CITY OF DOVER

DOVER PLANNING BOARD – AGENDA

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall, 288 Central Avenue, Dover, NH 03820
Meeting Date: **Tuesday, April 23, 2024**
Meeting Time: **7:00 pm**

1. **CITIZENS' FORUM**
2. **APPROVAL OF THE PRIOR MINUTES**
   - April 9, 2024 Regular Meeting Minutes
3. **OLD BUSINESS**
4. **NEW BUSINESS**

   A. Consideration and acceptance of a Lot Line Adjustment for Peter and Kimberly Clairmont, Assessor's Map J, Lots 29 and 29-2, zoned R-40, located at 303 Old Garrison Road & Old Garrison Road. *(LOTA-2024-0004)

   B. Consideration and acceptance of an Extension Request for an approved Site Review Plan for Harlech, LLC, Assessor's Map 31, Lot 5, zoned CBD-TOD, located at 47 Chestnut Street. (Proposal is to extend the period of time to seek financing). *(WAIV-2024-0005)

   C. Consideration and acceptance of a Conditional Use Permit for Future Automations, Inc. (Owner: DBIDA), Assessor's Map D, Lot 11-8, zoned IT, located at Quality Way. (Proposal is for the construction of two (2) commercial buildings with 1,631 s.f. of wetland impact and 39,820 s.f. of wetland buffer impact). *(COND-2024-0005)

   D. Consideration and acceptance of a Site Review for Future Automation, Inc. (Owner: DBIDA), Assessor's Map D, Lot 11-8, zoned IT, located at Quality Way. (Proposal is to construct a light manufacturing facility consisting of two (2) buildings 24,000 s.f and 10,000 s.f, each with office space, and associated infrastructure.) *(SITE-2024-0002)

   E. Consideration and acceptance of a Conditional Use Permit Stonefield Engineering & Design (Owners: Dover Retail Management, LLC & R W Realty Inc), Assessor's Map 38, Lots 15-A and 15-B, zoned C, located at 1-3 Webb Place and Webb Place. (Proposal is for additional parking beyond the maximum allowed). *(COND-2023-0054)

   F. Consideration and acceptance of a Site Review for Stonefield Engineering & Design (Owners: Dover Retail Management, LLC & R W Realty Inc.), Assessor's Map 38, Lots 15-A and 15-B, zoned C, located at 1-3 Webb Place and Webb Place. (Proposal is for demolition of current building and constructing a 3,300-sf bank with a drive through ATM, (20) twenty parking spaces). *(SITE-2023-0011)

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. The public is encouraged to leave comments in advance by emailing Dover-Planning@dover.nh.gov, or mailing written comments to Planning Board, Dover City Hall, 288 Central Ave., Dover, NH 03820. Messages must be received no later than 4 p.m. the day of the meeting and should identify the name and Dover address of the person leaving the message or providing the comment.

CITY OF DOVER

DOVER PLANNING BOARD – MINUTES

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Ave, Dover, NH.
Meeting Date:	**Tuesday, April 9, 2024**
Meeting Time:	**7:00 pm**

Members Present: Mark Speidel (Vice Chair), Kyle Pimental, Fergus Cullen (Councilor), Ken Mavrogeorge, Tom Clark, Jeff Sanborn (Alternate)
Members Not Present (excused): Gina Cruikshank (Chair), Jon Elliard, George DeBoer, Erinn Kaspari, Melina Gambino (Alternate)
Members Not Present (un-excused): None
Staff Present: Donna Benton, Director of Planning and Community Development and Dave Carpenter, Community Development Planner

M. Speidel called the meeting to order at 7 p.m and noted he would be chairing, K. Pimental would be Vice Chairing, and J. Sanborn would sit for E. Kaspari.

1. CITIZENS' FORUM

Citizens Forum Open
No one spoke
Citizens Forum Closed

2. APPROVAL OF THE PRIOR MINUTES

- March 12, 2024 Regular Meeting Minutes

Motion T. Clark moved to approve the regular meeting minutes of March 12, 2024 as submitted. Seconded by: J. Sanborn. Vote: U/A

3. OLD BUSINESS

A. Consideration and possible vote on the proposed Amendments regarding the make-up the Technical Review Committee, Chapter 153-6 (Site Plan Regulations). The full text of the amendments is available in the Planning Department & at City of Dover, NH - Official Website located under meeting materials and on the Planning Department page*.

B. Consideration and possible vote on the proposed Amendments regarding the Technical Review Committee definition, Chapter 157-60 (Subdivision Regulations). The full text of the amendments is available in the Planning Department & at City of Dover, NH - Official Website located under meeting materials and on the Planning Department page*.

Motion T. Clark moved to remove the item from the table. Seconded by: J. Sanborn. Vote: U/A

F. Cullen arrived at this time.

D. Benton explained the reason for the proposed amendments, procedures and next steps, and itemized each proposed change for the board.

Public hearing opened.
No one spoke
Public hearing closed.

Motion: T. Clark moved to approve the proposed Amendments in Item A as presented regarding the make-up of the TRC. Seconded by: K. Mavrogeorge. Vote: U/A
Motion: T. Clark moved to approve the proposed Amendments in Item B as presented regarding the definition of the TRC. Seconded by: K. Mavrogeorge. Vote: U/A

4. NEW BUSINESS

A. Consideration and acceptance of an Amendment for Dover Housing Authority, Assessor's Map 33, Lot 1-A, zoned RM-U, located at 48 Whittier Street. (Proposal is to extend the building 8' towards Whitter Street and amend the architecture design). *(WAIV-2024-0003)

D. Benton explained that the Board previously approved the applicant's proposal for a six-unit multi-family housing structure that includes four TDR units. The applicant now seeks to obtain an amendment to their approved site plan to reduce the front building setback to 10 feet, from the approved 18 feet, in order to extend the building 8 feet towards Whitter Street. This request is to support an increased footprint of the building from 1,768 square feet to 1,976 square feet, change the architecture and some minor site design changes.

The previous approval included a waiver granted for the 30' no-cut, no-disturb buffer which still applies. The applicant is seeking a waiver for aisle width to be 20', instead of 24', as required in Section 153-14.D(6)(b).

Christopher Berry, Berry Surveying and Engineering, represented the application noting the application was approved in 2022. The building style has changed- gotten longer- therefore the request to be closer to the roadway; some architectural features have been removed and some added; the color has changed, but the style is still the same general style as approved. The 20' aisle way was always part of the proposal, but recently realized a waiver is required for that.

Motion: T. Clark moved to accept the application and declared no regional impact. Seconded by: F. Cullen. Vote: U/A

Public hearing opened.
No one spoke
Public hearing closed.

Ryan Crosby, Executive Director of the Dover Housing Authority noted there are specific criteria to meet for funding which is why they had to increase the size of the units minimally and adjust the total building size. Funding is coming from the NH Housing Supportive Housing Initiative. This project is specifically for permanent housing for survivors of domestic violence in partnership with Haven.

STAFF RECOMMENDATION - Waivers:
The applicant is requesting the Board grant the following waiver:

- Waiver from parking aisle width 153-14.D(6)(b)

§153-21 of the Site Plan Review Regulations states the "Planning Board may waive specific provisions of these regulations. The Planning Board may only grant a waiver if the Planning Board finds, by majority vote, that:

(1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary
to the spirit and intent of the regulations; or
(2) Specific circumstances relative to the subdivision, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations."

Planning Staff finds the waiver requests for parking aisle width reasonable to reduce impervious surface and criterion 2 has been met.

DRAFT

The Planning Department recommends the Planning Board vote to approve the waiver.

Motion: T. Clark moved grant the waiver and found the criteria of §153.21 have been met. Seconded by: F. Cullen Vote: U/A

STAFF RECOMMENDATION – Site Plan:
Chapter 153-4 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.

The Planning Department recommends the Planning Board make findings and vote to approve the Site Plan with the following subsequent conditions as the plans meet the standards outlined:

Subsequent Condition to Be Met Prior to Signing of Plans:

1. Revise plan to:
    a. Combine architectural plan set with civil plan set.
    b. Add owner's signature
    c. Add architect stamp and signature to Architectural Plan Set.
    d. Update streetscape to correct curbing and provide for accessibility, add crosswalk, trees, mail kiosk, etc. to match plan

Conditions to Be Met Prior to Building Permit:

2. Payment of the water/sewer fees at time or request of service.
3. Development agreement has been recorded.
4. Construction sign with hours of operation has been installed to the satisfaction of the City Engineer and Planning Director.

Conditions to Be Met Prior to Occupancy:

5. Issuance of Certificate of Occupancy.
6. Payment of Impact Fees as noted in the invoice attached to the Decision Letter, unless a decision is made to pause impact fees.
7. Surety or other form of security acceptable to the City is provide for any unfinished work.

Motion: T. Clark moved to approve the site plan with subsequent conditions and found the application to meet the required land use regulations. Seconded by: K. Mavrogeorge.
K. Pimental asked if the reason for the crosswalk to safely cross to the community trail. C. Berry explained the crosswalk isn't changing, staff is asking for the streetscape to be updated to show all of those elements.
Vote: U/A

B. A Public Hearing for the purpose of receiving public input regarding the City's CDBG program, the development of a new CDBG Consolidated Plan, and issues, needs and opportunities related to, but not limited to, efforts to Affirmatively Further Fair Housing, Economic Development, Public Improvements, Housing, Supportive Services and Transportation. Information received will be used to help develop Dover's FY26-30 Consolidated Plan. The Consolidated Plan serves as the guiding document for identifying priority issues to be addressed through annual CDBG funding. *

D. Carpenter explained that the City of Dover must create and adopt a five-year Consolidated Plan in order to implement the Community Development Block Grant (CDBG) program. To begin the process of creating the FY26-30 Consolidated Plan, a Public Hearing is held to receive public input regarding issues to be

considered for inclusion in the FY26-30 Consolidated Plan. There will be additional opportunities for the public to provide input throughout the year.

Board members asked clarifying questions and gave opinions on the topic including:

- K. Pimental: allocation of funds- more funds to less projects vs less funds to more groups
- K. Pimental: advocated for weatherization projects
- M. Speidel: ancillary funding that supports housing such as needs for sporting equipment for families
- K. Mavrogeorge: business development- are solutions for gaps in community development being sought

Public hearing opened.
No one spoke
Public hearing closed.

