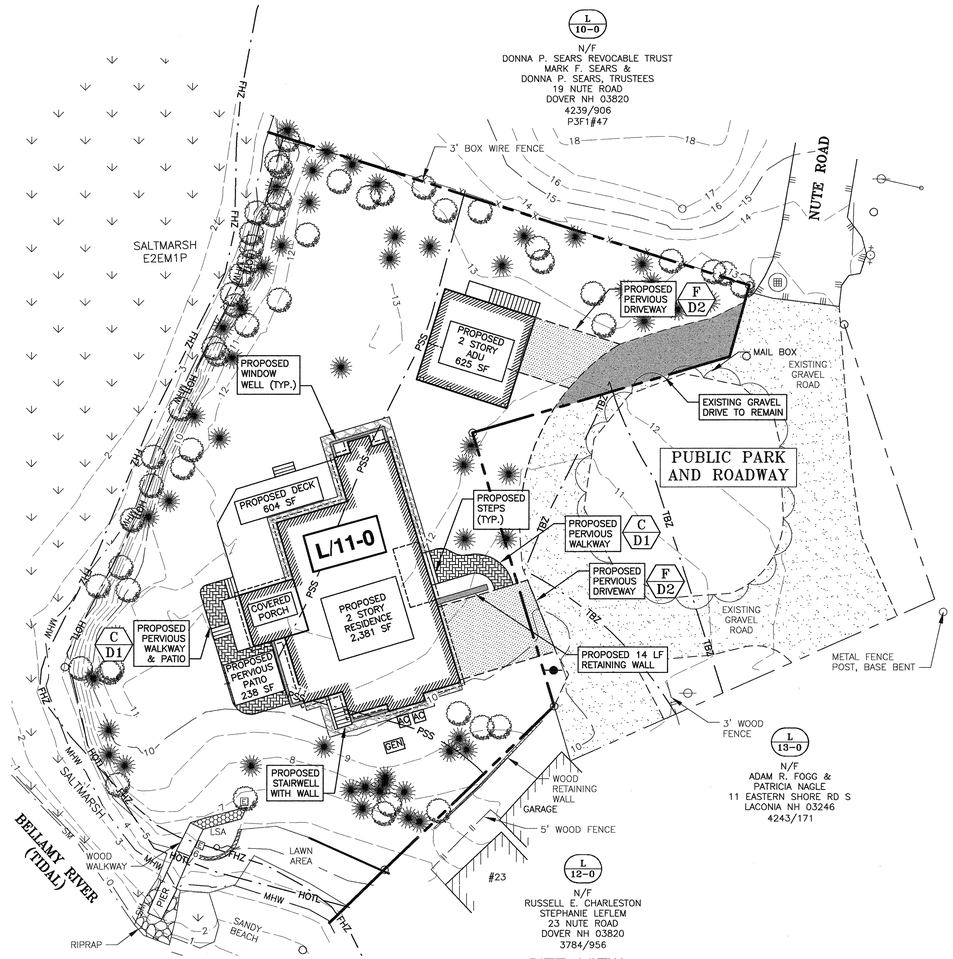
	PERMANENT IMPACT AREAS	TEMPORARY IMPACT AREAS
100' TIDAL BUFFER ZONE	5,462	4,328

DOVER LOT DIMENSIONAL REQUIREMENTS (R–20)

	EXISTING	PROPOSED
MIN. LOT AREA: 20,000 S.F.	20,070	20,070
FRONTAGE: 125 FT	145	145
SETBACKS: (PRINCIPLE/OUTBUILDINGS)		
MIN. FRONT: 50 FT/ NO CLOSER THAN PRINCIPAL BUILDING OR 35 FT, WHICHEVER IS LESS	30	3.6
SIDE: 20 FT/10 FT	27	20
REAR: 30 FT/ 10 FT	14	20
MAX. STRUCTURE HEIGHT: 35 FT	N/A	TO COMPLY
MAX. LOT COVERAGE: 30%	29.8%	21.5%
IMPERVIOUS AREA WITHIN 50' BUFFER	5,365 SF	1,279 SF
BUILDING AREA WITHIN 50' BUFFER	983 SF	514 SF



SETBACK VIEW



SITE VIEW

CITY OF DOVER PLANNING BOARD

CHAIRMAN _____ DATE _____

GRAPHIC SCALE

10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

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NOTES:

1) PARCEL IS SHOWN ON THE CITY OF DOVER ASSESSOR'S MAP L AS LOT 11–0.

2) OWNERS OF RECORD:
CHAD M. HOLLEMAN AND
HEATHER A. HOLLEMAN
P.O. BOX 924
2365 FOX LANE
AVON, CO 81 01827
4605/217
P3F1#47 (LOTS 27, 28, 29, 30, AND 31)

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20,070± S.F. (TO MEAN HIGH WATER)
0.4607± ACRES (TO MEAN HIGH WATER)

5) PARCEL IS LOCATED IN THE LOW DENSITY RESIDENTIAL, ZONING DISTRICT (R–20) AND IS SUBJECT TO THE CONSERVATION DISTRICT, WETLAND CONSERVATION DISTRICT, THE RIVERFRONT RESIDENTIAL DISTRICT, AND THE FLOODPLAIN DEVELOPMENT RULES.

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED BUILDING AND SITE IMPROVEMENTS OF TAX MAP L LOT 11–0 IN THE CITY OF DOVER.

8) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GPS OBSERVATIONS (±0.2').

9) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1–888–DIG–SAFE (1–888–344–7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

10) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

11) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

12) FOR TREE REMOVAL SEE SHEET C2 DEMOLITION PLAN.

HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
1	ADD ADU DRIVEWAY AND PERVIOUS PATIO	1/16/20
0	ISSUED FOR COMMENT	11/5/19

REVISIONS

STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON NO. 7551 – LICENSED PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE – STEVEN D. RIKER – NO. 219 – CERTIFIED WETLAND SCIENTIST

SCALE: 1"=20' AUGUST 2019

NHDES PERMIT PLAN

C3

FB 180 PG 57 | CITY OF DOVER FILE NO. PB ____ | 3052

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UTILITY NOTES:

1) SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.

2) COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY.

3) ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.

4) ALL WORK WITHIN CITY R.O.W. SHALL BE COORDINATED WITH CITY OF DOVER

5) CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.

6) ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.

7) THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH BUILDING DRAWINGS AND UTILITY COMPANIES.

8) ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.

9) THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATED TO THE OWNER PRIOR TO THE COMPLETION OF PROJECT.

10) THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED IN THESE DRAWING TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.

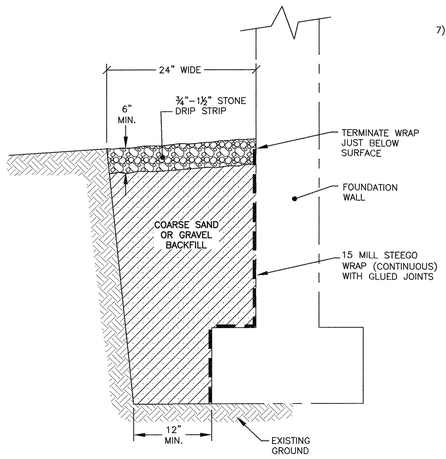
11) A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS WATER ABOVE SEWER.

12) GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.

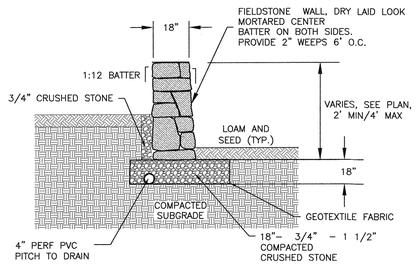
13) COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.

14) CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.

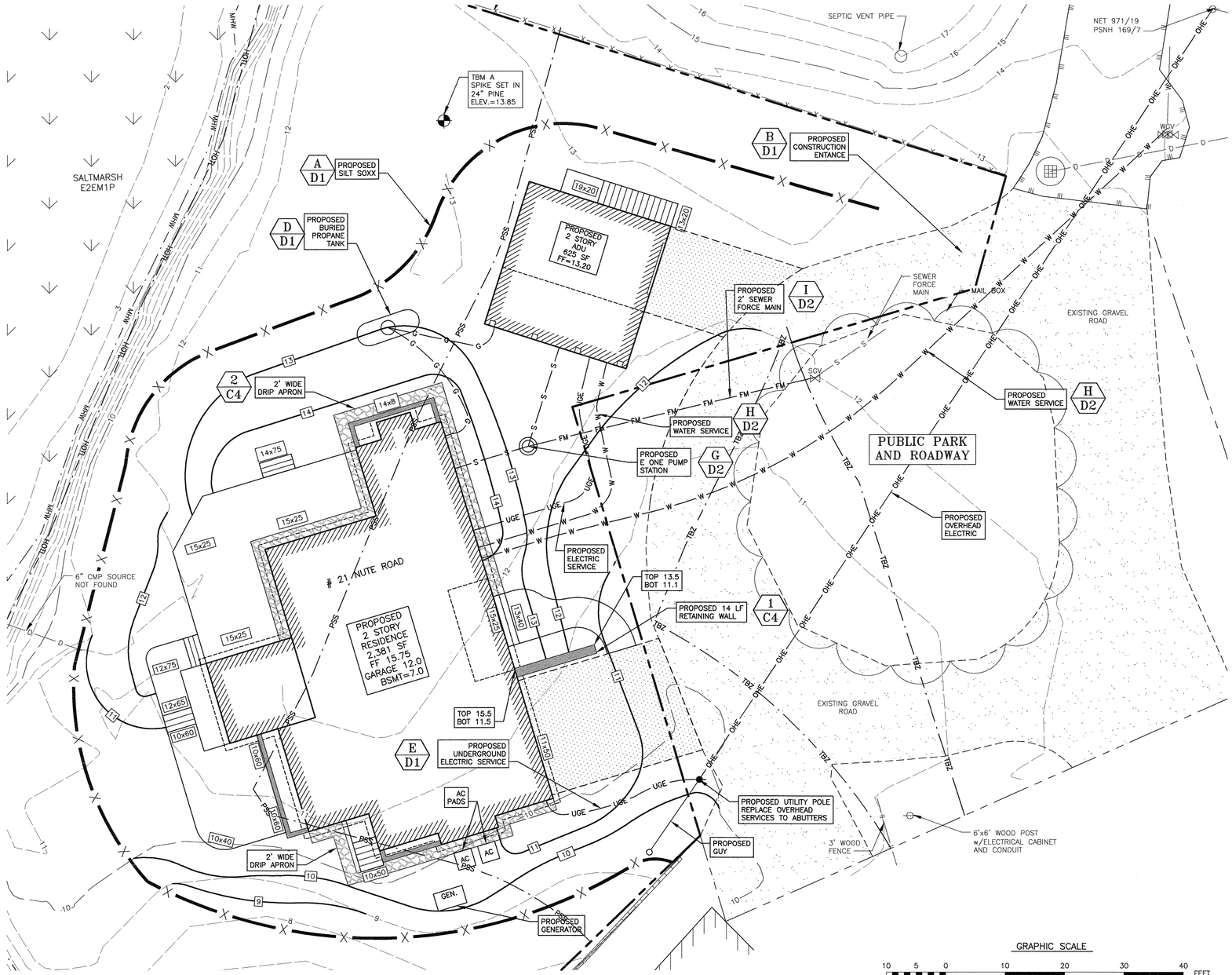
15) CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION SO AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH UTILITY COMPANY AND AFFECTED ABUTTERS.



2/C4 STONE DRIP APRON
UNDER BUILDING DRIP LINE & DECK (FED BY GUTTERS)
NTS



1/C4 RETAINING WALL
NTS



AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
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NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
1	ADD ADU DRIVEWAY	1/16/20
0	ISSUED FOR COMMENT	11/5/19

REVISIONS

STATE OF NEW HAMPSHIRE — JOHN R. CHAGNON NO. 7851 — LICENSED PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE — STEVEN D. PIKER — 1/16/20 — No. 219 — CERTIFIED WETLAND SCIENTIST

SCALE: 1"=10' AUGUST 2019

GRADING AND UTILITY PLAN

C4

FB 180 PG 57 | CITY OF DOVER FILE NO. PB ____ | 3052

J:\CAD\3052\2019\3052-2019 Survey and Permitting\Plans & Specs\dwg\3052-2019-2019.dwg, C4 GRADE, By JTL, 1/16/2020 2:29:01 PM

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

INSTALL SILT SOXX NECESSARY TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION PRIOR TO ANY EARTH MOVING ACTIVITIES.

CUT AND REMOVE ALL TREES, SHRUBS, SAPLINGS, BRUSH, VINES AND OTHER DEBRIS AND RUBBISH AS REQUIRED.

DEMOLISH STRUCTURES

CONSTRUCT CONSTRUCTION ENTRANCE, DRAINAGE STRUCTURES, AND SUBGRADES. INSTALL AND MAINTAIN EROSION CONTROL DEVICES AS SHOWN ON THE PLANS.

CONSTRUCT UTILITIES, BUILDING AND PAVEMENT AREAS.

LOAM AND SEED REMAINING DISTURBED AREAS IN ACCORDANCE WITH VEGETATIVE PRACTICE AND GENERAL CONSTRUCTION NOTES.

MAINTAIN DISTURBED AREAS IN ACCORDANCE WITH MAINTENANCE AND PROTECTION NOTES, UNTIL STABILIZED.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE".

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

SILT SOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT SOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) AS WELL AS THE SEPTIC SYSTEM AREA, WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVE AND PARKING AREAS.

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS
CONSTRUCT SILT FENCE AROUND TOPSOIL STOCKPILE.

AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED BY GRINDING OR FILL IN AN APPROVED FACILITY.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEED 8 INCHES IN THICKNESS.

FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

DISTURBED AREAS SHALL BE SEEDED IMMEDIATELY FOLLOWING FINISHED GRADING.

AT NO TIME SHALL ANY DISTURBED AREA REMAIN UNSTABILIZED FOR LONGER THAN THIRTY DAYS. ALL AREAS WHERE CONSTRUCTION IS NOT COMPLETE WITHIN THIRTY DAYS OF THE INITIAL DISTURBANCE SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

WINTER NOTES

ALL PROPOSED 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 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS:

LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE:

GENERAL COVER	PROPORTION	SEEDING RATE
CREEPING RED FESCUE	50%	100 LBS/ACRE
KENTUCKY BLUEGRASS	50%	

SLOPE SEED (USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1)

CREEPING RED FESCUE	42%	
TALL FESCUE	42%	48 LBS/ACRE
BIRDSFOOT TREFOIL	16%	

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

FOR TEMPORARY PROTECTION OF DISTURBED AREAS:
MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

PERENNIAL RYE: 0.7 LBS/1,000 S.F.
MULCH: 1.5 TONS/ACRE

MAINTENANCE AND PROTECTION

THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED, LIMED AND FERTILIZED, AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.

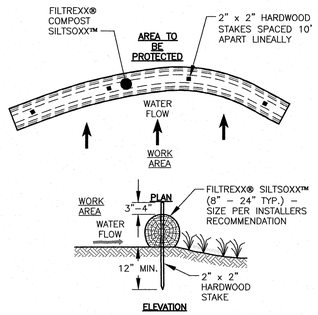
TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.

THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

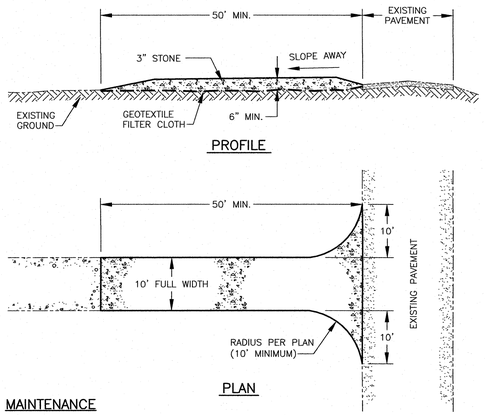
THE SILT FENCE BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

SILT FENCING SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED.



NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

A / C4 FILTREXX® SILTSOXX™ FILTRATION SYSTEM
NTS



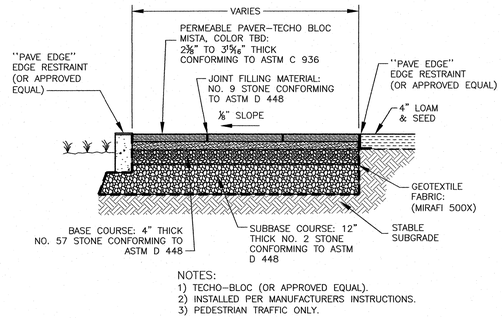
MAINTENANCE

1) MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOP DRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
2) IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

CONSTRUCTION SPECIFICATIONS

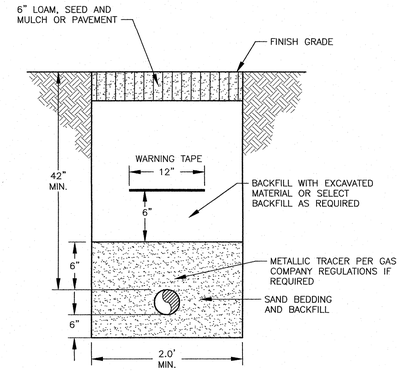
1) STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH CRUSHED STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2) THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 75 FEET.
3) THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4) THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE 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 ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8) WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

B / C4 STABILIZED CONSTRUCTION ENTRANCE
FODS TRACKOUT CONTROL MAT SYSTEM MAY BE SUBSTITUTED NTS



NOTES:
1) TECHO-BLOC (OR APPROVED EQUAL).
2) INSTALLED PER MANUFACTURERS INSTRUCTIONS.
3) PEDESTRIAN TRAFFIC ONLY.

C / C3 TECHO-BLOC POROUS WALKWAY
HARDSCAPE DESIGN & INSTALLATION 1-410-969-9260 NTS



D / C4 GAS SERVICE TRENCH
NTS

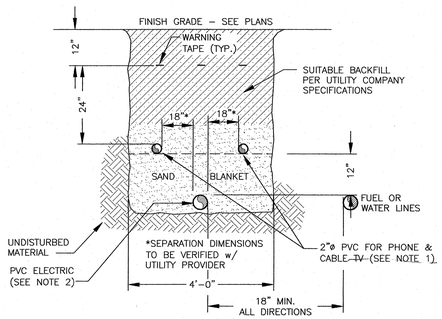
NOTES:
1) ALL CONDUIT TO BE U.L. LISTED, SCH. 80 UNDER ALL TRAVEL WAYS, & SCHED. 40 FOR THE REMAINDER.

2) NORMAL CONDUIT SIZES FOR PSNH ARE 3 INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4 INCH FOR THREE PHASE SECONDARY, AND 5 INCH FOR THREE PHASE PRIMARY.

3) ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE (LATEST REVISION)

4) INSTALL A 200# PULL ROPE FOR EACH CONDUIT

5) VERIFY ALL CONDUIT SPECIFICATIONS WITH UTILITY COMPANY'S PRIOR TO ANY CONSTRUCTION.



E / C4 BURIED ELEC/COMM CABLE
NTS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

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HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/5/19

REVISIONS

JOHN R. CHAGNON NO. 7851 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

SCALE: AS SHOWN AUGUST 2019

DETAIL SHEET D1

FB 180 PG 57 | CITY OF DOVER FILE NO. PB ____ | 3052

J:\3052\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 Details 2019.dwg, D1_DETAILS

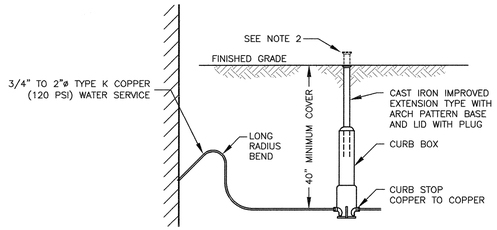
POROUS PAVEMENT SPECIFICAITONS

①		②		③	
POROUS PAVEMENT w/ THE FOLLOWING GRADATIONS*		CHOKER/RESERVOIR COURSE w/ THE FOLLOWING GRADATIONS**		FILTER COURSE (Item 304.3, Processed Gravel)	
SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)	SIEVE SIZE	PASSING BY WEIGHT (%)
3/4" (19mm)	100	1" (25mm)	100	3" (75mm)	100
1/2" (12.5mm)	85–100	3/4" (19mm)	45–55	2.0" (63mm)	95–100
3/8" (9.5mm)	55–75	1/2" (12.5mm)	40–50	1" (25mm)	55–85
No. 4 (4.75mm)	10–25	3/8" (9.5mm)	35–45	No. 4 (4.75mm)	27–52
No. 8 (2.36mm)	5–10	No. 4 (4.75mm)	---	---	---
No. 200 (0.075mm)	2–4	No. 8 (2.36mm)	0–5	No. 200 (0.075 mm)	0–12 (in sand portion)

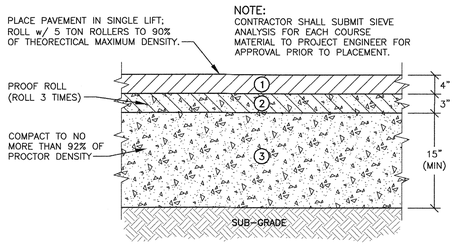
* WITH 6% PERFORMANCE GRADED ASPHALT BINDER CONTENT BY VOLUME. AIR VOIDS TO BE 20%

** CRUSHED QUARRY STONE SHALL CONTAIN AT LEAST 2 FRACTURED FACES, & SHALL BE WASHED WITH LESS THAN 1% BY WEIGHT PASSING No. 200 SIEVE.

NOTE:
1) INSTALLATION OF WATER MAIN TAP & CURB STOP & BOX SHALL ONLY BE PERFORMED BY THOSE AUTHORIZED BY THE PUBLIC WORKS DEPARTMENT.
2) IN AREAS OF HEAVY GROWTH THE CURB BOX COVER SHALL BE SET 6" ABOVE FINISH GRADE AND A WITNESS STAKE SET.
3) CURB BOX SHALL BE SET OUTSIDE PROPERTY LINE IN THE PUBLIC WAY.

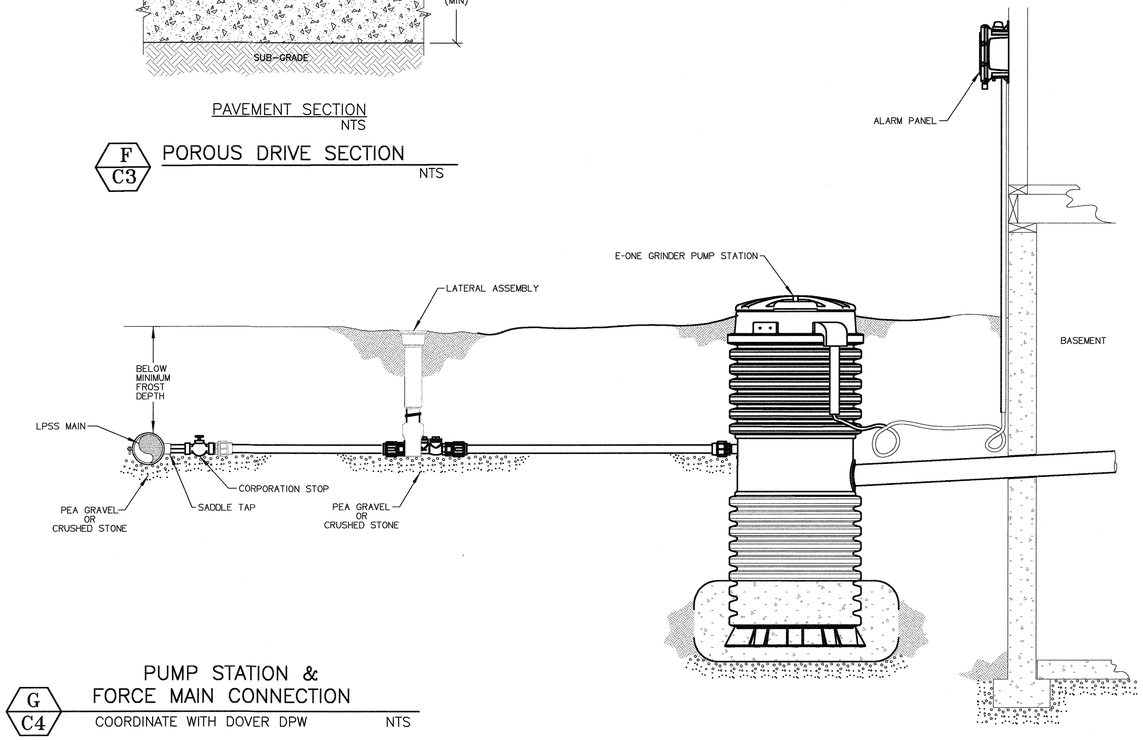


H / C4 WATER SERVICE CONNECTION
(DOVER) NTS



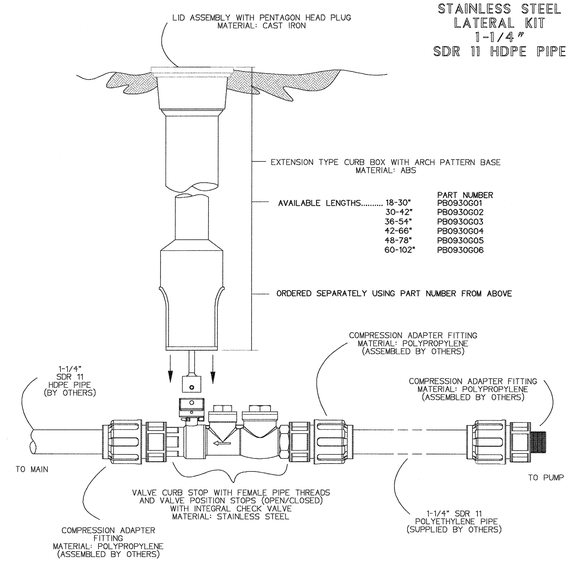
PAVEMENT SECTION
NTS

F / C3 POROUS DRIVE SECTION
NTS



G / C4 PUMP STATION & FORCE MAIN CONNECTION
COORDINATE WITH DOVER DPW NTS

environment one CORPORATION



STAINLESS STEEL LATERAL KIT
1-1/4"
SDR 11 HDPE PIPE

NOTES:

1. SS CURB STOP/CHECK VALVE AND FITTINGS ARE PROVIDED SEPARATELY, TO BE ASSEMBLED BY OTHERS
2. TO ASSEMBLE, APPLY A DOUBLE LAYER OF TEFLON TAPE, AND A LAYER OF PIPE DOPE (SUPPLIED BY OTHERS) TO THE THREADS ON THE PLASTIC FITTINGS AND INSTALL PER THE MANUFACTURER'S INSTRUCTIONS
   *FOR SS FITTING INTO SS THREAD, USE PIPE DOPE OR TEFLON TAPE, NOT BOTH
3. ASSEMBLY IS TO BE PRESSURE TESTED (BY OTHERS)
4. ASSEMBLY IS TO BE USED WITH SDR11 HDPE PIPE
5. TO ORDER SS LATERAL KIT, USE PART NUMBER NC0103G01
6. CURB BOX IS TO BE ORDERED SEPARATELY, SEE ABOVE

eone SEWER SYSTEMS
STAINLESS STEEL LATERAL KIT
1-1/4" SDR 11 HDPE PIPE

NA0330P02

I / C4 TYPICAL LATERAL INSTALLATION
COORDINATE WITH DOVER DPW NTS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
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HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	11/5/19

REVISIONS

STATE OF NEW HAMPSHIRE · JOHN R. CRAGNON No. 7961 · LICENSED PROFESSIONAL ENGINEER

SCALE: AS SHOWN AUGUST 2019

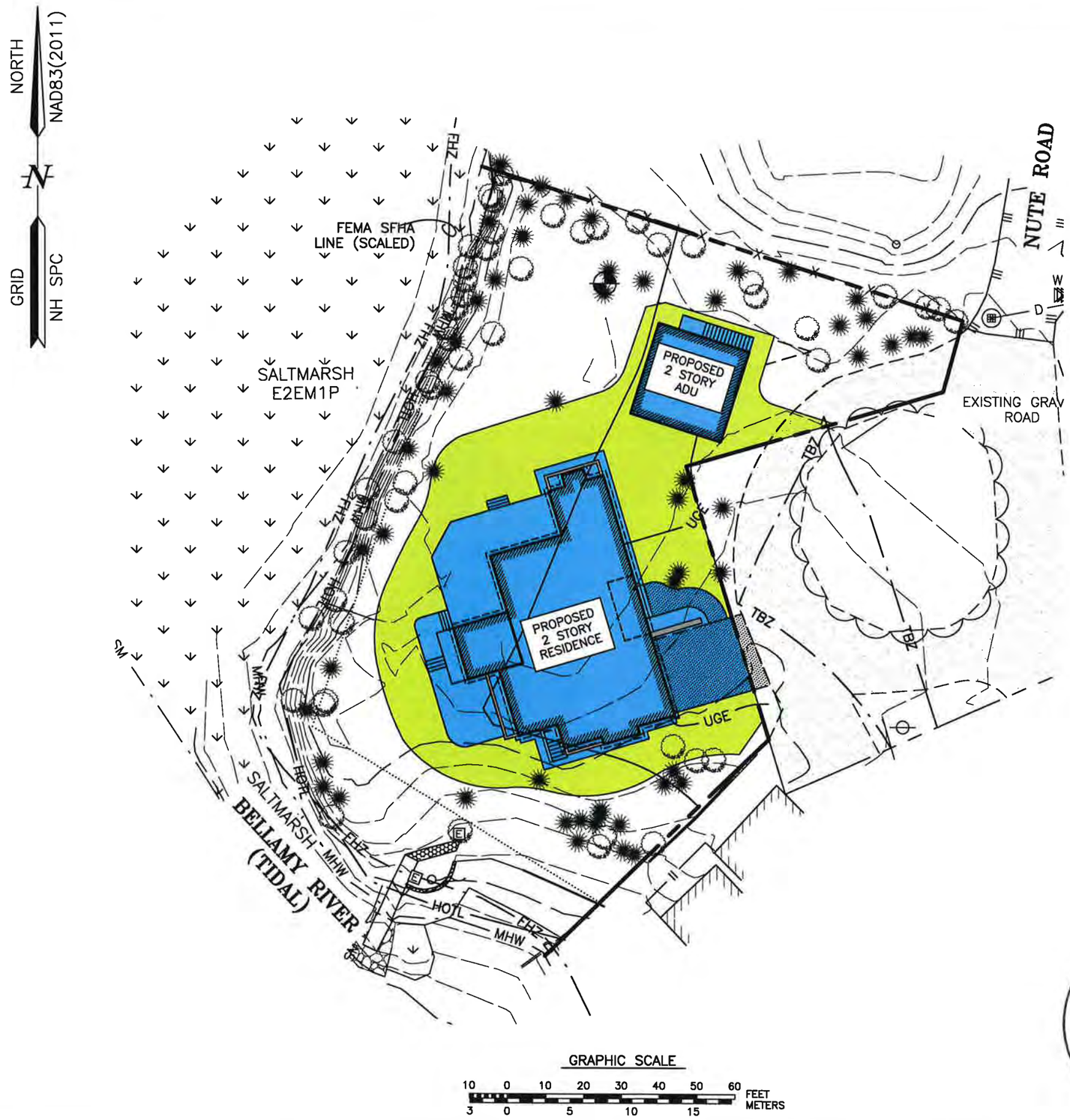
DETAIL SHEET D2

FB 180 PG 57 | CITY OF DOVER FILE NO. PB ____ | 3052

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NHDES IMPACT EXHIBIT

CHAD M. & HEATHER A. HOLLEMAN
21 NUTE ROAD
CITY OF DOVER
STATE OF NEW HAMPSHIRE



KEY

PERMANENT IMPACT (TBZ)

PERMANENT IMPACT (TBZ)
TEMPORARY IMPACT (TBZ)

NHDES IMPACT AREAS
IN S.F.

	PERMANENT IMPACT AREAS	TEMPORARY IMPACT AREAS
100' TIDAL BUFFER ZONE	5,190	4,167

DEED REFERENCE: *4605/217*
PLAN REF: 1

STATE OF NEW HAMPSHIRE
STEVEN D. RIKER
12/5/19
No. 219
CERTIFIED WETLAND SCIENTIST

SCALE 1"= 30' 5 DECEMBER 2019

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

FB 256 PG 69 3052

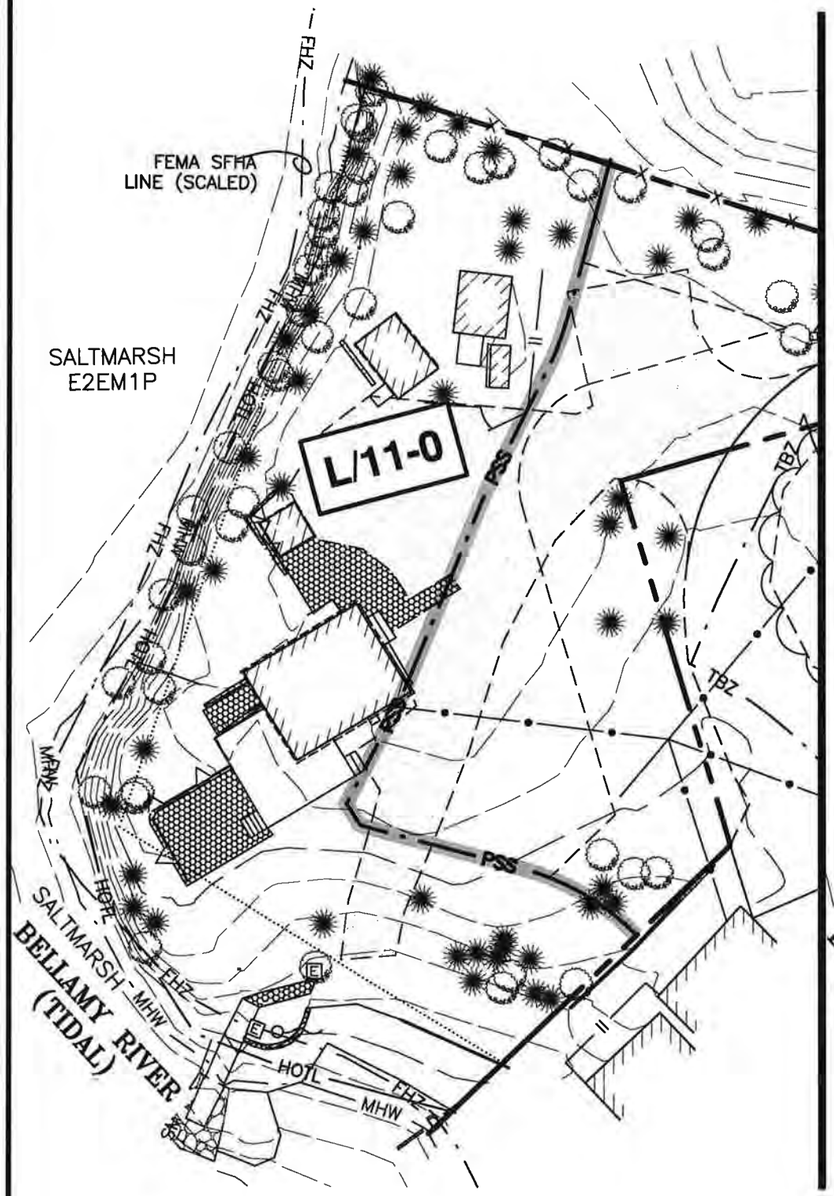
J:\JOBS3\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 SITE 2019.dwg, IMPACT EXHIBIT

NH DES IMPACT EXHIBIT

WITHIN 50' PRIMARY STRUCTURE SETBACK AND WATERFRONT BUFFER

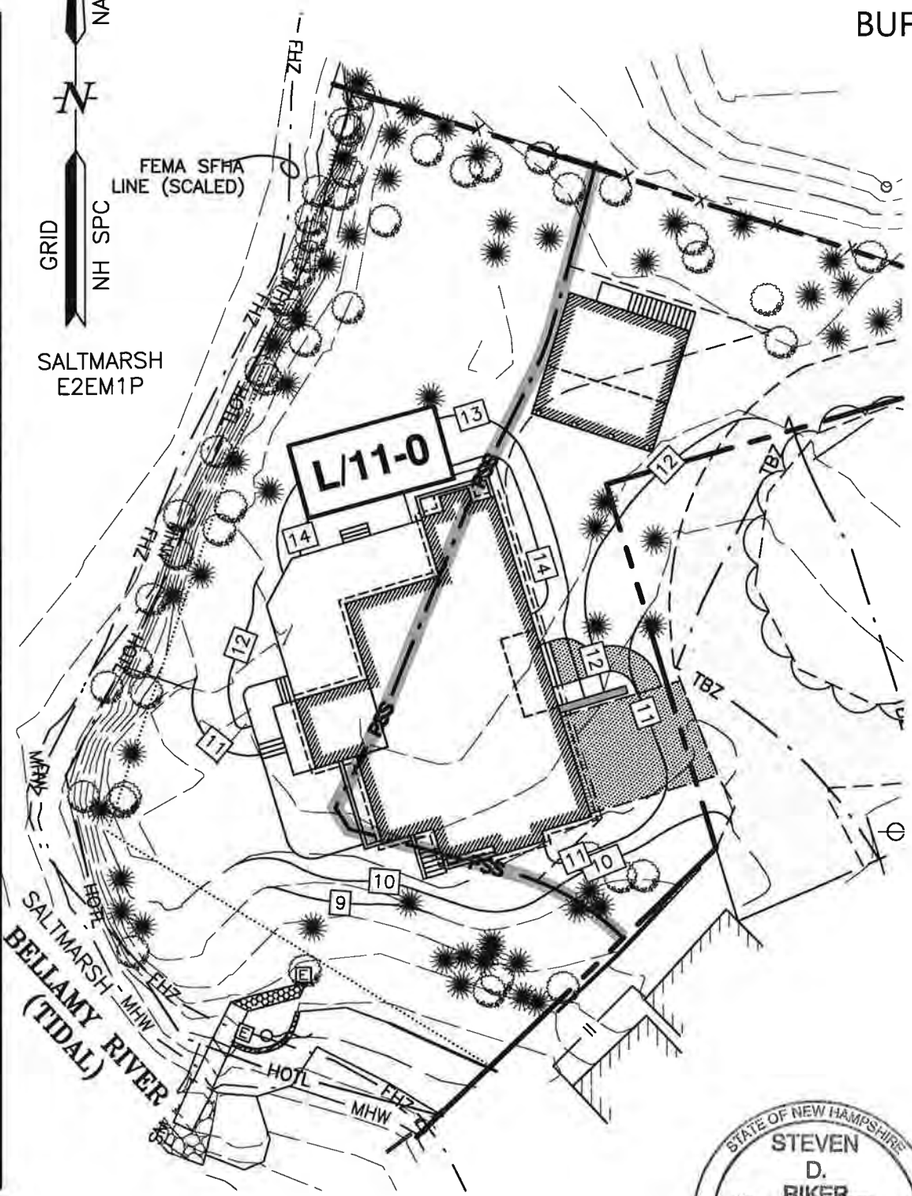
CHAD M. & HEATHER A. HOLLEMAN
21 NUTE ROAD
CITY OF DOVER
STATE OF NEW HAMPSHIRE

EXISTING



NORTH
NAD83(2011)
N
GRID
NH SPC

PROPOSED



GRAPHIC SCALE
10 0 10 20 30 40 50 60 FEET
3 0 5 10 15 METERS

WITHIN 50' PRIMARY STRUCTURE SETBACK

EXISTING SHEDS: 366 SQ.FT
EXISTING STRUCTURE: 575 SQ.FT
EXISTING DECK: 306 SQ.FT
EXISTING GRAVEL DRIVE: 1,361 SQ.FT
EXISTING PATIOS: 633 SQ.FT
EXISTING RETAINING WALLS: 78 SQ.FT
EXISTING STAIRS/RAMPS: 82 SQ.FT
EXISTING CONCRETE: 8 SQ.FT

PROPOSED STRUCTURE: 527 SQ.FT
PROPOSED DECK: 604 SQ.FT
PROPOSED PATIO: 181 SQ.FT
PROPOSED GRAVEL DRIVE: 0 SQ.FT
PROPOSED STAIRS/RAMPS: 77 SQ.FT
PROPOSED WALKWAY: 0 SQ.FT
PROPOSED RETAINING WALLS: 18 SQ.FT

DEED REFERENCE: *4605/217*
PLAN REF:1

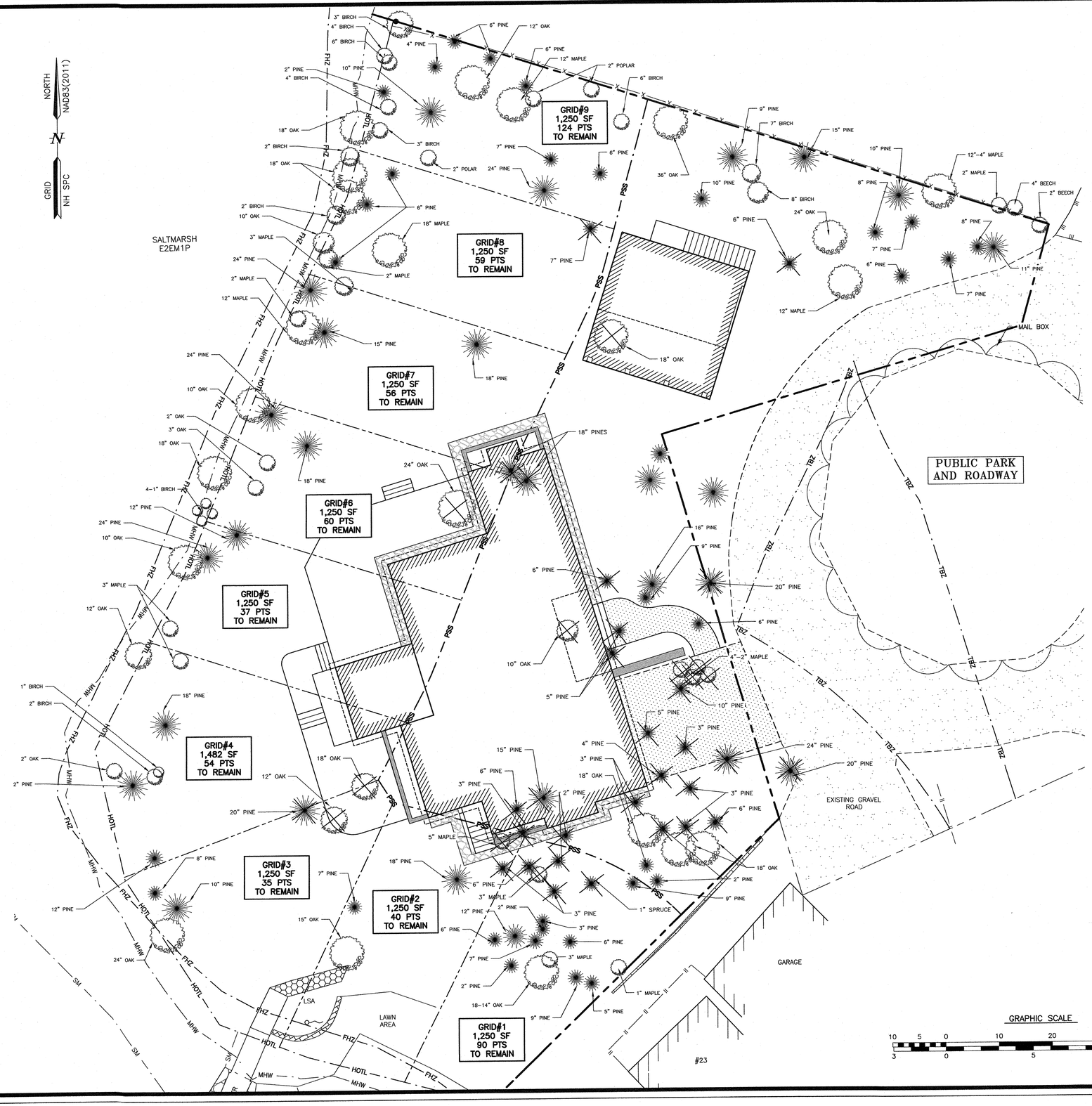
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SCALE 1"= 30' 5 DECEMBER 2019

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FB 180 PG 57 3052

J:\JOBS\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 SITE 2019.dwg, PSS EXHIBIT



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Tel (603) 430–9282
Fax (603) 436–2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF DOVER ASSESSOR'S MAP L AS LOT 11–0.

2) OWNERS OF RECORD:
CHAD M. HOLLEMAN AND
HEATHER A. HOLLEMAN
P.O. BOX 924
2365 FOX LANE
AVON, CO 81 01827
4605/217
P3F1#47 (LOTS 27, 28, 29, 30, AND 31)

3) PORTIONS OF THE PARCEL ARE IN A SPECIAL FLOOD HAZARD AREA, ZONE AE (EL.6) AS SHOWN ON FIRM PANEL 33017C0340E. EFFECTIVE DATE SEP. 30, 2015.

4) EXISTING LOT AREA:
20,070± S.F. (TO MEAN HIGH WATER)
0.4607± ACRES (TO MEAN HIGH WATER)

5) PARCEL IS LOCATED IN THE LOW DENSITY RESIDENTIAL, ZONING DISTRICT (R–20) AND IS SUBJECT TO THE CONSERVATION DISTRICT, WETLAND CONSERVATION DISTRICT, THE RIVERFRONT RESIDENTIAL DISTRICT, AND THE FLOODPLAIN DEVELOPMENT RULES.

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED WATERFRONT BUFFER GRID SCORES IN ACCORDANCE WITH SHORELAND WATER QUALITY PROTECTION ACT (SWQPA) RSA 483–B:9.V. (2).

8) ALL NINE (9) WATERFRONT BUFFER GRIDS MEET THE MINIMUM SCORE REQUIRED: 25 POINTS FOR A 1,250 SF GRID AND 30 POINTS FOR A 1,482 SF GRID FOLLOWING THE PROPOSED TREE REMOVAL AS DEPICTED.

TREE TO BE REMOVED

HOLLEMAN RESIDENCE
21 NUTE ROAD
DOVER, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	12/10/19

REVISIONS

STATE OF NEW HAMPSHIRE
STEVEN D. RIKER
NO. 219
CERTIFIED WETLAND SCIENTIST

SCALE: 1"=10' DECEMBER 2019

WATERFRONT BUFFER GRIDE SCORE PLAN

WB1

FB 180 PG 57 | CITY OF DOVER FILE NO. PB ____ | 3052

J:\JOBS3\JN 3000's\JN 3050's\3052\2019 Survey and Permitting\Plans & Specs\Site\3052 BUFFER.dwg, BUFFER GRID

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P19-04A

Application Type:	Site Plan Review
Applicant(s):	Little Bay Marina & Development, LLC
Owner(s):	Little Bay Marina & Development, LLC
Location:	421, 423, 425, 427 Dover Point Road (Map 8, Lots 9-12)
Meeting Date:	February 25, 2020

INTENT: Proposal is to amend a previously approved site plan by relocating units per NHDES. The previous approval was for purchasing 2 units through TDR in addition to the 23 units plus marina/marina office with 1 dwelling unit and 27 parking spaces.

LOTS/UNITS PROPOSED: 25 plus accessory

AGENDA ITEM #: 4-D

ACREAGE: 3.49 acres

ZONING DISTRICT: LBW

EXISTING LAND USE: Marina and Single Family Dethatched Homes

PROPOSED LAND USE: Marina and Single Family Attached Homes

SURROUNDING LAND USE: Commercial, Spaulding Turnpike, and Bellamy River

ZBA ACTION: Relief was granted to allow multi-family where 3 and 4 family units per lot are allowed

ATTACHMENTS: Amended application and materials, TRC Minutes from 1/23/2020

NOTICES SENT: Abutter notices were sent by certified or first class mail to all abutters for this meeting

PERMITS REQUIRED: Alteration of Terrain, Wetland Permit and Shore land Permit, Conditional Use Permit

WAIVERS REQUESTED:
N/A

Summary of Request and Background
The applicant is proposing to amend a previously approved site plan per the request of NHDES. Below is a history of the project and an overview of the changes made since.

The Board voted to sell the additional TDR units at their September 11, 2018 meeting. The application was reviewed by the Technical Review Committee on February 28, 2019. The Planning Board and Conservation Commission held a site walk on April 30th. The Conservation Commission endorsed the applications at its May 13, 2019 meeting. The Planning Board approved the plan and conditional use permit at their May 28, 2019 meeting. The Planning Board then approved the request to sell two additional units (P18-41A) at their October 9, 2019 meeting.

The applicant was informed by NHDES that they need to adjust the orientation/location of the buildings. Since, the impact went down another review by the Conservation Commission was not needed.

The applicant went back before the TRC on January 23, 2020 (minutes are attached). The amended plan changes the orientation of the buildings and location of the buildings to minimize the impact to wetlands and Great Bay.

Consistency with Land Use Regulations
Chapter 153-4 (formerly 149-4) of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. This plan is consistent with those regulations.

STAFF RECOMMENDATION:
The Planning Department recommends the Planning Board to accept the application, open the public hearing, and vote to approve the Site Plan with the following conditions:

Conditions to Be Met Prior to the Signing of Plans:

1. All previous conditions of approval from P19-05 and P18-41A remain in place.
2. All unregistered cars be removed from site.
3. The lots be merged into one.
4. The applicant shall provide a digital version of revised plan set.
5. The applicant must revise final plan set to:
    a. Add the owner's signatures to the final plat submitted for signature to be recorded at the Strafford County Registry of Deeds
    b. Add LLS, PE, Architect, and LA signatures and stamps to final plan
    c. Add state permit numbers
    d. Add note that emergency access has been granted by

the owners of Newick's per the email submitted.

e. Adjust snow storage to not interfere with emergency gate and add no parking fire lane signs.
f. Revise note 22 on sheet 4 to indicate Saturday hours 9Am – 4 PM and no Sunday hours
g. Confirm location and screening of transformer (discrepancy between sheet 10 and L-1).
h. Add state permit numbers.

Conditions to Be Met Prior to any Construction Activity:

6. A site construction sign with the contact information for the general contractor must be located and approved by the City Engineer or Assistant City Manager.

Conditions to Be Met Prior to Issuance of a Building Permit:

7. The new building shall be assessed and pay the current water and sewer investment fees in place at the time of application for service.
8. The applicant shall provide proof that the cross access easement has been recorded or is not necessary.

Conditions to Be Met Prior to Occupancy:

9. Issuance of a certificate of occupancy.
10. Impact fees shall be paid per the invoice included with the Notice of Decision.
11. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.
12. The applicant shall provide proof that the condominium association has been formed and is active.

Dover Point Road



Property Information

Property ID	08010-000000
Location	427 DOVER POINT RD
Owner	LITTLE BAY MARINA & DEVELOPMENT LLC
Land Use	101

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

City of Dover, New Hampshire
APPLICATION FOR EXTENSIONS OF/ AMENDMENTS TO/ WAIVERS FOR AN APPROVED PLAN

[Revised June 30, 2014]

Office Use Only Amount Paid: P19-04A Date/Time Received:

RECEIVED
Planning Office
JAN 10 2020
Dover, New Hampshire

APPLICANT INFORMATION

Name of Applicant: Little Bay Marina & Development, LLC Telephone # 603-749-9282

Address of Applicant: 197 Loudon Road, Suite 350 Concord, NH 03301 E-Mail aaversa@nedermatology.com

Project Name: Little Bay Marina Project Location: Dover Point Road - Tax Map 8, Lots 9,10,11,12

Planning File Number: P19-04A Date of Original Approval October 8, 2019

File Type: Conditional Use X Site Plan Review X Subdivision ____

EXTENSION INFORMATION (*Note: notification of abutters required for first time extensions under Sec. 149-9.B and Sec. 155-24.B only)*

Extension type requested *(check one)*: ___Sec. 149-8.A ___Sec. 149-9.B ___Sec. 155-14.A ___Sec. 155-24.B

Current deadline date: ____ Number of Extensions Previously granted by Board ____

Reason(s) for extension/comments (*attach additional sheets as needed*):

AMENDMENT INFORMATION

Condition(s) or portion of plan to be amended: SITE PLAN

Reason(s) for amendment/comments (*attach additional sheets as needed*):

To relocate units per NH DES and add two additional TDR units.

WAIVER INFORMATION

Site Review/Subdivision Regulations section(s) to be waived: NONE

Justification for waiver request(s) (*attach additional sheets as needed*):

SIGNATURES

I/We hereby submit this application to the 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: 1/9/2020

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

Signature of Agent: _____ Date: 1/9/2020

EXTENSIONS OF/ AMENDMENTS TO/ WAIVERS FOR AN APPROVED PLAN
LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS
8	9, 10, 11, 12	Little Bay Marina & Development, LLC	197 Loudon Road, Suite 350 Concord, NH 03301

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stephen J. Haight, P.E.	Civilworks New England	P.O. Box 1166 Dover, NH 03821
Kevin M. McEneaney, LLS	McEneaney Survey Associates	24 Chestnut Street Dover, NH 03820

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

CIVILWORKS NEW ENGLAND

181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

February 4, 2020

Mr. Christopher Parker
Assistant City Manager/Director of Planning
City of Dover
288 Central Ave
Dover, NH 03820

Subject: Little Bay Marina & Development. LLC
427 Dover Point Road
(Map 8 Lots 9-12)
Dover, NH 03820
Our Reference No. 1788

Re: Site Plan Amendment (P19-04A)

Dear Mr. Parker:

On behalf of our client, Little Bay Marina & Development. LLC we are pleased to submit revised plans in response to the January 23, 2020 TRC comments.

This proposal is an amendment to the previously approved site plan for Little Bay Marina.

- The Planning Board voted to grant a Transfer of Development Rights on September 11, 2018 for 8 additional units.
- The Planning Board approved the site plan with 23 units plus marina/marina office with 1 dwelling unit on May 28, 2019.
- NHDES granted the Alteration of Terrain permit (AoT-1623) on June 20, 2019.
- The NHDES Wetlands Bureau application was submitted in July 2019. After review of the permit application NHDES decided that although the existing buildings were within the 50' tidal buffer the proposed building would have to be out of the 50' tidal buffer. The NHDES determination necessitated a redesign of the site and re-orientation of the buildings.
- A new site layout with 2 additional units was presented to the Planning Board on October 8, 2019. The Planning Board voted to grant the TDR for 2 additional units.
- The amended plan with 25 units plus marina/marina office with 1 additional dwelling unit was reviewed by the TRC on January 23, 2020.

Plan Review:

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

- The project proponent is aware of the water and sewer investment, Impact and TDR fees.
- Updated draft HOA documents will be provided to the Planning Department for review.
- There are no changes proposed to the barge and the marina with this proposal.
- The lots will be merged after site plan approval.
- The land owner has been notified that unregistered cars will need to be removed.
- The project proponent has spoken with Newick's. Newick's has confirmed that they have no problem with emergency access through their property to the Marina property (see email attached).
- Note 26 on sheet 4 has been revised to indicate a fence height of 7'.
- Professional seals and signatures will be affixed to the plan prior to the Planning Board chair signature.
- The Landscape plan has been revised to indicate the minimum caliper size of 3.5".
- The view direction of the streetscape has been updated and added to the plan.
- The rendering and the elevations have been correlated.
- The State permit numbers that have been issued have been added to note 28 on sheet 4.
- Contours to 100' outside the property line will be added to the existing conditions plan prior to Planning Board chair signature.
- The lighting and landscape plans are in compliance with City of Dover regulations.

Fire/Inspection Comments:

- Note 15 on sheet 4 has been revised to add the work "and" between regulations and NH RSA…
- Utility note 11 on sheet 4 has been revised to change the Building Code reference to 2015.
- The "FDC's" have been relocated to the garage door side of each building.

Engineering Comments:

- The water main configuration for the water service to the docks has been updated as discussed.

Police Comments:

- The road will be private. The road has been named "Little Bay Road".
- The emergency gate is shown on the drawing and confirmation that emergency access is available through the Newick's property has been confirmed. Any additional signage required by the Fire or Police Departments will be added as requested.

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

We look forward to presenting this amendment request to the Planning Board at the February 25th meeting.

If you have any questions please do not hesitate to contact our office.

Sincerely,

CIVILWORKS NEW ENGLAND



Stephen J Haight, PE

SJH

P19-04A **Dover Point Road**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
08008-000000	419 DOVER POINT RD	SHINE ANN		419 DOVER POINT RD	DOVER	NH	03820
08008-A00000	417 DOVER POINT RD	PUIDOKAS ERIC BAILO		417 DOVER POINT RD	DOVER	NH	03820
08008-B00000	419 A DOVER POINT RD	BLACKWELL JOHN H &	BLACKWELL M SHARON	419 A DOVER POINT RD	DOVER	NH	03820-4627
08038-000000	422 DOVER POINT RD	DESJARDINS SETH C		422 DOVER POINT RD	DOVER	NH	03820
08038-A00000	420 DOVER POINT RD	ROBERGE MILES C &	ROBERGE COURTNEY E	420 DOVER POINT RD	DOVER	NH	03820
08038-B00000	1 WIGGIN DR	STATE OF NEW HAMPSHIRE		PO BOX 483	CONCORD	NH	03302-0483
08038-C00000	424 DOVER POINT RD	CRAGIN PATRICK J		PO BOX 250	DOVER	NH	03820
08038-D00000	418 DOVER POINT RD	PORTSIDE PROPERTIES LLC		22 COTTAGE ST	PORTSMOUTH	NH	03801
08039-000000	416 DOVER POINT RD	WHITE ERIC J &	MONNAT-WHITE DEBORAH J	118 OLD CONCORD RD	SULLIVAN	NH	03445
08013-A00001	431 DOVER POINT RD	NEWICK FAMILY REAL ESTATE LLC &	NEWICK JOAN LIFE ESTATE	431 DOVER POINT ROAD	DOVER	NH	03820
08029-000000	430 DOVER POINT RD	STATE OF NEW HAMPSHIRE		PO BOX 483	CONCORD	NH	03302-0483
08010-000000	427 DOVER POINT RD	LITTLE BAY MARINA & DEVELOPMENT LLC		197 LOUDON RD STE 350	CONCORD	NH	03301-8000
08011-000000	421 DOVER POINT RD	LITTLE BAY MARINA & DEVELOPMENT LLC		197 LOUDON RD STE 350	CONCORD	NH	03301
08012-000000	425 DOVER POINT RD	LITTLE BAY MARINA & DEVELOPMENT LLC		197 LOUDON RD STE 350	CONCORD	NH	03301
08009-000000	423 DOVER POINT RD	LITTLE BAY MARINA & DEVELOPMENT LLC		197 LOUDON RD STE 350	CONCORD	NH	03301-8000
		CIVILWORKS NEW ENGLAND	STEPHEN J. HAIGHT, P.E.	P.O. BOX 1166	DOVER	NH	03821
		MCENEANEY SURVEY ASSOCIATES	KEVIN M MCENEANEY, LLS	24 CHESTNUT STREET	DOVER	NH	03820

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES - P19-04A

Application Type:	Site Plan Amendment Review
Applicant(s):	Little Bay Marina & Development, LLC
Owner(s):	Little Bay Marina & Development, LLC
Location:	421, 423, 425, and 427 Dover Point Road (Tax Map 8, Lots 9-12)
Date:	January 23, 2020

INTENT: To develop a condominium containing 25 units plus marina/marina office with 1 ADU and 27 parking spaces. This project was previously approved by the Planning Board for TDR (P18-41), then received site plan approval (P19-04), then amended to add 2 units (P18-41A), and now is requesting to be amended again to relocate 2 units (P19-04A).

LOTS/UNITS PROPOSED: 25, 1 accessory apartment plus marina/marina office

AGENDA ITEM #: 1

ACREAGE: 3.49 acres

ZONING DISTRICT: Little Bay Waterfront

EXISTING LAND USE: Residential with Marina and marina office

SURROUNDING LAND USE: Residential, Restaurant, Little Bay

ZBA ACTION:-Z18-01: Variance granted on 2/15/18 to allow multi-family dwellings
-H88-8: Variance granted on 2/25/1988 to increase a nonconforming use (marina)
-H80-33: variance granted for Lot 9 to subdivide a lot without street frontage

PERMITS REQUIRED: Conditional Use Permit (Wetlands and Conservation District) already received

WAIVERS REQUESTED: None

ATTENDANCE:
Members: Donna Benton, Planning
Chief Hass, Fire/Inspection Services
Dan Barufaldi, Economic Development
Dave White, Engineering
Elena Piekut, Zoning
Sgt. Speidel, Police
Others: Alan Dews
Steve Haight
Scott Rudel

Approval of 1/16/2020 Meeting Minutes
D.White moved to approve the minutes of January 16, 2020. D.Barufaldi seconded. Vote: U/A

PLAN REVIEW:
Planning Comments:

- Please provide a narrative explaining the history of the approvals and the amendment request in more detail
- Same Water and Sewer Investment fees
- Same Impact fees
- Same TDR fees from previous approval
- Same HOA documents will be required for review
- What is the phasing of the barge and marina project?
- What is the status of the lot merger?
- Remove unregistered cars
- Provide response from Newick's regarding Emergency Access
- Please revise plan set to:
  - Revise note 26 on sheet 4 to 7'
  - Engineer, LLS, Architect, and Landscape architect to sign and stamp final plan set
  - Revise plantings to have a minimum of 3.5" caliper
  - Label view of streetscape
  - Renderings and elevations don't match
  - Indicate materials of windows
  - Add state permit numbers
  - Revise note 22 on sheet 4 to indicate no Sunday hours
  - Provide contours 100' off property or waiver request
  - Note lot area in acres and square feet
  - Indicate number of parking spaces in each grouping
  - Confirm location and screening of transformer and generator
  - Confirm lighting plan and landscape plan meets regulations

Fire/Inspections Comments:

- Page 4, Site Notes #15 – "… in compliance with applicable accessibility regulations ***and*** NH RSA 155-A:5….." (adding the word "and")
- Page 4, Utility Notes #11 – Change State Building Code 2009 reference to 2015
- FDCs should be located at the front of each building. This would be the garage door side of each building.

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES - P19-04A

Application Type:	Site Plan Amendment Review
Applicant(s):	Little Bay Marina & Development, LLC
Owner(s):	Little Bay Marina & Development, LLC
Location:	421, 423, 425, and 427 Dover Point Road (Tax Map 8, Lots 9-12)
Date:	January 23, 2020

Engineering Comments:

- Water comments separately discussed with S.Haight

Police Comments:

- Confirm this will be a private roadway with a street name for address assignments
- Preserve the emergency access gate as shown on sheets 5 and 7. Adjust snow storage to ensure that access is not blocked, add no parking fire lane signs to your side and/or to the gate, and ensure that if locked, Knox box system is in place for fire department.

Economic Development Comments:

- Like the new arrangement, materials and landscaping

Planning Board Comments: N/A

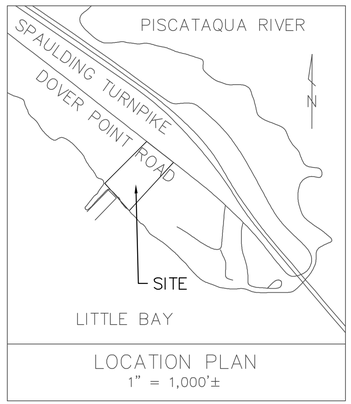
Next Steps:

- Revise plans and submit for Planning Board

Adjournment:

D.White made a motion to adjourn at 10:51am. Seconded by Sgt. Speidel. Vote U/A.

LITTLE BAY MARINA MIX USE DEVELOPMENT
MULTI UNIT RESIDENTIAL
AND MARINA OFFICE SITE PLAN



LOCATION PLAN
1" = 1,000'±

TAX MAP 8, LOTS 9, 10, 11 & 12

DOVER POINT ROAD
DOVER, NH
FEBRUARY 21, 2019
REVISED: MARCH 25, 2019
REVISED: APRIL 4, 2019
REVISED: MAY 1, 2019
REVISED: DECEMBER 30, 2019
REVISED: JANUARY 28, 2020

OWNER/APPLICANT
LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

_____ _____
FOR:_____ DATE

SITE CIVIL ENGINEER
CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

LAND SURVEYOR
MCENEANEY SURVEY ASSOCIATES, INC.
P.O. BOX 681
24 CHESTNUT STREET
DOVER, NH 03820
(603) 742-0911

LANDSCAPE ARCHITECT
WOODBURN & COMPANY
103 KENT PLACE
NEWMARKET, NH 03857
(603) 659-5949

ARCHITECT
MCHENRY ARCHITECTURE
4 MARKET STREET
PORTSMOUTH, NH 03831
(603) 430-0274

SHEET INDEX	SHEET
COVER SHEET	1
NEIGHBORHOOD PLAN	2
EXISTING CONDITIONS PLAN (BY MCENEANEY SURVEY)	3
NOTE SHEET	4
OVERALL SITE PLAN	5
DEMOLITION PLAN	6
SITE PLAN	7
GRADING, DRAINAGE & EROSION CONTROL PLAN	8
SITE IMPACT PLAN	9
UTILITY PLAN	10
EROSION CONTROL NOTES	11
EROSION CONTROL DETAILS	12
DETAILS	13 - 17
LIGHTING PLAN	18
LIGHTING DETAILS	19
DOVER LADDER TRUCK MOVEMENT PLAN	20
SITE SPECIFIC SOILS PLAN	-
LANDSCAPE PLAN	-
STREET SCAPE PLAN	-
ARCHITECTURAL ELEVATIONS & FLOOR PLANS	-

PLANNING FILE NO.: P19-04A



ABUTTERS LIST
(WITHIN 200 FT)

TAX MAP	LOT NO.	NAME & ADDRESS
8 / 8-B	8	8-B	JOHN H & SHARON M BLACKWELL 419 A DOVER POINT ROAD DOVER, NH 03820-4627
8 / 13-A	8	13-A	NEWICK FAMILY REAL ESTATE LLC & NEWICK JOAN LIFE ESTATE 431 DOVER POINT ROAD DOVER, NH 03820
8 / 29	8	29	STATE OF NEW HAMPSHIRE PO BOX 483 CONCORD, NH 03302-0483
8 / 38	8	38	SETH C. DESJARDINS 422 DOVER POINT ROAD DOVER, NH 03820
8 / 38-A	8	38-A	MILES C. & COUTRNEY E. ROBERGE 420 DOVER POINT ROAD DOVER, NH 03820
8 / 38-C	8	38-C	PATRICK J. CRAGIN PO BOX 250 DOVER, NH 03820
8 / 38-D	8	38-D	PORTSIDE PROPERTIES LLC. 22 COTTAGE STREET PORTSMOUTH, NH 03801

H / 33-E TAX MAP LOT NUMBER

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
4	REVISED SITE PLAN	SJH	12-30-19
3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

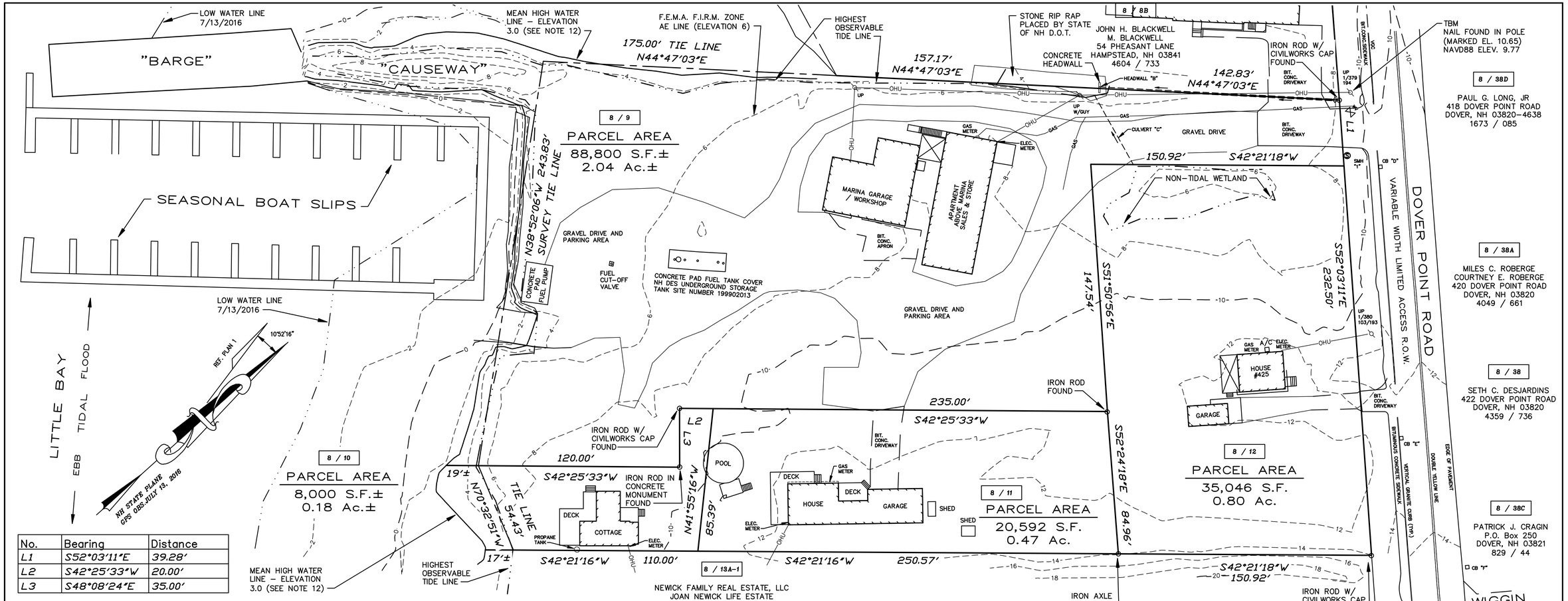
DATE: 11-2-18
SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

NEIGHBORHOOD PLAN

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

LITTLE BAY MARINA &
DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

2



No.	Bearing	Distance
L1	S52°03'11"E	39.28'
L2	S42°25'33"W	20.00'
L3	S48°08'24"E	35.00'

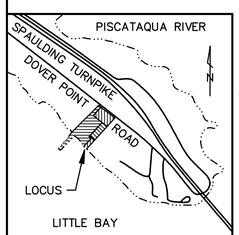
ATTENTION:

HIGH PRESSURE GAS MAIN EXISTS WITHIN THE RIGHT OF WAY OF DOVER POINT ROAD; PRIOR TO ANY EARTH MOVING ACTIVITY CONTACT DIGSAFE AT 1-888-344-7233 TO VERIFY LOCATION.

LEGEND

I.R. (set) o – IRON ROD W/ I.D. CAP (SET)
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
-o- UP – UTILITY POLE

– · · · – EDGE OF WETLAND
– – – – EDGE OF PAVEMENT
O.A. – OVERALL
R.O.W. – RIGHT OF WAY
CB – CATCH BASIN
S SMH – SEWER MANHOLE
WV WV – WATER GATE VALVE
BIT. – BITUMINOUS
CONC. – CONCRETE
ELEV. – ELEVATION
FF – FINISH FLOOR
ELEC. – ELECTRIC
OHU – OVERHEAD UTILITIES



LOCATION PLAN
1" = 1,000'±

SANITARY SEWER STRUCTURE SCHEDULE

EXIST. SMH "1"
RIM ELEV: = 8.9
INVERT IN: = 3.1 – SITE
INVERT IN: = 3.2 NORTH WEST
INVERT OUT: = 3.0 SOUTH EAST

EXIST. SMH "2"
RIM ELEV: = 16.4
INVERT IN: =
INVERT OUT: =

STORMDRAINAGE STRUCTURE SCHEDULE

EXIST. CB "A"
RIM = 7.7
INVERT OUT = 4.1
SUMP = 3.7
12" HDPE

EXIST. HEADWALL "B" – CONCRETE
TOP = 5.3±
INVERT OUT: = 2.7 12" HDPE

EXIST. CULVERT "C"
INVERT IN = 4.8± 6" CMP
INVERT OUT = 4.0± 6" CLAY

EXIST. CB "D"
RIM = 10.0

EXIST. CB "E"
RIM = 12.3

EXIST. CB "F"
RIM = 13.3

NOTES:

1.) OWNERS OF RECORD:

8 / 9 – LITTLE BAY MARINA & DEVELOPMENT, LLC, 197 LOUDON ROAD, SUITE 350, CONCORD, NEW HAMPSHIRE 03301-8000, S.C.R.D. VOL. 4101, PAGE 409, REF. S.C.R.D. VOL. 4593, PAGE 978

8 / 10 – LITTLE BAY MARINA & DEVELOPMENT, LLC, 197 LOUDON ROAD, SUITE 350, CONCORD, NEW HAMPSHIRE 03301-8000, S.C.R.D. VOL. 4473 PAGE 288

8 / 11 – LITTLE BAY MARINA & DEVELOPMENT, LLC, 197 LOUDON ROAD, SUITE 350, CONCORD, NEW HAMPSHIRE 03301-8000D, S.C.R.D. VOL. 4589, PAGE 826

8 / 12 – LITTLE BAY MARINA & DEVELOPMENT, LLC, 197 LOUDON ROAD, SUITE 350, CONCORD, NEW HAMPSHIRE 03301-8000, S.C.R.D. VOL. 4415, PAGE 221

2.) 8 / 9 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) ZONING DISTRICT: LITTLE BAY WATERFRONT (LBW)

MINIMUM LOT SIZE	= 10,000 S.F.
MAXIMUM COVERAGE	= 50 PERCENT
MINIMUM FRONTAGE	= 75 FEET
FRONT SETBACK	= 15 FEET
ABUT A STREET SETBACK	= 15 FEET
SIDE SETBACK	= 10 FEET
REAR SETBACK	= 15 FEET
MAXIMUM BUILDING HEIGHT	= 40 FEET

4.) PLAN INTENT: TO DEPICT THE PROJECT PARCEL BOUNDARIES AND IMPROVEMENTS AS OF NOVEMBER 2018, PARCELS ARE SERVICED BY MUNICIPAL SEWER AND WATER SUPPLY SYSTEMS.

5.) A PORTION OF PARCEL 8 / 9 & PARCEL 8 / 10 IS LOCATED WITHIN THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN, ZONE AE (ELEVATION 6) AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0405; SUFFIX E; MAP NUMBER 33017C0405E; EFFECTIVE DATE SEPTEMBER 30, 2015. PARCELS 8 / 11 AND 8 / 12 ARE LOCATED OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0405; SUFFIX E; MAP NUMBER 33017C0405E; EFFECTIVE DATE SEPTEMBER 30, 2015.

6.) BASIS OF BEARINGS IS NH STATE PLANE GRID FROM GPS OBSERVATION TAKEN ON JULY 13, 2016.

7.) VERTICAL DATUM IS NAVD88 FROM GPS OBSERVATION TAKEN ON JULY 13, 2016.

8.) JURISDICTIONAL WETLANDS AND HIGHEST OBSERVABLE TIDE LINE (H.O.T.L.) IDENTIFIED AND FLAGGED BY DAMON BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES. DURING JULY 2016 AND FIELD LOCATED BY McENEANEY SURVEY ASSOCIATES, INC.

9.) PORTIONS OF THE PARCELS ARE SUBJECT TO THE RULES OF THE SHORELAND WATER QUALITY PROTECTION ACT (NH RSA 483-B), THOSE AREAS WITHIN TWO HUNDRED AND FIFTY (250) FEET OF THE LITTLE BAY H.O.T.L. (REFERENCE LINE).

10.) REFERENCE IS MADE TO CERTAIN SEWER EASEMENTS GRANTED TO THE CITY OF DOVER, ALTHOUGH IT APPEARS THAT THE SAID SEWER LINE WAS NEVER CONSTRUCTED.
PARCEL 8 / 9 – S.C.R.D. VOL. 1006, PAGE 450
PARCEL 8 / 11 – S.C.R.D. VOL. 1011, PAGE 244
PARCEL 8 / 12 – S.C.R.D. VOL. 1014, PAGE 904

11.) PARCELS ARE SUBJECT TO ACCESS RIGHTS IN COMMON WITH EACH OTHER.

12.) MEAN HIGH WATER (ELEVATION 3.0) IS BASED ON NATIONAL TIDAL DATUM EPOCH INFORMATION PUBLISHED BY NOAA FOR STATION 8423005, ATLANTIC TERMINALS T14A NH (https://tidesandcurrents.noaa.gov/datums.html?id=8423005)

13.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES, INC. DATED APRIL 2018 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

REFERENCE PLANS:

1.) PLAN OF LAND PREPARED FOR LITTLE BAY MARINA & DEVELOPMENT, LLC AND RICHARD J.C. & VICTORIA BENN AND LITTLE BAY MARINA & DEVELOPMENT, LLC, TAX MAP 8, LOT Nos. 9, 10, 11 & 12, DOVER POINT ROAD & LITTLE BAY, CITY of DOVER, COUNTY of STRAFFORD, STATE of NEW HAMPSHIRE. SCALE: 1" = 30'; DATED: APRIL 1, 2018; BY: THIS OFFICE. RECORDED S.C.R.D. PLAN 116-58.

2.) LOT LINE ADJUSTMENT PLAN PREPARED FOR ANN SHINE TAX MAP 8, LOT No. 8, 419 DOVER POINT ROAD AND JOHN ANASTAS & GLORIA ESPOSITO-ANASTAS TAX MAP 8, LOT No. 8B, 419A DOVER POINT ROAD, CITY of DOVER, COUNTY of STRAFFORD, STATE of NEW HAMPSHIRE. SCALE: 1" = 20'; DATED: AUGUST 17, 2018, REVISED THROUGH 9/18/18; BY THIS OFFICE. RECORDED S.C.R.D. PLAN 117-33.

NO.	DATE	DESCRIPTION	BY	CHK
		REVISIONS		

16-2123	EXIST. COND.	16-05	23-47
PROJECT NO	TYPE	FIELDBOOK & PAGES	

EXISTING CONDITIONS PLAN
PREPARED FOR
LITTLE BAY MARINA & DEVELOPMENT, LLC
TAX MAP 8, LOT Nos. 9, 10, 11 & 12
DOVER POINT ROAD & LITTLE BAY
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. P 18-___

DRAWN BY: RJM	FILE: W10 CP\2123\16-2123 2018EC
SCALE: 1" = 30'	DATE: NOVEMBER 27, 2018

30 15 0 15 30 60 90 120

STATE OF NEW HAMPSHIRE – No. 661 – KEVIN M. McENEANEY – LICENSED LAND SURVEYOR – SIGNATURE

McEneaney Survey Associates, inc.
P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING

GENERAL NOTES

1. OWNERS OF RECORD:
   8 / 9, 10, 11 & 12 — LITTLE BAY MARINA & DEVELOPMENT, LLC
   197 LOUDON ROAD, SUITE 350
   CONCORD, NEW HAMPSHIRE 03301
   S.C.R.D. VOL. 4101, PAGE 409
2. 8 / 9 — DENOTES TAX MAP AND PARCEL NUMBER.
3. ZONING DISTRICT: LITTLE BAY WATERFRONT (LBW)

		EXIST	PROPOSED
MINIMUM LOT SIZE	=	10,000 S.F.	= 143,400 S.F
MAXIMUM COVERAGE	=	50%	= 19%
MINIMUM FRONTAGE	=	75 FEET	= 272 FEET
FRONT SETBACK	=	15 FEET	= 19 FEET
ABUT A STREET SETBACK	=	15 FEET	= 19 FEET
SIDE SETBACK	=	10 FEET	= 11 FEET
REAR SETBACK	=	15 FEET	= 100 FEET
MAXIMUM BUILDING HEIGHT	=	40 FEET	= >40 FEET

4. PLAN INTENT: TO DEVELOP A CONDOMINIUM CONTAINING 25 UNITS PLUS A MARINA/MARINA OFFICE WITH 1 ACCESSORY DWELLING UNITS WITH 27 SURFACE PARKING SPACES.
5. A PORTION OF PARCEL 8 / 9 & PARCEL 8 / 10 IS LOCATED WITHIN THE 1% PERCENT ANNUAL CHANCE FLOOD PLAIN, ZONE AE (ELEVATION 6) AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0405; SUFFIX E; MAP NUMBER 33017C0405E; EFFECTIVE DATE SEPTEMBER 30, 2015.
   PARCELS 8 / 11 AND 8 / 12 ARE LOCATED OUTSIDE OF THE 1% PERCENT ANNUAL CHANCE FLOOD PLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0405; SUFFIX E; MAP NUMBER 33017C0405E; EFFECTIVE DATE SEPTEMBER 30, 2015.
6. BASIS OF BEARINGS IS NH STATE PLANE GRID FROM GPS OBSERVATION TAKEN ON JULY 13, 2016.
7. VERTICAL DATUM IS NAVD88 FROM GPS OBSERVATION TAKEN ON JULY 13, 2016.
8. JURISDICTIONAL WETLANDS AND HIGHEST OBSERVABLE TIDE LINE (H.O.T.L.) IDENTIFIED AND FLAGGED BY DAMON BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES. DURING JULY 2016 AND FIELD LOCATED BY McENEANEY SURVEY ASSOCIATES, INC., IN ACCORDANCE WITH CHAPTER 170-27.1 OF THE ZONING ORDINANCE.
9. PORTIONS OF THE PARCELS ARE SUBJECT TO THE RULES OF THE SHORELAND WATER QUALITY PROTECTION ACT (NH RSA 483-B), THOSE AREAS WITHIN TWO HUNDRED AND FIFTY (250) FEET OF THE BELLAMY RIVER H.O.T.L.
10. REFERENCE IS MADE TO CERTAIN SEWER EASEMENTS GRANTED TO THE CITY OF DOVER, ALTHOUGH IT APPEARS THAT THE SAID SEWER LINE WAS NEVER CONSTRUCTED.
    PARCEL 8 / 9 — S.C.R.D. VOL. 1003, PAGE 450
    PARCEL 8 / 11 — S.C.R.D. VOL. 1101, PAGE 244
    PARCEL 8 / 12 — S.C.R.D. VOL. 1014, PAGE 904
11. PARCELS ARE SUBJECT TO ACCESS RIGHTS IN COMMON WITH EACH OTHER.
12. THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVED STORMWATER MANAGEMENT PLAN. THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.

DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (811).
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES AND PAVEMENT ON THE SITE TO THE LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT AND POLES.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
8. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
9. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES, AND CODES.
10. EXISTING ("OLD") WATER SERVICES TO THE SUBJECT SITE SHALL BE DISCONNECTED AND SHUT-OFF AT THE WATER MAIN.
11. EXISTING SEWER SERVICES TO BE CUT AND PERMANENTLY CAPPED AT PROPERTY LINE.
12. ALL EROSION CONTROL NOTES SHALL INCLUDE PROVISIONS FOR CONSTRUCTION SEQUENCING, TEMPORARY EROSION CONTROL MEASURES, AND PERMANENT STANDARDS SUCH AS LOAM SPREAD RATE FOR DISTURBED AREAS, RATES OF LIME, TYPE AND RATES FOR FERTILIZER, AND SEED AND MULCH MIXTURE WITH RATES OF APPLICATION.

SITE NOTES:

1. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A PLAN REFERENCED AND PREPARED BY MCENEANEY SURVEY ASSOCIATES INC. (SEE EXISTING CONDITIONS PLAN IN THIS PLAN SET)
2. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF 7 MULTI-UNIT CONDOMINIUM BUILDINGS, 1 MIXED-USE COMMERCIAL BUILDING, SURFACE PARKING, DRIVE AISLES, DRAINAGE IMPROVEMENTS, AND UTILITIES.
3. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
4. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
5. STRIPE PARKING AREAS AS SHOWN INCLUDING HANDICAP SYMBOLS AND PAINTED ISLANDS. ALL MARKINGS SHALL BE CONSTRUCTED USING WHITE TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M-248-TYPE N.
6. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS, AND THE AMERICAN WITH DISABILITIES ACT, LATEST EDITIONS.
7. PAINTED ISLANDS SHALL BE 4 INCHES WIDE DIAGONAL LINES 3 FEET ON CENTER.
8. ON-SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
9. ALL LAYOUT SHALL BE PERFORMED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
10. SEE DETAILS FOR SIGN LEGENDS.
11. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
12. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTORS' RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
14. BUILDING ADDRESSES TO BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
15. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS AND NH RSA 155-A:5. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS.
16. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
17. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
18. THE SUBJECT PARCEL(S) IS (ARE) SERVED BY MUNICIPAL WATER AND SEWER.
19. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN THE 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTRUBAIN ACTIVITY OCCURS.
20. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON PAPER AND IN A DIGITAL FORMAT IN PDF AND AUTOCAD DWG, AUTOCAD DXF OR AN ESRI FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO-REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
21. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
22. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM, SATURDAY AND NO SUNDAY WORK HOURS 9 AM-4 PM. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASSISTANT CITY MANAGER.
23. 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.
24. 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 SPECIFICATION FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
25. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES ISSUANCE OF A BULDING PERMIT FROM INSPECTION SERVICES.
26. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
27. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL. HTTP://WWW.UNH.EDU/UNHSC/PTAPP
28. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:
    NHDES AOT: AOT-1623 (APPROVED 6-20-19)
    NHDES WETLANDS/SHORELAND: PENDING
29. LIST ANY VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT OR CONDITIONAL USE PERMITS GRANTED BY THE PLANNING BOARD FOR THE PROPOSED USE OR STRUCTURE, INCLUDING THE CASE NUMBER AND DATE OF DECISION AND ANY CONDITIONS.
    CONDITIONAL USE PERMIT:
    ZBA Z18-01 TO ALLOW MULTIFAMILY: GRANTED 2-15-18
    PB P18-41 TO ALLOW UP TO 8 ADDITIONAL UNITS (VIA TDR): GRANTED 9-11-18
    PB P18-41A TO ALLOW UP TO 2 ADDITIONAL UNITS (VIA TDR): GRANTED 10-8 19
30. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS

GRADING NOTES:

1. ALL ROAD (INCLUDING PARKING LOT AND DRAINAGE) WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR CONSTRUCTION OF THE CITY OF DOVER, N.H. AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION", LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING PER THE ABOVE REFERENCED "STANDARD SPECIFICATIONS".
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. DENSITY REQUIREMENTS:

LOCATION	MINIMUM DENSITY
BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREA	90%

   *ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.