5. STAFF COMMENTS

- The Office of Planning and Development is holding their annual virtual conference on May 11. If anyone is interested in attending, let staff know.
- D. Benton shared information about the Conservation and Open Space Chapter update of the Master Plan as part of the First Five Minutes for Dover's Conservation and Open Space Priorities. The City, along with the project Steering Committee, is working with Resilience Planning & Design on the update. The purpose of this project is to ensure that the City's desire for conservation and open space lands is aligned with current environmental and community needs. The resulting chapter will then guide implementation efforts over the next decade along with the recently adopted Vision Chapter.
- Board Members are encouraged to share the webpage for the Master Plan update project on the City website, which features a feedback form, and to share and participate in the Natural Resource Inventory survey being conducted by SRPC.
- D. Benton shared that SRPC is also conducting a housing needs survey for Dover that Board Members are encouraged to participate in and share.
- TRCs since last meeting:
    - Site Review for Future Automation. LLC (Owners: DBIDA), Assessor's Map D, Lot 11-8, zoned IT, located at Quality Way. (Proposal is to construct a light manufacturing facility consisting of two buildings 24,000 s.f and 10,000 s.f, each with office space, and associated infrastructure.) (SITE-2024-0002)
    - Site Review for 17-19 Summer Street Properties, LLC, Assessor's Map 12, Lot 35-1, zoned HR, located at Locust Street. (Proposal is to build a 2,400 s.f. residential building consisting of (4) four, (2) two bedroom units, improved driveway access, parking, utilities and drainage improvements.) (SITE-2024-0003)
    - Amendment for Downtown Dover Storage, LLC, Assessor's Map 4, Lot 5, zoned CBD-G, located at 14 Broadway. (Proposal is to construct a 14,770 s.f. 4-story residential building with 38 units with revised covered parking and relocating internal staircase.) (WAIV-2024-0004)
    - Site Review for Stonefield Engineering & Design (Owners: Dover Retail Management, LLC & R W Realty Inc.), Assessor's Map 38, Lots 15-A and 15-B zoned Commercial, located at 1-3 Webb Place and Webb Place. (Proposal is for demolition of current building and constructing a 3,300-sf bank with a drive through ATM, (20) twenty parking spaces. One (1) related Conditional Use

Permit application would also appear before the Planning Board. (SITE-2023-0011 & COND-2023-0054)

- TRCs coming up:
  - Conditional Use Permit for Granite State Gas Transmission, Unitil (Owners: Dover Point Cooperative, Inc), Assessor's Map M, Lot 47-C, zoned R-12, located at 1 Polly Ann Trailer Park. (Proposal is the replacement of gas pipe section that will cause 17,015 s.f of impacts to wetlands.) (COND-2024-0004)

6. MEMBER COMMENTS

- The Chair signed the following plans:
  - Lot Line Adjustment Porch Light Drive
  - Site Plan for new COAST facilities at 42 Sumner Dr.
  - Site Plan for VC Dover mixed-used development at 30 Grapevine Dr.
- The Chair will soon signed a Lot Merger form from 256-264 Central LLC.

7. ADJOURNMENT

Motion: K. Mavrogeorge moved to adjourn at 7:50pm. Seconded by K. Pimental. Vote: U/A

DRAFT

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #LOTA-2024-0004

Application Type:	Lot Line Adjustment
Applicant(s):	Peter & Kimberly Clairmont c/o: Berry Surveying & Engineering
Owner(s):	Peter & Kimberly Clairmont c/o: Berry Surveying & Engineering
Location:	303 Old Garrison Road (Map J, Lots 29 & 29-2)
Meeting Date:	Tuesday, April 23, 2024

INTENT: To revise the lot lines between abutting properties, located at 303 Old Garrison Road (Map J, Lot 29) and a neighboring vacant parcel (Map J, Lot 29-2), adding approximately 57,188 sf. from Lot 29 to Lot 29-2, leaving Lot 29 with 452,385 sf. and Lot 29-2 with 147,829 sf.

LOTS/UNITS PROPOSED: N/A

AGENDA ITEM #: 4-A

FILE: LOTA-2024-0004

SQUARE FOOTAGE:
Existing/Proposed
Lot 29 = 509,573 / 452,385 sf.
Lot 29-2= 90,641 / 147,829 sf.

ZONING DISTRICT: R-40

EXISTING USE: Residential

PROPOSED USE: No change

SURROUNDING: Residential

ZBA ACTION: None

ATTACHMENTS: Lot Line Adjustment Plan

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail for this meeting.

PERMITS / WAIVERS REQUIRED:
None

Summary of Request and Background
The applicants are submitting a proposed lot line revision to revise the line between two congruent parcels they own, Map J, Lots 29 & 29-2 with the intent of to increasing the lot size and frontage of Lot 29-2. Each lot will remain compliant with the underlying zoning district

As a Lot Line Adjustment, this application did not appear before the TRC.

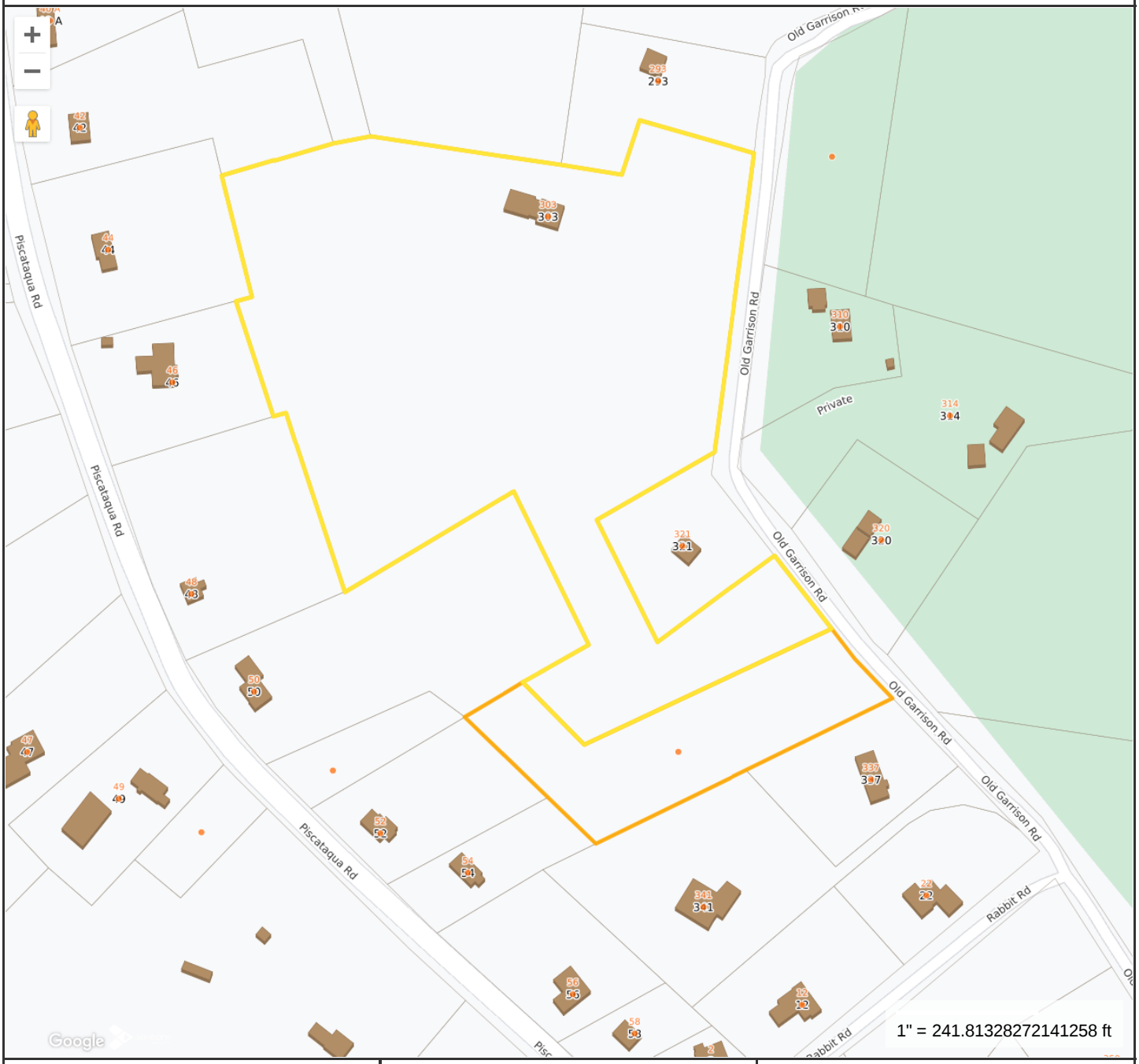
The post-adjustment area of Lot 29 will be 452,385 +/- sq. ft. and Lot 29-2 will be 147,829 +/- sq. ft., conditional upon the applicant submitting a Lot Line Adjustment Plan and necessary application materials to the City to be reviewed by this board.

Consistency with Land Use Regulations
Chapter §157-17 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 the Planning Board accept the application, open the public hearing, make findings, and vote to approve the application with the following subsequent conditions:

Subsequent Conditions to Be Met Prior to Signing of Plans:
1. Provide physical and digital copies (including CAD) of complete plan set for recording at Strafford County Registry of Deeds which additionally shall include:
   a. Planning File Number #LOTA-2024-0004
   b. The owner's signatures
   c. The LLS stamp and signature

LOTA-2024-0004 303 Old Garrison Road & Old Garrison Road



Property Information

Location	303 OLD GARRISON RD
Owner	CLAIRMONT KIMBERLY &
Land Use	
Zoning Code	R-40
Property Id	J0029-000000

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 10/30/2023
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

PLAN SNAPSHOT REPORT LOTA-2024-0004
FOR CITY OF DOVER, N.H.

Plan Type:	Lot Adjustment	**Project:**		**App Date:**	04/03/2024
Work Class:	Lot Line Adjustment	**District:**	None	**Exp Date:**	06/07/2024
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: Revise the Line Between Lot 29 and 29-2 to increase the size of Lot 29-2

Parcel:	J0029-002000	**Address:**	Old Garrison Rd Dover, NH	**Zone:** R-40(Residential - Rural)
	J0029-000000 Main		303 Old Garrison Rd Main Dover, NH	

Applicant
Berry Surveying & Engineering
335 Second Crown Point Road
Barrington, NH 03825
Business: (603) 332-2863
Mobile: (603) 781-3403

Owner
Kimberly & Peter Clairmont
Home: (603) 970-1021

Plan Custom Fields

Number of Parcels Involved	2	Parcel Map/Lot	J, Lot 29	Proposed Parcel Size (sqft)	452385
Parcel Zoning	R40	Existing Parcel Size (Ac)	509573	Address of First Property	303 Old Garrison Road
Existing Parcel Size (sqft)	2.2197e+010	Owner Name	Kimberly & Peter Clairmont	Deed Book	3420
Deed Page	20	Owner Address	303 Old Garrison Road	Deed Date	July 8th, 2006
Owner Phone	603-970-1021	Parcel Feedback		Address of Second Property	Old Garrison Road
Address of Third Property		Parcel 2 Map/Lot	J, Lot 29-2	Parcel 3 Map/Lot	
Second Property Owner Name	Same	Third Property Owner Name		Second Property Owner Address	
Third Property Owner Address		Second Property Owner Phone		Third Property Owner Phone	
First Easement Holder Name		Second Easement Holder Name		First Easement Holder Address	
Second Easement Holder Address		First Easement Holder Phone		Second Easement Holder Phone	

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Chris_Berry_4/3/2024.jpg	04/03/2024 10:45	Berry, Chris		Uploaded via CSS

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00007327	Planning Lot Line Adjustment Application Fee	$200.00	$0.00
	Planning Lot Line Adjustment Fee	$200.00	$0.00
	Total for Invoice INV-00007327	$400.00	$0.00
	Grand Total for Plan	**$400.00**	**$0.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		04/03/2024 11:31	04/03/2024 11:32
Confirm application complete v.1	Generic Action		04/03/2024 11:32
Planning Board v.1		04/03/2024 11:32	
Planning Board Agenda v.1	Task	04/03/2024 11:32	
Invoice for Notices v.1	Task		

Send Notices v.1	Task
Planner Creates Staff Recommendations v.1	Plan Activity
Distribute Planning Board Materials v.1	Task
Planning Board Hearing v.1	Hold Hearing
Planning Board Decision v.1	Plan Activity
NOD Sent to Applicant v.1	Create Report
Final Plan v.1	
Land Use Plan Final Review v.1	Receive Submittal
Land Use Plan Stamped and Signed v.1	Generic Action
Recording v.1	Task
Document Archival v.1	Generic Action
Internal Notification of Plan Completion v.1	Generic Action
Create/Link to Records v.1	
Create / Link to Permit - Building Major v.1	Create Sub Permit

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
April 3, 2024

City of Dover Planning Board
Attention: Donna Benton, Director of Planning and Community Development
288 Central Ave
Dover, NH 03820

Re: Peter and Kimberly Clairmont
Tax Map J, Lot 29 & 29-2
Lot Line Revision

Dear Mrs. Benton,

On behalf of our clients, Peter and Kimberly Clairmont, Berry Surveying & Engineering (BS&E) is submitting a proposed lot line revision to revise the line between two congruent parcels they own.