10. SEE GENERAL EROSION CONTROL NOTES ON DETAIL SHEET.
11. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
12. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
13. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FOR THIS PROJECT. THE SWPPP MUST INCLUDE THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE SITE. PARTIES RESPONSIBLE FOR DEVELOPING THE SWPPP SHOULD REFER TO THE EPA NPDES CONSTRUCTION GENERAL PERMITS NOTICE OF INTENT FOR A COMPLETE OUTLINE OR REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.
14. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
15. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
16. PLACARDS SHALL BE INSTALLED ALONG THE EDGE OF WETLAND PRIOR TO CONSTRUCTION.

UTILITY NOTES:

1. THE PROJECT SITE IS SERVED BY CITY WATER AND SEWER.
2. THE BEST AVAILABLE INFORMATION WAS USED TO DETERMINE THE LOCATION AND SIZE OF EXISTING UTILITIES. THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE EXACT SIZE AND LOCATION OF UTILITIES SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO WORK BEING PERFORMED. CALL DIGSAFE AT 1-888-388-7233 OR "811"
4. ALL PROPOSED UTILITY SERVICES SHALL BE UNDERGROUND WITHIN THE SITE.
5. UNDERGROUND ELECTRIC, TELEPHONE, AND CABLE TV CONDUITS SHALL BE INSTALLED IN ACCORDANCE WITH/PER PSNH, VERIZON, COMCAST, AND UNITIL STANDARDS.
6. PROPOSED INSTALLATION OF UNDERGROUND CONDUITS FOR TELEPHONE, ELECTRIC AND GAS SERVICE SHALL BE COORDINATED WITH THE RESPECTIVE CONTACTS ARE AS FOLLOWS:
   ELECTRIC: EVERSOURCE 1.800.362.7764
   CABLE: COMCAST 603.334.3615
   GAS: UNITIL 866.933.3821
7. SEE ELECTRICAL DRAWINGS AND DETAILS FOR OUTDOOR LIGHTING CONDUIT LOCATIONS.
8. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
9. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
10. SEWAGE LOADING (PER ENV. - Wq 1008.03 TABLE 1008-1)
    25 - 3 BEDROOM RESIDENTIAL TOWNHOMES =
    3 BDRMS x 150 GALS./DAY/BDRM x 25 = 11,250 GPD
    PLUS
    1 - 2 BEDROOM ACCESSORY APT. =
    2 BDRMS x 150 GALS./DAY/BDRM x 1 = 300 GPD
    PLUS
    1 MARINA OFFICE/DRY GOODS STORE @ 10'x30' = 300 S.F.
    300 S.F. x 5 GPD/100 S.F. + 10 GPD/EMPLOYEE (2) = 35 GPD
    TOTAL = 11,585 GPD
11. THE PROPOSED STRUCTURES 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 CODE.
12. 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.
13. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
14. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
15. APPROVED BACKFLOW PREVENTORS SHALL BE INSTALLED ON BOTH FIRE AND DOMESTIC WATER LINES.
16. ALL UNUSED WATER SERVICES SHALL BE REMOVED BACK TO THE CORPORATION AT THE MAIN.

LEGEND

S.F.	SQUARE FEET		PROPOSED SIGN
Ac.	ACRE	74	PROPOSED FINISH GRADE
±	MORE OR LESS	x 74.00	PROPOSED SPOT GRADE
(TYP.)	TYPICAL	PD	PROPOSED DRAIN LINE
S.C.R.D.	STRAFFORD COUNTY REGISTRY OF DEEDS		PAVEMENT WITH CURB
TBR	TO BE REMOVED		SILT BARRIER
TYP	TYPICAL	PG	PROPOSED GAS
	EXISTING UTILITY POLE	PW	PROPOSED WATER
	EXISTING SIGN		PROPOSED FENCE
	EXISTING WATER SHUT-OFF	PE	PROPOSED ELECTRIC
W	EXISTING WATER VALVE	PD	PROPOSED DRAIN LINE
GV		PUD	PROPOSED UNDERDRAIN LINE
	EXISTING GAS VALVE		PROPOSED CATCHBASIN
	EXISTING HYDRANT		INLET PROTECTION
	EXISTING LIGHT/SIGNAL POLE		HANDICAP PARKING SYMBOL
S	EXISTING SEWER MANHOLE		PROPOSED CONCRETE
D	EXISTING DRAINAGE MANHOLE		PROPOSED SIDEWALK
	EXISTING CATCHBASIN		PROPOSED POROUS PAVEMENT
5'R	PAVEMENT RADIUS		PROPOSED GRASS PAVERS
SGC	SLOPE GRANITE CURB		
SBC	SLOPED BITUMINOUS CURB		
VGC	VERTICAL GRANITE CURB		
T.O.W.	TOP OF WALL		
x 74.00	EXISTING SPOT GRADE		
94	EXISTING GRADE		
OHW	OVERHEAD WIRES		
E	EXISTING ELECTRIC		
W	EXISTING WATER LINE		
S	EXISTING SEWER LINE		
D	EXISTING DRAINAGE LINE		
G	EXISTING GAS LINE		

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
4	REVISED SITE PLAN	SJH	12-30-19
3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

DATE: 2-21-19
SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

NOTE SHEET

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

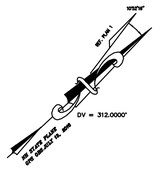
LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

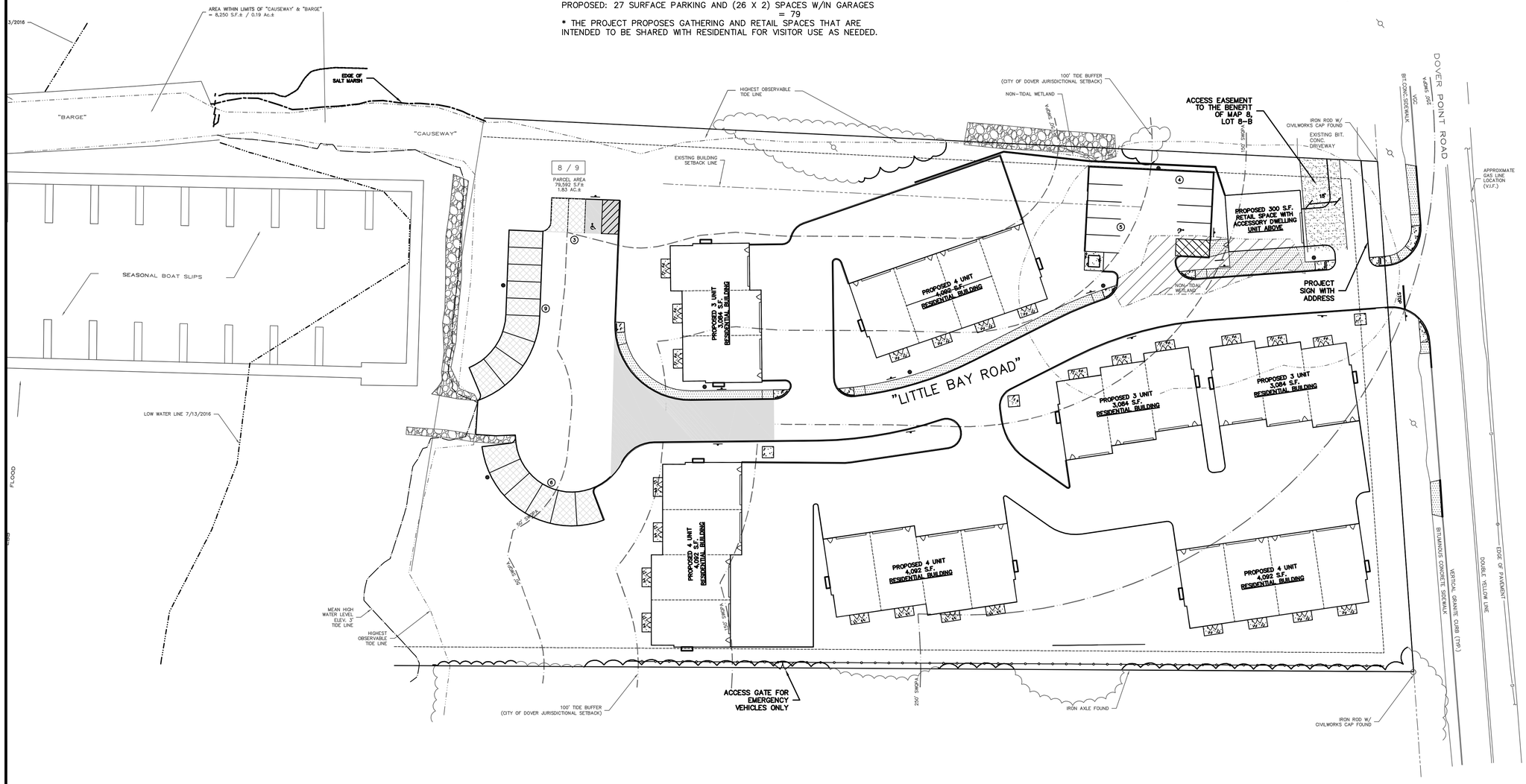
SITE DATA:

1. THE PARCEL IS SHOWN AS LOT NO. 9, 10, 11 & 12 4 ON MAP 8 OF THE CITY OF DOVER, TAX ASSESSOR'S MAPS.
2. THE PROJECT PARCEL CONTAINS 3.49 ACRES OF LAND. (152,024.4 S.F.).
3. PARKING CALCS:
   RETAIL: 1 PER 275 S.F. 300 S.F./275 S.F. = 1 SPACES
   RESIDENTIAL UNITS: 26 26 UNITS x (1.4+0.5) = 49 SPACES
   GATHERING SPACES: SLIPS: 42 x .8 = 34 SPACES
   MAX ALLOWED = 84
   PROPOSED: 27 SURFACE PARKING AND (26 X 2) SPACES W/IN GARAGES = 79
   * THE PROJECT PROPOSES GATHERING AND RETAIL SPACES THAT ARE INTENDED TO BE SHARED WITH RESIDENTIAL FOR VISITOR USE AS NEEDED.

NOTES:

1. NO BOAT STORAGE ALLOWWED ON SITE.
2. NO OVERNIGHT STAYS ON BOATS ALLOWED.
3. NO HOUSE BOATS ALLOWED.





LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP.)	TYPICAL
S.C.R.D.	STRAFFORD COUNTY REGISTRY OF DEEDS
TBR	TO BE REMOVED
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING LIGHT/SIGNAL POLE
	PROPOSED SIGN
	PAVEMENT WITH CURB
	PROPOSED FENCE
	HANDICAP PARKING SYMBOL
	PROPOSED CONCRETE
	PROPOSED SIDEWALK
	PROPOSED POROUS PAVEMENT
⑤	PROPOSED PARKING SPACE COUNT
	PROPOSED GRASS PAVERS

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

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CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

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4	REVISED SITE PLAN	SJH	12-30-19
5	REVISED PER TRC COMMENTS	SJH	1-28-20

DATE: 2-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

OVERALL SITE PLAN

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

5

8 / 38D
JOHN ANASTAS
GLORIA ESPOSITO-ANASTAS
419A DOVER POINT ROAD
DOVER, NH 03820
2567 / 760

"CAUSEWAY"

8 / 9
PARCEL AREA
79,592 S.F.±
1.83 AC.±

HIGHEST OBSERVABLE TIDE LINE
100' TIDE BUFFER (CITY OF DOVER JURISDICTIONAL SETBACK)
NON-TIDAL WETLAND
HEADWALL "B"
50' SWQPA
150' SWQPA
OVERHEAD WIRES TO BE REMOVED
OHU
PROPOSED NEW TREELINE
TREES & SHRUBS TO BE REMOVED
STAIRS TO BE REMOVED
CONCRETE TO BE REMOVED
GAS METER (TBR)
ELEC. METER (TBR)
BUILDING TO BE REMOVED
MARINA GARAGE / WORKSHOP
APARTMENT ABOVE MARINA SALES & STORE
GAS
UP W/GUY
OVERHEAD WIRES TO BE REMOVED
GAS LINE TO BE REMOVED
CULVERT "C" (TO BE REMOVED)
GRAVEL DRIVE (TO BE REMOVED)
GAS LINE TO BE REMOVED
PAVEMENT TO BE REMOVED
IRON ROD W/ CIVILWORKS CAP FOUND
EXISTING BIT. CONC. DRIVEWAY
OVERHEAD WIRES TO BE REMOVED
PAVEMENT TO BE REMOVED
BIT.CONC.SIDEWALK
VGC
DOVER POINT ROAD
SMH "I"
CB "D"
APPROXIMATE GAS LINE LOCATION (V.I.F.)
GRAVEL DRIVE AND PARKING AREA (TO BE REMOVED)
CONCRETE AND FUEL CUT-OFF VALVE TO BE REMOVED
CONCRETE PAD AND ALL FUEL COMPONENTS TO BE REMOVED
CONCRETE PAD FUEL TANK COVER NH DES UNDERGROUND STORAGE TANK SITE NUMBER 199902013
PAD FUEL PUMP CONCRETE
CONCRETE FUEL PAD TO BE REMOVED
PAVEMENT TO BE REMOVED
GRAVEL DRIVE AND PARKING AREA (TO BE REMOVED)
NON-TIDAL WETLAND
TREES & SHRUBS TO BE REMOVED
2,304 S.F. OF NON-TIDAL WETLAND TO BE REMOVED
SAWCUT LIMITS
CONCRETE RUBBLE PILE TO BE REMOVED
A/C UNITS TO BE REMOVED
ALL GAS CONPONENTS SHALL BE DISCONNECTED AND REMOVED PER LOCAL UTILITY COMPANY STANDARDS
BUILDING TO BE REMOVED
OHW TO BE REMOVED
COVERED PORCH & STAIRS TO BE REMOVED
HOUSE #425
STAIRS TO BE REMOVED
GARAGE TO BE REMOVED
GARAGE
SAWCUT LIMITS
GRAVEL TO BE REMOVED
PAVEMENT TO BE REMOVED
CONCRETE TO BE REMOVED
TREE & SHRUBS TO BE REMOVED
8 / 12
PARCEL AREA
35,046 S.F.±
0.80 AC.±
CB "L"
BITUMINOUS CONCRETE SIDEWALK
VERTICAL GRANITE CURB (TYP.)
DOUBLE YELLOW LINE
EDGE OF PAVEMENT
APPROXIMATE WATERLINE LOCATION (V.I.F.)
APPROXIMATE SEWER LINE LOCATION (V.I.F.)
PROPOSED NEW TREELINE
TREES & SHRUBS TO BE REMOVED
IRON ROD FOUND (TO BE REMOVED)
POOL TO BE REMOVED
DECK & STAIRS TO BE REMOVED
PAVEMENT TO BE REMOVED
SHED TO BE REMOVED
SHED
8 / 11
PARCEL AREA
20,592 S.F.±
0.47 AC.±
HOUSE
GAS METER
GARAGE
DECK
POOL
IRON ROD W/ CIVILWORKS CAP FOUND (TO BE REMOVED)
IRON ROD IN CONCRETE MONUMENT FOUND (TO BE REMOVED)
COTTAGE, DECK AND STEPS TO BE REMOVED
8 / 10
LITTLE BAY MARINA & DEVELOPMENT, LLC
111 LOUDON ROAD
CONCORD, NH 03301
4473 / 288
COTTAGE
PROPANE TANK (TBR)
ELEC. METER (TBR)
OHW TO BE REMOVED
PROPOSED NEW TREELINE
BUILDING TO BE REMOVED

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

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1	AOT SUBMISSION	SJH	1-22-19

DATE: 2-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

DEMOLITION PLAN

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

6

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
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LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

SITE PLAN

7

DRAINAGE SCHEDULE

PDMH 1
RIM=11.50
INV.IN=6.60 (OS-RG1)
INV.IN=6.60 (PCB4)
INV.OUT=6.60 (PDMH 2)

PDMH 2
RIM=9.75
INV.IN=5.35 (PDMH 1)
INV.IN=5.35 (OS-RG2)
INV.OUT=5.30 (LITTLE BAY)

PDMH 3
RIM=11.10
INV.IN=5.05 (OS-RG3)
INV.OUT=5.05 (R2)

OS-RG1
RIM=9.75
INV.IN=6.67
INV.OUT=6.67 (PDMH 1)

OS-RG2
RIM=8.50
INV.IN= 5.42
INV.OUT=5.40 (PDMH 2)

OS-RG3
RIM=9.10
INV.IN=5.92
INV.OUT=5.35 (PDMH 3)

PCB1
RIM=10.60
INV.OUT=7.60 (PCB2)

PCB2
RIM=10.60
INV.IN=7.40 (PCB1)
INV.OUT=7.30 (PCB3)

PCB3
RIM=10.00
INV.IN=6.50 (PCB2)
INV.IN=7.00 (RD4)
INV.OUT=6.40 (TS2)

PCB4
RIM=11.20
INV.IN=8.65 (TS1)
INV.OUT=8.65 (PDMH 1)

RD1
INV.IN=10.00
INV.OUT=9.50 (RG1)

RD2
INV.IN=8.85
INV.OUT=8.50 (RG2)

RD3
INV.IN=9.50
INV.OUT=9.00 (RG3)

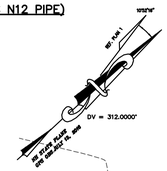
RD4
INV.IN=8.00
INV.OUT=7.00 (PCB3)

POROUS PAVEMENT SCHEDULE

PPA1 (PIPE OUTFALL)
INV.IN=7.46
INV.OUT=5.50

DRAINAGE PIPE SCHEDULE (ADS N12 PIPE)

PIPE	LENGTH	SIZE	SLOPE
PD1	18'	12"	0.0111
PD2	85'	12"	0.0094
PD3	10'	12"	0.025
PD4	182'	15"	0.0113
PD5	235'	18"	0.0053
PD6	75'	18"	0.004
PD7	4'	12"	0.0125
PD8	12.5'	15"	0.008
PD9	5'	15"	0.014
PD10	4'	12"	0.0125
PD11	30'	12"	0.01
PUD1	150'	6"	0.0033



TS2
5'Wx1'Dx180'L
S=0.0075

TS1
3'Wx1'Dx150'L
S=0.005

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING F.F.=12.75

PROPOSED 3 UNIT 3,084 S.F. RESIDENTIAL BUILDING F.F.=11.0

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING F.F.=12.5

PROPOSED 3 UNIT 3,084 S.F. RESIDENTIAL BUILDING F.F.=13.25

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING F.F.=13.0

OFFICE F.F.=12.5
PROPOSED 300 S.F. RETAIL SPACE WITH ACCESSORY DWELLING UNIT ABOVE
GARAGE F.F.=10.25

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING F.F.=11.0

PROPOSED 6" ROOF DRAIN

PROPOSED RIP-RAP APRON FOR ROOF DRAIN (SEE DETAIL) (TYP)

PROPOSED RIP-RAP (SEE DETAIL)

PROPOSED SILTSOXX

PROPOSED CHECK DAM

PROPOSED LIMIT OF FILL

PRETREATMENT SWALE 1
6'Wx0.5'Dx50'L
S=0.005

HIGHEST OBSERVABLE TIDE LINE

100' TIDE BUFFER (CITY OF DOVER JURISDICTIONAL SETBACK)

NON-TIDAL WETLAND

EXISTING BUILDING SETBACK LINE

HEADWALL "B"

TBM
NAIL FOUND IN POLE
(MARKED EL. 10.65)
NAVD88 ELEV.9.77
IRON ROD W/
CIVILWORKS CAP FOUND

EXISTING BIT. CONC. DRIVEWAY

"CAUSEWAY"

DOVER POINT ROAD

BIT.CONC.SIDEWALK

VGC

CB "D"

CB "E"

APPROXIMATE GAS LINE LOCATION (V.I.F.)

BITUMINOUS CONCRETE SIDEWALK

VERTICAL GRANITE CURB (TYP.)

DOUBLE YELLOW LINE

EDGE OF PAVEMENT

IRON AXLE FOUND

IRON ROD W/ CIVILWORKS CAP FOUND

50' SWQPA

150' SWQPA

250' SWQPA

GENERAL CONSTRUCTION NOTE

1. UPON COMPLETION OF CONSTRUCTION THE PERMIT HOLDER SHALL SUBMIT TO THE DEPARTMENT A WRITTEN NOTICE SIGNED BY THE PERMIT HOLDER AND QUALIFIED ENGINEER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, OR, DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS WERE MADE BUT THE DEVIATIONS DID NOT REQUIRE AN AMENDED OR NEW PERMIT. THE WRITTEN NOTICE SHALL INCLUDE THE ENGINEERS REPORT THAT IDENTIFIES THE DISCHARGE POINTS OF ROOF DRAINS ON SITE.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

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SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

GRADING, DRAINAGE & EROSION CONTROL PLAN

8

SHORELAND CALCULATIONS

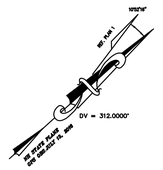
	PRE	POST
PRIMARY STRUCTURES	8,074 S.F.	22,753 S.F.
ACESSORY STRUCTURE		
DRIVEWAY/PARKING	39,255 S.F.	47,126 S.F.
CONCRETE & WALLS	1,252 S.F.	1,691 S.F.
WALKOUT DECKS & STAIR	1,606 S.F.	0 S.F.
TOTAL	50,187 S.F.	71,570 S.F.

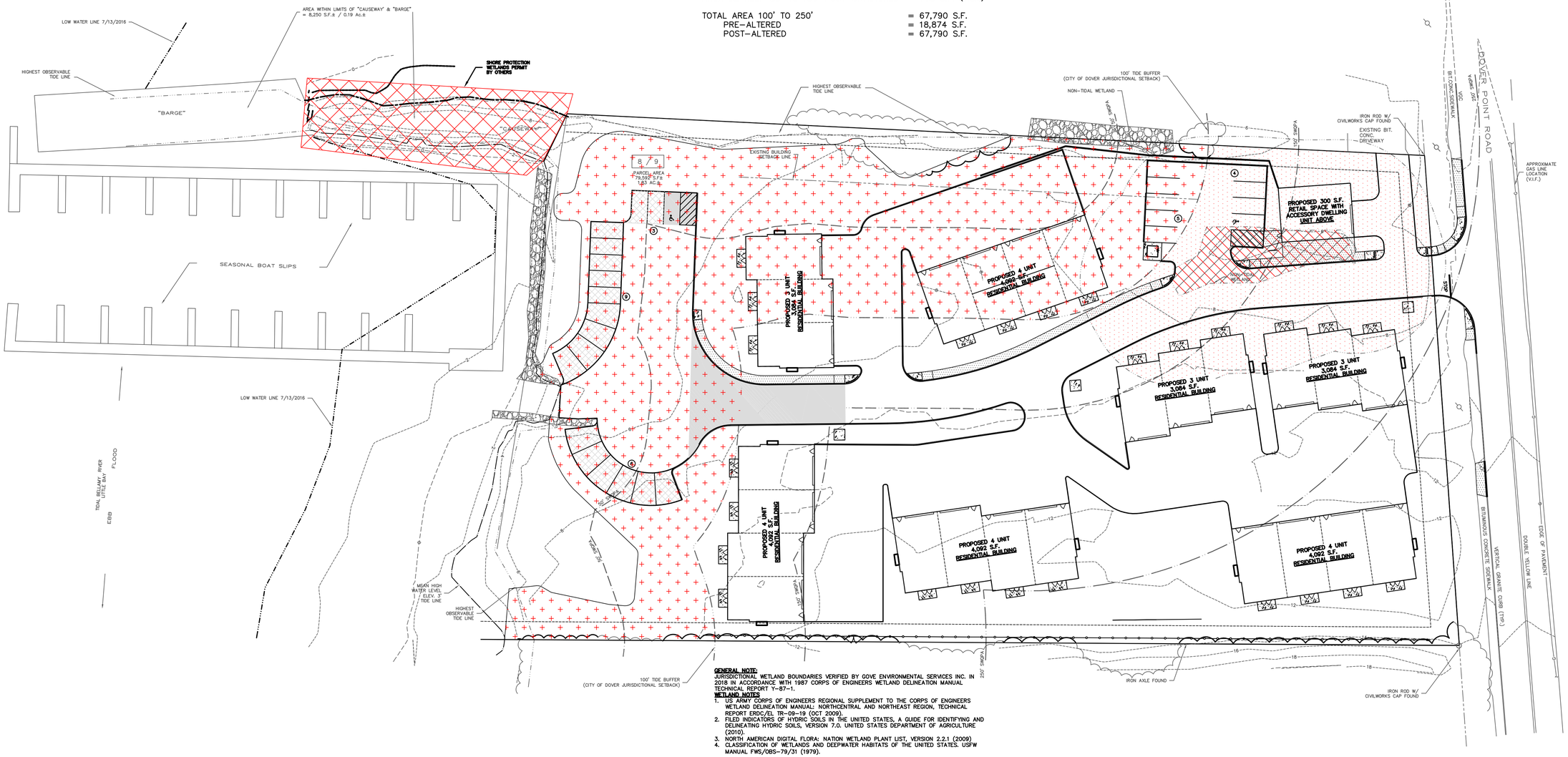
TOTAL SHORELAND AREA 250' = 125,988 S.F. S.F.
% PRE-CONSTRUCTION IMPERVIOUS 250' = 38.8%
% POST-CONSTRUCTION IMPERVIOUS 250' = 56.8%

TOTAL AREA 50' TO 150' = 50,137 S.F.
AREA BETWEEN 50' TO 150' PRE-UNALTERED = 6,826 (13.6%)
AREA BETWEEN 50' TO 150' POST-UNALTERED = 758 S.F. (1.5%)

TOTAL AREA 100' TO 250' = 67,790 S.F.
PRE-ALTERED = 18,874 S.F.
POST-ALTERED = 67,790 S.F.

WETLAND IMPACT = 2,304 S.F.
50' WETLANDS BUFFER IMPACT = 15,581 S.F.
100' TIDAL BUFFER IMPACT = 46,635 S.F.





GENERAL NOTE:
JURISDICTIONAL WETLAND BOUNDARIES VERIFIED BY GOVE ENVIRONMENTAL SERVICES INC. IN 2018 IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLAND DELINEATION MANUAL TECHNICAL REPORT Y-87-1.

WETLAND NOTES
1. US ARMY CORPS OF ENGINEERS REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, TECHNICAL REPORT ERDC/EL TR-09-19 (OCT 2009).
2. FILED INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 7.0. UNITED STATES DEPARTMENT OF AGRICULTURE (2010).
3. NORTH AMERICAN DIGITAL FLORA: NATION WETLAND PLANT LIST, VERSION 2.2.1 (2009)
4. CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL FWS/OBS-79/31 (1979).

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

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CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

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DATE: 2-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:S.JH
PROJECT NO:1788
FILE: SITE.DWG

IMPACT SITE PLAN

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

"CAUSEWAY"

HIGHEST OBSERVABLE TIDE LINE

100' TIDE BUFFER (CITY OF DOVER JURISDICTIONAL SETBACK)

NON-TIDAL WETLAND

HEADWALL "B"

EXISTING BUILDING SETBACK LINE

8 / 9

PARCEL AREA
79,592 S.F.±
1.83 AC.±

DOVER POINT ROAD

TBM
NAIL FOUND IN POLE
(MARKED EL. 10.65)
NAVD88 ELEV.9.77
IRON ROD W/
CIVILWORKS CAP FOUND

EXISTING BIT. CONC. DRIVEWAY

BIT.CONC.SIDEWALK

APPROXIMATE GAS LINE LOCATION (V.I.F.)

PROPOSED 8"x12" TAPPING SLEEVE WITH THRUST BLOCK

OFFICE
F.F.=12.5
PROPOSED 300 S.F. RETAIL SPACE WITH ACCESSORY DWELLING UNIT ABOVE
GARAGE F.F.=10.25

PROPOSED FDC

INV. = 3.0'

INV. =7.77'

RIM=11.02'
INV. IN=3.48'
OUTSIDE DROP INV.=6.5'
INV. OUT=3.38

SMH

CB "D"

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING
F.F.=12.75

PROPOSED 6"FIRE SERVICE

PROPOSED 2" DOMESTIC SERVICE

INV.=7.12'

PROPOSED 3 UNIT 3,084 S.F. RESIDENTIAL BUILDING
F.F.=11.0

PROPOSED 2" DOMESTIC SERVICE

PROPOSED 6"FIRE SERVICE

PROPOSED FDC

PROPOSED WATER SERVICE HUT (SEE DETAIL)

PROPOSED 2" DOMESTIC FOR DOCK SERVICE

INV.=5.91'

RIM=10.63'
INV. IN=4.86'
INV. OUT=4.76'

PSMH3

CHIMNEY INV.=6.5'

PSMH1

(Y) INV.=3.63'

CHIMNEY INV.=6.5'

CHIMNEY INV.=6.65'

PSMH2

NON-TIDAL WETLAND

PROPOSED 3 UNIT 3,084 S.F. RESIDENTIAL BUILDING
F.F.=13.25

PROPOSED 2" DOMESTIC SERVICE

INV.= 7.0'

PROPOSED 6"FIRE SERVICE

INV.=7.0'

PROPOSED 3 UNIT 3,084 S.F. RESIDENTIAL BUILDING
F.F.=13.25

PROPOSED 2" DOMESTIC SERVICE

PROPOSED 6"FIRE SERVICE

PROPOSED FDC

INV.=7.04'

PROPOSED 2" DOMESTIC SERVICE

PROPOSED 6"FIRE SERVICE

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING
F.F.=11.8

RIM=11.87'
INV. IN=4.21'
INV. OUT=4.11'

PROPOSED 6" DUCTILE IRON PIPE (TYP)

PROPOSED FDC

PROPOSED 2" DOMESTIC SERVICE

PROPOSED 6"FIRE SERVICE

INV.=7.60'

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING
F.F.=12.5

PROPOSED FDC

PROPOSED FDC

PROPOSED 6"FIRE SERVICE

PROPOSED 2" DOMESTIC SERVICE

INV.=6.5'.

PROPOSED 4 UNIT 4,092 S.F. RESIDENTIAL BUILDING
F.F.=13.0

APPROXIMATE WATERLINE LOCATION (V.I.F.)

APPROXIMATE SEWER LINE LOCATION (V.I.F.)

CB "E"

BITUMINOUS CONCRETE SIDEWALK

VERTICAL GRANITE CURB (TYP.)

DOUBLE YELLOW LINE

EDGE OF PAVEMENT

150' SWQPA

50' SWQPA

PD1 PD2 PD3 PD4 PD5 PD6 PD8 PD11

RD1 RD2 RD3 RD4

PUD PUD1 PW PS PG PE OHU

SANITARY SEWER SCHEDULE

*EXISTING SMH 1
RIM=8.88
INV.=3.0

PSMH1
RIM=11.02
INV.IN=3.48 (PSMH2)
INV.OUTSIDE DROP=6.5 (BUILDING)
INV.OUT=3.38 (EXISTING SMH)

PSMH2
RIM=11.87
INV.IN=4.21 (PSMH3)
INV.OUT=4.11 (PSMH1)

PSMH3
RIM=10.63
INV.IN=4.86 (BUILDING X 3)
INV.OUT=4.76 (PSMH2)

NOTES:

1) WATER MAIN SHALL BE 8" DUCTILE IRON PIPE
2) FIRE SERVICES TO BUILDING SHALL BE 6" DUCTILE IRON PIPE
3) DOMESTIC WATER SERVICES SHALL BE 2" PLASTIC POLY PIPE
4) TEE INTERSECTION SHALL HAVE THRUST BLOCKS
5) SEWER MAIN SHALL BE 8" SDR35 PVC PIPE
6) ALL SEWER SERVICES SHALL BE 6" SDR35 PVC

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
4	REVISED SITE PLAN	SJH	12-30-19
3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

DATE: 2-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

UTILITY PLAN

10

DESCRIPTION

THE INTENT OF THIS PLAN IS TO SHOW THE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF (6) MULTI-UNIT BUILDINGS, (1) MIXED USE-COMMERCIAL BUILDING, SITE ACCESS DRIVE, PARKING AREAS, UTILITY INSTALLATION, AND DRAINAGE IMPROVEMENTS.

PROJECT NAME AND LOCATION

LITTLE BAY MARINA & DEVELOPMENT — LATITUDE N43°07'18"
421 DOVER POINT ROAD — LONGITUDE W70°49'58"
DOVER, NH 03820

DISTURBED AREA

±152,438 square feet

SEQUENCE OF MAJOR ACTIVITIES

1. CONTRACTOR SHALL PREPARE THE SWPPP, FILE FOR AND OBTAIN THE NOI A MINIMUM OF 2 WEEKS PRIOR TO COMMENCEMENT OF SITE WORK.
2. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
3. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
4. SELECTIVE DEMOLITION.
5. REGRADE SITE TO SUBGRADE.
6. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
7. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
8. INSTALL UNDERGROUND UTILITIES AND FOUNDATIONS FOR STRUCTURES.
9. PLACE GRAVELS AND FINE GRADE.
10. STABILIZE, ROADWAYS & PARKING LOTS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
12. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
13. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 3.5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
14. WHEN ALL SITE WORK IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND FILE THE EPA – N.O.T.

DEFINITIONS

AN AREA SHALL BE CONSIDERED STABLE OF ONE OF THE FOLLOWING HAS OCCURRED.

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

1. CONTRACTOR SHALL PREPARE THE SWPPP, FILE FOR AND OBTAIN THE NOI A MINIMUM OF 2 WEEKS PRIOR TO COMMENCEMENT OF SITE WORK.
2. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
3. TEMPORARY WATER DIVERSION MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
4. SELECTIVE DEMOLITION.
5. REGRADE SITE TO SUBGRADE
6. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.
7. INSTALL DRAINAGE STRUCTURES AND CONTROLS
8. INSTALL UNDERGROUND UTILITIES AND FOUNDATIONS FOR STRUCTURES
9. PLACE GRAVELS AND FINE GRADE
10. STABILIZE, ROADWAYS & PARKING LOTS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
12. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
13. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 3.5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
14. WHEN ALL SITE WORK IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND FILE THE EPA – N.O.T.

1. Silt Fence
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property	Test	Requirements
Filtering Efficiency	VTM-51	75% minimum
Tensile Strength at 20% Maximum Elongation*	VTM-52	Extra Strength 50 lb/lin in (min)
Standard Strength 30 lb/lin in (min)		
Flow Rate	VTM-51	0.3 gal/sf/min (min)

* Requirements reduced by 50 percent after six (6) months of installation.

Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120 Degrees F.

   b. The height of a silt fence shall not exceed thirty-six (36) inches.
   c. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at support post, with a minimum six (6) inch overlap, and securely sealed.
   d. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location and driven securely into the ground (minimum of 12 inches). When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet.
   e. Posts for silt fences shall be 2-inch diameter wood with a minimum length of 5 feet.
   f. Wire fence reinforcement for silt fences using standard strength filter cloth shall be a minimum of 42 inches in height, a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches.
   g. A trench shall be excavated approximately four (4) inches wide and four (4) inches deep along the line of posts and upslope from the barrier.
   h. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.
   i. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
   j. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (i) applying.
   k. The trench shall be backfilled and the soil compacted over the filter fabric.
   l. Silt fences shall be removed when they have served their useful purpose, but not before the upslope areas has been permanently stabilized.

2. Sequence of Installation
   Sediment barriers shall be installed prior to any soil disturbance of the contributing drainage area above them.

3. Maintenance
   a. Check dams and silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.
   b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
   c. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one third (1/3) the height of the barrier.
   d. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

C. MULCHING

1. Timing
   In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this.
   a. Apply mulch prior to any storm event. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
   b. Required Mulching within a specified time period. The time period can range from 14 to 21 days of inactivity on a area, the length of time varying with site conditions. Professional judgement shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

2. Application Rate
   Mulch shall be applied at a rate of between 1.5 to 2 tons per acre, or 90 to 100 pounds per 1000 square feet.

3. Guidelines for Winter Mulch Application. When mulch is applied to provide protection over winter (past the growing season) it shall be at a rate of 6,000 pounds of hay or straw per acre. A tackifier may be added to the mulch.

4. Maintenance All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

5. Excelsior Matting Excelsior Matting shall be used in place of mulch on all slopes steeper than 3:1.

D. TEMPORARY GRASS COVER

1. Seedbed Preparation
   Apply fertilizer at the rate of 600 pounds per acre of 10-10-10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.

2. Seeding
   a. Utilize annual rye grass at a rate of 40 lbs/acre.
   b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
   c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

3. Maintenance
   Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

E. PERMANENT SEEDING

1. Bedding – stones larger than 1 ½ ", trash, roots, and other debris interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 4" to prepare a seedbed and mix fertilizer into the soil.

2. Fertilizer – lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:
   Agricultural Limestone @ 100 lbs. per 1,000 s.f.
   10-20-20 fertilizer @ 12 lbs. per 1,000 s.f.

3. Seed Mixture (recommended)
   Rate:

Type	LBS per Acre	LBS per 1,000 s.f.
Tall Fescue	20	0.45
Creeping Red Fescue	20	0.45
Birdsfoot Trefoil	8	0.20
Total	48	1.10

4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook.

   Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt) etc.

5. Provide a minimum of 4 inches (5 inches loose) of topsoil to all areas to be seeded.

F. STORM DRAIN INLET PROTECTION

1. Straw/Hay Bale Inlet Structure
   a. Bales shall be either wire bound or string tied with the bindings oriented around the sides rather than over and under the bales.
   b. Bales shall be placed lengthwise in a single row surrounding the inlet, with the ends of adjacent bales pressed together.
   c. The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of bale to a minimum depth of four (4) inches. After the bales are staked, the excavated soil shall be backfilled and compacted against the filter barrier.
   d. Each bale shall be securely anchored and held in place by at least two (2) stakes or rebars driven through the bale.
   e. Loose straw/hay shall be wedged between bales to prevent water from entering between bales.
   f. All structures should be inspected after every rainstorm and repairs made as necessary.
   g. Sediment should be removed from the devices after the sediment has reached a maximum of one-third the depth of the trap.
   h. Haybales should be removed and the area repaired as soon as the contributing drainage area to the inlet has been completely stabilized.

TIMING OF CONTROLS/MEASURES

As indicated in the sequence of Major Activities the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Areas where construction activity temporarily ceases for more than twenty one (21) days will be stabilized with a temporary seed and mulch within fourteen (14) days of the last disturbance. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established. All areas shall be stabilized within 72 hours of achieving finish grade.

WASTE DISPOSAL

A. WASTE MATERIALS
All waste materials will be collected and stored in securely lidded receptacles. All trash and construction debris from the site will be deposited in a dumpster. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal by the superintendent.

B. HAZARDOUS WASTE
All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices by the superintendent.

C. SANITARY WASTE
All sanitary waste will be collected from the portable units a minimum of once per week by a licensed sanitary waste management contractor.

SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances during construction to stormwater runoff:

Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

- An effort will be made to store only sufficient amounts of products to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their proper (original if possible) containers and, if possible, under a roof or other enclosure.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible all of a product will be used up before disposing of the container.

Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous materials:

- Products will be kept in their original containers unless they are not resealable.
- Original labels and material safety data will be retained for important product information.
- Surplus product that must be disposed of will be discarded according to the manufacturer's recommended methods of disposal.

B. PRODUCT SPECIFICATION PRACTICES
The following product specific practices will be followed on site:

Petroleum Products:

All on site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt based substances used on site will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts directed by the specifications. Once applied fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed or enclosed trailers. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid

Paints:
spills.
All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be disposed of properly according to manufacturer's instructions or state and local regulations.

Concrete Trucks:

Concrete trucks will discharge and wash out surplus concrete or drum wash water in a contained area on site.

C. SPILL CONTROL PRACTICES

In addition to good housekeeping and material management practices discussed in the previous section the following practices will be followed for spill prevention and cleanup:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on site. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic or metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to cleanup the spill if it recurs. A description of the spill, its cause, and the cleanup measures will be included.
- The site superintendent responsible for day-to-day site operations will be the spill prevention and cleanup coordinator.

The project proponent is required to manage construction to meet the requirements and intent of RSA 430:53 and AGR 3800 relative to controlling invasive species and controlling fugitive dust in accordance with ENV-A 1002.
AGR 3800 Prohibited Invasive Plant Species Rules

The rule, Agr 3800, states : "No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1, New Hampshire prohibited invasive species list". A complete copy of the rules can be accessed on the internet at http://agriculture.nh.gov/topics/plants_insects.htm.

Env-A 1002 FUGITIVE DUST: Precautions to Prevent, Abate, and Control Fugitive Dust
(a) Any person engaged in any activity within the state that emits fugitive dust, other than those listed in Env-A 1002.02(b), shall take precautions throughout the duration of the activity in order to prevent, abate, and control the emission of fugitive dust.

(b) Precautions required by (a), above, shall include but not be limited to the following:

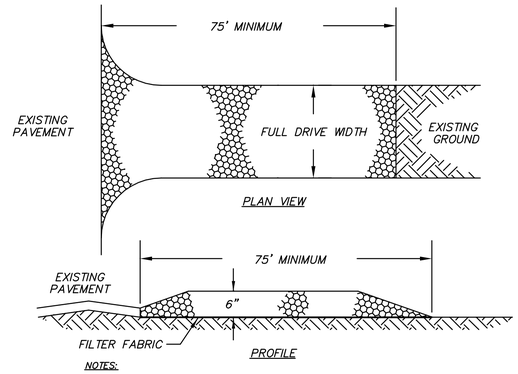
(1) The use of water or hydrophilic material on operations or surfaces, or both;

(2) The application of asphalt, water or hydrophilic material, or tarps or other such covers to material stockpiles;

(3) The use of hoods, fans, fabric filters, or other devices to enclose and vent areas where materials prone to producing fugitive dust are handled;

(4) The use of containment methods for sandblasting or similar operations; and

(5) The use of vacuums or other suction devices to collect airborne particulate matter.



NOTES:
1. SEE EROSION CONTROL NOTES BELOW FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.
2. TO BE INSTALLED AT EACH POINT OF EGRESS FROM THE WORK AREA.

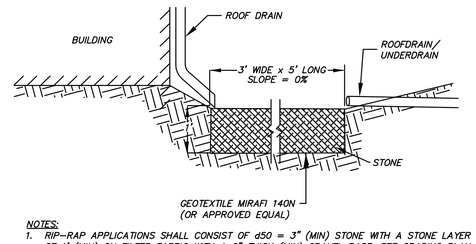
STABILIZED CONSTRUCTION ENTRANCE

1. SPECIFICATIONS
   A. AGGREGATE SIZE: USE THREE (3) INCHES STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
   B. AGGREGATE THICKNESS: NOT LESS THAN SIX (6) INCHES.
   C. WIDTH TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS.
   D. LENGTH: AS REQUIRED, BUT NOT LESS THAN SEVENTY-FIVE (75) FEET. PIPING OF SURFACE WATER UNDER ENTRANCE SHALL BE PROVIDED AS REQUIRED.
   E. GEOTEXTILE: TO BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE.
   F. CRITERIA FOR GEOTEXTILE: THE FABRICS SHALL BE TREVIA SPUNBOND 1135, MIRAFI 600X OR EQUAL.

2. MAINTENANCE
   THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTES:
1. RIP-RAP APPLICATIONS SHALL CONSIST OF d50 = 3" (MIN) STONE WITH A STONE LAYER THICKNESS OF 1' (MIN) ON FILTER FABRIC WITH A 6" THICK (MIN) GRAVEL BASE. SEE GRADING PLAN FOR APRON LOCATIONS.

RIP-RAP APRON

NOT TO SCALE

PER 149-10 F:
All site improvements which require blasting of land shall meet the following requirements prior to any blasting occurring.

1. The Applicant shall prepare a pre-blast survey of all structures within five (500) feet of the external boundaries of the proposed lot to be developed. This survey, along with a monitoring plan, shall be on file with the Dover Fire and Rescue. Upon recommendations of the Chief , the planning Board may require a pre-blast survey of all structures within one thousand (1000) feet.
2. The Applicant shall hold a neighborhood meeting to review the blasting plan and pre-blast survey, with representatives of the Fire and Rescue and the blasting company in attendance, prior to any on-site blasting. Abutters within on thousand (1000) feet of the external boundary of the project parcel shall be notified by certified mail (paid for by the applicant) of the meeting no less than ten (10) days prior to the meeting.
3. Permit holders shall be in compliance with NFPA 495, The Code for the Manufacture, Transportation, Storage and Use of Explosive Material, in addition to all other ordinances and codes set forth in the City of Dover Fire Prevention Code, which specifically prohibits the overnight storage of explosive or blasting agents. Further all storage magazines shall be locked in the open position at the end of the days' operation, for easy inspection by City Officials.
4. blasting permits may be obtained by calling the Dover Fire and Rescue during normal business hours. The permits are only active for the dates and time specified on the permit.
5. Permit holders shall hold insurance against claims for damages for personal injury and property which may arise from performance of the work.
6. Hours of operation for the blasting shall be no earlier than 8:00 am and no later than 6:00 pm Monday through Friday, excluding federal holidays.

MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES

The project proponent is responsible for the maintenance of all stormwater facilities during construction and the property owner is responsible after construction is complete.

CATCH BASINS & STORMWATER TREATMENT STRUCTURES

1. Catch basins & Stormwater treatment structures should be inspected on a monthly basis and/or after a major rainfall event to assure that debris or sediments do not reduce the effectiveness of the system.

WINTER CONSTRUCTION NOTES

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 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The placement of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt.
2. All slopes 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.
3. After October 15th, incomplete road surfaces shall be protected with a minimum of 3-inches of crushed gravel per NHDOT item 403.3, or if construction is to continue through the winter season be cleared of any accumulated snow after each storm event.

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

DATE	NO.	REVISION	APP'D
1-22-19	1	AOT SUBMISSION	SJH
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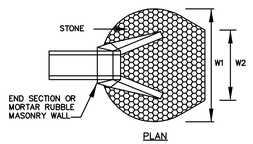
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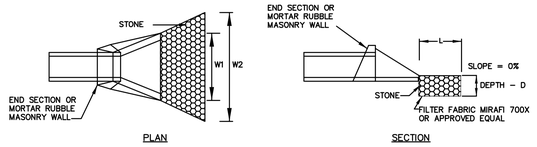
LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

EROSION CONTROL NOTES



STONE APRON OUTLET PROTECTION DETAIL
OUTLET TO DEFINED CHANNEL



STONE APRON OUTLET PROTECTION DETAIL
OUTLET TO FLAT AREA, NON DEFINED CHANNEL

MAINTENANCE

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

STONE GRADATION

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100	1.5 TO 2.0 D50
85	1.3 TO 1.8 D50
50	1.0 TO 1.5 D50
15	0.3 TO 0.5 D50

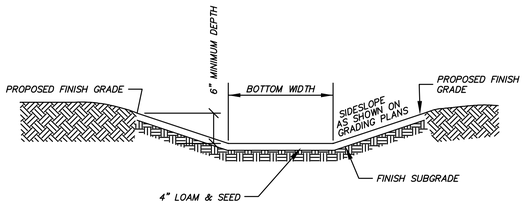
CONSTRUCTION SPECIFICATIONS

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

OUTLET FROM	OUTLET TO	W1(ft)	W2(ft)	L(ft)	CHANNEL TYPE
DMH2	LITTLE BAY	5	28	19	UNDEFINED
DMH3	R2	9	3	9	DEFINED
SC1	TS1	5	3	17	DEFINED
CB3	TS2	11	5	16	DEFINED

RIP RAP OUTLET PROTECTION

NOT TO SCALE



GRASSED TREATMENT SWALE

NOTES:

1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.

2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.

3. EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.

4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR INSTALLATION.

5. VEGETATION SHALL BE ESTABLISHED IN THE SWALE PRIOR TO ALLOWING STORMWATER RUNOFF TO FLOW THROUGH THE SWALE.

6. MAINTENANCE OF THE VEGETATION IN THE GRASSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, EROSION, AND FAILURE OF THE WATERWAY. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP THE GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE WATERWAY.

7. THE WATERWAY SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE WATERWAY. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

8. PERIODIC APPLICATIONS OF LIME AND FERTILIZER MAY BE NEEDED TO MAINTAIN VIGOROUS GROWTH.

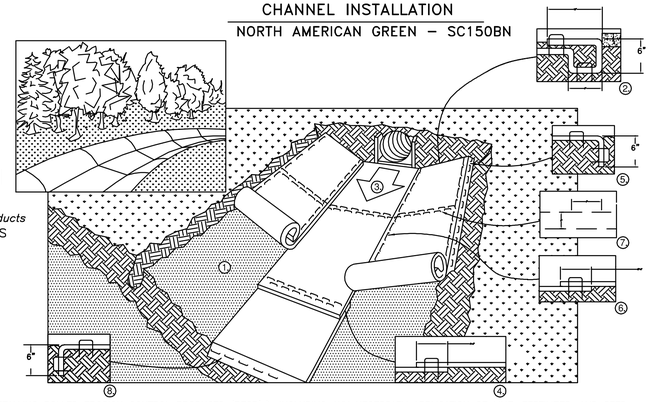
GRASSED TREATMENT SWALE

NOT TO SCALE

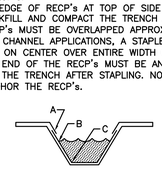
STRUCTURE	WIDTH (Ft)	LENGTH (Ft)	SLOPE (Ft/Ft)
TS 1	3.00	150	0.005
TS 2	5.00	180	0.0075
PTS 1	6.00	50	0.005

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS

CHANNEL INSTALLATION
NORTH AMERICAN GREEN – SC150BN



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. NOTE: * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



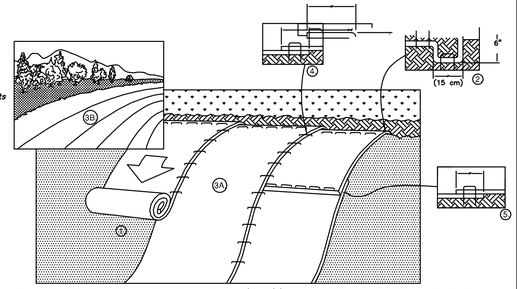
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

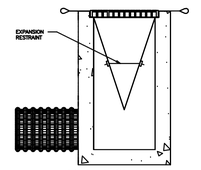
NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS

SLOPE INSTALLATION
NORTH AMERICAN GREEN – SC150BN



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM®, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

NOTE: THE USE OF WELDED PLASTIC OR BIODEGRADABLE PLASTIC NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED. THE USE OF WILDLIFE FRIENDLY ORGANIC MATERIALS IS RECOMMENDED.



SILTSACK®
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS. AS SUPPLIED BY AH HARRIS OF PORTSMOUTH OR APPROVED EQUAL

REGULAR FLOW SILTSACK●
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	900 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

HI-FLOW SILTSACK●
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

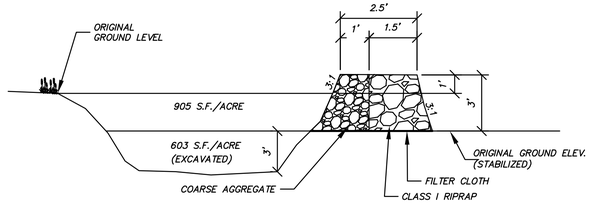
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	125 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.3 SEC -1

OIL-ABSORBANT SILTSACK●

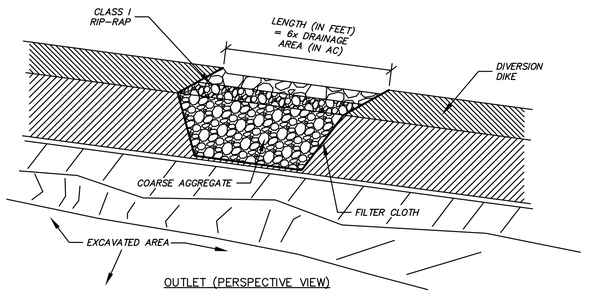
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS) DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK● CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK●, WITH A WOVEN PILLOW INSERT.

DETAIL OF INLET SEDIMENT CONTROL DEVICE

NOT TO SCALE



CROSS SECTION OF OUTLET

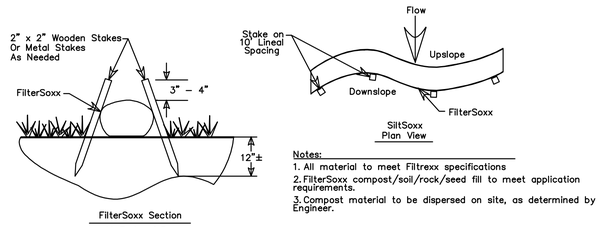


OUTLET (PERSPECTIVE VIEW)

NOTES:
1. COARSE AGGREGATE SHALL MEET NHDOT 304.5 SPECIFICATIONS AND SHALL NOT CONTAIN MORE THAN 5% FINES PASSING THE #200 SIEVE.
2. FILTER CLOTH SHALL BE MIRAFI 700X OR APPROVED EQUAL.
3. CLASS I RIPRAP SHALL MEET NHDOT 583 SS SPECIFICATIONS.
4. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHALL BE LESS THAN 5 AC.
5. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED.
6. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

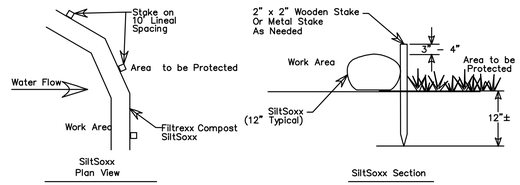
TEMPORARY SEDIMENT TRAP

NOT TO SCALE



FilterSoxx Staking Details

Notes:
1. All material to meet Filtrexx specifications
2. FilterSoxx compost/soil/rock/seed fill to meet application requirements.
3. Compost material to be dispersed on site, as determined by Engineer.



Notes:
1. All material to meet Filtrexx specifications
2. SiltSoxx compost/soil/rock/seed fill to meet application requirements.
3. SiltSoxx depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
4. Compost material to be dispersed on site, as determined by Engineer.

SiltSoxx Details

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
4	REVISED SITE PLAN	SJH	12-30-19
3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

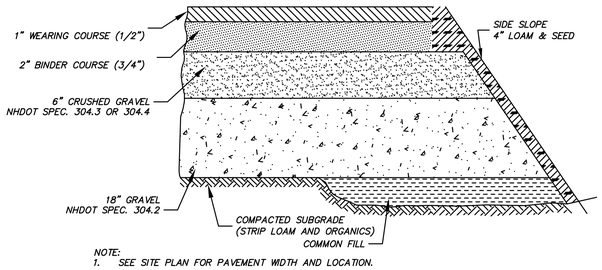
DATE: 2-21-19
SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY: SJH
PROJECT NO: 1788
FILE: SITE.DWG

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

EROSION CONTROL DETAILS

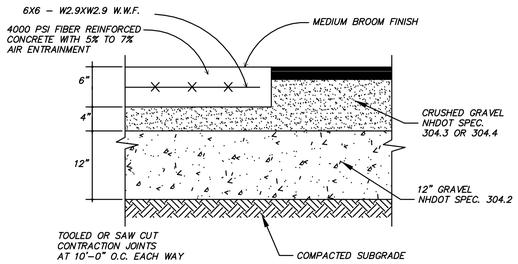
12



NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.

TYPICAL PAVEMENT SECTION

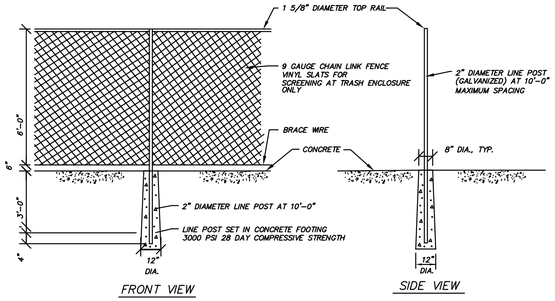
NOT TO SCALE



NOTE: PITCH CONCRETE PAD GRADING TO CENTER

DUMPSTER DETAIL

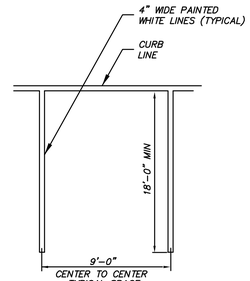
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NOTES:
1. DUMPSTER CHAINLINK FENCE SHALL HAVE GREEN VINYL PRIVACY SLATS.

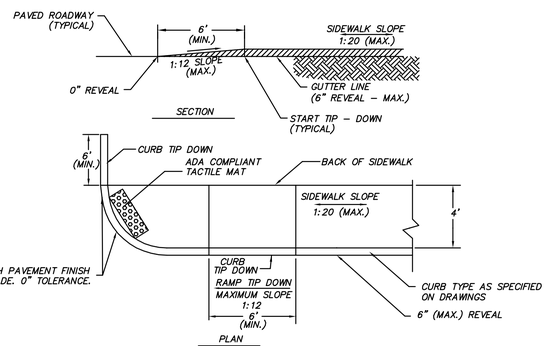
CHAINLINK FENCE DETAIL

NOT TO SCALE



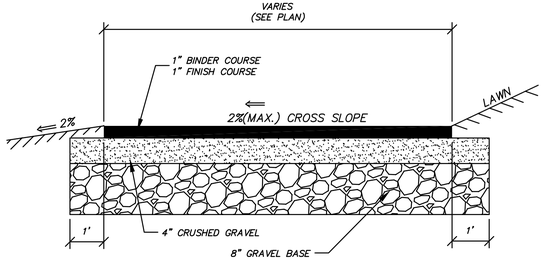
STANDARD PARKING STALL

NOT TO SCALE



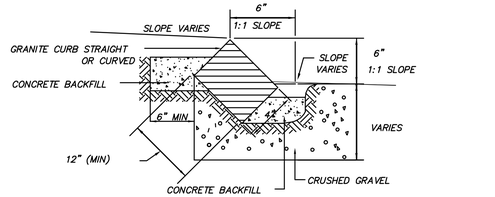
SIDEWALK TIP DOWN RAMP

NOT TO SCALE



BITUMINOUS CONCRETE WALK

NOT TO SCALE

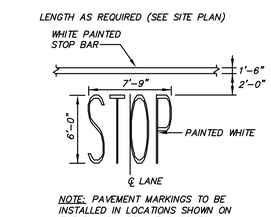


NOTES
1. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
2. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"
3. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES – SEE CHART

RADIUS FOR STONES WITH SQUARE JOINTS	MAXIMUM LENGTH
16'–28'	1'–6"
29'–41'	2'
42'–55'	3'
56'–68'	4'
69'–82'	5'
83'–96'	6'
97'–110'	7'
OVER 110'	8'

SLOPED GRANITE CURBING

NOT TO SCALE

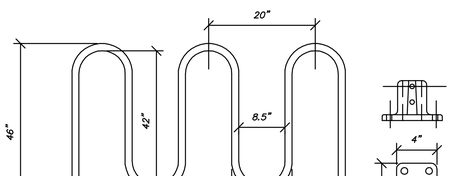


NOTE: PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS SHOWN ON THE PLANS. APPLY TWO COATS.

STOP BAR & LEGEND

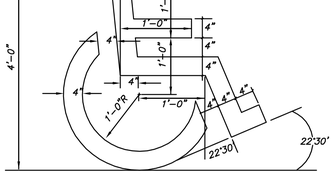
PAVEMENT MARKINGS

NOT TO SCALE



BIKE RACK DETAIL

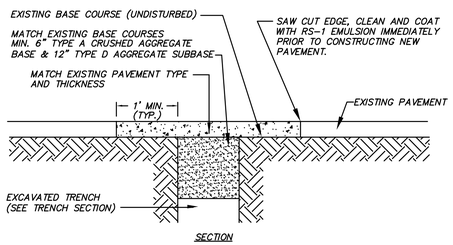
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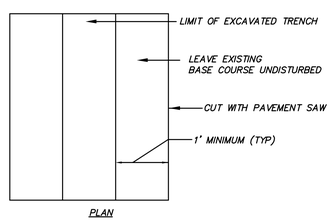


NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES

PAINTED HANDICAP SYMBOL

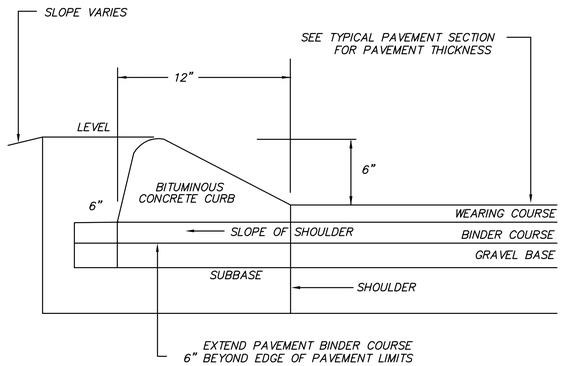
NOT TO SCALE





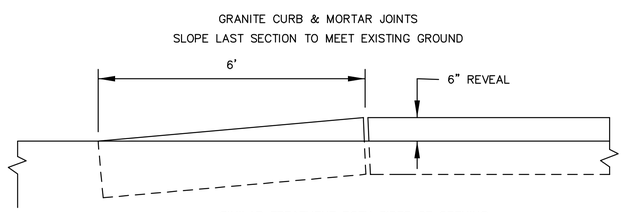
ROADWAY TRENCH PATCH DETAIL

NOT TO SCALE



BITUMINOUS SLOPED CURB

NOT TO SCALE



"TIP–DOWN" CURB DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

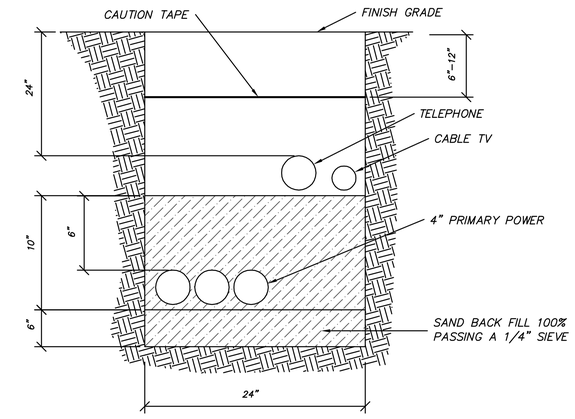
NO.	REVISION	APP'D	DATE
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DATE: 2-21-19
SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

DETAILS

LITTLE BAY MARINA &
DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

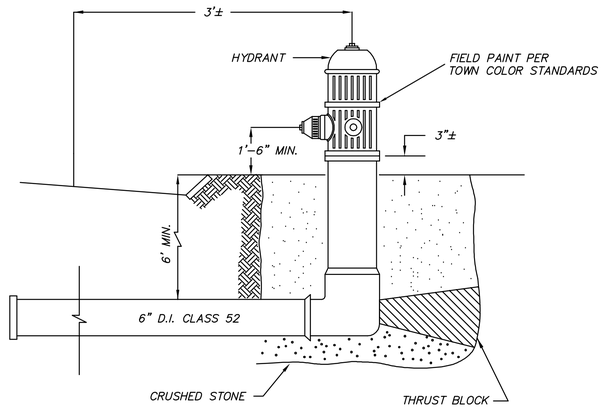


1. TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.
2. LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.
3. FOR COMPLETE SPECIFICATIONS SEE "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND CONDUIT SYSTEMS".
4. CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES.

UTILITY TRENCH

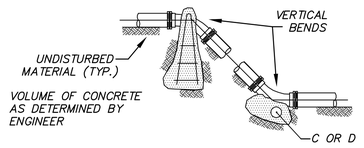
NOT TO SCALE

NOTE:
HYDRANT INSTALLATION & OPERATION TO CONFORM TO REGULATIONS OF CITY OF DOVER FIRE DEPARTMENT.



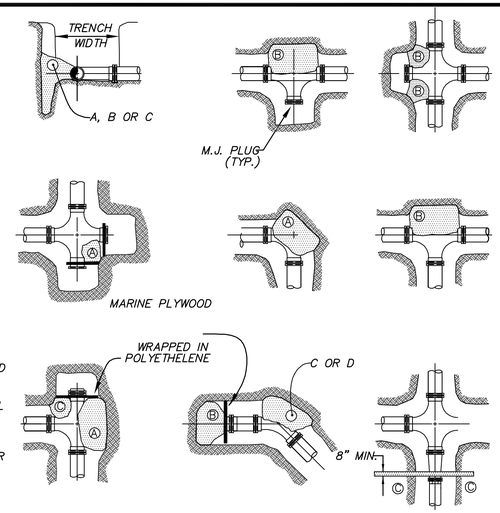
FIRE HYDRANT DETAIL

NOT TO SCALE



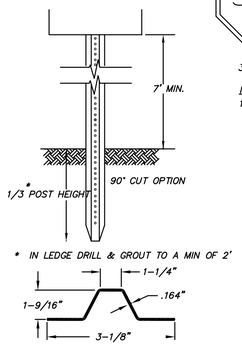
TEST PRESSURE = 200psi	SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL					
	REACTION TYPE	PIPE SIZE				
		4"	6"	8"	10"	12"
	A 90°	0.89	2.19	3.82	11.14	17.24
	B 180°	0.65	1.55	2.78	8.38	12.00
	C 45°	0.48	1.19	2.12	6.02	9.32
	D 22-1/2°	0.25	0.60	1.06	3.08	4.74
	E 11-1/4°	0.13	0.30	0.54	1.54	2.38

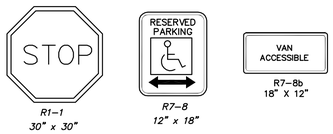
NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.



TRUST BLOCK DETAIL

NOT TO SCALE





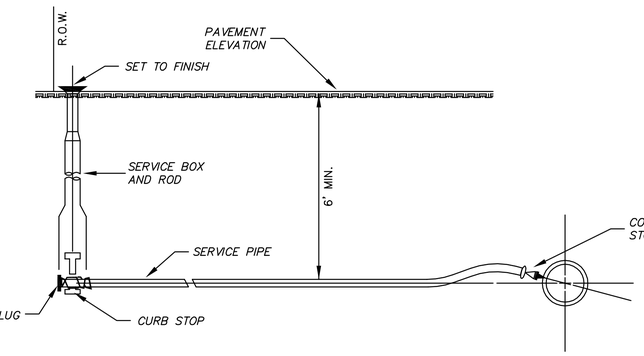
NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.



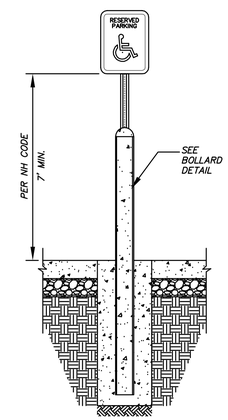
SIGN LEGEND & SIGN POST

NOT TO SCALE



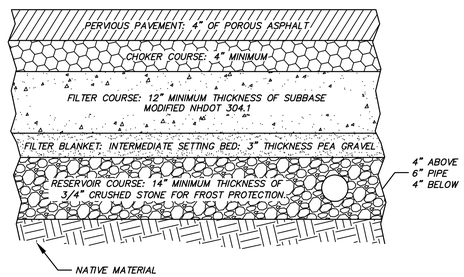
TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE



SIGN IN BOLLARD

NOT TO SCALE

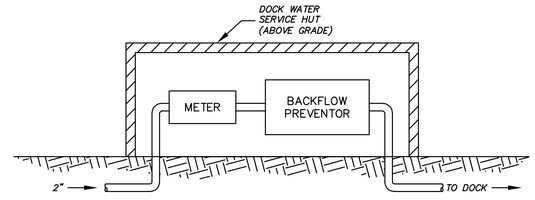


(UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS)

NOTE:
1. SEE SITE PLAN FOR LOCATION OF POROUS PAVEMENT, PAVEMENT WIDTH AND LOCATION.
2. CONSTRUCTION MATERIALS SHALL NOT BE STORED ON THE POROUS PAVEMENT OR BASE MATERIALS.
3. A PROFESSIONAL ENGINEER SHALL PERFORM ON-SITE INSPECTIONS DURING THE CONSTRUCTION AND INSTALLATION OF POROUS PAVEMENT AND PROVIDE A STATEMENT UPON COMPLETION OF WORK IDENTIFYING THAT THE PAVEMENT WAS PRODUCED AND INSTALLED AS PER THE REFERENCED SPECIFICATION. NOTIFY THE CITY ENGINEER OF THE INSTALLATION SCHEDULE AND IN ADVANCED OF INSTALLATION.
4. CRUSHED STONE, BANK RUN GRAVEL & CRUSHED GRAVEL MATERIALS SHALL CONFORM WITH NHDOT STD. SPECIFICATIONS.
5. THE POROUS PAVEMENT AREAS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS IN "UNHSC DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS, FEBRUARY 2014, REVISED SEPTEMBER 2016" (OR LATEST EDITION), PUBLISHED BY UNIVERSITY OF NEW HAMPSHIRE STORMWATER CENTER.
6. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
7. QUALITY CONTROL AND QUALITY ASSURANCE SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.
8. POROUS ASPHALT SHALL BE INSTALLED AS THE LAST CONSTRUCTION ACTIVITY ONCE THE GRADING ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS BEEN STABILIZED.

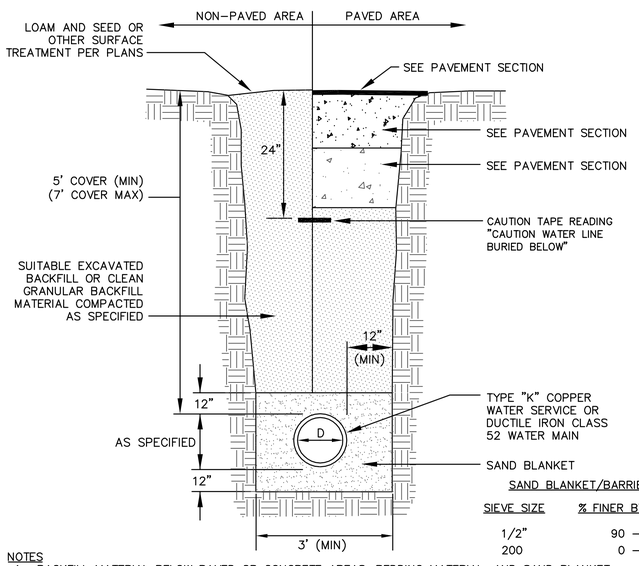
POROUS PAVEMENT SECTION (SEE SITE PLAN FOR LOCATION)

NOT TO SCALE



WATER SERVICE HUT DETAIL

NOT TO SCALE



SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 - 100
200	0 - 15

NOTES
1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

WATER MAIN TRENCH

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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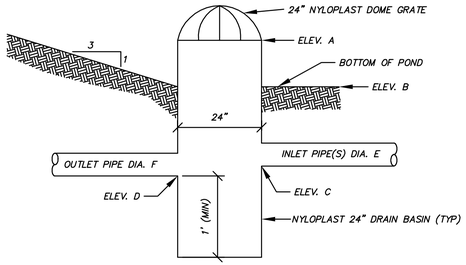
CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
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LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
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LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

DETAILS

14

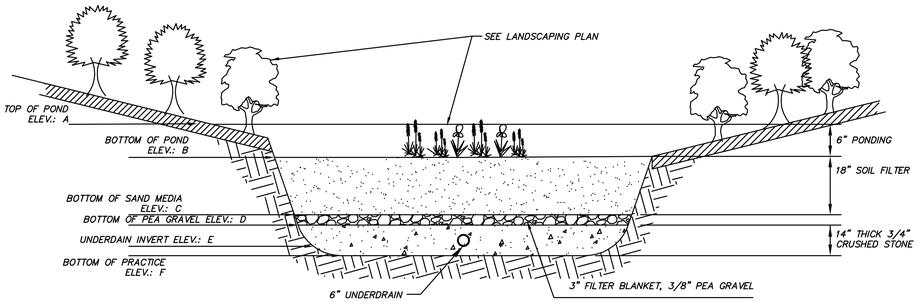


OS	ELEV. A (FT)	ELEV. B (FT)	ELEV. C (FT)	ELEV. D (FT)	DIA. E (IN)	DIA. F (IN)
OS-RG1	9.75	9.25	6.67	6.67	6.00 X 2	15.00
OS-RG2	8.50	8.00	5.42	5.40	6.00	12.00
OS-RG3	9.10	8.50	5.92	5.35	6.00	12.00

OUTLET STRUCTURE DETAIL

(OS-RG1, OS-RG2, OS-RG3)
NOT TO SCALE

NOTES:
1. CONSTRUCT GRASSED OVERFLOW SPREADER EARLY DURING INITIAL CONSTRUCTION TO ESTABLISH TURF PRIOR TO CONSTRUCTION OF BIORETENTION SYSTEM.
2. DO NOT BEGIN CONSTRUCTION OF THE BIORETENTION AREA UNTIL LAWN AREA ON THE ENTIRE SITE AREA ESTABLISHED WITH AT LEAST 80 PERCENT TURF. FILTER ALL DRAIN INLETS IN THE SEDIMENT FOREBAYS TO PREVENT SILTATION INTO THE BIORETENTION AREA.
3. THE RAIN GARDEN SUBGRADE SHALL BE EXCAVATED TO THE DESIGN DEPTH PLUS TWO (2) INCHES. AT THAT DEPTH FOUR (4) INCHES OF COMPOST SHALL BE TILLED INTO THE EXISTING SOILS SUCH THAT THE SOILS ARE WELL MIXED.
4. DO NOT DRIVE CONSTRUCTION EQUIPMENT ON FILTER SUBGRADE NOR ON THE FILTER MATERIAL. INSTALL FILTER MATERIAL BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER AREA.
5. MATERIALS: CRUSHED STONE LAYER SHALL MEET NHDOT 304.4. STONE SHALL CONTAIN NO MORE THAN 5% FINES PASSING THE #200 SIEVE. TOPSOIL SHALL CONTAIN 15 TO 25% FINES PASSING THE #200 SIEVE. MULCH SHALL BE SHREDDED HARDWOOD, AGES IN A STOCKPILE OR STORED FOR AT LEAST 12 MONTH. NON-WOVEN GEOTEXTILE BE 4 TO 6 OZ. PER SQUARE YARD WITH A.O.S. OF #70 SIEVE OR LOWER, AND A MINIMUM FLOW RATE OF 125 GAL PER SQUARE FEET. UNDERDRAIN SHALL BE PERFORATED 6" PVC OR TRIPLE WALL PE PIPE; SLOPE 1/4"/FT. MINIMUM.
6. REFER TO LANDSCAPING DRAWINGS FOR GRASS SEED MIXES AND PLANTINGS. FERTILIZATION OF THE FILTER AREA SHALL BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.
7. INITIAL ESTABLISHMENT: DURING THE FIRST 2-3 MONTHS OF ESTABLISHMENT WATER THE GARDEN ON A WEEKLY BASIS (TO SUPPLEMENT RAINFALL FOR TOTAL OF 1 INCH PER WEEK).
8. ANNUAL MAINTENANCE: IN THE SPRING OF EACH YEAR, ANY DEAD VEGETATION SHALL BE REMOVED TO ALLOW FOR NEW GROWTH, AND ANY ACCUMULATED SEDIMENT (NORMALLY AT THE ENTRANCE TO THE GARDEN) SHALL ALSO BE REMOVED. DURING THE GROWING SEASON THE RAIN GARDEN SHALL BE WEEDED TWO (2) TIMES AND ADDITIONAL HARDWOOD MULCH SHALL BE ADDED AS NEEDED TO ASSIST IN WEED SUPPRESSION. TURF AT FILTER SHALL BE MOWED NO MORE THAN 3 TIMES PER GROWING SEASON. IF WATER PONDS ON THE SURFACE FOR MORE THAN 24 HOURS DURING THE FIRST YEAR OR 72 HOURS THEREAFTER, THE FILTER SURFACE SHALL BE AERATED WITH DEEP TINES OR THE SURFACE REPLACED.
9. PLANTINGS SHALL BE NATIVE NON-INVASIVE SPECIES, SEE LANDSCAPE ARCHITECT DRAWINGS.



BIORETENTION POND SYSTEM CHART

POND	POND ELEVATION					
	A	B	C	D	E	F
RG1	10.35	9.25	7.75	7.50	6.67	6.34
RG2	9.00	8.00	6.50	6.25	5.42	5.09
RG3	11.00	8.50	7.00	6.75	5.92	5.58

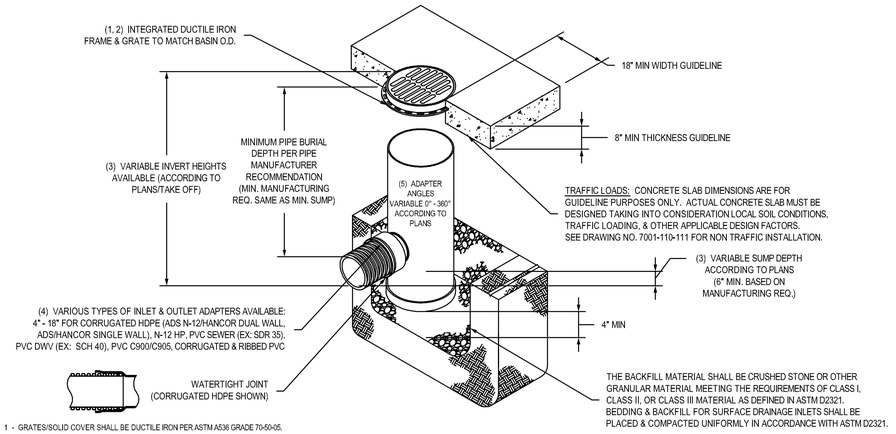
BIORETENTION FILTER MEDIA SPECIFICATIONS

COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	PERCENT BY WEIGHT PASSING STANDARD SIEVE
FILTER MEDIA OPTION A			
ASTM C-33 CONCRETE SAND	50 TO 55		
LOAMY SAND TOPSOIL, WITH FINES AS INDICATED	20 TO 30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5
FILTER MEDIA OPTION B			
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5
LOAMY COARSE SAND	70 TO 80	10	85 TO 100
		20	70 TO 100
		60	15 TO 40
		200	8 TO 15

BIORETENTION SYSTEM DETAIL (SEE GRADING PLAN FOR LOCATION)

NOT TO SCALE

NYLOPLAST 18" DRAIN BASIN:



1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

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DRAWN BY EBC	MATERIAL	Nyloplast 3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 04-03-06		
REVISED BY NMH	PROJECT NO./NAME	TITLE
DATE 03-14-16	18 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL	
DWG SIZE A	SCALE 1:30 SHEET 1 OF 1 DWG NO. 7001-110-191	REV E

DETAIL NOTES:
1) DRAIN MANHOLES PDMH1, PDMH2, PDMH3 & OS-RG4 TO USE SOLID COVERS.
2) RAINGARDEN AND DETENTION POND OUTLETS TO USE DOME COVERS
3) SEE DRAINAGE PLAN FOR INVERTS, INLETS AND OUTLET LOCATION AND SIZES.

TYPICAL OUTLET STRUCTURES AND MANHOLE DETAIL (PDMH1)(PDMH2)(PDMH3)

NOT TO SCALE

SEEKING REPORTS OF RARE TURTLES

The NH Fish & Game Department is collecting observations of four turtle species:



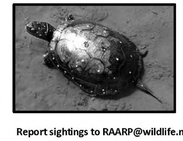
Blanding's turtle (state endangered)
- Large, dark/black domed shell with lighter speckles
- Distinct yellow throat/chin
- Aquatic but often moves on land



Wood turtle (special concern)
- Sculpted, pyramidal brownish shell
- Orange around neck and limbs
- River/stream turtle spending many months on land



Eastern box turtle (state endangered)
- Small terrestrial turtle with highly domed shell
- Irregular yellow or orange markings over brown/black base



Spotted turtle (state threatened)
- Small, mostly aquatic with black or dark brown with yellow spots.
- Fairly flat shell compared to Blanding's turtle

Report sightings to RAARP@wildlife.nh.gov or 603-271-2461 *Please report promptly, noting specific location and date – Photographs strongly encouraged*

NOTES:
1. ALL OUTSIDE CONSTRUCTION PERSONNEL SHALL RECEIVE TRAINING IN THE IDENTIFICATION OF RARE TURTLE SPECIES AND MADE AWARE OF THEIR PROTECTED STATUS.
2. THE USE OF WELDED PLASTIC OR "BIODEGRADABLE PLASTIC" NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED
3. THE USE OF EROSION CONTROL BERM, WHITE FILTREXX DEGRADABLE WOVEN SILT SOCK, OR "WILDLIFE FRIENDLY" WOVEN ORGANIC MATERIAL (E.G. COCO OR JUTE MATTING SUCH AS NORTH AMERICAN GREEN SC150BN OR EQUIVALENT) ARE ACCEPTABLE FOR USE
4. IF WOOD, SPOTTED, OR BLANDING'S TURTLES ARE FOUND LAYING EGGS IN THE WORK AREA, PLEASE CONTACT MELISSA DOPERALSKI AT 271-1738 or JOSH MEGYESY AT 271-1125 FOR FURTHER INSTRUCTIONS.

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

CIVILWORKS NEW ENGINEERING
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
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(603) 749-0443

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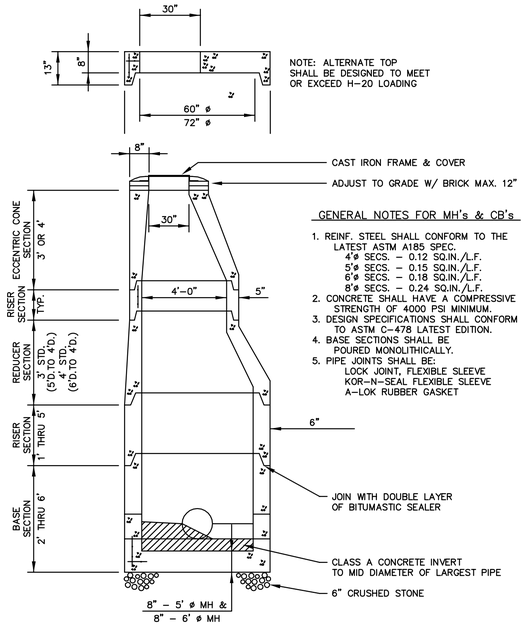
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SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
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LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
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LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

DETAILS

15

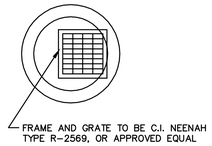


GENERAL NOTES FOR MH's & CB's

1. REINF. STEEL SHALL CONFORM TO THE LATEST ASTM A185 SPEC.
   4'ø SECS. – 0.12 SQ.IN./L.F.
   5'ø SECS. – 0.15 SQ.IN./L.F.
   6'ø SECS. – 0.18 SQ.IN./L.F.
   8'ø SECS. – 0.24 SQ.IN./L.F.
2. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI MINIMUM.
3. DESIGN SPECIFICATIONS SHALL CONFORM TO ASTM C-478 LATEST EDITION.
4. BASE SECTIONS SHALL BE POURED MONOLITHICALLY.
5. PIPE JOINTS SHALL BE:
   LOCK JOINT, FLEXIBLE SLEEVE
   KOR-N-SEAL FLEXIBLE SLEEVE
   A-LOK RUBBER GASKET

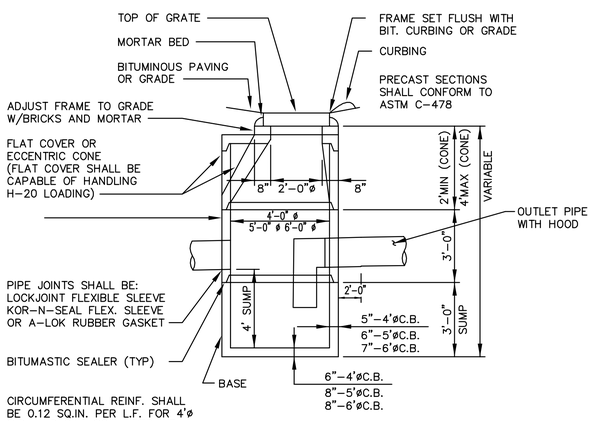
STANDARD 4 FT. DIA. MANHOLE

NOT TO SCALE



GRATE DETAIL

NOT TO SCALE



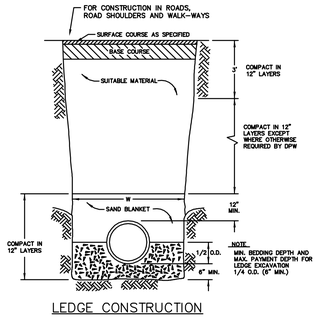
PRE-CAST REINFORCED CATCH BASIN

NOT TO SCALE

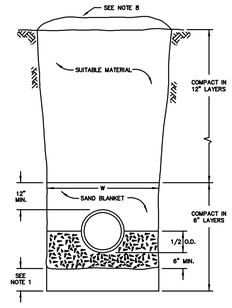
SPECIFICATIONS

1. All construction shall conform with the State of New Hampshire Department of Transportation (NHDOT), "Standard Specifications for Road and Bridge Construction"; hereinafter referred to as the "Standard Specifications".
2. Catch basins and manholes shall be pre-cast reinforced concrete designed by an engineer registered in New Hampshire, and able to withstand loadings of 8 tons (H20 Loading).
3. Manholes shall have cast iron frames and covers with 30" inside diameter openings. A 3-inch (minimum) letter "D" for drain shall be plainly cast into the center of each cover.
4. Catch basins and manholes shall be adjusted to grade with courses of brick. Maximum adjustment to grade shall be 12 inches. Frames shall be set on a full bed of mortar, true to grade and concentric with the masonry. All voids between the top of the structure and the bottom flange of the frame shall be completely filled to make a watertight fit. A ring of mortar at least one inch thick and pitched to shed water away from the frame, shall be placed over and around the outside of the bottom flange. The mortar shall extend to the outer edge of the masonry all around its circumference and shall be finished smooth. No visible leakage will be permitted.
5. Invert channels of sewer manholes shall be formed smoothly to the largest pipe radius. Changes in grade shall be formed smoothly and evenly. The floor of the structure outside the channels shall be sloped towards the channels at approximately 1/2 inch per foot. The floor at the channel shall match the crown of the largest pipe.
6. Trench construction will conform with Section 603.3.1 of the Standard Specifications (1974).
7. Wood sheeting or a suitable trench box shall be used to support the trench as necessary. If wood sheeting is used, it shall be driven at a distance of 1 foot from the outside diameter of the pipe to a depth 6 inches below the invert of the pipe. Wood sheeting shall be cut off and left in place to an elevation not less than 1 foot above the top of the pipe, but not greater than 3 feet below the finished grade.
8. Bedding shall conform with Section 603.3.2 of the Standard Specifications (1974).
9. Backfill material will conform with Section 603.3.5 of the Standard Specifications (1974) and, in addition, shall exclude debris, pieces of pavement, organic matter, top soil, all wet or soft muck, peat or clay, all excavated ledge material, frozen material, all rocks over 6 inches in largest dimension, or any material which, as determined by the Engineer, will not provide sufficient support or maintain the completed construction in a stable condition. Backfill shall not be placed on frozen or previously frozen material.
10. All backfill and bedding compaction shall meet the requirements of AASHTO 99 Method C. Density shall be 95 percent. Compaction shall be 6 inch lifts for bedding and backfill to a plane 1 foot above the pipe and in 12 inch lifts thereafter by an approved mechanical compactor.
11. Should frozen material be encountered, it shall not be placed in the backfill nor shall backfill be placed upon frozen material. Previously frozen material shall be removed as required before new backfill is placed.
12. The Contractor shall be responsible for any damage to frames and grates during and from the time of removal from the existing structure to and during the time of resetting, and shall replace in kind any damaged frames or grates at no additional compensation.
13. All trenches will be covered and debris, including any rejected materials, shall be removed daily. Strict safety precautions shall be maintained at all times.
14. Location of utilities shown on the plans are approximate.
    a) the Contractor shall, 48 hours prior to construction, notify the utility companies and have all utilities in the vicinity of the construction marked in the field.
    b) after the utilities have been located and prior to construction, the Contractor with the Engineer, shall layout the proposed drainage system in the field and rectify any utility conflicts which may be found.
    c) Any conflicts with utilities found during construction by the Contractor shall be immediately brought to the attention of the Engineer and the Utility Company and properly rectified.
    d) The Contractor is responsible for the cost of repair for any utilities damaged during construction. The Contractor shall contact the Utility Company to repair any damages, however, the Contractor may make appropriate repairs with the Utility Company's permission.
15. Complete shop drawings for pipe, manholes, catch basins, frames, grates and covers shall be submitted in triplicate for approval by the Engineer prior to the start of construction. Each shop drawing shall be checked and initialized by the Contractor to indicate approval before it is submitted to the Engineer.
16. Shop drawings for flat concrete covers shall be stamped prior to submission for approval by a New Hampshire Registered Professional Engineer.
17. Brick masonry for setting frames and brick and mortar plugs shall conform to the Standard Specification Section 604.2.4.

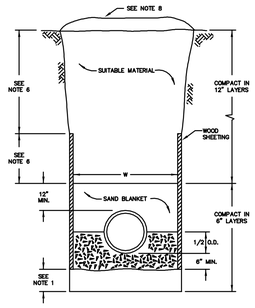
STANDARD TRENCH SECTION



LEDGE CONSTRUCTION



EARTH CONSTRUCTION



EARTH CONSTRUCTION WITH SHEETING

NOTES:

1.) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. SEE ALSO NOTE 7.

2.) BEDDING : SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90 – 100% PASSING	3/4 INCH SCREEN
20 – 55% PASSING	3/8 INCH SCREEN
0 – 10% PASSING	#4 SIEVE
0 – 5% PASSING	#8 SIEVE

– CRUSHED STONE 1/2 INCH – 1 1/2 INCH MAY BE USED INSTEAD OF SCREENED GRAVEL WHERE ALLOWED BY THE ENGINEER.

3.) SAND BLANKET : CLEAN SAND FREE FROM ORGANIC MATTER SO GRADED THAT 90–100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE.

4.) SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALK-WAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY, WILL BE PRESERVED.

5.) BASE COURSE , IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS, (D.O.T.).

6.) WOOD SHEETING , IF REQUIRED. WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

7.) W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

8.) FOR CROSS COUNTRY CONSTRUCTION , BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

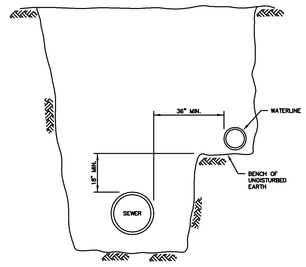
9.) CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000#) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:

CEMENT: 6.0 BAGS PER CUBIC YARD
WATER : 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH

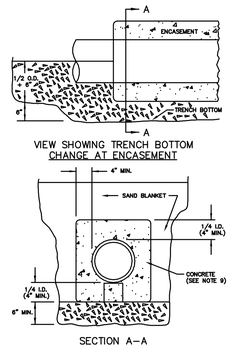
10.) NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION (NH DES) DESIGN STANDARDS REQUIRE 10 FT. SEPARATION. HOWEVER, SHOULD CONSTRUCTION OPERATIONS REVEAL OR EXPOSE A WATERLINE (MAIN OR SERVICE) RUNNING APPROXIMATELY PARALLEL AND LESS THAN 10 FT. HORIZONTAL FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICABLE TO RELOCATE THE SEWER, THE FOLLOWING METHODS OF PROTECTION MUST BE EMPLOYED.

A. IF THE WATERLINE CAN BE KEPT AT LEAST 18 INCHES ABOVE AND 3 FEET TO ONE SIDE OF THE SEWER, AS SHOWN AND SUPPORTED ON A BENCH OF ORIGINAL SOIL, NO OTHER PROTECTION IS REQUIRED.

11.) IF FULL CASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.



WATER AND SEWER IN SAME TRENCH

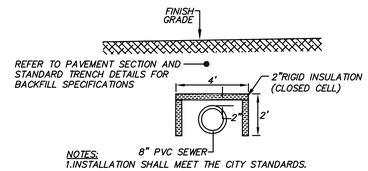


VIEW SHOWING TRENCH BOTTOM CHANGE AT ENCASEMENT

SECTION A–A

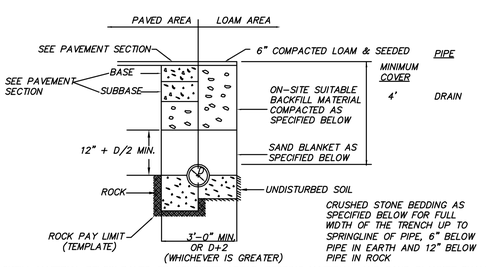
CONCRETE FULL ENCASEMENT

(SEE NOTE 11)



SEWER INSULATION DETAIL

NOT TO SCALE



BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET & BEDDING		3/4" CRUSHED STONE BEDDING	
SIEVE SIZE	% FINER BY WEIGHT	SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100	1"	100
200	0 – 15	3/4"	90 – 100
(FOR WATER MAIN BEDDING)		1/2"	20 – 50
		3/8"	0 – 20
		# 4	0 – 5

DRAINAGE TRENCH

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
4	AOT COMMENTS 6-17-19	SJH	6-17-19
3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

DATE: 2-21-19
SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

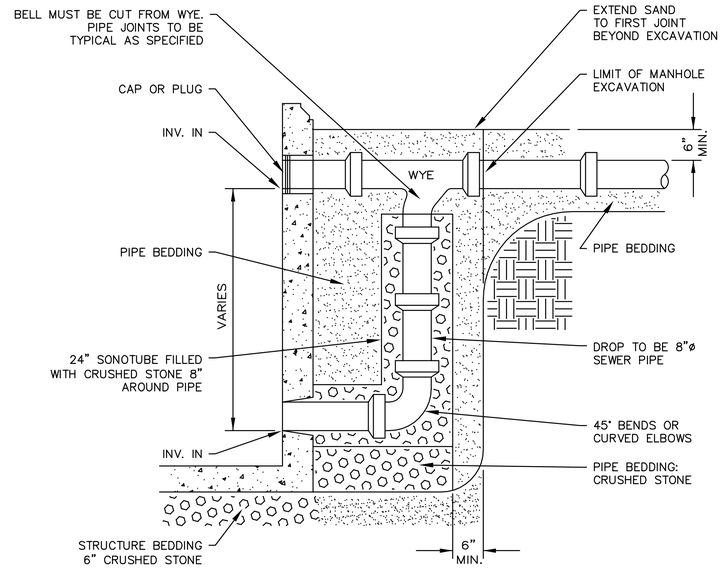
CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

DETAILS

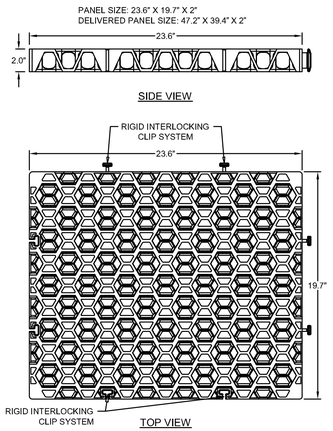
16



OUTSIDE DROP

NOT TO SCALE

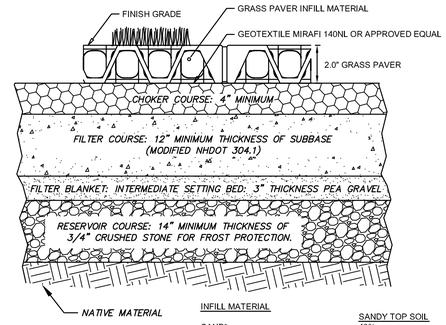
NOTE:
DIMENSIONS AND CONSTRUCTION OF DROP MANHOLE TO BE SIMILAR TO TYPICAL MANHOLE EXCEPT AS SHOWN



NOTE:
GRASS PAVERS SHALL BE ACF GRASS CELL, MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL

SPECIFICATIONS

WIDTH	19.7"
LENGTH	23.6"
HEIGHT	2.0"
AREA PER UNIT	3.23 SF
UNIT WEIGHT	1.24 LBS/SF
SURFACE OPEN AREA	>90%
INTERNAL VOID AREA	>95%
BASE MATERIAL	100% RECYCLED POLYPROPYLENE
BIOLOGICAL & CHEMICAL RESISTANCE	UNAFFECTED BY MOLD, ALGAE, SOIL BORN CHEMICALS, BACTERIA, AND BITUMEN
SERVICE TEMPERATURE	-14 TO 185 °F
COMPRESSIVE STRENGTH (UNFILLED)	320.02 PSI
COMPRESSIVE STRENGTH (FILLED)	6,351.70 PSI



INFILL MATERIAL

	SANDY TOP SOIL
SAND*	40%
(MIXED TO THE GRADATION BELOW)	
COURSE >1 mm	20%
MEDIUM 0.25 - 1.0 mm	60%
VERY FINE <0.15 mm	20% MAX
TOPSOIL	50%
DECOMPOSED BARK MULCH	10%

THE BREAKDOWN SHOWN FOR SAND CAN OFTEN BE ACHIEVED WITH CONCRETE SAND.

GRASS PAVER DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

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Dover, New Hampshire 03820
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5	REVISED PER TRC COMMENTS	SJH	1-28-20
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3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

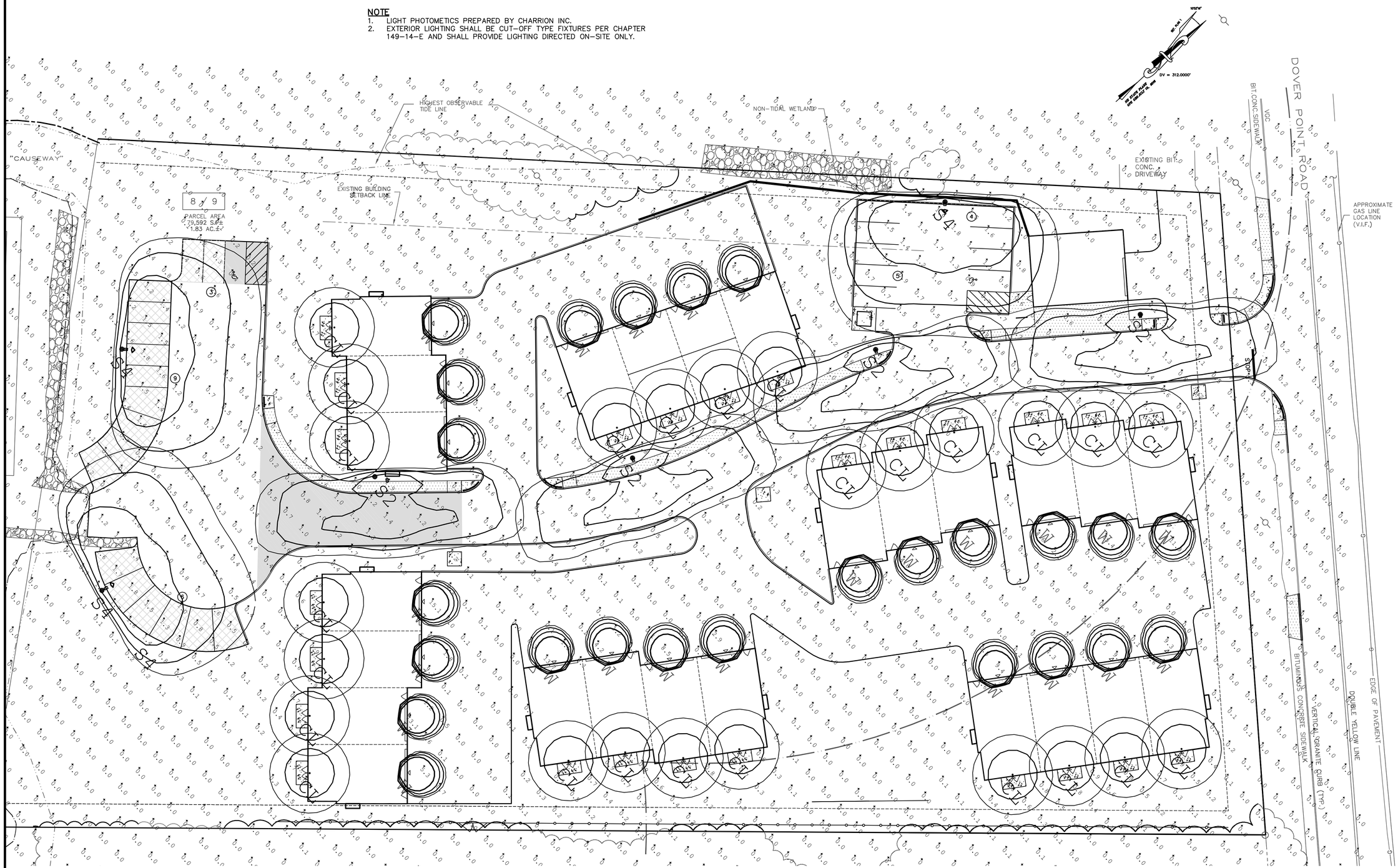
DATE: 2-21-19
SCALE: AS NOTED
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

DETAILS

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

NOTE
1. LIGHT PHOTOMETICS PREPARED BY CHARRION INC.
2. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.



Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
⊙	25	CL	SINGLE	SLD606830WH/ MOUNTED TO DECK CEILING
▭	4	S2	SINGLE	GLEON-AF-01-LED-E1-SL2-600-HSS/ SSS4A20SFN1 (20' AFG)
▭	3	S4	SINGLE	GLEON-AF-01-LED-E1-SL4-HSS/ SSS4A20SFN1 (20' AFG)
⊙	25	W	SINGLE	24502 WALL MTD 10' AFG

StatArea_1
CLUB HOUSE PARKING LOT
Illuminance (Fc)
Average = 1.04
Maximum = 1.9
Minimum = 0.4
Avg/Min Ratio = 2.60
Max/Min Ratio = 4.75

StatArea_2
ROADWAY
Illuminance (Fc)
Average = 0.98
Maximum = 1.5
Minimum = 0.5
Avg/Min Ratio = 1.96
Max/Min Ratio = 3.00

StatArea_3
STALL AND PARKING AT END OF ROAD
Illuminance (Fc)
Average = 0.77
Maximum = 1.8
Minimum = 0.2
Avg/Min Ratio = 3.85
Max/Min Ratio = 9.00

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

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1	AOT SUBMISSION	SJH	1-22-19

DATE: 2-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

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LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

LIGHTING PLAN

18

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

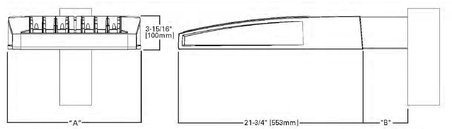
Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8" Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

DIMENSIONS



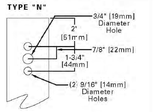
DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm ft²(sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: **1.** Optional arm length to be used when mounting two fixtures at 90° on a single pole. **2.** EPA calculated with optional arm length.

DRILLING PATTERN

TYPE "N"





GLEON
GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology CLICK HERE

CERTIFICATION DATA
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

*www.designlights.org

HALO

DESCRIPTION

The Halo Surface Mount LED Downlight (SMD) is a low profile surface mounting luminaire with a modern look and high performance. SMD6 (6") is designed for installation in many 3-1/2" and 4" square, octagon, or round junction boxes. Supply wire adapter with LED quick wiring connector included. The SMD6 may also retrofit in 5" and 6" aperture IC and Non-IC recessed housings.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

HOUSING
- Non-electrically conductive polycarbonate frame.
- High impact diffuse polystyrene lens provides shielding to the light guide with no pixilation
- Stamped aluminum housing provides thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications

GASKETS
- Closed cell gasket achieves restrictive airflow and wet location requirements without additional caulking

OPTICS
- Precision acrylic light guide organizes source flux into wide distribution with 1.2 – 1.4 spacing criteria useful for general area illumination

LED
- Mid power LED array provide a uniform source with high efficiency and long life.
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 3 SDCM provide color accuracy and uniformity

DRIVER
SMD 120V
- Integral 120V 50/60Hz constant current driver provides noise free operation.
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers.
- Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect and E26 adapter (provided) provides mains connections.

SMD 120-277V
- Integrated 120-277V 60Hz constant current driver provides noise free operation.
- SMD Universal Voltage (120-277V) configurations are recommended for use with compatible 0-10V DC low voltage dimmers only.

MOUNTING/RETENTION
- Adjustable spider plate allows for quick installation into both junction boxes and recessed housings.
- Torsion springs and friction blades included

ELECTRICAL JUNCTION BOX MOUNTING
- The SMD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation.
- Suitable for installation in many 3-1/2" and 4" square, octagon, and round electrical junction boxes. **Note:** SMD120-277V UNV is **only** compatible with junction boxes that provide minimum depth of 2-1/8".
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building codes

RECESSED HOUSING MOUNTING
- May be installed in IC recessed housings in direct contact with insulation **Note:** Not for use in recessed housing in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013.

Torsion Spring 5" & 6"
- Precision formed torsion spring bracket kit included
- The torsion springs adjust on the mounting plate to fit 5" or 6" compatible housings

Friction Blade 5" & 6"
- Precision formed friction blades included
- For retrofit in 5" and 6" housings without torsion springs mounting tabs.
- Friction blade design allows the SMD to be installed in any position within the housing aperture (360 degrees)

DESIGNER SKINS (SOLD SEPARATELY)
- SMD skins are accessory rings in both round and square. These skins attach to the SMD for a permanent finish. Refer to the SMD accessories specification sheet for details.
- Matte White (Paintable)
- Satin Nickel
- Tuscan Bronze

WARRANTY
- Five year limited warranty, consult website for details. www.eaton.com/lighting/legal

COMPLIANCE
- cULus Certified for use with Halo housings and for use with other's housings, see instruction sheet for conditions of acceptability.
- Wet and Damp Location listed, airtight per ASTM-E283
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- EMI/RFI emissions per FCC 47CFR Part 15B
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 andTM-21-11.
- Can be used for State of CaliforniaTitle 24 high efficacy luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings.
- Can be used for International Energy Conservation Code (IECC) and high efficiency luminaire compliance
- ENERGY STAR® listed, reference database for current listings





SMD6 Series

6 inch Round and Square

SMD6R
SMD6S

6" Surface Mount Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 5" and 6" recessed housing retrofit

Non-conductive Dead Front

90 CRI Nominal CRI — 2700K, 3000K, 3500K, 4000K, 5000K

Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JAE.

Note: For Direct mount product please refer to the SLD6-DM spec sheet.

Steel Poles



SSS SQUARE
STRAIGHT STEEL

Catalog #		Type
Project		
Comments		Date
Prepared by		

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on 5" and 6" pole; and 2" x 4" on 4" pole
- 10'-39' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. Learn more.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

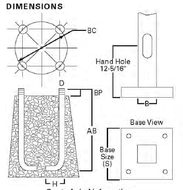
ORDERING INFORMATION

SAMPLE NUMBER: SSA5A20SFM1XG

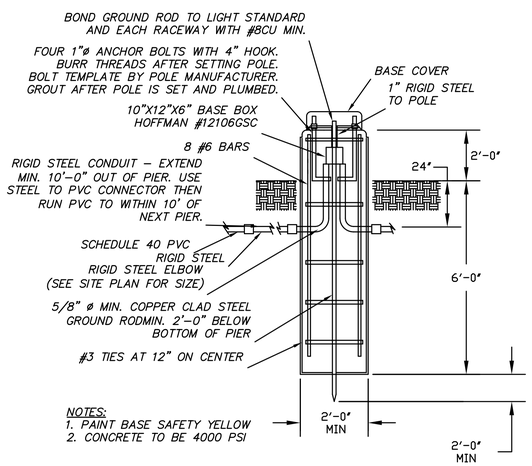
Product Family	Shaft Size (Inches)[1]	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
SSS=Square Straight Steel	4=4" 5=5" 6=6"	A=0.20" M=0.188" X=0.250"	10=10' 15=15' 20=20' 25=25' 30=30' 35=35' 39=39'	S=Square Steel Base	F=Dark Bronze G=Galvanized Steel J=Summit White K=Carbon Bronze L=Dark Platinum R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 9=3" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling C=Type C Drilling E=Type E Drilling F=Type F Drilling G=Type G Drilling J=Type J Drilling K=Type K Drilling M=Type M Drilling N=Type N Drilling R=Type R Drilling S=Standard Upsweep Arm Z=Type Z Drilling	1=Single 2=2 at 180° 3=Triple[2] 4=4 at 90° 5=2 at 90° X=None	X=None 2=2' 2=2.5' 4=4' 8=8'	A=1/2" Tapped Hub[3] B=3/4" Tapped Hub[3] C=Convenience Outlet[4] E=CFCI Convenience Outlet[4] G=Ground Lug H=Additional Hand Hole[5] V=Vibration Dampener

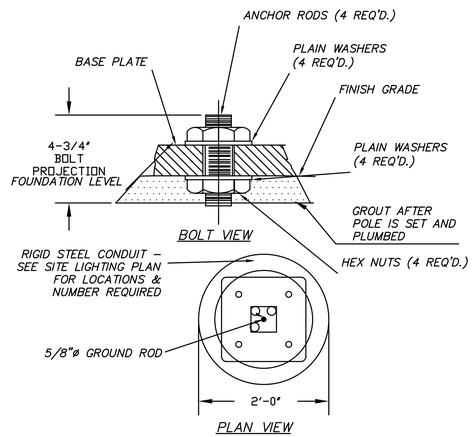
NOTES: 1. All shaft sizes nominal. **2.** Square poles are 3 at 90°, round poles are 3 at 120°. **3.** Tapped Hub is located 5" below the pole top and on the same side of pole as hand hole, unless specified otherwise. **4.** Outlet is located 4" above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. **5.** Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



See technical information.





LIGHT POLE BASE

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19–04A

NO.	REVISION	APP'D	DATE
1	AOT SUBMISSION	S.JH	1–22–19
2	TRC COMMENTS	S.JH	4–4–19
3	AOT COMMENTS 3–14–19	S.JH	5–1–19
4	REVISED SITE PLAN	S.JH	12–30–19
5	REVISED PER TRC COMMENTS	S.JH	1–28–20

DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:S.JH
PROJECT NO: 1788
FILE: SITE.DWG

DATE: 2–21–19
SCALE: AS NOTED

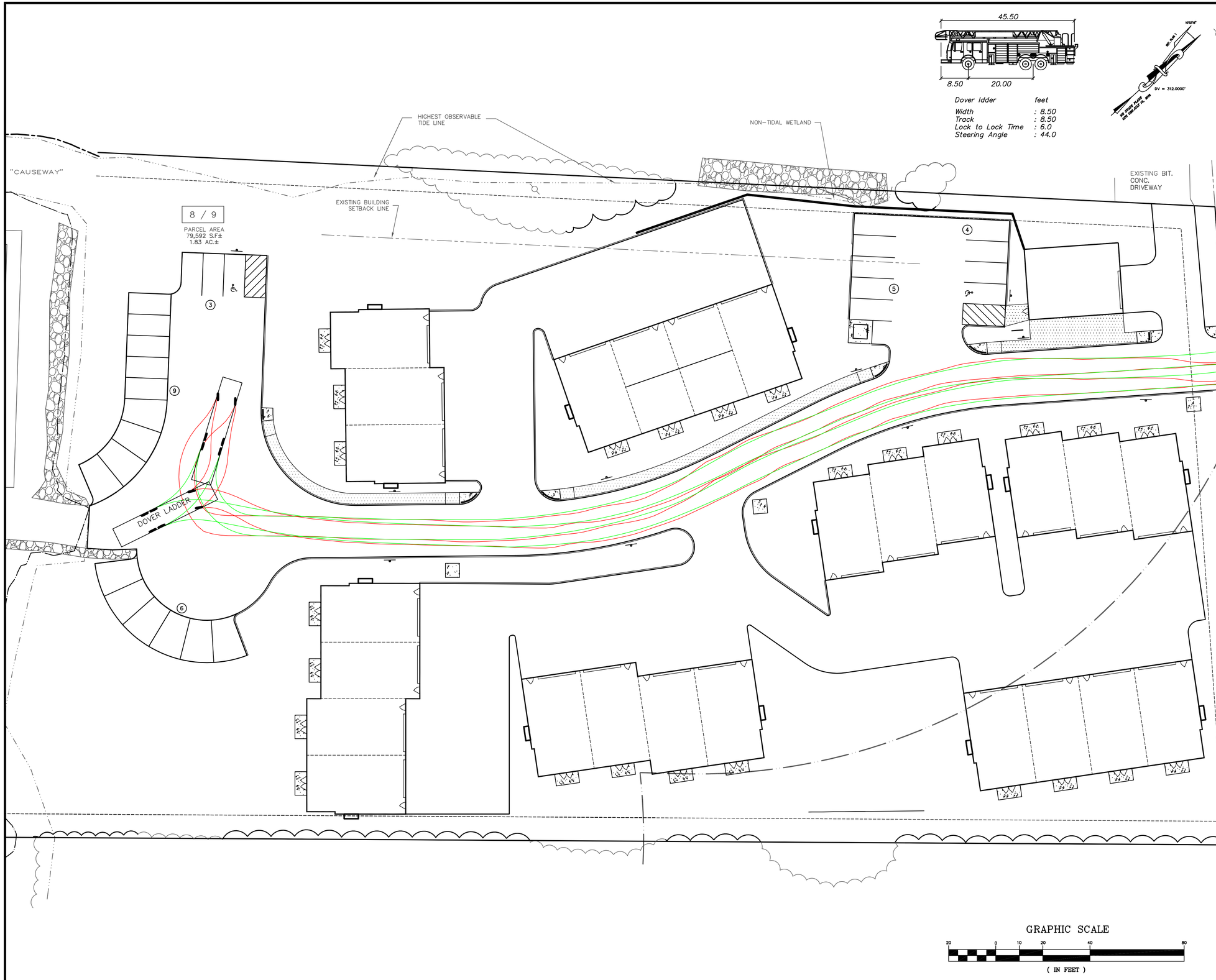
CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

DETAILS

19



NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P19-04A

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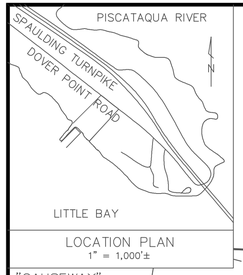
NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
4	REVISED SITE PLAN	SJH	12-30-19
3	AOT COMMENTS 3-14-19	SJH	5-1-19
2	TRC COMMENTS	SJH	4-4-19
1	AOT SUBMISSION	SJH	1-22-19

DATE: 2-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

DOVER LADDER TRUCK MOVEMENT PLAN

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301



LOCATION PLAN
1" = 1,000'±

SOIL IDENTIFICATION LEGEND

SYMBOL	SOIL TAXONOMIC NAME	HYDROLOGIC SOIL GROUP
100	UDORTHENTS WET SUBSTRATUM	D
38	ELDRIDGE	C
943	ELDRIDGE VARIANT	C
546	WALPOLE	C

8 / 38D
JOHN ANASTAS
GLORIA ESPOSITO-ANASTAS
419A DOVER POINT ROAD
DOVER, NH 03820
2567 / 760

8 / 9
PARCEL AREA
79,592 S.F.±
1.83 AC.±

100/943A

546A

100/38A

38A

"CAUSEWAY"

HIGHEST OBSERVABLE TIDE LINE

100' TIDE BUFFER (CITY OF DOVER JURISDICTIONAL SETBACK)

NON-TIDAL WETLAND

HEADWALL "B"

50' SWQPA

150' SWQPA

250' SWQPA

OHU

UP W/GUY

GAS

METER

ELEC. METER

CULVERT "C"

GRAVEL DRIVE

IRON ROD W/ CIVILWORKS CAP FOUND

EXISTING BIT. CONC. DRIVEWAY

BIT.CONC.SIDEWALK

VGC

DOVER POINT ROAD

SMH "1"

CB "D"

APPROXIMATE GAS LINE LOCATION (V.I.F.)

MARINA GARAGE / WORKSHOP

APARTMENT ABOVE MARINA SALES & STORE

GRAVEL DRIVE AND PARKING AREA

PAD FUEL PUMP CONCRETE

CONCRETE PAD FUEL TANK COVER NH DES UNDERGROUND STORAGE TANK SITE NUMBER 199902013

NON-TIDAL WETLAND

APPROXIMATE WATERLINE LOCATION (V.I.F.)

A/C

G

E

HOUSE #425

GARAGE

IRON ROD FOUND

8 / 12
PARCEL AREA
35,046 S.F.±
0.80 AC.±

CB "E"

BITUMINOUS CONCRETE SIDEWALK

VERTICAL GRANITE CURB (TYP.)

DOUBLE YELLOW LINE

EDGE OF PAVEMENT

APPROXIMATE SEWER LINE LOCATION (V.I.F.)

IRON ROD W/ CIVILWORKS CAP FOUND

SMH "2"

8 / 10
LITTLE BAY MARINA & DEVELOPMENT, LLC
111 LOUDON ROAD
CONCORD, NH 03301
4473 / 288

IRON ROD IN CONCRETE MONUMENT FOUND

POOL

DECK

HOUSE

GAS METER

GARAGE

SHED

COTTAGE

PROPANE TANK

ELEC. METER

8 / 11
PARCEL AREA
20,592 S.F.±
0.47 AC.±

8 / 13A-1
JOHN F. NEWWICK REVOCABLE TRUST 2001
JOHN F NEWICK, TRUSTEE
431 DOVER POINT ROAD
DOVER, NH 03820
2472 / 010

IRON AXLE FOUND

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

GENERAL NOTE:
1. WETLANDS WERE DELINEATED BY LUKE HURLEY, CERTIFIED WETLAND SCIENTIST#232 GOVE ENVIRONMENTALSERVICES, INC. ON JUNE 7. 2018

*THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE SITE SPECIFICMAPPING STANDARDS FOR NH & VT, SSSNNE SPECIAL PUBLICATION NO. 3

PREPARED BY LUKE HURLEY, CSS #95, CWS #232

STATE OF NEW HAMPSHIRE LUKE D. HURLEY No. 095 5/31/19 CERTIFIED SOIL SCIENTIST

STATE OF NEW HAMPSHIRE LUKE HURLEY 5/31/19 No. 232 CERTIFIED WETLAND SCIENTIST

LUKE HURLEY CSS #95, CWS #232

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PLANNING FILE NO.: P19-04A

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

NO.	REVISION	APP'D	DATE
5	REVISED PER TRC COMMENTS	SJH	1-28-20
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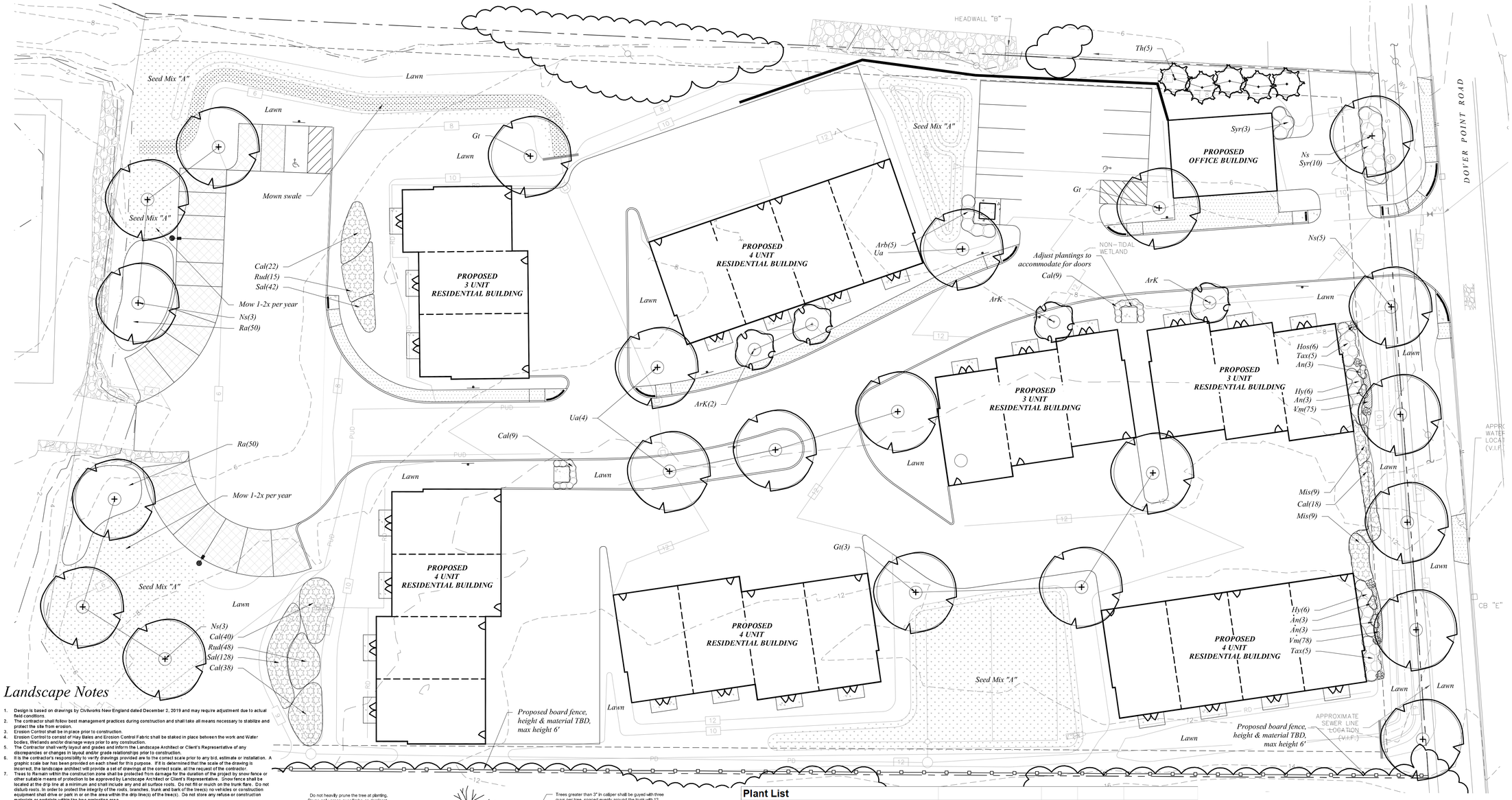
DATE: 1-21-19
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:1788
FILE: SITE.DWG

SITE SPECIFIC SOILS PLAN

LITTLE BAY MARINA & DEVELOPMENT, LLC
197 LOUDON ROAD, SUITE 350
CONCORD, NH 03301

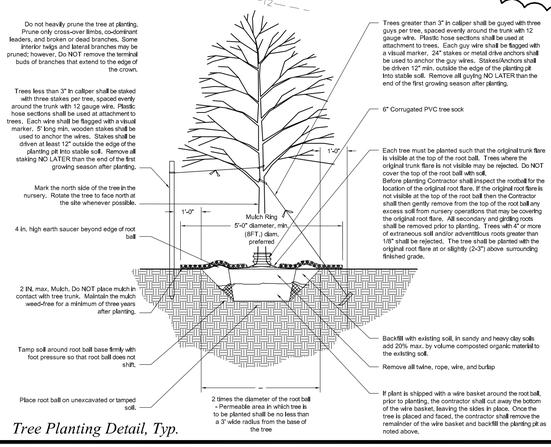
LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

SS-1



Landscape Notes

1. Design is based on drawings by Civilworks New England dated December 2, 2019 and may require adjustment due to actual field conditions.
2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
3. Erosion Control shall be in place prior to construction.
4. Erosion Control to consist of Hay Bales and Erosion Control Fabric shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
5. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
6. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.
7. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
8. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
9. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
10. The Contractor shall procure any required permits prior to construction.
11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to: unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.
13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. In the American Standard of Nursery Stock. American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
15. All plants shall be legibly tagged with proper botanical name.
16. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
19. All landscaping shall be provided with either of the following
    a. An underground sprinkling system
    b. An outside hose attachment within 150 feet
20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.
21. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, and watering of plants. Plants shall be appropriately watered prior to, during and after planting. It is the contractor's responsibility to provide water from off site, should it not be available on site.
22. All disturbed areas will be dressed with 6" of loosoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
23. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.
24. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
25. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy.
26. Snow shall be stored a minimum of 5' from shrubs and trunks of trees.
27. Landscape Architect is not responsible for the means and methods of the contractor.



Tree Planting Detail, Typ.

Plant List

TREES

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
ArK	*Acer rubrum 'Karpick'*	Red Maple	4	3.5-4" Cal	B&B
Gt	*Gleditsia tricanthos var. inermis 'Halka'*	Halka Thornless Honeylocust	5	3.5-4" Cal	B&B
Ns	*Nyssa sylvatica*	Black Tupelo	12	3.5-4" Cal	B&B
Th	*Thuja plicata 'Atrovirens'*	Atrovirens Arborvitae	5	8-10' Ht.	B&B
Ua	*Ulmus americana 'Princeton'*	Princeton American Elm	5	3.5-4" Cal	B&B

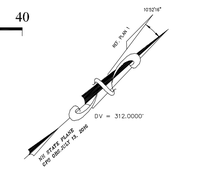
SHRUBS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Arb	*Thuja occidentalis 'Techny'*	Techny Arborvitae	5	6-7' Ht	B&B
Hy	*Hydrangea arborescens 'Incrediball'*	Incrediball Hydrangea	12	5 gal	
Ra	*Rhus aromatica 'Grow-Low'*	Grow Low Sumac	100	3 gal	plant 24" o.c.
Syr	*Syringa meyeri 'Palibin'*	Dwarf Korean Lilac	13	2-3' Ht	B&B
Tax	*Taxus media 'Greenwave'*	Greenwave Yew	10	5 gal	

PERENNIALS, GROUNDCOVERS, VINES and ANNUALS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
An	*Anemone 'Honorine Jobert'*	Windflower	12	1 gal	
Cal	*Calamagrostis acutifolia 'Karl Foerster'*	Feather Reed Grass	136	1 gal	3' O.C.
Hos	*Hosta 'Sum and Substance'*	Sum and Substance Hosta	6	1 gal	
Mis	*Miscanthus sinensis 'purpurascens'*	Maiden Grass	18	2 gal	42" O.C.
Rud	*Rudbeckia fulgida 'Goldsturm'*	Black-Eyed Susan	63	1 gal	24" O.C.
Sal	*Salvia nemorosa 'Blue Hill'*	Dark Blue Salvia	170	1 gal	18" O.C.
Vm	*Vinca minor 'Bowles'*	Bowles Periwinkle	153	2.5" pots	

0 5 10 20 40



SEED MIX:
Seed Mix "A" - New England Wetland Plants, Inc.
New England Coastal Salt Tolerant Grass Mix

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILENO.: P18-___

CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road, P.O. Box 1166
Dover, New Hampshire 03820
(603) 749-0443

NO.	REVISION	APP'D	DATE
4	PLANTINGS ADDED AT SHORELINE	VM	01.17.2020
3	PER REVISED SITE PLAN	LF	12.12.2019
2	SEED MIXES	VM	5.1.2019
1	PER REVISED SITE PLAN	VM	2.21.2019
0	INITIAL SUBMISSION	VM	1.11.2019

DATE: 01-11-19
SCALE: 1"=20'
DRAWN BY: VM&LF
DESIGN BY: VM
APPROVED BY:RW
PROJECT NO:1788
FILE: SITE.DWG

LITTLE BAY MARINA & DEVELOPMENT, LLC
111 LOUDON ROAD
CONCORD, NH 03301

LITTLE BAY MARINA
DOVER POINT ROAD
DOVER, NH

LANDSCAPE PLAN

L-1

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN NATURAL CLAY (DARKER COLOR)

30+ YEAR ARCHITECTURAL SHINGLES BY CERTAINTEED, COLOR TO BE COLONIAL SLATE

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN HERRINGBONE (LIGHTER COLOR)

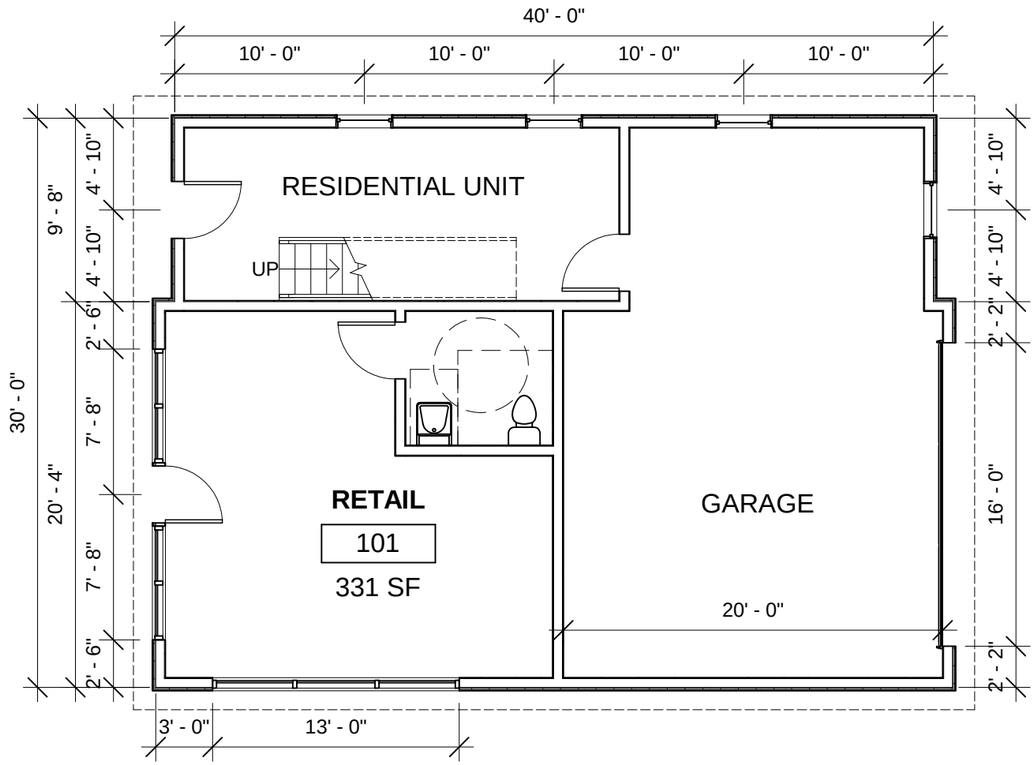
CLAD WINDOWS

WHITE AZEK TRIM



VIEW FROM DOVER POINT ROAD LOOKING SOUTH AT LITTLE BAY MARINA HOUSING

LITTLE BAY MARINA HOUSING DOVER, NEW HAMPSHIRE	STREETSCAPE	McHENRY ARCHITECTURE 4 Market Street Portsmouth, New Hampshire	01/29/2020 A-0



1 FIRST FLOOR PLAN RETAIL

1/8" = 1'-0"









30+ YEAR ARCHITECTURAL SHINGLES BY CERTAINTEED, COLOR TO BE COLONIAL SLATE

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN NATURAL CLAY (DARKER COLOR)

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN HERRINGBONE (LIGHTER COLOR)

WHITE AZEK TRIM

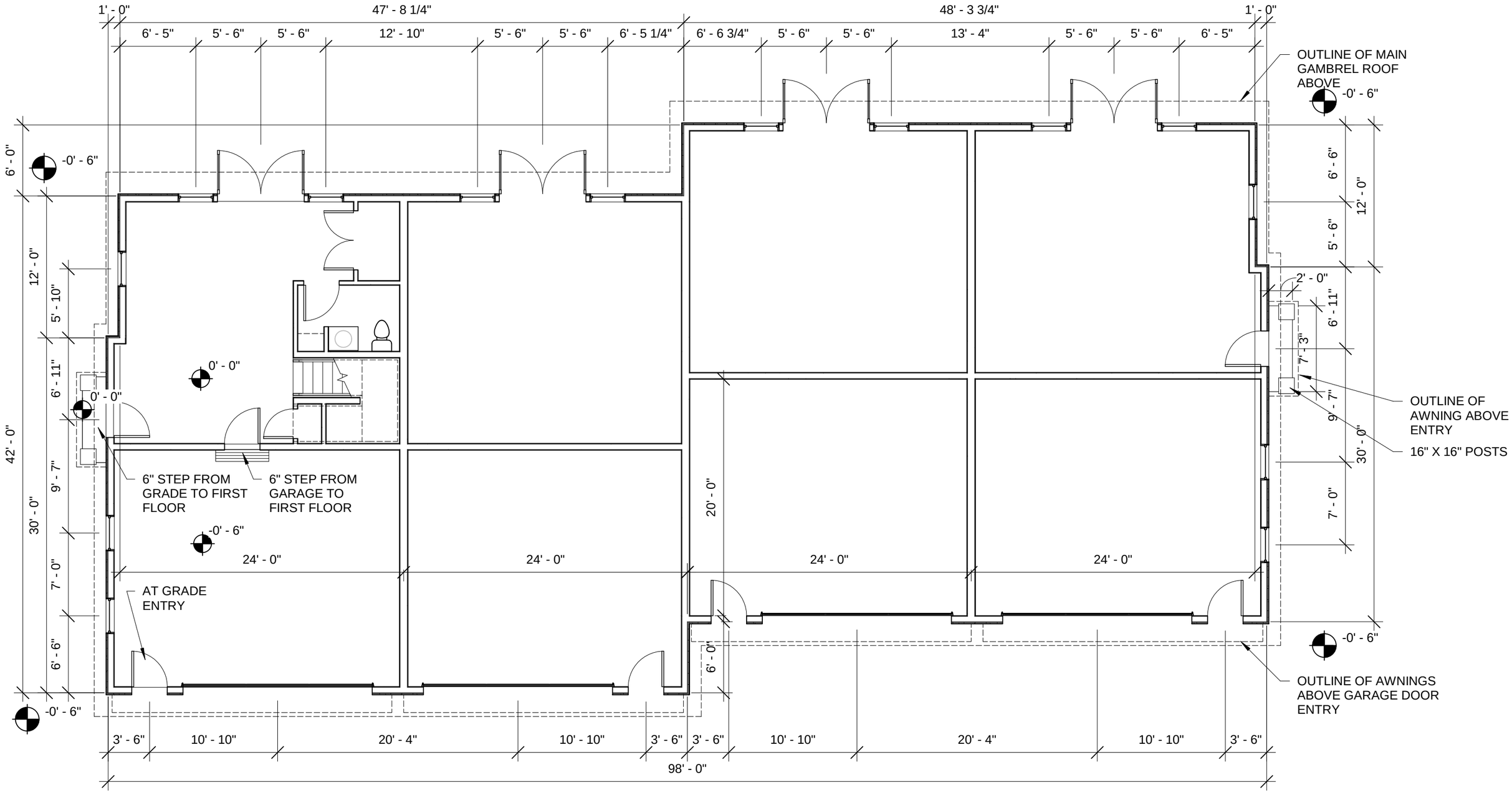
CLAD WINDOWS

LITTLE BAY MARINA HOUSING
DOVER, NEW HAMPSHIRE

RETAIL FLOOR PLAN AND BUILDING IMAGES

McHENRY ARCHITECTURE
4 Market Street
Portsmouth, New Hampshire

01/29/2020
1/8" = 1'-0"
A-1



TYPICAL FIRST FLOOR PLAN







STONE VENEER BY STONEYARD.COM, BOSTON BLEND IN ASHLAR

30+ YEAR ARCHITECTURAL SHINGLES BY CERTAINTEED, COLOR TO BE COLONIAL SLATE

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN NATURAL CLAY

CLAD WINDOWS

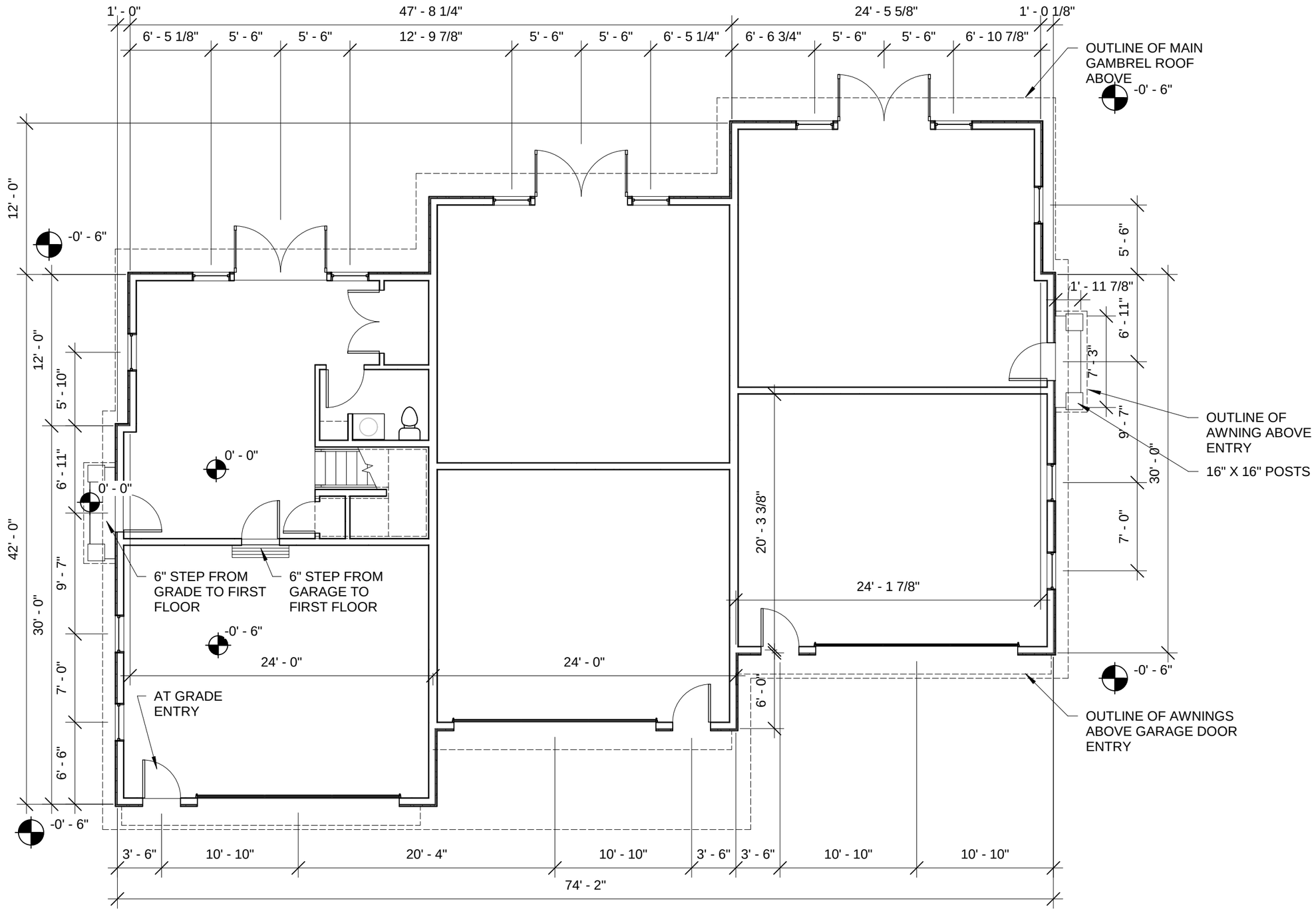
CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN HERRINGBONE

WROUGHT IRON GUARDRAILS

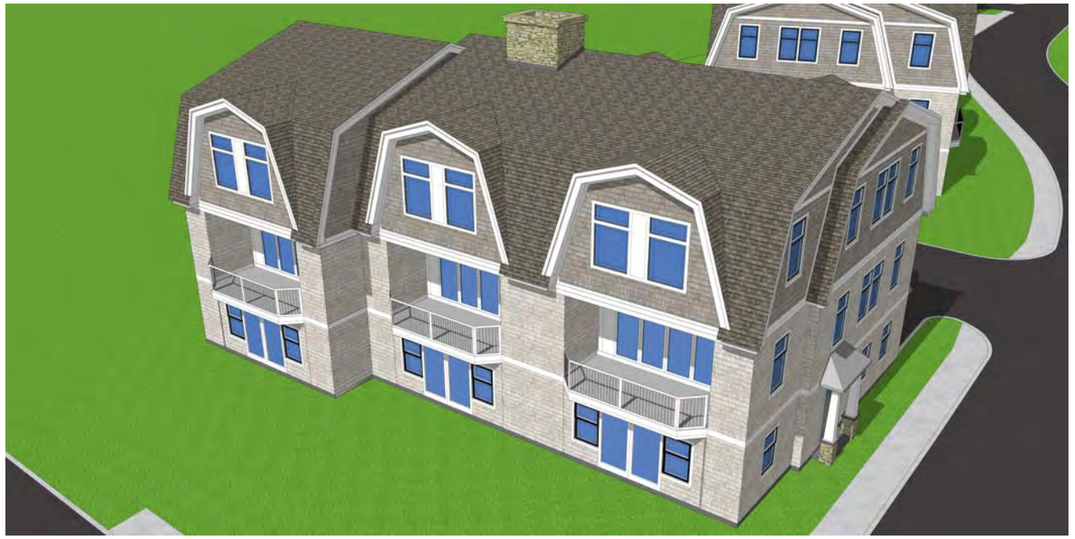
WHITE AZEK TRIM

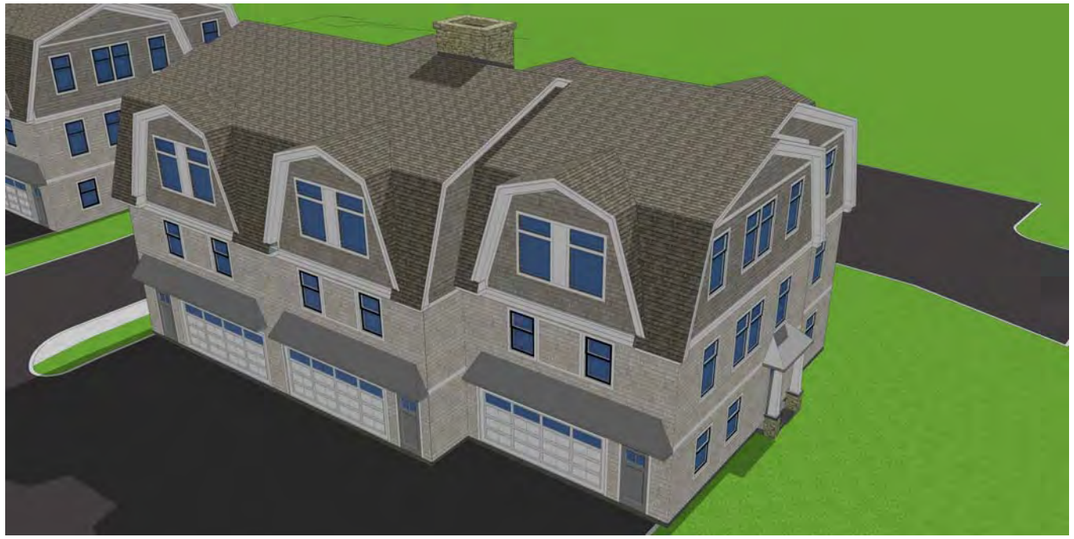


LITTLE BAY MARINA HOUSING DOVER, NEW HAMPSHIRE	4 UNIT TOWNHOUSE IMAGES	McHENRY ARCHITECTURE 4 Market Street Portsmouth, New Hampshire	01/29/2020 A-2.1



TYPICAL FIRST FLOOR PLAN







STONE VENEER BY STONEYARD.COM, BOSTON BLEND IN ASHLAR

30+ YEAR ARCHITECTURAL SHINGLES BY CERTAINTEED, COLOR TO BE COLONIAL SLATE

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN NATURAL CLAY

CLAD WINDOWS

CERTAINTEED CEDAR IMPRESSIONS SHINGLES SIDING IN HERRINGBONE

WROUGHT IRON GUARDRAILS

WHITE AZEK TRIM



LITTLE BAY MARINA HOUSING
DOVER, NEW HAMPSHIRE

3 UNIT TOWNHOUSE IMAGES

McHENRY ARCHITECTURE
4 Market Street
Portsmouth, New Hampshire

01/29/2020

A-3.1

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P19-80

Application Type: TDR Subdivision
Applicant(s): DRVP Developers LLC
Owner(s): DVRP Developers LLC
Location: Cataract Ave (Assessor's Map 14, Lot 10-G)
Meeting Date: February 25, 2020

INTENT: To subdivide one lot into 12 through TDR and build 10 new single family dwellings. A related CUP will appear before the Planning Board.

LOTS/UNITS PROPOSED: 12 lots, 10 units

AGENDA ITEM: # 4-E

ACREAGE: 5.25 acres

ZONING DISTRICT: R-12

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential and Bellamy River

ZBA ACTION: None

ATTACHMENTS:
- TDR Subdivision Application and Materials and TRC minutes from 01/16/2020

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by verified or first class mail to all abutters for this meeting

PERMITS REQUIRED:
- Conditional Use Permit
- NHDES Wetlands Permit
- NHDES Shoreland Permit
- EPA NOI
- NHDES Sewer Discharge Permit
- NHDES AOT

WAIVER REQUESTED: Road length (Section 157-33.J)

Summary of Request and Background
Per Chapter 170-27.2.G, the applicant is requesting that the Board vote on the plan indicating whether they would sell 1.5 units through Transfer of Development Rights which would mean 2 units are limited to no more than 1,400 s.f.. Should the Board find the request is in keeping with the intensity and density of the neighborhood, then it should grant the additional units.

The applicant is proposing to create 10 single family homes on individual lots. The lots will be serviced by public water and sewer and accessed via a private road.

Waiver Requests
The applicant requests a waiver from Section 157-33.J (formerly 155-33.J) for road width to be 380' instead of 500'.

Consistency with Land Use Regulations
Chapter 157-15 (formerly 155-15) of the Land Subdivision Regulations of the City Code provides for subdivisions of existing lots. Section 157-51 (formerly 155-51) allows the Board to grant waivers. Section 170.27.2 allows additional units to be purchased through Transfer of Development Rights.

STAFF RECOMMENDATION:
Waiver Request:
The Planning Department recommends that the Planning Board accept the application, open the public hearing, close the public hearing, and vote to approve the waiver with the following condition:

Condition to Be Met Prior to the Signing of the Plan:
1. A note shall be added to the subdivision plan that the waivers were granted for the reasons stated by the applicant and that the Board found the criteria of 157-22 (formerly 155-52) have been met.

TDR Subdivision Request
Staff finds that this application meets the intent of the Master Plan and is compatible with land uses on neighboring lots.

The Planning Department recommends that the Planning Board vote to approve the application of TDR to the Subdivision Plan with the following conditions:

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P19-80

Application Type: TDR Subdivision
Applicant(s): DRVP Developers LLC
Owner(s): DVRP Developers LLC
Location: Cataract Ave (Assessor's Map 14, Lot 10-G)
Meeting Date: February 25, 2020

Conditions to be Met Prior to Granting the TDR:

1. Payment of the TDR fee ($13,402)

Conditions to Be Met Prior to Signing of Plans:

1. The applicant shall provide a digital version of the plan to the Planning Department.
2. The applicant shall provide homeowners association documents to be reviewed and approved by the Assistant City Manager in consultation with the City's General Legal Counsel. Documentation shall include common space, roadway, perimeter screening, visitor parking, forcemain, stormwater infrastructure maintenance/operation, private roadway and conversion process, calculation used to determine reserve amount in the treasury, prior to converting ownership and maintenance obligations, including stormwater, open space, and roadway maintenance, and deed/easement requirements per Section 170.27.2.
3. Provide letter to serve from Eversource.
4. The applicant shall revise the plat to:
    a. Add the owners' signatures
    b. Add the Licensed Land Surveyor, Professional Engineer, Certified Wetland Scientist and Landscape Architect stamps and signatures
    c. Add permit numbers and dates to the permit status notes
    d. Add proposed intersection improvements as shown in traffic assessment.
    e. Revise construction note to indicate no Saturday hours.
    f. Encroaching shed shall be removed or agreement in place between two property owners
    g. Revise note 46 on sheet 8 to 3.5" caliper

Conditions to Be Met Prior to Any Construction Activity:

5. A site construction sign with the contact information for the general contractor must be located and approved by the City Engineer or Assistant City Manager.
6. Provide deed language to the Planning Department including regards to the specific restrictions set forth in 170-27.2.G.

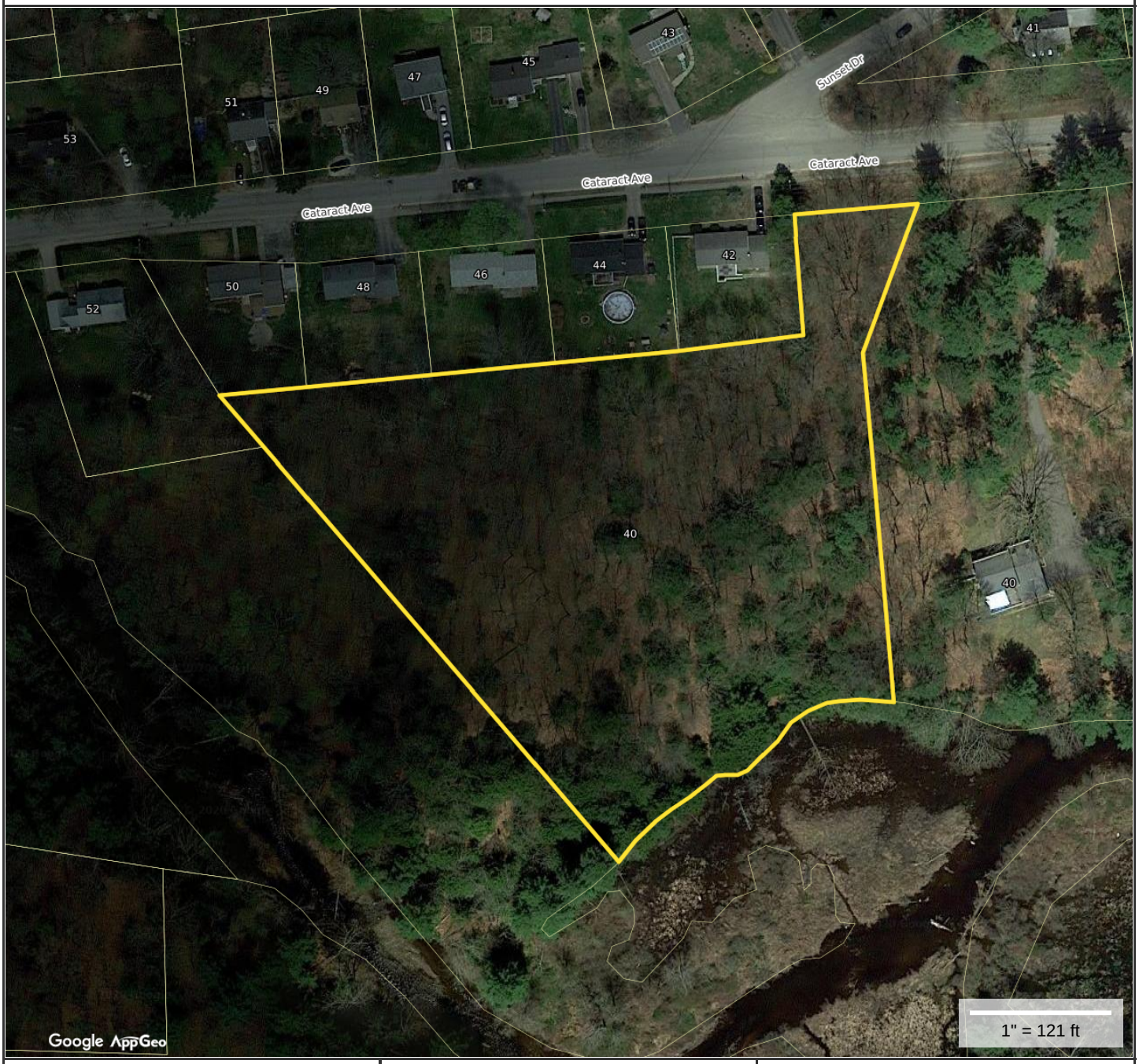
Conditions to Be Met Prior to Issuance of a Building Permit:

7. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.
8. Water and sewer investment fees shall be paid at the time of request of service.

Conditions to Be Met Prior to Occupancy:

9. Issuance of a Certificate of Occupancy.
10. Documentation that the HOA has been created and is in place.
11. Impact fees for any new unit ($8,895 per unit) shall be paid per the invoice provided with the Notice of Decision.
12. Intersection improvements at Cataract and Bellamy be implemented to the satisfaction of the Assistant City Manager and City Engineer.
13. Prior to the last Certificate of Occupancy being issued, the Engineer of Record shall meet with the Association and review the assaults for the project.

40A Cataract Avenue



Property Information

Property ID	14010-G00000
Location	40 A CATARACT AV
Owner	DRVP DEVELOPERS LLC
Land Use	131

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

City of Dover, New Hampshire
SUBDIVISION APPLICATION

[Revision Date: June 4, 2019]

RECEIVED
Planning Office
FEB 04 2020
Dover, New Hampshire

Office Use Only	Project #: P19-79	Date Received:
	Amount Paid:	Time Received:

APPLICANT AND OWNER INFORMATION

Name of Applicant: DRVP Developers LLC Telephone # 603-742-2121

Address of Applicant: 242 Central Ave, Dover, NH 03820

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

Address of Property Owner:

E-Mail Address: Dave@CentralFallsRealty.com

PROPERTY INFORMATION

Address of Property: Cataract Avenue

Assessor's Map # 14 Lot(s) # 10-G

Zoning District(s) Medium Density Residential District R12 Overlay District(s) Wetlands & Shoreland

Size of Parcel: +/- 5.25 Acres Property Deed: Book 4664 Page: 948

Existing Use of Property: Vacant lot

SUBDIVISION INFORMATION

Subdivision Type: Major (4 + net new lots): _____ Open Space: _____ TDR: x

Existing Number of Lots: 1 Proposed Number of Lots: 12

City Water? x Yes ___ No How far is city water from the property? Cataract Avenue

City Sewer? x Yes ___ No How far is city sewer from the property? Cataract Avenue

Highway Access (check where applicable): x City Street ____ State Highway

Estimated Length of Proposed Roads: 702' feet Public or Private Road? Private

Estimated value of construction: _____ Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Subdivision Regulations section(s) to be waived: Road length

Justification for waiver request(s) (*attach additional sheets as needed*): See attached

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Kenneth A Berry, PE, LLS
Christopher R. Berry
Berry Surveying & Engineering

Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 805 E-mail address: K.Berry@BerrySurveying.com
crberry@metrocast.net

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Kenneth A Berry, PE, LLS
Christopher R. Berry
Berry Surveying & Engineering

Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 14243 E-mail address: K.Berry@BerrySurveying.com
crberry@metrocast.net

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) Stoney Ridge Environmental

Address 229 Prospect Mountain Road Telephone #: 603-776-5825

Professional License #: CSS 84 E-mail address: cbalcius@stoneyridgeenv.com

CONSERVATION EASEMENT HOLDER

Name of Easement Holder: _____ Telephone #_____

Address Easement Holder: _____

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: 11/4/19

Signature of Applicant (*if different from owner*): _____ Date: 11/4/19

Signature of Agent: _____ Date: 11/4/19

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: 11/4/19

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

I, and my successors, hereby authorize the City of Dover and 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: 11/4/19

Signature of Applicant (*if different from owner*): _____ Date: 11/4/19

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: 11/4/19

Signature of Applicant (*if different from owner*): _____ Date: 11/4/19

CERTIFICATION OF PUBLIC ROADWAY ACCEPTANCE

I, and my successors, hereby certify that I understand that the acceptance of a roadway as a public road is an action of the City Council in its sole and complete discretion. In order for the City Council to consider accepting a road as public, it must be free of encumbrances. No roadway with private utility easements shall be accepted as a public road by the City unless the easements are expunged prior to the transfer of land to the City. License agreements for any and all private utilities within the right of way may be granted by the City upon acceptance of the unencumbered roadway consistent with applicable state law.

Signature of Property Owner: _____ Date: 11/4/19

Signature of Applicant (*if different from owner*): _____ Date: 11/4/19

PLANNING BOARD FEE SCHEDULE

(Revised May 14, 2019)

Below are the fees associated with plan review. Please complete the information below and provide payment with your application submittal. **Plan review fees shall be paid prior to technical review committee (TRC) being scheduled.** For plans not requiring TRC review, **fees are due 21 days prior** to the Planning Board meeting. Staff will coordinate abutter/notice fees, which will be invoiced and must be paid 28 hours before the Planning Board meeting for an application to be heard. Fees shall be paid by cash or check made payable to "City of Dover."

A. Plan Review Fees

1. Application fee for the following (SELECT ALL THAT APPLY):

☐ SUBDIVISION $150.00 x # 9 new lots created=	$1,350.00
☐ LOT LINE ADJUSTMENT $100.00 X # of lots involved=	$_____
☐ TRANSFER OF DEVELOPMENT RIGHTS Application fee $150.00=	$ 150.00
☐ SITE REVIEW – RESIDENTIAL $100.00 x # ____ per dwelling unit=	$_____
☐ SITE REVIEW – NON-RESIDENTIAL (not to exceed $10,000)	
o New construction $.15 sq. ft. x # _____ sq. ft.=	$_____
o Additions (new floor space) $.10 per sq. ft. x # _____sq. ft.=	$_____
☐ MOTEL/HOTEL $35.00 x # ___ per lodging unit=	$_____
☐ CHANGE OF USE (not to exceed $5,000)	
o Existing floor spaces $.10 per sq. ft. x # _____ sq. ft. =	$_____
☐ CONDITIONAL USE PERMIT $150.00 x # 1 per application=	$ 150.00
☐ GRAVEL PIT/ EXCAVATIONS	
o Application fee $50.00=	$_____
o Permit fee $75.00=	$_____
☐ EXTENSIONS OF/AMENDMENTS TO/WAIVERS FOR AN APPROVED PLAN $50.00 x # ____ per hour of review (3 hour minimum)=	$_____
☐ REQUEST FOR REZONING Application fee $150.00=	$_____
☐ DRIVEWAY WAIVER Application fee $100.00=	$_____
SUB TOTAL=	**$_____**

AND

2. IMPERVIOUS PAVED AREA (for new development or additions to existing parking lots (not to exceed $10,000) $.07 sq. ft. x # _____= $_____

TOTAL PLAN REVIEW FEE= $1,650.00

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 review the list and provide to this office the engineer, architect, licensed land surveyor (LLS), licensed landscape architect (LLA) and/or soil scientist whose professional seal appears on the plan with names and addresses for notices.

☐ Applicant & Owner, engineer, architect, LLS, LLA and/or soil scientist	
o Certified letters fee # _____ of x $8.00=	$_____
☐ Certified letters fee: # of abutters _____ X $8.00=	$_____
☐ First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00=	$_____
☐ Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00=	$_____
SUB TOTAL=	**$_____**

C. Foster's newspaper public notice fee **$ 80.00**

TOTAL NOTICE FEE= $80.00

The above amount must be paid 28 hours prior to the Planning Board meeting, to be heard.

City of Dover, New Hampshire
SUBDIVISION SUBMISSION CHECKLIST

[Revision Date: May 18, 2019]

This review checklist is intended to assist the applicant in the planning process of preparing a Subdivision 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.

The first step would be to appear before the Technical Review Committee, to apply, eight (8) folded copies of the site plan with scale of not less than 1"=50' or 1" =100' for larger site plans, need to be provided, along with payment of plan review fees.

Two weeks prior to Planning Board, three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and materials, including response to TRC comments, will be due. Abutter/Notice Fees will be invoiced and need to be paid 28 hours 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 subdivision requirements. Please refer to the Subdivision Regulations for full details.

APPLICANT: DRVP Developers LLC File Number: _____

PROJECT TITLE: Porch Light Development

PROPERTY LOCATION: 40A Cataract Avenue Tax Map: 14 Lot: 10-G

	Where/How Provided	Reviewed
1. Completed and signed Application form	Included in the submittal	
2. Plan Review Fees are provided	Included in the submittal	
3. Electronic copy of the surveyed plat layout	Included in the submittal	
4. Electronic copy of supplementary materials and application	Included in the submittal	
5. Traffic Impact Assessment and Analysis (Standard or Advanced)	Included in the submittal	
6. Waiver requests to the Subdivision Regulations, with written justification	Will be submitted when completed	
7. Conditional Use Permit applications	Included in the submittal	
8. Narrative describing yield plan and cost analysis	Included in the submittal	
9. Folded copies of subdivision plan w/scale of not less than 1"=50' or 1"=100' for larger subdivisions. Plans shall contain the following items as appropriate:	X	
Location map at appropriate scale	X	
Proposed subdivision name and title and Planning File #	X	
Date, north arrow and scale	X	
Names of all abutting property owners	X	
Name and address of owners and/or applicants	X	
Signature & stamp of NH licensed land surveyor and/or engineer	X	
Zoning District boundaries, including any special or overlay districts	X	
Location of Conservation District areas	X	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	X	
Location and widths of existing & proposed easements & right of ways	X	
Location and widths of existing and proposed sidewalks	X	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	X	
Existing and proposed lot areas in square feet	X	
Existing and proposed topographic information at two foot intervals	X	
Minimum building setbacks or build to lines on all lots	X	

	Explain How Provided	Reviewed
Existing and proposed buildings and structure locations	X	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	X	
Existing and proposed water lines and fire hydrants, including materials and capacity needed	X	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	X	
Existing and proposed septic system, including test pit locations and results and NHDES subdivision permit number	X	
Existing and proposed stormwater lines and facilities	X	
Existing and proposed streetlights	X	
Location of Flood Hazard Zone	X	
Location of all bodies of water and watercourses	X	
Location of wetlands and buffers	X	
Neighborhood plan with aerial underlay showing how project relates to abutting uses	X	
Existing natural features and/or significant vegetation on property	X	
Depict existing contours up to 100 ft. beyond project limits	X	
Soil types	X	
Map and lot numbers for existing and proposed lots as assigned by Tax Assessor	X	
Location of all land offered for dedication for public use or land to be held in common by property owners of the subdivision	X	
Location of all land offered for dedication for public use or land to be held in common by property owners of the subdivision	X	
Location, material and size of existing and proposed permanent monuments	X	
Existing railroad lines	N/A	
Note regarding solid waste disposal	X	
All applicable Dover Common Subdivision notes	X	
10. Construction Detail Sheets shall contain the following:	X	
Profiles showing existing & proposed elevations along the center lines of proposed streets & within 100' of intersections with existing streets	X	
Profiles showing the locations & a typical cross-section detail of streets	X	
Location of street trees, street lighting poles and street signs	X	
Location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants	X	
Location and size of all water, gas and other underground utilities	X	
11. Additional Information if appropriate	X	
Stormwater Management Plan depicting the existing and proposed storm drainage system and engineered drainage analysis	X	
Stormwater Management System Operation and Maintenance Plan	X	
Letter to Serve from Public and Private Utilities	N/A	
Erosion and Sedimentation Control Plan	X	
Perimeter Landscaping Plan	X	
Proposed restrictive covenants or homeowners association documents	Not yet completed	
Dates and permit numbers of all required state and federal permits	X	
If wetland buffer, indicate placards locations, as applicable	X	
Hydrogeologic study if located in Groundwater Protection Zone	N/A	
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required	X	

REVIEWED BY: _____ DATE_____ TRC DATE_____

City of Dover, New Hampshire
TRANSFER OF DEVELOPMENT RIGHTS APPLICATION

[Revision Date: August 16, 2018]

Office Use Only	Project #: P19-86	Date Received:
	Amount Paid:	Time Received:

APPLICANT AND OWNER INFORMATION

Name of Applicant: DRVP Developers LLC Telephone # 603-742-2121

Address of Applicant: 242 Central Ave, Dover, NH 03820

E-Mail Address: Dave@CentralFallsRealty.com

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

Address of Property Owner:

PROPERTY INFORMATION

Assessor's Map # 14 Lot(s) # 10-G

Address of Property: Cataract Avenue

Zoning District(s) Medium Density Residential District R12 Overlay District(s) Wetlands & Shoreland

Existing Use of Property: Vacant lot

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION

Type of TRANSFER OF DEVELOPMENT RIGHT REQUEST (Check All That Apply):

☒ Residential ☒ Residential (reduced size) ☐ Industrial | ☐ Purchase ☐ Land Preservation

Relief sought (Check All That Apply):

☐ Lot Size ☐ Frontage ☐ Setback ☒ Increase by 1.5 units

Describe Proposed Use or Activity that requires TDR; describe any impacts and document mitigation:

See attached project narrative

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NHDES Shoreland Permit, NHDES wetland Permit, NHDES sewer discharge permit

Name of Professional That Prepared TDR Plans: Kenneth A Berry, PE, LLS
Christopher R. Berry
Berry Surveying & Engineering

Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 14243 E-mail address: K.Berry@BerrySurveying.com
crberry@metrocast.net

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: Dad Pahi Date: 9/30/2019

Signature of Applicant (if different from owner): Dad Pahi Date: 9/30/2019

Signature of Agent: Date: 9/30/2019

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: Dad Pahi Date: 9/30/2019

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: May 18, 2017]

Office Use Only	Project #: P19-81	Date Received:
	Amount Paid:	Time Received:

APPLICANT AND OWNER INFORMATION

Name of Applicant: DRVP Developers LLC Telephone # 603-742-2121

Address of Applicant: 242 Central Ave, Dover, NH 03820

E-Mail Address: dave@centralfallsrealty.com

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

Address of Property Owner:

PROPERTY INFORMATION

Assessor's Map # 14 Lot(s) # 10-G

Address of Property: Cataract Ave.

Zoning District(s) R-12 Overlay District(s) Wetlands

Existing Use of Property: Vacant Land

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:

For work within the 50' wetland buffer

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: Shoreland Protection Permit & NHDES minimum expedited wetland permit

Name of Professional That Prepared Plans: Kenneth A. Berry, PE, LLS
Berry Surveying & Engineering

Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 14243 E-mail address: K.Berry@BerrySurveying.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: 9/30/2019

Signature of Applicant (if different from owner): _____ Date: 9/30/2019

Signature of Agent: _____ Date: 9/30/2019

AUTHORIZATION TO ENTER SUBJECT PROPERTY

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Signature of Property Owner: _____ Date: 9/30/2019

BERRY SURVEYING & ENGINEERING
335 Second Crown Point Road
Barrington, NH 03825
Phone: (603) 332-2863
Fax: (603) 335-4623
www.BerrySurveying.Com
crberry@metrocast.net

January 30, 2020

City of Dover
Attention: City Planner Donna Benton
288 Central Ave
Dover, NH 03820

Re: Proposed TDR development
DRVP Developers LLC
Cataract Ave.
Tax Map 14, Lot 10-G

Dear Mrs. Benton,

On behalf of our client DRVP Developers LLC. Berry Surveying & Engineering (BS&E) is submitting for TRC to discuss a proposed development at Cataract Avenue.

Background and General Narrative:

DRVP Developers LLC, owns the parcel known as 40A Cataract Avenue in Dover, NH (Tax Map 14, Lot 10-G). Berry Surveying & Engineering has conducted an on-site survey of the parcel which includes a topographic analysis as well as a wetlands analysis. Stoney Ridge Environmental was on site and delineated the wetlands. The lot is vacant with no existing buildings or structures and is fully wooded. The site abuts the Bellamy River.

The Proposal:

The applicant is utilizing the TDR regulations within the City of Dover zoning regulations to obtain 10 new single family homes. The proposal is to construct a 24' wide private roadway off Cataract Avenue in order to provide access to the single family homes. The roadway will be 700 feet long (380 feet to the neck of the cul-de-sac). A 5' wide raised sidewalk will also be constructed in order to provide pedestrian access from Cataract Avenue to the proposed road, known as Porch Light Drive.

As part of the design, an intensive drainage analysis was conducted in order to design a drainage system that will treat the generated runoff from the proposed development. The proposed roadway will be super elevated towards the sidewalk, where a series of catch basins

and drain lines will be to capture the runoff and divert it a rain garden to northerly side of the parcel. The cul-de-sac will be super elevated to the inside in order to divert all the runoff into a second rain garden that will be constructed within the center of the cul-de-sac. Both rain gardens will serve to capture and treat the generated runoff utilizing a layer of bio-media (a mix between loam, sand and natural material) and crushed stone. Once the runoff is filtered through the treatment layers, it will be diverted to a level spreader on the southerly side of the project. This proposed level spreader will disperse the runoff over a large area, so as not to cause erosion downhill of the proposed development.

The single family homes will be serviced by City water and sewer. The applicant is proposing to tap into the existing sewer and water in Cataract Avenue. There is an existing hydrant at the entrance of the proposed roadway that will be moved to the easterly side of the proposed road. In addition a second hydrant will be installed at the end of the cul-de-sac. The applicant will install a new sewer manhole in front of the proposed development on the existing 24" sewer main.

All necessary erosion and sediment control measures will be taken during the construction process. Mulch berm or silt soxx will be used to contain the sediment within the construction area and to prevent it from going onto abutting parcels or wetlands. A construction entrance will be installed at the beginning of the road to prevent sediment from being tracked out into Cataract Avenue during the construction process.

A unit density analysis was conducted in the surrounding area to determine the existing unit density and how it will relate to the proposed unit density. Several lots along Cataract Avenue and Sunset Drive were analyzed as part of this analysis (see the Figure 1 below for an outlined analysis area). The existing density was determined to be 3.2 units per acre (this was calculated by taking the number of units on each lot and dividing it by the lot size in acres). The unit density of the proposed development will be 1.9 units per acre.

In addition to having a lower unit density than the surrounding lots, the proposed development will also nearly meet setbacks within the R-12 zone. The R-12 zone has a front setback of 15-25, a side setback of 15 and rear setback of 30. While the proposed TDR setbacks will be 10' from the front (relief sought for the front setback), 10 from the side and 10 from the rear. However this design does not place structures any closer to abutting land owners then would be placed in a standard residential subdivision.

As part of the application process with the City, the applicant will also requesting a conditional use permit for disturbance within the 50' buffer. The proposed development will have 312 Sq.Ft. of wetland disturbance and 5,869 Sq.Ft. of buffer disturbance. All of this disturbance will be for the construction of the proposed road and relating grading through the buffer. The remaining area of road and proposed units will be pulled towards the center of the lot and away from the Bellamy River. There will be no other buffer disturbance on this project and

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all the proposed work will be conducted outside of the NHDES 150' shoreland buffer. Given the sensitivity of the site and its location, the applicant wanted to contain all work within a concentrated area and away from the adjacent river. The applicant will also be filing for a NHDES shoreland permit and a NHDES wetland permit. Copies of permits will be presented to the City when acquired.

Figure 1: Calculation zone for density analysis



Respectfully Submitted,
BERRY SURVEYING & ENGINEERING

James F. Hayden
Engineering Technician

Christopher R. Berry
Principal, President

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January 30, 2020

City of Dover
Attention: City Planner Donna Benton
288 Central Ave
Dover, NH 03820

Re: TRC Response
Proposed TDR development
DRVP Developers LLC
Cataract Ave.
Tax Map 14, Lot 10-G

Based on comments from the Technical Review Committee Notes, we respectfully submit the following comments and revisions. Our comments are in **bold**.

PLANNING COMMENTS

- TDR fees (1.5 units = $13,402)
  Applicant will pay the TDR fees.

- Water/sewer investment fees
  Applicant will pay the water & sewer investment fees.

- Impact fees (10x8,895 =$88,950)
  Applicant will pay the invest fees.

- Provide HOA documents (including note about this never becoming a public road)
  HOA documents will be provided to the City when completed. A note will be added stating this will never be a public road.

- Provide proposed deed language
  Proposed deed language will be provided when completed.

- Why limited common area instead of lot lines?
  Project has been converted from limited common areas to a standard TDR subdivision.

- Traffic Assessment doesn't include Bus info (worth noting new COAST run on 155)
  Traffic memo was updated to mention the new COAST stop on 155, to the

prior public transit section.

- Private street would be it's own lot
  A lot number has been added to the street. See subdivision sheet.

- Are steep slopes being created?
  This project does not propose disturbance within any steep slopes. Slopes between units will be graded at 2:1, 3:1 and 4:1 side slopes to limit disturbance.

- Provide Letter to Serve
  Letters to serve will be provided to the City when acquired. Berry Surveying and Engineering has reached out to utilities and Eversource.