Berry Surveying & Engineer has conducted a standard boundary survey of the parcel in the fall of 2023. This included a topographic survey as well as a wetlands analysis of the property. Lot 29 currently contains a house, well and effluent disposal field. Lot 29-2 is a vacant parcel that was created by subdivision in 1987.

The proposal is to conduct a lot line revision between the two parcels to increase the lot size and frontage of Lot 29-2. Each lot will remain compliant with the underlying zoning district.

Respectfully Submitted,
BERRY SURVEYING & ENGINEERING

Christopher R. Berry
Principal, President

CHRISTOPHER G. PARKER, AICP
Assistant City Manager
Planning & Strategic Initiatives
c.parker@dover.nh.gov

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City of Dover, New Hampshire

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

INSTRUCTIONS TO APPLICANTS TO THE DOVER PLANNING BOARD

IMPORTANT: PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE FILLING OUT ATTACHED APPLICATION.
INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED FOR REVIEW.

Dear Applicant:

This will serve to briefly inform you regarding the process to have the Dover Planning Board (the Board) review a land use application. Please refer to the NH Statutes on Land Use and Regulation the Dover Code, and our Developer's Handbook for more specific information.

The Board primarily reviews 5 types of applications:

1. **Site Plans** - A site plan is a professionally rendered drawing which delineates the proposed development of a site. This plan is required for non-residential development, creation of multi-family residential structures, and for extensions of parking lots and alteration of an acre or more of land. These plans require meeting with the Technical Review Committee before Planning Board review.

2. **Subdivisions** - A subdivision is the division of the lot, tract, or parcel of land into two (2) or more lots, plats, sites or other divisions of land for the purpose, whether immediate or future, of sale, rent, lease or building development. It includes re-subdivision and, when appropriate to the context, relates to the process of subdividing or to the land or territory subdivided. Major subdivision plans (4+) require meeting with the Technical Review Committee before Planning Board review.

3. **Lot Line Adjustments** - A lot line adjustment alters the size of two (2) or more lots, but does not create a new buildable lot.

4. **Conditional Use Permits** - A conditional use permit is required for any alteration of wetlands, wetland buffers or work within the City's conservation district. Additionally, a conditional use permit could be issued as to offer relief in the Central Business District, for plans in the Residential Mixed Use Overlay District, or parking relief. Environmental Conditional Use Permits are acted on after Conservation Commission review.

5. **Excavation Permits** – NH RSA Chapter 155-E grants municipalities the authority to regulate earth excavations within their borders. This authority rests with the Planning Board.

The Board cannot and will not review applications that do not meet zoning requirements. **Please review the need to apply to the Zoning Board of Adjustment prior to applying to the Board.**

Professional agents will prepare your application; however, you may represent yourself or authorize, in writing, someone else to represent you before the Planning Board.

In most cases, 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, and a PDF, need to be provided, along with payment of plan review fees. These meetings occur on Thursday, and materials and payment must be submitted three (3) weeks prior to meeting. Meetings are scheduled, upon receipt of completed applications with the full checklist and payment.

The next step would be to provide, two weeks prior to Planning Board, the final plan sets (three (3) full size and twelve (12) half size (11x 17), folded, copies of the plan), and 15 copies, and a PDF, of all supporting materials, including response to TRC comments. Please print all materials on both sides of paper.

For projects not appearing before the Technical Review Committee, Plan Review Fees are due along with three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and 15 copies, plus a PDF, of plans and materials, 3 weeks prior to the Planning Board meeting. Please print all materials on both sides of paper.

Staff will generate an abutter list, and Abutter/Notice Fees will be invoiced. They are due 28 hours prior to Planning Board. If they are not paid, the application will not be heard.

Once an item is placed upon an agenda the following process is used:

- The Board will hold a public hearing on your application at a regularly scheduled meeting
    - Typically the second or fourth Tuesday of the Month.
- Public notice of the hearing will be posted at the City Clerk's office and the Planning Department office and printed in the newspaper.
- Certified letters will be mailed to you and to all abutters at least ten days before the date of the hearing.
- 28 hours prior to the meeting, abutter/notice fees must be paid
- At the meeting
    - Staff will introduce your project
    - You and all other parties will be invited to appear in person or by agent or counsel to present your application.
        - Your project will be pre-loaded onto a laptop for review by the Board and public
    - The Board may ask clarifying questions
    - The Board will vote to accept jurisdiction on the application
    - If accepted:
        - The Board will hold a public hearing
        - The Board may ask additional questions
        - The Board will deliberate on your application
            - Typically decisions are made the night of the presentation, but an application may be tabled
        - After deliberation, a decision will be made.
            - You will be sent a notice of the decision.

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: Kimberly & Peter Clairmont Telephone # 603-970-1021

Address of Applicant: 303 Old Garrison Road, Dover, NH 03820

FIRST PROPERTY OWNER AND PARCEL INFORMATION

Name of 1st Property Owner (*if different from applicant*): _____ Telephone #_____

Address of 1st Property Owner: _____

Address of Property: 303 Garrison Road

Assessor's Map # J Lot(s) # 29

Property Deed: Book 3420 Page: 20

Zoning District(s) R40 Overlay District(s) Wetlands, Conservation, Scenit Road

Size of Existing Parcel (sq. ft.): 509,573 Size of Proposed Parcel (sq. ft.): 452,385

SECOND PROPERTY OWNER AND PARCEL INFORMATION

Name of 2nd Property Owner (*if different from applicant*): _____ Telephone #_____

Address of 2nd Property Owner: Same

Address of Property: _____

Assessor's Map # J Lot(s) # 29-2

Property Deed: Book 3400 Page: 285

Zoning District(s) R40 Overlay District(s) Wetlands, Conservation, Scenic Road

Size of Existing Parcel (sq. ft.): 90,641 Size of Proposed Parcel (sq. ft.): 147,829

THIRD PROPERTY OWNER AND PARCEL INFORMATION

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.) Berry Surveying & Engineering, Kenneth A. Berry LLS Christopher R. Berry PM

Address 335 Second Crown Point Road, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 805 E-mail address: crberry@metrocast.net k.berry@berrysurveying.com

CONSERVATION EASEMENT HOLDER (s)

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: _____ Date: 4-3-24

Signature of Second Property Owner: _____ Date: _____

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

Signature of Agent: _____ Date: 4-3-24

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: _____ Date: 4-3-24

CITY OF DOVER MINOR LOT LINE ADJUSTMENT
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

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

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: Kimberly & Peter Clairmont File Number: _____

PROPERTY LOCATION: 303 Old Garrison Road Tax Map: J Lot: 29 and Lot: 29-2

	Where/How Provided	Reviewed
1. Completed and signed Application form	x	
2. Plan Review Fees are provided	x	
3. Electronic copy of the surveyed plat layout	x	
4. Electronic copy of supplementary materials and application	x	
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:	x	
Location map at appropriate scale	x	
Planning File #	x	
Date, north arrow and scale	x	
Names of all abutting property owners	x	
Name and address of owners	x	
Signature & stamp of NH licensed land surveyor	x	
Zoning District boundaries, including any special or overlay districts	x	
Location of Conservation District areas	x	
Location, names and widths of existing and streets, including pavement widths, grades, curbs and crosswalks	x	
Location and widths of existing & proposed easements & right of ways	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 buildings and structure locations	x	
Minimum building setbacks or build to lines on all lots	x	
Map and lot numbers for existing and proposed lots as assigned by Tax Assessor	x	
Location, material and size of existing and proposed permanent monuments	x	
All applicable Dover Common Subdivision notes	x	

REVIEWED BY: _____ DATE_____

CITY OF DOVER PLANNING DEPARTMENT
Created June 4, 2019

APPLICANT: _____ FILE NUMBER: _____

List of Common Lot Line Adjustment Plan Notes

The following list of commonly required notes is intended to be used as a guide to applicants and should not be construed as a comprehensive note requirement list for all projects. A preapplication conference with the Planning Department is suggested to help determine the actual notes that may be required.

1. The intent of this plan is to *(describe the purpose of the plan).*

2. Owners of Record are: Name
   Street address
   Municipality, State, Zip Code
   _____
   Authorized Signature

3. The parcels are shown as Lot Nos. _____, and _____ on Map ____ of the City of Dover Tax Assessor's Maps.

4. The subject parcels contains ____ acres or _____ sq. ft. area of land. *(existing and proposed)*

5. Title reference for the project parcels are the Strafford County Registry of Deeds, Book No. ___, Page No. ___ and Book No. ___, Page No. ___

6. Reference Plans: (*List all reference plans and their SCRD #)*

7. All applicable right-of-way, conservation, slope, construction, power line, cross travel, or other easements shall be referenced in a note.

8. Zoning dimensional and density requirements are as follows:

Required:	Provided:
a. Zoning district _____ sub-district _____	
b. Minimum lot size: _____ acres (sq. ft.)	
c. Minimum lot frontage: _____ ft.	
d. Minimum yard setbacks/build-to-lines:	
Front _____ft.	
Side _____ft.	
Rear _____ft.	
Abut-a-street _____ ft.	
e. Maximum/minimum lot coverage _____ %	
f. Minimum/maximum bldg. height _____ ft./stories	

These properties falls within the following zoning overlay districts: *(List districts)*

9. List any variances or special exceptions granted by the Zoning Board of Adjustment or Conditional Use Permits granted by the Planning Board for the subject parcels, including the case number and date of decision and any conditions.

10. Property line information has been obtained from a survey performed by *(surveyor)* on (*date*) with an error not greater than 1 in 10,000 (*or has been obtained from _____ Plan, prepared by (surveyor)*).

11. Subject parcels are (*are not*) located within a Federally designated flood hazard area (Community panel number 33017C0xxxD, Effective Date: September 30, 2015).