- Provide O& M plans for:
  - Stormwater
  - Landscaping
  - Forcemain

  A stormwater operation and maintenance plan was included within the drainage binder for the original submittal. A landscaping operation and maintenance plan is included on sheet C-102. Operation maintenance plans for stormwater, landscaping and forcemain will also be included within the HOA documents.

- Condition of approval: Prior to the last CO being issued, the Engineer of Record shall meet with the Association and review the project.
  The Engineer of Record will meet with the association and review the project.

- Provide waiver requests
  Waiver request forms have been included in the submission.

- The HOA docs should include
  - Language about private roadway and conversion process
  - The calculation used to determine the reserve amount in the treasury
  - That prior to converting the ownership and maintenance obligations from the developer to the Association, the Engineer of Record shall meet with the Association and review maintenance obligations, including stormwater, open space and roadway maintenance

  HOA docs will include the above mentioned comments.

- Revise plan set to:
  - Add owner's signatures

    Owner's signatures will be added to the cover sheet of the final plan set.

  - Add professional signature and stamps

All professional stamps and signatures will be on the final plans.

- Revise locus map on sheet 7
  Locust map on sheet 7 has been revised to match sheet 5.

- Extend sidewalk to cul-de-sac
  Sidewalk has been extended to the cul-de-sac.

- Revise note 11 on sheet 5 to include that the roadway is private and per 155-48B there are no City services provided unless the roadway conforms with public road specifications and the Planning Board has reviewed and agreed to amend the approval to allow a public roadway.
  Note 11 on sheet 5 has been revised based on the above comment.

- Revise the Site Construction Sign note to indicate that it shall also indicate that the roadway is private and is intended to remain private with no City services performed on the roadway
  Note 19 on sheet 8 has been revised to reflect the above comment.

- No Saturday hours for site work
  The applicant would like to ask the Board to consider Saturday hours. We have left the note to include Saturday hours for Planning Board review.

- There is a shed encroachment, how are they addressing that?
  The applicant will reach out to the abutter regarding the encroachment.

- Revise set to Bellamy River, not reservoir
  The plans have been revised to read Bellamy River, not Bellamy Reservoir.

- Remove map and lot numbers unless assigned by Assessing Department
  Lot numbers are only on the subdivision sheets. Berry Surveying & Engineering is to verify lot numbers prior to recording.

- On sheet 5 switch LLS certification with Dover approval area.
  The Dover approval area has been moved to where the LLS certification was.

- Indicate length of cul-de-sac
  Length of cul-de-sac is indicated on the road stationing on sheet 8.

- Indicate tree calipers
  Note 46 has been added to sheet 8, stating the required caliper for all proposed trees.

- Show snow storage calculation
  Snow storage calculations is now show on sheet 8.

- Remove Dover Common notes references
  Dover common note references have been removed from sheet 8.

- Revise limited common area line to not include rain garden structure
  Lot lines have been adjusted to not include the rain garden.

ENGINEERING DEPARTMENT COMMENTS

- Separate sewer and water more
  Forcemain has been moved to provide more separation between water and sewer. There is a proposed separation of 10' between all gravity sewer lines and water main.

- Lights proposed?
  Note 39 is on the sheet 8 stating that each unit is to have a residential light. A light is proposed at the intersection of Cataract and Porch light and a light is proposed to be installed by the visitor parking.

- Taping sleeve?
  A tap and sleeve is proposed where the water main ties into the existing main in Cataract Avenue.

POLICE DEPARTMENT COMMENTS

- Change "No Parking Fire Lane" signs to "No Parking This Side" signs, adjust facing to be visible upon approach entering Porch Light Drive. Relocate 1 sign so that all are on left side, and add 1 sign near Cataract Ave intersection.
  "No parking fire lane signs" have been changed to "no parking this side signs" and have been moved based on the above comment.

- Add note regarding Visitor Parking area as subject to HOA rules pertaining to use and time limits
  Note 48 has been added to sheet 8 stating that visitor parking is subject to the HOA rules.

- Driveways as shown are 15' wide – too narrow for side-by-side parking but wider than needed for single vehicle
  Driveways have been widened to 20' to allow for two vehicles.

- Garages proposed?
  Note 47 has been added to sheet 8 stating that all units are to have garages.

- Provide off-site improvements to Cataract/Bellamy intersection to widen the two- lane queue for Cataract Ave
  A demonstration plan for possible improvements to the Cataract/Bellamy intersection improvements has been included with the traffic analysis.

FIRE/INSPECTION COMMENTS

- Provide sample structures with elevations for TDR units
  Sample structures with elevations will be provided to the Planning Board.

- Clarify tip downs at applicable driveway entrances
  Note 49 has been added to sheet 8 stating that there is to be a tip down at each driveway.

- Remove note 38 on sheet 8 if no units are getting a fire suppression system
  Note referencing fire suppression systems has been removed from sheet 8.

- Sheet 15 Utility plan: clarify underground utilities other than water and sewer
  Underground utilities are labeled with the notation "U.G.E." to clarify its location around the site.

- Clarify forced main waste water system
  The forcemain system is denoted with a "F.M." to differentiate it from the water system "W" and the gravity sewer system "S".

- Remove ADA exemption from note 47 on sheet 8
  The ADA exemption from note 47 on sheet 8 has been removed.

- Add "excavation" to note 19 on sheet 8
  "Excavation" has been added to note 19 on sheet 8.

ECONOMIC DEVELOPMENT COMMENTS

- Renderings of houses?
  Renderings of the houses will be provided by the applicant

- Garages?
  All units will have garages.

- Anticipated price ranges?
  Until projects are approved, construction budgets cannot be finalized.

PLANNING BOARD COMMENTS

No comments from planning board.

Respectfully Submitted,
BERRY SURVEYING & ENGINEERING

James F. Hayden
Project Engineer

Christopher R. Berry
Principal, President

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January 30, 2020

City of Dover
Attention: City Planner Donna Benton
288 Central Ave
Dover, NH 03820

Re: Proposed TDR development
DRVP Developers LLC
Cataract Ave.
Tax Map 14, Lot 10-G

Mr. Chairperson & Members of the Dover Planning Board:

In accordance with to the subdivision standards Article 155-51, the following waiver is hereby requested:

1. **Identification of Waiver Request**: Minimum roadway length of 500 (to the neck of the cul-de-sac) per Subdivision Regulation 155-33.J

- Proposed private road length of 380' to the neck of the cul-de-sac.

2. **Explanation:**

The applicant is utilizing the TDR regulations within the City of Dover zoning regulations to obtain 10 new single family homes. The proposal is to construct a 24' wide private roadway off Cataract Avenue in order to provide access to the single family homes. The roadway will be 700 feet long (380 feet to the neck of the cul-de-sac). A 5' wide raised sidewalk will also be constructed in order to provide pedestrian access from Cataract Avenue to the proposed road, known as Porch Light Drive.

3. **Waiver Justification**:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The proposed road length is 380 feet to the neck of the cul-de-sac. A traffic study was done for the proposed site and it was determined that the proposed TDR development would generate 7 trips in the AM peak hour and 10 trips in the PM peak hour. The traffic generated from this site will be relatively low and will not warrant a longer road. Minimum road length regulations are directly related to municipal efficiencies, where it is not efficient to maintain smaller road. This is a private road with no municipal responsibility.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Requiring the applicant to lengthen the road would pose an unnecessary hardship on the applicant. The road and project were designed to keep the majority of the development on the flat area in the middle of the lot and minimize the disturbance within the shoreland zone. Lengthening the road to 500' would push the disturbance further down slope and increase the construction area.

Respectfully Submitted,
BERRY SURVEYING & ENGINEERING

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January 30, 2020

City of Dover Planning Board
288 Central Ave
Dover, NH 03820

RE: Proposed TDR Development LLC
DRVP Developers LLC
Cataract Avenue
Conditional Use Permit

Mr. Bird and the Dover Conservation Commission

Berry Surveying & Engineering (BS&E,) on behalf of DRVP Developers, LLC respectfully requests the City of Dover Conservation Commission to accept the following Conditional Use Permit:

- Disturbance within the 50' wetland buffer.

1. Identification of Conditional Use Permits

Regulations in the zoning ordinance do not allow for earth disturbance within the 50' wetland buffer. However, Section 170-27.C states that a conditional use permit may be granted by the planning board, given the following standards, as shown below, are met. Below we show the project's compliance with the standards required to grant a Conditional Use Permit, and we provide justification for its approval.

2. Compliance with the following standards

a) The APPLICANT shall demonstrate that the proposed use is essential to the productive use of land not in the district; is located and constructed to minimize any detrimental impact of such use upon the surface waters or other environmentally sensitive areas, where it is physically impossible to locate DOVER CODE P 170-101 such use on land not in the district; and economic advantage alone shall not be deemed a sufficient reason for such proposed use.

- **There is an existing wetland finger that cuts into the parcel close to Cataract Avenue. Because of this, all the frontage along Cataract is within the wetland buffer. The proposed disturbance is necessary to gain access to the parcel's upland area towards the center of the lot.**

b) A soil erosion and sedimentation control plan is submitted and followed to verify the planned avoidance of sediment pollutant runoff to bodies of water.

- **A full erosion and sediment control plan will be submitted as part of this design. Silt soxx or mulch berm will be used to contain the sediment within the project limits. Rip-Rap and natural fiber matting will be used for slope stabilization. All necessary precautions will be taken to ensure that no sediment goes into the remaining wetland or buffer areas.**

c) Necessary state and federal approvals have been applied for. Said permits shall be received prior to the issuance of the Conditional Use Permit by the Planning Department.

- **As part of this design, the applicant will be filing for a NHDES shoreland and wetland permits. All permits will be presented to the City when acquired.**

d) That architecture and landscape design shall grow from local climate, topography, history, and building practice.

- **An in depth landscaping design will also be done to ensure that new vegetation is promoted to grow throughout the construction site. In addition, the disturbed buffer and wetland areas will receive a special conservation seed mix that will allow for re-vegetation of those areas.**

3. Justification for approval of Conditional Use Permits

The proposed development will have 312 Sq.Ft. of wetland disturbance and 5,869 Sq.Ft. of buffer disturbance. All of this disturbance will be for the construction of the proposed road and relating grading through the buffer. The remaining area of road and proposed units will be pulled towards the center of the lot and away from the Bellamy River. There will be no other buffer disturbance on this project and all the proposed work will be conducted outside of the NHDES 150' shoreland buffer. Given the sensitivity of the site and its location, the applicant wanted to contain all work within a concentrated area and away from the adjacent river.

As part of this design, a full drainage analysis will also be conducted. The proposed road will be crowned, so that all the generated runoff will flow into proposed catch basins and drain lines. These drain lines will divert the generated runoff towards two rain gardens. The first rain garden will be located behind units 8-10 and the second will be constructed in the center of the cul-de-sac. Both rain gardens will have a layer of

bio-media mix and stone to provide treatment. Once the runoff filters through the rain gardens it will be directed towards a level spreader at the rear of the project. The level spreader will take the generated runoff and disperse it over a larger area, instead of discharging it at a single point. This will allow for a more controlled release of the runoff and prevent erosion downhill of the project.

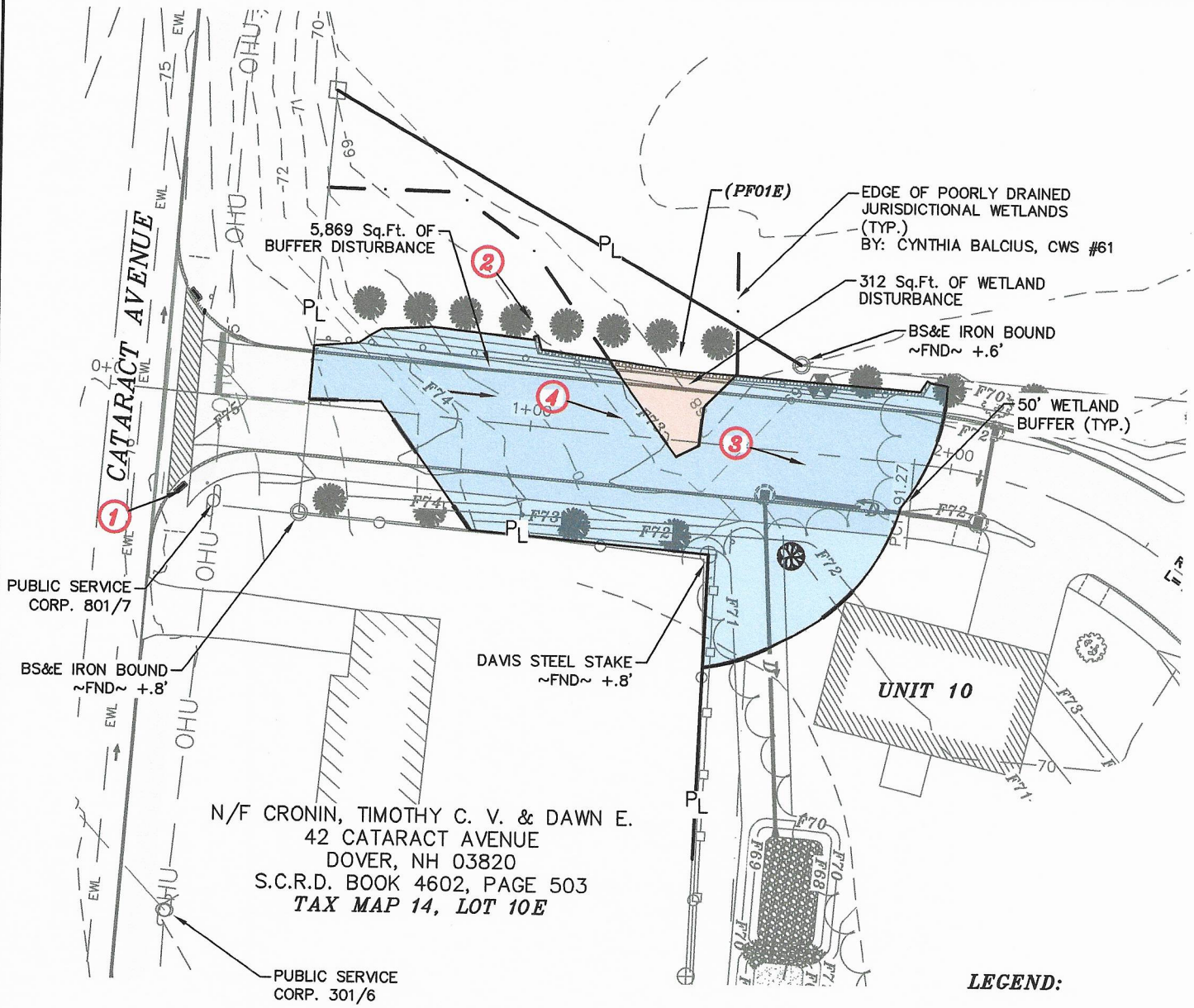
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LEGEND:

PHOTO POINT

WETLAND LINE
WETLAND BUFFER

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, N.H. 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq.

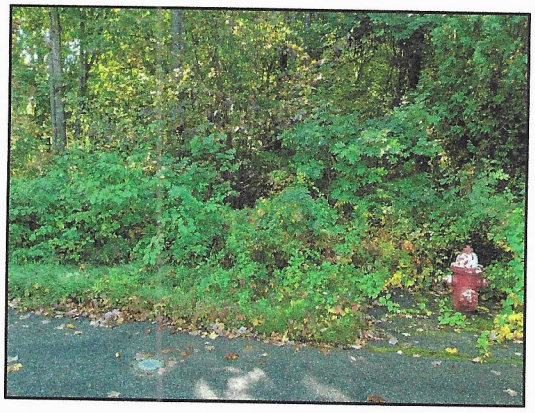
4.) S.C.R.D. BOOK 4664, PAGE 948

WETLAND DISTURBANCE
DRVP DEVELOPERS LLC
CATARACT AVE.
DOVER, N.H.
TAX MAP 14, LOT 10-G

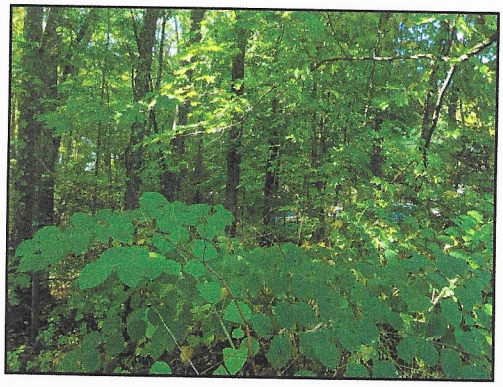
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON , N.H. 332-2863

SCALE :	1 IN. EQUALS 40 FT.
DATE :	JANUARY 30, 2020
FILE NO. :	DB 2019-077

#1



#2



#3



#4



PICTURES
DRVP DEVELOPERS LLC
CATARACT AVE.
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON , N.H. 332-2863

SCALE :	NONE
DATE :	JANUARY 30, 2020
FILE NO. :	DB 2019-077

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City of Dover Planning Department
Attention: City Planner Donna Benton
288 Central Ave.
Dover, NH 03820

September 30, 2019
Revised January 30, 2020

RE: Traffic Impact Summary
DRVP Developers, LLC
242 Central Avenue
Dover, NH 03820
40A Cataract Avenue
Tax Map 14, Lot 10-G

Mrs. Benton,

Pursuant to the City of Dover Site Review Regulations, Berry Surveying & Engineering (BS&E), on behalf of DRVP Developers, has prepared a Traffic Impact Summary for the development of a 10 single family detached homes at 40A Cataract Avenue. The point of analysis is the intersection of Cataract Avenue and the proposed access roadway, Porch Light Drive.

The following trip generation is calculated from the 10th Edition Trip Generation Manual using Code 210, Single Family Detached Housing:

Porch Light Drive Proposed Trip Generation (2020)

Time Method	Weekday Total (Page 2) Dwelling Units			Time Method	AM Peak Adj. Street (Page 3) Dwelling Units			Time Method	PM Peak Adj. Street (Page 4) Dwelling Units		
# Units	10			# Units	10			# Units	10		
Avg. Rate	9.44			Avg. Rate	0.74			Avg. Rate	0.99		
Total Trips	94.4			Total Trips	7.4			Total Trips	9.9		
% Enter	50.0	Total Enter	47.2	% Enter	25.0	Total Enter	1.9	% Enter	63.0	Total Enter	6.2
% Exit	50.0	Total Exit	47.2	% Exit	75.0	Total Exit	5.6	% Exit	37.0	Total Exit	3.7

Using Traffic Counts from the NHDOT Transportation Data Management System, dated August 22nd – 24th, 2018, the following peak values were used to determine the directional distribution of trips entering and exiting Porch Light Drive from Cataract Avenue.

Traffic Distribution Cataract Avenue						
Date	Eastbound		Westbound		Two-Way	
8/22/2018	AM Peak	47	AM Peak	52	AM Peak	99
	PM Peak	96	PM Peak	74	PM Peak	163
8/23/2018	AM Peak	47	AM Peak	34	AM Peak	81
	PM Peak	91	PM Peak	63	PM Peak	154
8/24/2018	AM Peak	50	AM Peak	32	AM Peak	81
	PM Peak	77	PM Peak	93	PM Peak	170
Average Peak Hour Traffic	AM Peak	48.0	AM Peak	39.3	AM Peak	87.0
	PM Peak	88.0	PM Peak	76.7	PM Peak	162.3
% Distribution	AM Peak	55.0	AM Peak	45.0		
	PM Peak	53.4	PM Peak	46.6		

The AM and PM peak hour directional distribution indicates nearly a 50/50 directional split of traffic towards downtown Dover and N.H. Route 16/N.H. Route 155 during the AM and PM peak hour. In the AM peak hour, 55.0% of vehicle trips are eastbound towards downtown Dover. This is opposed to 45.0% of AM vehicle trips westbound towards N.H. Route 16/N.H. Route 155. In the PM peak hour 53.4% of vehicle trips are eastbound as opposed to 46.6% westbound.

Traffic data obtained from the NHDOT's Transportation Data Management System from 2018 has been projected to 2020 and ten years further to 2030. This has been done using an August peak seasonal adjustment factor of 1.03 (AM & PM) and using an annual growth rate of 0.5%, compounded annually. The derivation of the peak seasonal adjustment factor comes from an average series of values from other urban highways from across New Hampshire, provided by the NHDOT. The following figures show the build turning movements to and from Porch Light Drive during AM and PM peak hours. These figures also show the projected volume of traffic eastbound and westbound on Cataract Avenue in 2020 and 2030. The projected and peaked traffic volumes for Cataract Avenue are as follows:

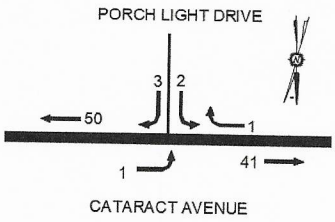
Adjacent Intersection

AM Peak Hour Projections		
Year	Westbound Volume	Westbound Volume Peaked
2018	39	40.5
2019	40	40.7
2020	40	40.9
2021	40	41.1
2022	40	41.3
2023	40	41.5
2024	41	41.7
2025	41	41.9
2026	41	42.1
2027	41	42.3
2028	41	42.5
2029	42	42.8
2030	42	43.0
Year	Eastbound Volume	Eastbound Volume Peaked
2018	48	49.4
2019	48	49.6
2020	48	49.9
2021	49	50.1
2022	49	50.4
2023	49	50.6
2024	49	50.9
2025	50	51.1
2026	50	51.4
2027	50	51.7
2028	50	51.9
2029	51	52.2
2030	51	52.4
Seasonal Peaking Factor (August)		1.03

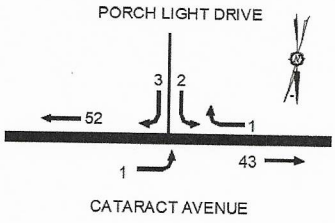
PM Peak Hour Projections		
Year	Westbound Volume	Westbound Volume Peaked
2018	77	78.9
2019	77	79.3
2020	77	79.7
2021	78	80.1
2022	78	80.5
2023	79	80.9
2024	79	81.3
2025	79	81.7
2026	80	82.1
2027	80	82.5
2028	81	82.9
2029	81	83.3
2030	81	83.7
Year	Eastbound Volume	Eastbound Volume Peaked
2018	88	90.5
2019	88	91.0
2020	89	91.5
2021	89	91.9
2022	90	92.4
2023	90	92.8
2024	91	93.3
2025	91	93.8
2026	92	94.2
2027	92	94.7
2028	93	95.2
2029	93	95.7
2030	93	96.1
Seasonal Peaking Factor (August)		1.03

The following figures are a visual representation of the projected turning movements of Porch Light Drive, including the projected traffic volumes:

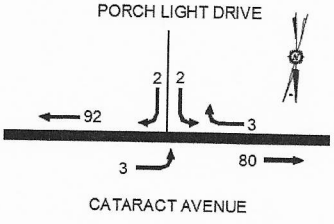
2020 AM Peak Hour
Build



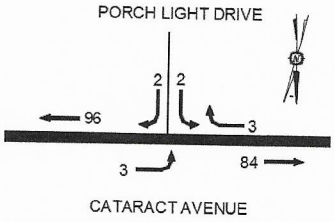
2030 AM Peak Hour
Build



2020 PM Peak Hour
Build



2030 PM Peak Hour
Build



BERRY SURVEYING & ENGINEERING
335 Second Crown Pt. Rd., Barrington, NH 03825
(603) 332-2863 / (603) 335-4623 FAX
www.BerrySurveying.Com

The following table shows in a tabular format the total trips that are calculated to occur to and from Porch Light Drive. These trips are shown at AM and PM weekday peak hours in a build situation. These trips are further broken down into enter and exit to and from the site as well as percentage of left and right turns.

Time	AM Peak Hour Porch Light Drive	# Trips	Turn Type	% Distribution
Total Trips	7.4			
Trips Enter from Cataract Ave Eastbound		1.0	Right	13.7
Trips Enter from Cataract Ave Westbound		0.8	Left	11.3
Trips Exit to Cataract Ave Eastbound		3.1	Right	41.2
Trips Exit to Cataract Ave Westbound		2.5	Left	33.8

Time	PM Peak Hour Porch Light Drive	# Trips	Turn Type	% Distribution
Total Trips	9.9			
Trips Enter from Cataract Ave Eastbound		3.3	Right	33.7
Trips Enter from Cataract Ave Westbound		2.9	Left	29.3
Trips Exit to Cataract Ave Eastbound		2.0	Right	19.8
Trips Exit to Cataract Ave Westbound		1.7	Left	17.2

Due to the low trip generation of and low quantity of single family detached homes on Porch Light Drive, minimal turning movements will occur. The largest generation is three trips entering from the east and three trips entering from the west during the PM peak hour. During the PM peak hour, the 2020 projected and peaked three day average eastbound traffic on Cataract Avenue was 92 and westbound was 80. For 2030, the projected and peaked eastbound traffic volume is 96 vehciles and 84 wetbound vehicles. It can be seen from the low traffic volumes of Cataract Avenue that this minimal trip generation of Porch Light Drive will have a marginal impact on Cataract Avenue and the surrounding roadways.

The posted speed limit of Cataract Avenue is 30MPH. For the purposes of the safety analysis, the 85th percentile of speed is required. This particular section of Cataract Avenue was observed by Berry Surveying & Engineering to analyze the pass by traffic, reviewing speed. Excessive speeds occurred on occasion, as Cataract Avenue can be used by drivers as a short cut. Most operators obeyed the posted speed limits within a deviation of 10 MPH. The 85th percentile derived by observation and conservatively is assumed to be 40 MPH.

Sight distance on Cataract Avenue to the east and west, as well as roadway alignment are the two determining factors of safety. Sight distance to the east is un-obstructed for well over 305 feet (measured), while sight distance to the west is un-obstructed for well over 305 feet (measured). Using Exhibit 3-1 (Stopping Sight Distance) in the Geometric Design Manual, City of Dover regulations, and a 40 mph 85th percentile speed, requires a stopping sight distance of 305 feet for

eastbound and westbound traffic. In this instance both the easterly and westerly sight distances meet the design required warrants. There are no improvements required to obtain this sight distance.

With respect to general safety of Cataract Avenue in relation to the peak hour trip generation and AADT, it is our assessment that the cross section of pavement and shoulder widths are appropriate.

The applicant is also willing to work with the City of Dover to provide improvements to the Bellamy and Cataract intersection, in order to widen the two lane queue, intersection striping and angles of approach. The two existing lanes are 9' wide. The applicant proposes to increase the width to two 10-12' lanes with a tapper length of the lane. See attached concept redesign plan.

*AASHTO Geometric Design of Highways and Streets 7th Edition (2018)

The proposed build out presents an opportunity for the utilization of public transportation for residents and guests alike. While there are no public transportation stops within ¼ mile of the subject parcel, there is a stop approximately 0.6 miles away at the intersection of Central Avenue and Rutland Street. If residents or guests choose to utilize this public transportation stop, there are sidewalks along to entire route to safely provide access. The proposed TDR development is located within a relatively close proximity to and existing COAST bus stop on Route 155. However, this stop is over half a mile away from the proposed development.

- It is recommended that the existing and surrounding infrastructure will be sufficient to handle the minimal projected vehicle trips generated for the peak hour and all other hours for Cataract Avenue and the surrounding roadways

Respectfully Submitted,

BERRY SURVEYING & ENGINEERING

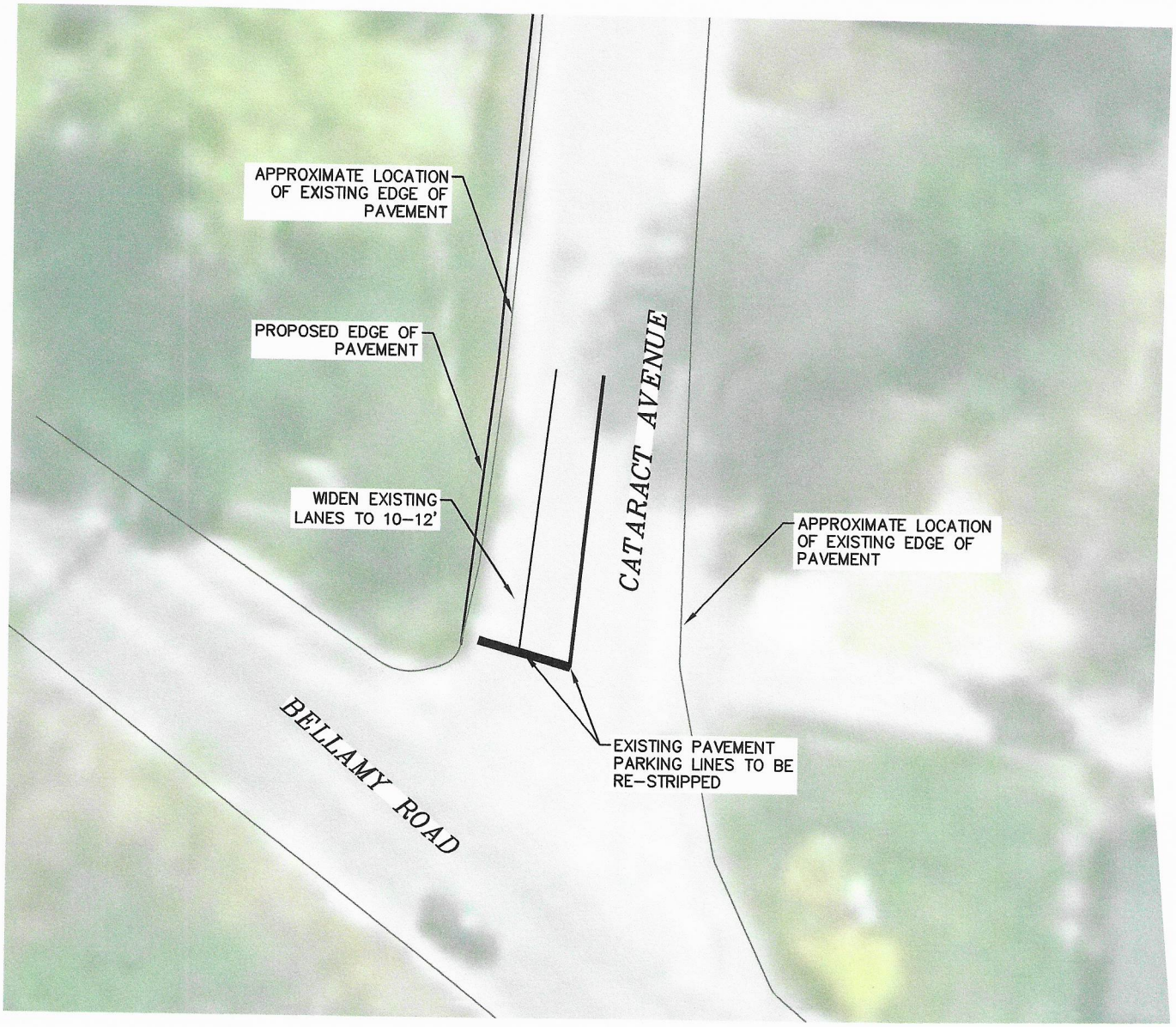
KRP

Kevin Poulin, EIT
Project Engineer

Kenneth A. Berry, PE, LLS,
CPSWQ, CPESC, CESSWI
Principal, VP-Technical Operations

BOUNDARY & TOPOGRAPHIC SURVEYING
CIVIL ENGINEERING
SITE DESIGN
BERRY SURVEYING & ENGINEERING
SEPTIC SYSTEM DESIGN
WETLANDS PERMITTING
WETLAND PROTECTION PERMITTING

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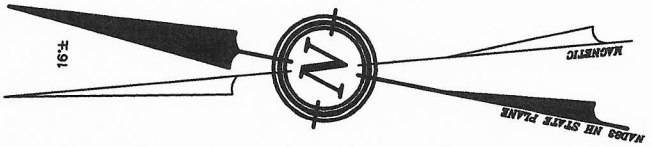
NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, N.H. 03820

2.) TAX MAP 14, LOT 10–G

3.) LOT AREA: 228,717 Sq.

4.) S.C.R.D. BOOK 4664, PAGE 948



INTERSECTION IMPROVEMENTS
DRVP DEVELOPERS LLC
CATARACT AVE.
DOVER, N.H.
TAX MAP 14, LOT 10–G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON , N.H. 332–2863

SCALE :	NONE
DATE :	JANUARY 30, 2020
FILE NO. :	DB 2019–077

P19-80 & P19-81 **Cataract Avenue**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
14005-M00000	43 CATARACT AV	CHOLEWINSKI DENNIS &	CODY GLORIA	43 CATARACT AV	DOVER	NH	03820
14006-000000	53 55 CATARACT AV	MORGAN ALLEN & EILEEN TRUSTEES	MORGAN ALLEN AND EILEEN IRREVOCABLE TRUS	53 CATARACT AV	DOVER	NH	03820-4335
14007-000000	51 CATARACT AV	STANSFIELD MARK		51 CATARACT AV	DOVER	NH	03820
14008-000000	49 CATARACT AV	KAY ALEXANDER &	SCOTT-KAY JACLYN R	49 CATARACT AVENUE	DOVER	NH	03820
14009-000000	47 CATARACT AV	KELLEY SAMUEL L &	MOYNIHAN ANNAH K	47 CATARACT AVE	DOVER	NH	03820
14010-000000	41 CATARACT AV	PUTH ROBERT C &	PUTH SALLY J	41 CATARACT AV	DOVER	NH	03820
14010-A00000	50 CATARACT AV	LAROCHE STEVEN		50 CATARACT AV	DOVER	NH	03820
14010-B00000	48 CATARACT AV	ROY CORMIER JACQUELINE REV TRUST	ROY CORMIER JACQUELINE TRUSTEE	48 CATARACT AVENUE	DOVER	NH	03820
14010-C00000	46 CATARACT AV	CARBONE COLLEEN S		46 CATARACT AV	DOVER	NH	03820
14010-D00000	44 CATARACT AV	LUDWICK WILLIAM J		44 CATARACT AV	DOVER	NH	03820
14010-E00000	42 CATARACT AV	CRONIN TIMOTHY C V &	CRONIN DAWN E	42 CATARACT AV	DOVER	NH	03820
14010-F00000	40 CATARACT AV	JACOBSMEYER CECILE R &	JACOBSMEYER WILLIAM J	40 CATARACT AV	DOVER	NH	03820
14011-001000	34 CATARACT AV	CASWELL CHRISTOPHER P &	CASWELL WENDY S	34 CATARACT AVE	DOVER	NH	03820
14018-000000	45 CATARACT AV	NORTON ROBERT E		45 CATARACT AVENUE	DOVER	NH	03820
14025-000000	39 SUNSET DR	MILLER MARK E &	MILLER CHRISTINE M	39 SUNSET DR	DOVER	NH	03820
14026-000000	37 SUNSET DR	WATKINS ROBERT S	WATKINS NANCY A	37 SUNSET DR	DOVER	NH	03820
H0011-001000	16 DALEY DR	CITY OF DOVER	SCHOOL DEPARTMENT	288 CENTRAL AVE	DOVER	NH	03820
H0012-000000	25 ALUMNI DR	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
H0014-000000	54 CATARACT AV	MCCRUM J & THURBER D & PROULX ET AL TC &	PROULX MADELINE LIFE ESTATE	54 CATARACT AVENUE	DOVER	NH	03820
H0014-B00000	52 CATARACT AV	GAGNON MARK A		52 CATARACT AV	DOVER	NH	03820
		DRVP DEVELOPERS LLC		242 CENTRAL AVENUE	DOVER	NH	03820
		BERRY SURVEYING & ENGINEERING	CHRISTOPHER BERRY	335 SECOND CROWN POINT ROAD	BARRINGTON	NH	03825

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – P19-80

** Recorder was accidentally off for Call to Order and Roll Call**

Application Type:	TDR Subdivision Review
Applicant(s):	DVRP Developers LLC
Owner(s):	DVRP Developers LLC
Location:	Cataract Ave (Tax Map 14, Lot 10-G)
Date:	January 16, 2020

INTENT: To subdivide one lot into 12 through TDR and build 10 new single family dwellings. A related CUP will appear before the Planning Board.

UNITS PROPOSED: 11 new lots, 10 new SF homes

AGENDA ITEM #: 1

ACREAGE: 5.25 acres

ZONING DISTRICT: R-12

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential and Bellamy River

ZBA ACTION: None

PERMITS REQUIRED:
-NHDES Shoreland
-NHDES Wetlands
-EPA NOI
-NHDES Sewer Discharge permit
-CUP for Wetlands

WAIVERS REQUESTED: TBD

ATTENDANCE:
Members:
Donna Benton, Planning
Jim Maxfield, Inspection Services
Dan Barufaldi, Economic Development
Sgt. Speidel, Police
Dave White, Engineering
Elena Piekut, Zoning
Others:
Robert Paolini
Dave Paolini
Chris Berry

Approval of 12/19/2019 Meeting Minutes

D.White moved to approve the minutes of December 19, 2019. J.Maxfield seconded. Vote: U/A

PLAN REVIEW:
Planning:

- TDR fees (1.5 units = $13,402)
- Water/sewer investment fees
- Impact fees (10x8,895 =$88,950)
- Provide HOA documents (including note about this never becoming a public road)
- Provide proposed deed language
- Why limited common area instead of lot lines?
- Traffic Assessment doesn't include Bus info (worth noting new COAST run on 155)
- Private street would be it's own lot
- Are steep slopes being created?
- Provide Letter to Serve
- Provide O& M plans for:
    - Stormwater
    - Landscaping
    - Forcemain
- Condition of approval: Prior to the last CO being issued, the Engineer of Record shall meet with the Association and review the assaults for the project.
- Provide waiver requests
- The HOA docs should include
    - Language about private roadway and conversion process
    - The calculation used to determine the reserve amount in the treasury
    - That prior to converting the ownership and maintenance obligations from the developer to the Association, the Engineer of Record shall meet with the Association and review maintenance obligations, including stormwater, open space and roadway maintenance
- Revise plan set to:
    - Add owner's signatures
    - Add professional signature and stamps
    - Revise locus map on sheet 7
    - Extend sidewalk to cul-de-sac
    - Revise note 11 on sheet 5 to include that the roadway is private and per 155-48B there are no City services provided unless the roadway

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – P19-80

** Recorder was accidentally off for Call to Order and Roll Call**

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Applicant(s):	DVRP Developers LLC
Owner(s):	DVRP Developers LLC
Location:	Cataract Ave (Tax Map 14, Lot 10-G)
Date:	January 16, 2020

conforms with public road specifications and the Planning Board has reviewed and agreed to amend the approval to allow a public roadway.
  - Revise the Site Construction Sign note to indicate that it shall also indicate that the roadway is private and is intended to remain private with no City services performed on the roadway
- No Saturday hours for site work
- There is a shed encroachment, how are they addressing that?
- Revise set to Bellamy River, not reservoir
- Remove map and lot numbers unless assigned by Assessing Department
- On sheet 5 switch LLS certification with Dover approval area.
- Indicate length of cul-de-sac
- Indicate tree calipers
- Show snow storage calculation
- Remove Dover Common notes references
- Revise limited common area line to not include rain garden structure

Engineering Comments:

- Separate sewer and water more
- Lights proposed?
- Taping sleeve?

Fire/Inspections Comments:

- Provide sample structures with elevations for TDR units
- Clarify tip downs at applicable driveway entrances
- Remove note 38 on sheet 8 if no units are getting a fire suppression system
- Sheet 15 Utility plan: clarify underground utilities other than water and sewer
- Clarify forced main waste water system
- Remove ADA exemption from note 47 on sheet 8
- Add "excavation" to note 19 on sheet 8

Police Department Comments:

- Change "No Parking Fire Lane" signs to "No Parking This Side" signs, adjust facing to be visible upon approach entering Porch Light Drive. Relocate 1 sign so that all are on left side, and add 1 sign near Cataract Ave intersection.
- Add note regarding Visitor Parking area as subject to HOA rules pertaining to use and time limits
- Driveways as shown are 15' wide – too narrow for side-by-side parking but wider than needed for single vehicle
- Garages proposed?
- Provide off-site improvements to Cataract/Bellamy intersection to widen the two-lane queue for Cataract Ave

Economic Development:

- Renderings of houses?
- Garages?
- Anticipated price ranges?

Planning Board Comments: N/A

Next Steps: Submit for Planning Board

Adjournment: A motion to adjourn TRC was made at 11:10 am by D.White and seconded by J.Maxfield. Vote: U/A

''PORCH LIGHT DEVELOPMENT''
TRANSFER OF DEVELOPMENT RIGHTS
FOR
DRVP DEVELOPERS LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

TABLE OF CONTENTS:

SHEET 1 ~ NEIGHBORHOOD PLAN
SHEET 2 ~ BOUNDARY PLAN*
SHEET 3 ~ EXISTING CONDITIONS PLAN
SHEET 4 ~ SITE SPECIFIC SOILS MAP
SHEET 5 ~ SUBDIVISION PLAN*
SHEET 6 ~ TOPOGRAPHIC SUBDIVISION PLAN
SHEET 7 ~ EASEMENT PLAN*
SHEET 8 ~ SITE PLAN
SHEET 9 ~ OVERVIEW GRADING PLAN
SHEET 10 ~ PLAN AND PROFILE PORCH LIGHT DRIVE 0+00 – 4+00
SHEET 11 ~ PLAN AND PROFILE PORCH LIGHT DRIVE 4+00 – END
SHEET 12 ~ R–101 RAIN GARDEN 101
SHEET 13 ~ R–102 RAIN GARDEN 102
SHEET 14 ~ EROSION & SEDIMENT CONTROL PLAN
SHEET 15 ~ OVERVIEW UTILITY PLAN
SHEET 16 ~ UTILITY PLAN AND PROFILE 0+00 – 4+00
SHEET 17 ~ UTILITY PLAN AND PROFILE 4+00 – END
SHEET 18 ~ SIGHT DISTANCE CATARACT AVENUE WESTBOUND
SHEET 19 ~ SIGHT DISTANCE CATARACT AVENUE EASTBOUND
SHEET 20 ~ CROSS SECTIONS
SHEET 21 ~ E101–SEDIMENT & EROSION DETAILS
SHEET 22 ~ E102–SEDIMENT & EROSION DETAILS
SHEET 23 ~ C101–CONSTRUCTION DETAILS
SHEET 24 ~ C102–CONSTRUCTION DETAILS
SHEET 25 ~ D101–DRAINAGE DETAILS
SHEET 26 ~ U101–UTILITY DETAILS
SHEET 27 ~ U102–UTILITY DETAILS
SHEET 28 ~ U103–UTILITY DETAILS

* ASTERISKS ARE FOR PLANS TO BE RECORDED

OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

SURVEYOR OF RECORD: KENNETH A. BERRY, PE, LLS
CPSWQ, CPESC, CESSWI
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825
(603) 332–2863

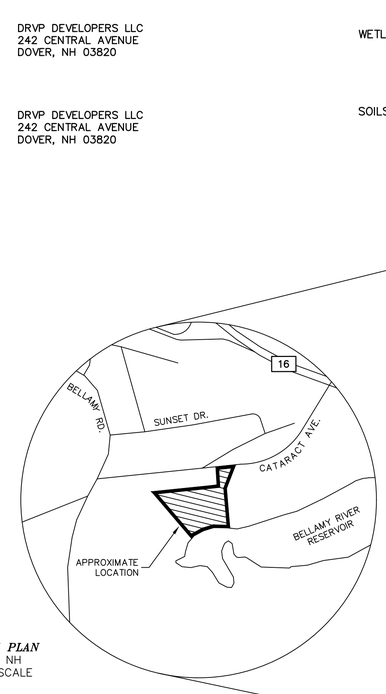
ENGINEER OF RECORD: KENNETH A. BERRY, PE, LLS
CPSWQ, CPESC, CESSWI
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825
(603) 332–2863

WETLAND SCIENTIST: STONEY RIDGE ENVIRONMENTAL
CYNTHIA M. BALCIUS, CSS, CWS, CPESC
229 PROSPECT MOUNTAIN ROAD
ALTON, NH 03809
(603) 776–5825

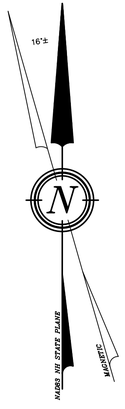
SOILS SCIENTIST: STONEY RIDGE ENVIRONMENTAL
CYNTHIA M. BALCIUS, CSS, CWS, CPESC
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(603) 776–5825

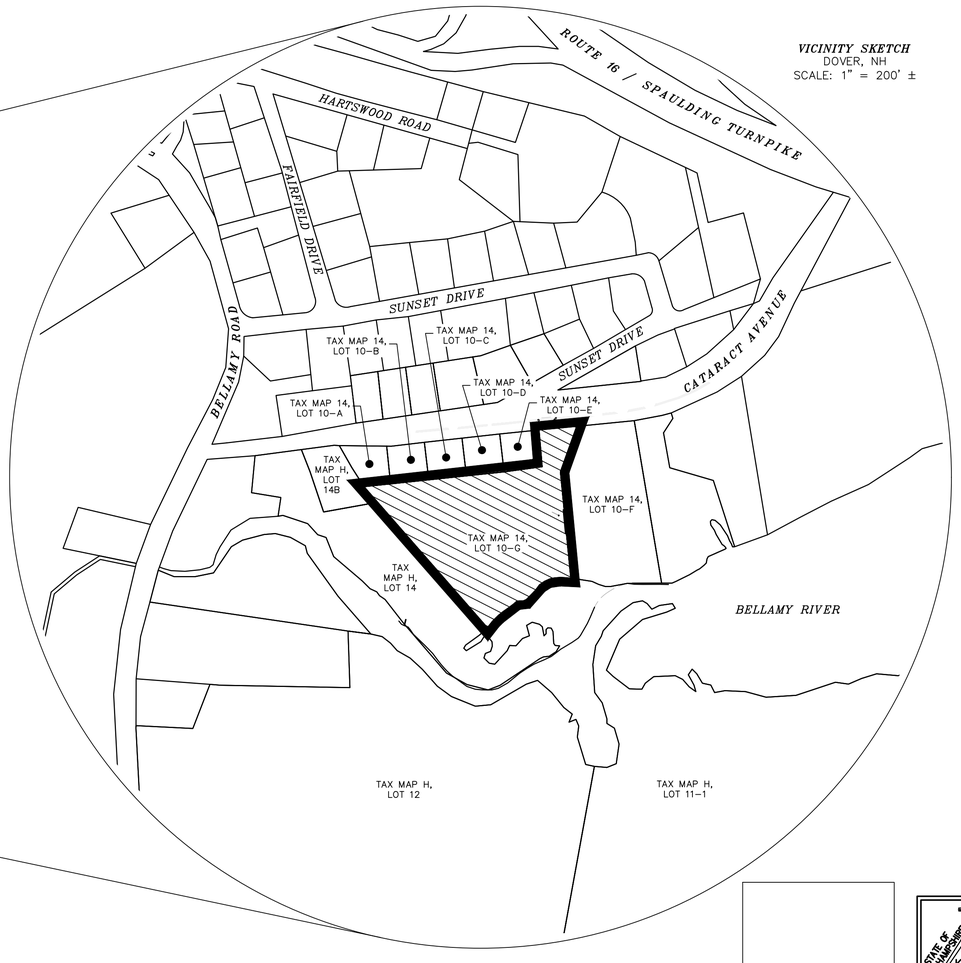
NOTE:

BERRY SURVEYING & ENGINEERING HAS PREPARED AN INSPECTION & MAINTENANCE MANUAL AS PART OF THIS PROJECTS DOCUMENTATION. ALL USERS ARE BOUND TO THIS DOCUMENT AS PART OF THE APPROVAL OF THE PLANNING BOARD. COPIES OF THE YEARLY INSPECTIONS ARE TO BE DELIVERED TO THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT.



LOCATION PLAN
DOVER, NH
NOT TO SCALE





VICINITY SKETCH
DOVER, NH
SCALE: 1" = 200' ±

GENERAL PLAN SET NOTES:

1.) 11x17" PLANS ARE HALF THE PUBLISHED SCALE.

2.) ALL PLANS ARE CONSIDERED TO BE NOT FOR CONSTRUCTION UNLESS THEY CONTAIN THE APPROVAL STAMP OF THE CITY OF DOVER.

WHETHER OR NOT OTHERWISE EXPRESSLY RECITED ON THIS SITE PLAN, THE SITE PLAN APPROVAL GRANTED IS CONDITIONED ON FAITHFUL AND DILIGENT ADHERENCE BY THE OWNER/SUBDIVIDER/DEVELOPER OF ALL TERMS, CONDITIONS, PROVISIONS AND SPECIFICATIONS OF THE CITY OF DOVER LAND SITE PLAN REGULATIONS AS AMENDED OR AS MAY LATER BE AMENDED, IN EFFECT ON THE DATE OF APPROVAL, UNLESS OR EXCEPT INSOFAR AS EXPRESSLY WAIVED, IN ANY PARTICULAR, BELOW. NON – ADHERENCE MAY RESULT IN A REVOCATION OF APPROVAL. ANY VARIATION FROM THE APPROVED PLAN WILL REQUIRE A RESUBMISSION FOR SITE PLAN APPROVAL.

REQUIRED PERMITS:

1.) NHDES SHORELAND IMPACT PERMIT: PENDING
2.) NHDES WETLAND PERMIT: PENDING
3.) EPA NOTICE OF INTENT (NOI): PENDING
4.) NHDES SEWER DISCHARGE PERMIT: PENDING
5.) NHDES ALTERATION OF TERRAIN: PENDING

OWNER'S SIGNATURE DATE

APPLICANT'S SIGNATURE DATE

APPROVED DOVER

STATE OF NEW HAMPSHIRE – LICENSED LAND SURVEYOR – No. 805 – KENNETH A. BERRY – SIGNATURE

STATE OF NEW HAMPSHIRE – KENNETH A. BERRY – No. 14241 – LICENSED PROFESSIONAL ENGINEER

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

T.D.R. DEVELOPMENT PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : AS SHOWN
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

ABBREVIATION LEGEND:

BITUM.	BITUMINOUS
CF	CUBIC FEET
CL	CENTER LINE
C.O.	CLEAN OUT
E.G.	EXISTING GRADE
ELEV.	ELEVATION
E.O.P.	EDGE OF PAVEMENT
E.S.H.W.T.	ESTIMATED SEASONAL HIGH WATER TABLE
F.E.S.	FLARED END SECTION
F.G.	FINISHED GRADE
G.F.	GARAGE FINISH FLOOR
HDPE	HIGH DENSITY POLYTHYLENE
INV.	INVERT
L.C.A.	LIMITED COMMON AREA
P.C.	POINT OF CURVATURE
PL	PROPERTY LINE
PROP	PROPOSED
P.T.	POINT OF TANGENCY
P.V.C.	POINT OF VERTICAL CURVE
P.V.I.	POINT OF VERTICAL INTERSECTION
P.V.T.	POINT OF VERTICAL TANGENCY
RECB	ROLLED EROSION CONTROL BLANKET
STA	STATION
S.G.C.	SLOPED GRANITE CURB
T.B.C.	TO BE REMOVED
TYP.	TYPICAL
U.D.	UNDER DRAIN
U.G.E.	UNDERGROUND ELECTRICAL/UTILITY
V.G.C.	VERTICAL GRANITE CURB
'/.	FEET / FEET

{ } SSL ( ) ~ {SIZE} SINGLE SOLID LINE (COLOR W=WHITE, Y=YELLOW)
{ } DSL ( ) ~ {SIZE} DOUBLE SOLID LINE (COLOR W=WHITE, Y=YELLOW)
{ } SSB ( ) ~ {SIZE} SINGLE SOLID W/ BROKEN LINE (COLOR W=WHITE, Y=YELLOW)
{ } SBL ( ) ~ {SIZE} SINGLE BROKEN LINE (COLOR W=WHITE, Y=YELLOW)
{ } DBL ( ) ~ {SIZE} DOUBLE BROKEN LINE (COLOR W=WHITE, Y=YELLOW)

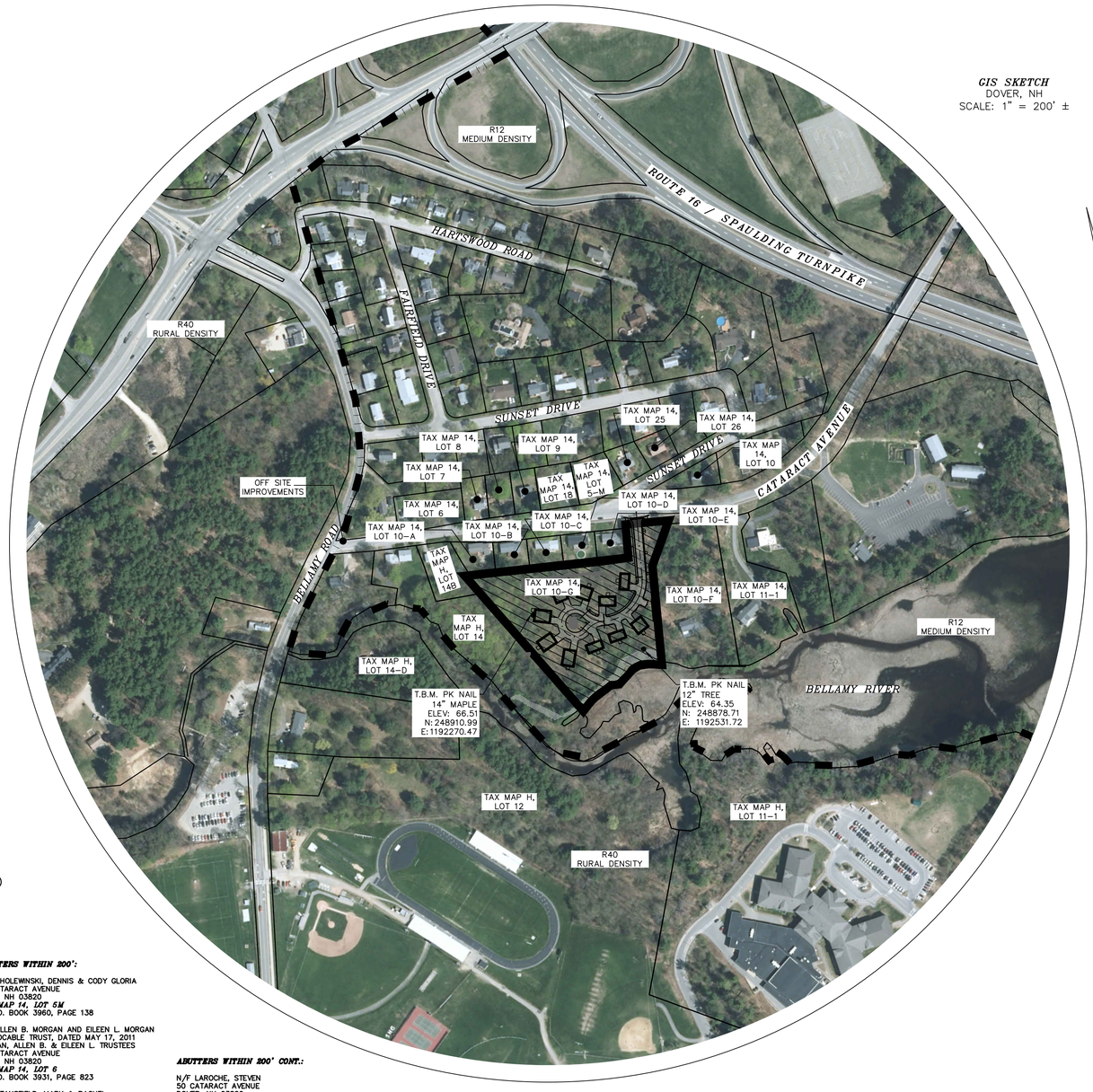
LEGEND:

- IRON BOUND ~FND~
- IRON PIPE ~FND~
- STEEL STAKE ~FND~
- SPIKE ~FND~
- GRANITE BOUND ~FND~
- UTILITY POLE / GUY WIRE
- STREET LAMP
- GATE VALVE
- FIRE HYDRANT
- CATCH BASIN
- SEWER MANHOLE
- NRCS SOIL DELINEATION LINE
- BUILDING SETBACK LINE
- SURVEY TIE LINE
- OVERHEAD UTILITIES LINE
- WATER LINE
- CONTOUR LINE, MINOR
- CONTOUR LINE, MAJOR
- WETLAND LINE
- WETLAND BUFFER
- SEWER LINE
- DRAINAGE LINE
- NHDES 50' SETBACK
- NHDES 150' SETBACK
- NHDES 250' SETBACK
- B&B S.C.R.D. TYP. FND — NRCS SOIL LABEL; STRAFFORD COUNTY REGISTRY OF DEEDS; TYPICAL; FOUND

PROPOSED LEGEND:

- IRON BOUND (FND)
- TEMPORARY BENCHMARK
- CURB STOP
- GATE VALVE
- GAS VALVE
- CATCH BASIN
- SHEET DETAIL (E101 / E6)
- THRUST BLOCK
- LIGHTING
- F114.05 — PROPOSED SPOT ELEVATION
- EASEMENT LINE
- PROPOSED GAS LINE
- PROPOSED WATER LINE
- PROPOSED SEWER LINE
- PROPOSED DRAIN LINE
- PROPOSED UNDERDRAIN
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- SAW CUT LINE
- UGE — PROPOSED UNDERGROUND UTILITY
- SF — SILT FENCE / EROSION MIX BERM
- SS — FILTREXX SILT SOXX (8" or 12" AS NOTED)
- C — ORANGE CONSTRUCTION PERIMETER FENCE

GIS SKETCH
DOVER, NH
SCALE: 1" = 200' ±



SIGN ID NUMBER	SIGN SIZE (WIDTH x HEIGHT)	SIGN	TEXT DIMENSIONS	NO. OF SIGNS	BACKGROUND	LEGEND	BORDER	POST SIZE & QUANTITY
R1-1	30"x30"	STOP	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	1	RED	WHITE	WHITE	SQUARE (1)
R2-1	24"x30"	SPEED LIMIT 25	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	1	WHITE	GREEN	GREEN	SQUARE (1)
R6-1R	36"x12"	ONE WAY	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	1	BLACK W/ WHITE ARROW	BLACK	WHITE	SQUARE (1)
W14-2	30"x30"	NO OUTLET	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	1	YELLOW	BLACK	BLACK	SQUARE (1)
R8-31	12"x18"	NO PARKING	SEE STANDARD HIGHWAY SIGNS 2004 EDITION PUBLISHED BY USDOT – FHWA	2	WHITE	RED	RED	SQUARE (2)

ABUTTERS WITHIN 200':

N/F CHOLEWINSKI, DENNIS & CODY GLORIA
43 CATARACT AVENUE
DOVER NH 03820
TAX MAP 14, LOT 5M
S.C.R.D. BOOK 3960, PAGE 138

N/F ALLEN B. MORGAN AND EILEEN L. MORGAN IRREVOCABLE TRUST, DATED MAY 17, 2011
MORGAN, ALLEN B. & EILEEN L. TRUSTEES
53 CATARACT AVENUE
DOVER NH 03820
TAX MAP 14, LOT 6
S.C.R.D. BOOK 3931, PAGE 823

N/F STANSFIELD, MARK & RACHEL
51 CATARACT AVENUE
DOVER NH 03820
TAX MAP 14, LOT 7
S.C.R.D. BOOK 4449, PAGE 142

N/F KAY, ALEXANDER & JACLYN R. SCOTT
49 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 8
S.C.R.D. BOOK 4199, PAGE 467

N/F KELLEY, SAMUEL L. & MOYNIHAN, ANNAH K.
47 CATARACT AVENUE
DOVER NH 03820
TAX MAP 14, LOT 9
S.C.R.D. BOOK 3780, PAGE 903

N/F PUTH, ROBERT C. & PUTH, SALLY J.
41 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 17, LOT 10
S.C.R.D. BOOK, 1756, PAGE 315

ABUTTERS WITHIN 200' CONT.:

N/F LAROCHE, STEVEN
50 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 10A
S.C.R.D. BOOK 4071, PAGE 612

N/F JACQUELINE CORMIER ROY REVOCABLE TRUST OF 2002
CORMIER ROY, JACQUELINE TRUSTEE
48 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 10B
S.C.R.D. BOOK 2567, PAGE 99

N/F CARBONE, COLLEEN S.
46 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 10C
S.C.R.D. BOOK 4560, PAGE 979

N/F LUDWICK, WILLIAM J.
44 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 10D
S.C.R.D. BOOK 1820, PAGE 350

ABUTTERS WITHIN 200' CONT.:

N/F CRONIN, TIMOTHY C. V. & DAWN E.
42 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 10E
S.C.R.D. BOOK 4602, PAGE 503

N/F JACOBSMEYER, CECILE R. & WILLIAM J.
40 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 10F
S.C.R.D. BOOK 3601, PAGE 420

N/F CASWELL, CHRISTOPHER P. & WENDY S.
34 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 11-1
S.C.R.D. BOOK 4169, PAGE 196

ABUTTERS WITHIN 200' CONT.:

N/F JOHNSON, MATTHEW & ERICA
26 SUNSET DRIVE
DOVER, NH 03820
TAX MAP 14, LOT 11A-1
S.C.R.D. BOOK 3601, PAGE 420

N/F NORTON, ROBERT E.
45 CATARACT AVENUE
DOVER, NH 03820
TAX MAP 14, LOT 1B
S.C.R.D. BOOK 3803, PAGE 802

N/F MILLER, MARK E. & CHRISTINE M.
39 SUNSET DRIVE
DOVER, NH 03820
TAX MAP 14, LOT 25
S.C.R.D. BOOK 4609, PAGE 915

ABUTTERS WITHIN 200' CONT.:

N/F WATKINS, ROBERT S. & NANCY A.
37 SUNSET DRIVE
DOVER, NH 03820
TAX MAP 14, LOT 26
S.C.R.D. BOOK 2260, PAGE 474

N/F PROULX, RICHARD, JAMES J., DANIEL, MARIA, CHRISTOPHER, JOHN & PROULX-ROSE, RENEE & MCCRUM, JEANNE & THURBER, DIANE & BREW, MICHELLE MARIE & JACOBS, ANGELIQUE
54 CATARACT AVENUE
DOVER, NH 03820
TAX MAP H, LOT 14
S.C.R.D. BOOK 2668, PAGE 596

N/F GAGNON, MARK A.
52 CATARACT AVENUE
DOVER, NH 03820
TAX MAP H, LOT 14B
S.C.R.D. BOOK 4461, PAGE 688

DOVER PLANNING FILE #19-80

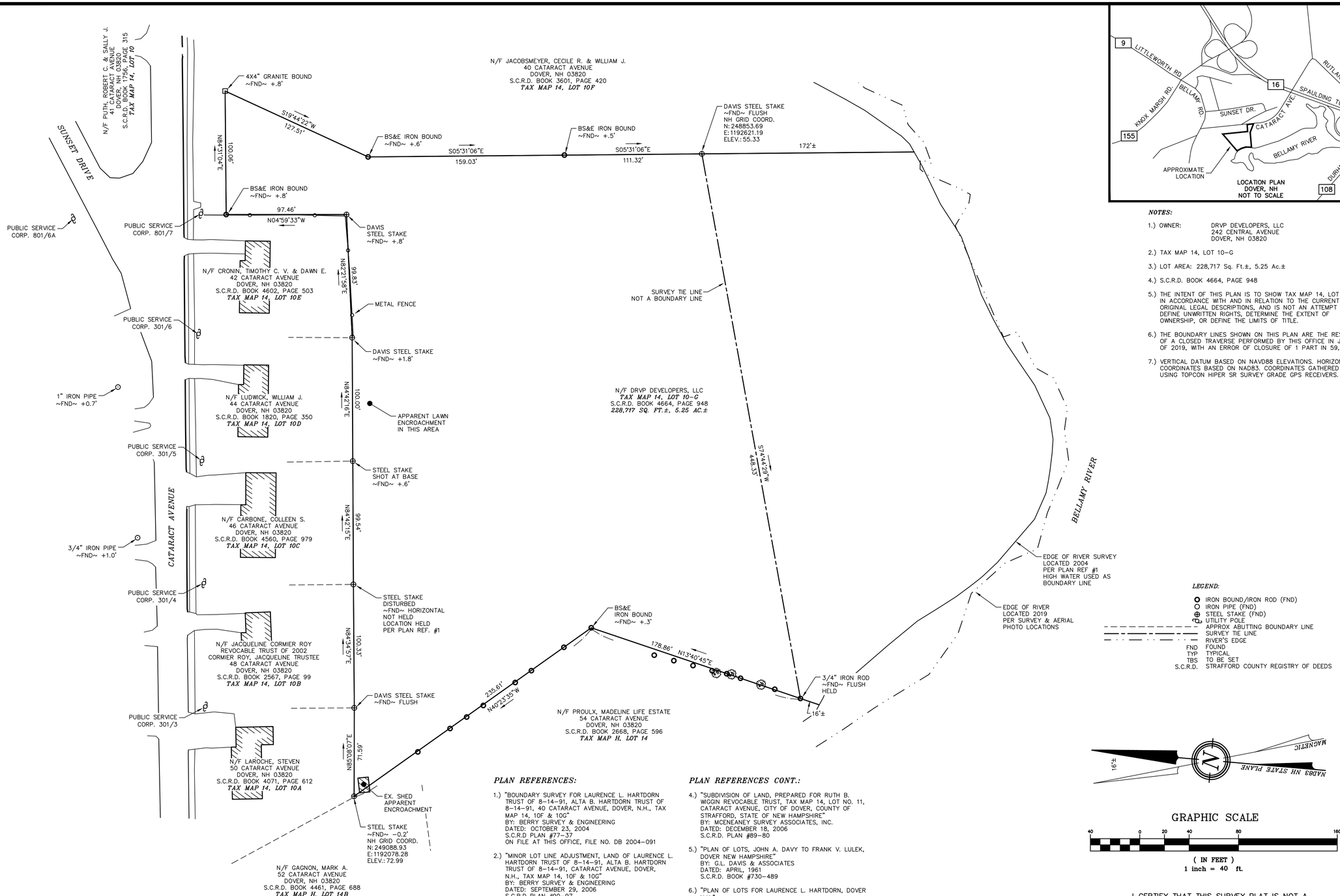
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#1	12-16-19	REVISED PER STAFF COMMENT

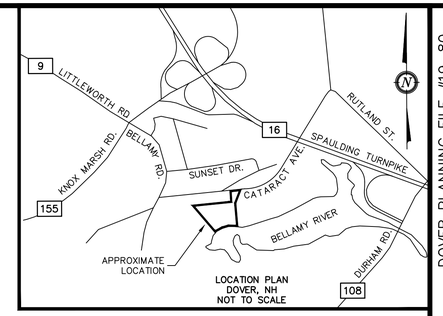
NEIGHBORHOOD PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : AS SHOWN
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE — KENNETH A. BERRY No. 14243 LICENSED PROFESSIONAL ENGINEER





LOCATION PLAN
DOVER, NH
NOT TO SCALE

NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THE INTENT OF THIS PLAN IS TO SHOW TAX MAP 14, LOT 10-G IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT AND ORIGINAL LEGAL DESCRIPTIONS, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.

6.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

PLAN REFERENCES:

1.) "BOUNDARY SURVEY FOR LAURENCE L. HARTDORN TRUST OF 8-14-91, ALTA B. HARTDORN TRUST OF 8-14-91, 40 CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G"
BY: BERRY SURVEY & ENGINEERING
DATED: OCTOBER 23, 2004
S.C.R.D PLAN #77-37
ON FILE AT THIS OFFICE, FILE NO. DB 2004-091

2.) "MINOR LOT LINE ADJUSTMENT, LAND OF LAURENCE L. HARTDORN TRUST OF 8-14-91, ALTA B. HARTDORN TRUST OF 8-14-91, CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G"
BY: BERRY SURVEY & ENGINEERING
DATED: SEPTEMBER 29, 2006
S.C.R.D PLAN #90-97
ON FILE AT THIS OFFICE, FILE NO. DB 2006-158

3.) "PLAN OF PROPERTY LOCATED IN DOVER NEW HAMPSHIRE TO BE CONVEYED TO TEXTILE REALTY CO. BY AMERICAN WOOLEN CO."
BY: JOHN FRANKLIN, CE.
DATED: APRIL, 1932
S.C.R.D. PLAN #2, POCKET #7, FOLDER #2

PLAN REFERENCES CONT.:

4.) "SUBDIVISION OF LAND, PREPARED FOR RUTH B. WIGGIN REVOCABLE TRUST, TAX MAP 14, LOT NO. 11, CATARACT AVENUE, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE"
BY: MCENEANEY SURVEY ASSOCIATES, INC.
DATED: DECEMBER 18, 2006
S.C.R.D. PLAN #89-80

5.) "PLAN OF LOTS, JOHN A. DAVY TO FRANK V. LULEK, DOVER NEW HAMPSHIRE"
BY: G.L. DAVIS & ASSOCIATES
DATED: APRIL, 1961
S.C.R.D. BOOK #730-489

6.) "PLAN OF LOTS FOR LAURENCE L. HARTDORN, DOVER N.H."
BY: DAVIS & ASSOCIATES
DATED: MAY, 1964
S.C.R.D. PLAN #4, POCKET #1, FOLDER #7

7.) "LOT LINE ADJUSTMENT PLAN PREPARED FOR ROBERT AND SALLY PUTH AND RUTH WIGGIN TRUST, CATARACT AVENUE, DOVER, NEW HAMPSHIRE
BY: MCENEANEY SURVEY ASSOCIATES, INC.
DATED: MARCH 30, 1994
S.C.R.D. PLAN #44-24

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

KENNETH A. BERRY L.L.S. 805 DATE

DOVER PLANNING FILE #19-80

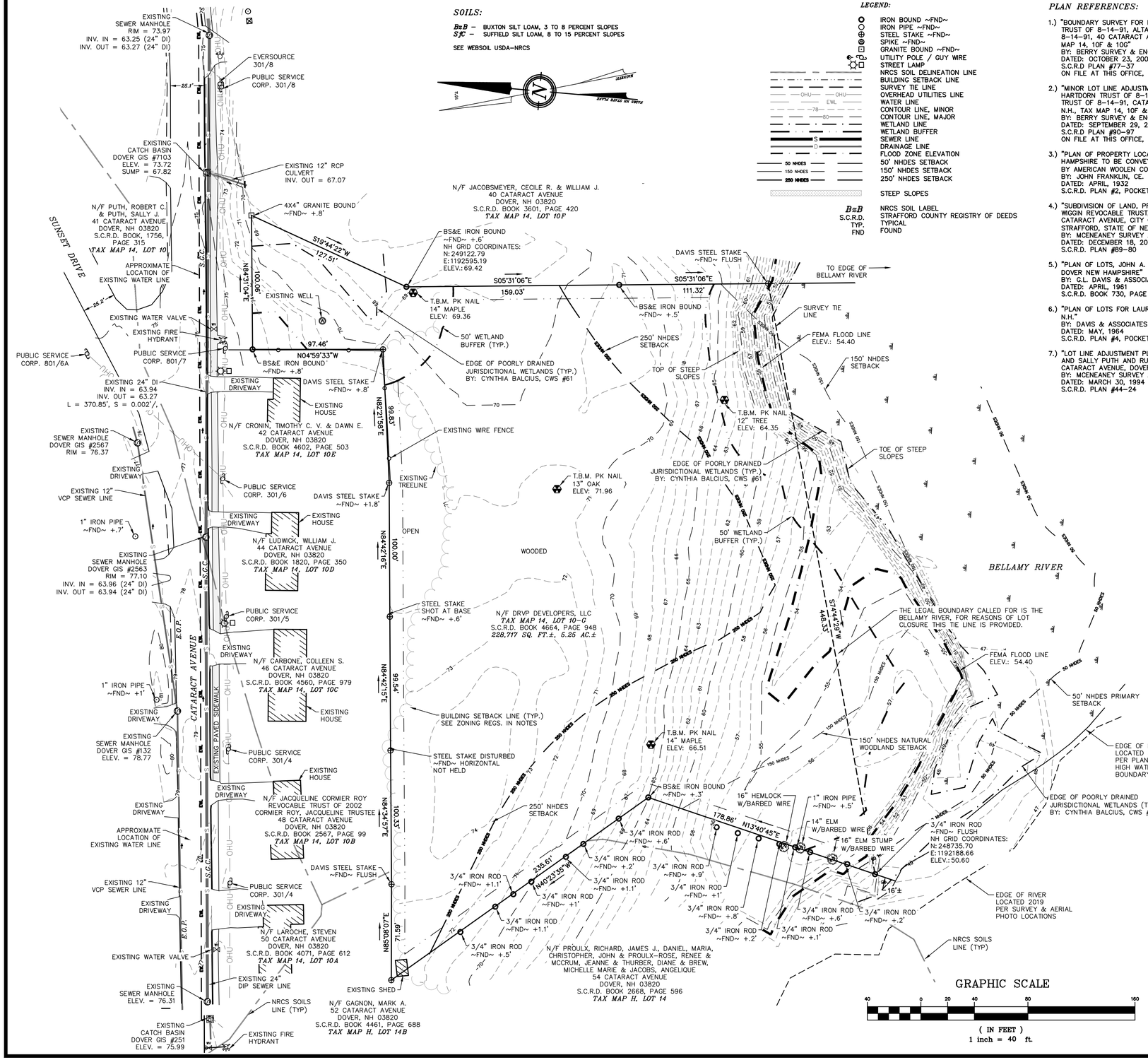
REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

BOUNDARY SURVEY
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
No. 805
KENNETH A. BERRY
LICENSED LAND SURVEYOR
SIGNATURE



PLAN REFERENCES:

1.) "BOUNDARY SURVEY FOR LAURENCE L. HARTDORN TRUST OF 8–14–91, ALTA B. HARTDORN TRUST OF 8–14–91, 40 CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G" BY: BERRY SURVEY & ENGINEERING DATED: OCTOBER 23, 2004 S.C.R.D PLAN #77–37 ON FILE AT THIS OFFICE, FILE NO. DB 2004–091

2.) "MINOR LOT LINE ADJUSTMENT, LAND OF LAURENCE L. HARTDORN TRUST OF 8–14–91, ALTA B. HARTDORN TRUST OF 8–14–91, CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G" BY: BERRY SURVEY & ENGINEERING DATED: SEPTEMBER 29, 2006 S.C.R.D PLAN #90–97 ON FILE AT THIS OFFICE, FILE NO. DB 2006–158

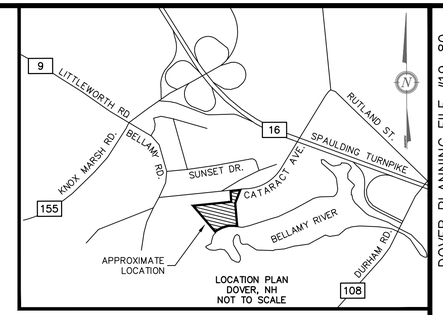
3.) "PLAN OF PROPERTY LOCATED IN DOVER NEW HAMPSHIRE TO BE CONVEYED TO TEXTILE REALTY CO. BY AMERICAN WOOLEN CO." BY: JOHN FRANKLIN, CE. DATED: APRIL, 1932 S.C.R.D. PLAN #2, POCKET #7, FOLDER #2

4.) "SUBDIVISION OF LAND, PREPARED FOR RUTH B. WGGIN REVOCABLE TRUST, TAX MAP 14, LOT NO. 11, CATARACT AVENUE, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE" BY: MCENEANEY SURVEY ASSOCIATES, INC. DATED: DECEMBER 18, 2006 S.C.R.D. PLAN #89–80

5.) "PLAN OF LOTS, JOHN A. DAVY TO FRANK V. LULEK, DOVER NEW HAMPSHIRE" BY: G.L. DAVIS & ASSOCIATES DATED: APRIL, 1961 S.C.R.D. BOOK 730, PAGE 489

6.) "PLAN OF LOTS FOR LAURENCE L. HARTDORN, DOVER N.H." BY: DAVIS & ASSOCIATES DATED: MAY, 1964 S.C.R.D. PLAN #4, POCKET #1, FOLDER #7

7.) "LOT LINE ADJUSTMENT PLAN PREPARED FOR ROBERT AND SALLY PUTH AND RUTH WGGIN TRUST, CATARACT AVENUE, DOVER, NEW HAMPSHIRE BY: MCENEANEY SURVEY ASSOCIATES, INC. DATED: MARCH 30, 1994 S.C.R.D. PLAN #44–24



LOCATION PLAN
DOVER, NH
NOT TO SCALE

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC 242 CENTRAL AVENUE DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS LLC 242 CENTRAL AVENUE DOVER, NH 03820

2.) TAX MAP 14, LOT 10–G

3.) LOT AREA: 228,717 Sq. Ft., 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) ZONING: (R–12) MEDIUM DENSITY RESIDENTIAL DISTRICT
MINIMUM FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 12,000 Sq. Ft.
FRONT BUILD–TO LINE ~ 15'–25'
REAR SETBACK ~ 30'
SIDE SETBACK ~ 15'
WETLANDS BUFFER ~ 50.0'
MAX. BUILDING HEIGHT: 35'
MAX. LOT COVERAGE: 30%

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, A PORTION OF THIS PARCEL DOES FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD. FLOOD ELEVATION = 54.4' REF.: FEMA COMMUNITY #330145, MAP #33017C0320E, DATED: SEPTEMBER 30, 2015

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

9.) THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON TAX MAP 14, LOT 10–G AS OF THE DATE OF THE SURVEY.

10.) THE EXISTING LOT COVERAGE IS 84 Sq. Ft.

11.) THE EXISTING IMPERVIOUS LOT COVERAGE IT 0 Sq. Ft.

JURISDICTIONAL WETLANDS WERE DELINEATED BY CYNTHIA BALCIUS OF STONEY RIDGE ENVIRONMENTAL LLC IN JUNE OF 2019 UTILIZING THE FOLLOWING STANDARDS:

1) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0. 2010. L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.
2) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. VERSION 3. APRIL 2004. NEIWPCC WETLANDS WORKGROUP. WILMINGTON, MA 01887.
3) NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, VERSION 2.1.0 (HTTP://WETLAND_PLANTS.USACE.ARMY.MIL). U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER, COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, HANOVER, NH, AND BONAP, CHAPEN HILL.
4) STATE OF NEW HAMPSHIRE 2014 WETLAND PLANT LIST. LICHVAR, R.W., M. BUTTERWICH, N.C. MELVIN, AND W.N. KIRCHNER. 2014. THE NATIONAL WETLAND PLANT LIST: 2014 UPDATE OF WETLAND RATINGS. PHYTONEURON 2014–41:1–42.
5) CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. JANUARY 1987. WETLANDS RESEARCH PROGRAM TECHNICAL REPORT Y–87–1.
6) REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. JANUARY 2012, VERSION 2. U.S. ARMY CORPS OF ENGINEERS. ENVIRONMENTAL LABORATORY ERDC/EL TR–12–1.
7) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. DECEMBER 1979. L. COWARDIN, V. CARTER, F. GOLET, AND E. LAROE. US DEPARTMENT OF THE INTERIOR. FISH AND WILDLIFE SERVICE. FWS/OBS–79/31.

STONEY RIDGE ENVIRONMENTAL, LLC.
CYNTHIA BALCIUS, CWS #61

I CERTIFY THAT THIS PLAT EXCEEDS THE MINIMUM REQUIREMENT FOR ACCURACY AND COMPLETENESS OF THE STATE OF N.H. AND OF THE CITY OF DOVER, N.H. – 1:10,000 –

KENNETH A. BERRY LLS 805 DATE

DOVER PLANNING FILE #19–80

REVISION	DATE	DESCRIPTION
#2	1–30–20	REVISED PER TRC COMMENT
#1	12–16–19	REVISED PER STAFF COMMENT

EXISTING CONDITIONS PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10–G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019–077

STATE OF NEW HAMPSHIRE No. 805 LICENSED LAND SURVEYOR
KENNETH A. BERRY
SIGNATURE

OFFSITE SOILS:

BzB – BUXTON SILT LOAM, 3 TO 8 PERCENT SLOPES
SfC – SUFFIELD SILT LOAM, 8 TO 15 PERCENT SLOPES

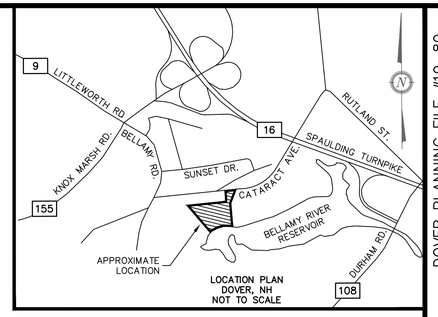
SEE WEBSOIL USDA–NRCS

STONEY RIDGE ENVIRONMENTAL, LLC.
CYNTHIA BALCIUS, CWS #61

STONEY RIDGE ENVIRONMENTAL, LLC.
CYNTHIA BALCIUS, CSS #84

JURISDICTIONAL WETLANDS WERE DELINEATED BY CYNTHIA BALCIUS OF STONEY RIDGE ENVIRONMENTAL LLC IN JUNE OF 2019 UTILIZING THE FOLLOWING STANDARDS:

1) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0. 2010. L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.
2) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. VERSION 3. APRIL 2004. NEIWPCC WETLANDS WORKGROUP. WILMINGTON, MA 01887.
3) NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, VERSION 2.1.0 (HTTP://WETLAND_PLANTS.USACE.ARMY.MIL). U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER, COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, HANOVER, NH, AND BONAP, CHAPEN HILL.
4) STATE OF NEW HAMPSHIRE 2014 WETLAND PLANT LIST. LICHVAR, R.W., M. BUTTERWICH, N.C. MELVIN, AND W.N. KIRCHNER. 2014. THE NATIONAL WETLAND PLANT LIST: 2014 UPDATE OF WETLAND RATINGS. PHYTONEURON 2014–41:1–42.
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LOCATION PLAN
DOVER, NH
NOT TO SCALE

NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10–G

3.) LOT AREA: 228,717 Sq. Ft., 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

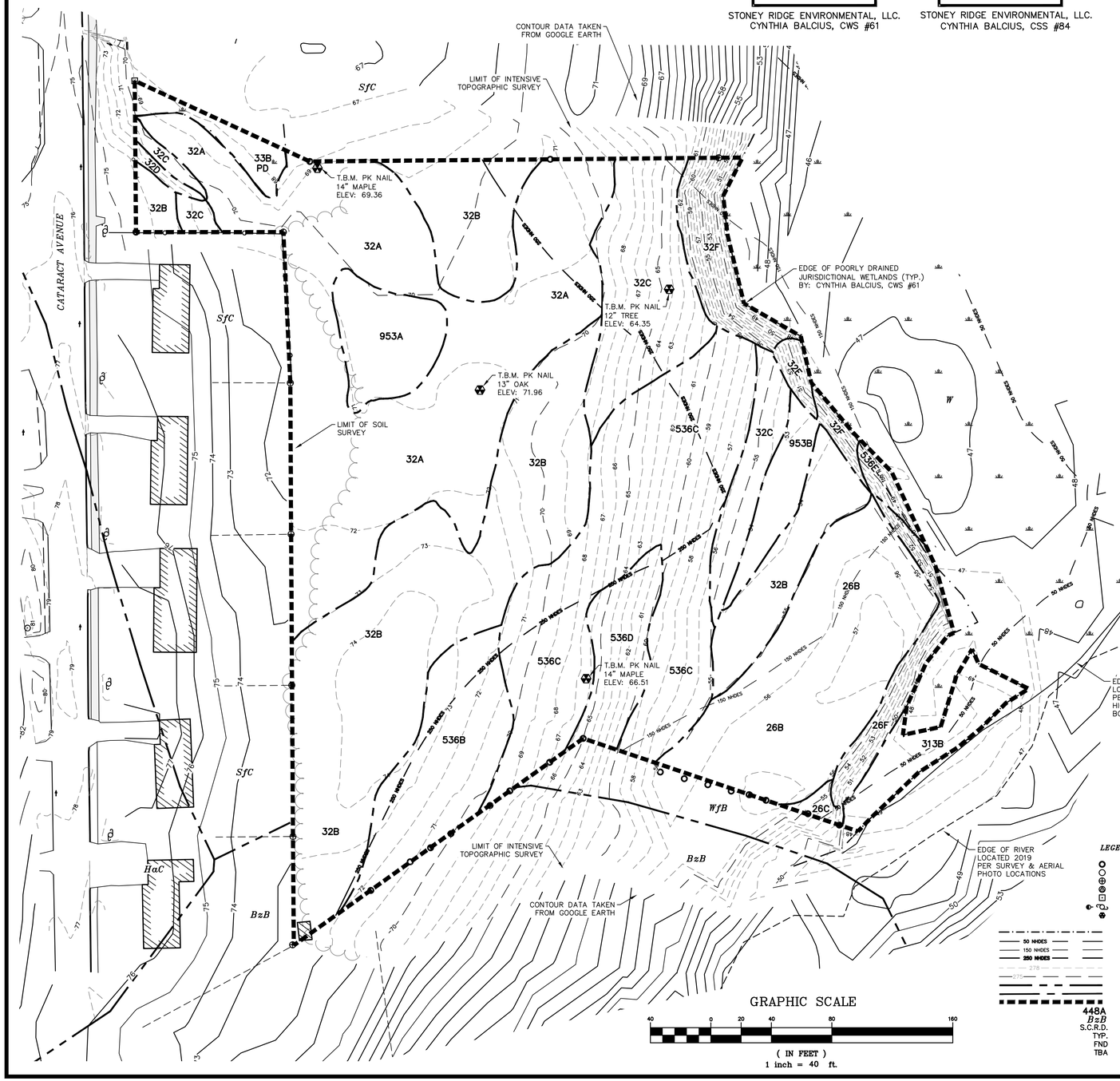
5.) ZONING: (R–12) MEDIUM DENSITY RESIDENTIAL DISTRICT
MINIMUM FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 12,000 Sq. Ft.
FRONT BUILD–TO LINE ~ 15'–25'
REAR SETBACK ~ 30'
SIDE SETBACK ~ 15'
WETLANDS BUFFER ~ 50.0'
MAX. BUILDING HEIGHT: 35'
MAX. LOT COVERAGE: 30%

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, A PORTION OF THIS PARCEL DOES FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD. FLOOD ELEVATION = 54.4' REF.: FEMA COMMUNITY #330145, MAP #33017C0320E, DATED: SEPTEMBER 30, 2015

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

9.) THE INTENT OF THIS PLAN IS TO REPRESENT THE SITE SPECIFIC SOILS ON TAX MAP 14, LOT 10–G AS OF THE DATE OF THIS PLAN.



GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

LEGEND:

- IRON BOUND ~FND~
- IRON PIPE ~FND~
- STEEL STAKE ~FND~
- SPIKE ~FND~
- GRANITE BOUND ~FND~
- UTILITY POLE/GUY WIRE
- BENCHMARK
- WETLAND LINE
- 50' NHDES PRIMARY SETBACK
- 150' NHDES NATURAL WOODLAND SETBACK
- 250' NHDES SETBACK
- EXISTING CONTOUR MINOR
- EXISTING CONTOUR MAJOR
- OFF SITE NRCS SOIL LINE
- SOIL LINE
- LIMIT OF SOIL SURVEY
- 448A SOIL SERIES
- *BzB* NRCS SOIL LABEL
- S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
- TYP. TYPICAL
- FND FOUND
- TBA TO BE ABANDONED

SOILS LEGEND

SYMBOL	SOIL TAXONOMIC NAME	HYDROLOGIC SOIL GROUP
32B	BOXFORD LOAM	C
32C	BOXFORD LOAM	C
32D	BOXFORD LOAM	C
32E	BOXFORD LOAM	C
32F	BOXFORD LOAM	C
953A	BOXFORD LOAM VARIANT	C
953B	BOXFORD LOAM VARIANT	C
536B	SUFFIELD LOAM	C
536C	SUFFIELD LOAM	C
536D	SUFFIELD LOAM	C
536E	SUFFIELD LOAM	C
26B	WINDSOR FINE SANDY LOAM	A
26C	WINDSOR FINE SANDY LOAM	A
26F	WINDSOR FINE SANDY LOAM	A
313B	DEERFIELD FINE SANDY LOAM	B
33B/PD	SCITICO LOAM	C

SLOPE: A = 0–3% B = 3–8% C = 8–15% D = 15–25% E = 25–50% F = 50%+

DENOMINATOR: /VPD = VERY POORLY DRAINED /PD = POORLY DRAINED /SWPD = SOMEWHAT POORLY DRAINED /MWD = MODERATELY WELL DRAINED

DOVER PLANNING FILE #19–80

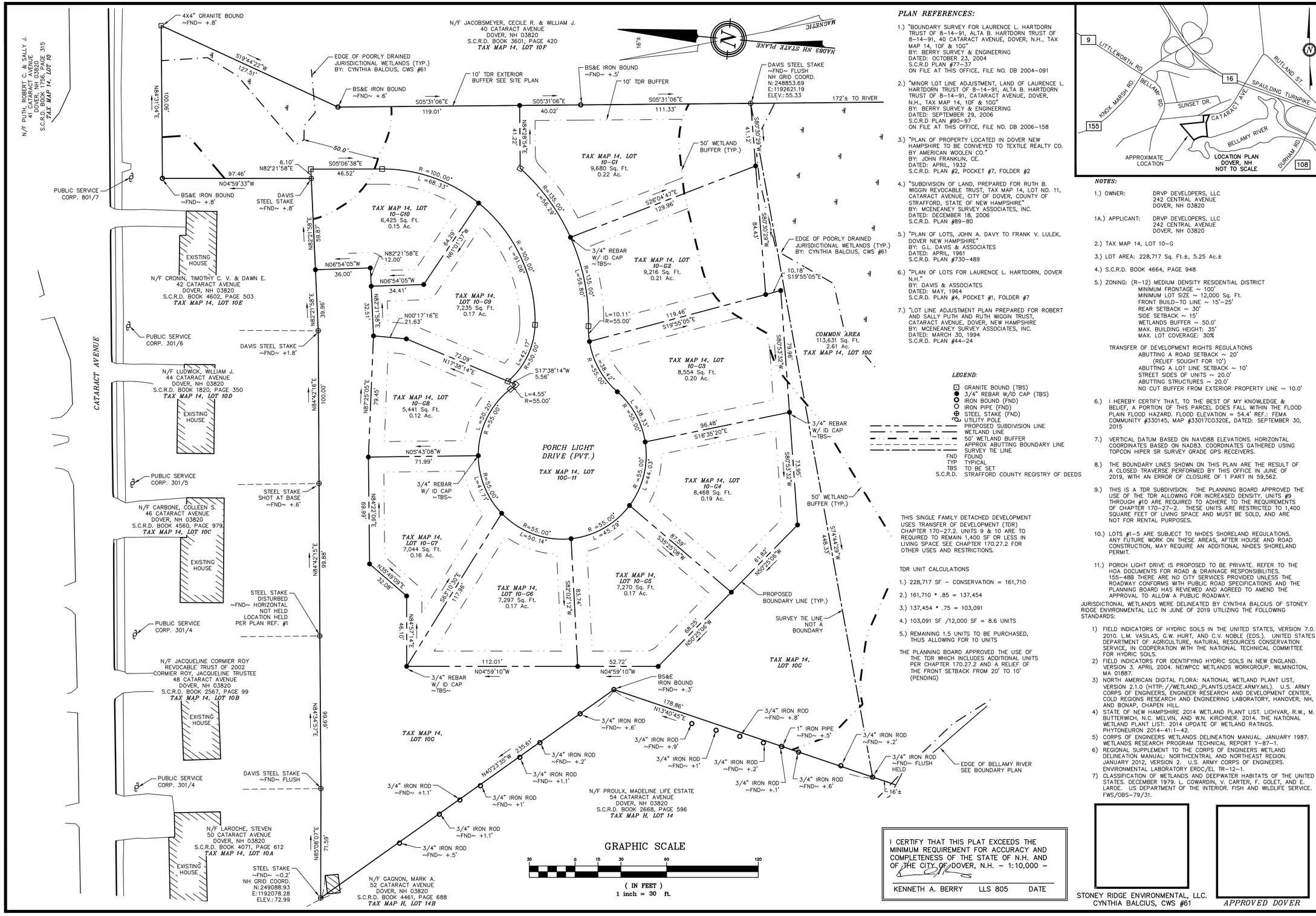
REVISION	DATE	DESCRIPTION
#2	1–30–20	REVISED PER TRC COMMENT
#1	12–16–19	REVISED PER STAFF COMMENT

SITE SPECIFIC SOILS MAP
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10–G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 40 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019–077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED
PROFESSIONAL ENGINEER



PLAN REFERENCES:

1.) "BOUNDARY SURVEY FOR LAURENCE L. HARTDORN TRUST OF 8-14-91, ALTA B. HARTDORN TRUST OF 8-14-91, 40 CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G" BY: BERRY SURVEY & ENGINEERING DATED: OCTOBER 23, 2004 S.C.R.D PLAN #77-37 ON FILE AT THIS OFFICE, FILE NO. DB 2004-091

2.) "MINOR LOT LINE ADJUSTMENT, LAND OF LAURENCE L. HARTDORN TRUST OF 8-14-91, ALTA B. HARTDORN TRUST OF 8-14-91, CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G" BY: BERRY SURVEY & ENGINEERING DATED: SEPTEMBER 29, 2006 S.C.R.D PLAN #90-97 ON FILE AT THIS OFFICE, FILE NO. DB 2006-158

3.) "PLAN OF PROPERTY LOCATED IN DOVER NEW HAMPSHIRE TO BE CONVEYED TO TEXTILE REALTY CO. BY AMERICAN WOOLEN CO." BY: JOHN FRANKLIN, CE. DATED: APRIL, 1932 S.C.R.D. PLAN #2, POCKET #7, FOLDER #2

4.) "SUBDIVISION OF LAND, PREPARED FOR RUTH B. WGGIN REVOCABLE TRUST, TAX MAP 14, LOT NO. 11, CATARACT AVENUE, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE" BY: MCENEANEY SURVEY ASSOCIATES, INC. DATED: DECEMBER 18, 2006 S.C.R.D. PLAN #89-80

5.) "PLAN OF LOTS, JOHN A. DAVY TO FRANK V. LULEK, DOVER NEW HAMPSHIRE" BY: G.L. DAVIS & ASSOCIATES DATED: APRIL, 1961 S.C.R.D. PLAN #730-489

6.) "PLAN OF LOTS FOR LAURENCE L. HARTDORN, DOVER N.H." BY: DAVIS & ASSOCIATES DATED: MAY, 1964 S.C.R.D. PLAN #4, POCKET #1, FOLDER #7

7.) "LOT LINE ADJUSTMENT PLAN PREPARED FOR ROBERT AND SALLY PUTH AND RUTH WGGIN TRUST, CATARACT AVENUE, DOVER, NEW HAMPSHIRE BY: MCENEANEY SURVEY ASSOCIATES, INC. DATED: MARCH 30, 1994 S.C.R.D. PLAN #44-24

LEGEND:

- GRANITE BOUND (TBS)
- 3/4" REBAR W/ID CAP (TBS)
- IRON BOUND (FND)
- IRON PIPE (FND)
- STEEL STAKE (FND)
- UTILITY POLE
- PROPOSED SUBDIVISION LINE
- WETLAND LINE
- 50' WETLAND BUFFER
- APPROX ABUTTING BOUNDARY LINE
- SURVEY TIE LINE

FND FOUND
TYP TYPICAL
TBS TO BE SET
S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS

THIS SINGLE FAMILY DETACHED DEVELOPMENT USES TRANSFER OF DEVELOPMENT (TDR) CHAPTER 170-27.2. UNITS 9 & 10 ARE TO REQUIRED TO REMAIN 1,400 SF OR LESS IN LIVING SPACE SEE CHAPTER 170.27.2 FOR OTHER USES AND RESTRICTIONS.

TDR UNIT CALCULATIONS

1.) 228,717 SF - CONSERVATION = 161,710

2.) 161,710 * .85 = 137,454

3.) 137,454 * .75 = 103,091

4.) 103,091 SF /12,000 SF = 8.6 UNITS

5.) REMAINING 1.5 UNITS TO BE PURCHASED, THUS ALLOWING FOR 10 UNITS

THE PLANNING BOARD APPROVED THE USE OF THE TDR WHICH INCLUDES ADDITIONAL UNITS PER CHAPTER 170.27.2 AND A RELIEF OF THE FRONT SETBACK FROM 20' TO 10' (PENDING)

I CERTIFY THAT THIS PLAT EXCEEDS THE MINIMUM REQUIREMENT FOR ACCURACY AND COMPLETENESS OF THE STATE OF N.H. AND OF THE CITY OF DOVER, N.H. - 1:10,000 -

KENNETH A. BERRY LLS 805 DATE

STONEY RIDGE ENVIRONMENTAL, LLC.
CYNTHIA BALCIUS, CWS #61

APPROVED DOVER

NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) ZONING: (R-12) MEDIUM DENSITY RESIDENTIAL DISTRICT
MINIMUM FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 12,000 Sq. Ft.
FRONT BUILD-TO LINE ~ 15'-25'
REAR SETBACK ~ 30'
SIDE SETBACK ~ 15'
WETLANDS BUFFER ~ 50.0'
MAX. BUILDING HEIGHT: 35'
MAX. LOT COVERAGE: 30%

TRANSFER OF DEVELOPMENT RIGHTS REGULATIONS
ABUTTING A ROAD SETBACK ~ 20'
(RELIEF SOUGHT FOR 10')
ABUTTING A LOT LINE SETBACK ~ 10'
STREET SIDES OF UNITS ~ 20.0'
ABUTTING STRUCTURES ~ 20.0'
NO CUT BUFFER FROM EXTERIOR PROPERTY LINE ~ 10.0'

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, A PORTION OF THIS PARCEL DOES FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD. FLOOD ELEVATION = 54.4' REF.: FEMA COMMUNITY #330145, MAP #33017C0320E, DATED: SEPTEMBER 30, 2015

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

9.) THIS IS A TDR SUBDIVISION. THE PLANNING BOARD APPROVED THE USE OF THE TDR ALLOWING FOR INCREASED DENSITY. UNITS #9 THROUGH #10 ARE REQUIRED TO ADHERE TO THE REQUIREMENTS OF CHAPTER 170-27-2. THESE UNITS ARE RESTRICTED TO 1,400 SQUARE FEET OF LIVING SPACE AND MUST BE SOLD, AND ARE NOT FOR RENTAL PURPOSES.

10.) LOTS #1-5 ARE SUBJECT TO NHDES SHORELAND REGULATIONS. ANY FUTURE WORK ON THESE AREAS, AFTER HOUSE AND ROAD CONSTRUCTION, MAY REQUIRE AN ADDITIONAL NHDES SHORELAND PERMIT.

11.) PORCH LIGHT DRIVE IS PROPOSED TO BE PRIVATE. REFER TO THE HOA DOCUMENTS FOR ROAD & DRAINAGE RESPONSIBILITIES. 155-488 THERE ARE NO CITY SERVICES PROVIDED UNLESS THE ROADWAY CONFORMS WITH PUBLIC ROAD SPECIFICATIONS AND THE PLANNING BOARD HAS REVIEWED AND AGREED TO AMEND THE APPROVAL TO ALLOW A PUBLIC ROADWAY.

JURISDICTIONAL WETLANDS WERE DELINEATED BY CYNTHIA BALCIUS OF STONEY RIDGE ENVIRONMENTAL LLC IN JUNE OF 2019 UTILIZING THE FOLLOWING STANDARDS:

1) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0. 2010. L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.
2) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. VERSION 3. APRIL 2004. NEIWPCC WETLANDS WORKGROUP. WILMINGTON, MA 01887.
3) NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, VERSION 2.1.0 (HTTP://WETLAND_PLANTS.USACE.ARMY.MIL). U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER, COLD REGIONS RESEARCH AND ENGINEERING LABORATORY, HANOVER, NH, AND BONAP, CHAPEN HILL.
4) STATE OF NEW HAMPSHIRE 2014 WETLAND PLANT LIST. LICHVAR, R.W., M. BUTTERWICH, N.C. MELVIN, AND W.N. KIRCHNER. 2014. THE NATIONAL WETLAND PLANT LIST: 2014 UPDATE OF WETLAND RATINGS. PHYTONEURON 2014-41:1-42.
5) CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL. JANUARY 1987. WETLANDS RESEARCH PROGRAM TECHNICAL REPORT Y-87-1.
6) REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. JANUARY 2012, VERSION 2. U.S. ARMY CORPS OF ENGINEERS. ENVIRONMENTAL LABORATORY ERDC/EL TR-12-1.
7) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. DECEMBER 1979. L. COWARDIN, V. CARTER, F. GOLET, AND E. LAROE. US DEPARTMENT OF THE INTERIOR. FISH AND WILDLIFE SERVICE. FWS/OBS-79/31.

DOVER PLANNING FILE #19-80

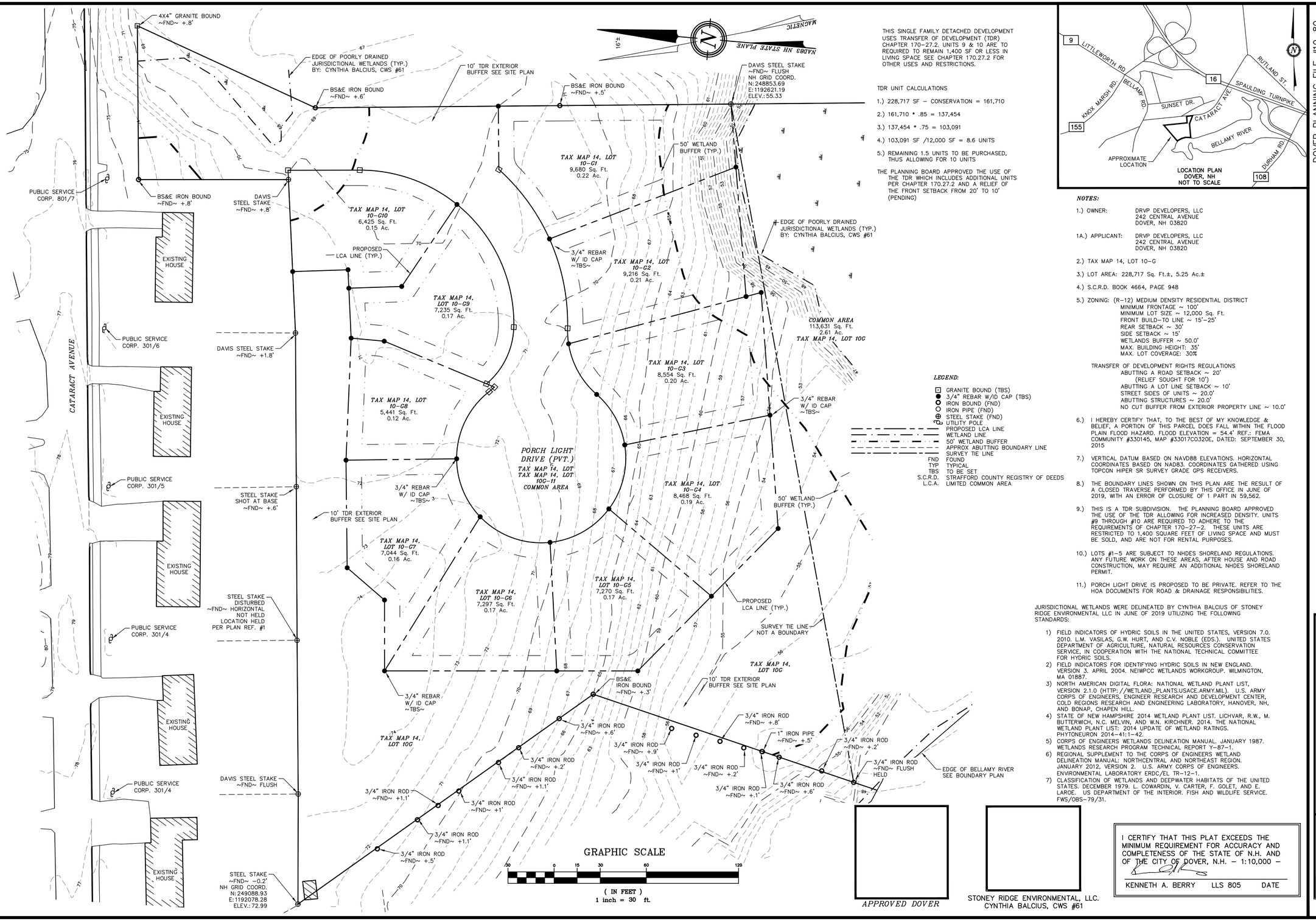
REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

TRANSFER OF DEVELOPMENT RIGHTS SUBDIVISION PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE — No. 805 — KENNETH A. BERRY — LICENSED LAND SURVEYOR — SIGNATURE



NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) ZONING: (R-12) MEDIUM DENSITY RESIDENTIAL DISTRICT
MINIMUM FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 12,000 Sq. Ft.
FRONT BUILD-TO LINE ~ 15'-25'
REAR SETBACK ~ 30'
SIDE SETBACK ~ 15'
WETLANDS BUFFER ~ 50.0'
MAX. BUILDING HEIGHT: 35'
MAX. LOT COVERAGE: 30%

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(RELIEF SOUGHT FOR 10')
ABUTTING A LOT LINE SETBACK ~ 10'
STREET SIDES OF UNITS ~ 20.0'
ABUTTING STRUCTURES ~ 20.0'
NO CUT BUFFER FROM EXTERIOR PROPERTY LINE ~ 10.0'

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, A PORTION OF THIS PARCEL DOES FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD. FLOOD ELEVATION = 54.4' REF.: FEMA COMMUNITY #330145, MAP #33017C0320E, DATED: SEPTEMBER 30, 2015

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

9.) THIS IS A TDR SUBDIVISION. THE PLANNING BOARD APPROVED THE USE OF THE TDR ALLOWING FOR INCREASED DENSITY. UNITS #9 THROUGH #10 ARE REQUIRED TO ADHERE TO THE REQUIREMENTS OF CHAPTER 170-27-2. THESE UNITS ARE RESTRICTED TO 1,400 SQUARE FEET OF LIVING SPACE AND MUST BE SOLD, AND ARE NOT FOR RENTAL PURPOSES.

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JURISDICTIONAL WETLANDS WERE DELINEATED BY CYNTHIA BALCIUS OF STONEY RIDGE ENVIRONMENTAL LLC IN JUNE OF 2019 UTILIZING THE FOLLOWING STANDARDS:

1) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0. 2010. L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.
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LEGEND:

- GRANITE BOUND (TBS)
- 3/4" REBAR W/ID CAP (TBS)
- IRON BOUND (FND)
- IRON PIPE (FND)
- STEEL STAKE (FND)
- UTILITY POLE
- PROPOSED LCA LINE
- WETLAND LINE
- 50' WETLAND BUFFER
- APPROX ABUTTING BOUNDARY LINE
- SURVEY TIE LINE

FND FOUND
TYP TYPICAL
TBS TO BE SET
S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
L.C.A. LIMITED COMMON AREA

APPROVED DOVER

STONEY RIDGE ENVIRONMENTAL, LLC.
CYNTHIA BALCIUS, CWS #61

I CERTIFY THAT THIS PLAT EXCEEDS THE MINIMUM REQUIREMENT FOR ACCURACY AND COMPLETENESS OF THE STATE OF N.H. AND OF THE CITY OF DOVER, N.H. – 1:10,000 –

KENNETH A. BERRY LLS 805 DATE

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
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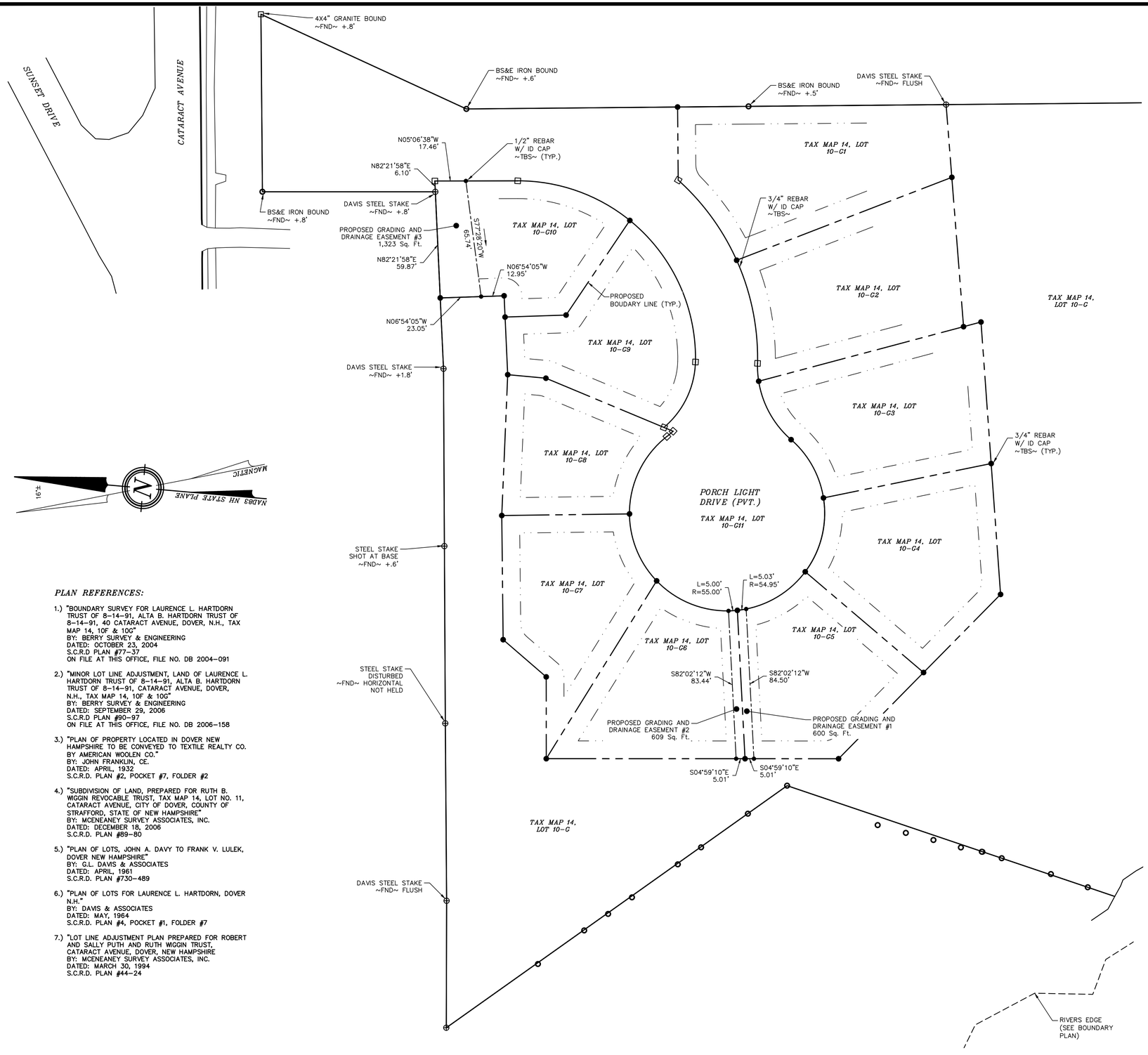
DOVER PLANNING FILE #19-80

TRANSFER OF DEVELOPMENT RIGHTS SUBDIVISION PLAN TOPO
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE NO. 805 KENNETH A. BERRY LICENSED LAND SURVEYOR SIGNATURE



PLAN REFERENCES:

1.) "BOUNDARY SURVEY FOR LAURENCE L. HARTDORN TRUST OF 8-14-91, ALTA B. HARTDORN TRUST OF 8-14-91, 40 CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G"
BY: BERRY SURVEY & ENGINEERING
DATED: OCTOBER 23, 2004
S.C.R.D PLAN #77-37
ON FILE AT THIS OFFICE, FILE NO. DB 2004-091

2.) "MINOR LOT LINE ADJUSTMENT, LAND OF LAURENCE L. HARTDORN TRUST OF 8-14-91, ALTA B. HARTDORN TRUST OF 8-14-91, CATARACT AVENUE, DOVER, N.H., TAX MAP 14, 10F & 10G"
BY: BERRY SURVEY & ENGINEERING
DATED: SEPTEMBER 29, 2006
S.C.R.D PLAN #90-97
ON FILE AT THIS OFFICE, FILE NO. DB 2006-158

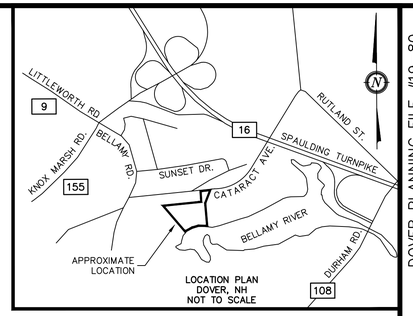
3.) "PLAN OF PROPERTY LOCATED IN DOVER NEW HAMPSHIRE TO BE CONVEYED TO TEXTILE REALTY CO. BY AMERICAN WOOLEN CO."
BY: JOHN FRANKLIN, CE.
DATED: APRIL, 1932
S.C.R.D. PLAN #2, POCKET #7, FOLDER #2

4.) "SUBDIVISION OF LAND, PREPARED FOR RUTH B. WIGGIN REVOCABLE TRUST, TAX MAP 14, LOT NO. 11, CATARACT AVENUE, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE"
BY: MCENEANEY SURVEY ASSOCIATES, INC.
DATED: DECEMBER 18, 2006
S.C.R.D. PLAN #89-80

5.) "PLAN OF LOTS, JOHN A. DAVY TO FRANK V. LULEK, DOVER NEW HAMPSHIRE"
BY: G.L. DAVIS & ASSOCIATES
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6.) "PLAN OF LOTS FOR LAURENCE L. HARTDORN, DOVER N.H."
BY: DAVIS & ASSOCIATES
DATED: MAY, 1964
S.C.R.D. PLAN #4, POCKET #1, FOLDER #7

7.) "LOT LINE ADJUSTMENT PLAN PREPARED FOR ROBERT AND SALLY PUTH AND RUTH WIGGIN TRUST, CATARACT AVENUE, DOVER, NEW HAMPSHIRE
BY: MCENEANEY SURVEY ASSOCIATES, INC.
DATED: MARCH 30, 1994
S.C.R.D. PLAN #44-24



LOCATION PLAN
DOVER, NH
NOT TO SCALE

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft., 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

6.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

7.) THE INTENT OF THIS PLAN IS TO SHOW THE PROPOSED EASEMENTS RELATING TO THE TRANSFER OF DEVELOPMENT RIGHTS DEVELOPMENT.

LEGEND:

- ● 3/4" REBAR W/ID CAP (TBS)
- • 1/2" REBAR W/EASEMENT ID CAP (TBS)
- ⊡ GRANITE BOUND (TBS)
- ○ IRON BOUND (FND)
- PROPOSED BOUNDARY LINE
- PROPOSED EASEMENT LINE

TBS TO BE SET
FND FOUND
TYP TYPICAL
S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

KENNETH A. BERRY L.L.S. 805 DATE

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

EASEMENT PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE No. 805 KENNETH A BERRY LICENSED LAND SURVEYOR SIGNATURE

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) ZONING: (R-12) MEDIUM DENSITY RESIDENTIAL DISTRICT
MINIMUM FRONTAGE ~ 100'
MINIMUM LOT SIZE ~ 12,000 Sq. Ft.
FRONT BUILD-TO LINE ~ 15'-25'
REAR SETBACK ~ 30'
SIDE SETBACK ~ 15'
WETLANDS BUFFER ~ 50.0'
MAX. BUILDING HEIGHT: 35'
MAX. LOT COVERAGE: 30%
TRANSFER OF DEVELOPMENT RIGHTS (TDR):
MINIMUM DISTANCE AROUND INDIVIDUAL UNITS IN CLUSTERS:
STREET SIDES OF UNITS ~ 20 Ft.
BETWEEN UNITS ~ 20 Ft.
BOUNDARY LINE ~ 10 Ft.

6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, A PORTION OF THIS PARCEL DOES FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD, ELEV. = 54.4. REF.: FEMA COMMUNITY #330145, MAP #33017C0320E, DATED: SEPTEMBER 30, 2015

7.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN JUNE OF 2019, WITH AN ERROR OF CLOSURE OF 1 PART IN 59,562.

9.) THE INTENT OF THIS PLAN IS TO SHOW THE PROPOSED SITE DEVELOPMENT FOR THE TDR SUBDIVISION.

10.) AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON PAPER AND IN DIGITAL FORMAT AUTOCAD DWG, AUTOCAD DXF OR ESRI FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT IF A STREET IS PROPOSED FOR CITY ACCEPTANCE. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO-REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.

11.) THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED. SUBDIVISION PLANS SHALL SHOW ANY EASEMENTS FOR THESE SERVICES.

12.) THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.

13.) 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 SPECIFICATION FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.

14.) ALL EROSION CONTROL NOTES SHALL INCLUDE PROVISIONS FOR CONSTRUCTION SEQUENCING, TEMPORARY EROSION CONTROL MEASURES, AND PERMANENT STANDARDS SUCH AS LOAM SPREAD RATE FOR DISTURBED AREAS, RATES OF LIME, TYPE AND RATES FOR FERTILIZER, AND SEED AND MULCH MIXTURE WITH RATES OF APPLICATION.

15.) THERE IS NO PROPOSED DISTURBANCE WITHIN THE 50 WETLAND BUFFER ALONG THE BACKSIDE OF THE PROPOSED DEVELOPMENT. 5,979 Sq.Ft. OF DISTURBANCE AT ENTRANCE.

16.) ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.

17.) A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED, AND THE APPROVED CONSTRUCTION SIGN INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.

18.) 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.

19.) SITE CONSTRUCTION AND EXCAVATION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM, SATURDAY 9AM - 4PM AND NOSUNDAY HOURS. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR AND THAT THE ROAD IS PRIVATE WITH NO CITY SERVICES. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASSISTANT CITY MANAGER.THE PROJECT SIGN SHOULD ALSO STATE THAT THE ROAD IS PROPOSED TO BE PRIVATE AND IS INTENDED TO REMAIN PRIVATE WITH NO CITY SERVICES.

20.) BUILDING ADDRESSES (INCLUDING APT/UNIT NUMBERS IF APPLICABLE) SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

21.) THE PROPOSED USE FOR THE SITE IS FOR A TRANSFER OF DEVELOPMENT RIGHTS (TDR) DEVELOPMENT.

22.) THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:
NHDES SHORELAND PERMIT: PENDING
NHDES WETLAND PERMIT: PENDING
EPA NOTICE OF INTENT (NOI): PENDING
NHDES SEWER DISCHARGE PERMIT: PENDING
NHDES ALTERATION OF TERRAIN: PENDING

23.) COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR. .

24.) APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL.

25.) THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS/ENTITIES THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVED STORMWATER MANAGEMENT PLAN. THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.

26.) ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.

NOTES CONT.:

27.) WETLANDS WERE DELINEATED BY STONEY RIDGE ENVIRONMENTAL, CERTIFIED WETLAND SCIENTIST, CERTIFICATION NUMBER 61, IN ACCORDANCE WITH CHAPTER 170-27.1 OF THE ZONING ORDINANCE IN 2019.

28.) THIS SITE DESIGN HAS BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE ACCESSIBILITY REGULATIONS IN ACCORDANCE WITH NH RSA 155-A:5.

29.) WRITTEN DIMENSION ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONFIRM ALL ELEVATIONS. CONFLICTS WILL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

30.) THE PROPOSED USE FOR THE SITE IS SINGLE FAMILY DETACHED HOUSING.

31.) LIST ANY VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT: NONE
CONDITIONAL USE PERMITS REQUIRED BY THE PLANNING BOARD: WORK WITHIN THE 50' WETLAND BUFFER: PENDING

33.) FROM GROUND BREAKING THE SITE SHALL REMAIN ACCESSIBLE YEAR ROUND IN ALL WEATHER CONDITIONS.

34.) ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.

35.) ANY FENCE TALLER THAN SIX FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.

36.) FIRE DEPARTMENT ACCESS ROAD(S) SHALL BE INSTALLED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS IN ALL WEATHER CONDITIONS AT ALL TIMES.

37.) EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.

38.) THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL BE ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. (I.E. IBC, ANSI-117.1) AND NH RSA 155-A:5. (N/A)

39.) RESIDENTIAL LIGHTS ARE TO BE PLACED ON EACH UNIT.

40.) THE PROPOSED PROJECT WILL CONSIST OF TWO PHASES. THE FIRST PHASE WILL BE THE CONSTRUCTION OF THE PROPOSED ROAD, RELATING GRADING/DRAINAGE AND THE STORM WATER MANAGEMENT SYSTEM (RAIN GARDENS AND LEVEL SPREADER). THE ROAD, RAIN GARDENS AND LEVEL SPREADER IS TO BE FULLY CONSTRUCTED AND STABILIZED PRIOR TO RESIDENTIAL LOT CONSTRUCTION.
PHASE 1 (ROAD): 39,000 SqFt. OF DISTURBANCE
PHASE 2 (RESIDENTIAL): 42,000 Sq.Ft. OF DISTURBANCE

41.)EXISTING BUILDING IMPERVIOUS AREA: 0 Sq.Ft. (0%)
EXISTING PAVED IMPERVIOUS AREA: 0 Sq.Ft. (0%)
TOTAL EXISTING IMPERVIOUS COVER: 0 Sq.Ft. (0%)
PROPOSED BUILDING IMPERVIOUS AREA: 13,120 Sq.Ft. (5.7%)
PROPOSED PAVED IMPERVIOUS AREA: 22,208 Sq.Ft. (11.3%)
TOTAL PROPOSED IMPERVIOUS COVER: 39,208 Sq.Ft. (17.1%)
TOTAL PROPOSED IMPERVIOUS WITHIN 250' BUFFER: 5,283 Sq.Ft. (3.6%)

42.) SEE GRADING PLANS FOR WETLAND DISTURBANCE AREAS.

43.) PRIOR TO LAND CLEARING BUFFERS WILL BE STAKED BY BERRY SURVEYING & ENGINEERING WITH FLACKARDS. ORANGE CONSTRUCTION FENCE WILL BE ERECTED ALONG THE LINE.

44.) A DRIP EDGE IS PROPOSED TO BE INSTALLED AROUND EACH UNIT. SEE GRADING PLAN FOR DETAILS.

45.) PRIVATE TRASH PICKUP WILL BE THROUGH THE USE OF TOTTERS.

46.) ALL STREET TREES ARE TO HAVE A 3" CALIPER OR GREATER WHEN PLANTED.

47.) ALL UNITS WILL HAVE GARAGES.

48.) VISITOR PARKING IS SUBJECT TO HOA RULES PERTAINING TO USE AND TIME LIMITS

49.) TIP DOWNS AT ALL DRIVEWAY ENTRANCES FOR CURB.

50.) IF REQUIRED, SNOW SHALL BE REMOVED TO AN APPROVED LOCATION. PAVEMENT COVERAGE: 22,208 Sq. Ft.
SNOW STORAGE: 3,701 Sq. Ft.
6:1 RATIO PROVIDED

51.) ALL PROPOSED UNITS ARE AT LEAST 20 FEET OFF THE EDGE OF PAVEMENT.

CONDITIONAL USE PERMITS:
CONSTRUCTION WITHIN THE 50' BUFFER (5,979 Sq. Ft. PROPOSED): PENDING

WAIVER REQUESTS:
ROAD LESS THAN 500' TO THE NECK (400' PROPOSED): PENDING

THIS SINGLE FAMILY DETACHED DEVELOPMENT USES TRANSFER OF DEVELOPMENT (TDR) CHAPTER 170-27.2. UNITS 9 & 10 ARE TO REQUIRED TO REMAIN 1,400 SF OR LESS IN LIVING SPACE SEE CHAPTER 170.27.2 FOR OTHER USES AND RESTRICTIONS.

TDR UNIT CALCULATIONS

1.) 228,717 SF - 67,007 (CONSERVATION) = 161,710

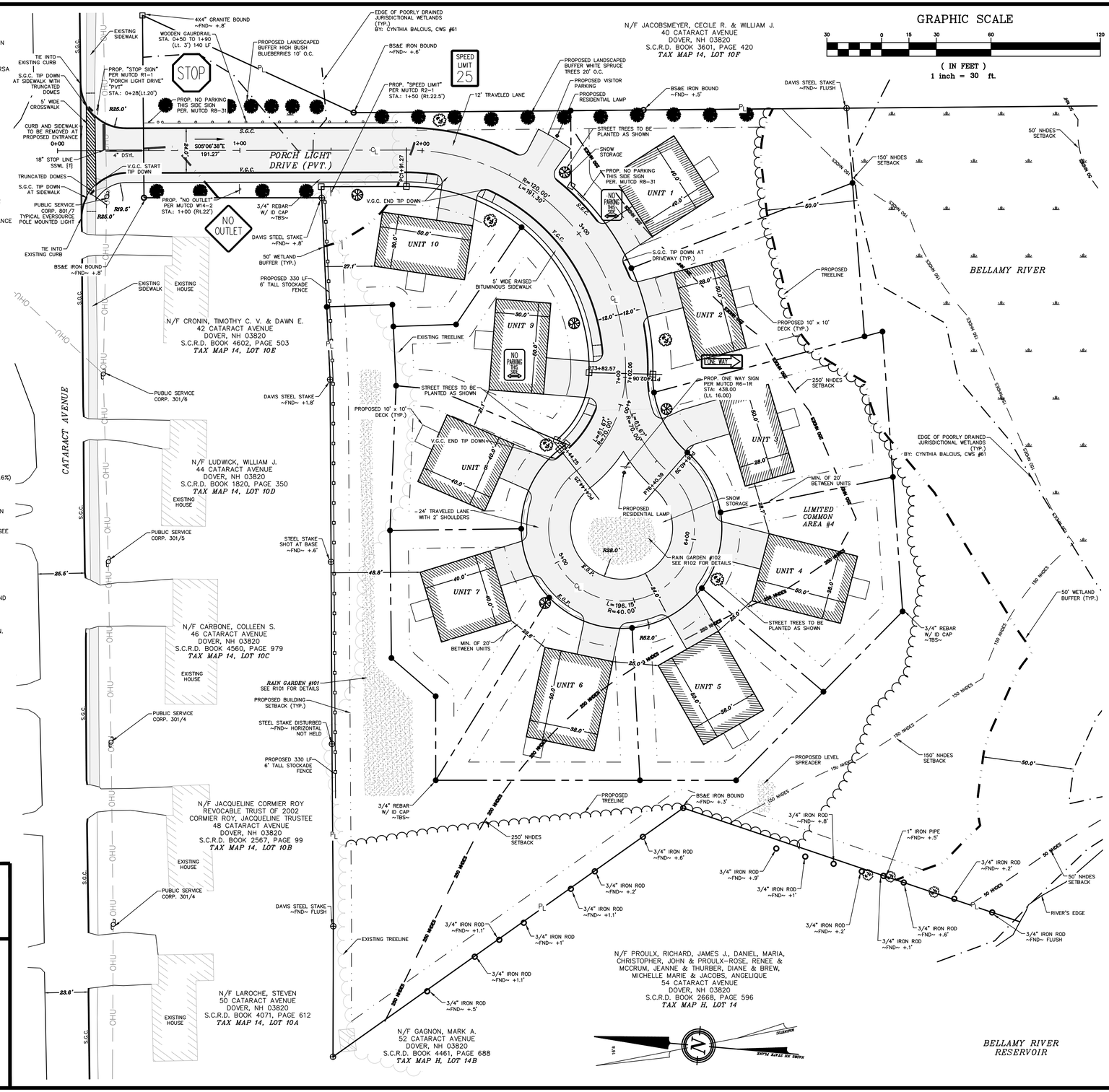
2.) 161,710 * .85 = 137,454

3.) 137,454 * .75 = 103,091

4.) 103,091 SF /12,000 SF = 8.6 UNITS

5.) REMAINING 1.5 UNITS TO BE PURCHASED, THUS ALLOWING FOR 10 UNITS

THE PLANNING BOARD APPROVED THE USE OF THE TDR WHICH INCLUDES ADDITIONAL UNITS PER CHAPTER 170.27.2 AND A RELIEF OF THE FRONT SETBACK FROM 20' TO 10' (PENDING)



DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

SITE PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 3043
LICENSED PROFESSIONAL ENGINEER

NOTES:

1. OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2. APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

3. TAX MAP 14, LOT 10–G

4. LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

5. S.C.R.D. BOOK 4664, PAGE 948

6. EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING AND IS ENCLOSED IN THIS PACKAGE.

7. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS DATED 2016. CURRENT STANDARD PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

8. CONTRACTOR SHALL TAKE SPECIAL CARE IN NOT DISTURBING EXISTING MONUMENTS BOUNDS, AND OR BENCHMARKS WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION

9. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES CALL "DIG–SAFE" 1–888–DIGSAFE (344–7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION

10. WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.

11. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.

12. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. LIMIT OF GRADING SHOULD NOT BE EXPANDED WITHOUT CONSULTING THE DESIGN ENGINEER. SEE ALSO E&SC PLAN.

13. THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS, OR, WHERE APPLICABLE, RE–USING EXISTING MATERIALS IDENTIFIED AS "REMOVE & RESET" (R & R).

14. ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES, AND ALL OTHER MARKINGS NOTED WITH {T} SHALL BE THERMOPLASTIC.

15. ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM PLACED AND SEEDED. THE LOAM SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, EDGING, BERM OR PAVEMENT SURFACE.

16. ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY. TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER.

17. NOTE THAT THE PROJECT IS SUBJECT TO THE EPA NPDES PHASE II. THE NOTICE OF INTENT (NOI) MUST BE FILED ALONG WITH A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). BIWEEKLY INSPECTIONS WILL BE CONDUCTED BY THE DESIGN ENGINEER AND AFTER STORM EVENTS OF OVER 0.25".

18. UPON FINAL COMPLETION AND 85% STABILIZATION THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS TO INCLUDE THE PUMPING OF THE BASIN SUMPS. SEE SHEET E102, DETAIL E18 FOR DEFINITION OF STABLE.

19. ALL UNPAVED AREAS ARE TO RECEIVE 4" QUALITY LOAM AND SEED.

20. ALL BASINS AND DRAINS ARE TO HAVE BOOTS INSTALLED ON ALL INLETS AND OUTLETS.

21. ALL TREATMENT SWALE TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS UNLESS OTHERWISE INSTRUCTED BY THE DESIGN ENGINEER DURING CONSTRUCTION.

22. A LETTER OF CREDIT FOR THE COST OF RE–VEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS, AS MAY BE APPLICABLE.

23. A PRE–CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND DOVER CITY STAGF SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.

24. BUILDING ADDRESSES SHALL BE DETERMINED BY THE BUILDING OGFICIAL.

25. THE PROPOSED PROJECT WILL CONSIST OF TWO PHASES. THE FIRST PHASE WILL BE THE CONSTRUCTION OF THE PROPOSED ROAD, RELATING GRADING/DRAINAGE AND THE STORM WATER MANAGEMENT SYSTEM (RAIN GARDENS AND LEVEL SPREADER). THE ROAD, RAIN GARDENS AND LEVEL SPREADER IS TO BE FULLY CONSTRUCTED AND STABILIZED PRIOR TO RESIDENTIAL LOT CONSTRUCTION.
PHASE 1 (ROAD): 39,000 SqFt. OF DISTURBANCE
PHASE 2 (RESIDENTIAL): 42,000 Sq.Ft. OF DISTURBANCE

26. WRITTEN DIMENSION ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONFIRM ALL ELEVATIONS. CONFLICTS WILL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

27. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH CITY OF DOVER CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.

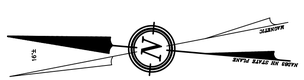
28. THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE AT 1–888–344–7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

29. SEE DETAILS CONCERNING SITE LAYOUT, DRAINAGE, UTILITY, AND SEDIMENT AND EROSION CONTROLS.

30. ALL DRAINAGE PIPE IS TO BE HDPE N–12. INDIVIDUAL PIPE SIZES ARE SPECIFIED, RECYCLED PIPE IS APPROVED FOR PROJECT SITE. RECYCLED HDPE PIPE "GREEN PIPE" IS ACCEPTABLE FOR THIS PROJECT SITE.

31. ALL CATCH BASINS SHALL BE PRE–CAST H–20 LOADING AND SHALL BE EQUIPPED WITH DEEP SUMPS (4' MIN.) AND HOODS (SEE DETAILS) HOODS ARE TO BE "THE ELIMINATOR" BY KLEANSTREAM. RIMS ARE TO BE REXUS STYLE AND SHALL BE SET FLUSH WITH FINISH GRADE, UNLESS OTHERWISE INSTRUCTED DURING CONSTRUCTION BY DOVER DPW. RIMS ABOVE FINISH GRADE WILL BE NOT BE ACCEPTED. ALL RIMS, GRATES AND COVERS ARE TO BE U.S.A MADE. RIMS ARE TO BE SET AT BINDER GRADE AND RIM–RAISED FOR FINAL TOP COAT. HOODS ARE TO BE INSTALLED IMMEDIATELY AFTER BASIN CONSTRUCTION.

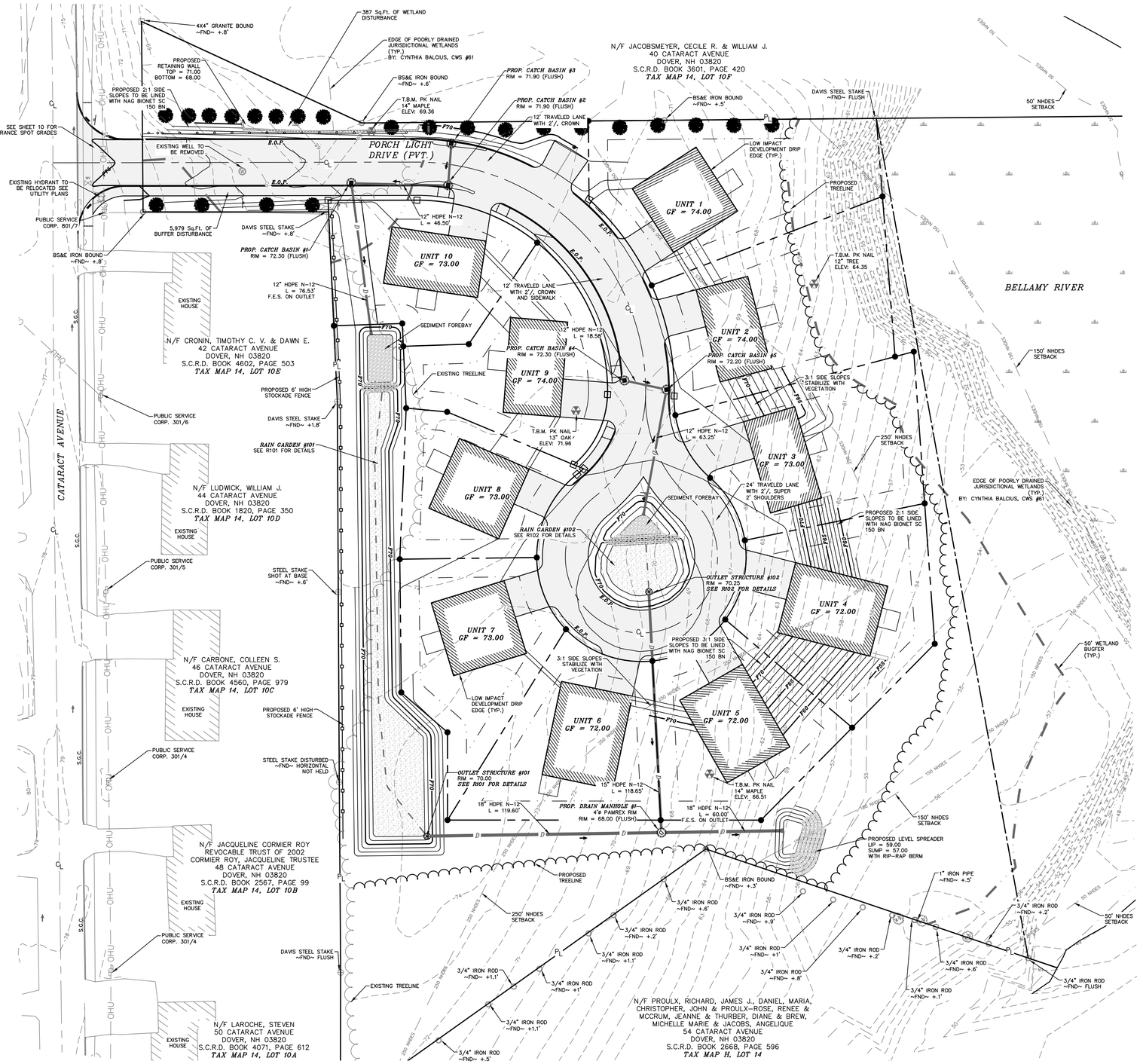
32. DRIP EDGES ARE TO BE INSTALLED AROUND EACH UNIT AS PART OF THE DRAINAGE DESIGN.



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



DOVER PLANNING FILE #19–80

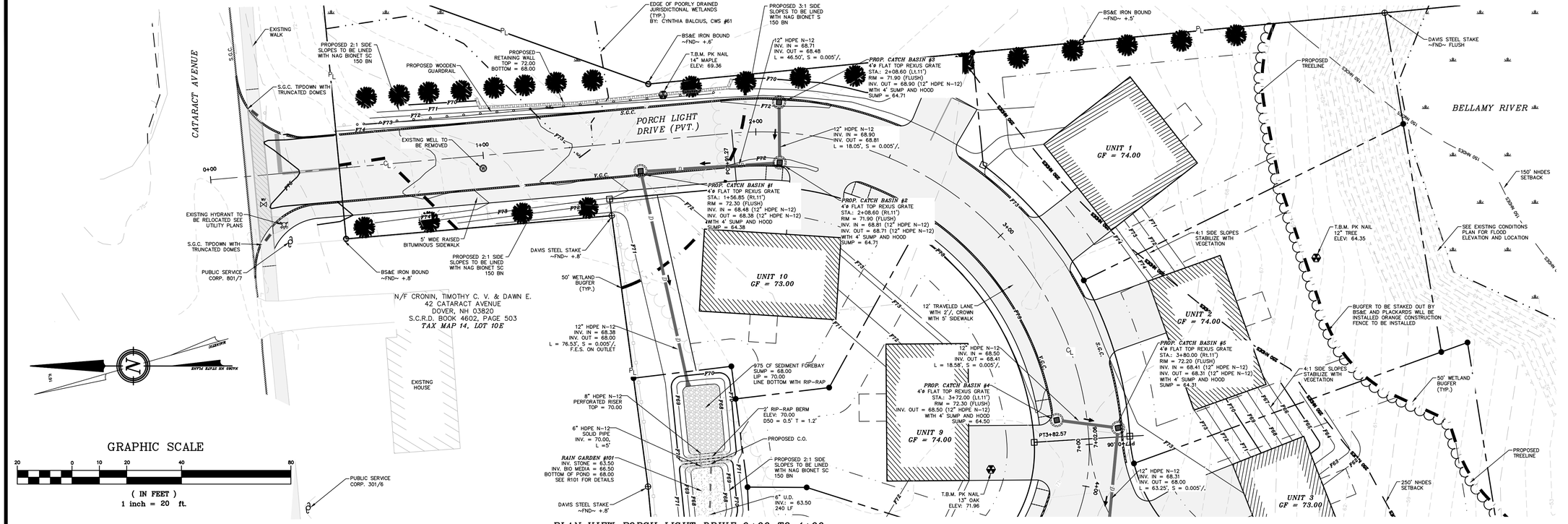
REVISION	DATE	DESCRIPTION
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OVERVIEW GRADING PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10–C

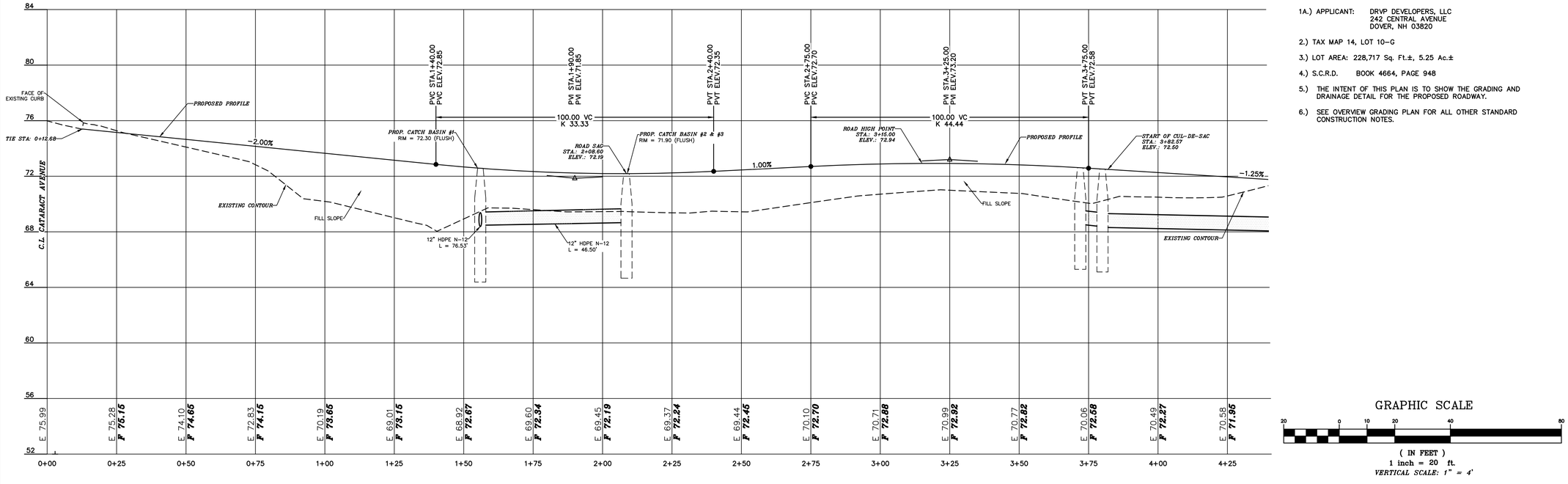
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019–077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY No. 14043
LICENSED PROFESSIONAL ENGINEER



PLAN VIEW PORCH LIGHT DRIVE 0+00 TO 4+00



PROFILE VIEW PORCH LIGHT DRIVE 0+00 TO 4+00

NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THE INTENT OF THIS PLAN IS TO SHOW THE GRADING AND DRAINAGE DETAIL FOR THE PROPOSED ROADWAY.

6.) SEE OVERVIEW GRADING PLAN FOR ALL OTHER STANDARD CONSTRUCTION NOTES.

DOVER PLANNING FILE #19-80

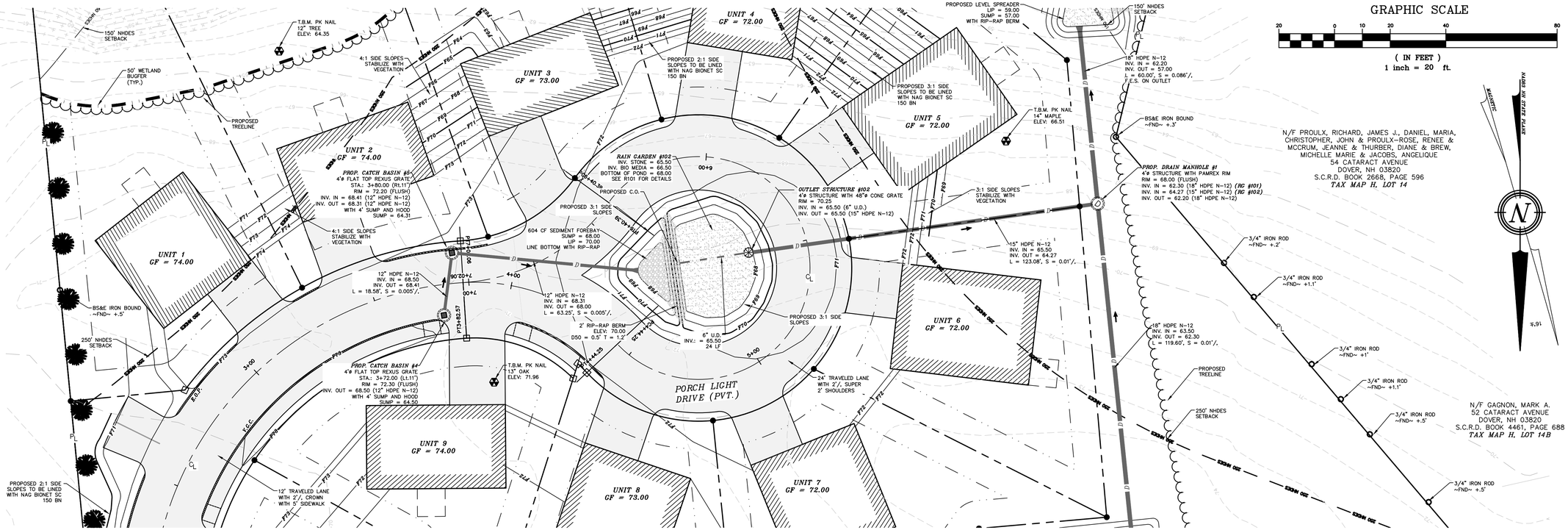
REVISION	DATE	DESCRIPTION
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PLAN AND PROFILE PORCH LIGHT DRIVE 0+00 TO 4+00
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

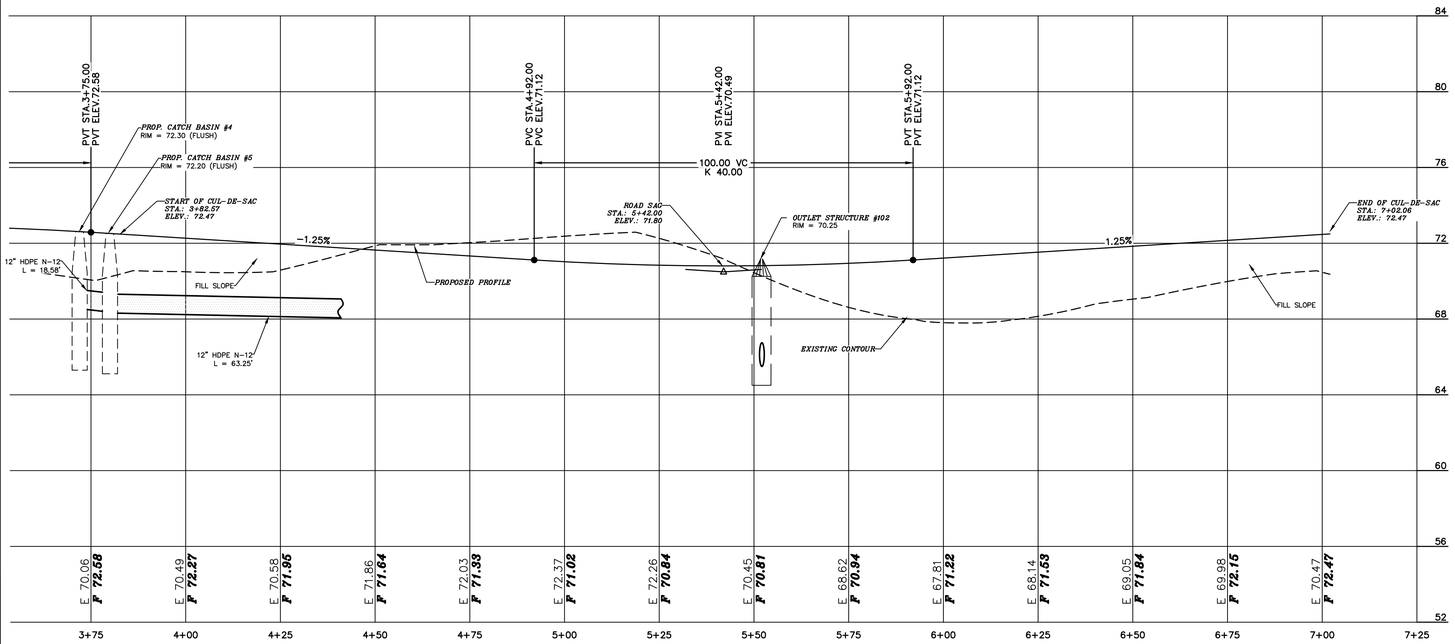
SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE KENNETH A. BERRY No. 10448 LICENSED PROFESSIONAL ENGINEER



PLAN VIEW PORCH LIGHT DRIVE 4+00 TO END

PROFILE VIEW PORCH LIGHT DRIVE 4+00 TO END



NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THE INTENT OF THIS PLAN IS TO SHOW THE GRADING AND DRAINAGE DETAIL FOR THE PROPOSED ROADWAY.

6.) SEE OVERVIEW GRADING PLAN FOR ALL OTHER STANDARD CONSTRUCTION NOTES.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

PLAN AND PROFILE PORCH LIGHT DRIVE 4+00 TO END
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE KENNETH A. BERRY No. 14048 LICENSED PROFESSIONAL ENGINEER

BIORETENTION FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Bioretention Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

3/8" WASHED CRUSHED STONE*

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	95 – 100
# 4	22 – 55
# 8	0 – 10

* EQUIVALENT TO STANDARD WASHED STONE – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

1-1/2" WASHED CRUSHED STONE*

SIEVE SIZE	% PASSING BY WEIGHT
2"	100
1-1/2"	90 – 100
1"	20 – 55
3/4"	0 –15
3/8"	0 –5

* EQUIVALENT TO STANDARD WASHED STONE – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL BIORETENTION FILTER MEDIA SHALL BE AS SHOWN ABOVE. "BIO MEDIA" MEANS BIORETENTION FILTER MADIA.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION. SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOGF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAGFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
7. CENTER CORE OF THE BERM IS TO BE CONSTRUCTED UNDERNEATH THE EMERGENCY SPILLWAY.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWCE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

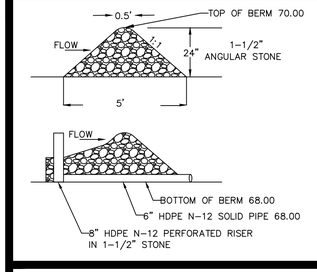
DESIGN REFERENCES

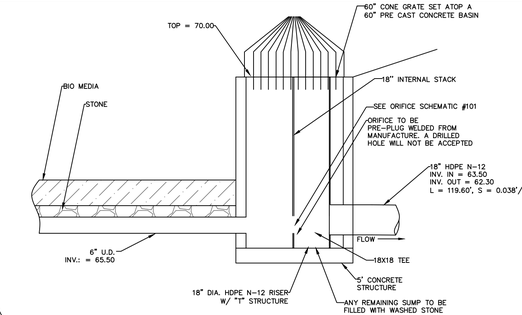
1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

RAIN GARDEN MIX

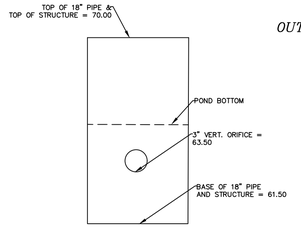
THE GRASS THAT IS PLANTED WITHIN A RAIN GARDEN BIO-FILTRATION SYSTEM WITHIN THE BIO-MEDIA MUST CONSIST OF A COMBINATION OF WARM SEASON GRASS SEED AND COLD SEASON GRASS SEED IN ORDER FOR THE GRASS TO START GROWING FOR STABILIZATION AND CONTINUE GROWING IN THE SANDY WELL-DRAINED ENVIRONMENT. PLANTING SPECIFICATION WILL MEET THE REQUIREMENTS AS OUTLINED IN 'VEGETATION NEW HAMPSHIRE SAND AND GRAVEL PITS' MIX 1 (WARM SEASON GRASSES) (15 LBS/AC) AND INCLUDE ANNUAL AND PERENNIAL RYE GRASS SEED (15 LBS/AC); THE NEW ENGLAND NATIVE WARM SEASON GRASS MIX (23 LBS/AC) BY NEW ENGLAND WETLAND PLANTS, INC.; RAIN GARDEN MIX 180 (15 LBS/AC & 15 LBS/AC OF RYE) / RAIN GARDEN GRASS MIX 180-1 (20 LBS/AC & 10 LBS/AC OF RYE) BY ERNST CONSERVATION SEEDS; OR APPROVED EQUAL.

STONE BERM FOR FOREBAY



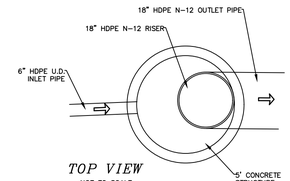


OUTLET STRUCTURE #101
NOT TO SCALE



ORIFICE SCHEMATIC #101

OUTLET STRUCTURE #101
NOT TO SCALE

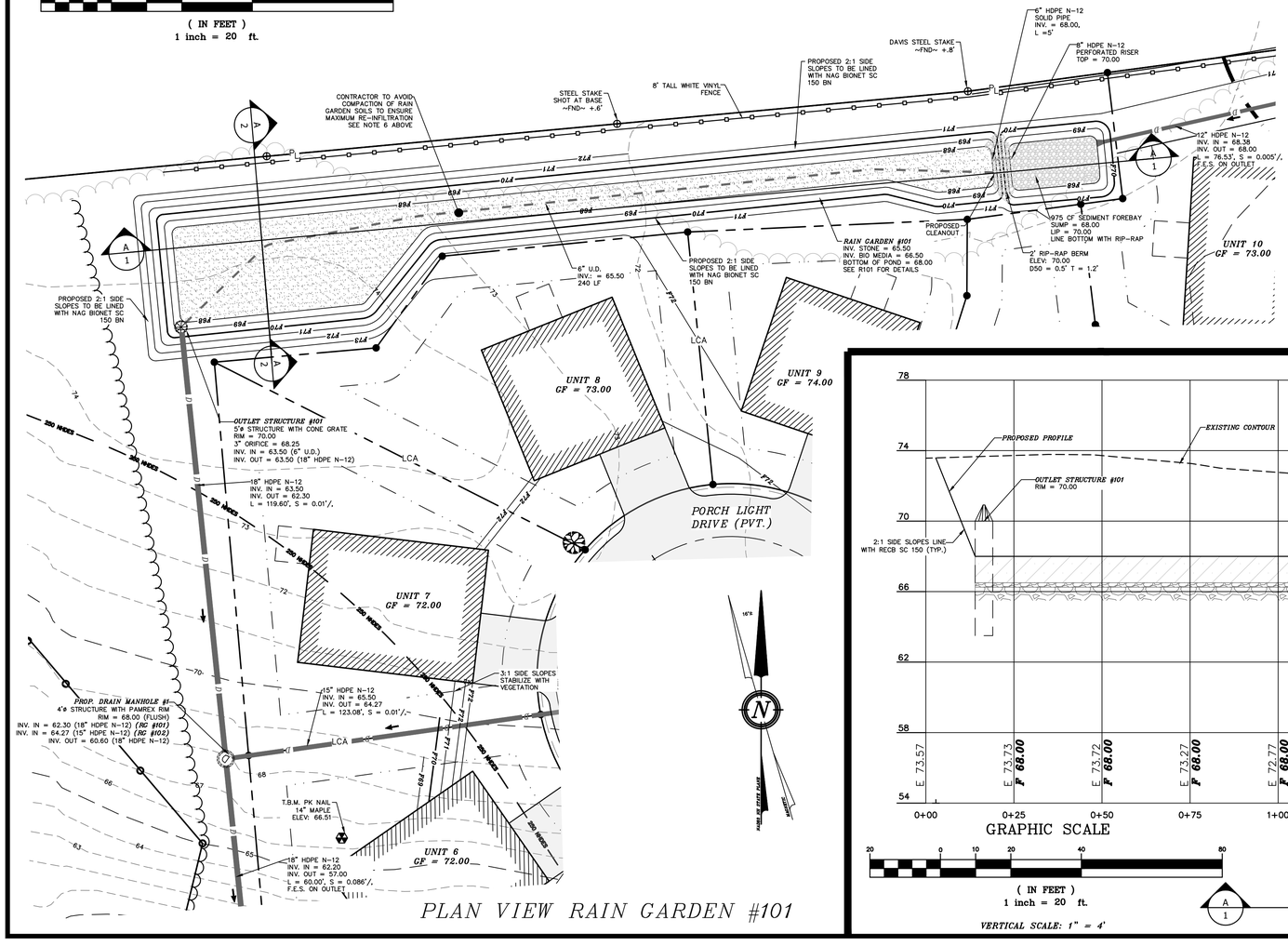


TOP VIEW
NOT TO SCALE

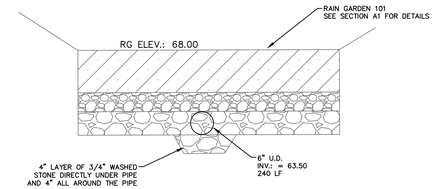
GRAPHIC SCALE

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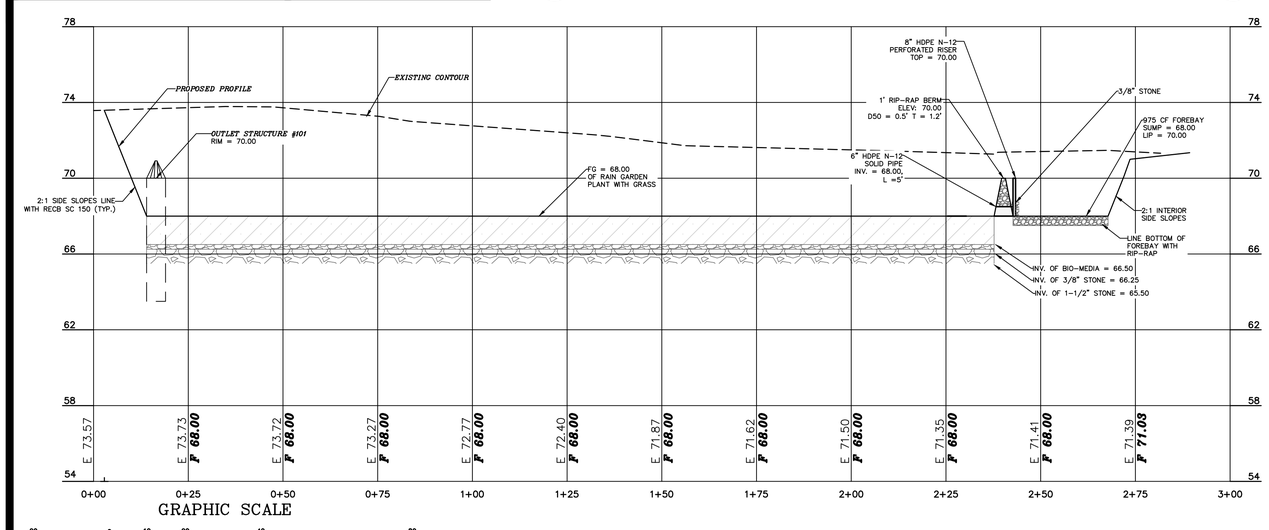
(IN FEET)
1 inch = 20 ft.



PLAN VIEW RAIN GARDEN #101



SECTION OF RAIN GARDEN R101



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

SECTION OF RAIN GARDEN R101

R101

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

RAIN GARDEN #101
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7443
LICENSED PROFESSIONAL ENGINEER

BIORETENTION FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Bioretention Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5

3/8" WASHED CRUSHED STONE*

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	95 – 100
# 4	22 – 55
# 8	0 – 10

* EQUIVALENT TO STANDARD WASHED STONE – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

1-1/2" WASHED CRUSHED STONE*

SIEVE SIZE	% PASSING BY WEIGHT
2"	100
1-1/2"	90 – 100
1"	20 – 55
3/4"	0 –15
3/8"	0 –5

* EQUIVALENT TO STANDARD WASHED STONE – SECTION 702 OF NHDOT NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL BIORETENTION FILTER MEDIA SHALL BE AS SHOWN ABOVE. "BIO MEDIA" MEANS BIORETENTION FILTER MADIA.
3. COMPACTION IS NOT TO OCCUR IN THE RAIN GARDEN AREAS PRIOR TO CONSTRUCTION. SCARIFICATION REQUIRED IN THE EVENT COMPACTION TAKES PLACE.
4. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOGF WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
6. DO NOT TRAGFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
7. CENTER CORE OF THE BERM IS TO BE CONSTRUCTED UNDERNEATH THE EMERGENCY SPILLWAY.

MAINTENANCE REQUIREMENTS

1 SYSTEMS SHOULD BE INSPECTED AT LEAST TWCE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.

2 PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.

3 AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.

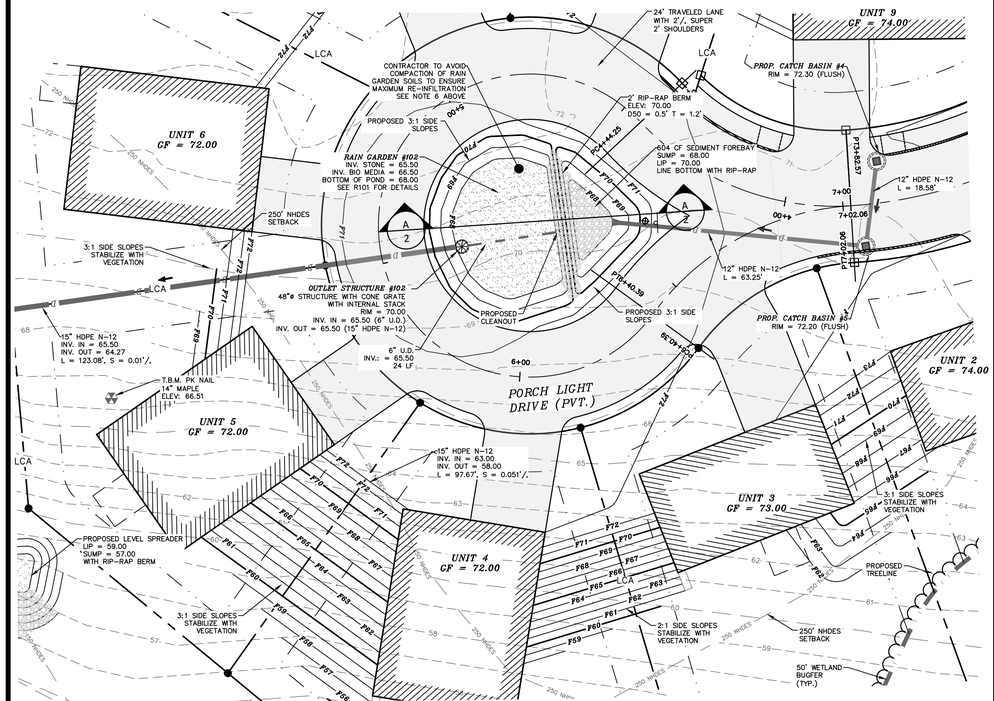
4 VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

1 UNH STORMWATER CENTER
2 NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

RAIN GARDEN MIX

THE GRASS THAT IS PLANTED WITHIN A RAIN GARDEN BIO-FILTRATION SYSTEM WITHIN THE BIO-MEDIA MUST CONSIST OF A COMBINATION OF WARM SEASON GRASS SEED AND COLD SEASON GRASS SEED IN ORDER FOR THE GRASS TO START GROWING FOR STABILIZATION AND CONTINUE GROWING IN THE SANDY WELL-DRAINED ENVIRONMENT. PLANTING SPECIFICATION WILL MEET THE REQUIREMENTS AS OUTLINED IN 'VEGETATION NEW HAMPSHIRE SAND AND GRAVEL PITS' MIX 1 (WARM SEASON GRASSES) (15 LBS/AC) AND INCLUDE ANNUAL AND PERENNIAL RYE GRASS SEED (15 LBS/AC); THE NEW ENGLAND NATIVE WARM SEASON GRASS MIX (23 LBS/AC) BY NEW ENGLAND WETLAND PLANTS, INC.; RAIN GARDEN MIX 180 (15 LBS/AC & 15 LBS/AC OF RYE) / RAIN GARDEN GRASS MIX 180-1 (20 LBS/AC & 10 LBS/AC OF RYE) BY ERNST CONSERVATION SEEDS; OR APPROVED EQUAL.



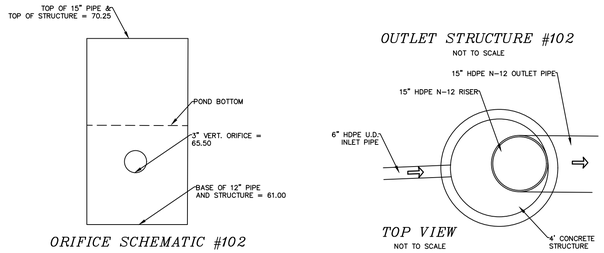
GRAPHIC SCALE

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(IN FEET)
1 inch = 20 ft.

PLAN VIEW RAIN GARDEN #102





SECTION OF RAIN GARDEN R102

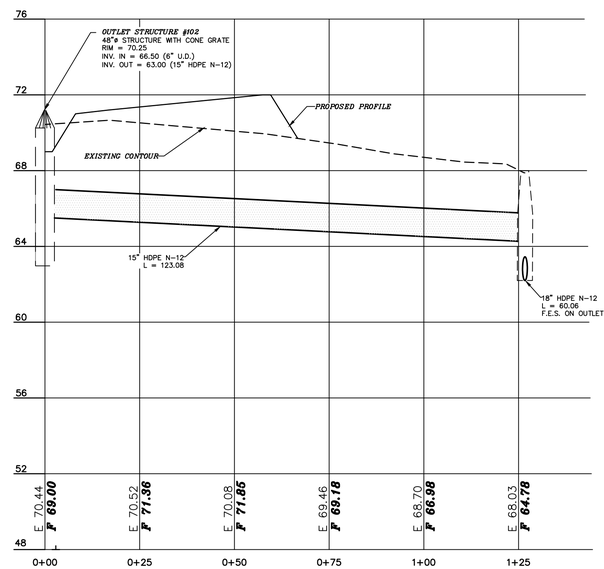
A 2 — A 2

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'



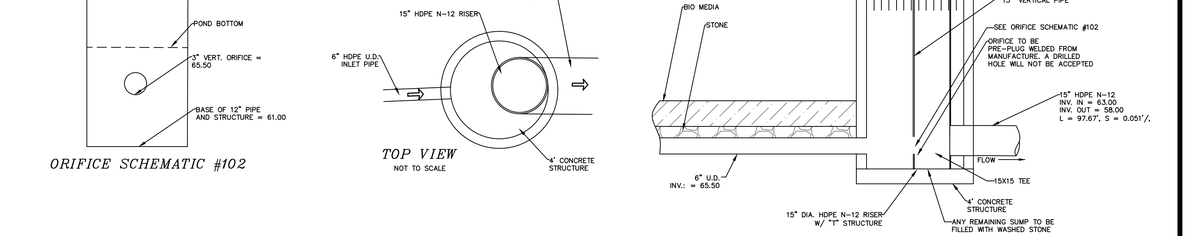
PROFILE 15" CULVERT

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'



DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

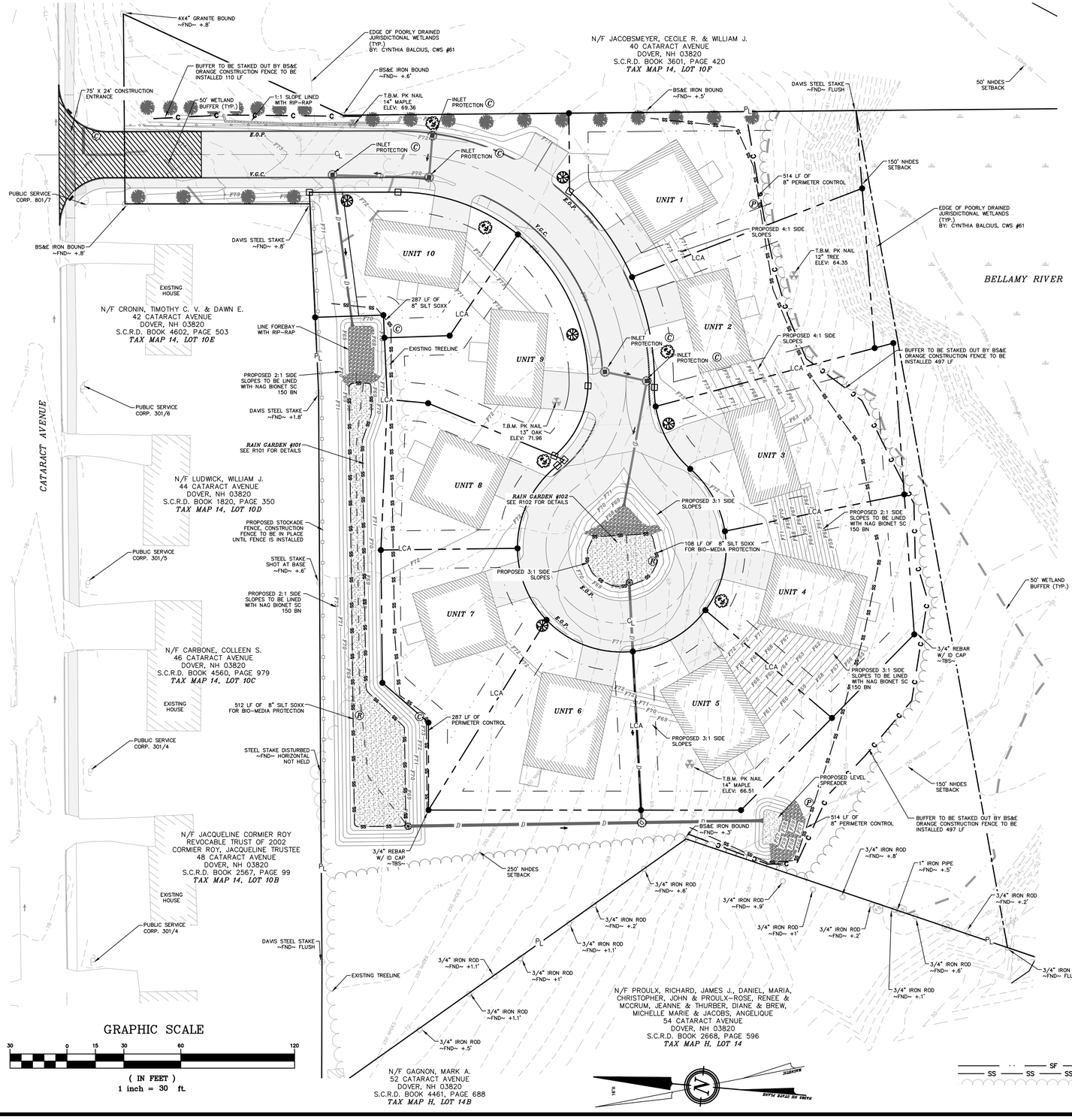
RAIN GARDEN #102
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED PROFESSIONAL ENGINEER

R102



NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

3.) THE PROJECT PARCEL IS TAX MAP 14, LOT 10-G

4.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

5.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.

6.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

7.) ALL DRAINAGE PIPE IS TO BE HDPE N-12. INDIVIDUAL PIPE SIZES ARE SPECIFIED ON GRADING AND DETAIL PLAN SHEETS, GREEN PIPE.

8.) ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY. TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER.

9.) UPON FINAL COMPLETION AND 85% STABILIZATION, THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS. SEDIMENT CONTROL PRACTICES REMOVED AND DISPOSED OF PROPERLY, AND ANNUAL MAINTENANCE PREFORMED ON ALL DRAINAGE PRACTICES.

10.) EROSION AND SEDIMENT CONTROL INSPECTIONS TO BE CONDUCTED ONCE PER EVERY SEVEN DAYS AND AT AN INCREASED FREQUENCY INCLUDING WITHIN 24-HOURS OF A 0.25 INCH RAIN EVENT. INSPECTIONS TO BE CONDUCTED BY A "QUALIFIED PERSON" DEFINED BY EPA CGP 4.1.1 AND INSPECTION REPORTS SUBMITTED TO THE CITY OF DOVER, NH, ENGINEERING DEPARTMENT WITHIN 24 HOURS IN ACCORDANCE WITH CGP 4.1.7 AND MAINTAINED BY THE OWNER FOR A PERIOD OF THREE YEARS AFTER THE PROJECT IS COMPLETED. SEE ALSO CITY OF DOVER ADDITIONAL INSPECTION REQUIREMENTS BELOW.