12. The subject parcels are served by municipal water and sewer (*or are served by on-site well and septic system*).

13. Basis of bearing is the City of Dover GIS system stations _____ and _____ which were used to determine location, orientation and vertical datum.

REMARKS:

_____

_____

_____

_____

_____

_____

_____

_____

LOTA-2024-0004 **303 OLD GARRISON ROAD/OLD GARRISON ROAD**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
J0010-006000	GARRISON RD	STATE OF NEW HAMPSHIRE	C/O NH FISH AND GAME	11 HAZEN DR	CONCORD	NH	03301
J0010-A00000	320 OLD GARRISON RD	LABONTE ROBERT & GAUTHIER JESSICA &	GAUTHIER MARY J AND GEORGE I	320 OLD GARRISON RD	DOVER	NH	03820
J0010-A00001	314 OLD GARRISON RD	HAY SUSAN		314 OLD GARRISON RD	DOVER	NH	03820
J0010-A00002	310 OLD GARRISON RD	MORIN GARTH K &	JEFFCOAT LYDIA	310 OLD GARRISON RD	DOVER	NH	03820
J0011-000000	350 OLD GARRISON RD	PERKINS NICOLE B	PERKINS JASON S	350 OLD GARRISON RD	DOVER	NH	03820
J0012-000000	OLD GARRISON RD	WHITE JEFFREY S & DARLENE KAY TRUSTEES	WHITE FAMILY 1995 TRUST	32 PISCATAQUA RD	DOVER	NH	03820
J0012-002000	293 OLD GARRISON RD	BRUCE NANCY J	HANSCOM JODIE M	293 OLD GARRISON ROAD	DOVER	NH	03820
J0012-003000	289 OLD GARRISON RD	TOWLE LAURA		289 OLD GARRISON RD	DOVER	NH	03820
J0013-001000	PISCATAQUA RD	GRIFFIN INVESTMENTS LLC		40 A PISCATAQUA RD	DOVER	NH	03820
J0013-A00000	337 OLD GARRISON RD	ECHO PROPERTY MANAGEMENT LLC		16 NASON RD	HAMPTON FALLS	NH	03844
J0013-A00001	341 OLD GARRISON RD	KELLY BRYAN P		341 OLD GARRISON RD	DOVER	NH	03820
J0013-D00000	48 PISCATAQUA RD	YELINKO MAUREEN A TRUSTEE	MAUREEN A YELINKO REVOCABLE TRUST	8 CYPRESS HOLLOW	BLUFFTON	SC	29909
J0013-E00000	46 PISCATAQUA RD	WILSON JOHN A & CHRISTAL TRUSTEES	WILSON FAMILY REVOCABLE TRUST	46 PISCATAQUA RD	DOVER	NH	03820
J0013-F00000	50 PISCATAQUA RD	FRIARS GARY		50 PISCATAQUA ROAD	DOVER	NH	03820
J0013-H00000	54 PISCATAQUA RD	LEIGHTON GARY W &	LEIGHTON TRACEY S	54 PISCATAQUA RD	DOVER	NH	03820
J0013-J00000	44 PISCATAQUA RD	SKVIRSKY PAUL S		44 PISCATAQUA ROAD	DOVER	NH	03820
J0013-L00000	52 PISCATAQUA RD	WALSH MARK		52 PISCATAQUA ROAD	DOVER	NH	03820
J0013-M00000	42 PISCATAQUA RD	HODGMAN GLENN A &	BROOKFIELD DEBORAH J	42 PISCATAQUA RD	DOVER	NH	03820
J0013-P00000	56 PISCATAQUA RD	CUMMINGS STEWART C TRUSTEE	CUMMINGS FAMILY REVOCABLE TRUST	56 PISCATAQUA ROAD	DOVER	NH	03820
J0013-Q00000	22 RABBIT RD	KELLEY ANNA M		22 RABBIT RD	DOVER	NH	03820
J0020-000000	GARRISON RD	STATE OF NEW HAMPSHIRE	C/O NH FISH AND GAME	11 HAZEN DR	CONCORD	NH	03301
J0029-001000	321 OLD GARRISON RD	ZUCKERMAN SAMUEL &	LEE ARCADIA	321 OLD GARRISON RD	DOVER	NH	03820
J0029-000000	303 OLD GARRISON RD	CLAIRMONT KIMBERLY &	CLAIRMONT PETER	303 OLD GARRISON RD	DOVER	NH	03820-5243
J0029-002000	OLD GARRISON RD	CLAIRMONT KIMBERLY &	CLAIRMONT PETER	303 OLD GARRISON RD	DOVER	NH	03820-5243
		BERRY SURVEYING & ENGINEERING	CHRIS BERRY	335 SECOND CROWN POIN	BARRINGTON	NH	03825

PLAN REFERENCE:

1.) "PLAN OF LAND OF JENNIE KRECKLOW, DOVER N.H., SHOWING LOT TO BE SOLD TO KARL & SUSAN KRECKLOW"
BY: RICHARD P. TOWLE
DATED: MARCH, 1973
S.C.R.D. POCKET 7, FOLDER 1, PLAN # 35

2.) "PLAN SHOWING LAND OWNED BY FRANCIS CORMIER, BACK RIVER ROAD, DOVER, N.H."
BY: HAROLD G. HERSEY
DATED: NOVEMBER 3, 1954
S.C.R.D. POCKET 8, FOLDER 2, PLAN #7

3.) "PLAN OF LAND, WILLIAM A. JACQUES, PISCATAQUA ROAD, DOVER, NEW HAMPSHIRE"
BY: K.E.MOORE & B.G.Staples
DATED: OCTOBER, 1975
S.C.R.D. PLAN #17–14

4.) "PLAN OF SUBDIVISION, FOR THERESA C. WEIK, DAVID & JEAN HILLS, PISCATAQUA ROAD, DOVER, NEW HAMPSHIRE"
BY: K.E.MOORE & B.G.STAPLES
DATED: JUNE 1980
S.C.R.D. PLAN #21–31

5.) "SUBDIVISION OF LAND OF DAVID AND JEAN HILLS, DOVER, N.H."
BY: RICHARD P. TOWLE
DATED: JANUARY 1987
S.C.R.D. PLAN #28A–108

6.) "SUBDIVISION OF LAND FOR KARL & SUSAN KRECKLOW IN DOVER, N.H."
BY: BRUCE L. POHOPEK
DATED: MARCH 12, 1981
S.C.R.D. PLAN #31–8

7.) "LOT LINE ADJUSTMENT, PROPERTY OF DAVID AND JEAN HILLS, DOVER, N.H."
BY: RICHARD P. TOWLE
DATED: JULY 25, 1988
S.C.R.D. PLAN #32–67

8.) "PLAN OF SUBDIVISION OF LAND OF KATHERINE TOWLE, OLD GARRISON ROAD, DOVER, N.H."
BY: RICHARD P. TOWLE
DATED: OCTOBER 2, 1989
S,C,R,D, PLAN #37A–50

9.) "OVERALL SUBDIVISION AND CONSOLIDATION PLAN FOR RIVER RUN, GARRISON ROAD, DOVER, N.H."
BY: RICHARD P. MILLETTE AND ASSOCIATES
DATED: AUGUST 9, 1990
S.C.R.D. PLAN #38–145

10.) "MINOR SUBDIVISION OF LAND PREPARED FOR RICHARD P. TOWLE REV. TRUST OF 1997 AND KATHERINE C. TOWLE REV. TRUST OF 1997, TAX MAP J, LOT NO. 12, 283 OLD GARRISON ROAD, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE"
BY: McENEANEY SURVEY ASSOCIATES, INC.
DATED NOVEMBER 13, 2006
S.C.R.D. PLAN #88–92

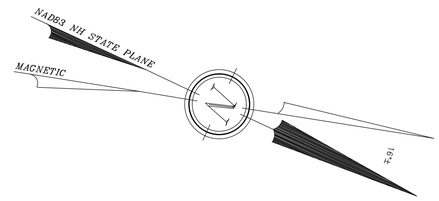
11.) "MINOR SUBDIVISON OF LAND PREPARED FOR RICHARD & STEPHANIE LUND, TAX MAP J, LOT NO. 13, 38 PISCATAQUA ROAD, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE"
BY: McENEANEY SURVEY ASSOCIATES, INC.
DATED: AUGUST 25, 2014
S.C.R.D. PLAN #108–52

12.) "SUBDIVISION PLAN, TAX MAP J – LOT 12, OWNERS: THE WHITE FAMILY 1995 TRUST, OLD GARRISON ROAD, CITY OF DOVER, COUNTY OF STRAFFORDSTATE OF NEW HAMPSHIRE"
BY: PAUL A. DOBBERSTEIN
DATED: NOVEMBER 2018
S.C.R.D. PLAN #11883

13.) "PROPERTY SURVEY, LOCATED AT: 50 PISCATAQUA ROAD, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE, FOR: GARY FRIARS, 50 PISCATAQUA ROAD, DOVER, NH 03820"
BY: STONEWALL SURVEYING
DATED: FEBRUARY 10, 2022
S.C.R.D. PLAN #12603

CEMETERY NOTE :

LICENSE SHALL BE PROVIDED FOR A RIGHT–OF WAY TO THE CEMETERY LOCATED ON TAX MAP J, LOT 29. SEE PLAN REFERENCE #7.



N/F WILSON FAMILY REVOCABLE TRUST
WILSON, JOHN A & CHRISTAL TRUSTEES
46 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–E
S.C.R.D. BOOK 4772, PAGE 83

N/F MAUREEN A YELINKO
REVOCABLE TRUST
YELINKO, MAUREEN A TRUSTEE
8 CYPRESS HOLLOW
BLUFFTON, SC 29909
TAX MAP J, LOT 13–D
S.C.R.D. BOOK 5056, PAGE 898

.75" IRON PIPE
INSIDE A 1.5" IRON PIPE
~FND~ (UP 0.2')
N:236980.2668
E:1196603.5672

N/F FRIARS, GARY
50 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–F
S.C.R.D. BOOK 4715, PAGE 186

N/F SKVIRSKE, PAUL S
44 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–J
S.C.R.D. BOOK 2002, PAGE 159

N/F WALSH, MARK
52 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–L
S.C.R.D. BOOK 4014, PAGE 198

N/F LEIGHTON,
GARY W. & TRACEY S.
54 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–H
S.C.R.D. BOOK 2893,
PAGE 460

S 59°23'25" W
315.34'

1" IRON PIPE
W/FITTINGS ON TOP
~FND~ (UP 1.2')

N 46°39'10" W
195.00'

N 47°27'10" W
99.80'

1.25" IRON PIPE
~FND~ (UP 0.6')

N 59°29'11" E
108.00'

SEASONAL BROOK

N/F KELLY, BRIAN
341 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 29–1
S.C.R.D. BOOK 4479, PAGE 503

BOUNDARY LINE
TO BE
ABANDONED

N 59°29'11" E
120.68'

EDGE OF POORLY DRAINED
JURISDICTIONAL WETLANDS (TYP.)
BY: JOHN P. HAYES, III, CWS #18

2" IRON PIPE
~FND~ (UP 1.7')

N 26°33'35" W
272.90'

PROPOSED
BOUNDARY LINE

EXISTING
"TUTTLE"
CEMETERY

AREA TO BE TRANSFERRED
57,188 Sq.Ft., 1.31 Ac.

TAX MAP J, LOT 29–2
S.C.R.D. BOOK 3400,
PAGE 285
EXISTING LOT AREA:
90,641 Sq.Ft.
2.08 Ac.
PROPOSED LOT AREA:
147,829 Sq.Ft.
3.39 Ac

AREA OF UPLAND = 105,503 Sq.Ft.
AREA OF UPLAND OUTSIDE OF THE WETLANDS BUFFER = 65,658 Sq.Ft.

TAX MAP J, LOT 29
S.C.R.D. BOOK 3420, PAGE 20
EXISTING LOT AREA:
±509,573 Sq.Ft., 11.70 Ac.
PROPOSED LOT AREA:
±452,385 Sq.Ft., 10.38 Ac.

AREA OF UPLAND = 86,259 Sq.Ft.
AREA OF UPLAND OUTSIDE OF THE WETLANDS BUFFER = 52,601 Sq.Ft.

N/F HODGMAN, GLANN A.
&
BROOKFIELD, DEBORAH J
42 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–M
S.C.R.D. BOOK 4387,
PAGE 437

N 75°23'45" E
253.19'

N/F GRIFFIN INVESTMENTS, LLC
40 A PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–1
S.C.R.D. BOOK 4259, PAGE 400

.75" IRON BOUND
~FND~ (DOWN 1.3')
N:237699.4090
E:1196624.8043

S 26°33'39" E
59.84'

S 26°33'39" E
162.12'

IRON BOUND
W/YELLOW CAP
~FND~ (UP 0.2')

CAPPED
IRON BOUND
~FND~ (UP 0.2')

N 64°37'59" E
417.51'

S 50°19'09" W
502.07'

N 64°37'59" E
502.07'

EXISTING
HOUSE

EXISTING
DRIVEWAY

N 51°45'41" E
216.23'

S 81°57'09" E
418.94'

N/F ZUCKERMAN, SAMUEL &
LEE, ARCADIA
321 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 29–1
S.C.R.D. BOOK 4773, PAGE 274

N/F WHITE FAMILY 1995 TRUST,
WHITE, JEFFERY S &
DARLENE KAY TRUSTEES
32 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 12
S.C.R.D. BOOK 4631, PAGE 885

N 51°45'41" E
2.70'
SEE DETAIL "A"

S 00°48'51" W
7.59'

UP
PSNH
212/5E

EXISTING TRANSFORMER
212/5GTI, SEE S.C.R.D.
BOOK 3471, PAGE 241
FOR PSNH EASEMENT

.75" IRON BOUND
~FND~ (UP 1.4')

S 37°36'58" E
45.94'

S 36°39'04" E
52.60'

NET 114/4

S 38°37'20" E
51.31'

SCENIC ROAD BUFFER – 25'

54.24'

S 37°36'58" E

EVERSOURCE 212/5D

.75" IRON BOUND
~FND~ (UP 1.3')

S 40°45'09" E
51.15'

N 64°37'59" E
0.87'
SEE DETAIL "B"

.75" IRON PIPE
W/ELBOW ON TOP
~FND~ (UP 0.3')

N 17°05'53" E
92.11'

S 38°42'30" E
46.55'

PUNCH MARK IN
END OF CULVERT
~FND~ SEE PLAN
REFERENCE #6

UP
PSNH
212/5C

UP
NET 3

N/F LABONTE, ROBERT &
GAUTHIER, JESSICA & GAUTHIER,
MARY J AND GEORGE I
31 SIXTH ST UNIT #2
DOVER, NH 03820
TAX MAP J, LOT 10–A
S.C.R.D. BOOK 4494, PAGE 925

N/F HAY, SUSAN
314 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 10–A–1
S.C.R.D. BOOK 4743,
PAGE 870

24" CMP
CULVERT

10" CMP
CULVERT

OLD GARRISON ROAD

SCENIC ROAD BUFFER – 25'

S 07°46'18" W
326.62'

SCENIC ROAD–PUBLIC–PAVED

EXISTING
DRIVEWAY

N/F BRUCE, NANCY J. &
HANSCOM, JODIE M.
293 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 12–2
S.C.R.D. BOOK 1648, PAGE 558

1" CRIMPED IRON PIPE
~FND~ (UP 0.9')

N/F STATE OF NEW HAMPSHIRE,
C/O NH FISH AND GAME
11 HAZEN DRIVE
CONCORD, NH 03301
TAX MAP J, LOT 20
S.C.R.D. BOOK 1603, PAGE 198

N/F MORIN, GARTH K &
JEFFCOAT, LYDIA
310 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 10–A–2
S.C.R.D. BOOK 4006, PAGE 886

UP
PSNH
212/5F

31.46'
S 05°23'23" W

21.76'
S 02°56'41" W

31.64'
S 01°49'33" W

177.59'
S 74°43'13" E

"NO PARKING"
SIGN

14.0'

.75" IRON BOUND
~FND~ (UP 1.1')
N:237678.2794
E:1197237.4045

UP
EVERSOURCE
212/5G

45.94'
S 37°36'58" E

"SLOW"
SIGN

"NO PARKING"
SIGN

N/F STATE OF NEW HAMPSHIRE,
C/O NH FISH AND GAME
11 HAZEN DRIVE
CONCORD, NH 03301
TAX MAP J, LOT 10–6
S.C.R.D. BOOK 1533, PAGE 627

DETAIL "B"
SCALE: 1"=3'

N 64°37'59" E
417.51'

45.94'
S 37°36'58" E

N 64°37'59" E
0.87'

DETAIL "A"
SCALE: 1"=3'

N 51°45'41" E
218.23'

N 51°45'41" E
2.70'

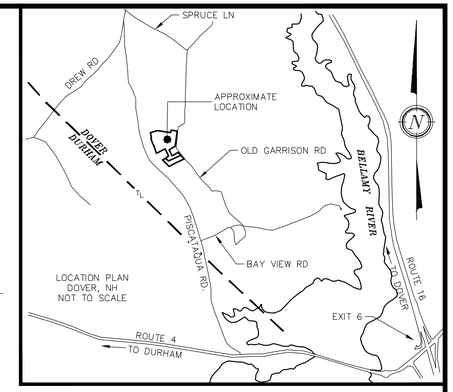
S 36°39'04" E
52.60'

LEGEND:

- IRON PIPE (FND)
- IRON BOUND (FND)
- 3/4" REBAR W/ID CAP (TO BE SET)
- DRILL HOLE (FND)
- PUNCH MARK IN CULVERT (FND)
- UTILITY POLE
- PROPOSED BOUNDARY LINE
- BOUNDARY LINE TO BE ABANDONED
- APPROX. EXISTING ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- EDGE OF POORLY DRAINED WETLAND
- 50' WETLAND BUFFER

FND FOUND
TYP. TYPICAL
S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS
TBS TO BE SET

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.



NOTES:

1.) OWNER/APPLICANT: KIMBERLY & PETER CLAIRMONT
303 OLD GARRISON RD
DOVER, NH 03820–5243

_____
AUTHORIZED SIGNATURE – KIMBERLY CLAIRMONT

_____
AUTHORIZED SIGNATURE – PETER CLAIRMONT

2.) TAX MAP J, LOT 29
TAX MAP J, LOT 29–2

3.) LOT 29, EXISTING AREA: ±509,573 Sq. Ft., 11.70 Ac.
PROPOSED AREA: ±452,385 Sq. Ft., 10.38 Ac.

LOT 29–2, EXISTING AREA: 90,641 Sq.Ft., 2.08 Ac.
PROPOSED AREA: 147,829 Sq.Ft., 3.39 Ac.

4.) S.C.R.D. BOOK 3420, PAGE 20
S.C.R.D. BOOK 3400, PAGE 285

5.) ZONING: R–40 – RURAL RESIDENTIAL
MIN. AREA: 40,000 SQ. FT.
MIN. FRONTAGE: 150'
LOT COVERAGE: 30%
MIN. YARD SETBACKS:
FRONT / ABUT A STREET – 40'
SIDE – 25'
REAR – 30'
MAXIMUM BUILDING HEIGHT: 35'
THIS PROPERTY FALLS WITHIN THE FOLLOWING ZONING OVERLAY DISTRICTS:
CONSERVATION DISTRICT:
– 50' SETBACK TO SEASONAL BROOK
– > 20% SLOPES
SCENIC ROAD OVERLAY DISTRICT:
– 25' BUFFER FROM EDGE OF ROAD ROW
WETLAND PROTECTION DISTRICT:
– 50' BUFFER FROM EDGE OF WETLAND
– 75' SEPTIC SYSTEM SETBACK

6.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN FALL OF 2023, WITH NO SNOW CONDITIONS, WITH AN ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000.

7.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THESE PARCELS DO NOT FALL WITHIN THE FLOOD PLAIN. FLOOD HAZAR REF.: FEMA, COMMUNITY #330145,
MAP #33017C0340E, DATED: SEPTEMBER 30, 2015.

8.) VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL DATUM BASED ON NAD83 STATE PLANE. COORDINATES GATHERED USING BRX7 SURVEY GRADE GPS RECEIVERS.

9.) THE SUBJECT PARCELS ARE SERVED BY PRIVATE WATER AND SEWER.

10.) THE INTENT OF THIS PLAN IS TO SHOW A LOT LINE REVISION BETWEEN TAX MAP J, LOT 29 AND TAX MAP J, LOT 29–2.

11.) NO VARIANCES, SPECIAL EXCEPTIONS, OR CONDITIONAL USES PERMITS REQUIRED FOR THE LINE LINE ADJUSTMENT.