11.) SILT FENCE MAY BE SUBSTITUTED WITH FILTREXX SILT SOXX OR EROSION CONTROL MIX BERM. SILT FENCE IS NOT A SUBSTITUTE FOR FILTREXX SILT SOXX OR APPROVED EQUAL.

12.) PER EPA CGP Z.1.2.2 (INSTALL PERIMETER CONTROL), "YOU MUST INSTALL SEDIMENT CONTROLS ALONG THOSE PERIMETER AREAS OF YOUR SITE THAT WILL RECEIVE STORMWATER FROM EARTH DISTURBING ACTIVITIES." AS A RESULT OF SWPPP INSPECTIONS, THE CONTRACTOR MAY HAVE TO EXPAND PERIMETER CONTROLS TO MEET THIS REQUIREMENT. THE E&SC PLAN IS INITIAL GUIDANCE AS TO THE ANTICIPATED REQUIREMENTS AND IT THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT STORMWATER VIOLATION DO NOT OCCUR.

13.) CITY OF DOVER: IN ACCORDANCE WITH SITE PLAN REVIEW REGULATIONS (149-14) THE FOLLOWING STORMWATER MEASURES ARE REQUIRED. THE EXISTING IMPERVIOUS AREA IS 0% AND PROPOSED IMPERVIOUS AREA IS 16.7%. THE CONTIGUOUS LAND DISTURBANCE IS 39,000 SQUARE FEET.

A.) ALL PROPOSED BMPs WILL CONFORM TO THE NH STORMWATER MANUAL VOLUME 3.
B.) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL LAND DISTURBANCE AND MUST BE REVIEWED AND APPROVED BY COMMUNITY SERVICE.
C.) TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN SEVEN CALENDAR DAYS FOR EXPOSED SOILS AREAS THAT ARE WITHIN ONE HUNDRED FEET OF A SURFACE WATER BODY OR A WETLAND AND NO MORE THAN 14 CALENDAR DAYS FOR ALL OTHER AREAS. PERMANENT STABILIZATION SHOULD BE IN PLACE WITHIN THREE CALENDAR DAYS FOLLOWING COMPLETION OF FINAL GRADING OF EXPOSED SOKL AREAS.
D.) ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL STABILIZATION IS ACCOMPLISHED.
E.) COMMUNITY SERVICES DEPARTMENT OR THEIR DESIGNATED AGENT SHALL HAVE ACCESS TO THE SITE TO COMPLETE ROUTINE INSPECTIONS AND SHALL BE NOTIFIED 24-HOURS PRIOR TO INSTALLATION OF A STORMWATER BMP IN ORDER TO SCHEDULE AN INSPECTION, DURING NORMAL WORKING HOURS.
F.) THE PLANNING BOARD OR COMMUNITY SERVICES MAY REQUIRE THE DESIGN ENGINEER AND/OR AN INDEPENDENT, THIRD-PARTY INSPECTION AND OVERSIGHT OF THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES AND EROSION AND SEDIMENT CONTROL AT THEIR DISCRETION. THE OWNER / APPLICANT IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH INSPECTIONS.
G.) ALL SWPPP INSPECTIONS MUST BE CONDUCTED BY A QUALIFIED PROFESSIONAL SUCH AS A PROFESSIONAL ENGINEER (PE), A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), A CERTIFIED EROSION SEDIMENT AND STORMWATER INSPECTOR (CESSWI), OR A CERTIFIED PROFESSIONAL IN STORMWATER QUALITY (CPSWQ). INSPECTION REPORTS WILL BE SUBMITTED TO THE COMMUNITY SERVICES DEPARTMENT.

14.) CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A CONSTRUCTION ENTRANCE UNTIL THE SITE IS PAVED.

15.) CONTRACTOR IS RESPONSIBLE FOR SWEEPING THE PARKING LOT, SIDEWALKS AND ANYTHING DISTURBED, TO ENSURE THAT NO SEDIMENT IS BEING TRACKED ONTO CATARACT AVENUE.

16.) CONTRACTOR IS RESPONSIBLE FOR CLEANING AND MAINTAINING THE INLET PROTECTION ONCE INSTALLED.

17.) FUGITIVE DUST IS TO BE CONTROLLED THROUGHOUT THE CONSTRUCTION PROCESS IN ACCORDANCE WITH ENV-A 1000.

18.) CONTRACTOR IT TO MEET THE REQUIREMENTS SPECIFIED IN RSA 430:51-57 AND AGR 3800, RELATING TO INVASIVE SPECIES.

19.) CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WATER QUALITY FROM ANY RUN OFF DURING THE CONSTRUCTION PROCESS, IN ACCORDANCE WITH ENV-WQ 1507, IN ORDER TO PREVENT VIOLATIONS OF THE STORM WATER QUALITY STANDARDS.

20.) CATCH BASIN HOODS WILL BE INSTALLED AS SOON AS THE BASIN IS PUT ON LINE. RIM IS TO BE RAISED WITH FINAL GRADE SO THAT STORMWATER RUNOFF CAN DRAIN PROPERLY THROUGHOUT CONSTRUCTION.

21.) THE PROPOSED PROJECT WILL CONSIST OF TWO PHASES. THE FIRST PHASE WILL BE THE CONSTRUCTION OF THE PROPOSED ROAD, RELATING GRADING/DRAINAGE AND THE STORM WATER MANAGEMENT SYSTEM (RAIN GARDENS AND LEVEL SPREADER). THE ROAD, RAIN GARDENS AND LEVEL SPREADER IS TO BE FULLY CONSTRUCTED AND STABILIZED PRIOR TO RESIDENTIAL LOT CONSTRUCTION.

LEGEND:

- (R) RAIN GARDEN BIO-MEDIA PROTECTION
- (P) PERIMETER CONTROL
- (C) RESIDENTIAL/ROADWAY CONSTRUCTION
- STEEL STAKE (FND)
- IRON BOUND (TBS)
- IRON ROD (FND)
- UTILITY POLE
- GUY WIRE
- (W) WELL
- BENCHMARK
- CONIFEROUS TREE
- DECIDUOUS TREE
- SF — SILT FENCE
- SS SS SS — FILTREXX SILTSOXX TREE LINE

SOILS & DEWATERING:

SF	***SUFFIELD***	***SILT LOAM***	***K= 0.20***
BxB	***BUXTON***	***SILT LOAM***	***K= 0.20***

SEE SITE SPECIFIC SOILS MAP (SSSM)
SEE WEBSOIL USDA-NRCS
ERODIBILITY FACTOR - K, CPESC MANUAL, ENVROCERT INTERNATIONAL INC. & ROCKINGHAM COUNTTY SOIL SURVEY, ROCKWEB SOIL ATTRIBUTES.

CONTRACTOR TO BE AWARE OF THE SOIL PROFILES AND ENSURE THAT PROPER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TAKEN AT ALL TIMES. ANY DEWATERING REQUIREMENTS IN NEW HAMPSHIRE REQUIRE SPECIAL PROVISIONS IN ACCORDANCE WITH THE "CLARIFICATION OF SECTION 9.1.2 (STATE OF NEW HAMPSHIRE CONDITIONS) AND OTHER NH SPECIFIC INFORMATION FOR THE U.S. EPA 2012 NPDES CONSTRUCTION GENERAL PERMIT (CGP)" DATED MAY 3, 2012 INCLUDED IN THE SWPP.

COVER MANAGEMENT DURING CONSTRUCTION FOR EXPOSED SOIL WILL INCLUDE HAY / STRAW APPLIED AT A RATE OF 2.0 TONS PER ACRE, TEMPORARY SEEDING OF ANNUAL RYE GRASS, AND PERMANENT SEEDING AT THE EARLIES OPPORTUNITY. SEE ADDITIONAL REQUIREMENT FOR STABILIZATION ON THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS, E-101 AND E-102.

THE CONSTRUCTION SCHEDULE WILL BE MANAGED SO THAT ALL STORMWATER STRUCTURES WILL BE BUILT AND STABILIZED PRIOR TO RECEIVING SURFACE WATER RUNOFF. CONTRACTOR TO BE RESPONSIBLE FOR ALL DIVERSIONS DURING CONSTRUCTION AND FOR INTERIM SEDIMENT AND EROSION CONTROL MEASURES.

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

EROSION AND SEDIMENT CONTROL PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14248
LICENSED PROFESSIONAL ENGINEER

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10–G

3.) LOT AREA: 228,717 Sq. Ft., 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE OVERVIEW PRIVATE UTILITY DESIGN OF PORCH LIGHT DRIVE.

6.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.

7.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 1–888–344–7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

8.) PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES, TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOGF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAGFIC IN SENSITIVE AREAS, AND MAINTAINING AN EGFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL MEETING THE ENGINEERS SPECIFIC RECOMMENDED CRITERIA.

9.) IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER (NOT ALLOWED IN CITY R.O.W.), EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATION. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.

10.) PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIGFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION. VOIDS BETWEEN STONES AND CLUMPS OF MATERIAL SHALL BE FILLED WITH FINE MATERIALS.

11.) FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE DOVER DPW.

12.) CONTRACTOR TO CONTACT DOVER DPW A MINIMUM OF TWO WEEKS PRIOR TO ANY CONSTRUCTION TO COORDINATE ALL WORK CONCERNING INSTALLATION OF ANY PROPOSED WATER LINE IMPROVEMENTS.

13.) ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL CONFORM TO CITY OF DOVER STANDARDS. ALL HIGHWAY CONSTRUCTION WILL MEET THE CITY OF DOVER STANDARDS.

14.) CONTRACTOR SHALL COORDINATE ALL ELECTRICAL INSTALLATIONS WITH EVERSOURCE AT (800) 662–7764. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL. A 48–HOUR MINIMUM NOTICE IS REQUIRED.

15.) CONTRACTOR SHALL COORDINATE ALL TELECOMMUNICATIONS INSTALLATIONS WITH FAIRPOINT COMMUNICATIONS AT (603) 427–5525.

16.) CONTRACTOR SHALL COORDINATE ALL CABLE INSTALLATIONS WITH COMCAST.

17.) CONTRACTOR SHALL COORDINATE ALL GAS INSTALLATIONS WITH UNITIL.

18.) ALL SEWER MAN HOLE RIMS & COVERS ARE TO BE PAMREX.

19.) ALL WATER SERVICES ARE TO BE WITNESSED WITH A 2"X4" PAINTED BLUE. ALL SEWER SERVICES ARE TO BE WITNESSED WITH A 2"X4" PAINTED YELLOW, IS STUBBED PRIOR TO BUILDING CONSTRUCTION.

20.) CURB BOXES SHOULD BE PLACED IN THE LAWN AREA, OR IF PLACED IN PAVEMENT, A ROAD BOX IS REQUIRED.

21.) SEE EXISTING CONDTIONS PLAN FOR DATUM. VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL DATUS BASED ON NAD83 STATE PLANE COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS.

22.) MINIMUM SLOPE FOR ALL SEWER SERVICE CONNECTIONS IS TO BE NO LESS THAN 0.02'/,.

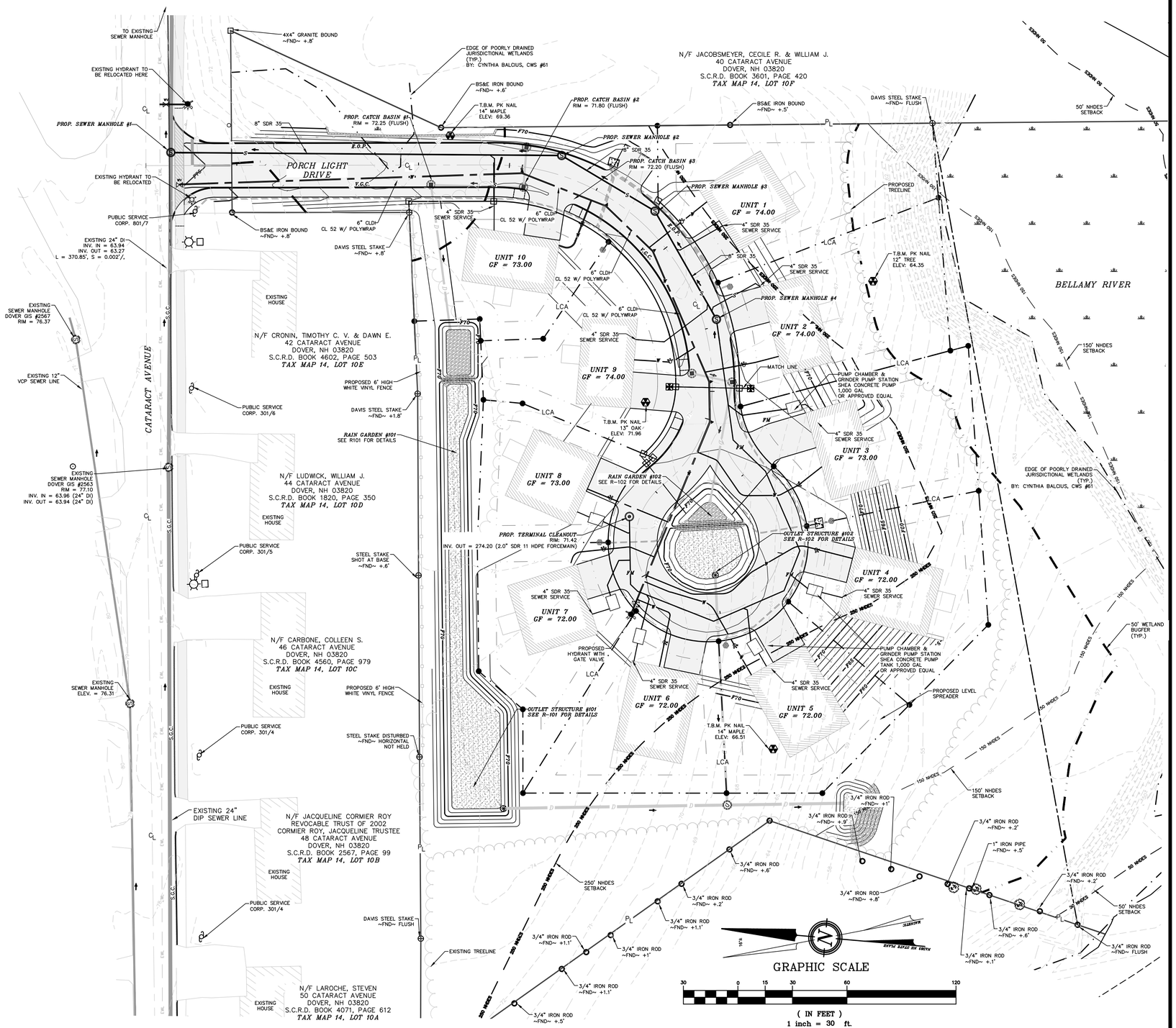
23.) ALL SEWER INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF NHDES & DOVER DPW SEWER DIVISION STANDARDS. ALL PVC SEWER PIPE IS TO CONFORM WITH ENV–WQ 704.05 (c)–(e) FOR SDR 35 GRAVITY SEWER PIPE, CONFORM WITH ENV–WQ 704.08 FOR SDR 21 / 11 / 9 FORCE MAIN PRESSURE PIPE, AND CONFORM WITH ASTM D3034. PVC JOINT SEALS SHALL CONFORM WITH ASTM D3121. THE FORCE MAIN SHALL BE TESTED IN ACCORDANCE WITH ENV–WQ 704.09.

24.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS RECEIVERS.

25.) CONTRACTOR TO TRANSFER TEMPORARY BENCHMARK TO A SUITABLE BENCHMARK TO CONTROL CONSTRUCTION. ANY ELEVATION DISCREPANCIES ARE TO BE REPORTED TO THE THE DESIGN ENGINEER IMMEDIATELY.

26.) UNITS 3 THROUGH 5 WILL UTILIZE A LIBERTY PROVORE PRG SERIES GRINDER 1HP PUMP WITH CONTROLS AS SPECIFIED ON SHEET U–103, OR EQUAL UTILITY DETAILS AND A 1,000 GALLON HOLDING TANK. THE SYSTEM FOR EACH LOT MUST BE DESIGNED BY A PROFESSIONAL ENGINEER AND APPROVED BY THE CITY OF DOVER ENGINEER, DPW, COMMUNITY SERVICES.

27.) ALL SEWER AND WATER CROSSINGS ARE TO MAINTAIN A 1.5' OF SEPARATION. OTHERWISE, 2" RIGID INSULATION WILL BE REQUIRED.



DOVER PLANNING FILE #19–80

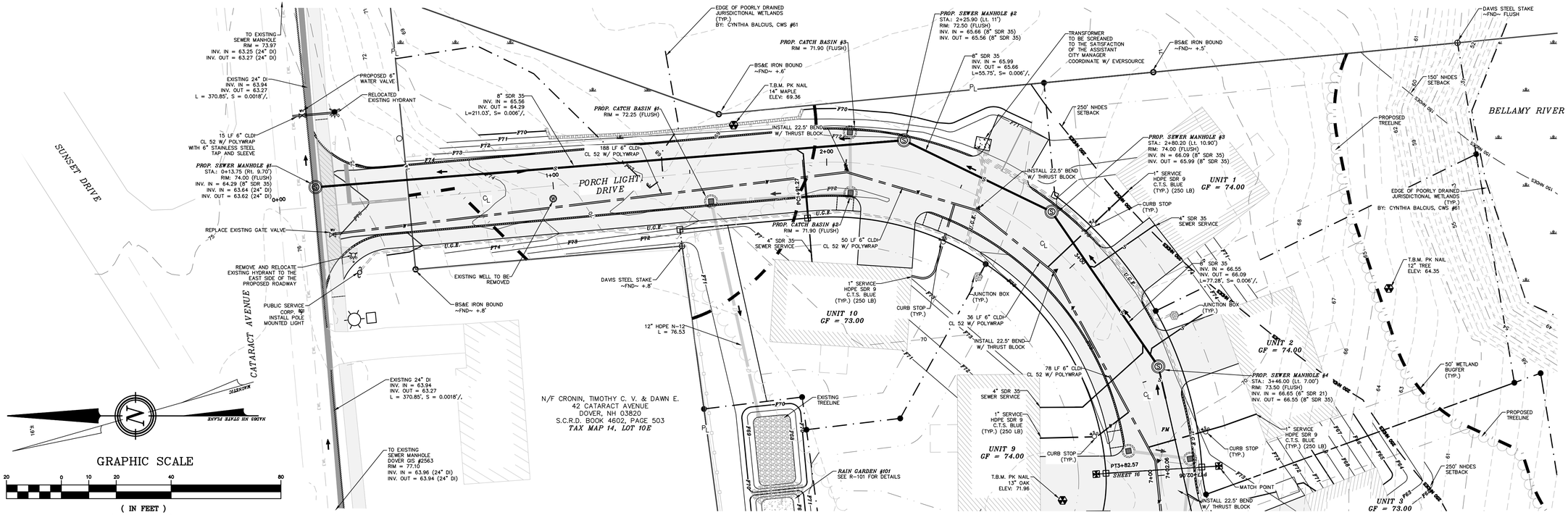
REVISION	DATE	DESCRIPTION
#2	1–30–20	REVISED PER TRC COMMENT
#1	12–16–19	REVISED PER STAFF COMMENT

OVERVIEW UTILITY PLAN
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10–G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

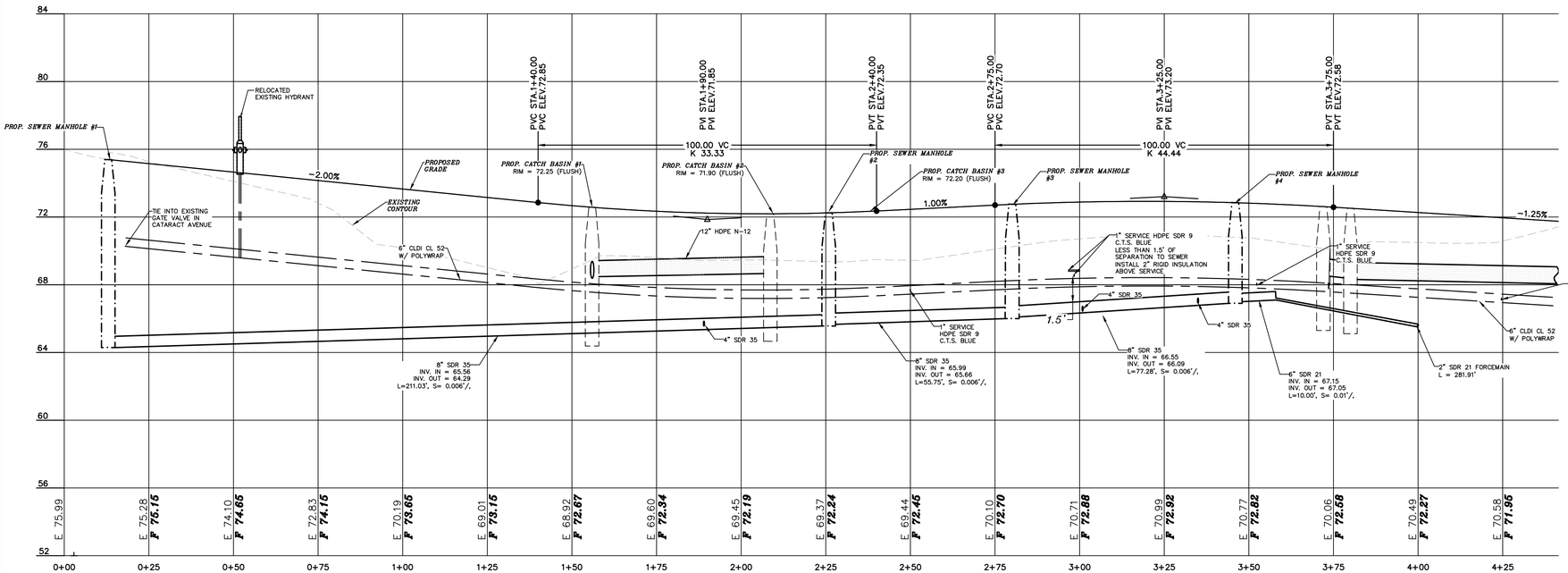
SCALE : 1 IN. EQUALS 30 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019–077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 3424
LICENSED PROFESSIONAL ENGINEER



UTILITY VIEW PORCH LIGHT DRIVE 0+00 TO 4+00

UTILITY VIEW PORCH LIGHT DRIVE 0+00 TO 4+00



NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10–G

3.) LOT AREA: 228,717 Sq. Ft., 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE UTILITY DESIGN FOR THE PROPOSED DEVELOPMENT.

6.) SEE OVERVIEW UTILITY PLAN FOR OTHER STANDARD UTILITY NOTES.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

DOVER PLANNING FILE #19–80

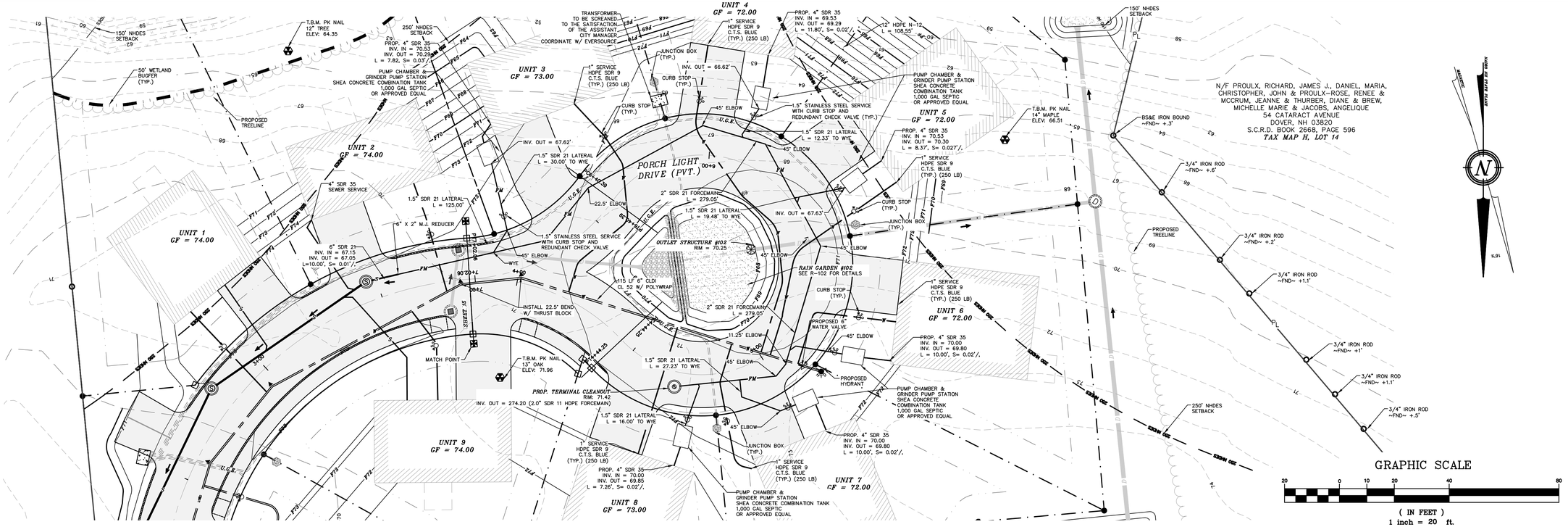
REVISION	DATE	DESCRIPTION
#2	1–30–20	REVISED PER TRC COMMENT
#1	12–16–19	REVISED PER STAFF COMMENT

UTILITY PROFILE 0+00 TO 4+00
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10–G

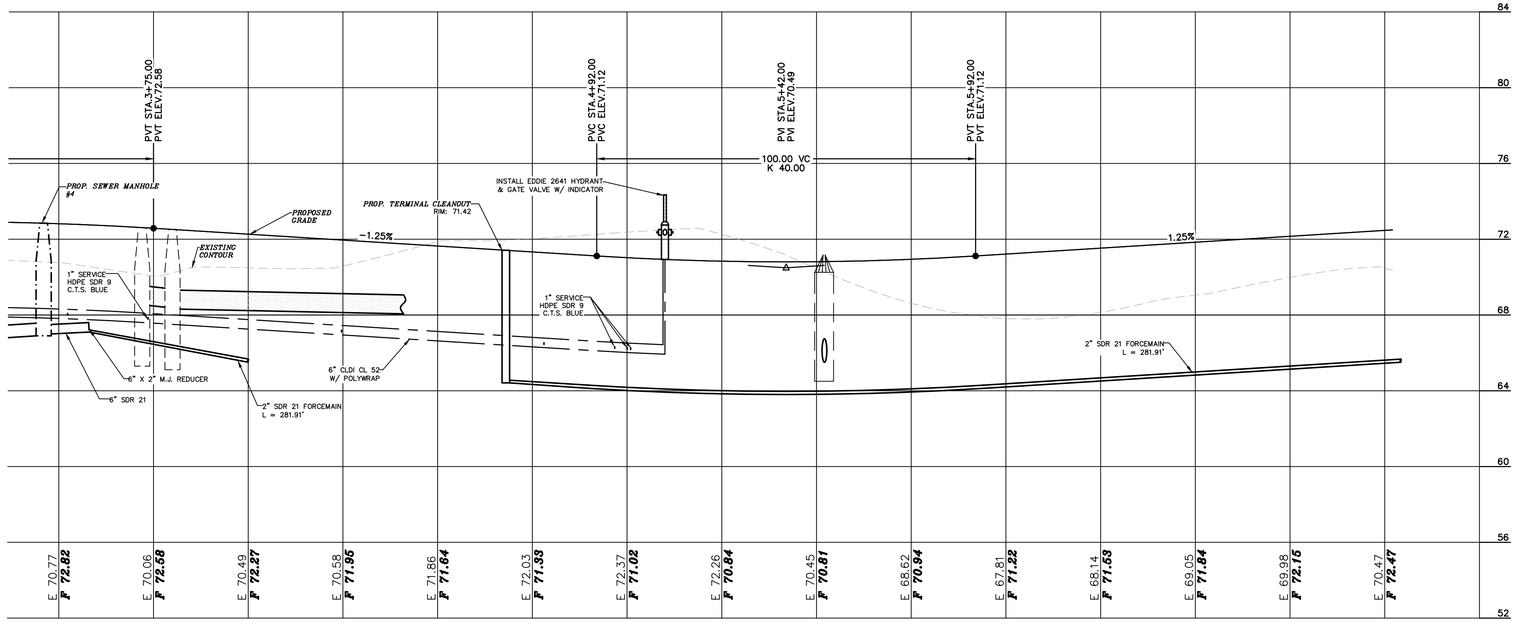
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019–077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7404
LICENSED PROFESSIONAL ENGINEER



UTILITY VIEW PORCH LIGHT DRIVE 4+00 TO END



UTILITY VIEW PORCH LIGHT DRIVE 4+00 TO END

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft., 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE UTILITY DESIGN FOR THE PROPOSED DEVELOPMENT.

6.) SEE OVERVIEW UTILITY PLAN FOR OTHER STANDARD UTILITY NOTES.

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

UTILITY PROFILE 4+00 TO END
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7424
LICENSED PROFESSIONAL ENGINEER

NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THIS IS A RESIDENTIAL SUBDIVISION.

6.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE AVAILABLE SIGHT DISTANCE FROM THE PROPOSED ROADWAY KNOWN AS CATARACT AVENUE.

7.) EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING AND IS ENCLOSED IN THIS PACKAGE. EXISTING AND PROPOSED CONTOURS ARE PROVIDED AT 1' INTERVALS.

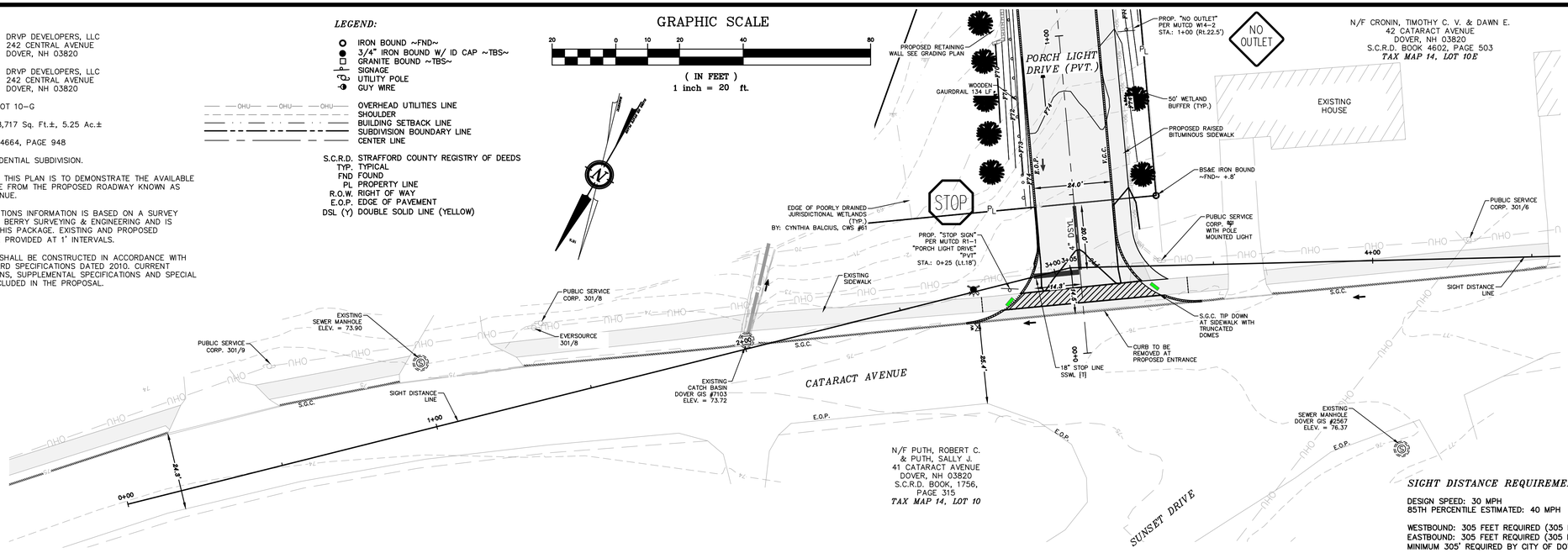
8.) THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS DATED 2010. CURRENT STANDARD PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

LEGEND:

- IRON BOUND ~FND~
- 3/4" IRON BOUND W/ ID CAP ~TBS~
- GRANITE BOUND ~TBS~
- SIGNAGE
- UTILITY POLE
- GUY WIRE
- OHU — OVERHEAD UTILITIES LINE
- SHOULDER
- BUILDING SETBACK LINE
- SUBDIVISION BOUNDARY LINE
- CENTER LINE

S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
TYP. TYPICAL
FND FOUND
PL PROPERTY LINE
R.O.W. RIGHT OF WAY
E.O.P. EDGE OF PAVEMENT
DSL (Y) DOUBLE SOLID LINE (YELLOW)

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.



PLAN VIEW CATARACT AVENUE

SIGHT DISTANCE REQUIREMENT:

DESIGN SPEED: 30 MPH
85TH PERCENTILE ESTIMATED: 40 MPH

WESTBOUND: 305 FEET REQUIRED (305 FEET PROVIDED)
EASTBOUND: 305 FEET REQUIRED (305 FEET PROVIDED)
MINIMUM 305' REQUIRED BY CITY OF DOVER

FROM AASHTO GEOMETRIC DESIGN OF HIGHWAYS AND STREETS (2018) TABLE 3-1

NOTES CONT.:

9.) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING CONSTRUCTION

10.) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.

11.) THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.

NOTES CONT.:

12.) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

13.) THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS, OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE & RESET" (R & R).

14.) ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS NOTED OTHERWISE.

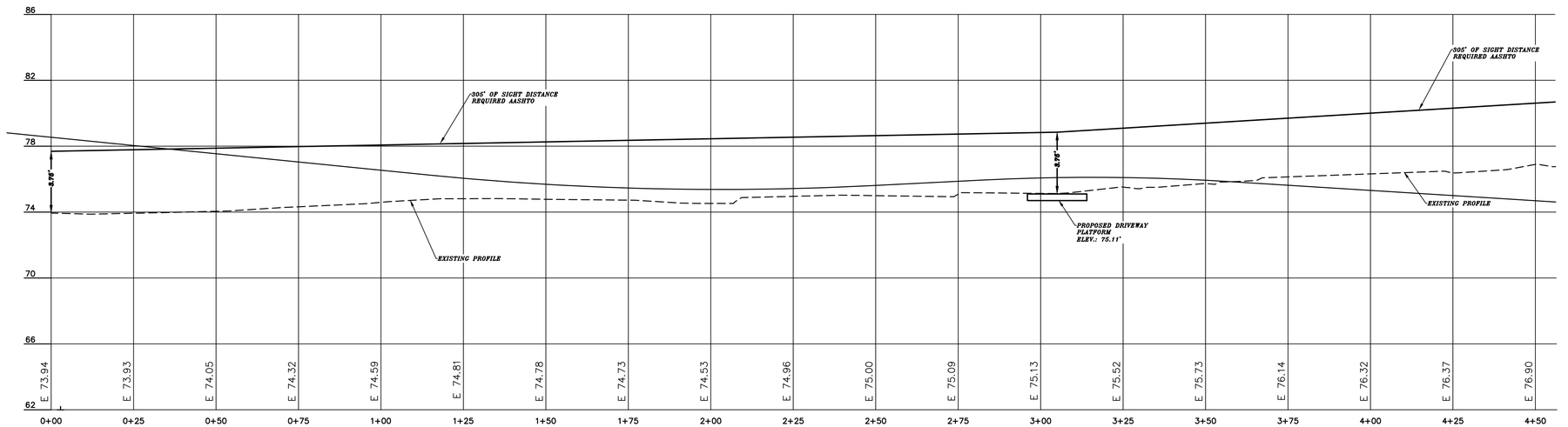
15.) ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES, AND ALL OTHER MARKINGS NOTED WITH (T) SHALL BE THERMOPLASTIC.

16.) ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM PLACED AND SEEDED. THE LOAM SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, EDGING, BERM OR PAVEMENT SURFACE.

17.) THE SPEED LIMIT ON CATARACT AVENUE IS 30 MPH.

PROFILE VIEW CATARACT AVENUE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'



HWA-1

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

SIGHT DISTANCE CATARACT AVENUE EASTBOUND
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED PROFESSIONAL ENGINEER

NOTES:

1.) OWNER: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

1A.) APPLICANT: DRVP DEVELOPERS, LLC
242 CENTRAL AVENUE
DOVER, NH 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq. Ft.±, 5.25 Ac.±

4.) S.C.R.D. BOOK 4664, PAGE 948

5.) THIS IS A RESIDENTIAL SUBDIVISION.

6.) THE INTENT OF THIS PLAN IS TO DEMONSTRATE THE AVAILABLE SIGHT DISTANCE FROM THE PROPOSED ROADWAY KNOWN AS CATARACT AVENUE.

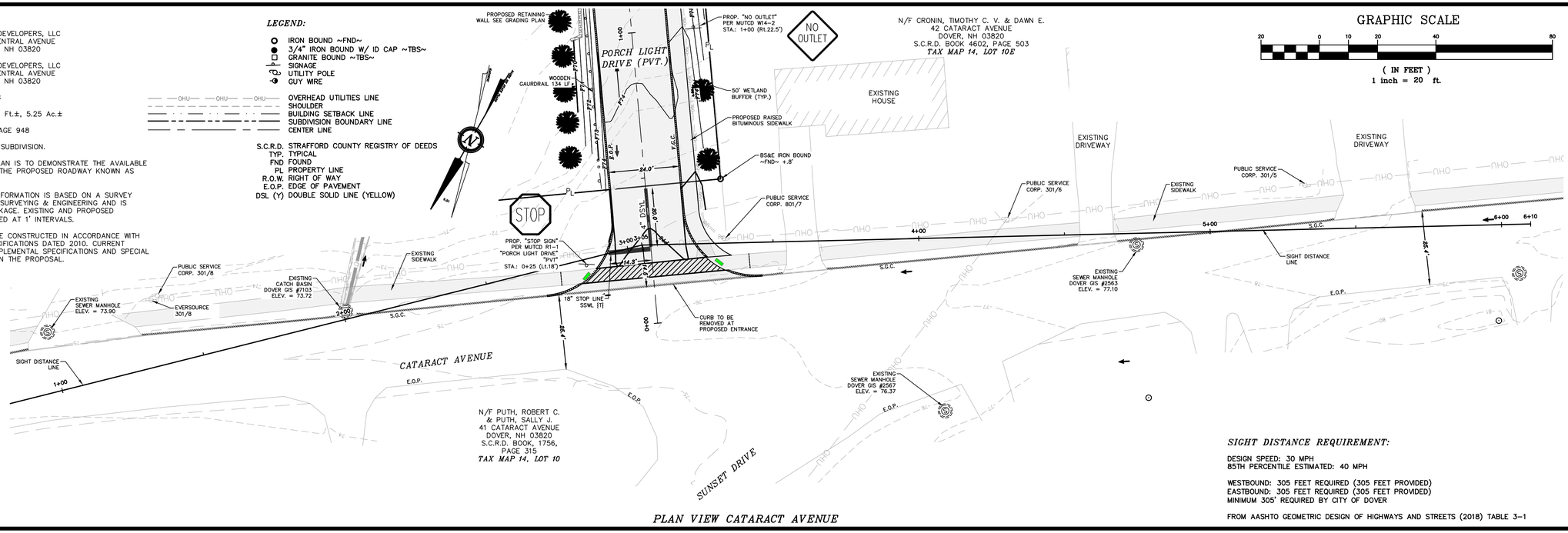
7.) EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING AND IS ENCLOSED IN THIS PACKAGE. EXISTING AND PROPOSED CONTOURS ARE PROVIDED AT 1' INTERVALS.

8.) THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS DATED 2010. CURRENT STANDARD PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

LEGEND:

- IRON BOUND ~FND~
- 3/4" IRON BOUND W/ ID CAP ~TBS~
- GRANITE BOUND ~TBS~
- SIGNAGE
- UTILITY POLE
- GUY WIRE
- OVERHEAD UTILITIES LINE
- SHOULDER
- BUILDING SETBACK LINE
- SUBDIVISION BOUNDARY LINE
- CENTER LINE

S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
TYP. TYPICAL
FND FOUND
PL PROPERTY LINE
R.O.W. RIGHT OF WAY
E.O.P. EDGE OF PAVEMENT
DSL (Y) DOUBLE SOLID LINE (YELLOW)



PLAN VIEW CATARACT AVENUE

SIGHT DISTANCE REQUIREMENT:

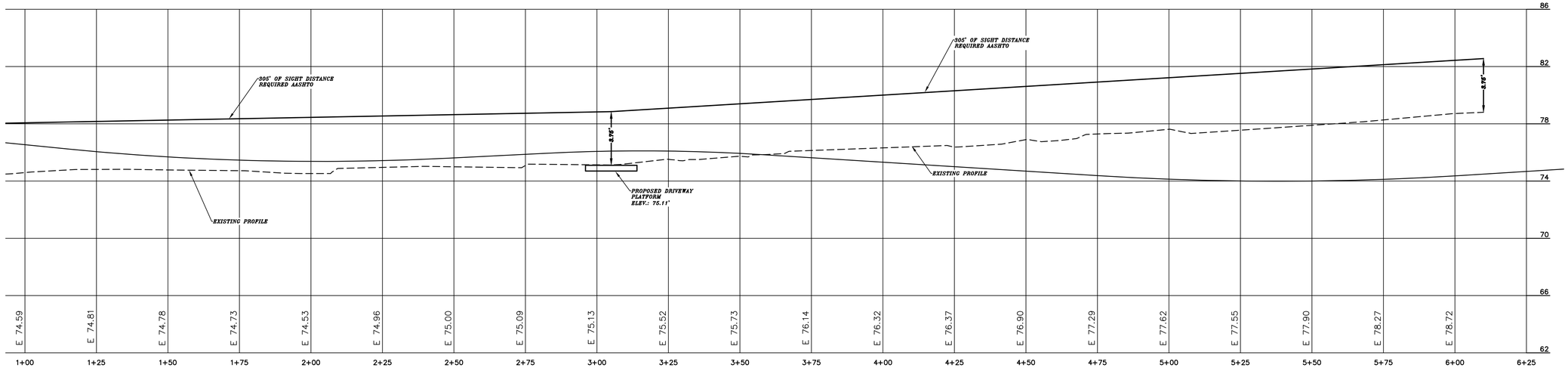
DESIGN SPEED: 30 MPH
85TH PERCENTILE ESTIMATED: 40 MPH

WESTBOUND: 305 FEET REQUIRED (305 FEET PROVIDED)
EASTBOUND: 305 FEET REQUIRED (305 FEET PROVIDED)
MINIMUM 305' REQUIRED BY CITY OF DOVER

FROM AASHTO GEOMETRIC DESIGN OF HIGHWAYS AND STREETS (2018) TABLE 3-1

PROFILE VIEW CATARACT AVENUE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.
VERTICAL SCALE: 1" = 4'



HWA-2

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

SIGHT DISTANCE CATARACT AVENUE WESTBOUND
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

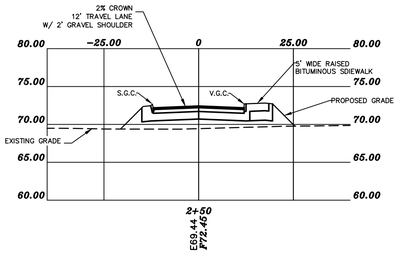
SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

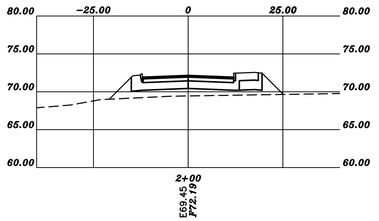
STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14243
LICENSED PROFESSIONAL ENGINEER

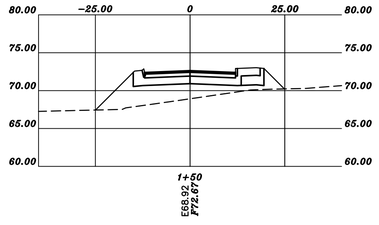
GRAPHIC SCALE

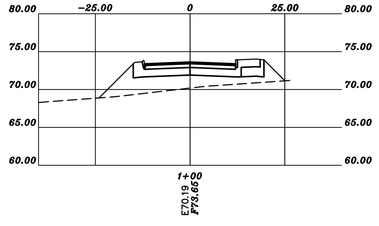
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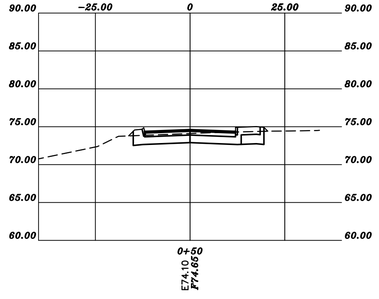
(IN FEET)
1 inch = 20 ft.
Vertical Scale 10

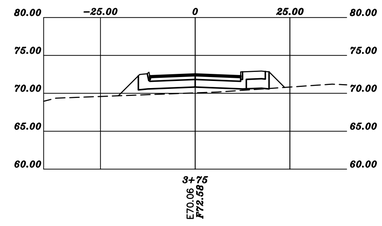


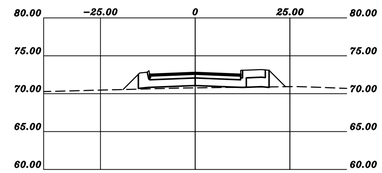


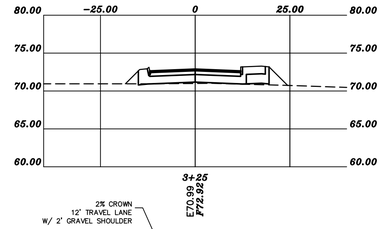


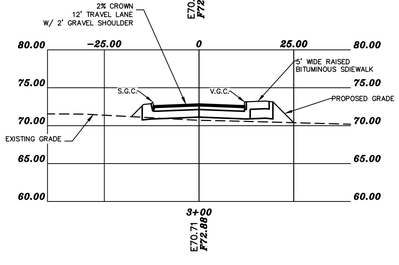


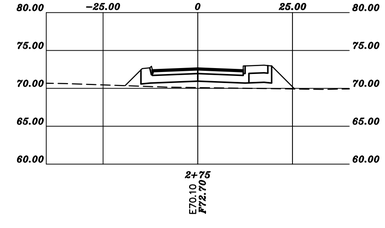


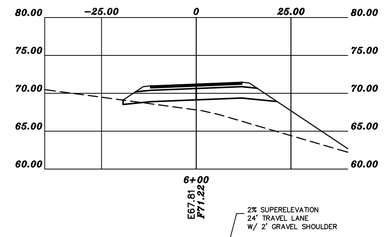


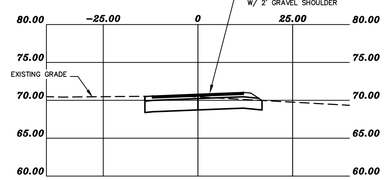


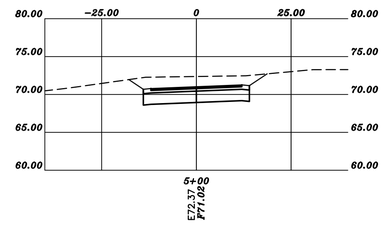


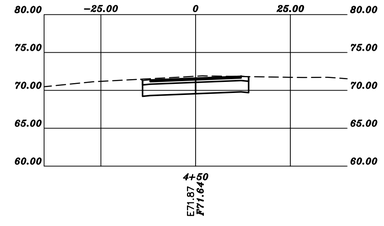


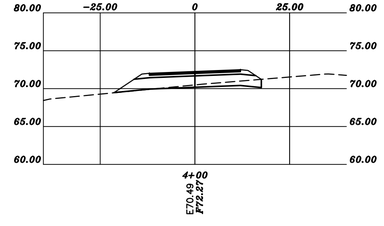


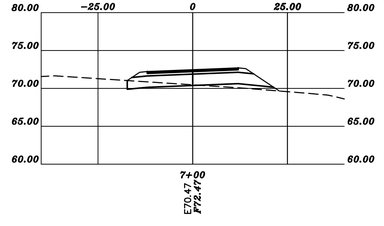


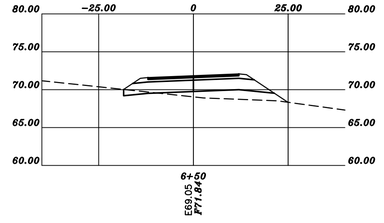












DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

CROSS SECTIONS 0+00 – END

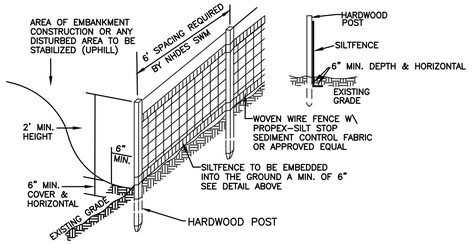
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14248
LICENSED PROFESSIONAL ENGINEER

E1



SILT FENCE CONSTRUCTION SPECIFICATIONS

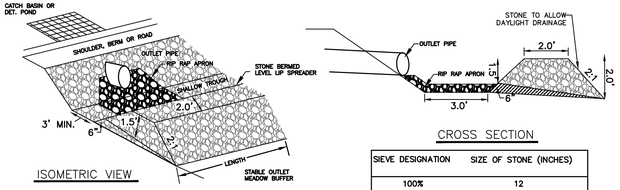
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8" THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 6' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF. SEE MAINTENANCE NOTE BELOW, REMOVAL OF SEDIMENT REQUIRED AT A DEPTH OF 6-INCHES.
4. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
5. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER.
6. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED.
7. TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, SILT FENCE, PAGE 90.

SILT FENCE MAINTENANCE

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

SILT FENCE DETAIL
NOT TO SCALE

E2

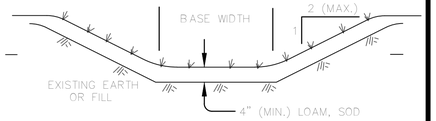


SIEVE DESIGNATION	SIZE OF STONE (INCHES)
100%	12
84-100%	6
68-83%	3
42-55%	1
8-12%	NO. 4

1. CONSTRUCT THE LEVEL SPREADER LIP ON A 0% GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
3. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING EXCELSIOR ENFORCER MATTING BENEATH THE STONE. EACH STRIP SHALL OVERLAP BY AT LEAST SIX INCHES.
4. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
5. MAINTENANCE: THE LEVEL SPREADER SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE LIP HAS BEEN DAMAGED AND THE DESIGN CONDITIONS HAVE NOT CHANGED. ANY DETRIMENTAL SEDIMENT ACCUMULATION SHOULD BE REMOVED. IF STONE REMOVAL HAS TAKEN PLACE ON THE LIP, THEN THE DAMAGE SHOULD BE REPAIRED.
6. REFERENCE IS MADE TO NHDES SWM VOL. 2, 4-6, STONE BERM LEVEL SPREADERS, PAGE 162

STONE BERM LEVEL SPREADER
NOT TO SCALE

E3



GRASS TREATMENT SWALE
NOT TO SCALE

INSPECT ANNUALLY FOR EROSION, SEDIMENT ACCUMULATIONS, VEGETATION LOSS, & INVASIVE SPECIES. REPAIR AS NECESSARY.

MOW GRASS ANNUALLY TO A DEPTH OF 4".

INSTALL STABILIZATION MATTING DURING CONSTRUCATION

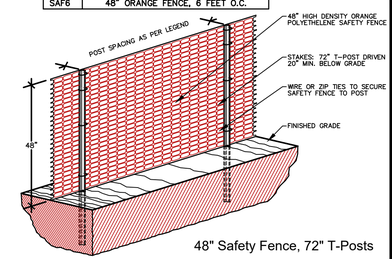
TO BE CONSTRUCTED IAW NH SWM #2 CHAPTER 4, #5 TREATMENT SWALES, PAGE 123.

E4

CONSTRUCTION SAFETY FENCE
NOT TO SCALE

LEGEND

SAF12	48" ORANGE FENCE, 12 FEET O.C.
SAF11	48" ORANGE FENCE, 11 FEET O.C..
SAF10	48" ORANGE FENCE, 10 FEET O.C.
SAF9	48" ORANGE FENCE, 9 FEET O.C.
SAF8	48" ORANGE FENCE, 8 FEET O.C..
SAF7	48" ORANGE FENCE, 7 FEET O.C.
SAF6	48" ORANGE FENCE, 6 FEET O.C.



48" Safety Fence, 72" T-Posts

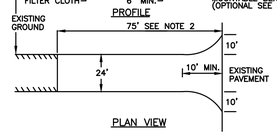
1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.
2. ALL TREES IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED AND PROTECTED WITH HIGH VISIBILITY FENCE AS PER PLAN.
3. WHEN PRACTICABLE, INSTALL HIGH VISIBILITY 3 FEET OUTSIDE OF THE DRIP LINE OF THE TREE.
4. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
5. THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

E5

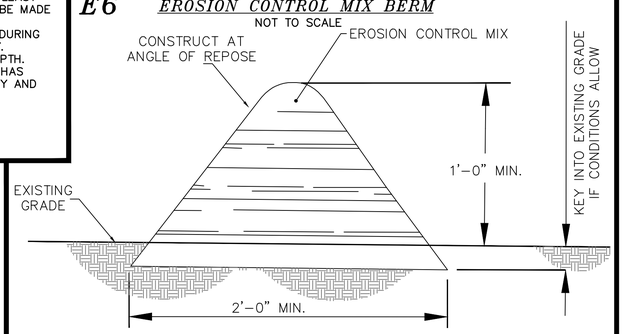
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8. TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY CONSTRUCTION EXIT, PAGE 124.

E6

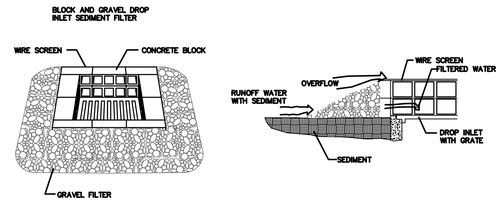
EROSION CONTROL MIX BERM
NOT TO SCALE



EROSION CONTROL MIX BERMS SHALL BE USED ONLY AS FOLLOWS:

1. BERMS SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE BERM.
2. THE BERMS SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSLY AS POSSIBLE.
3. THE BERMS SHALL BE INSTALLED ON SLOPES LESS THAN 5%.
4. SUBJECT TO (E), BELOW, THE MIX SHALL HAVE AN ORGANIC PORTION BETWEEN 80 AND 100%, DRY WEIGHT BASIS, AND BE FIBROUS AND ELONGATED SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS SHALL NOT BE USED AS ORGANIC MATERIAL.
5. THE MIX SHALL NOT CONTAIN SILTS, CLAY, OR FINE SANDS.
6. THE MIX SHALL HAVE A PARTICLE SIZE BY WEIGHT OF 70 TO 85% PASSING A 6-INCH SCREEN AND A MAXIMUM OF 85% PASSING THE 0.75-INCH SCREEN.
7. THE MIX PH SHALL BE BETWEEN 5.0 AND 8.0.
8. THE BERM SHALL BE AT LEAST 12 INCHES HIGH AND AT LEAST 2 FEET WIDE.
9. TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, EROSION CONTROL MIX BERMS, PAGE 106.

E7



MAINTENANCE

ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

BLOCK & GRAVEL DROP INLET SEDIMENT FILTER
NOT TO SCALE

TO BE USED IN ALL AREAS WHERE THERE WILL BE NO TRAFFIC.

TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY STORM DRAIN INLET PROTECTION, PAGE 118.

E8

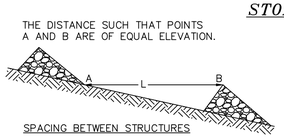
TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
3. ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA. (SEE SEED SPECIFICATIONS THIS SHEET)
4. ALL DISTURBED AREAS WILL BE RESTABILIZED WITHIN 45 DAYS. AT ANY ONE TIME, NO MORE THAN 5 ACRES, (217,800 Sq. Ft.) WILL BE DISTURBED.
5. SILT FENCES AND PERIMETER BARRIERS SHALL BE INSPECTED PERIODICALLY AND AFTER EVERY RAIN DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
6. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
7. PER THE EPA CGP REQUIREMENTS THERE WILL BE REPORTS OF THE EROSION CONTROL INSPECTIONS IAW SWPPP PREPARED BY BS&E. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OR GREATER RAIN EVENT.
8. DITCHES, SWALES, AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
9. DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
10. DRIVEWAYS AND CUT AND FILL SPLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINAL GRADE.
11. STABILIZATION MEANS:
    - 11.1. A MINIMUM OF 85% OF VEGETATIVE COVER HAS BEEN ESTABLISHED.
    - 11.2. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED, OR
    - 11.3. EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
12. THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
13. THE NHDES STORMWATER MANUAL, IN THREE VOLUMES, DATED DECEMBER 2008, IS A PART OF THIS PLAN SET AND THE MORE RESTRICTIVE WILL GOVERN. (NH SWM)

EROSION & SEDIMENT CONTROL DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

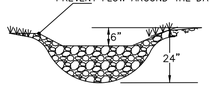
E9

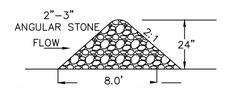
STONE CHECK DAM
NOT TO SCALE



1.) CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
2.) THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE DAM SHOULD BE LESS THEN ONE ACRE.
3.) THE MAXIMUM HEIGHT OF THE DAM SHOULD BE TWO FEET.
4.) THE CENTER OF THE DAM SHOULD BE AT LEAST SIX INCHES LOWER THAN THE OUTER EDGES.
5.) THE MAXIMUM SPACING IS AS SHOWN ON THE PROJECT SITE PLANS.
6.) CHECK DAMS WILL NOT BE USED IN A FLOWING STREAM.
7.) TEMPORARY CHECK DAMS WILL BE REMOVED ONCE THE SWALE OR DITCH IS DETERMINED STABLE.
8.) TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY CHECK DAMS, PAGE 114.

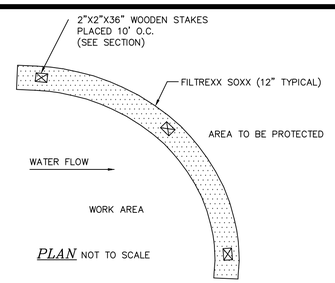
NOTE: KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIUM OF 18" TO PREVENT FLOW AROUND THE DAM.





STONE GRADE STABILIZATION STRUCTURE

E10

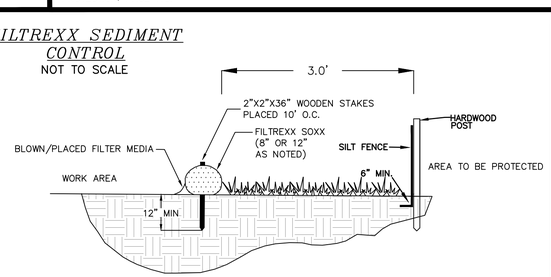


PLAN NOT TO SCALE

NOTES

1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIRMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
4. SILTSOXX MAY BE USED IN PLACE OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
5. SILTSOXX COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIRMENTS OF THE SPECIFIC APPLICATION.
6. FILTREXX SOXX IS A REGISTERED TRADEMARK OF FILTREXXIN TERNATIONAL, LLC.
7. SILT FENCE IS NOT A SUBSTITUTION FOR SILT SOXX AND ANY EQUAL SUBSTITUTION TO BE APPROVED.
8. TO BE CONSTRUCTED IAW FILTREXX, SECTION 1:EROSION & SEDIMENT CONTROL (PAGE 323) - CONSTRUCTION ACTIVITIES, SWPPP CUT SHEET: FILTREXX SEDIMENT CONTROL

FILTREXX SEDIMENT CONTROL
NOT TO SCALE

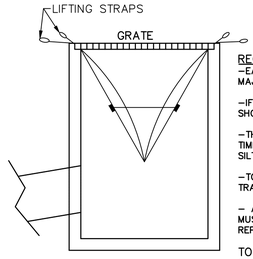


Filtrexx International, LLC
35481 Grafton Eastern Rd | Grafton, Oh 44044
440-926-2607 | fax: 440-926-4021
WWW.FILTREXX.COM
OR APPROVED EQUAL

NOTE: FOR AREAS REQUIRING DOUBLE PERIMETER CONTROL WITHIN 50' OF JURISDICTIONAL WETLANDS AND NOT FOR ALL SILT SOXX APPLICATIONS. THIS DUPLICATION MAY BE SPECIFIED AS 12" SILT SOXX OR ORANGE CONSTRUCTION FENCE AS NOTED.

SECTION NOT TO SCALE

E11



RECOMMENDED MAINTENANCE SCHEDULE

-EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT, AND MUST BE MAINTAINED.

-IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACK SHOULD BE INSPECTED EVERY 2-3 WEEKS.

-THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

-TO BE USED IN ALL AREAS WHERE THERE WILL BE TRAFFIC.

- ARE SUBJECT TO DAMAGE BY SNOW PLOWS, AND MUST BE INSPECTED AFTER ANY SNOW EVENT AND REPLACED AS REQUIRED.

TO BE CONSTRUCTED IAW NH SWM #3 4-2 SEDIMENT CONTROL PRACTICES, TEMPORARY STORM DRAIN INLET PROTECTION, PAGE 118.

SILTSACK DETAIL
NOT TO SCALE

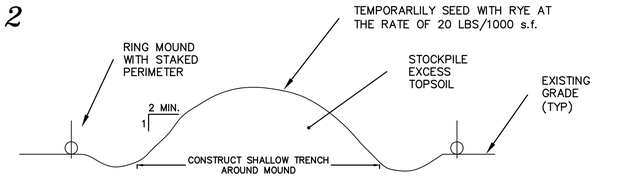
E-101

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077
AS NOTED

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 10283
LICENSED PROFESSIONAL ENGINEER

E12



TO BE CONSTRUCTED IAW NH SWM #3 4–1 EROSION CONTROL PRACTICES, SOIL STOCKPILE PRACTICES, PAGE 46.

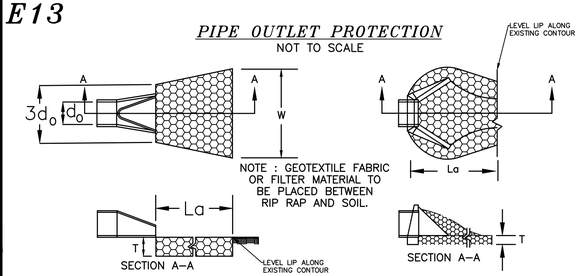
TOPSOIL STOCKPILE MOUND

NOT TO SCALE

E13

PIPE OUTLET PROTECTION

NOT TO SCALE



PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

PIPE OUTLET TO WELL–DEFINED CHANNEL

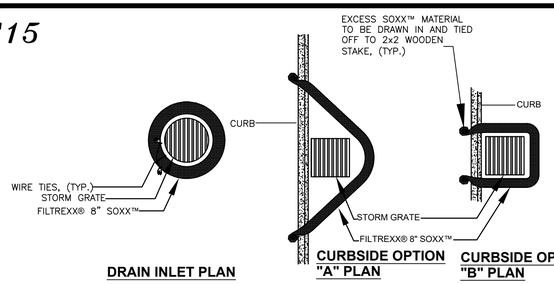
PIPE OUTLET PROTECTION CONSTRUCTION SPECIFICATIONS

1. THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS. SPECIFIED GRADATION.
2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO NHDOT SECTION 583.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. TO BE CONSTRUCTED IAW NH SWM #2 4–6 CONVEYANCE PRACTICES, 6. OUTLET PROTECTION, PAGE 172.

E14

TABLE 7–24––RECOMMENDED RIP RAP GRADATION RANGES		
d50 SIZE= 0.5	FEET 6	INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM	TO
100%	9	12
85%	8	11
50%	6	9
15%	2	3

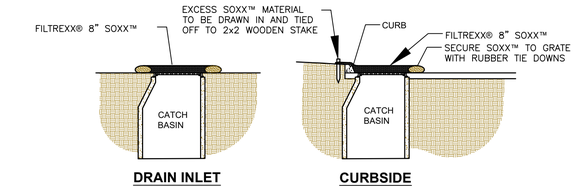
E15



DRAIN INLET PLAN

CURBSIDE OPTION "A" PLAN

CURBSIDE OPTION "B" PLAN



DRAIN INLET SECTION

CURBSIDE SECTION

NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTREXX INLET PROTECTION

NOT TO SCALE

E16

NOTE: THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

NOTE: Temporary seed mix for stabilization of turf shall be winter rye or oats at a rate of 2.5 lbs. per 1000 s.f. and shall be placed prior to OCT. 15, if permanent seeding not yet complete.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	FAIR	GOOD	EXCELLENT
	E	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	POOR
	D	FAIR	GOOD	GOOD	EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F	FAIR	EXCELLENT	EXCELLENT	2/
	G	FAIR	EXCELLENT	EXCELLENT	2/

GRAVEL PIT, SEE NH–PM–24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7–36.
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

RECOMMENDED *

SEEDING RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH OR	15	0.35
FLAT PEA	20	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	24	0.55
CREEPING RED FESCUE	24	0.55
BIRDS FOOT TREFOIL	REMOVED	REMOVED
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

CONSERVATION MIX	POUNDS PER ACRE	POUNDS PER 1,000 S.F.
TALL FESCUE (35%)	15	0.35
CREEPING RED FESCUE (25%)	15	0.35
ANNUAL RYEGRASS (12%)	5	0.12
PERENNIAL RYEGRASS (10%)	5	0.12
KENTUCKY BLUEGRASS (10%)	15	0.35
WHITE CLOVER (3%)	7	0.16

SEEDING SPECIFICATIONS

1. GRADING AND SHAPING
   A. SLOPES SHALL NOT BE STEEPER THAN 2:1;3:1 SLOPES OR FLATTER ARE PREFERRED.
   WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
2. SEEDBED PREPARATION
   A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
   B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEED BED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
3. ESTABLISHING A STAND
   A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING
   AND INCORPORATED INTO THE SOIL KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE,
   THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
   AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100LBS. PER 1,000 SQ.FT.
   NITROGEN(N), 50LBS. PER ACRE OR 1.1LBS. PER 1,000 SQ.FT.
   PHOSPHATE(P2O5), 100LBS. PER ACRE OR 2.2LBS. PER 1,000 SQ.FT.
   POTASH(K2O), 100LBS. PER ACRE OR 2.2LBS. PER 1,000 SQ.FT.
   (NOTE: THIS IS THE EQUIVALENT OF 500LBS. PER ACRE OF 10–20–20 FERTILIZER OR 1,000LBS. PER ACRE OF 5–10–10.)
   B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
   C. REFER TO TABLE(G–E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H–E1 THIS SHEET) FOR RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT TREFOIL, AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.
   D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
4. MULCH
   A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
   B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90LBS PER 1000 S.F.
5. MAINTENANCE TO ESTABLISH A STAND
   A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
   B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
   C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.
6. TO BE CONSTRUCTED IAW NH SWM #3 4–1 EROSION CONTROL PRACTICES, PERMANENT VEGETATION, PAGE 60.
7. SEE RAIN GARDEN AND INFILTRATION DETAIL SHEETS FOR SPECIFIC PLANTING INSTRUCTIONS AND SEEDING.

E17 *CONSTRUCTION SEQUENCE:*

1.) CUT AND REMOVE TREES IN CONSTRUCTION AREA ONLY AS REQUIRED, RELOCATE ANY PROJECT T.B.M.

2.) CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS SPECIFIED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL LAND DISTURBANCE AND MUST BE REVIEWED AND APPROVED BY THE COMMUNITY SERVICES DEPARTMENT.

3.) EROSION, SEDIMENT AND DETENTION CONTROL FACILITY SHALL BE INSTALLED & STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.TEMPORARY DIVERSIONS MAY BE REQUIRED. POST CONSTRUCTION STORM WATER MANAGEMENT PRACTICES MUST BE INITIATED AND STABILIZED EARLY IN THE PROCESS.

4.) CLEAR, CUT AND DISPOSE OF DEBRIS IN APPROVED FACILITY

5.) CONSTRUCT TEMPORARY CULVERTS AS REQUIRED, OR DIRECTED

6.) CONSTRUCT ROADWAYS FOR ACCESS TO DESIRED CONSTRUCTION AREAS. ALL ROADS SHALL BE STABILIZED IMMEDIATELY

7.) START BUILDING CONSTRUCTION

8.) INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. INSTALL RAIN GARDENS. ALLDISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.

9.) BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED. NO AREA IS ALLOWED TO BE DISTURBED FOR A LENGTH OF TIME THAT EXCEEDS 45 DAYS BEFORE BEING STABILIZED. DAILY, OR AS REQUIRED. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADES. ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADES.

10.) CONSTRUCT TEMPORARY BERMS, DRAINS DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.

11.) INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. ALL SWPPP INSPECTIONS MUST BE CONDUCTED BY A QUALIFIED PROFESSIONAL SUCH AS A PROFESSIONAL ENGINEER (PE), A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), A CERTIFIED EROSION SEDIMENT AND STORM WATER INSPECTOR (CESSW), OR A CERTIFIED PROFESSIONAL IN STORM WATER QUALITY (CPSWQ). INSPECTION REPORTS SHALL BE SUBMITTED TO THE COMMUNITY SERVICES DEPARTMENT.

12.) COMPLETE PERMANENT SEEDING AND LANDSCAPING.

13.) REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE.

14.) SMOOTH AND REVEGETATE ALL DISTURBED AREAS.

15.) FINISH PAVING ALL ROADWAYS.

E18 *DEFINITION OF STABLE:*

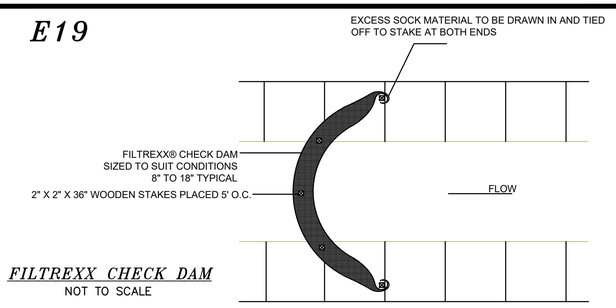
PER ENV–WQ 1500 ALTERATION OF TERRAIN

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
2. A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED..
3. A MINIMUM OF 3 INCHES OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIP–RAP HAS BEEN INSTALLED.
4. OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

ADDITION STABILIZATION NOTES:

5. HAY MULCH OR OTHER APPROVED METHODS SHALL BE USED TO CONTROL EROSION OF NEWLY GRADED AREAS. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS AFTER THEIR CONSTRUCTION.
6. DISTURBED SOIL AREAS SHALL BE EITHER TEMPORARILY OR PERMANENTLY STABILIZED. IN AREAS WHERE FINAL GRADING HAS NOT OCCURRED, TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN SEVEN (7) CALENDAR DAYS FOR EXPOSED SOIL AREAS THAT ARE WITHIN ONE HUNDRED (100) FEET OF A SURFACE WATER BODY OR A WETLAND AND NO MORE THAN 14 CALENDAR DAYS FOR ALL OTHER AREAS. PERMANENT STABILIZATION SHOULD BE IN PLACE WITHIN THREE (3) CALENDAR DAYS FOLLOWING COMPLETION OF FINAL GRADING OF EXPOSED SOIL AREAS.

E19

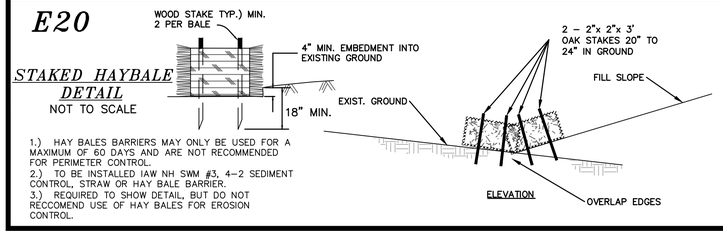


FILTREXX CHECK DAM

NOT TO SCALE

NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. CHECK DAM SHOULD BE USED IN AREAS THAT DRAIN 1 ACRE OR LESS.
3. SEDIMENT SHOULD BE REMOVED FROM BEHIND CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS REACHED ½ THE HEIGHT OF THE CHECK DAM.
4. CHECK DAM CAN BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
5. CONTRACTOR IS REQUIRED TO BE A FILTREXX CERTIFIED™ INSTALLER.

E20

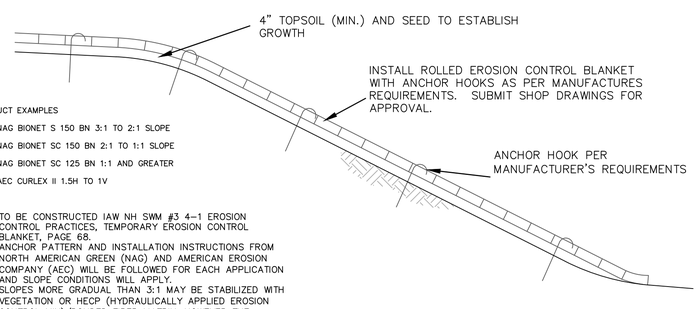


STAKED HAYBALE DETAIL

NOT TO SCALE

1.) HAY BALES BARRIERS MAY ONLY BE USED FOR A MAXIMUM OF 60 DAYS AND ARE NOT RECOMMENDED FOR PERIMETER CONTROL.
2.) TO BE INSTALLED IAW NH SWM #3, 4–2 SEDIMENT CONTROL, STRAW OR HAY BALE BARRIER.
3.) REQUIRED TO SHOW DETAIL, BUT DO NOT RECOMEND USE OF HAY BALES FOR EROSION CONTROL.

E21



PRODUCT EXAMPLES

1.) NAG BIONET S 150 BN 3:1 TO 2:1 SLOPE
2.) NAG BIONET SC 150 BN 2:1 TO 1:1 SLOPE
3.) NAG BIONET SC 125 BN 1:1 AND GREATER
4.) AEC CURLEX II 1.5H TO 1V

1. TO BE CONSTRUCTED IAW NH SWM #3 4–1 EROSION CONTROL PRACTICES, TEMPORARY EROSION CONTROL BLANKET, PAGE 68.
2. ANCHOR PATTERN AND INSTALLATION INSTRUCTIONS FROM NORTH AMERICAN GREEN (NAG) AND AMERICAN EROSION COMPANY (AEC) WILL BE FOLLOWED FOR EACH APPLICATION AND SLOPE CONDITIONS WILL APPLY.
3. SLOPES MORE GRADUAL THAN 3:1 MAY BE STABILIZED WITH VEGETATION OR HECP (HYDRAULICALLY APPLIED EROSION CONTROL MIX)/BONDED FIBER MATRIX. HOWEVER THE ENGINEER RESERVES THE RIGHT TO REQUEST INCREASED RECB TO BE INSTALLED ON ANY SLOPE.

ROLLED EROSION CONTROL BLANKET (RECB) SLOPE STABILIZATION DETAIL

NOT TO SCALE

E22

WINTER STABILIZATION NOTES

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3–4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3–4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER OCTOBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

3. PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15–25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER OCTOBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3–4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.

E–102

DOVER PLANNING FILE #19–80

REVISION	DATE	DESCRIPTION
#2	1–30–20	REVISED PER TRC COMMENT
#1	12–16–19	REVISED PER STAFF COMMENT

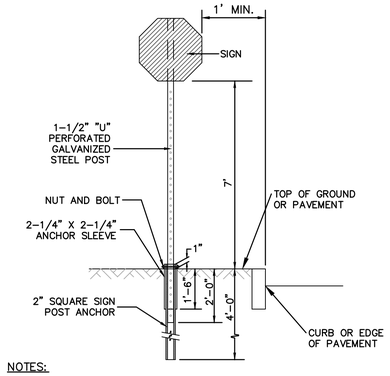
EROSION & SEDIMENT CONTROL DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10–C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332–2863

AS NOTED
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019–077

STATE OF NEW HAMPSHIRE – KENNETH A. BERRY No. 14243 LICENSED PROFESSIONAL ENGINEER –

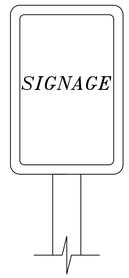
C1



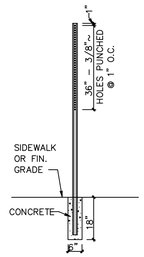
NOTES:

1. ALL SIGNAGE SHALL BE TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS AND NHDOT STANDARDS.
2. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS/CATALOG CUTS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ERECTING SIGNS.
3. THE LOCATION OF THE SIGNS SHALL BE AS INDICATED ON THE DRAWINGS AND/OR AS DIRECTED BY THE CITY OF DOVER DEPARTMENT OF PUBLIC WORKS.

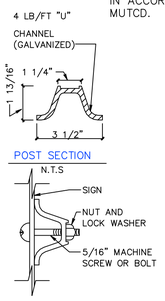
TYPICAL SIGN POST
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PARTIAL ELEVATION
N.T.S.

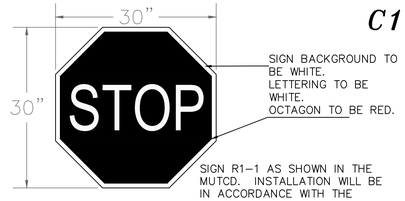


POST
N.T.S.

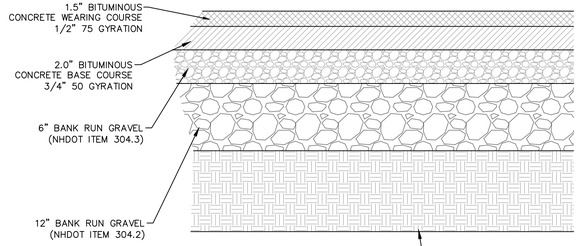


MOUNTING
N.T.S.

C1



C2



NOTES:

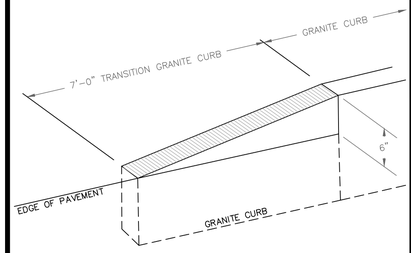
1.) BITUMINOUS MATERIALS SHALL CONFORM TO NHDOT SPECIFICATION SUBSECTION 401.3.6.

2.) PAVEMENT BASE COURSE AGGEGATE SHALL CONFORM TO NHDOT SPECIFICATION SECTION 304, ITEM 304.3 AND COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.

3.) PAVEMENT SUBBASE COURSE AGGREGATE AND AGGREGATE FOR SUBGRADE REPAIR AREAS SHALL BE SUITABLE FOR USE AS STRUCTURAL FILL AND BE PROOFROLLED AND COMPABED TO 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY. FOR NEW CONSTRUCTION AREAS ONLY. IN EXISTING PAVEMENT AREAS THE CONTRACTOR IS TO ENSURE THE BASE MATERIAL IS SUITABLE TO THE OWNER FOR RE-PAVING

BITUMINOUS CONCRETE PAVEMENT SECTION
NOT TO SCALE

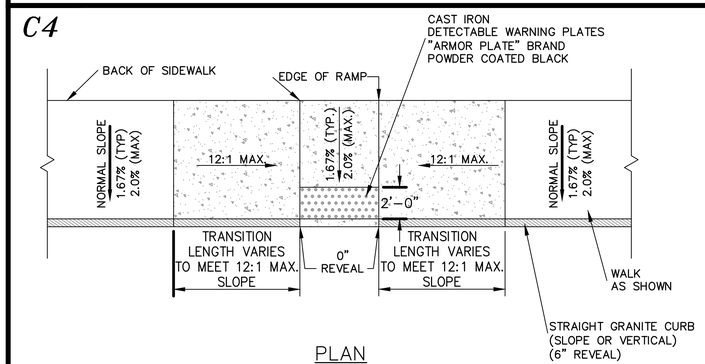
C3



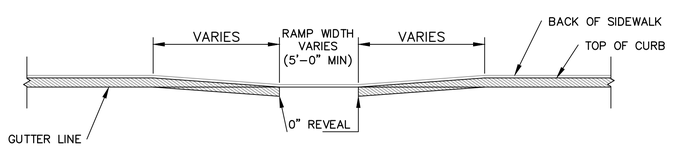
CURB TRANSITION DETAIL
NOT TO SCALE

TO BE USED FOR TRANSITION FROM GRANITE CURB TO EDGE OF PAVEMENT

C4



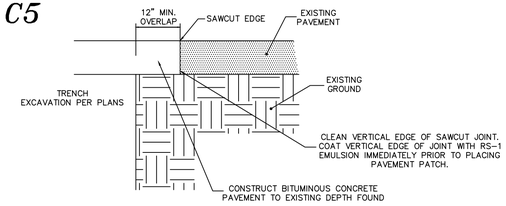
PLAN
(NOT TO SCALE)

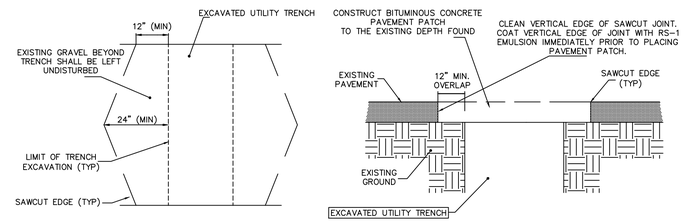


ELEVATION
NOT TO SCALE

TYPICAL DETAIL FOR WHEELCHAIR RAMP

C5



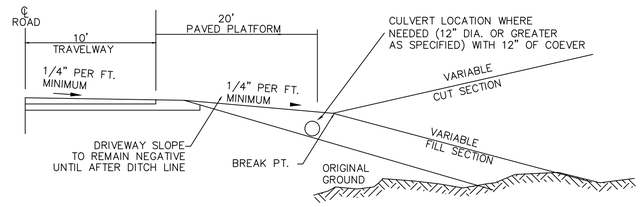


PLAN *SECTION*

NOTES
1. MACHINE CUT EXISTING PAVEMENT.
2. ALL TEMPORARY, DAMAGED, OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.
3. DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDOT REQUIREMENTS.

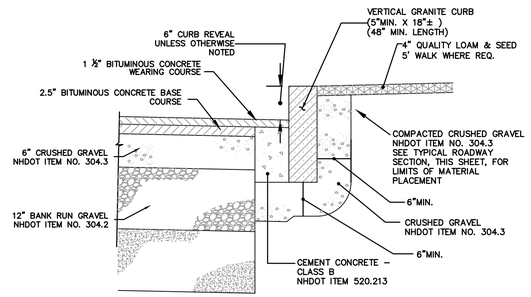
TYPICAL TRENCH PATCH
NOT TO SCALE

C6



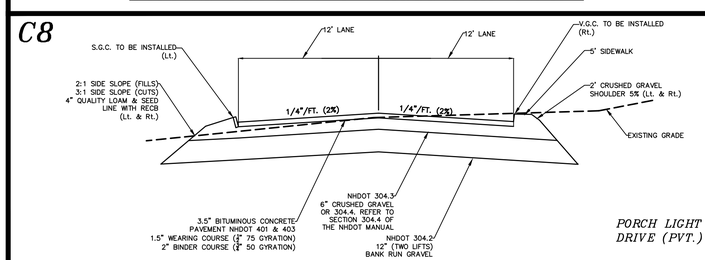
TYPICAL RURAL DRIVEWAY – CROSS SECTION
NOT TO SCALE

C7

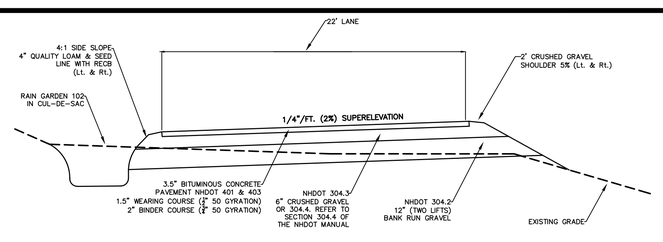


VERTICAL GRANITE CURB DETAIL
NOT TO SCALE

C8



TYPICAL ROADWAY SECTION PORCH LIGHT DRIVE
0+00–3+82.57



TYPICAL CUL-DE-SAC SECTION PORCH LIGHT DRIVE
3+82.57–END
NOT TO SCALE

CROSS SECTION NOTES

1. ALL ROADWAY FILL TO BRING ROAD TO SUBGRADE SHALL BE INSTALLED IN LIFTS NO GREATER THAN 12".
2. ALL FILL SHALL BE COMPACTED TO 95% MINIMUM. COMPACTION TESTS TO BE CONDUCTED AT THE START OF THE PROJECT AND NO FURTHER THAN 100 FEET APART.
3. GUARD RAIL REQUIRED AS NOTED ON PLAN & PROFILE SHEETS.
4. TEST PITTING WAS DONE WITHIN THE ROADWAY ALIGNMENT BY STONEY RIDGE ENVIRONMENTAL, AND NO UNSUITABLE MATERIALS WERE ENCOUNTERED IN THOSE TEST PITS.

COMPACTED SUBGRADE – CONTRACTOR SHALL SCARIFY SUBGRADE TO A DEPTH OF 30 INCHES BELOW F-GRADE. ALL STONES GREATER THAN 6" IN DIAMETER SHALL BE REMOVED FROM THE SCARIFIED LAYER. ANY IMPORTED FILL SHALL BE FREE OF ORGANICS AND FROST AND SHALL HAVE NO ROCKS LARGER THAN 6" IN DIAMETER. FILL MATERIAL SHALL BE APPROVED BY THE TOWNS AGENT AND/OR THE TOWNS ENGINEER.