WETLAND NOTES:

WETLANDS WERE DELINEATED BY JOHN P. HAYES, III, IN JUNE 2023 UTILIZING THE FOLLOWING STANDARDS:

1. REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.0. UNITED STATES DEPARTMENT OF AGRICULTURE (2016).
3. NATIONAL WETLAND PLANT LIST (CURRENT VERSION).
4. FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE, APRIL 2004, 3RD EDITION NEIWPCC–LOWELL, MA.
5. CORPS OF ENGINEERS WETLAND DELINEATION MANUAL JANUARY 1987, WETLANDS RESEARCH PROGRAM TECHNICAL REPORT Y–87–1
6. CLASSIFICATION OF WETLANDS AND DEEP WATER HABITATS OF THE UNITED STATES, DECEMBER 1979, US DEPARTMENT OF THE INTERIOR. FISH AND WILDLIFE SERVICES. FWS/OBS–79/31

JOHN P. HAYES, III, CWS #18

STATE OF NEW HAMPSHIRE
JOHN P. HAYES, III
CERTIFIED WETLAND SCIENTIST
No. 18

APPROVED DOVER

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–

4-3-24

KENNETH A. BERRY L.L.S. 805 DATE

REVISION	DATE	DESCRIPTION

LOT LINE REVISION PLAN
LAND OF
KIMBERLY & PETER CLAIRMONT
303 OLD GARRISON ROAD
DOVER, N.H.
TAX MAP J, LOT 29 & LOT 29–2

STATE OF NEW HAMPSHIRE
No. 805
KENNETH A. BERRY
LICENSED LAND SURVEYOR
SIGNATURE

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON, N.H. (603)332–2863

SCALE 1 IN. EQUALS 60 FT.:
DATE : NOVEMBER 27, 2023
FILE NO. : DB 2023 – 061

TEST PIT DATA:

TEST PIT # 1 10/4/23

0–3" 10YR 3/2, FINE SANDY LOAM, GRANULAR, FRIABLE,
3–21" 10YR 5/6, FINE SANDY LOAM, GRANULAR, FRIABLE, MANY COBBLES

BOTTOM OF HOLE @ 21"
REFUSAL @ 21" (BROKEN LEDGE)
SHWT @ 21"

TEST PIT # 2 10/4/23

0–4" 10YR 3/2, FINE SANDY LOAM, GRANULAR, FRIABLE, TOPSOIL & FOREST MAT
4–32" 10YR 5/6, FINE SANDY LOAM, GRANULAR, FRIABLE, MANY ROOTS
32–48" 2.5Y 6/3, FINE SANDY LOAM, MASSIVE, FIRM, MANY MOTTLES W/REDUCTION
48–60" 2.5Y 6/3, FINE SANDY LOAM, MASSIVE, FIRM, MANY MOTTLES W/REDUCTION

BOTTOM OF HOLE @ 60"
NO REFUSAL
SHWT @ 32"

TEST PIT # 3 10/4/23

0–3" 10YR 3/2, FINE SANDY LOAM, GRANULAR, FRIABLE, TOPSOIL
3–24" 10YR 5/4, FINE SANDY LOAM, GRANULAR, FRIABLE, FEW ROOTS
24–60" 10YR 5/2, FINE SANDY LOAM, MASSIVE, FIRM, MANY MOTTLES W/REDUCTION

BOTTOM OF HOLE @ 60"
NO REFUSAL
SHWT @ 24"

SOIL DATA:

BxB – BUXTON, SILT LOAM, 3–8% SLOPES
GsC – GLOUCESTER, VERY STONY FINE SANDY LOAM, 8–15% SLOPES
HfC – HOLLIS–GLOUCESTER, FINE SANDY LOAM 8–15% SLOPES
HgC – HOLLIS–GLOUCESTER, VERY ROCKY FINE SANDY LOAM, 8–15% SLOPES
ScA – SCANTIC, SILT LOAM, 0–8 % SLOPES

SEE: USDA/NRCS WEBSOIL

NAD83 NH STATE PLANE
MAGNETIC
±9°

N/F WILSON FAMILY REVOCABLE TRUST
WILSON, JOHN A & CHRISTAL TRUSTEES
46 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–E
S.C.R.D. BOOK 4772, PAGE 83

N/F MAUREEN A YELINKO REVOCABLE TRUST
YELINKO, MAUREEN A TRUSTEE
8 CYPRESS HOLLOW
BLUFFTON, SC 29909
TAX MAP J, LOT 13–D
S.C.R.D. BOOK 5056, PAGE 898

.75" IRON PIPE INSIDE A 1.5" IRON PIPE ~FND~ (UP 0.2')
N236980.2668
E1196603.5672

N/F FRIARS, GARY
50 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–F
S.C.R.D. BOOK 4715, PAGE 186

N/F SKVIRSKE, PAUL S
44 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–J
S.C.R.D. BOOK 2002, PAGE 159

N/F WALSH, MARK
52 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–L
S.C.R.D. BOOK 4014, PAGE 198

N/F LEIGHTON, GARY W. & TRACEY S.
54 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–H
S.C.R.D. BOOK 2893, PAGE 460

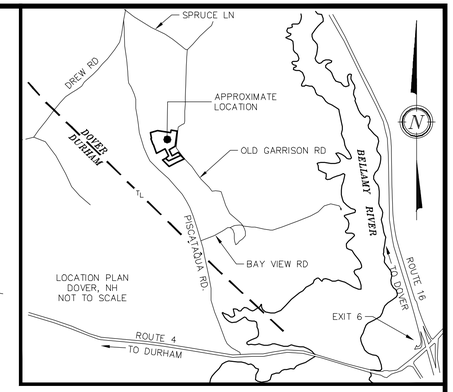
1.25" IRON PIPE ~FND~ (UP 0.6')

1" IRON PIPE W/FITTINGS ON TOP ~FND~ (UP 1.2')

N/F HODGMAN, GLANN A. & BROOKFIELD, DEBORAH J
42 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–M
S.C.R.D. BOOK 4387, PAGE 437

N/F KELLY, BRIAN
341 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 29–1
S.C.R.D. BOOK 4479, PAGE 503

CONSERVATION DISTRICT
SEASONAL BROOK
NRCS SOIL BOUNDARY LINE (TYP)
EDGE OF POORLY DRAINED JURISDICTIONAL WETLANDS (TYP.) BY: JOHN P HAYES, III, CWS #18
BOUNDARY LINE TO BE ABANDONED
TBM WOOD HUB ~SET~ ELEV. 86.85 N236866.1602 E1197019.7046
TBM WOOD HUB ~SET~ ELEV. 94.89 N237109.3793 E1196922.9860
2" IRON PIPE ~FND~ (UP 1.7')
EDGE OF POORLY DRAINED JURISDICTIONAL WETLANDS (TYP.) BY: JOHN P HAYES, III, CWS #18
CONSERVATION DISTRICT SLOPES 20% AND GREATER (TYP)
.75" IRON BOUND ~FND~ (DOWN 1.3') N237699.4090 E1196624.8043
N/F GRIFFIN INVESTMENTS, LLC
40 A PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 13–1
S.C.R.D. BOOK 4259, PAGE 400
EXISTING "TUTTLE" CEMETERY
PROPOSED BOUNDARY LINE
EXISTING SHED
TP #2
4,000 Sq.Ft. LEACHING AREA
AREA TO BE TRANSFERRED
57,234 Sq.Ft., 1.31 Ac.
TAX MAP J, LOT 29
TAX MAP J, LOT 29–2
CAPPED IRON BOUND ~FND~ (UP 0.2')
IRON BOUND W/YELLOW CAP ~FND~ (UP 0.2')
TP #1
EXISTING HOUSE
EXISTING WELL & 75' PROTECTIVE WELL RADIUS
EXISTING HOUSE
N/F WHITE FAMILY 1995 TRUST, WHITE, JEFFERY S & DARLENE KAY TRUSTEES
32 PISATAQUA RD
DOVER, NH 03820
TAX MAP J, LOT 12
S.C.R.D. BOOK 4631, PAGE 885
CONSERVATION DISTRICT SLOPES 20% AND GREATER (TYP)
4,000 Sq.Ft. LEACHING AREA
TP #3
N/F ECHO PROPERTY MANAGEMENT LLC
16 NASON RD
HAMPTON FALLS, NH 03844
TAX MAP J, LOT 14–422
S.C.R.D. BOOK 4670, PAGE 422
POTENTIAL HOUSE LOCATION
POTENTIAL WELL & 75' PROTECTIVE WELL RADIUS
POTENTIAL DRIVEWAY
EXISTING DRIVEWAY
N/F ZUCKERMAN, SAMUEL & LEE ARCADIA
321 15" HDPE PISCATAQUA RD
DURHAM, NH 03820
TAX MAP J, LOT 29–1
S.C.R.D. BOOK 4773, PAGE 274
NRCS SOIL BOUNDARY LINE (TYP)
DESIGN LOCATION OF EXISTING LEACHFIELD 4 BEDROOM, 600 GPD, NHDES APPROVAL # CA2006079093 & CA2006079093–A APPROVAL FOR OPERATION DATED 7/18/07
.75" IRON PIPE W/ELBOW ON TOP ~FND~ (UP 0.3')
.75" IRON BOUND ~FND~ (UP 1.4')
SCENIC ROAD BUFFER
UP PSNH 212/5E
UP NET 114/4
UP EVERSOURCE 212/5D
.75" IRON BOUND ~FND~ (UP 1.3')
OLD GARRISON ROAD
(SCENIC ROAD–PUBLIC–PAVED)
PUNCH MARK IN END OF CULVERT ~FND~ SEE PLAN REFERENCE #6
24" CMP CULVERT
UP PSNH 212/5C
UP NET 3
N/F LABONTE, ROBERT & GAUTHIER, JESSICA & GAUTHIER, MARY J AND GEORGE I
31 SIXTH ST UNIT #2
DOVER, NH 03820
TAX MAP J, LOT 10–A
S.C.R.D. BOOK 4494, PAGE 925
N/F HAY, SUSAN
314 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 10–A–1
S.C.R.D. BOOK 4743, PAGE 870
10" CMP CULVERT
15" HDPE CULVERT
N/F MORIN, GARTH K & JEFFCOAT, LYDIA
310 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 10–A–2
S.C.R.D. BOOK 4006, PAGE 886
N/F STATE OF NEW HAMPSHIRE, C/O NH FISH AND GAME
11 HAZEN DRIVE
CONCORD, NH 03301
TAX MAP J, LOT 20
S.C.R.D. BOOK 1603, PAGE 198
N/F STATE OF NEW HAMPSHIRE, C/O NH FISH AND GAME
11 HAZEN DRIVE
CONCORD, NH 03301
TAX MAP J, LOT 10–6
S.C.R.D. BOOK 1533, PAGE 627
"NO PARKING" SIGN
"SLOW" SIGN
"NO PARKING" SIGN
.75" IRON BOUND ~FND~ (UP 1.1') N237678.2794 E1197237.4045
UP EVERSOURCE 212/5G
EXISTING DRIVEWAY
N/F BRUCE, NANCY J. & HANSCOM, JODIE M.
293 OLD GARRISON RD
DOVER, NH 03820
TAX MAP J, LOT 12–2
S.C.R.D. BOOK 1648, PAGE 558
1" CRIMPTED IRON PIPE ~FND~ (UP 0.9')
EXISTING TARP SHED
14.0' PAVED
50.0' BUFFER
75.0' SETBACK
25.0' SETBACK
20.0'



LOCATION PLAN
DOVER, NH
NOT TO SCALE

NOTES:

1.) OWNER/APPLICANT: KIMBERLY & PETER CLAIRMONT
303 OLD GARRISON RD
DOVER, NH 03820–5243

_____
AUTHORIZED SIGNATURE – KIMBERLY CLAIRMONT

_____
AUTHORIZED SIGNATURE – PETER CLAIRMONT

2.) TAX MAP J, LOT 29
TAX MAP J, LOT 29–2

3.) LOT 29, EXISTING AREA: ±509,573 Sq. Ft., 11.70 Ac.
PROPOSED AREA: ±452,385 Sq. Ft., 10.38 Ac.

LOT 29–2, EXISTING AREA: 90,641 Sq.Ft., 2.08 Ac.
PROPOSED AREA: 147,829 Sq.Ft., 3.39 Ac.

4.) S.C.R.D. BOOK 3420, PAGE 20
S.C.R.D. BOOK 3400, PAGE 285

5.) ZONING: R–40 – RURAL RESIDENTIAL
MIN. AREA: 40,000 SQ. FT.
MIN. FRONTAGE: 150'
LOT COVERAGE: 30%
MIN. YARD SETBACKS:
FRONT / ABUT A STREET – 40'
SIDE – 25'
REAR – 30'
MAXIMUM BUILDING HEIGHT: 35'
THIS PROPERTY FALLS WITHIN THE FOLLOWING ZONING OVERLAY DISTRICTS:
CONSERVATION DISTRICT:
– 50' SETBACK TO SEASONAL BROOK
– > 20% SLOPES
SCENIC ROAD OVERLAY DISTRICT:
– 25' BUFFER FROM EDGE OF ROAD ROW
WETLAND PROTECTION DISTRICT:
– 50' BUFFER FROM EDGE OF WETLAND
– 75' SEPTIC SYSTEM SETBACK

6.) THE INTENT OF THIS PLAN IS TO SHOW TOPOGRAPHY, TEST PITS AND OTHER NATURAL FEATURES AS PART OF A LOT LINE REVISION BETWEEN TAX MAP J, LOT 29 AND TAX MAP J, LOT 29–2.

NEW HAMPSHIRE
Designer of Subsurface Disposal Systems
Christopher R. Berry
No. 1886
Department of Environmental Services

WETLAND NOTES:

JOHN P. HAYES, III, CWS #18

WETLANDS WERE DELINEATED BY JOHN P. HAYES, III, IN JUNE 2023 UTILIZING THE FOLLOWING STANDARDS:

1. REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.0. UNITED STATES DEPARTMENT OF AGRICULTURE (2016).
3. NATIONAL WETLAND PLANT LIST (CURRENT VERSION).
4. FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE, APRIL 2004, 3RD EDITION NEIWPCC LOWELL, MA.
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6. CLASSIFICATION OF WETLANDS AND DEEP WATER HABITATS OF THE UNITED STATES, DECEMBER 1979, US DEPARTMENT OF THE INTERIOR. FISH AND WILDLIFE SERVICES. FWS/OBS–79/31

STATE OF NEW HAMPSHIRE
JOHN P. HAYES, III
CWS 18
CERTIFIED WETLAND SCIENTIST

APPROVED DOVER

LEGEND:

- IRON PIPE (FND)
- IRON BOUND (FND)
- 3/4" REBAR W/ID CAP (TO BE SET)
- DRILL HOLE (FND)
- PUNCH MARK IN CULVERT (FND)
- UTILITY POLE
- PROPOSED BOUNDARY LINE
- BOUNDARY LINE TO BE ABANDONED
- APPROX. EXISTING ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- EDGE OF POORLY DRAINED WETLAND
- 50' WETLAND BUFFER
- 75' SEPTIC SETBACK TO WETLAND
- OHU — OVERHEAD ELECTRIC/UTILITIES
- UGE — UNDERGROUND ELECTRIC/UTILITIES
- 89 — MINOR CONTOUR LINE
- 90 — MAJOR CONTOUR LINE
- NRCS SOIL BOUNDARY
- GsC — NRCS SOIL LABEL
- FND — FOUND
- TYP. — TYPICAL
- S.C.R.D. — STRAFFORD COUNTY REGISTRY OF DEEDS
- TBS — TO BE SET

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

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–
4-3-24
KENNETH A. BERRY LLS. 805 DATE

REVISION	DATE	DESCRIPTION

LOT LINE REVISION TOPOGRAPHY PLAN
LAND OF
KIMBERLY & PETER CLAIRMONT
303 OLD GARRISON ROAD
DOVER, N.H.
TAX MAP J, LOT 29 & LOT 29–2

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR
NO. 805
KENNETH A. BERRY
SIGNATURE

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT RD.
BARRINGTON, N.H. (603)332–2863

SCALE 1 IN. EQUALS 60 FT.:
DATE : NOVEMBER 27, 2023
FILE NO. : DB 2023 – 061

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE # WAIV-2024-0005

Application Type:	Extension of Time Request
Applicant(s):	Harlech, LLC
Owner(s):	Harlech, LLC
Location:	47 Chestnut St. (Assessor's Map 31, Lot 5)
Meeting Date:	April 23, 2024

INTENT: The Board previously approved a Site Plan and two (2) Conditional Use Permits (CUPs) to construct a 173-unit multi-family residential building with commercial space. The applicant seeks an extension to meet financing requirements.

UNITS PROPOSED: 173 Residential Units (previously approved)

AGENDA ITEM #: 4-B

ACREAGE: 3.64± acres

ZONING DISTRICT: CBD-COD

EXISTING USE: Commercial

PROPOSED USE: Mixed-Use

SURROUNDING USES: Commercial/Residential/ Transportation Center/Community Trail/Cochecho River

ZBA ACTION: None

ATTACHMENTS: Application materials, previous site plan

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail.

PERMITS REQUIRED: City of Dover CUPs for: Side & Rear Setback, Frontage Build-out, Lot Coverage, and Solar/Green Roof Standards, NH DES Wetlands Permit and Alteration of Terrain

WAIVERS REQUIRED: None

Summary of Request and Background

Chapter 153-9 discusses that Planning Board approval shall be valid for five years from the date of said approval. If a building permit has not been issued within such time constraints, then said approval shall be considered null and void, except if the Planning Board grant time extensions.

Additionally, RSA 674:39 states that any site plan approved by the Planning Board shall be immune from any future changes to local site plan, subdivision, impact fee regulations and zoning ordinance amendments if active and substantial development, as defined by the municipality, is initiated within a twenty-four (24) month period following the Planning Board's initial approval of the plan. The statute elaborates that the Planning Board may, at their discretion, extend the twenty-four (24) month exemption deadline. This applicant seeks to extend the statutory exemption period from twenty-four (24) months to thirty-six (36) months due to the rise in interest rates and building costs which have complicated securing financing for the project, necessitating the extension.

STAFF RECOMMENDATION:

Pursuant to RSA 674:39.IV, "[t]he planning board may, for good cause, extend the 24-month period set forth in subparagraph I(a)", which is the deadline in which the owner must initiate active and substantial development or building to continue exempting the owner from any future local ordinance or regulation amendments.

STAFF RECOMMENDATION:

The Planning Department recommends the Planning Board vote to grant the Extension Request, as defined in RSA 674:39.IV, for both the Site Plan (P21-84) and Conditional Use Permit (P21-85) from twenty-four (24) to thirty-six (36) months, with the same conditions of approval as outlined in the original Notices of Decision.

WAIV-2024-0005 47 Chestnut Street

Property Information

Location	47 CHESTNUT ST
Owner	HARLECH LLC
Land Use	
Zoning Code	CBD-T
Property Id	31005-000000

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 10/30/2023
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

PLAN SNAPSHOT REPORT WAIV-2024-0005
FOR CITY OF DOVER, N.H.

Plan Type:	Waiver / Extension / Amendment	**Project:**		**App Date:**	04/03/2024
Work Class:	Plan	**District:**	None	**Exp Date:**	06/07/2024
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: Proposal is to extend the period of time to seek financing.

Parcel:	31005-000000 Main	**Address:**	47 Chestnut St Dover, 03820 Main	**Zone:**	CBD-T(Central Business District - Transit)

Owner
Harlech, LLC
273 Corporate Drive, Suite 150
Portsmouth, NH

Applicant
Francis X Bruton
601 Central Ave
Dover, NH 03820
Business: (603) 749-4529

Plan Custom Fields

Project Location	47 Chestnut Street	Waiver Request Type	Extension	Project Name	47 Chestnut
Owner Name	Harlech, LLC	Original Plan Approval Date	May 10 2022 12:00AM	Owner Address	273 Corporate Drive, Ste 150 Portsmouth, NH
Original Plan End Date	May 10 2027 12:00AM	Plan ID Number	P21-84, P21-85	Plan Type	Site Plan
Current Plan End Date	May 10 2027 12:00AM	Extension Request Detail	See narrative		

Invoice No.	Fee	Fee Amount	Amount Paid
NOT INVOICED	Planning Waiver / Extension /Amend Application Fee	$200.00	$0.00
	Total for Invoice NOT INVOICED	$200.00	$0.00
	Grand Total for Plan	**$200.00**	**$0.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		04/03/2024 10:53	04/03/2024 10:54
Confirm application complete v.1	Generic Action		04/03/2024 10:53
Technical Review Committee Meeting Agenda v.1	Task		04/03/2024 10:54
Land Use Plan Technical Review v.1	Receive Submittal		04/03/2024 10:54
Technical Review Committee Meeting v.1	Hold Meeting		04/03/2024 10:54
Planning Board v.1		04/03/2024 10:54	
Planning Board Agenda v.1	Task	04/03/2024 10:54	
Invoice for Notices v.1	Task		
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Plan Activity		
NOD Sent to Applicant v.1	Create Report		
Final Plan v.1			
Land Use Plan Stamped and Signed v.1	Generic Action		
Recording v.1	Task		
Document Archival v.1	Generic Action		
Internal Notification of Plan Completion v.1	Generic Action		
Building Official Notifies Address v.1	Generic Action		
Pre-Con Meeting v.1	Hold Meeting		

PLAN SNAPSHOT REPORT (WAIV-2024-0005)

Create/Link to Records v.1	
Create / Link to Permit - Building Major v.1	Create Sub Permit
Create / Link to Permit - Site Work, Construction v.1	Create Sub Permit

FRANCIS X. BRUTON, III
CATHERINE A. BERUBE
JOSHUA P. LANZETTA

OF COUNSEL
JAMES H. SCHULTE

Bruton & Berube, PLLC

ATTORNEYS AT LAW

601 Central Avenue
Dover, NH 03820

TEL (603) 749-4529
(603) 743-6300
FAX (603) 343-2986

www.brutonlaw.com

April 2, 2022

RECEIVED
Planning Office
APR 02 2024
Dover, New Hampshire

VIA HAND DELIVERED

Gina Cruikshank, Chair
Dover Planning Board
City of Dover
288 Central Avenue
Dover, New Hampshire 03820

RE: 47 Chestnut Street, Dover, New Hampshire
Site Plan Approval (Case No. P21-84)
Conditional Use Permit (Case No. P21-85)
Date of Approval: May 10, 2022

REQUEST FOR EXTENSION OF APPROVALS

Dear Chair Cruikshank:

Please be advised that this office represents Harlech, LLC. Harlech, LLC is the owner of property subject to a Site Plan and Conditional Use Permit approval (the "Approvals"), which was approved by the Dover Planning Board on May 10, 2022, related to a mixed-use site plan approval for property located at 47 Chestnut Street, Dover, New Hampshire pursuant to the cases as referenced above.

Given the Planning Board's approval of the owner's Site Plan & Conditional Use Permit on May 10, 2022, pursuant to Section 149-9 of the Dover Site Plan Regulations, those approvals are valid through May 10, 2027. In addition, pursuant to NH RSA 674:39, which was adopted within the Site Plan Regulations, the Approvals would be vested for a period of five (5) years to the extent that "active and substantial development or building" occurs within twenty-four (24) months of the date of approval. The Dover Site Plan Regulations provide a definition of active and substantial development or building, which is set forth in Section 149-9 which provides as follows:

> "The construction of basic infrastructure to support the development, including foundation walls and footings, driveway and parking lot construction to a minimum

of gravel base, utilities placed in underground conduits, construction of all drainage improvements, and installation of all EROSION and SEDIMENT control measures."