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

CONSTRUCTION DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

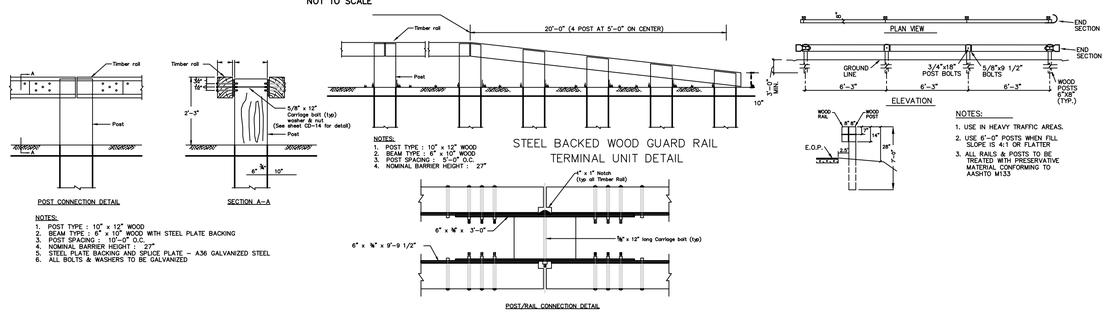
AS NOTED
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE – KENNETH A. BERRY No. 10283 LICENSED PROFESSIONAL ENGINEER

C-101

C9 GUARD RAIL (WOODEN RAIL & STEEL BACKED)

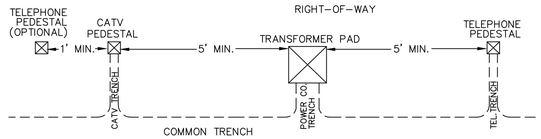
NOT TO SCALE



NOTES:
1. POST TYPE : 10" x 12" WOOD
2. BEAM TYPE : 6" x 10" WOOD WITH STEEL PLATE BACKING
3. POST SPACING : 10'-0" O.C.
4. NOMINAL BARRIER HEIGHT : 27"
5. STEEL PLATE BACKING AND SPLICE PLATE – A36 GALVANIZED STEEL
6. ALL BOLTS & WASHERS TO BE GALVANIZED

NOTES:
1. USE IN HEAVY TRAFFIC AREAS.
2. USE 6'-0" POSTS WHEN FILL SLOPE IS 4:1 OR FLATTER
3. ALL RAILS & POSTS TO BE TREATED WITH PRESERVATIVE MATERIAL CONFORMING TO AASHTO M133

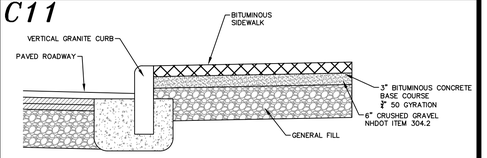
C10



PEDESTAL PLACEMENT

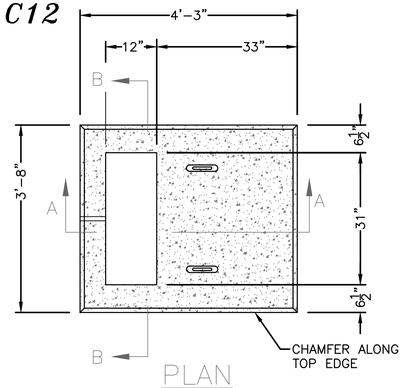
NOT TO SCALE

C11



BITUMINOUS SIDEWALK RAISED

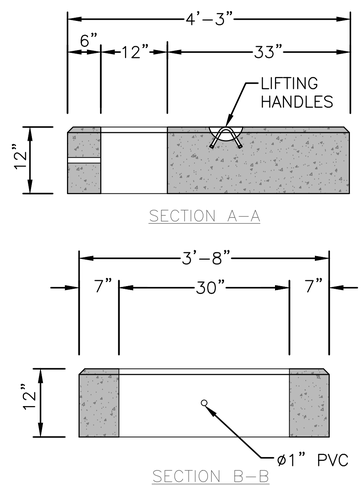
C12



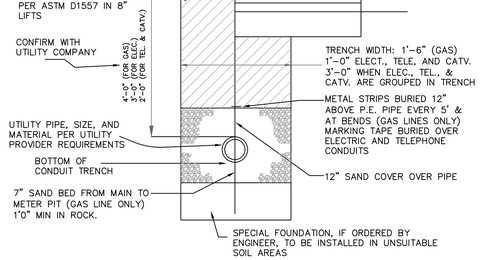
NOTES:
1. CONCRETE MINIMUM STRENGTH 4,000 PSI AFTER 28 DAYS
2. REINFORCEMENT STEEL CONFORMS TO ASTM A615 GRADE 60 #6 REBAR.
3. MEETS OR EXCEEDS EVERSOURCE SPECIFICATIONS.
4. MUST BE A SHEA CONCRETE PRODUCT OR EQUAL.

TRANSFORMER AND PAD DETAIL

NOT TO SCALE



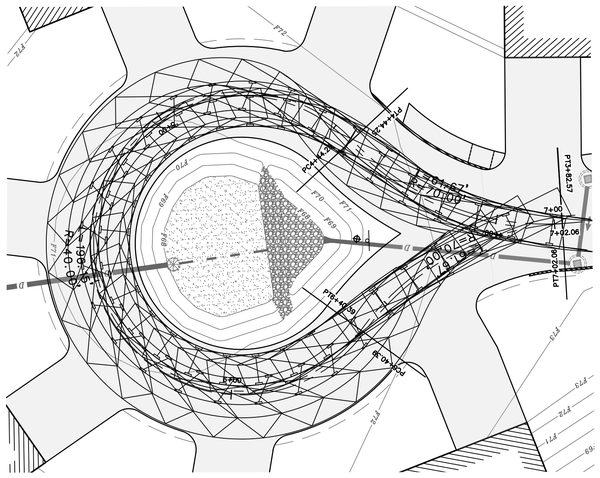
C13



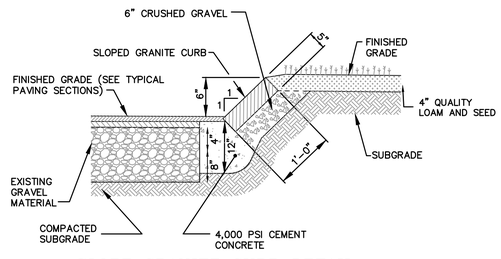
ELECTRICAL, TELEPHONE, AND GAS TRENCH

NOT TO SCALE

C14 DOVER FIRE TRUCK TURNING TEMPLATE HORIZONTAL SCALE: 1" = 20'



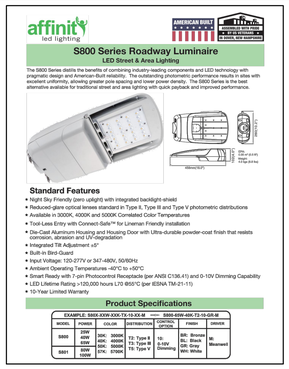
C15



SLOPE GRANITE CURB DETAIL

NOT TO SCALE

C16


affinity led lighting

S800 Series Roadway Luminaire

LED Street & Area Lighting

The S800 Series distills the benefits of combining industry-leading components and LED technology with pragmatic design and American-Built reliability. The outstanding photometric performance results in sites with excellent uniformity, allowing greater pole spacing and lower power density. The S800 Series is the best alternative available for traditional street and area lighting with quick payback and improved performance.

Standard Features
- Night Sky Friendly (zero uplight) with integrated backlight-shield
- Reduced-glare optical lenses standard in Type II, Type III and Type V photometric distributions
- Available in 3000K, 4000K and 5000K Correlated Color Temperatures
- Tool-Less Entry with Connect-Safe™ for Lineman Friendly installation
- Die-Cast Aluminum Housing and Housing Door with Ultra-durable powder-coat finish that resists corrosion, abrasion and UV-degradation
- Integrated Tilt Adjustment +5°
- Built-in Bird-Guard
- Input Voltage: 120-277V or 347-480V, 50/60Hz
- Ambient Operating Temperatures -40°C to +50°C
- Smart Ready with 7-pin Photocontrol Receptacle (per ANSI C136.41) and 0-10V Dimming Capability
- LED Lifetime Rating >120,000 hours L70 @50°C (per IESNA TM-21-11)
- 10-Year Limited Warranty

Product Specifications

EXAMPLE: S800-XXW-XXK-T2-10-D3-M					S800-XXW-40K-T2-10-GR-M		
MODEL	POWER	COLOR	DISTRIBUTION	MOUNTING OPTION	FINISH	DRIVER
S800	20W 30W 40W	30K: 3000K 40K: 4000K 50K: 5000K	T2: Type II T3: Type III T5: Type V	10: 0-10V Dimming	BR: Bronze BL: Black GR: Gray WH: White	M: Mounted
S801	60W 100W	STK: STOCK				

EVERSOURCE POLE MOUNTED LAMP

C17

terrain planning & design llc

General Plant Maintenance Guide

General Plant Bed Maintenance:

- All plant maintenance should be performed by a qualified horticulturalist or licensed arborist. Cleaning the dead material out of the planting bed in the fall helps keep litter from building up around the plants and in some cases killing the plants. Watering the first year during dry periods will help get the plants established. Mulching every year is not necessary. Raking the old mulch and turning it over is all that is needed. When necessary only install one inch of mulch and do not place the mulch closer than 3" to the trunks or stems of woody plants.

Trees

- The first year watering during dry periods will be necessary.
- 3" inches of mulch maybe used. The mulch should be kept 3 inches from the trunk.
- Fertilizing is not necessary for the first year. Fertilizing in subsequent years only when and if the foliage is looking weak.
- Fertilization should occur prior to Mat 31st or after trees have dropped their leaves for the year.
- Prune dead wood once a year.
- Depending on the amount of compaction the bed area receives, deep root aeration may be needed over time

Woody Shrubs

- The first year watering during dry periods will be necessary.
- 3" inches of mulch maybe used. The mulch should be kept 3 inches from the stems.
- Fertilizing is not necessary for the first year. Fertilizing in subsequent years only when and if the foliage is looking weak.
- Fertilization should occur prior to Mat 31st or after shrubs have dropped their leaves or gone dormant for the year.
- Prune dead wood once a year.

Grasses

- Grasses only need to be clipped back at the end of the growing season and all the clippings removed from the area.
- Do not over mulch. Too much mulch will prohibit the grass from developing into a strong clump.

Perennials

- All perennials need to be pruned back after the first or second hard frost. A two-step method; first dead head all the flower heads and let drop to the ground for re-seeding. Second cut the stems back to 3" above the ground and remove the stem and leaf litter and place in compost. Do not over mulch. Too much mulch will prohibit the growth and development
- Fertilizing perennials once in the spring with a low phosphate fertilizer will help the plants to get started in the spring.

www.terrainplanning.com 311 kast hill road hopkinton nh 03229 T:603-491-2322

LANDSCAPING OPERATION MANUAL

C-102

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

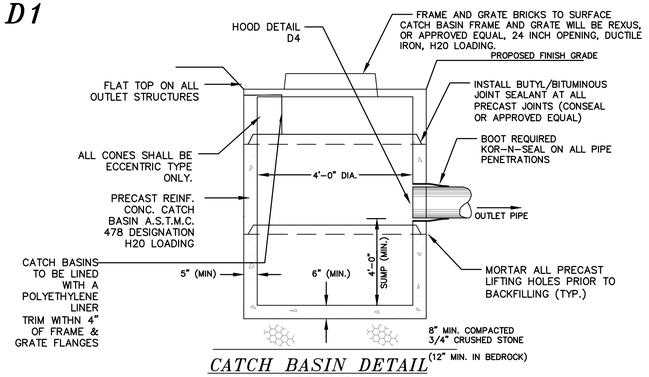
CONSTRUCTION DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE: AS NOTED
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE – KENNETH A. BERRY No. 10683 LICENSED PROFESSIONAL ENGINEER

D1



CATCH BASIN DETAIL

NOT TO SCALE



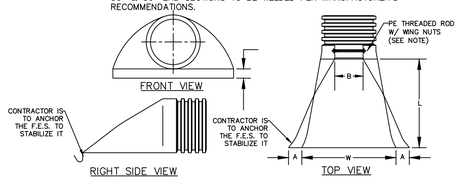
D2

ADS N-12 FLARED END SECTIONS

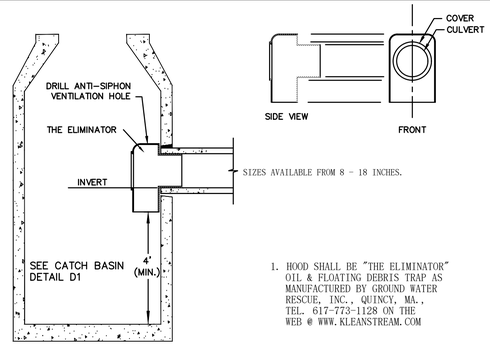
NOT TO SCALE (ALL DIMENSIONS ARE NOMINAL)

PART No.	PIPE SIZE	A	B(MAX)	H	L	W
1510-NP	15" 375 mm	6.5" 165 mm	10" 254 mm	6.5" 165 mm	25" 635 mm	29" 735 mm
1810-NP	18" 450 mm	7.5" 190 mm	15" 380 mm	6.5" 165 mm	32" 812 mm	35" 890 mm
2410-NP	24" 600 mm	7.5" 190 mm	18" 450 mm	6.5" 165 mm	36" 900 mm	45" 1140 mm
3010-NP	30" 750 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm
3610-NP	36" 900 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm

NOTE: PE THREADED ROD W/ WING NUTS PROVIDED FOR END SECTIONS 15"-24". 30" & 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.



D3

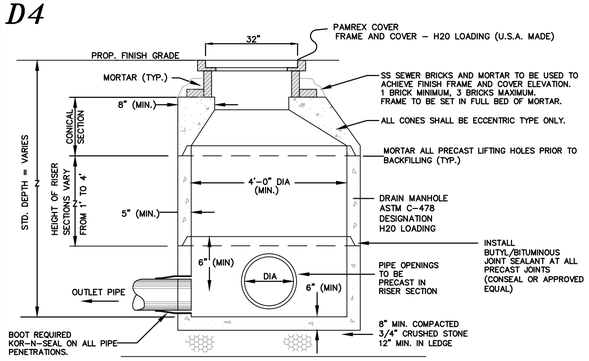


1. HOOD SHALL BE "THE ELIMINATOR" OIL & FLOATING DEBRIS TRAP AS MANUFACTURED BY GROUND WATER RESCUE, INC., QUINCY, MA., TEL. 617-773-1128 ON THE WEB @ WWW.KLEANSTREAM.COM

CATCH BASIN HOOD DETAIL

NOT TO SCALE

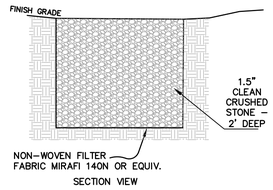
D4



PRECAST DRAIN MANHOLE DETAIL

NOT TO SCALE

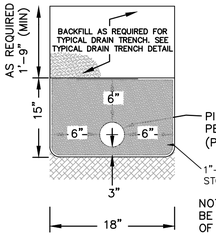
D5



SECTION VIEW

INFILTRATION STONE DRIP EDGE DETAIL

D6



SUBDRAIN PIPE TO BE ADS N-12 PERFORATED (CORRUGATED EXTERIOR/ SMOOTH INTERIOR) MEETING AASHTO M-252 WITH FILTER SOCK

PIPE SIZE PER SITE PLANS (PLACE HOLES DOWN)

NOTE: SUBDRAIN TO BE LAID WITH SLOPE OF FINISHED GROUND

TYPICAL CROSS SECTION

NOTES:

CROWN OF 6" SUBDRAIN PIPES TO MATCH CROWN OF DRAIN PIPES IN CATCH BASINS

SUBDRAIN TO BE INSTALLED AS INDICATED ON THE DRAWINGS AND AS DIRECTED BY THE ENGINEER.

SHORING AND STABILIZING OF TRENCH SIDEWALLS DURING EXCAVATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY TRENCH EXCAVATION BEYOND THE LIMITS OF PAY EXCAVATION INDICATED.

SUBDRAIN DETAIL TYPICAL

NOT TO SCALE

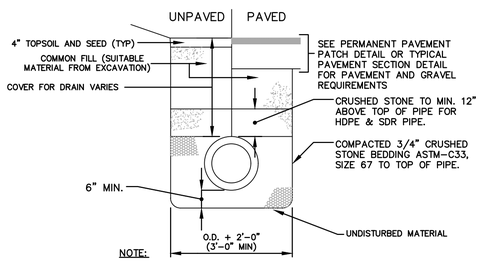
D7



DRAIN MAN HOLE FRAME AND GRATE WILL BE PAMREX, OR APPROVED EQUAL, 24 INCH OPENING, DUCTILE IRON, H20 LOADING.

DRAIN MANHOLE COVER DETAIL

D8



NOTE:

PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

DI DRAIN PIPE SHALL BE CL. 52.

RC DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

TYPICAL DRAIN PIPE TRENCH

NOT TO SCALE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

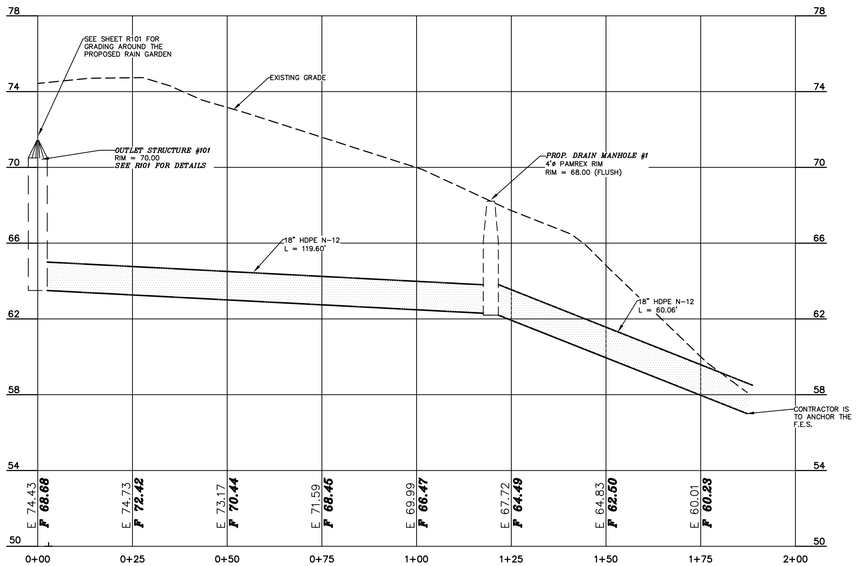
1 inch = 20 ft.

VERTICAL SCALE: 1" = 4'

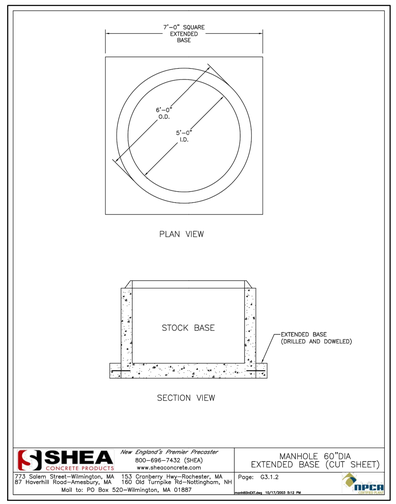
15" DRAIN LINE

RG #101

D9



D10



60" MANHOLE RECTANGLE EXTENDED BASE

NOT TO SCALE

D-101

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
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DRAINAGE DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

AS NOTED

DATE : SEPTEMBER 30, 2019

FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 14143
LICENSED PROFESSIONAL ENGINEER

NOTES ON MANHOLE AND SEWER CONSTRUCTION:

1) IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT AND ADEQUATE JOINTING. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND HS-20-44 LOADING, INCLUDING THE COVER. ALL SMH CONSTRUCTION AND MATERIALS WILL BE IAW ENV.-WQ 704.13 ADOPTED OCTOBER 15, 2014

2) BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE. (IAW ENV.-WQ 704.12 (d))

3) SEWER MANHOLE DIAMETER SHALL BE AS INDICATED ON THE PLANS.

4) PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478.

5) GRAVITY SEWER PIPE TESTING WILL BE IN ACCORDANCE WITH ENV.-WQ 704.06 AND MAN HOLE TESTING IAW ENV.-WQ 704.17 DATED OCTOBER 15, 2014.

6) INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. INVERT BRICKS SHALL BE LAID ON EDGE AND THE BASE SECTION SHALL BE FULL. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. CARE SHALL BE TAKEN TO ENSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. (IAW ENV.-WQ 704.13 (a) (9)), MORTAR SHALL CONFORM WITH REQUIREMENTS OF IAW ENV.-WQ 704.13 (c).

7) FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH (MINIMUM HEIGHT) LETTERS WITH THE WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH MANHOLE COVER. (IAW ENV.-WQ 704.13 (a) (4-6)) SEWER MAN HOLE COVERS ARE TO PAMREX.

8) SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.

9) HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE DOVER DPW, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON A DOUBLE ROW OF AN OVERLAPPING TYPE ELASTOMERIC OR MASTIC-LIKE GASKET. APPROVED ELASTOMERIC SEALANTS ARE: RAM-NEK, KENT SEAL NO. 2, EZ, OR EQUAL.

10) IN CROSS COUNTRY AREAS OUTSIDE OF THE PAVED ROADWAY SURFACE, THE MANHOLE FRAME ELEVATION SHALL BE A MINIMUM OF 6" ABOVE FINISHED GRADE. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE. SEE TYPICAL TRENCH DETAIL ON SHEET D-102.

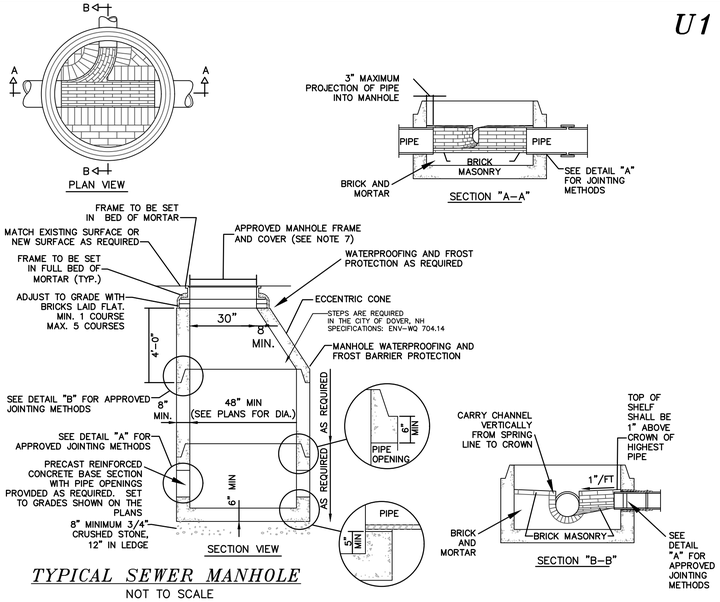
11.) ALL FRAMES AND GRATES ARE TO BE U.S.A. MADE. MANHOLE STEPS ARE REQUIRED IN THIS MUNICIPALITY AND MUST CONFORM TO THE REQUIREMENTS OF ENV-WQ 704.14.

12.) THE CONTRACTOR TO WORK WITH CITY OF DOVER REVIEW ENGINEER AND SEWER DEPARTMENT ON THE MEANS AND METHODS USED TO INSTALL ALL SEWER STRUCTURES.

13.) ANY WORK INVOLVING THE CUTTING INTO THE EXISTING A.C. PIPE SHALL MEET THE REQUIREMENTS OF ENV-A 1800.

14.) THE "CITY OF DOVER, NEW HAMPSHIRE, DEPARTMENT OF COMMUNITY SERVICES, CONSTRUCTION GUIDELINES, PERMITS, RULES, AND REGULATIONS" (DATED MARCH 13, 2018) ARE A PART OF THE CONSTRUCTION DETAILS AND TO BE FOLLOWED. SEE APPENDIX B, PAGE 14 FOR INTERNAL DROP DETAILS.

U1



TYPICAL SEWER MANHOLE
NOT TO SCALE

U2

Manhole Castings L-2

Pamrex Ductile Iron Frame & Cover

Designed to handle the rigors of modern traffic conditions, PAMREX, with a load bearing strength of 120,000 lbs. is far stronger than traditional castings meeting the AASHTO H20 loading requirement. The superior performance of PAMREX is due to the fact that the frame is designed with an elastomer gasket which ensures that the unit is silent and stable in use and provides infiltration resistance from surface water run-off. The design features a hinge which enables all covers to be our man operable using standard tools and eliminates the "lost cover" problem associated with traditional designs. Covers are available in 24", 28" and 32" clear opening and can be fitted with locks for enhanced security.





PAMREX In Open Position

Features:
- Ductile iron
- Available in 24", 28" and 32" opening
- Hinged cover.
- Optional locking features
- Independently tested and certified

NOTE: 36" Pamrex with gas arm is available. Contact your local EIP sales office for more information.

DESCRIPTION	PRODUCT NUMBER
24" PAMREX DI MH FAC - Plain	62113 P
24" PAMREX DI MH FAC - Sewer	62113 S
24" PAMREX DI MH FAC - Drain	62113 D
24" PAMREX DI CB Grate	62113 G
32" PAMREX DI MH FAC - Drain	62113 32 D
32" PAMREX DI MH FAC - Plain	62113 32 P
32" PAMREX DI MH FAC - Sewer	62113 32 S
24" SCS Lock without Key	62132 S24-02
28" SCS Lock Key Only	62132 S28-03
32" SCS Lock with Key	62132 S32-01
32" SCS Lock without Key	62132 S32-02

NOTE: 28" size also available. Call for information.

SCS Locking Device for Pamrex and Rexus



Model	Lock Only - Reference	Key Only - Reference	Lock And Key - Reference
Pamrex 24"/28" Rexus 24"	C6	C16	C7
Pamrex 32" Rexus 28"	C16	C16	C15

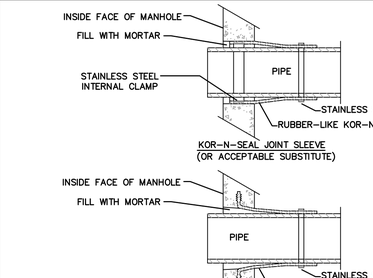
SPECIFICATIONS:
Manhole cover and frame shall be called PAMREX or approved equal. Cover and frame shall be manufactured by a firm regularly engaged in the manufacture of such approved. Product shall be fully tested in road conditions for a period of at least 2 years. Product design will require that covers are hinged and incorporate a 90-degree blocking system to prevent accidental closure. Cover shall be independently tested and certified. Cover and shaft come complete with an open hinge box and a hinge infiltration plug. Covers shall be one man operable using standard tools and shall be capable of withstanding a test load of 120,000 lbs. Frames shall be circular and shall incorporate a rubber gasket which shall prevent surface water inflow and absorbing shock from routine traffic. Product will be available in c. 24-inch clear opening. The frame depth shall not exceed 4 inches, and the flange shall incorporate bedding slots and bolt holes.

L-2 Phone: 800-EJP-24HR (357-2447) • Fax: 207-582-5637

SEWER MANHOLE FRAME AND GRATE WILL BE PAMREX, OR APPROVED EQUAL, 24 INCH OPENING, DUCTILE IRON, H20 LOADING.

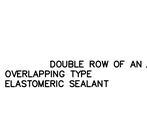
SEWER MANHOLE COVER DETAIL
NOT TO SCALE

U3



ALL GASKETS, SEALANTS, MORTAR, ETC... SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

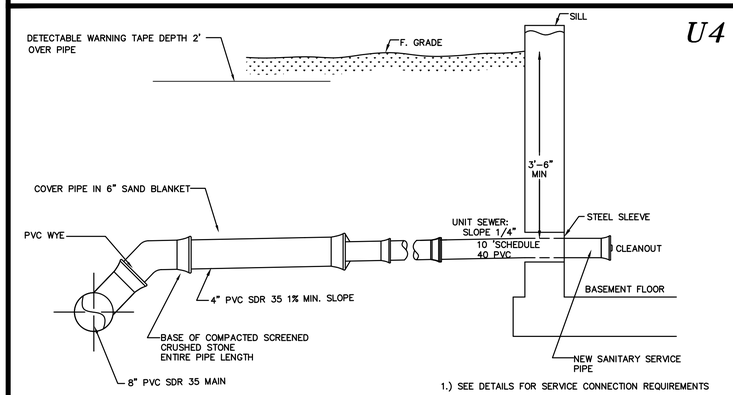
DETAIL "A" - PIPE TO MANHOLE JOINTS
NOT TO SCALE



NOTE:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

DETAIL "B" HORIZONTAL JOINTS
NOT TO SCALE

U4



1.) SEE DETAILS FOR SERVICE CONNECTION REQUIREMENTS

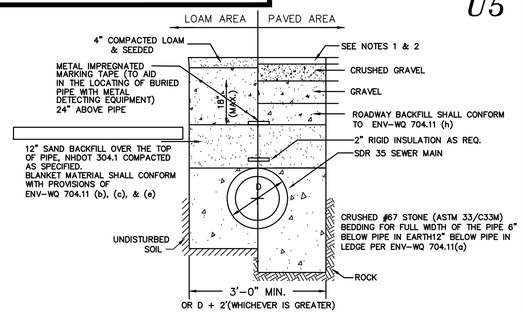
2.) SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.

3.) CLEANOUTS SHALL BE INSTALLED INSIDE EACH BUILDING EXIT POINT

DETAIL OF UNIT SEWER SERVICE
NOT TO SCALE

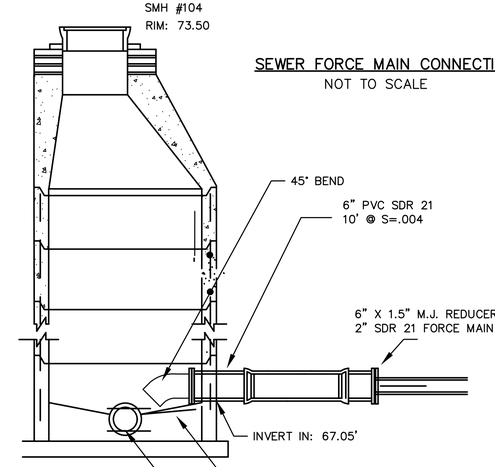
TYPICAL SEWER PIPE TRENCH
NOT TO SCALE

U5



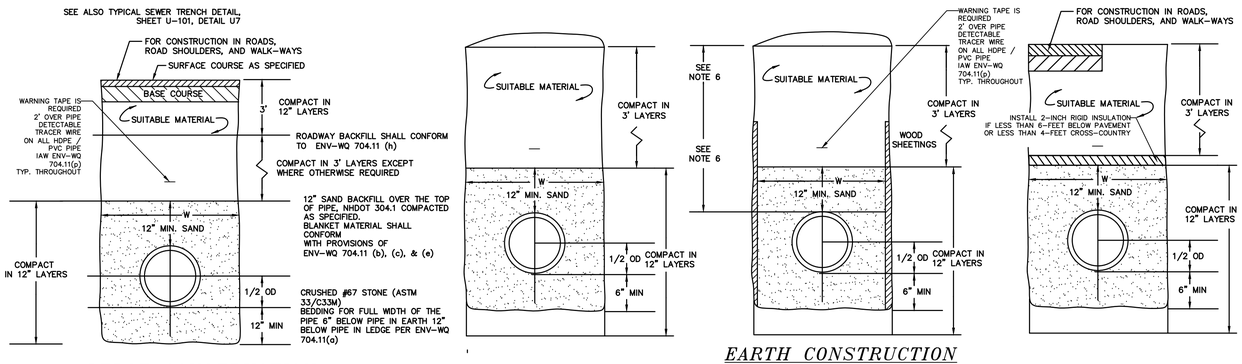
NOTE:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPEC'S.
3. ANTI-SEEPP COLLARS OR CLAY CHECK DAMS ON STEEP RUNS IN WET CONDITIONS.
4. ALL SEWER INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF NHDES & MUNICIPAL DPW SEWER DIVISION STANDARDS. ALL PVC SEWER PIPE IS TO CONFORM WITH ENV-WQ 704.05 (c)-(e) AND CONFORM WITH ASTM D3034. PVC JOINT SEALS SHALL CONFORM WITH ASTM D3121. SDR-21 PVC FORCE MAIN PIPE MATERIAL IS REQUIRED IN LOCATIONS AS SHOWN. SDR-21 PVC FORCEMAIN PIPE WILL CONFORM TO ENV-WQ 704.08.

U6

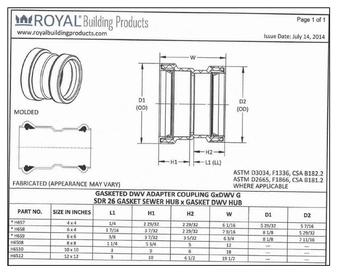


SEWER FORCE MAIN CONNECTION
NOT TO SCALE

U7



U8



COUPLING DETAIL
NOT TO SCALE

U-101

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

UTILITY DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

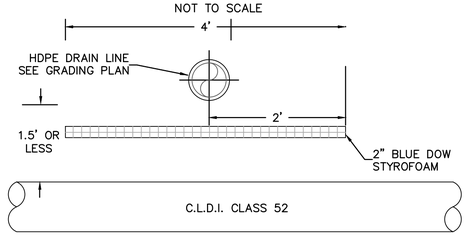
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : AS SHOWN
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7048
LICENSED PROFESSIONAL ENGINEER

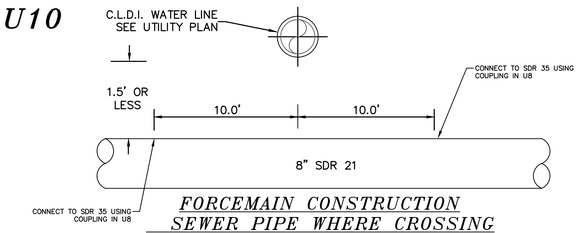
U9 INSULATE WATER PIPE WHERE CROSSING UNDER DRAIN LINE

NOT TO SCALE



NOTE: THIS ONLY APPLIES IF 1.5' OF VERTICAL SEPARATION CAN NOT BE OBTAINED THIS ALSO APPLIES FOR THE REVERSE SITUATION

U10



FORCEMAIN CONSTRUCTION SEWER PIPE WHERE CROSSING UNDER WATER LINE

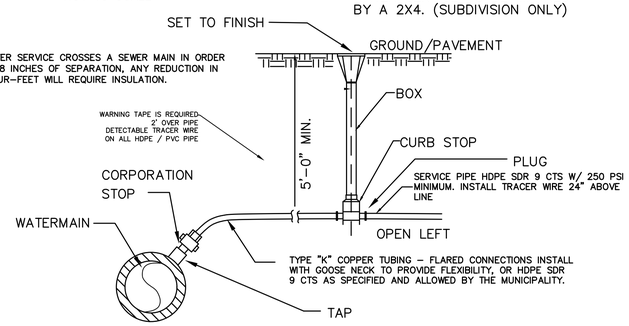
NOT TO SCALE

U11 TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE

THE END OF THE INSTALLED WATER SERVICE TO BE MARKED BY A 2X4. (SUBDIVISION ONLY)

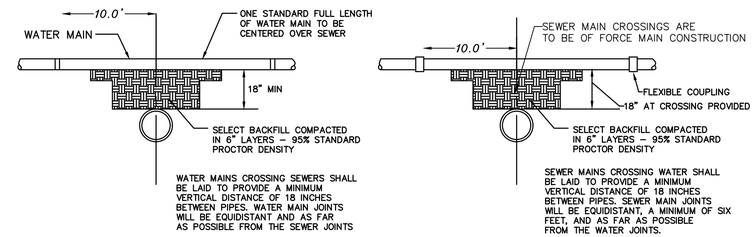
WHERE A WATER SERVICE CROSSES A SEWER MAIN IN ORDER TO PROVIDE 18 INCHES OF SEPARATION, ANY REDUCTION IN DEPTH TO FOUR-FEET WILL REQUIRE INSULATION.



U12

SEPERATION NOTES:

1. WATER MAIN SHALL BE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WATER WORKS" SO-CALLED TEN STATE STANDARDS AND NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL DESIGN STANDARDS, ENV-WQ 700 ADOPTED OCTOBER 14, 2014.
2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
3. VERTICAL SEPARATION REQUIREMENTS APPLY TO WATER AND SEWER MAINS AND SERVICE LINES. WHERE SEWER CROSSES WATER MAIN AND WATER SERVICE CROSSES SEWER MAIN, 18 INCH VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER OVER SEWER.



WATER MAIN ABOVE SEWER | WATER MAIN BELOW SEWER

TYPICAL WATER/SEWER SEPERATION DETAILS

NOT TO SCALE

U16 TYPICAL THRUST BLOCKS

NOT TO SCALE

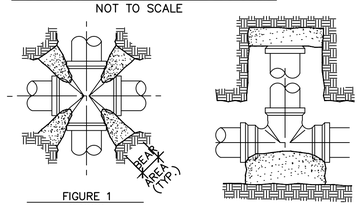


FIGURE 1
CROSS
(ONLY REQ'D IF ANY LEG IS LESS THAN 60 FT. LONG)

FIGURE 2
TEE, PLUG OR CAP

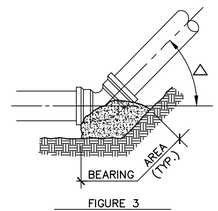


FIGURE 3
HORIZONTAL OR
UPWARD VERTICAL BEND

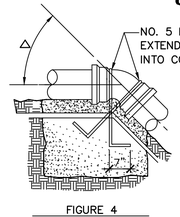


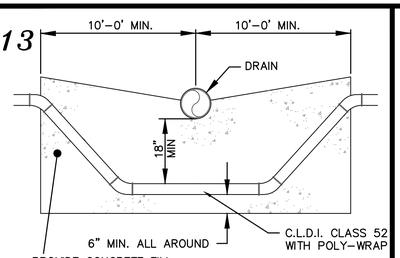
FIGURE 4
DOWNWARD VERTICAL BEND

PIPE I.D.	BEARING AREA, SQUARE FEET						VOLUME OF CONC. CU.YD		
	FIGURE 1	FIGURE 2	FIGURE 3, △				FIGURE 4, △		
			90°	45°	22-1/2°	11-1/4°	45°	22-1/2°	11-1/4°
4"	2	2	2	1	1	1	1.0	.5	.5
6"	2	3	3	2	1	1	1.5	1.0	.5
8"	2	5	6	3	2	1	2.0	1.0	.5
10"	3	7	10	5	3	1	4.0	2.0	1.0
12"	3	10	14	8	4	2			
14"	4	14	20	10	5	3			
16"	4	20	24	12	7	4			
18"	5	24	30	16	10	5			
20"	5	28	40	20	12	6			

GENERAL NOTES:

1. ALL FITTINGS & EXPOSED REBAR TO BE RAPPED W/ TWO LAYERS OF 6 MIL POLYETHYLENE WHERE COVERED WITH CONCRETE.
2. ALL CONCRETE SHALL BE CLASS C 3000 P.S.I. MINIMUM 28 DAYS COMPRESSIVE STRENGTH.
3. PLACE CONCRETE AGAINST UNDISTURBED EARTH.
4. TABLE DENOTES MINIMUM BEARING AREA OR VOLUME OF THRUST BLOCK. SPECIAL DESIGN FOR EACH INSTALLATION IS REQUIRED IF ALLOWABLE SOIL BEARING CAPACITY IS LESS THAN 3000 P.S.F.
5. VERTICAL SURFACES NOT BEARING AGAINST UNDISTURBED EARTH SHALL BE FORMED.
6. KEEP CONCRETE AWAY FROM FLANGE BOLTS AND FITTINGS.
7. MECHANICAL JOINTS AT ALL FITTINGS IE: BENDS, TEES, CROSSES, AND VALVES SHALL BE THRUST RESTRAINT. (MEGA-LUG OR APPROVED EQUAL.

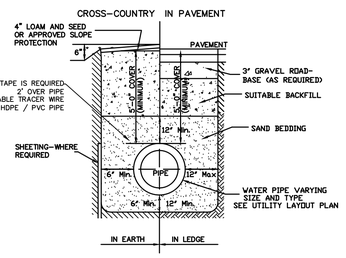
U13



WATER MAIN INSTALLATION - BELOW DRAIN & SEWER

NOT TO SCALE

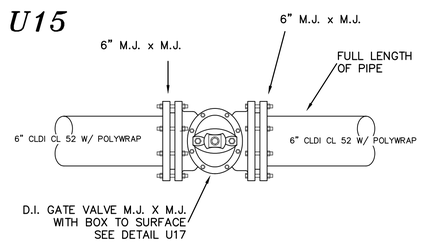
U14



TYPICAL TRENCH DETAIL FOR WATER SYSTEM

NOT TO SCALE

U15

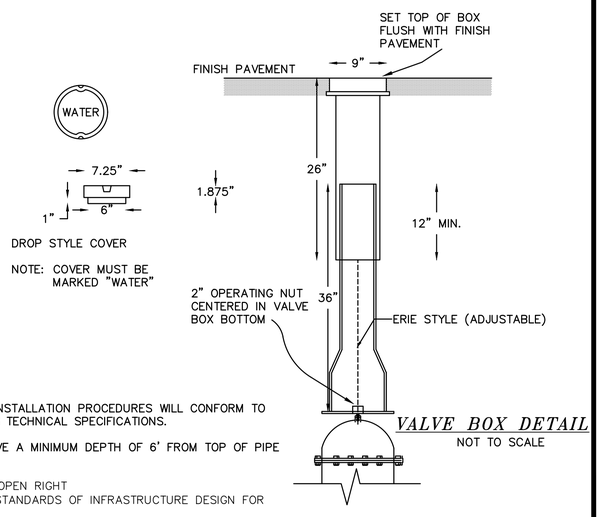


SHUTOFF VALVE DETAIL

NOT TO SCALE

1.) ALL VALVES ARE TO OPEN RIGHT
2.) SEE CITY OF DOVER STANDARDS OF INFRASTRUCTURE DESIGN FOR POTABLE WATER DETAILS

U17



NOTES:

1.) ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO LOCAL WATER WORKS TECHNICAL SPECIFICATIONS.

2.) ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 6' FROM TOP OF PIPE TO FINISH GRADE.

3.) ALL VALVES ARE TO OPEN RIGHT

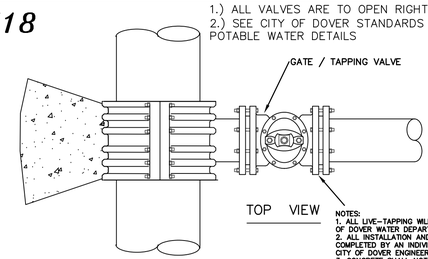
4.) SEE CITY OF DOVER STANDARDS OF INFRASTRUCTURE DESIGN FOR POTABLE WATER DETAILS

VALVE BOX DETAIL

NOT TO SCALE

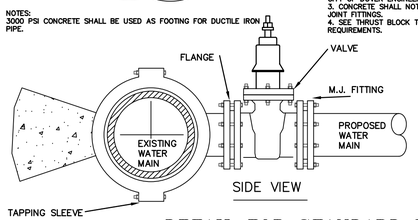
U18

1.) ALL VALVES ARE TO OPEN RIGHT
2.) SEE CITY OF DOVER STANDARDS OF INFRASTRUCTURE DESIGN FOR POTABLE WATER DETAILS



NOTES:
1. ALL LIVE-TAPPING WILL BE COMPLETED IN ACCORDANCE WITH CITY OF DOVER WATER DEPARTMENT REGULATIONS.
2. ALL INSTALLATION AND TAPPING OF EXISTING WATER MAINS WILL BE COMPLETED BY AN INDIVIDUAL OR FIRM THAT IS APPROVED BY THE CITY OF DOVER ENGINEERING
3. CONCRETE SHALL NOT CONTACT BOLTS OR END OF MECHANICAL JOINT FITTINGS.
4. SEE THRUST BLOCK TABLES FOR AREA OF CONCRETE REQUIREMENTS.

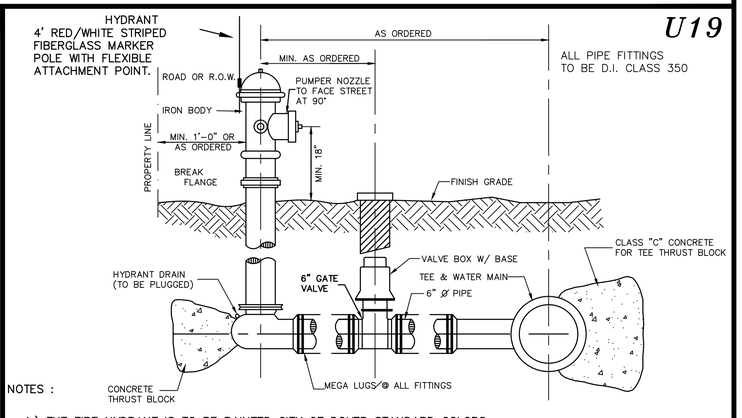
NOTES:
3000 PSI CONCRETE SHALL BE USED AS FOOTING FOR DUCTILE IRON PIPE.



DETAIL FOR STANDARD TAPPING SLEEVE AND VALVE ASSEMBLY

NOT TO SCALE

U19



NOTES :

1.) THE FIRE HYDRANT IS TO BE PAINTED CITY OF DOVER STANDARD COLORS AND BE EQUIPPED WITH A HYDRANT LOCATOR.

2.) THE FIRE HYDRANT SHALL BE THE "EDDY" TYPE.

3.) GATE VALVES OPEN LEFT.

HYDRANT INSTALLATION DETAIL

NOT TO SCALE

U-102

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
#2	1-30-20	REVISED PER TRC COMMENT
#1	12-16-19	REVISED PER STAFF COMMENT

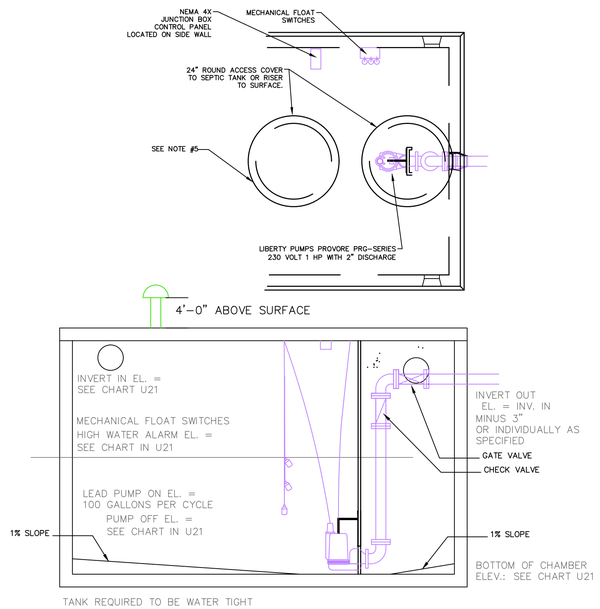
UTILITY DETAILS
FOR
DRVP DEVELOPERS, LLC
40A CATARACT AVENUE
DOVER, N.H.
TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : AS SHOWN
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE
KENNETH A. BERRY
No. 7143
LICENSED PROFESSIONAL ENGINEER

U20



NOTES:

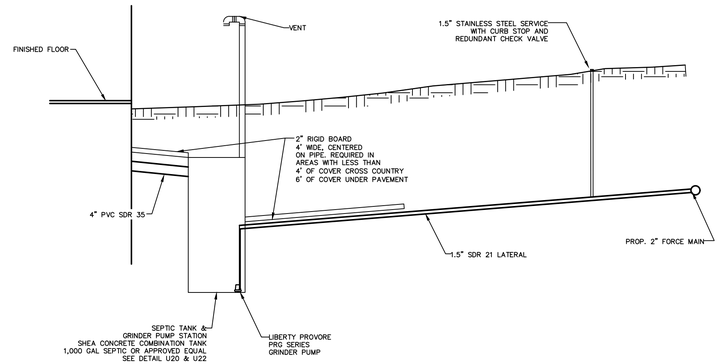
1. THE BOTTOM OF THE PUMP CHAMBER WILL BE SLOPED AT A 1% SLOPE IN ALL DIRECTIONS CREATING A SUMP AROUND THE BASE OF THE PUMP. THE LIFT STATION WILL BE EQUIPPED WITH A GR20 GUIDE RAIL BASE AND RAIL SYSTEM AND LIFT CHAIN. THE PUMP DISCHARGE WILL BE EQUIPPED WITH A CHECK VALVE AND A GATE VALVE BETWEEN THE PUMP AND THE TANK WALL, IN THAT ORDER. THE DISCHARGE WILL LEAVE THE TANK AT A POINT FOUR-FEET BELOW GRADE, INSULATED OR SIX-FEET IF UNDER PAVEMENT, AND THE FORCE MAIN WILL BE DESIGNED UP-HILL TO THE IN-LINE RELIEF VALVE.
2. WET WELL/SEPTIC TANK SHALL BE LEAK TESTED USING METHOD ACI 350.1 METHOD HST-NML.
3. SUBMERSIBLE PUMPS AND ALL OTHER ELECTRICAL SYSTEMS/COMPONENTS IN THE WET WELL/SEPTIC TANK SHALL MEET NEC REQUIREMENTS FOR CLASS I, DIVISION I ENVIRONMENT.
4. POWER SOURCE FOR ALARM SYSTEM SHALL BE AN INDEPENDENT BATTERY WITH CONTINUOUS CHARGE, OR MAIN LINE POWER WITH BACK UP BATTERY SYSTEM.
5. 36" CONCRETE RISER TO SURFACE. NORTH AMERICAN MADE, RIM & COVER.

PUMP CHAMBER & PUMP DETAILS
NOT TO SCALE

U21

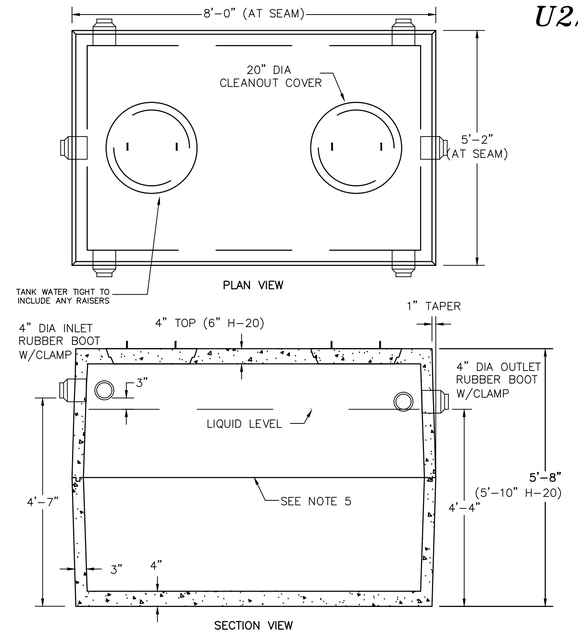
UNIT #	TOTAL DYNAMIC HEAD	PUMP RATE	1.5" SERVICE (SDR 21)	PUMP CHAMBER BOTTOM	PUMP CHAMBER INVERT IN	PUMP OFF ELEVATION	PUMP ON ELEVATION	ALARM ON ELEVATION	FLOW (GPD)
3	9.5'	43.5 GPM	65.0'	66.29'	70.29'	67.62'	68.00'	68.10'	450
4	14.5'	40.0 GPM	145.0'	65.29'	69.29'	66.62'	67.00'	67.10'	450
5	16.0'	40.0 GPM	170.0'	66.30'	70.30'	67.63'	68.01'	68.11'	450
6	15.5'	40.0 GPM	161.3'	65.80'	69.80'	67.13'	67.51'	67.61'	450
7	14.0'	41.0 GPM	147.1'	65.80'	69.80'	67.13'	67.51'	67.61'	450
8	14.0'	41.0 GPM	126.1'	65.85'	69.85'	67.18'	67.56'	67.66'	450

DESIGNERS NOTE: SEE THE FORCE MAIN PROFILE ON THE UTILITIES PLAN. ALL UNITS WILL UTILIZE A LIBERTY PUMPS PRG SERIES 1HP SUBMERSIBLE GRINDER PUMP, OR APPROVED EQUAL. ALL DWELLING UNITS WILL HAVE A LIBERTY PUMPS SX-SERIES SIMPLEX CONTROL PANEL WITH ALARM BELL AND FLASHER. IT IS HIGHLY RECOMMENDED THAT A GENERATOR HOOKUP BE AVAILABLE FOR EMERGENCY POWER SUPPLY.



TYPICAL RESIDENTIAL FORCE MAIN CONNECTION
NOT TO SCALE

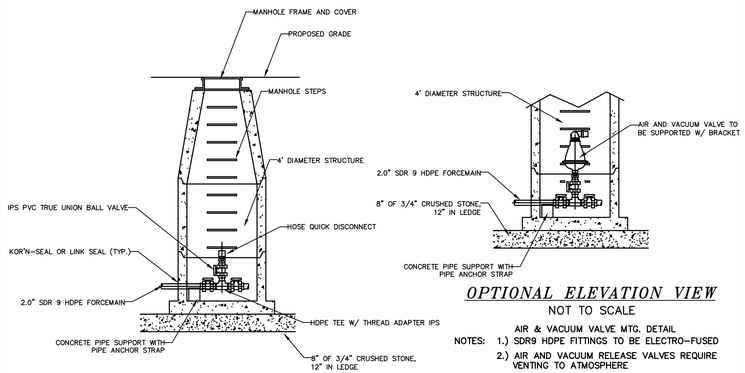
U22



NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. CONSTRUCTION OF SEPTIC TANK CONFORMS WITH DEP TITLE 5 REGS, 310 CMR, SECTION 15.226.
3. ALL REINFORCEMENT PER ASTM C1227.
4. TEES AND GAS BAFFLE SOLD SEPARATELY.
5. TONGUE & GROOVE JOINT SEALED WITH BUTYL RESIN.
6. IF COVER EXCEEDS 4 FEET, HEAVY DUTY TANK REQUIRED. ALSO AVAILABLE IN AASHTO HS-20 LOADING.

U23



TERMINAL FLUSHING MANHOLE DETAIL
NOT TO SCALE

OPTIONAL ELEVATION VIEW
NOT TO SCALE

AIR & VACUUM VALVE MTG. DETAIL

NOTES: 1.) SDR9 HDPE FITTINGS TO BE ELECTRO-FUSED
2.) AIR AND VACUUM RELEASE VALVES REQUIRE VENTING TO ATMOSPHERE

DOVER PLANNING FILE #19-80

REVISION	DATE	DESCRIPTION
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UTILITY DETAILS
FOR
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TAX MAP 14, LOT 10-C

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : AS SHOWN
DATE : SEPTEMBER 30, 2019
FILE NO. : DB 2019-077

STATE OF NEW HAMPSHIRE — KENNETH A BERRY No. 10143 LICENSED PROFESSIONAL ENGINEER

U-103

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P19-81

Application Type:	Conditional Use Permit
Applicant(s):	DRVP Developers LLC
Owner(s):	DVRP Developers LLC
Location:	40A Cataract Ave (Assessor's Map 14, Lot 10-G)
Meeting Date:	February 25, 2020

INTENT: To obtain a Conditional Use Permit to allow creating 387 s.f. of wetlands impact and 5,979 s.f. of wetland buffer impact.

LOTS/UNITS PROPOSED: 12 lots, 10 units

AGENDA ITEM: # 4-F

ACREAGE: 5.25 acres

ZONING DISTRICT: R-12

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential and Bellamy River

ZBA ACTION: None

ATTACHMENTS:

- Conditional Use Permit Application Materials including plans and Conservation Commission minutes from 02/10/2020

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by verified or first class mail to all abutters for this meeting

PERMITS REQUIRED:

- Conditional Use Permit
- NHDES Wetlands Permit

WAIVERS REQUESTED: N/A for this case

Summary of Request and Background
The applicant is requesting a Conditional Use Permit to impact 387 s.f. of wetlands impact and 5,979 s.f. of wetland buffer impact. The impacts are caused by the addition of the proposed private road and necessary work for the proposed TDR subdivision (P19-80).

The Conservation Commission endorsed this application at their February 10, 2020 meeting.

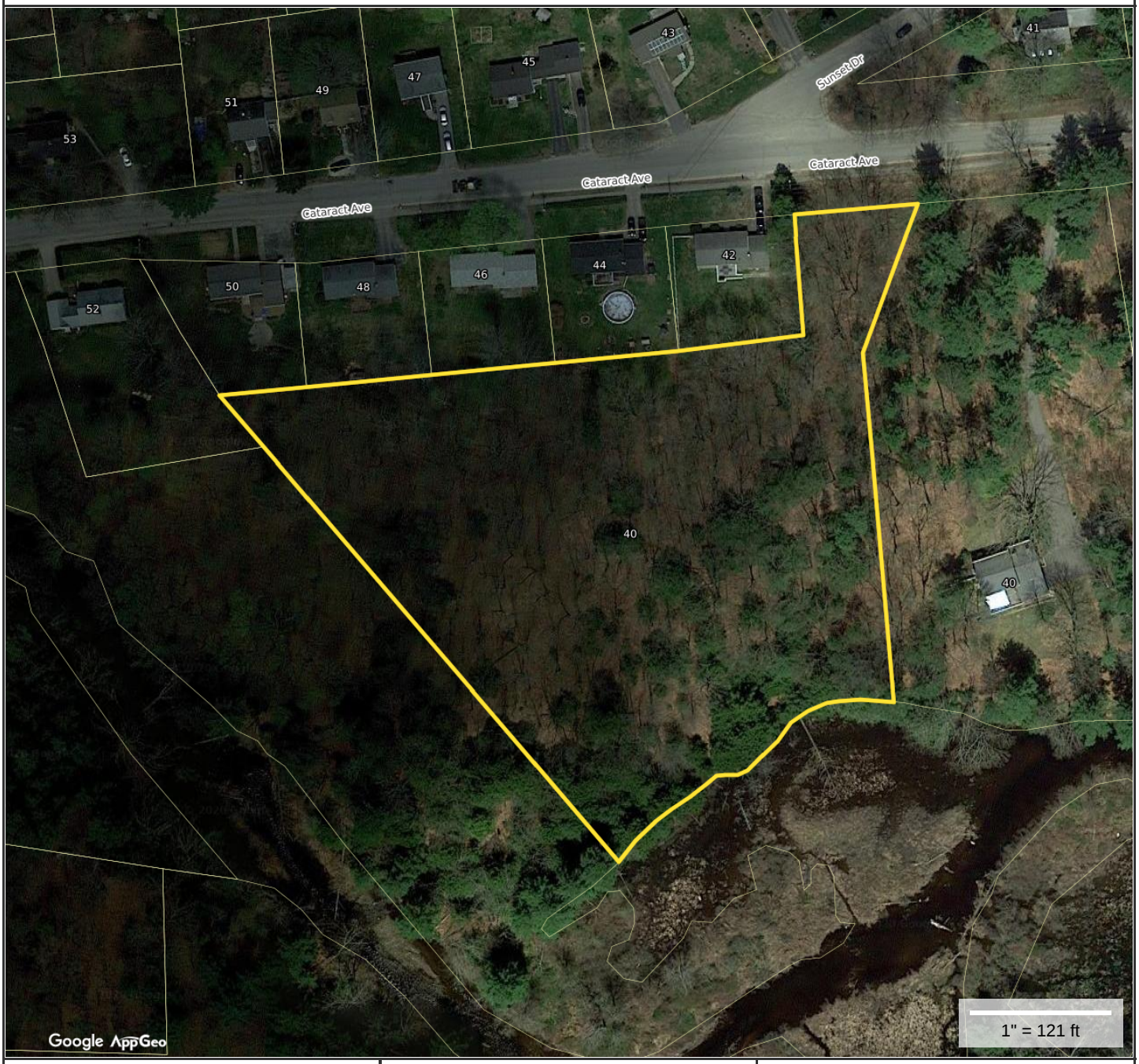
Consistency with Land Use Regulations
The Wetlands Protection District ordinance provides for Conditional Use Permits to allow impacts to wetlands and wetland buffers if standards related to demonstration of need, avoidance, minimization, and mitigation are met. This proposal is consistent with those standards.

STAFF RECOMMENDATION:
The Planning Department recommends the Planning Board accept the application, open the public hearing, and vote to approve the Conditional Use Permit with the following condition:

Condition to Be Met Prior to the Issuance of the Conditional Use Permit:

1. The applicant shall provide the Planning Department with a copy of the NH Department of Environmental Services Wetlands Permit.

40A Cataract Avenue



Property Information

Property ID	14010-G00000
Location	40 A CATARACT AV
Owner	DRVP DEVELOPERS LLC
Land Use	131

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/18/2019
Data updated Daily

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: DRVP Developers LLC Telephone # 603-742-2121

Address of Applicant: 242 Central Ave, Dover, NH 03820

E-Mail Address: dave@centralfallsrealty.com

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

Address of Property Owner:

PROPERTY INFORMATION

Assessor's Map # 14 Lot(s) # 10-G

Address of Property: Cataract Ave.

Zoning District(s) R-12 Overlay District(s) Wetlands

Existing Use of Property: Vacant Land

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:

For work within the 50' wetland buffer

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: Shoreland Protection Permit & NHDES minimum expedited wetland permit

Name of Professional That Prepared Plans: Kenneth A. Berry, PE, LLS
Berry Surveying & Engineering

Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 14243 E-mail address: K.Berry@BerrySurveying.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: 9/30/2019

Signature of Applicant (if different from owner): _____ Date: 9/30/2019

Signature of Agent: _____ Date: 9/30/2019

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: 9/30/2019

BERRY SURVEYING & ENGINEERING
335 Second Crown Point Road
Barrington, NH 03825
Phone: (603) 332-2863
Fax: (603) 335-4623
www.BerrySurveying.Com

January 30, 2020

City of Dover Planning Board
288 Central Ave
Dover, NH 03820

RE: Proposed TDR Development LLC
DRVP Developers LLC
Cataract Avenue
Conditional Use Permit

Mr. Bird and the Dover Conservation Commission

Berry Surveying & Engineering (BS&E,) on behalf of DRVP Developers, LLC respectfully requests the City of Dover Conservation Commission to accept the following Conditional Use Permit:

- Disturbance within the 50' wetland buffer.

1. Identification of Conditional Use Permits

Regulations in the zoning ordinance do not allow for earth disturbance within the 50' wetland buffer. However, Section 170-27.C states that a conditional use permit may be granted by the planning board, given the following standards, as shown below, are met. Below we show the project's compliance with the standards required to grant a Conditional Use Permit, and we provide justification for its approval.

2. Compliance with the following standards

a) The APPLICANT shall demonstrate that the proposed use is essential to the productive use of land not in the district; is located and constructed to minimize any detrimental impact of such use upon the surface waters or other environmentally sensitive areas, where it is physically impossible to locate DOVER CODE P 170-101 such use on land not in the district; and economic advantage alone shall not be deemed a sufficient reason for such proposed use.

- **There is an existing wetland finger that cuts into the parcel close to Cataract Avenue. Because of this, all the frontage along Cataract is within the wetland buffer. The proposed disturbance is necessary to gain access to the parcel's upland area towards the center of the lot.**

b) A soil erosion and sedimentation control plan is submitted and followed to verify the planned avoidance of sediment pollutant runoff to bodies of water.

- **A full erosion and sediment control plan will be submitted as part of this design. Silt soxx or mulch berm will be used to contain the sediment within the project limits. Rip-Rap and natural fiber matting will be used for slope stabilization. All necessary precautions will be taken to ensure that no sediment goes into the remaining wetland or buffer areas.**

c) Necessary state and federal approvals have been applied for. Said permits shall be received prior to the issuance of the Conditional Use Permit by the Planning Department.

- **As part of this design, the applicant will be filing for a NHDES shoreland and wetland permits. All permits will be presented to the City when acquired.**

d) That architecture and landscape design shall grow from local climate, topography, history, and building practice.

- **An in depth landscaping design will also be done to ensure that new vegetation is promoted to grow throughout the construction site. In addition, the disturbed buffer and wetland areas will receive a special conservation seed mix that will allow for re-vegetation of those areas.**

3. Justification for approval of Conditional Use Permits

The proposed development will have 312 Sq.Ft. of wetland disturbance and 5,869 Sq.Ft. of buffer disturbance. All of this disturbance will be for the construction of the proposed road and relating grading through the buffer. The remaining area of road and proposed units will be pulled towards the center of the lot and away from the Bellamy River. There will be no other buffer disturbance on this project and all the proposed work will be conducted outside of the NHDES 150' shoreland buffer. Given the sensitivity of the site and its location, the applicant wanted to contain all work within a concentrated area and away from the adjacent river.

As part of this design, a full drainage analysis will also be conducted. The proposed road will be crowned, so that all the generated runoff will flow into proposed catch basins and drain lines. These drain lines will divert the generated runoff towards two rain gardens. The first rain garden will be located behind units 8-10 and the second will be constructed in the center of the cul-de-sac. Both rain gardens will have a layer of

bio-media mix and stone to provide treatment. Once the runoff filters through the rain gardens it will be directed towards a level spreader at the rear of the project. The level spreader will take the generated runoff and disperse it over a larger area, instead of discharging it at a single point. This will allow for a more controlled release of the runoff and prevent erosion downhill of the project.

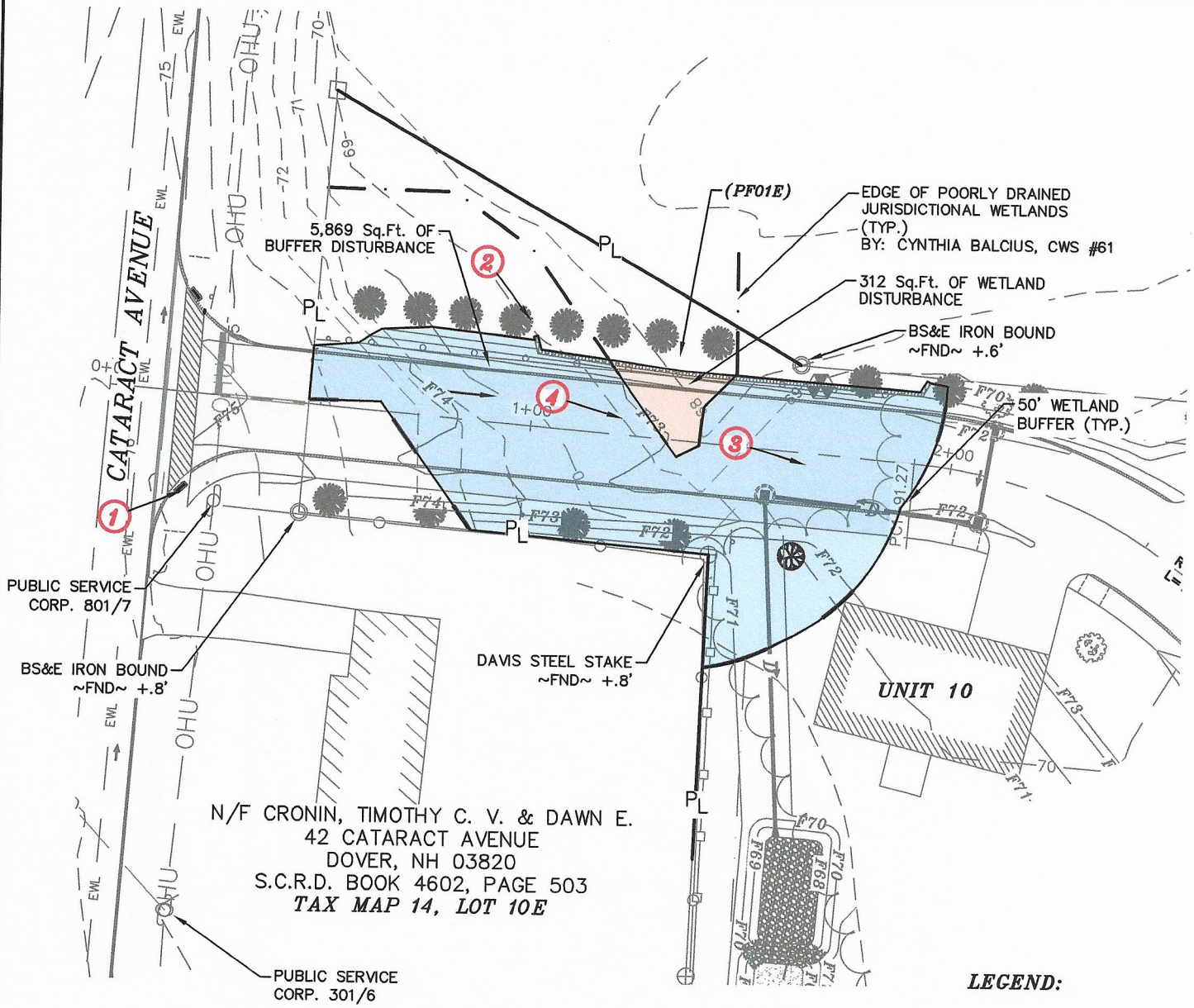
BERRY SURVEYING & ENGINEERING

James F. Hayden
Engineering Technician

Christopher R. Berry
Principal, President

BERRY SURVEYING & ENGINEERING

BERRY SURVEYING & ENGINEERING
335 Second Crown Pt. Rd., Barrington, NH 03825
(603) 332-2863 / (603) 335-4623 FAX
www.BerrySurveying.Com



LEGEND:

PHOTO POINT

WETLAND LINE
WETLAND BUFFER

NOTES:

1.) OWNER: DRVP DEVELOPERS LLC
242 CENTRAL AVENUE
DOVER, N.H. 03820

2.) TAX MAP 14, LOT 10-G

3.) LOT AREA: 228,717 Sq.

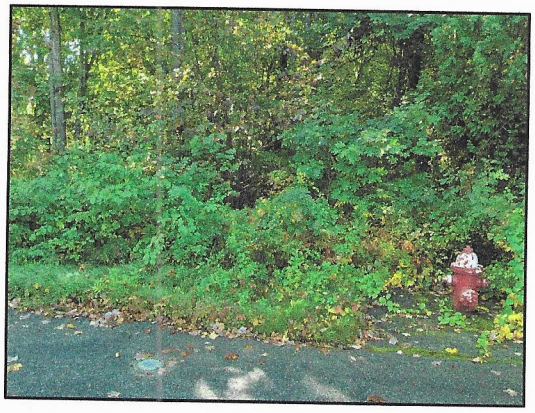
4.) S.C.R.D. BOOK 4664, PAGE 948

WETLAND DISTURBANCE
DRVP DEVELOPERS LLC
CATARACT AVE.
DOVER, N.H.
TAX MAP 14, LOT 10-G

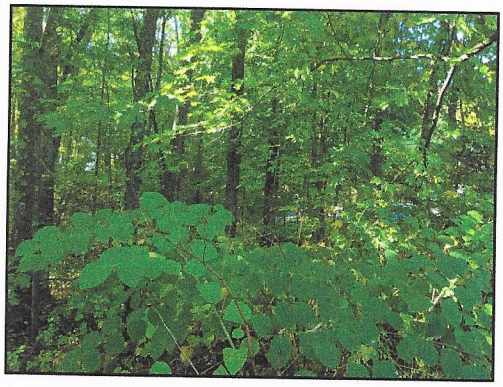
BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON , N.H. 332-2863

SCALE :	1 IN. EQUALS 40 FT.
DATE :	JANUARY 30, 2020
FILE NO. :	DB 2019-077

#1



#2



#3



#4



PICTURES
DRVP DEVELOPERS LLC
CATARACT AVE.
DOVER, N.H.
TAX MAP 14, LOT 10-G

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON , N.H. 332-2863

SCALE :	NONE
DATE :	JANUARY 30, 2020
FILE NO. :	DB 2019-077

P19-80 & P19-81 **Cataract Avenue**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
14005-M00000	43 CATARACT AV	CHOLEWINSKI DENNIS &	CODY GLORIA	43 CATARACT AV	DOVER	NH	03820
14006-000000	53 55 CATARACT AV	MORGAN ALLEN & EILEEN TRUSTEES	MORGAN ALLEN AND EILEEN IRREVOCABLE TRUS	53 CATARACT AV	DOVER	NH	03820-4335
14007-000000	51 CATARACT AV	STANSFIELD MARK		51 CATARACT AV	DOVER	NH	03820
14008-000000	49 CATARACT AV	KAY ALEXANDER &	SCOTT-KAY JACLYN R	49 CATARACT AVENUE	DOVER	NH	03820
14009-000000	47 CATARACT AV	KELLEY SAMUEL L &	MOYNIHAN ANNAH K	47 CATARACT AVE	DOVER	NH	03820
14010-000000	41 CATARACT AV	PUTH ROBERT C &	PUTH SALLY J	41 CATARACT AV	DOVER	NH	03820
14010-A00000	50 CATARACT AV	LAROCHE STEVEN		50 CATARACT AV	DOVER	NH	03820
14010-B00000	48 CATARACT AV	ROY CORMIER JACQUELINE REV TRUST	ROY CORMIER JACQUELINE TRUSTEE	48 CATARACT AVENUE	DOVER	NH	03820
14010-C00000	46 CATARACT AV	CARBONE COLLEEN S		46 CATARACT AV	DOVER	NH	03820
14010-D00000	44 CATARACT AV	LUDWICK WILLIAM J		44 CATARACT AV	DOVER	NH	03820
14010-E00000	42 CATARACT AV	CRONIN TIMOTHY C V &	CRONIN DAWN E	42 CATARACT AV	DOVER	NH	03820
14010-F00000	40 CATARACT AV	JACOBSMEYER CECILE R &	JACOBSMEYER WILLIAM J	40 CATARACT AV	DOVER	NH	03820
14011-001000	34 CATARACT AV	CASWELL CHRISTOPHER P &	CASWELL WENDY S	34 CATARACT AVE	DOVER	NH	03820
14018-000000	45 CATARACT AV	NORTON ROBERT E		45 CATARACT AVENUE	DOVER	NH	03820
14025-000000	39 SUNSET DR	MILLER MARK E &	MILLER CHRISTINE M	39 SUNSET DR	DOVER	NH	03820
14026-000000	37 SUNSET DR	WATKINS ROBERT S	WATKINS NANCY A	37 SUNSET DR	DOVER	NH	03820
H0011-001000	16 DALEY DR	CITY OF DOVER	SCHOOL DEPARTMENT	288 CENTRAL AVE	DOVER	NH	03820
H0012-000000	25 ALUMNI DR	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
H0014-000000	54 CATARACT AV	MCCRUM J & THURBER D & PROULX ET AL TC &	PROULX MADELINE LIFE ESTATE	54 CATARACT AVENUE	DOVER	NH	03820
H0014-B00000	52 CATARACT AV	GAGNON MARK A		52 CATARACT AV	DOVER	NH	03820
		DRVP DEVELOPERS LLC		242 CENTRAL AVENUE	DOVER	NH	03820
		BERRY SURVEYING & ENGINEERING	CHRISTOPHER BERRY	335 SECOND CROWN POINT ROAD	BARRINGTON	NH	03825

DOVER CONSERVATION COMMISSION – MINUTES

CITY OF DOVER

Meeting Type:	Regular Meeting
Meeting Location:	**First Floor Conference Room** - 288 Central Avenue, Dover, NH
Meeting Date:	Monday, February 10, 2020
Meeting Time:	5:30 pm

MEMBERS PRESENT: Bill Hunt (Chair), Steve Fellows (Vice Chair), Robert Atwood (Secretary), Jason Aube, Richard Erickson (5:35), Amy Kramer-Perry, Zach Schmidt (Alternate)

Absent (Excused): Piper Bartlett-Browne (Alternate)

Absent (Un-excused): Abby Lyon

STAFF PRESENT: Steve Bird (City Planner)

OTHERS PRESENT: Lindsey Williams (City Council Liaison), Chris Berry, Steve Riker, Shawn Moriarty

1. **The meeting was convened at 5:32 PM and a roll call was done.**
2. **APPROVAL OF THE PRIOR MEETING MINUTES** – January 13, 2020

Kramer-Perry moved to approve the January 13, 2020 minutes, Fellows seconded. Vote: 5 in favor, Aube abstained

3. **OLD BUSINESS:** NONE
4. **NEW BUSINESS:**

A. City of Dover Conditional Use Permit and NHDES Expedited Wetland Permit for DRVP Developers, LLC, Assessor's Map 14, Lot 10-G, zoned R-12, located at 40A Cataract Avenue.

Chris Berry was present to explain the proposal for 10 single family units along a 700 foot long road and associated drainage, creating 312 sq. ft. of wetlands impact and 5,869 sq. ft. of 50 foot wetland buffer impact. We have had two TRC meetings. We completed a storm water analysis. Wetland and buffer impacts have been reduced. There are no impacts to the Conservation District, but we will need a Shoreland Permit and an AOT permit.

Fellows: Did TRC have any concerns about the location of the road being adjacent to Sunset Drive?

Berry: No concerns were noted. It is a fairly low volume road and we are generating minimal traffic.

Fellows: I appreciate you adding additional vegetation and the rain garden.

Bird: What is the status of the DES Wetlands Permit?

Berry: We have most of it ready to submit, but it is not final. It is an expedited permit but we may go with a standard permit because we won't be able to get your approval until March 9th. It would add 20 days to review period.

Fellows moved to endorse the Conditional Use Permit as presented, Schmidt seconded. Vote: 7 in favor

B. City of Dover Conditional Use Permit and NHDES Expedited Wetland Permit for Chad & Heather Holleman, Assessor's Map L, Lot 11, zoned R-20, located at 21 Nute Road.

Steve Riker of Ambit Engineering was present to explain the proposal for a new single family house and accessory dwelling unit to replace an existing house adjacent to the tidal Bellamy River, with 5,190 sq. ft. of permanent tidal buffer zone impact and 4,167 sq. ft. of temporary tidal buffer zone impact. The entire lot is within the 100 foot tidal buffer zone. All existing structures will be removed. We are proposing an Accessory Dwelling Unit (ADU) in a separate building above a garage. There is another garage in the main house. There is an existing dock on lot. The house has a deck, patio and pervious driveway. We have applied for a driveway permit and it was approved. We will tie into city water and sewer. Patio is now pervious. DES requested more information and I will be submitting a

DRAFT

CITY OF DOVER

CITY OF DOVER – ORDINANCE

Ordinance Number: **O – yyyy.mm.dd -**
Ordinance Title: Updating the Dover Zoning Ordinance
Chapter: 170

The City of Dover Ordains:

1. PURPOSE

The purpose of this ordinance is to amend Chapter 170 of the Code of the City of Dover, entitled Zoning, by updating the Code to reflect changes in the community and in land use regulations.

2. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to add a new "Gateway" (G) district to subsection A (3) "Mixed Use".

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to add a new subsection (f) and purpose statement to subsection B (3) to read as follows:

"(f) Gateway (G). The purpose of this district is to mark a transition point where you move from the less developed area (the highway, the rural landscape, etc.) to a more formal, densely developed urban core (multi-story buildings, civic buildings, etc.). In Dover the primary Gateways (eg Central Avenue north and south of the downtown core, Broadway, and Portland Avenue) are generally dominated by commercial activity, with buildings of a lower height than those located downtown. Some residual residential activity occurs occasionally as stand-alone buildings, but frequently residential activity is located above ground floor commercial uses. A modest distance between the building and the street exists, with a fair amount of landscaping."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Central Business District" (CBD) to "Gateway" (G) District an area of approximately 109 acres located along XXXX and XXX Drive, consisting of Map X lots X, X, X, and Map C lot C."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Restricted Industrial" (I-1) to "Gateway" (G) District an area of approximately 50 acres located along Locust Street and Rutland Street, consisting of Map 15 lots 35, 36, 37, 38, 39, 41, 42, 21, and 62 as well as the portion of Map 15 lots 40, 45 and 51 zoned I-1"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Restricted Industrial" (I-1) to "Gateway" (G) District an area of approximately 9.4 acres located along Oak Street, consisting of the portions of Map 24 lot 2-A and Map 26 lot 3-1 zoned I-1"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Thoroughfare Business" (B-3) to "Gateway" (G) District an area of approximately 21.9 acres located along Portland Avenue and Oak Street, consisting of Map 25 Lots 43, 43-A, 43-C, 43-D, 43-E, 43-F, 43-G, 43-H, 47, and 48 and the portion of Map 25 lots 43-B, 46 zoned B-3."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Office" (O) to "Gateway" (G) District an area of approximately 25 acres located along New Rochester Road, consisting of Map 39 lots 17, 18, 29, 26, 27, 28, 29, 36, 37, 38, 39, 49, 50, 51, 52, 63, 64, 69A, 69E, 69F, 69I, 69J, 69K, 99, 100, 101, and 106 and Map 40 lots 4, 5, 6, 13, 14, 15, 16, 35, 35-A, 36, 37 and 38 and the portions of Map 39 lots 34, 47, 53, 61, 66, 75, 102, 103, 104 and 105 and Map 40 lots 2, 7, 12, 38, 38B, 38F, 47 and 17 zoned O"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Neighborhood Business" (B-1) to "Gateway" (G) District an area of approximately 5.2 acres located along Dover Point Road and Old Dover Point Road, consisting of Map M lots 24, 24-A, 25, 26, 48, and 49."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Highway Business" (B-5) to "Gateway (G) District an area of approximately 30 acres located along Central Avenue, consisting of Map 15 lots 4, 19, 20 and 71 and Map 16 lots 1, 2, 3, 5, 6, 7, 8, 9, 10. 11. 13-A and 38 and Map 17 lots 76 and 76-E-1."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Low Density Residential" (R-20) to "Gateway" (G) District an area of approximately 7.4 acres located along Durham Road, consisting of Map H lot 11, and Map I lot 7"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Medium Density Residential" (R-12) to "Gateway" (G) District an area of approximately 4.2 acres located along Cataract Avenue and Rutland Street, consisting of Map 13 lots 23, 24, 25, 26, 27, and Map 15 lots 14, 15, 16, 17, 18, 58, 59, 60, 61, 63, 65, 66A, 15-1, 66."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Suburban Density Multi-Residential" (RM-SU) to "Gateway" (G) District an area of approximately 7.9 acres located along Cataract Avenue and Rutland Street, consisting of Map 14 lots 14, 16, 17, 17-A, and Map 15 lotS 12, 13, 13-A, 13-B."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Downtown Gateway" table and replace it with a "Gateway" table, in the same order as 170-7, to read as attached:

3. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to remove the "Restricted Industrial" (I-1) district from subsection A (2) "Nonresidential".

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to remove the "Restricted Industrial" (I-1) district from subsection B (2) (e) "Nonresidential", eliminating the purpose statements [1] and [2] and renumbering subsequent items to reflect the elimination.

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from Restricted Industrial (I-1) to Urban Density Multi-Residential District (RM-U) District an area of approximately 4.2 acres located along Maple Street, consisting of Map 30 lots 19, 19-A and 19-B, and the portion of Map 30 lots 4 and 18 zoned I-1"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Restricted Industrial" (I-1) table in its entirety.

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by eliminating Section 170-19 "Flexible Uses in the I-1 District" in its entirety and replacing it with a "reserved" notation.

4. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Medium Density Residential" (R-12) to "Hotel/Retail" (B-4) District an area of approximately 20 acres located along Indian Brook Drive, Alder Lane, Wilbroad Ave and Glenwood, consisting of Map D lots 18-3, 18-4, 18-5, 18-6, 18-9, 18-10 and the portion of Map D lots 18-7 and 18-8 from the Centerline of Indian Brook drive into the lot 200' and the portion of Map D lots 19 and

20, the portion of the lot between the Indian Brook Drive centerline and 400; from Glenwood."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Medium Density Residential" (R-12) to "Executive and Technology Park" (ETP) District an area of approximately 14 acres located along Sixth Street, consisting of Map E lots 20, 20-D, 73, 73-A, and the portion of Map E lot 19 up to 400' from the Sixth Street centerline and Map E lots 19 and 19B."

5. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to remove the "Neighborhood Business" (B-1) district from subsection A (2) "Nonresidential".

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to remove the "Neighborhood Business" (B-1) district from subsection B (2) (a) "Nonresidential", eliminating the purpose statements and renumbering subsequent items to reflect the elimination.

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Neighborhood Business" (B-1) to "Thoroughfare Business" (B-3) District an area of approximately .5 acres located along Weeks Lane, consisting of Map 39 lot 4 and Map 38 lot 38."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Medium Density Residential" (R-12) to "Thoroughfare Business" (B-3) District an area of approximately .4 acres located along Pinecrest Lane, consisting of Map 38 lots 38 Lots 41 and 42."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Neighborhood Business" (B-1) table in its entirety.

6. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Rural Residential" (R-40) to "Hotel/Retail" (B-4) District an area of approximately 39 acres located along Durham Road and Mast Road, consisting of Map H lots 4-2, 4-B, 4-G, 4-L, 5 and 5A and Map I lot 22A, and the portion of Map I lot 22 that is 225' off the centerline of Mast Road and 194' off Durham Road."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Low Density Residential" (R-20) to "Hotel/Retail" (B-4) District an area of approximately 3.4 acres located along Durham Road and Mast Road, consisting of Map I lots 20-E, 20-F, 20-G, 20-H, 21, and 20-J."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Low Density Residential" (R-20) to "Suburban Density Multi-Residential" (RM-SU) District an area of approximately 2.3 acres located along Surrey Run, consisting of Map I lot 20I"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Rural Residential" (R-40) to "Office and Assembly" (I-4) District an area of approximately 29 acres located off Durham Road and Spruce Lane, consisting of a portion of Map I lot 27."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Hotel/Retail" (B-4) to "Office and Assembly" (I-4) District an area of approximately 45 acres located along Durham Road, consisting of Map I lots 22D, 24, 122, 123, 129, 131 and 132."

7. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Low Density Residential" (R-12) to "Rural Restricted Industrial District" (I-2) District an area of approximately 101 acres located

along Littleworth Road and Old Littleworth Road, consisting of Map H lots 25, 26, 26-1, 26A, 27, 28A, 28, 28-1, 29-A, 29-A-1, 29-A-2, 29-A-3, 29-A-4, 29-A-5, 30, 31and 31-A, and Map 11 lots 1 and 2A and the portion of Map G lot 5 zoned R-20"

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Hotel/Retail" (B-4) to "Rural Restricted Industrial District" (I-2) District an area of approximately 54 acres located along Knox Marsh Road, consisting of Map H lots 32, 32A-1, 32A-2, 33, 33A, 33B, 33-B, 33-C, 33-E and 34."

8. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to rename the "Rural Restricted Industrial" (I-2) District to "Commercial Manufacturing" (CM) District in subsection A(2) "Nonresidential".

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to rename the "Rural Restricted Industrial" (I-2) District to "Commercial Manufacturing" (CM) District in subsection B(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Rural Restricted Industrial" (I-2) table and replace it with the "Commercial Manufacturing" (CM) District, in the same order as 170-7, to read as attached:

9. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to rename the "Thoroughfare

Business" (B-3) District to "Commercial" (C) District in subsection A(2) "Nonresidential".

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to rename the "Thoroughfare Business" (B-3) District to "Commercial" (C) District in subsection B(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Thoroughfare Business" (B-3) table and replace it with the "Commercial" (C) District, in the same order as 170-7, to read as attached:

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Highway Business" (B-5) to "Commercial" (C) District an area of approximately 30 acres located along •Indian Brook Drive, New Rochester Rd and Willand Pond Ave, consisting of Map 39 lots 9, 11, 11-B, 15, 16, 76, 79, 80, 81, 82, 83, 93, 94, 95, 96, 97 and 113-B."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Hotel/Retail" (B-4) to "Commercial" (C) District an area of approximately 108 acres located along Indian Brook Drive, Heather Lane and Sixth Street, consisting of Map D lots 16-A, 16-F, 16-G, 17, 17-B, 17-C , 17-D, 17-E, 17-F , 18, 18-10, and the portion of Map D lots 16 and 16-B that is within 400' of the centerline of Sixth Street."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Hotel/Retail" (B-4) to "Office and Assembly" (I-4) District an area of approximately 72.3 acres located along Sixth Street, consisting of Map D lots 5A and 15 and the portion of Map D lot 16 and 16-B that is further than 400' from the centerline of Sixth Street."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Hotel/Retail" (B-4) to "Commercial" (C) District an area of approximately 77 acres located along Knox Marsh Road, consisting of Map H lots 37, 37-A, 37-B, 37-C, 38, 38-A, 38-B, 39, 40-B, 40, 40-6, 40-C, 40-C-1, 40-D, 40-E, 40-F, 40-G, and the portion of Map H lot 35-D that is zoned B-4."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Hotel/Retail" (B-4) to "Commercial" (C) District an area of approximately 48 acres located along Durham Road and Mast Road, consisting of Map H lots 1, 1-B, 2, 2B, 3, 4N, 4-1 and 4-3."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to eliminate the "Hotel/Retail" (B-4) and "Highway Business" (B-5) District in subsection A(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to eliminate the "Hotel/Retail" (B-4) and "Highway Business" (B-5) District in subsection B(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Hotel/Retail" (B-4) table and "Highway Business" (B-5) table.

10. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to rename the "Office and Assembly" (I-4) District to "Innovative Technology" (IT) District in subsection A(2) "Nonresidential".

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to rename the "Office and Assembly" (I-4) District to "Innovative Technology" (IT) District in subsection B(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Office and Assembly" (I-4) table and replace it with the "Innovative Technology" (IT) District, in the same order as 170-7, to read as attached:

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Executive Technology Park" (ETP) to "Innovative Technology" (IT) District an area of approximately 406 acres located along Sixth Street,

consisting of Map E lots 24, 24-1, 26-B, 27-1, 27-A, 27-B, 27-C, 17-D, 27-E, 28, 29, 31, 32, 32-1, 32-2, 32-4, 33, 70A and 70B."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising the official Zoning Map of the City of Dover, referred to in Section 170-8 of said Chapter as follows:

"The official Zoning Map of the City of Dover, New Hampshire, dated September 11, 2019, is amended by changing from "Executive Technology Park" (ETP) to "Innovative Technology" (IT) District an area of approximately 102 acres located along Pointe Place, consisting of Map K lots 18A-10, 19, 19-1, 19-2, 19-3, 19-4, 19-5, 19-7 and Map M lots 4, and 4-OPN, and the portion of Map K lots 19-C, 19-B, 22, 23, 24, 25, 25-B zoned ETP."

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to eliminate the "Executive Technology Park" (ETP) District in subsection A(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to eliminate the "Executive Technology Park" (ETP) District in subsection B(2).

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-12 "Applicability of tables of use and dimensional regulations by district", to remove the "Executive Technology Park" (ETP) District table.

11. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-21 "Small Wind Energy Systems" to update and amend as follows:

" 170-21. ~~SMALL WIND~~ Alternative ENERGY SYSTEMS.

A. Authority/Purpose:

This ~~SMALL WIND~~ Alternative ENERGY SYSTEMs ordinance is enacted in accordance with RSA 674:62-66, and the purposes outlined in RSA 672:1-III-a. The purpose of this ordinance is to accommodate ~~SMALL WIND~~ Alternative ENERGY SYSTEMs in appropriate locations, while protecting the public's health, safety and welfare. In addition, this ordinance provides a permitting process for ~~SMALL WIND~~ Alternative ENERGY SYSTEMs to ensure compliance with the provisions of the requirements and standards established herein.

B. Procedure for Review:

(1) Building Permit: ~~SMALL WIND~~ Alternative ENERGY SYSTEMs and met TOWERs are an ACCESSORY USE permitted in all zoning districts where STRUCTUREs of any sort are allowed. No ~~SMALL WIND~~ Alternative ENERGY SYSTEM shall be erected, constructed, or installed without first receiving a BUILDING permit from the Building Inspector. A BUILDING permit shall be required for any physical MODIFICATION to an existing ~~SMALL WIND~~ Alternative ENERGY SYSTEM. Met TOWERs that receive a BUILDING permit shall be permitted on a temporary basis not to exceed three (3) years from the date the BUILDING permit was issued.

(2) Consumer Use. For the purposes of this Section, Alternative energy systems are intended to be incidental and subordinate to a use on the same parcel and shall supply electrical power principally for on-site consumption.
   a. To the extent net metering is allowed, excess power may be contributed to the grid. Should the excess power contributed exceed 125% of the power required on site for one year, the use shall be considered no longer be incidental and subordinate, and shall require Technical Review.

(3) Application: Applications submitted to the Building Inspector shall contain a site plan with the following information where appropriate:

   (a) Property lines and physical dimensions of the APPLICANT's property.

   (b) Location, dimensions, and types of existing major STRUCTUREs on the property.

   (c) Location of the proposed ~~SMALL WIND~~ Alternative ENERGY SYSTEM, including, foundations, guy anchors and associated equipment.

   (d) TOWER foundation blueprints or drawings.

(e) TOWER blueprints or drawings.

(f) SETBACK requirements as outlined in this ordinance.

(g) The RIGHT-OF-WAY of any public road that is CONTIGUOUS with the property.

(h) Any overhead utility lines.

(i) SMALL WIND ENERGY SYSTEM:

i. Specifications, including manufacturer, model, rotor diameter, TOWER HEIGHT, TOWER type, nameplate generation capacity.

ii. SMALL WIND ENERGY SYSTEMs that will be connected to the POWER GRID shall include a copy of the application for interconnection with their electric utility provider.

iii. Sound level analysis prepared by the WIND GENERATOR manufacturer or qualified engineer.

iv. Electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the NH State Building Code.

v. Evidence of compliance or non-applicability with Federal Aviation Administration requirements.

(j) Solar Panel Systems

i. Specifications, including manufacturer, model, type, nameplate generation capacity.

ii. Solar Panels that will be connected to the POWER GRID shall include a copy of the application for interconnection with their electric utility provider.

iii. Electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the NH State Building Code, as well as applicable Electric Code.

(k) List of ABUTTERs to the APPLICANT's property.

(4) ABUTTER and Regional Notification: In accordance with RSA 674:66, the Building Inspector shall notify all ABUTTERs and the local governing body by certified mail upon application for a BUILDING permit to construct an ~~SMALL WIND~~ Alternative ENERGY SYSTEM. The public will be afforded 30 days to submit comments to the Building Inspector prior to the issuance of the BUILDING permit. The Building Inspector shall review the application for regional impacts per RSA 36:55. If the proposal is determined to have potential regional impacts, the Building Inspector shall follow the procedures set forth in RSA 36:57, IV.

C. SMALL WIND ENERGY SYSTEM Standards:

(1) The Building Inspector shall evaluate the application for compliance with the following standards;

(a) SETBACK: The SETBACK shall be calculated by multiplying the minimum SETBACK requirement number by the SYSTEM HEIGHT and measured from the center of the TOWER base to property line, public roads, or nearest point on the foundation of an occupied BUILDING.

Minimum SETBACK Requirements			
Occupied BUILDINGs on Participating Landowner Property	Occupied BUILDINGs on Abutting Property	Property Lines of Abutting Property and Utility Lines	Public Roads
0	1.5	1.1	1.5

(i) SMALL WIND ENERGY SYSTEMs must meet all SETBACKs for principal STRUCTUREs for the zoning district in which the system is located.

(ii) Guy wires used to support the TOWER are exempt from the SMALL WIND ENERGY SYSTEM SETBACK requirements.

(b) TOWER: The maximum TOWER HEIGHT shall be restricted to thirty five (35) feet above the tree canopy within three hundred (300) feet of the SMALL WIND ENERGY SYSTEM. In no situation shall the TOWER HEIGHT exceed one hundred fifty (150) feet.

(c) Sound Level: The SMALL WIND ENERGY SYSTEM shall not exceed sixty (60) decibels using the A scale (dBA), as measured at the site property line, except during short-term events such as severe wind storms and utility outages.

(d) SHADOW FLICKER: SMALL WIND ENERGY SYSTEMs shall be sited in a manner that does not result in significant SHADOW FLICKER impacts. Significant SHADOW FLICKER is defined as more than thirty (30) hours per year on abutting occupied BUILDINGs. The APPLICANT has the burden of proving that the SHADOW FLICKER will not have significant adverse impact on neighboring or adjacent uses. Potential SHADOW FLICKER will be addressed either through siting or mitigation measures.

(e) SIGNs: All SIGNs including flags streamers and decorative items, both temporary and permanent, are prohibited on the SMALL WIND ENERGY SYSTEM, except for manufacturer identification or appropriate warning SIGNs.

(f) Code Compliance: The SMALL WIND ENERGY SYSTEM shall comply with all applicable sections of the New Hampshire State BUILDING Code.

(g) Aviation: The SMALL WIND ENERGY SYSTEM shall be built to comply with all applicable Federal Aviation Administration regulations including but not limited to 14 C.F.R. part 77, subpart B regarding installations close to airports, and the New Hampshire Aviation regulations, including but not limited to RSA 422-b and RSA 424.

(h) Visual Impacts: It is inherent that SMALL WIND ENERGY SYSTEMs may pose some visual impacts due to the TOWER HEIGHT needed to access wind

resources. The purpose of this section is to reduce the visual impacts, without restricting the owner's access to the optimal wind resources on the property.

(i) The APPLICANT shall demonstrate through project site planning and proposed mitigation that the SMALL WIND ENERGY SYSTEM's visual impacts will be minimized for surrounding neighbors and the community. This may include, but not be limited to information regarding site selection, WIND GENERATOR design or appearance, buffering, and screening of ground mounted electrical and control equipment. All electrical conduits shall be underground, except when the financial costs are prohibitive.

(ii) The color of the SMALL WIND ENERGY SYSTEM shall either be the stock color from the manufacturer or painted with a non-reflective, unobtrusive color that blends in with the surrounding environment. Approved colors include but are not limited to white, off-white or gray.

(iii) A SMALL WIND ENERGY SYSTEM shall not be artificially lit unless such lighting is required by the Federal Aviation Administration (FAA). If lighting is required, the APPLICANT shall provide a copy of the FAA determination to establish the required markings and/or lights for the SMALL WIND ENERGY SYSTEM.

(i) Approved WIND GENERATORS: The manufacturer and model of the WIND GENERATOR to be used in the proposed SMALL WIND ENERGY SYSTEM must have been approved by the California Energy Commission or the New York State Energy Research and Development Authority, or a similar list approved by the state of New Hampshire, if available.

(j) Utility Connection: If the proposed SMALL WIND ENERGY SYSTEM is to be connected to the POWER GRID through NET METERING, it shall adhere to RSA 362-A:9.

(k) Access: The TOWER shall be designed and installed so as not to provide step bolts or a ladder readily accessible to the public for a minimum HEIGHT of eight (8) feet above the ground. All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.

(l) Clearing: Clearing of natural vegetation shall be limited to that which is necessary for the construction, operation and maintenance of the SMALL WIND ENERGY SYSTEM and as otherwise prescribed by applicable laws, regulations, and ordinances.

D. Solar Panel Standards

a. Lot Coverage: solar systems do not constitute an increase to lot coverage unless the panel(s)/collector(s) and supporting structures constitute a building.

b. Placement of solar systems:

i. The height of a roof mounted solar panel shall not be counted towards the maximum permitted height of the structure it is affixed to the zoning district.

ii. Ground-mounted solar panels, shall not be located in the front yard and shall meet or exceed required side and rear yard setbacks for accessory buildings.

iii. In no case shall a ground mounted unit exceed 20 feet in height.

iv. When solar storage batteries are included as part of the solar energy system, they must be housed in a secure space or enclosure meeting the requirements of the City's building and electrical codes when in use and, when no longer used, shall be disposed of in accordance with all applicable City, state and federal laws and regulations.

E. ~~D.~~ Abandonment:

(1) At such time that a SMALL WIND ENERGY SYSTEM is scheduled to be abandoned or discontinued, the APPLICANT will notify the Building Inspector by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.

(2) Upon abandonment or discontinuation of use, the owner shall physically remove the SMALL WIND ENERGY SYSTEM within ninety (90) days from the date of abandonment or discontinuation of use. This period may be extended at the

request of the owner and at the discretion of the Building Inspector. "Physically remove" shall include, but not be limited to:

(a) Removal of the WIND GENERATOR and TOWER and related above-grade STRUCTUREs.

(b) Restoration of the location of the SMALL WIND ENERGY SYSTEM to its natural condition, except that any landscaping, grading or below-grade foundation may remain in its same condition at initiation of abandonment.

(3) In the event that an APPLICANT fails to give such notice, the system shall be considered abandoned or discontinued if the system is out-of-service for a continuous twelve (12) month period. After the twelve (12) months of inoperability, the Building Inspector may issue a Notice of Abandonment to the owner of the SMALL WIND ENERGY SYSTEM. The owner shall have the right to respond to the Notice of Abandonment within thirty (30) days from Notice receipt date. After review of the information provided by the owner, the Building Inspector shall determine if the SMALL WIND ENERGY SYSTEM has been abandoned. If it is determined that the SMALL WIND ENERGY SYSTEM has not been abandoned, the Building Inspector shall withdraw the Notice of Abandonment and notify the owner of the withdrawal.

(4) If the owner fails to respond to the Notice of Abandonment or if, after review by the Building Inspector, it is determined that the SMALL WIND ENERGY SYSTEM has been abandoned or discontinued, the owner of the SMALL WIND ENERGY SYSTEM shall remove the WIND GENERATOR and TOWER at the owner's sole expense within 3 months of receipt of the Notice of Abandonment. If the owner fails to physically remove the SMALL WIND ENERGY SYSTEM after the Notice of Abandonment procedure, the Building Inspector may pursue legal action to have the SMALL WIND ENERGY SYSTEM removed at the owner's expense.

F. ~~E.~~ Violation:

It is unlawful for any person to construct, install, or operate a SMALL WIND ENERGY SYSTEM that is not in compliance with this ordinance. SMALL WIND ENERGY SYSTEMs installed prior to the adoption of this ordinance are exempt

from this ordinance except when MODIFICATIONs are proposed to the SMALL WIND ENERGY SYSTEM.

G. Penalties:

Any person who fails to comply with any provision of this ordinance or a BUILDING permit issued pursuant to this ordinance shall be subject to enforcement and penalties as allowed by RSA 676:17.

AND

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-6 "Definitions" to add the following terms to read as follows:

"Alternative energy System means a system where energy is derived from a renewable natural source, such as the sun, wind, tides, or waves."

"Energy storage is the capture of energy produced at one time for use at a later time. A device that stores energy is generally called an accumulator or battery. Energy comes in multiple forms including radiation, chemical, gravitational potential, electrical potential, electricity, elevated temperature, latent heat and kinetic. Energy storage involves converting energy from forms that are difficult to store to more conveniently or economically storable forms."

"Geothermal energy means a system generating electricity by tapping into steam or hot water reservoirs underground; the heat is used to drive an electrical generator."

"Ground mounted solar means a system installed on the ground rather than on the roof of a building. This allows the solar panels to be placed anywhere on the property and mounted at any height, from a few inches to many feet off the ground. Ground mounted solar may include motorized ground-mounts that track the sun throughout the day, ensuring the panels are facing the sun at all times."

"Rooftop solar mean a photovoltaic system that generates electricity by capturing solar thermal energy and is mounted on the rooftop of a residential or commercial building or structure"

12. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-27.2 "Transfer of Development Rights" to update and amend as follows:

"170-27.2. TRANSFER OF DEVELOPMENT RIGHTS.

A. Authority. By the authority granted under RSA 674:21, this section creates overlay district(s) for the purpose of transferring DEVELOPMENT RIGHTS (TDR) within said districts.

B. Purpose and Intent. Within the City of Dover there are certain lands that possess significant conservation features, including but not limited to wetlands, groundwater recharge zones, forested areas, wildlife habitat, farmland, scenic viewsheds, historic landmarks, and linkages to other such areas. Because of their unique assemblages of flora and fauna and their significant contribution to the ecological system and/or the cultural identity of our community, these lands are worthy of special protection. The City of Dover furthermore, has a limited supply of land suitable for development. The purpose of this overriding district is to promote intensive development on the developable land possessing the least conservation value and to permanently protect lands possessing significant conservation features that provide unique values in their undisturbed condition.

   Additionally, it is recognized that the City of Dover has an Open Lands Committee and Conservation Commission who are active in protecting and preserving OPEN SPACE.

C. Applicability. Upon request by an APPLICANT for development approval and at the discretion of the PLANNING BOARD, the provisions of this subsection may apply to the district(s) defined in this subsection E below.

D. Districts Defined.

   (1) The Industrial TDR DISTRICT is hereby determined to be any I-4 or B-4 zoning district as shown on the Zoning Map for the City of Dover, New Hampshire, adopted December 9, 2009. The SENDING AREA is defined to be OPEN SPACE and related SETBACKs as defined by the City of Dover Wetland Protection District, Chapter 170-27.1, which are located in any I-4 or B-4 zoning district. The RECEIVING AREA is defined to be all remaining land in be any I-4 or B-4 zoning district.

   (2) The Residential TDR DISTRICT is hereby determined to be Residential districts noted or displayed on the Zoning Map for the City of Dover, New Hampshire,

adopted December 9, 2009. The SENDING AREA is defined to be any land preserved by the City of Dover through conservation programs in the R-40 or R-20 residential zoning districts. The RECEIVING AREA is defined to be all non-R-40 or R-20 zoning districts east of the Spaulding Turnpike which allow residential development.

a. If the units created are purchased, the receiving area may be any zoning district that allows residential development.

E. Procedural Requirements.

(1) At the discretion of the PLANNING BOARD, an APPLICANT for development approval within the RECEIVING AREA of the defined Industrial TDR DISTRICT may apply the performance standards specified in Subsection F below in return for the acquisition of land or DEVELOPMENT RIGHTS from the SENDING AREA within the same TDR DISTRICT. The performance standards for the Residential TDR DISTRICT are outlined in Subsection G below.

(2) A certified boundary survey of the associated land in the SENDING AREA shall be submitted as a supplement to the site plan or subdivision plan for development within the RECEIVING AREA.

(3) The owner of the subject OPEN SPACE within the SENDING AREA of the TDR DISTRICT shall SIGN all application materials as a co- APPLICANT of the development application. For residential application, proof of an agreement to sell DEVELOPMENT RIGHTS must be provided by the Conservation Commission.

(4) A sketch plan estimating layout of the development site and identifying the OPEN SPACE associated with the plan shall be submitted to the PLANNING BOARD for review at a regularly scheduled meeting. The PLANNING BOARD, within thirty (30) days of its review of the sketch plan, shall determine if waivers will be granted as allowed in Subsections G and H below. Following this decision, a final application is prepared. The final application for development approval shall be reviewed in accordance with the standard plan review process and subjected to all applicable development regulations, except as provided in this section.

(5) A perpetual easement or restrictive covenant shall be recorded at the Strafford County Registry of Deeds that preserves the designated OPEN SPACE within the

SENDING AREA. Said easement or covenant may allow for the continuance of existing residential and agricultural activities, and may allow for utility and access crossings in accordance with subsection I below. The designation of the land protection agency to hold the easement shall be approved by the PLANNING BOARD.

F. Industrial Performance Standards.

(1) Land within a SENDING AREA, when surveyed, approved by the PLANNING BOARD and preserved by easement or covenant as specified in Subsection E above, may be counted for the OPEN SPACE requirement for a development site in a RECEIVING AREA. The amount of land preserved in a SENDING AREA shall equal or exceed the OPEN SPACE requirement for the development site, but in no case be less than one (1) acre. Notwithstanding, development sites within the I-4 and B-4 zoning districts shall maintain OPEN SPACE or landscaped area on at least ten percent (10%) of the site. The design of the development site shall locate the OPEN SPACE or landscaped area to maximize the aesthetic value of the site.

(2) The minimum LOT size requirement may be waived by the PLANNING BOARD for land subjected to the TRANSFER OF DEVELOPMENT RIGHTS.

(3) The minimum FRONTAGE requirement may be waived by the PLANNING BOARD for land subjected to the TRANSFER OF DEVELOPMENT RIGHTS provided that paved access to all developed areas suitable for emergency vehicles is approved by the PLANNING BOARD.

(4) SETBACKs for parking, paved areas, and BUILDINGs may be waived by the PLANNING BOARD, and be consistent with the intent to promote intensive development of suitable development sites. Notwithstanding, BUILDINGs shall be at least one hundred fifty (150) feet from residential STRUCTUREs that exist on the date of enactment of the I-4 and B-4 Zoning districts, and seventy five (75) feet from the LOT LINE of a disagreeing residential ABUTTER.

(5) The developer shall record covenants that address architectural considerations for STRUCTUREs, SIGNAGE and lighting that are designed to promote the highest possible aesthetic quality of the development site.

(6) A landscaping plan shall be submitted with a development application that depicts landscaping or OPEN SPACE around the perimeter of the site, near the proposed BUILDINGs, and within the parking LOT that promotes the highest possible aesthetic quality of the development.

G. Residential Performance Standards.

(1) Annually, the City shall update a document identifying the cumulative cost per acre spent to preserve OPEN SPACE within the City of Dover. This list shall be kept on file in the Department of Planning and Community Development, and coordinated with the Conservation Commission. This cost shall become the value at which DEVELOPMENT RIGHTS may be purchased.

(2) Proceeds from the purchase of DEVELOPMENT RIGHTS, shall be placed into the Conservation Fund to be used to purchase future property or easements, or monitor easements, and not into the general fund.

(3) A residential TRANSFER OF DEVELOPMENT RIGHTS APPLICANT may pursue one of the following methods for TRANSFERING DEVELOPMENT RIGHTS.

(a) Single Family Detached method

i. An applicant shall develop a baseline yield for the lot to be developed, through the following formula
   1. The square footage of the parent lot minus environmental constraints (wetlands, conservation areas etc) is the base lot size.
   2. The base lot size is then reduced by fifteen (15) percent to account for roadway, this creates the net area.
   3. The net area is then multiplied by a factor determined by the amount of wetlands over the parent lot. This is the developable area.

Percentage of Parcel that is wetlands	Factor
0<10%	0.85
10<20%	0.8
20<30%	0.75
30%<	.7

4. The developable area is the divided by the minimum lot size, and the whole number value is the base number, with no rounding.
    a. This base number is not required to be restricted by the requirements in subsection iii, unless the formula defined in item ii 1. is utilized.
5. The development plan shall be laid out in a design that meets the requirements for block length and cu de sac length.

ii. The transfer shall equate to one of the following calculations:
1. For construction of units no larger than six hundred (600) square feet of total living area, including the base calculated units, there shall be no density limit. The monthly cost of said units shall conform to the HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority, and there shall be no TDR fee collected for said unit(s).
2. For construction of units no larger than one thousand (1,000) square feet, of total living area, two (2) units per DEVELOPMENT RIGHT purchased shall be allowed.
3. For construction of units no larger than fourteen hundred (1,400) square feet, of total living area, one ~~and a half~~ (1~~.5~~) unit per DEVELOPMENT RIGHT purchased shall be allowed. The unit count shall be the whole number value and not rounded up.
    a. ~~If the math to devise the base number ends in more than half a unit but less than a whole, and a transfer is purchased, the result would be two (2) dwelling units.~~ Total living area shall mean the size of the home (in square feet) based upon the exterior dimensions, excluding unconditioned spaces.
    b. If using formula 2 or 3 above, the purchase shall add no more than 10 units to the base yield.

iii. The units created, through the transfer must be
1. ~~Sold, and are not for rental purposes~~
2. Limited to the square footage originally constructed.

iv. A note shall be placed on the approved plan and any Building Permit shall note the adherence to this section of the Code.

v. A note shall be placed in the property/unit deed citing the restrictions listed above.

vi. The plan shall be considered a subdivision application. Prior to submission, a determination by the Director of Planning and Community

Development shall be made whether to follow the minor or major subdivision regulations.

1. {If the proposed plan includes 4 or more total lots to be created, the submission shall be meet the standards for a major subdivision, and no sketch plan review (Section E 4) is allowed.
2. If the proposed plan creates 3 or fewer total lots, existing conditions, topography and wetlands/steep slopes shall be shown in addition to the sketch plan submitted for review under Section E 4. Final plans shall meet the standards for a minor subdivision.}
    a. If the sketch plan requires an environmental Conditional Use Permit to develop homes, the applicant must appear before the Conservation Commission for review and endorsement prior to the Planning Board's review.

(b) Attached Single Family, Two family, three family and 4 or more method

(i) The transfer may be through the purchase of development rights, as described in G) (1) ~~and (2)~~, or through the protection of land via a permanent conservation easement as per section E) (5).

a. In mixed use or multi-family zones, the base density shall be derived from the underlying zoning, and not through a formula.
b. If the additional unit(s) resulting from TDR are restricted so that the rent of said units conforms to the HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority, there shall be no fee collected for said unit(s).

(ii) The transfer shall equate to one (1) unit per acre preserved, or purchased. If the end result is a village themed residential/non-residential ~~commercial~~ project, whereby 35% of the square footage being created is non-residential the transfer shall equate to one (1) unit per 2,500 square feet ~~tenth (10th)~~ of an acre preserved or purchased.

(iii) Any development approved by the Planning Board after July 1, 2020, which will create a manufacturing or assembly facility over 40,000 square feet, may create and transfer one (1) unit per 2,000 square feet of building approved. The transfer shall not be completed prior to the issuance of the Certificate of Occupancy for the additional space.

(iv) The plan shall be treated as a site plan application, unless otherwise determined by the Director of Planning and Community Development, prior to final submission.

1. If the proposed plan includes 4 or more total units to be created, the submission shall be meet the standards for a Site Plan application, and no sketch plan review (Section E 4) is allowed.
2. If the proposed plan creates 3 or fewer total units, existing conditions, topography and wetlands/steep slopes shall be shown in addition to the sketch plan submitted for review under Section E 4. Final plans shall meet the standards for a Site Plan application.

(4) Regardless of the method utilized, the minimum LOT size requirement may be waived by the PLANNING BOARD for land subjected to the TRANSFER OF DEVELOPMENT RIGHTS.

(5) Regardless of the method utilized, the setbacks shall be:

~~MINIMUM DISTANCE AROUND INDIVIDUAL UNITS IN CLUSTERS~~		MINIMUM DISTANCE AROUND INDIVIDUAL UNITS IN CLUSTERS		
~~STREET Sides of Units~~	~~STREET Sides of Units~~	Abutting A STREET	Abutting A SIDE LOT LINE	Abutting A REAR LOT LINE
~~20 feet~~	~~20 feet~~	20 feet	10 feet	30 feet

(6) Regardless of the method utilized, the minimum FRONTAGE requirement may be waived by the PLANNING BOARD, for land subjected to the TRANSFER OF DEVELOPMENT RIGHTS provided that paved access to all developed areas suitable for emergency vehicles is approved by the PLANNING BOARD.

(a) If lots are proposed, the minimum frontage allowed shall be forty (40) feet per unit

(7) A continuous visual buffer shall be created along the perimeter of the parent parcel, which shall include a thirty (30) foot no cut, no disturb buffer.

(8) Regardless of the method utilized, any other provision in this Chapter to the contrary, the density or intensity of development of a receiving parcel may be increased by the TRANSFER OF DEVELOPMENT RIGHTS so long as the increase in density or intensity:

(a) Is consistent with the Master Plan

(b) Is not incompatible with the land uses on neighboring LOTs (eg a multifamily building in a single family neighborhood)

(c) Is created on property served by public water and sanitary sewer

13. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-28.2 "Residential-Commercial Mixed Use (RCM) Overlay" to update and amend as follows:

A. **"**Purpose and intent.
   (1) The Residential-Commercial Mixed Use Overlay District is designed as an overlay district that allows a mixture of residential use and commercial uses on one parcel. In order for a developer to utilize these regulations, the Planning Board shall have granted a conditional use permit. The district includes options which enable and encourage greater flexibility in the design of residential housing ~~for older persons~~ with commercial projects. The overlay permits development of large tracts of land on a development-plan basis which allows flexibility in internal road design, with reduced dwelling lot sizes and modified dimensional requirements.
   (2) The mixed residential and commercial uses are intended to be complementary to one another and to create a sense of community between the mixed uses. Housing and commercial uses can be developed to provide appropriate use of land, facilitate the economical and efficient provision of public services, promote open space conservation, protect the natural and scenic attributes of the land, and expand opportunities for the development of housing ~~for older persons, as defined under RSA 354-A:15~~, outside the traditional residential developments.

B. Conditional use permit.
   (1) Conditional use approval may be granted by the Planning Board (RSA 674:21, II) after proper public notice and public hearing, provided that the proposed project complies with the following standards:
      (a) The applicant demonstrates that the development complies with the design guidelines that are outlined in § 153-16 of the Site Review Regulations. These guidelines encourage a context-sensitive development, which encourages components that act as one project and not as two adjacent projects.
      (b) The applicant demonstrates that the development poses no detrimental effects on surrounding properties. Potential areas of impact that need to be

analyzed include, but are not limited to, vehicular traffic, noise, property value, visual blight, natural resources degradation, light pollution, and offensive emissions such as dust, odor, or smoke.

(c) The applicant shall submit a fiscal impact analysis as defined in § 157-21C(1)(b) of the Land Subdivision Regulations. The analysis shall demonstrate that the project is at least a cost-neutral project for the City at present and 10 years from the occupation.

(2) Conditional use approval shall be subject to a formal agreement between the Planning Board and the applicant. Said agreement shall be recorded at the Strafford County Registry of Deeds.

C. Location. The Residential-Commercial Mixed Use Overlay District shall include any parcel located within the CM, IT ~~B-4, I-4~~ or ~~ETP~~ R-40 zone which is greater than 50 acres and has the ability to connect into municipal water and sewer.

D. Permitted uses. The following uses are permitted:

(1) Principal uses.

(a) Housing ~~for older persons as that term is defined under RSA 354-A:15 and 42 U.S.C. § 3607(b)(2) and the regulations adopted thereunder in the following settings:~~

(3) Single-family dwelling, including the use of manufactured housing.
(4) Two-family dwelling.
(5) Three- to four-family dwelling.
(6) Multifamily dwelling.
(7) Manufactured housing parks (permitted outright without a special exception).

B. Public and private utilities.

C. Nonresidential uses as allowed as follows:

(1) Any use allowed in the underlying zone ~~that is compatible with housing for older persons.~~
(2) Barber or beauty shop.
(3) Bank.
(4) Eating/drinking establishments (no drive-through service).
(5) Bed-and-breakfast.
(6) Office.
(7) Retail store.
(8) Theater.
(9) Adult day care.
(10) Nursing homes ~~(in areas not serviced by City water and sewer utilities at a density of one bedroom per 10,000 square feet of land; in areas~~

~~serviced by City water and sewer utilities~~ at a density of one bedroom per 7,500 square feet of land).

(11) Congregate care facilities ~~(in areas not serviced by City water and sewer utilities at a density of one unit per 10,000 square feet of land; in areas serviced by City water and sewer utilities~~ at a density of one unit per 7,500 square feet of land).

(12) Other uses compatible with housing ~~for older persons~~ may be approved via Conditional Use, using the criteria in 170-20 B(2).

(13) Nonresidential uses in existence at the adoption of this section on adjacent parcels shall be allowed to expand within the development if conceptually shown on the approved plan.

(2) Accessory uses.

(a) Recreational facilities.

(b) "Community building," defined as a building used as a place of meeting, recreation or social activity typically for use by the residents of a particular development.

(c) Maintenance buildings.

(d) Rental and sales offices.

E. Procedural concepts.

(1) The developer shall prepare a development plan, which locates the proposed types of nonresidential and residential development, utilities, access roads, and public ways. The parcels comprising the development may be under separate ownership but shall be treated as one development and shall be bound by the approval granted for the entire development plan. If approval is granted, individual lots must be developed as part of the larger development plan and phasing outlined below, and not separately. The development plan must identify the percentage of the nonresidential uses, residential uses and open space. Nonresidential and/or mixed-use uses must comprise at least 55% of the total proposed floor area for the development (outdoor display areas may be counted towards the minimum required floor area) residential uses must not exceed 45% of the total proposed floor area for the development. <u>Nonresidential uses within projects located in the CM district must be 90% manufacturing and assembly in nature.</u> A building shall be considered "mixed-use," provided that at least 50% of the floor area of the first floor is reserved as commercial space and provided that such commercial space is located roughly in the front half of the building and extends the length of the building facade. Residential accessory uses (e.g. mechanical, storage, laundry, etc.) are permitted to be located within the back half of the first floor of any mixed-use building.

(2) A minimum of 20% of the area of the original tract shall be reserved as open space and identified as such on the development plan. Fifty percent of the required

open space (as defined in § 157-60) must be usable uplands and reasonably accessible to all property owners in the project. Any open space provided above 20% may be mixed wetlands and upland.

(3) Residential uses require that the calculation of permitted density shall be completed through the submission of a yield plan (as defined in § 157-60) applied to the development lot and not individually to the internal dwelling lots.

(4) For residential development that includes single family homes over 1,001 square feet of total living area, ~~two-family,~~ three- to four-family or multifamily dwellings, density shall be based upon calculating one unit per 40,000 square feet of contiguous upland, and using 150 feet of frontage on a public roadway.

(5) For single-family residential homes 1,000 or less square feet of total living area, development, or two-family dwellings density shall be based upon calculating one unit per 10,000 square feet of contiguous upland, and using 100 feet of frontage on a public roadway.

(6) The development plan may be phased for a term of five years. The phasing plan shall contain provisions which promote the mixed use of the site consistent with Subsection A. For the purposes of this section, development shall include:
   (a) Construction of structures;
   (b) Environmental remediation;
   (c) Site preparation or demolition;
   (d) Roadway utility or recreation and common area design and construction; and
   (e) Bonding or other security for site development.

(7) The phasing plan shall provide that no more than 50% of the residential development may be occupied prior to completion of between 25% and 50% of the nonresidential structures, as negotiated between the Planning Board and the developer, and included in the Conditional Use Approval.

(8) Provided that the developer is making reasonable efforts to develop the site, the Planning Board may extend the initial five-year phasing period, provided a request for extension is submitted before the expiration of the initial five-year phasing term.

(9) Residential development plan guidelines.
   (a) The developer shall be permitted to allocate permitted density among internal dwelling lots in a flexible and creative manner. The sum total of the permitted density shall not exceed the permitted density of the development lot or legal lot, unless the additional density is derived from the Transfer of Development Rights Ordinance. Layouts may include individual lots or a cluster of units without lot lines.
   (b) Dwelling layouts shall be so designed that parking is screened from external roadways by garages, building locations, grading or screening. Major topographical changes or removal of existing trees shall be avoided

wherever possible, and water, wetlands, and other scenic views from the external streets shall be preserved as much as possible.

(c) Where possible, it is desirable and encouraged to mix residential and nonresidential uses. This may be achieved through situating the buildings close to each other, or though allowing structures to house residential, preferably on the second or above floor, with nonresidential on the first floor. Creativity and flexibility is encouraged, and the development plan may offer another option for mixing uses. ~~Units created through the TDR program are not required to be housing for the elderly, as that term is defined under RSA 354-A:15 and 42 U.S.C. § 3607(b)(2).~~

(d) All residential development must adhere to architectural design guidelines. Said standards will reflect a New England village motif and include structures with peaked roofs and architectural shingles. The guidelines for this development are included in Chapter 153, Site Review Regulations,

(e) All manufactured houses shall adhere to the standards outlined in Chapter 101, Manufactured Home Parks, with the exception of §§ 101-3, 101-4, 101-5, 101-6, and 101-7F, which shall be controlled by the provisions hereof and unless noted below. Where there is a difference in the requirements between this overlay district and the provisions of Chapter 101, Manufactured Home Parks, the provisions of the overlay district shall apply.

(10) Nonresidential development plan guidelines.

(a) The general character of the nonresidential structures within the development lot is intended to be a pedestrian-friendly setting, with emphasis on the natural characteristics of the site. The site design should create a sense of character and cohesiveness through landscaping, facade treatment, and signage.

(b) The guidelines for this development are included in Chapter 153, Site Review Regulations, § 153-16.

F. Standards and regulations.

(1) Internal roads. As part of the approval of the conditional use permit, the Planning Board shall determine whether internal roads shall be public or private. If a road is determined to be private, no municipal services shall be provided other than public safety, utilities maintenance, and regulatory services. Unless noted below, roadways shall conform to the street design criteria laid out in the Code.

(a) Minimum internal right-of-way.

(1) Maximum residential: 35 feet.

(2) Maximum nonresidential: 50 feet.

(b) Minimum pavement width.

(1) Minimum residential: 20 feet.

(2) Minimum nonresidential: 28 feet.

(3) Minimum sidewalk pavement width: five feet.

(4) Minimum bike/Segway®/golf cart path width: five feet.

(c) Minimum tangent length at intersections: 75 feet.

(d) Maximum street angle at intersections: 60°.

(e) Minimum center-line radius: 100 feet.

(f) Minimum tangent length between reverse curves: 50 feet.

(2) Dimensional requirements.

(a) Nonresidential/mixed-use buildings.

[1] Minimum structure setback from external lot line: 50 feet. Expanding existing nonresidential uses are not held to this setback.

[2] Minimum structure setback from external right-of-way: 50 feet.

[3] Maximum nonresidential building height: 55 feet.

[4] For all other dimensional requirements for nonresidential structures and parking setbacks refer to the underlying zone.

(b) Residential dwellings.

[1] Minimum structure and parking setback from external lot line: 50 feet.

[2] Minimum structure and parking setback from external row: 100 feet.

[3] Maximum residential building height: 35 feet.

[4] Minimum frontage on internal road: 40 feet.

[5] Minimum setbacks:

[a] Front yard setbacks: 20 feet.

[b] Distance between buildings: 24 feet.

(c) <u>There shall be no minimum lot size of frontage for internal lots created.</u>

(3) Parking.

(a) All dwelling units shall require two independently accessible parking spaces per unit, except that the congregate-care and nursing-home requirements shall be as otherwise defined by this chapter. Nonresidential uses shall comply with parking requirements defined by this chapter.

(b) Overnight parking shall not be permitted on internal roadways.

(c) <u>Parking shall be utilized and available to all components of the Development Plan, through the recording of access and parking easements."</u>

14. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Section 170-7 "Establishment of Districts", to replace as a whole, based upon the preceding amendments, follows:

"A. Districts. The City of Dover is hereby divided into the following districts:

(1) Residential.

HR Heritage Residential District
R-40 Rural Residential District
R-20 Low-Density Residential District
R-12 Medium-Density Residential District
RM-SU Suburban Density Multi-residential District
RM-U Urban Density Multi-residential District

(2) Nonresidential. **[Amended 8-22-2018 by Ord. No. 2018.08.08-009]**

C Commercial District
CM Commercial Manufacturing
IT Innovative Technology

(8) Mixed-use.

G Gateway
H Hospital
LBW Little Bay Waterfront District
O Office District
CBD Central Business District
CWD Cochecho Waterfront District

(9) Overriding.

CD Conservation District
URD Urban Renewal District
RRD Riverfront Residential Overlay District
GWP Groundwater Protection District
HWD Hazardous Waste Landfill District
RCM Residential-Commercial Mixed-Use
SRD Scenic Road Overlay District
TDR Transfer of Development Rights
TEL Telecommunications Facilities
WPD Wetland Protection District

D. District purpose statements.

(1) Residential districts. The residential districts are intended to provide a wide range of residential units to provide the citizens of Dover with a balance of housing choices, with varying housing types, densities and costs. The goal is to preserve and create City neighborhoods that are safe and promote harmonious development.

(a) Rural Residential District (R-40). The purpose of this residential district is to provide for conventional single-family neighborhoods in the more rural areas of the City. These areas have larger lot sizes (one or more acres) and the homes are most likely served by on-site septic systems and wells, but there are some portions of the district that have municipal sewer and water. New subdivisions

are designed as open space developments with reduced lot sizes allowed in return for the permanent preservation of open space. Agriculture and farming are promoted in this district. Some nonresidential uses that are compatible with single-family homes are permitted, including churches, hospitals, elementary schools, high schools and child-care facilities.

(b) Low-Density Residential District (R-20). The purpose of this residential district is to provide for conventional single-family neighborhoods on lots not less than 20,000 square feet. The homes in this district are likely served by municipal sewer and water, but there are some areas that still have on-site septic systems and wells. These districts are located near major roadways. The development of parcels with at least 15 acres can be done as open space subdivisions. Agriculture and farming are promoted in this district. Some nonresidential uses that are compatible with single-family homes are permitted, including churches, elementary schools, high schools and child-care facilities.

(c) Medium-Density Residential District (R-12). The purpose of this residential district is to provide for conventional single-family neighborhoods on lots not less than 12,000 square feet. The homes in this district are almost all served by municipal sewer and water. Many of the neighborhoods surrounding the elementary schools are in this district and have a sidewalk system that is conducive to children walking to school. The development of parcels with at least five acres can be done as open space subdivisions. Some nonresidential uses that are compatible with single-family homes are permitted, including churches, elementary schools, high schools, colleges and child-care facilities.

(d) Suburban Density Multi-Residential District (RM-SU) The purpose of this residential district is to provide an environment suitable for a variety of moderate-density housing types, including single-family, two-family, three- to four-family and multifamily dwellings. These districts are suburban neighborhoods located along major roadways outside of the center of the City. The homes in this district are almost all served by municipal sewer and water. Some nonresidential uses that are compatible with residences are permitted, including churches, elementary schools, high schools, and child- care facilities.

(e) Urban Density Multi-Residential District (RM-U). The purpose of this residential district is to provide an environment suitable for a variety of moderate/high-density housing types, including single-family, two-family, and three- to four-family dwellings. These districts are urban neighborhoods located close to the downtown area and contain many historic homes that are built close to the sidewalks and streets. The homes in this district are all served by municipal sewer and water. Some nonresidential uses that are compatible

with residences are permitted, including churches, funeral parlors, elementary schools, high schools, and child-care facilities.

(g) Heritage Residential District (HR).

(a) These primarily residential neighborhoods surrounding the Silver Street area exhibit a rare collection of interesting architecture. While primarily Victorian and characterized by wide porches, bay windows, steep roofs, and intricate and involved woodwork, there are noteworthy Colonial buildings as well. In both instances, their original occupants were likely community leaders, whether early tavern keepers, or later senior managers and foremen from the mill facilities that lined the Cochecho River, as well as other community professionals.

(b) The common theme through all of these designs is both the massing and the placement of these structures in a manner that is compatible with what had gone before. It is the intent that in this district, new construction, replacement construction, and new additions should continue that tradition of compatibility with the existing neighborhood.

F. Nonresidential districts. The nonresidential districts are intended to provide suitable areas for commercial, service, retail, office and industrial developments, to provide employment opportunities for citizens of Dover and the region, to enhance property values, and expand the tax base. Development that uses land efficiently and has high quality design is encouraged.

(1) Commercial District (C). The purpose of this business district is to provide an environment that encourages efficient and attractive automobile-oriented commercial development along major highways outside of the downtown. The minimum lot size of 20,000 square feet encourages moderately sized commercial uses. The district provides economic development opportunities for a mix of land uses, including retail sales, personal services, restaurants, automobile sales, hotels, offices, banks, and theaters. Other commercial uses and multifamily dwellings are allowed by special exception.

(2) Commercial/Manufacturing District (CM). The purpose of this industrial district is to provide appropriate locations for manufacturing, assembly, fabrication, packaging, distribution, storage, warehousing, wholesaling and shipping activities that expand the economic base of the City and provide employment opportunities. This area is the location of one of the first industrial parks in the City, located off Littleworth Road and Knox Marsh Road in a more rural area. The smaller minimum lot size of 20,000 square feet also encourages business uses such as publishing, hotels, vehicle refueling/recharging stations, restaurants, car sales, offices, and personal services.

(3) Innovative Technology (IT). The purpose of this district is to provide appropriate locations for manufacturing, assembly, fabrication, packaging,

distribution, laboratory, testing facility, warehousing, wholesaling, publishing and shipping activities that expand the economic base of the City and provide employment opportunities. These areas are located along major collector roads away from the downtown area. The newer business parks are located in this district. The minimum lot size in this district is two acres, which encourages larger assembling and manufacturing users.

(3) Mixed-use districts. The mixed use districts are intended to provide suitable areas for a mixture of urban neighborhoods containing residential, commercial, service, retail, and office uses. The mixed-use development is intended to create a sense of community between the mixed uses and facilitate the economical and efficient use of land. The districts are intended to provide housing and employment opportunities for citizens of Dover and the region, to enhance property values, and expand the tax base. Development that uses land efficiently and has high- quality design is encouraged.

(a) Gateway (G). The purpose of this district is to mark a transition point where you move from the less developed area (the highway, the rural landscape, etc.) to a more formal, densely developed urban core (multi-story buildings, civic buildings, etc.). In Dover the primary Gateways (eg Central Avenue north and south of the downtown core, Broadway, and Portland Avenue) are generally dominated by commercial activity, with buildings of a lower height than those located downtown. Some residual residential activity occurs occasionally as stand-alone buildings, but frequently residential activity is located above ground floor commercial uses. A modest distance between the building and the street exists, with a fair amount of landscaping.

(b) Hospital (H). The purpose of the Hospital District is to provide appropriate locations for hospitals and medical offices associated with a hospital. This district also encourages other health care services and various housing facilities providing levels of service for older persons. Single- and two- family residential uses are permitted along with commercial uses such as offices, banks, funeral parlors, assembly halls, and schools.

(c) Little Bay Waterfront District (LBW). The purpose of this mixed-use district is to provide locations for a mixture of residential and commercial uses on the waterfront parcels along a portion of the shores of the Little Bay. The small minimum lot size encourages a mix of various-sized commercial uses, with water-related uses, such as marinas, specifically permitted. Single- and two-family homes are allowed in recognition of the historically residential use of the area. Three- or four-family dwellings are allowed only as part of a mixed-use building. Businesses that take advantage of the unique location along Little Bay are encouraged.

(d) Office District (O). The purpose of this Office District is to provide appropriate locations for a mixture of residential and office uses along

higher-volume streets. The remaining large historic homes are no longer suitable for single-family residential due to the high traffic. This district is a transition area between the more commercial areas and the urban residential areas on the side streets. Residential uses up to four dwelling units per structure are permitted, along with commercial uses such as offices, banks, funeral parlors, churches, schools, hospitals, nursing homes and congregate-care facilities. The density for residential uses is about eight units per acre, and in new buildings, residential is only allowed on the second floor or higher.

(e) Central Business District (CBD). The purpose of this district is to provide the appropriate locations for context-sensitive zoning. The form-based code in this district is intended to foster a vital main street both for itself and for its adjacent neighborhoods through a lively mix of uses, with shop fronts, sidewalk cafes, and other commercial uses at street level, overlooked by canopy shade trees, upper story residences and offices. The district has an increased emphasis on the form and placement of structures and a decreased emphasis on the function(s) contained within them.

(f) Cochecho Waterfront District (CWD). The purpose of this mixed use district is to provide appropriate locations for a mixture of residential and commercial uses on the waterfront parcels along the downtown portion of the Cochecho River. This district has very flexible dimensional requirements, with no minimum lot size, frontage or setback requirements and a density of 43 dwelling units per acre. Several water-related land uses are permitted in the district, including marinas, waterborne passenger transportation facilities and water-related education and resource centers. The architecture of the waterfront areas should encourage the development of marine-, history- or tourism-related land uses and activities, which take advantage of the unique characteristics of the waterfront as well as its central location and proximity to historic areas.

(4) Overriding districts. The purpose of the overriding districts is to provide an additional layer of land use regulation or protection in certain sensitive areas of the City. The requirements of these overlay districts are in addition to the underlying zoning districts. Most of the districts are intended to protect environmentally sensitive areas. For specific purpose statements, review the text of each overriding district.[47]

15. TAKES EFFECT

This ordinance shall take effect upon passage and publication of notice as required by RSA 47:18.

CITY OF DOVER

CITY OF DOVER – ORDINANCE

Ordinance Number: **O – yyyy.mm.dd -**
Ordinance Title: Updating the Dover Zoning Ordinance
Chapter: 170

AUTHORIZATION

Approved as to Funding:	Daniel R. Lynch Finance Director	Sponsored by:	Councilor Dennis Ciotti City Council Planning Board Representative
Approved as to Legal Form and Compliance:	Joshua M. Wyatt City Attorney		
Recorded by:	Susan Mistretta City Clerk		

DOCUMENT HISTORY:

First Reading Date:	Public Hearing Date:
Approved Date:	Effective Date:

DOCUMENT ACTIONS:

VOTING RECORD Date of Vote:	YES	NO
Mayor, Robert Carrier		
Deputy Mayor, Dennis Ciotti, Ward 2		
Councilor Michelle Moffet Lipinski, Ward 1		
Councilor Deborah Thibodeaux, Ward 3		
Councilor Joshua Manley, Ward 4		
Councilor Dennis Shanahan, Ward 5		
Councilor Fergus Cullen, Ward 6		
Councilor Lindsey Williams, At Large		
Councilor John O'Connor, At Large		
Total Votes:		
Resolution does | does not pass.		

ORDINANCE BACKGROUND MATERIAL:

Gateway District

The information included in this table represents the requirements for development in this district; see Section 170-20 for additional requirements (Adopted 12/9/2009 per O–2009.09.09-15, Amended 09/11/2019 per O-2019.08.28-12).

STATEMENT OF PURPOSE

A gateway is an area that marks a transition point where you move from one existing condition to another. In terms of land use, Gateways generally indicate transition points from a less developed area (the highway, the rural landscape, etc.) to a more formal, densely developed urban core (multi-story buildings, civic buildings, etc.). In Dover the primary Gateways (Central Avenue north and south of the downtown core, Broadway, and Portland Avenue) are generally dominated by commercial activity, with buildings of a lower height than those located downtown. Some residual residential activity occurs occasionally as stand-alone buildings, but frequently residential activity is located above ground floor commercial uses. A modest distance between the building and the street exists, with a fair amount of landscaping.

DIMENSIONAL REGULATIONS*

Principal Building	
Lot Size	N/A
Lot Coverage	50%
Frontage Build-Out	60% min.
Front Primary BUILD TO LINE	5 ft. min - 20 ft. max
Front Secondary BUILD TO LINE	5 ft. min - 20 ft. max
Side Setback	5 ft. min
Rear Setback	0 ft. min
Outbuilding	
Front Setback	20 ft. min + bldg. setback
Side Setback	5 ft. min
Rear Setback	10 ft. min
Private Frontages	
Common Yard	Permitted
Porch and Fence	Permitted
Terrace/Lightwell	Permitted
Stoop	Permitted
Shopfront/Awning	Permitted
Gallery	Not permitted
Height of Building	
Principal Building	4 story max, 2 story min
Outbuilding/Accessory	2 story max

**CUP (170-20B) may be used to adjust standards.*

PARKING LOCATION STANDARDS (SEE 153-14)

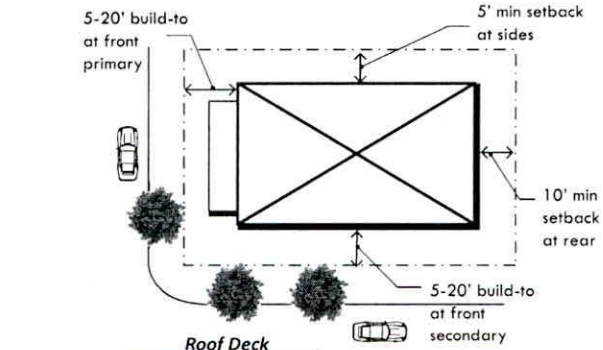
New construction resulting in additional square footage or an increase in residential units must comply with parking standards for the new portion of the building only.

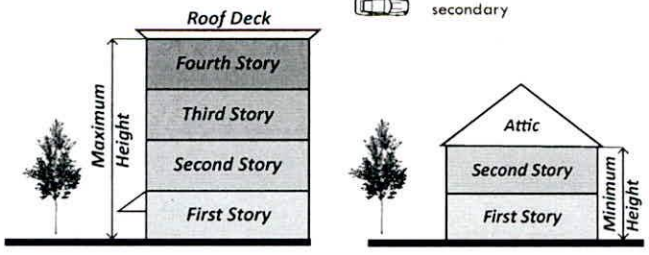
PERMITTED USES*

Use	
Residential	Permitted; density: 4,000 sf. per unit**
Lodging	Permitted, up to 12 rooms, 13+ rooms if CUP is granted.
Daycare	Adult and child permitted. Institutional not permitted.
Professional Services & Offices	Permitted
Eating & Drinking Establishments	Permitted
Retail/Personal Services	Permitted
Industrial	Permitted on Broadway via CUP
Civic	Permitted
Drive-Thru Services	Not Permitted
Other	Via Conditional Use Permit

**CUP (170-20B) may be used to adjust standards.*

PRINCIPAL BUILDING PLACEMENT





PRINCIPAL BUILDING HEIGHTS

SIGN REGULATIONS

Sign Size & Quantity	
Total signs permitted	2
Total area of all signs	24 sf
Sign Type	
Freestanding	Permitted- 16 ft. max ht. or to bottom of second floor window sills (whichever is lowest)
Projecting	Permitted- 10 ft. min. above sidewalk, 25 ft. max height, 24 sq. ft. max.
Wall/Awning	Permitted
Temporary	Permitted per- 170-32.Q (1)

ARCHITECTURAL STANDARDS*

Preserving and enhancing the architectural tradition, history, and visual appeal of the Central Business District is integral to maintaining the character and identity of our community. Buildings designs and materials should enhance the appearance of Dover, reinforce pedestrian character where appropriate, reflect a consistency found within the sub-district, neighboring buildings, and natural and cultural resources. Building design should also minimize potential aesthetic conflicts between residential and nonresidential uses and between single family and multifamily uses. Architectural Standards are not intended to stifle creativity or variety, but produce designs respectful of place and context. **For more information, please see Section 2 of Dover's CBD Architectural Design Guidelines.**

The following **Architectural Standards** must apply for a residential building with 5 units or more and all mixed use/non-residential uses. Applicants will also be expected to prepare a narrative explaining how the project meets all of the architectural standards.

Required Ground Floor Standards:

- No less than 30% of the façade shall be windows.
- A pedestrian entrance shall be required at the street side or front façade.
- Residential uses permitted.
- The use of ground floor exterior lighting on the building should offer a feeling of warm security and increase safety to pedestrians without being overwhelming.

Required Building Standards:

- Building designs shall be harmonious with neighboring structures in terms of mass, width, height, proportion, spacing, and setback.
- All exterior walls that front on a public way with adjacent pedestrian traffic/infrastructure must incorporate wood, brick, stone or a suitable contemporary material appropriately detailed within the first 20 vertical feet.
- Large structures shall be broken into smaller masses to provide human scale, variation, and depth.
- The design of the building shall incorporate views that are directed to the street and garden/courtyard rather than adjacent neighbors.
- Buildings shall be placed at or near the street, along the outer edge of their sites, to ensure the unity of those streets and to encourage and facilitate pedestrian activity.
- Building design shall enhance the pedestrian environment and streetscape.
- Utility elements shall be screened in an aesthetically pleasing manner.
- Use of architectural details and changes in depth are included on building elevations to increase visual interest and scale.
- Garages shall not face the street.
- Solar/Green Roof Standard:
  - All buildings must be solar ready
  - Commercial and mixed use buildings that are 25,000 sq ft or more must also incorporate solar panels and a green roof on at least 30 percent of the roof area.

Optional Standards:

- Use of elements that accentuate and/or provide coverage at the entry such as canopy, porch, recessed entry, etc. are encouraged.
- Ornamental roof features that exceed the allowed building height are subject to the CUP process.
- Energy efficient design techniques, LEED standards, or an equivalent standard are encouraged.
- Other integrated green infrastructure elements are encouraged.
- Approved public art is encouraged.

**CUP (170-20B) may be used to adjust standards.*

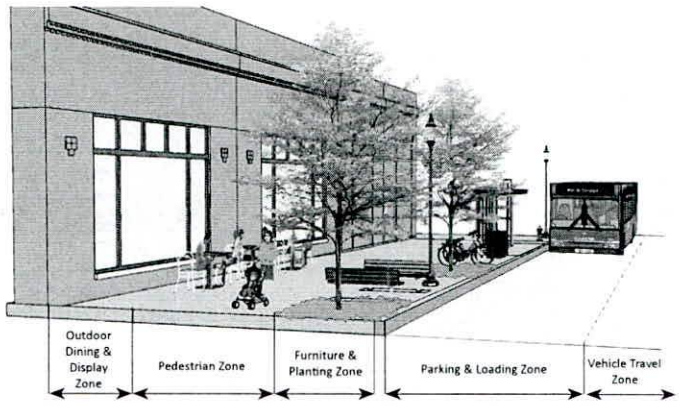
STREETSCAPE STANDARDS

Streetscape standards were crafted to ensure streets in mixed use areas of the CBD have a relationship with adjacent buildings, accommodate pedestrians and bicyclists, and are compatible with the character of Dover's neighborhoods. All street elements must be consistent with Dover Streetscape and Landscape Standards. **For more information on streetscape standards, please see Section 3 of Dover's CBD Architectural Design Guidelines.**

- Sidewalks shall be brick and a minimum of 5 feet wide.
- Street trees shall be planted at an average spacing of 25 to 30 feet on center. Planting method shall allow for maximum root zone space where possible. Existing healthy street trees shall be protected, if possible.
- Unpaved ground area along the frontage shall be planted with appropriate groundcover or shrubs, no bare ground permitted. Low Impact Development techniques such as rain gardens, bioretention areas, tree boxes and other green infrastructure techniques shall be incorporated into these landscaped areas and maintained to ensure 5' wide walkway.
- Projects shall be designed to maintain and enhance, the quality of vehicular, bicycle and pedestrian circulation and safety on affected public streets.
- Street furniture shall be provided as follows:
  - 1 bench for every 75 feet of frontage.
  - At least 1 waste bin at each block corner.
  - 1 bike rack per non-residential project.
- Lighting and mechanical equipment standards per 170-20(E)(3)(d).

**CUP (170-20B) may be used to adjust standards.*

STREETSCAPE ELEMENTS



*** Density: 3,000 sf. per unit if part of a mixed-use building with 35 percent nonresidential uses. 2,000 sf. per unit if rents conform to HUD fair market rent rates for Dover, as published by the New Hampshire Housing Finance Authority.*

Commercial (C) District

Created: MM-DD-2020 by Ord. No. 2020-MM.DD-##

Permitted Uses

- ADULT DAY CARE
- AUTO SERVICE STATION
- Bank
- Barber and Beauty Shop
- CHILD CARE FACILITY
- Clinic
- COMMERCIAL PARKING FACILITY
- COMMERCIAL RECREATION
- Computer and data processing
- Eating and Drinking Establishment [3]
- Farm
- HOTEL / MOTEL
- New Car Sales
- OFFICE
- PERSONAL SERVICE ESTABLISHMENT
- Public Utility [4]
- PUBLISHING FACILITY
- Retail Store
- Theater
- USED CAR LOT [5]
- Veterinary Office, Animal Hospital or KENNEL

Uses Permitted by Special Exception

- ADULT BOOKSTORE AND/ OR VIDEO STORE
- ADULT CABARET
- Conversion of Existing Dwelling to Accommodate not more than 2 units
- DWELLING, MULTI-FAMILY
- VEHICLE REFUELING AND RECHARGING STATION

Sign Regulations

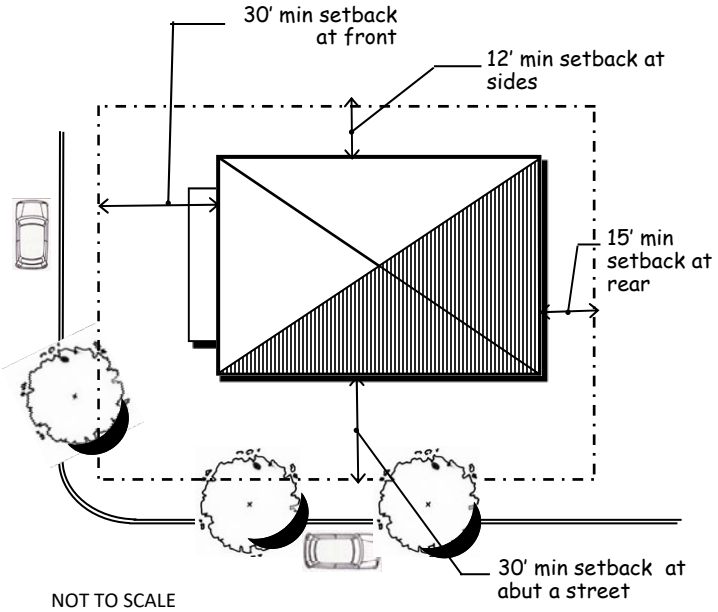
Size	C District
Total signs permitted	2 [per tenancy, and is for lot (excluding development identification signs)]
Total area permitted	2 sf for each lineal foot of business FRONTAGE (see 170-32 for regulations for businesses bordering the Spaulding Turnpike)
Type	
FREESTANDING	(Max size 60 sf, max height 16 ft. One SIGN per side of frontage. FREESTANDING signs shall be located on low planter walls or be monument SIGNS.)
PROJECTING	permitted (max size 8 sf)
WALL/ Awning	permitted (Provide building signage that is proportional to the SCALE of the tenant façade)
Temporary	permitted (max ht 4 ft, max size 32 sf)

Dimensional Regulations [1] [2]

LOT	
Minimum LOT Size	20,000 sf
Maximum COVERAGE	50%
Minimum FRONTAGE	125 ft
PRINCIPAL	
Front SETBACK	30 ft
Abut a Street SETBACK	30 ft
Side SETBACK [6]	12 ft
Rear SETBACK [6]	15 ft
OUTBUILDING/ ACCESSORY USE	
Front SETBACK	50 ft
Abut a Street SETBACK	50 ft
Side SETBACK	10 ft
Rear SETBACK	10 ft
HEIGHT OF BUILDING	
PRINCIPAL BUILDING	40 ft max
OUTBUILDING	40 ft max

***Parking areas shall be set back at least twenty-five (25) feet from property lines.**

Principal Building Placement



NOT TO SCALE

SIGNS shall be designed and located to be visible from both pedestrian and vehicular areas, and shall be designed to further the design theme of the building and be consistent with any SIGN package. Paint SIGN backgrounds and SIGN cabinets to complement building colors.)

Footnotes

[1] Refer to 170-13 and 170-14 for exceptions to lot size, frontage and setback requirements.

[2] All land containing wetlands shall not be counted in determining the gross land area of a lot for the purposes of minimum lot size or minimum density requirements for residential uses. The minimum non-wetland portion of any newly created lot shall be contiguous. For the purposes of this calculation, wetlands shall include areas that meet the definition of wetland in the NH Code of Administrative Rules – Wt. 101.87 and the 1987 Federal Manual For Identifying Jurisdictional Wetlands. [Amended 1-22-2003 by Ord. No. 35]. Wetland buffers shall only be allowed to count for 40 percent of the minimum lot size required.

[3] If the eating and drinking establishment has drive-in services, said service shall be setback either 50' from a residential abutting lot line, or 100' from the abutting residential structure whichever is greater. [Added 1-22-2003 by Ord. No. 35].

[4] The utility facility shall be appropriately fenced to protect the public. Landscaping materials shall be required to provide a visual screen from any structures and storage within. [Amended 10-28-88 by Ord. No. 18-88]

[5] Permitted if an accessory use to a new car dealership. [Amended 8-1-90 by Ord. 8-90]

[6] A vegetated buffer of no less than fifty feet (50') must be established and maintained along the C/R-12 zoning boundary abutting the southern property line of the Tax Assessor's Map 37, Lot 38. The buffer must be populated with existing vegetation, where available, and where existing vegetation is not available or not adequate, the buffer shall be improved to provide visual screening on a year-round basis for the benefit of the residential uses abutting the B-3 Zoning District. The buffer may feature new landscaping vegetation and materials, berms, fences, walls and other screening techniques, with a preference toward preserving existing healthy trees, where feasible. Buildings, impervious surfaces, mechanical equipment, parking and storage and display of goods and materials are prohibited in the buffer. Following installation, the buffer must be adequately maintained by the owner(s) of Tax Assessor's Map 37, Lot 38.

Special Exception Criteria **(see 170-52(C)(3) for additional regulations)**

ADULT BOOKSTORE AND/OR VIDEO STORE, ADULT CABARET [Added 10-20-93 by Ord. No. 28-93]: ADULT BOOKSTORE AND/OR VIDEO STORE AND ADULT CABARET shall be subject to the following conditions:

A. An ADULT BOOKSTORE, VIDEO STORE OR CABARET shall be at least 500 feet from a parcel of land containing an existing residential use.

B. An ADULT BOOKSTORE, VIDEO STORE OR CABARET shall be at least 1000 feet from a parcel of land containing a school, church, community park or public recreational area.

C. No ADULT BOOKSTORE, VIDEO STORE OR CABARET shall be permitted within 1000 ft. of an existing similar use.

D. The proposed use shall comply with all other state statutes, and city ordinances and codes.

DWELLING, MULTI-FAMILY: Provided that the lot contain at least five thousand (5,000) square feet for each dwelling unit. Dwelling units are allowed only in mixed use buildings, where 35% of the overall square footage of the building is non-residential.

VEHICLE REFUELING/RECHARGING STATIONS:

A. The use of land for VEHICLE REFUELING/RECHARGING STATION may only be permitted upon the determination that the property values of adjacent land will not be compromised. Any vehicle refueling/ recharging station which discontinues operations for a period in excess of one hundred eighty (180) days shall be required to file a new application for a special exception with the Zoning Board of Adjustment. Such conditions may include, but need not be limited to, the provision of adequate and properly maintained screening around land so used.

B. The minimum lot size shall be eighty thousand (80,000) square feet; the minimum lot width shall be one hundred fifty (150) feet. Thirty three percent (33%) of the subject parcel shall be open/green space.

C. The total permitted sign area shall not exceed one-hundred (100) square feet, inclusive of the canopy and fueling equipment.

D. If a drive-in thru service is proposed, said facility shall be setback either fifty (50) feet from a residential abutting lot or one-hundred (100) feet from the abutting residential structure, whichever is greater. Additionally, adequate vegetative or fence screening shall be constructed. Audible ordering system design features shall include, but not be limited to; non-audible ordering systems (touchpad or human contact) shall be utilized, and hours of operation for the drive-in portion of the business shall be limited to 6:00 a.m. to 9: 00 p.m.

E. No fuel storage tanks may be constructed or enlarged closer than one-hundred (100) feet to any Conservation District, and two hundred (200) feet to a secondary groundwater protection zone.

Commercial Manufacturing (CM) District

Created: MM-DD-2020 by Ord. No. 2020-MM.DD-##,

Permitted Uses

- ADULT DAY CARE
- CHILD CARE FACILITY
- COMMERCIAL RECREATION
- Eating and Drinking Establishment [5]
- Establishments for the manufacture assembly, services and repair of the products listed below and other uses of a similar nature:
  - ◊ Drugs
  - ◊ Office, computing and accounting machines
  - ◊ Radio and television receiving equipment Communication equipment
  - ◊ Electronic components and Engineering, laboratory, scientific and research instruments and associated equipment
  - ◊ Measuring and controlling instruments
  - ◊ Optical instruments and lenses
  - ◊ Surgical, medical and dental instruments and supplies
  - ◊ Photographic equipment and supplies
  - ◊ Electrotherapeutic, electro-medical and X-ray apparatus
- FARM [6]
- Fuel, Oil, or Gas Storage
- Helicopter Take Offs & Landings [7]
- HOTEL/MOTEL
- Industry
- LIGHT INDUSTRY
- OFFICE
- Open Storage [8]
- PERSONAL SERVICE ESTABLISHMENT
- Public Utility
- PUBLISHING FACILITY
- Research Institutions
- Retail Sale of Agricultural or Farm Products Raised on Site
- Trucking Terminal
- WAREHOUSING
- WHOLESALING

Uses Permitted by Special Exception

- AUTO SERVICE
- VEHICLE REFULING AND RECHARGING STATION

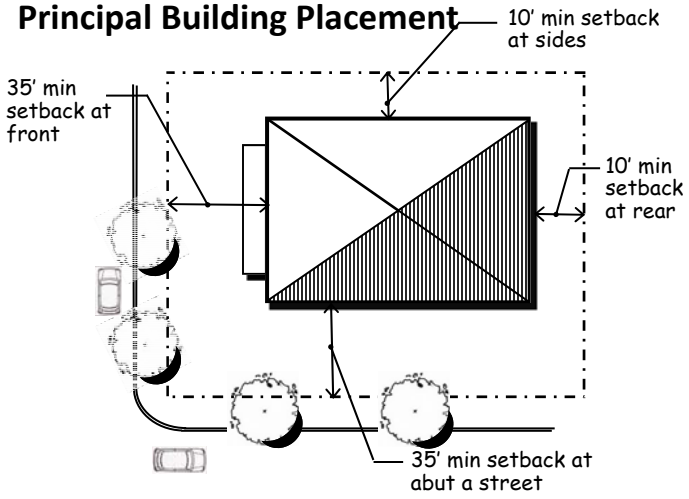
Uses Permitted by Conditional Use

- Alternative Treatment Center
- Educational Institution, Post Secondary
- Hotel/Motel
- SELF-SERVICE STORAGE FACILITY

Dimensional Regulations [1] [2]

LOT	
Minimum LOT Size	20,000 sf
Maximum LOT COVERAGE	50%
Minimum FRONTAGE	100 ft
PRINCIPAL BUILDING	
Front SETBACK [3]	35 ft
Abut a Street SETBACK	35 ft
Side SETBACK	10 ft
Rear SETBACK	10 ft
OUTBUILDING/ACCESSORY USE	
Front SETBACK	35 ft
Abut a Street SETBACK	35 ft
Side SETBACK	10 ft
Rear SETBACK	10 ft
BUILDING HEIGHT	
PRINCIPAL BUILDING [4]	50 ft max
OUTBUILDING/ACCESSORY USE	40 ft max

Principal Building Placement



NOT TO SCALE

Sign Regulations

Size	CM District
Total SIGNS permitted	2 [per tenancy, and is for lot (excluding development identification signs)]
Total area permitted	1 sf for each 100 sf of leased space (if less than 700 sf of leased space, then 6 sf max)
Type	
FREESTANDING	permitted, provided that the principal building is set back at least 35 ft (max size 100 sf, max ht 30 ft)
PROJECTING	permitted
WALL/ Awning	permitted
Temporary	permitted

Footnotes

[1] Refer to 170-13 and 170-14 for exceptions to lot size, frontage and setback requirements.

[2] All land containing wetlands shall not be counted in determining the gross land area of a lot for the purposes of minimum lot size or minimum density requirements for residential uses. The minimum non-wetland portion of any newly created lot shall be contiguous. For the purposes of this calculation, wetlands shall include areas that meet the definition of wetland in the NH Code of Administrative Rules – Wt. 101.87 and the 1987 Federal Manual For Identifying Jurisdictional Wetlands. [Amended 1-22-2003 by Ord. No. 35]. Wetland buffers shall only be allowed to count for 40 percent of the minimum lot size required.

[3] The maximum building heights may be increased to seventy- five (75') feet provided the following conditions are met:

A. The additional building height above fifty (50') feet is necessary to meet an industrial function.

B. The building is located a minimum of 150 feet from a Residential District.

C. The Planning Board has granted preliminary approval to the development proposal containing the taller building.

D. The building is for a permitted use, and not one granted by special exception, conditional use permit or variance.

[5] If the eating and drinking establishment has drive-in services, said service shall be setback either 150' from a residential abutting lot line, or 200' from the abutting residential structure whichever is greater.

[6] Shall not include the raising and sale of FARM ANIMALS; the breeding, boarding, and training of equines, and equine riding instruction; the commercial raising, harvesting, and sale of fresh water fish or other aquaculture products; and/or the breeding of poultry or game birds.

[7] Helicopter take offs and landings are allowed subject to the following conditions:

A. There shall be a distance of one thousand (1,000) feet between any existing residential structure and any proposed helicopter landing pad.

B. Except in the case of an emergency, no helicopter take offs or landings shall occur between the hours of 9:00 p.m. and 7:00 a.m.

C. The facility shall be accessory to the principal use located on the lot.

D. All facilities shall be located and designed so that the operation thereof will not adversely affect adjacent residential areas, particularly with respect to noise levels.

[8] Provided that safety precautions be implemented so to prevent the endangerment of people and property adjacent to said storage. Screening, of at least six (6) feet in height, of all open storage shall be accomplished through use of a fence, wall or vegetal (evergreens) material.

Special Exception Criteria **(see 170-52(C)(3) for additional regulations)**

VEHICLE REFUELING AND RECHARGING and AUTO SERVICE STATIONS:

A. The use of land for a VEHICLE REFUELING AND RECHARGING and AUTO SERVICE STATION may only be permitted upon the determination that the property values of adjacent land will not be compromised. Any VEHICLE REFUELING AND RECHARGING and AUTO SERVICE STATION which discontinues operations for a period in excess of ninety (90) days shall be required to file a new application for a special exception with the Zoning Board of Adjustment. Such conditions may include but need not be limited to the provision of adequate and properly maintained screening around land so used.

B. The minimum lot size shall be eighty thousand (80,000) square feet, the minimum lot width shall be one hundred fifty (150) feet. Thirty-five percent (25%) of the subject parcel shall be open/green space. The total permitted sign area shall not exceed one hundred (100) square feet.

Conditional Use Permit Criteria

An *Alternative Treatment Center*, as defined in RSA 126:X-1, I, shall be allowed if a Conditional Use Permit is granted by the PLANNING BOARD upon a finding that the following criteria are met:

A. An Alternative Treatment Center shall not be located within one thousand (1,000) feet of the property line of a public or private elementary or secondary school or designated drug free school zone.

B. The Alternative Treatment Center shall be located in a permanent BUILDING and may not be located in a trailer, MANUFACTURED HOME, cargo container, or any STRUCTURE that has axles with wheels. DRIVE-IN SERVICEs are prohibited.

C. Hours of operation shall be limited to 9 am to 9 pm, Monday through Friday, and 10 am to 6 pm on Saturday and Sunday.

D. The Alternative Treatment Center shall provide for the proper disposal of cannabis remnants or byproducts, which remnants or byproducts shall not be placed in the facility's exterior refuse containers.

E. The APPLICANT shall provide a detailed narrative and floor plan, as well as any other relevant documentation, describing how the Alternative Treatment Center shall be secured. The security plan must take into account the measures that will be taken to ensure the safe delivery of any product to the facility (including permitted times for delivery), how the product will be secured on site, and how patient transactions will be facilitated in order to ensure safety. The security plan shall be reviewed and approved by the City of Dover Police Department.

F. The use of cannabis on the premises is prohibited.

G. The Alternative Treatment Center shall emit no cannabis related fumes, vapors or odors which can be smelled or otherwise perceived from beyond the LOT LINEs of the property where the facility is located.

SELF-SERVICE STORAGE FACILITY shall be allowed if a Conditional Use Permit is granted by the PLANNING BOARD upon a finding that the following criteria are met:

A. The minimum front SETBACK shall be double the SETBACKs required in the district.

B. Any storage unit BUILDING visible from the STREET shall be located to be perpendicular to the STREET, with no storage unit doors facing the STREET.

C. If adjacent to a residential district or a LOT containing a residential use, the facility shall:

i. Be limited to a one story STRUCTURE with a height no more than twenty (20) feet.

ii. Restrict the hours of operation to 9 am to 9 pm, Monday through Friday, and 10 am to 6 pm on Saturday and Sunday.

iii. Not hold auctions or sales of contents of storage containers.

iv. Have screening sufficient to block the view of the BUILDINGS from abutting parcels and shall prohibit lighting from shedding onto abutting parcels.

v. All setbacks shall be double the setbacks required in the district, not just the front setback.

D. The architectural design standards of Chapter 149-14L (8) (b) shall be adhered to.

Innovative Technology (IT) District

Created: MM-DD-2020 by Ord. No. 2020-MM.DD-##

Permitted Uses [10] [11] [12] [13] [14]

- Adult Day Care
- CHILD CARE FACILITY
- Computer and data processing
- Eating and Drinking Establishments [7]
- Establishments for the manufacture assembly, services and repair of the products listed below and other uses of a similar nature:
  - ◊ Drugs
  - ◊ Office, computing and accounting machines
  - ◊ Radio and television receiving equipment Communication equipment
  - ◊ Electronic components and Engineering, laboratory, scientific and research instruments and associated equipment
  - ◊ Measuring and controlling instruments
  - ◊ Optical instruments and lenses
  - ◊ Surgical, medical and dental instruments and supplies
  - ◊ Photographic equipment and supplies
  - ◊ Electrotherapeutic, electro-medical and X-ray apparatus
- EXCAVATION
- FARM [8]
- Laboratories (scientific, medical chemical) and testing facilities devoted to experimental production, research, product development or similar activity
- OFFICE
- Public Utility [9]
- PUBLISHING FACILITY
- Veterinary Office, Animal Hospital or KENNEL [10]
- WAREHOUSING
- WHOLESALING

Dimensional Regulations [1] [2]

LOT	
Minimum LOT Size [3]	2 acres
Maximum LOT COVERAGE [4]	33%
Minimum FRONTAGE	200 ft [3]
PRINCIPAL BUILDING	
Front SETBACK [5]	50 ft
Abut a Street SETBACK	50 ft
Side SETBACK	50 ft
Rear SETBACK	50 ft
OUTBUILDING/ACCESSORY USE*	
Front SETBACK	50 ft
Abut a Street SETBACK	50 ft
Side SETBACK	10 ft
Rear SETBACK	10 ft
HEIGHT OF BUILDING	
PRINCIPAL BUILDING [6]	55 ft max
OUTBUILDING	55 ft max

***Parking areas shall be set back at least twenty-five (25) feet from property lines. [Added 7-8-87 by Ord. No. 15-87]**

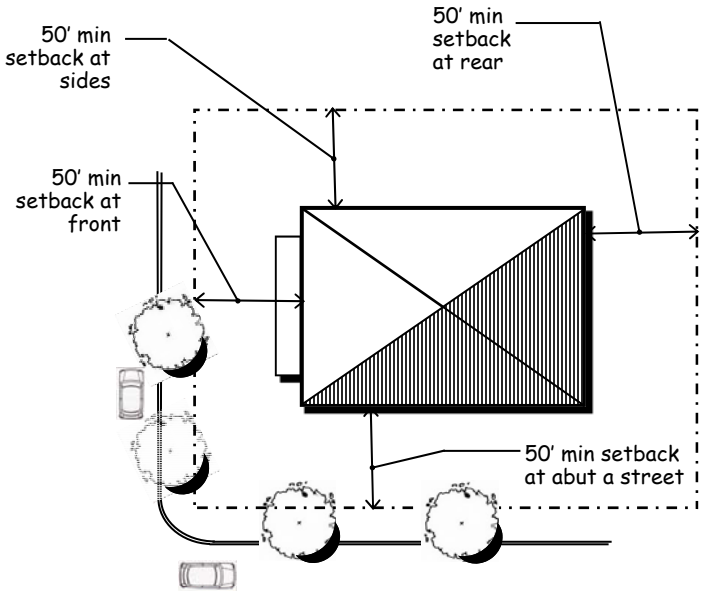
Uses Permitted by Conditional Use

- Educational Institution, Post Secondary
- Helicopter Take Offs & Landings
- Personal Service Establishment
- SELF-SERVICE STORAGE FACILITY

Sign Regulations

Size	IT District
Total signs permitted	2 [per tenancy, and is for lot (excluding development identification signs)]
Total area permitted	1 sf for each lineal foot of business FRONTAGE (see 170-32 for regulations for businesses bordering the Spaulding Turnpike)
Type	
FREESTANDING	permitted, provided that the principal building is setback at least 75 ft (max ht 16 ft, max size 100 sf)
PROJECTING	Not permitted
WALL/ Awning	permitted
Temporary	permitted

Principal Building Placement



NOT TO SCALE

Footnotes

[1] Refer to 170-13 and 170-14 for exceptions to lot size, frontage and setback requirements.

[2] All land containing wetlands shall not be counted in determining the gross land area of a lot for the purposes of minimum lot size or minimum density requirements for residential uses. The minimum non-wetland portion of any newly created lot shall be contiguous. For the purposes of this calculation, wetlands shall include areas that meet the definition of wetland in the NH Code of Administrative Rules – Wt. 101.87 and the 1987 Federal Manual For Identifying Jurisdictional Wetlands. [Amended 1-22-2003 by Ord. No. 35]. Wetland buffers shall only be allowed to count for 40 percent of the minimum lot size required.

[3] Not applicable to lots off internal or private roadways

[4] At least thirty-three percent (33%) of the site shall be maintained as open space, either landscaped or left natural. A maximum of thirty-three percent (33%) of the site can be covered by buildings. [Added 10-26-88 by Ord. No. 18-88]

[5] See Section 170-15.

[6] The maximum building heights may be increased to seventy- five (75') feet provided the following conditions are met:

A. The additional building height above fifty (50') feet is necessary to meet an industrial function.

B. The building is located a minimum of 200 feet from a Residential District.

C. The Planning Board has granted preliminary approval to the development proposal containing the taller building.

D. The building is for a permitted use, and not one granted by special exception, conditional use permit or variance.

[7] No Drive Thru Allowed

[8] Where FARM ANIMALS are raised and boarded, shelters to house said animals shall not be less than one hundred (100) feet from any property boundary.

[9] The utility facility shall be appropriately fenced to protect the public. Landscaping materials shall be required to provide a visual screen from any structures and storage within. [Amended 10-28-88 by Ord. No. 18-88]

[10] Shelters and runs used to house and/or contain animals shall be no closer than one hundred (100) feet from any property line and must support a minimum tract size of one hundred thousand (100,000) square feet. [Amended 8-1-90 by Ord. 8-90]

[11] Parking areas shall be screened from public streets and existing residential uses so as to minimize the visibility of such areas. Screening may consist of vegetation, earth berms, fencing or any combination of the above.

[12] The allowed activities shall not be obnoxious or offensive by reason of emission of dust, odor, smoke, gas, noise or similar cause. Prior to site plan approval, the applicant shall submit evidence to the Planning Board identifying waste products to be generated by on-site activities. A plan for removal of the waste shall be approved by the Planning Board. Developments that will use, store or generate hazardous chemicals shall identify such chemicals prior to site plan approval. A plan for storage and use of hazardous chemicals shall be approved by the Planning Board. Plans pertaining to waste or hazardous chemicals shall verify compliance with applicable federal, state and local regulations.

[13] A residential structure located within the Innovative Technology District and existing prior to 7-8-1987 may be increased up to twenty percent (20%) of the gross floor area of habitable space. New dwelling units shall not be allowed. Furthermore, customary accessory structures shall be allowed within the Innovative Technology District, but must remain within seventy-five (75) feet of the nonconforming residential structure.

[14] Development within the IT District shall conform to design standards contained in Chapter 153, entitled Site Review, Chapter 153-15.

Conditional Use Permit Criteria

The following uses shall be allowed if a Conditional Use Permit is granted by the PLANNING BOARD upon a finding that the following criteria are met:

Self Storage Facility

A. The minimum front SETBACK shall be double the SETBACKs required in the district.

B. Any storage unit BUILDING visible from the STREET shall be located to be perpendicular to the STREET, with no storage unit doors facing the STREET.

C. If adjacent to a residential district or a LOT containing a residential use, the facility shall:

i. Be limited to a one story STRUCTURE with a height no more than twenty (20) feet.

ii. Restrict the hours of operation to 9 am to 9 pm, Monday through Friday, and 10 am to 6 pm on Saturday and Sunday.

iii. Not hold auctions or sales of contents of storage containers.

iv. Have screening sufficient to block the view of the BUILDINGS from abutting parcels and shall prohibit lighting from shedding onto abutting parcels.

D. The architectural design standards of Chapter 149-14L (8) (b) shall be adhered to.

Helicopter take offs and landings:

A. There shall be a distance of one thousand (1,000) feet between any existing residential structure and any proposed helicopter landing pad.

B. Except in the case of an emergency, no helicopter take offs or landings shall occur between the hours of 9:00 p.m. and 7:00 a.m.

C. The facility shall be accessory to the principal use located on the lot.

D. All facilities shall be located and designed so that the operation thereof will not adversely affect adjacent residential areas, particularly with respect to noise levels.

Educational Institution, Post Secondary: The school is a trade/vocational/career technical school

F. The school is accredited by the State of New Hampshire

Personal Service Establishments:

A. The use is part of a larger retail/office or service center

B. The use is complimentary to the adjacent advanced manufacturing or assembly uses