As you may be aware, the above referenced vesting protects the Approvals from subsequent changes in Site Plan Regulations or changes to the Zoning Ordinance. To the best of our knowledge and understanding, the city of Dover is not contemplating any change to the Site Plan Regulations or the Zoning Ordinances that would affect the Approvals and we understand, after inquiry with Dover Planning, that no such changes have occurred to date. Nonetheless, the owner is attempting to secure financing to construct the project, and, as part of these efforts, and in order to do so, the twenty-four (24) month time frame for vesting needs to be extended to thirty-six (36) months, or an additional twelve (12) months from the twenty-four (24) months provided by the Site Plan Regulations and NH RSA 674:39. The Planning Board has the authority to extend this period. The delay in seeking this financing relates to the previous spike in interest rates and building const that have now, or are expected to soon, stabilized.

With the above in mind, and given the authority that the Planning Board has to extend the twenty-four (24) month timeframe, pursuant to NH RSA 674:39, for good cause, the owner respectfully requests that the timeframe to begin "active and substantial development" associated with the Approvals be extended from twenty-four (24) to thirty-six (36) months, and that the Planning Board consider this request at its meeting on April 23, 2024.

Sincerely,

Francis X. Bruton, III, Esquire
E-mail: fx@brutonlaw.com

FXB/mas

cc: Harlech, LLC
Ms. Donna P. Benton, AICP

WAIV-2024-0005 **47 CHESTNUT STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
01041-000000	5 GREEN ST	RIVERVIEW BUILDING CONDOMINIUM		40 COURT ST STE 650	BOSTON	MA	02108
01042-000000	3 GREEN ST	DOVER HOUSING AUTHORITY		62 WHITTIER STREET	DOVER	NH	03820
02083-001000	ORCHARD ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
06003-001000	200 FIRST ST	FIRST STREET AT GARRISON LLC		466 CENTRAL AVE STE 12	DOVER	NH	03820
06009-000000	24 CHESTNUT ST	FIRST STREET AT CHESTNUT LLC		466 CENTRAL AVE	DOVER	NH	03820
06010-000000	22 CHESTNUT ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06010-A00000	37 39 FIRST ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06011-000000	35 FIRST ST	R&M HOLDINGS LLC		8 BLEVENS DR	BOW	NH	03304
06012-000000	31 33 FIRST ST	31-33 FIRST STREET LLC		496 WALLIS RD	RYE	NH	03870
06029-000000	36 42 SECOND ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
10034-000000	ALONG B & M RR	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
10040-000000	WASHINGTON ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
10041-000000	1 7 CAPITAL DR	192 WASHINGTON SQUARE LLC		242 CENTRAL AVE	DOVER	NH	03820
31004-B00000	33 CHESTNUT ST	COCHECO MILLS HOLDINGS LLC		3 PENSTOCK WAY	NEWMARKET	NH	03857-4416
31004-B00LSE	33 CHESTNUT ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
31006-000000	45 CHESTNUT ST	LOYAL ORDER OF MOOSE #443		45 CHESTNUT STREET	DOVER	NH	03820
31005-000000	47 CHESTNUT ST	HARLECH LLC		273 CORPORATE DR STE 1	PORTSMOUTH	NH	03801
		BRUTON & BERUBE, PLLC	FRANCIS, BRUTON	601 CENTRAL AVENUE	DOVER	NH	03820

SITE PLAN REVIEW
CITY OF DOVER DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
FILE NO. P21-84

47 CHESTNUT

RESIDENTIAL & COMMERCIAL MIXED USE RE-DEVELOPMENT PLANS

47 Chestnut Street
Dover, New Hampshire
Assessor's Parcel 31, Lot 5

ISSUED FOR FINAL APPROVAL

Plan Issue Date:

August 8,2022

Owner:
Harlech, LLC
273 Corporate Drive, Suite 150
Portsmouth, NH 03801
(603) 427-5100
Signature: _____
Date: _____

Applicant:
REDGATE™
Redgate Real Estate Advisors, LLC
286 Franklin Street, Suite 602
Boston, MA 02110
(617) 904-7000

Architect:
ARROWSTREET
ARCHITECTURE & DESIGN
10 Post Office Square, Suite 700N
Boston, MA 02109
(617) 623-5555

Wetland Scientist:
GOVE ENVIRONMENTAL SERVICES, INC.
Wetlands and Soil Mapping
8 Continental Dr Bldg 2 Unit H, Exeter, NH 03833-7526
Ph (603) 778 0644 / Fax (603) 778 0654

Traffic Engineer:
Stephen G. Pernaw & Company, Inc.
P.O. Box 1721, Concord, NH 03302
(603) 731-8000

Traffic Engineer (Offsite):
GPI
44 Stiles Road
Salem, NH 03079
Phone: (603) 893-0720

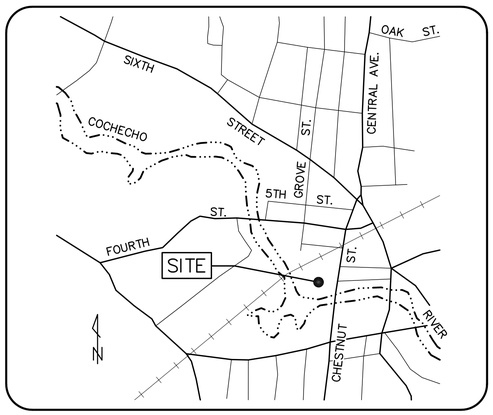
Civil Engineer:
ALTUS ENGINEERING, INC.
133 Court Street (603) 433-2335
Portsmouth, NH 03801 www.altus-eng.com

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

Landscape Architect:
CWDG Copley Wolff Design Group
Landscape Architects & Planners
10 Post Office Square, Suite 1315
Boston, MA 02109
(617) 654-90000

Lighting Consultant (Parking Lot):
VISIBLELIGHT
24 STICKNEY TERRACE, SUITE 6
HAMPTON, NH 03842
(603) 926-6049

Lighting Consultant (Pedestrian):
AVAILABLE LIGHT
31 STATE STREET, 6TH FLOOR • BOSTON MA 02109
617.944.6800 AVAILABLELIGHT.COM



LOCUS NOT TO SCALE

Sheet Index Title	*Sheet Desig.:*	*Sheet No.:*	*Rev.*	*Date*
Landscape Site Plan Rendering	L0.00	2	3	04/19/22
Existing Conditions Plan	–	3	0	12/28/21
Neighborhood Plan	C–1	4	2	04/05/22
Demolition and Site Preparation Plan	C–2	5	3	08/08/22
Site Plan	C–3	6	4	08/08/22
Stormwater Management Plan	C–4	7	3	04/19/22
Erosion and Sediment Control Plan	C–5	8	3	04/19/22
Utility Plan	C–6	9	3	04/19/22
Parking Lot Lighting Plan	C–7	10	3	04/19/22
Site Lighting Calc	AL–1	11	1	02/24/22
Detail Sheet	C–8	12	1	02/24/22
Detail Sheet	C–9	13	2	04/05/22
Detail Sheet	C–10	14	1	02/24/22
Detail Sheet	C–11	15	3	04/19/22
Detail Sheet	C–12	16	2	04/05/22
Detail Sheet	C–13	17	1	02/24/22
Detail Sheet	C–14	18	2	04/05/22
Traffic Signal Plan	TS–1	19	1	04/05/22
Landscape Plan	L1.00	20	3	04/19/22
Chestnut Street Enlargement	L1.10	21	2	04/19/22
Courtyard Enlargement	L1.20	22	2	04/19/22
Landscape Details	L2.00	23	3	04/19/22
Landscape Details	L2.01	24	3	04/19/22
Ground Floor Accessibility Plan	A0.01	25	2	04/19/22
Ground Floor Plan	A2.11	26	3	04/19/22
Typical Floor Plan	A2.12	27	3	04/19/22
Roof Plan	A2.13	28	3	04/19/22
Building Elevations	A3.00	29	3	04/19/22
Building Elevations	A3.01	30	3	04/19/22
Building Elevations	A3.02	31	3	04/19/22
Building Elevations	A3.03	32	3	04/19/22
Perspective View	A5.01	33	4	08/08/22
Perspective View	A5.02	34	4	08/08/22

Permit Summary:	*Submitted*	*Received*
Dover Site Plan Review	11/23/21	05/10/22
NHDES Alteration of Terrain	02/24/22	04/22/22
NHDES Wetlands	12/06/21	04/20/22
EPA Notice of Intent	By Contractor 14 days prior to construction	

P4904

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11/22/2021 12:58:42 PM

CLIENT:

REDGATE

Redgate Real Estate Advisor, LLC
286 Franklin Street, Suite 602
Boston, MA 02110

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

CONSULTANTS:

CWDG
Copley Wolff Design Group
Landscape Architects & Planners

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street,
Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

LANDSCAPE SITE PLAN RENDERING

Project No.	**21033.00**
Drawn By	**SS/JM**
Date	**4/19/22**
Scale	

DRAWING NUMBER:

L0.00

NOTES:

1.) OWNER OF RECORD:

HARLECH, LLC
273 CORPORATE DRIVE, SUITE 150
PORTSMOUTH, NEW HAMPSHIRE 03801
S.C.R.D. VOLUME 2036, PAGE 090

2.) 31 / 5 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA = 158,315 S.F.± / 3.63 Ac.±

4.) THE INTENT OF THIS PLAN IS TO DEPICT THE PARCELS BOUNDARIES AND EXISTING SITE CONDITIONS AS OF DECEMBER 28, 2021.

5.) ZONING DISTRICT:

CBD TRANSIT ORIENTED DEVELOPMENT SUB-DISTRICT (CBD TO)
DIMENSIONAL REQUIREMENTS:

MINIMUM LOT SIZE	= N/A
MINIMUM LOT COVERAGE	= 75 – 100 PERCENT
FRONTAGE BUILD–OUT	= 80 PERCENT MINIMUM
FRONT BUILD TO LINE	= 0 FEET MIN. / 0 FEET MAX.
SIDE SETBACK	= 10 FEET MIN. / 25 FEET MAX.
REAR SETBACK	= 0 FEET MIN. / 25 FEET MAX.
MAXIMUM BUILDING HEIGHT	= 5 STORY MAX / 3 STORY MIN.

6.) THE SUBJECT PARCEL IS LOCATED WITHIN THE SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1 PERCENT ANNUAL CHANCE FLOOD, ZONE AE (BASE FLOOD ELEVATIONS DETERMINED); AND AREAS DETERMINED TO BE INSIDE THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY NUMBER 330145; PANEL 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPT. 30, 2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED FEBRUARY 14, 2011.
VERTICAL DATUM IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED FEBRUARY 14, 2011.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES, INC. DURING DECEMBER 2021 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

9.) THERE ARE CURRENTLY 171 STRIPED PARKING SPACES LOCATED ON THE SUBJECT PARCEL, INCLUDING 6 ACCESSIBLE SPACES.

10.) THERE ARE NO WETLANDS ON THE SUBJECT PARCEL.

11.) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1–888–344–7233.

12.) THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.

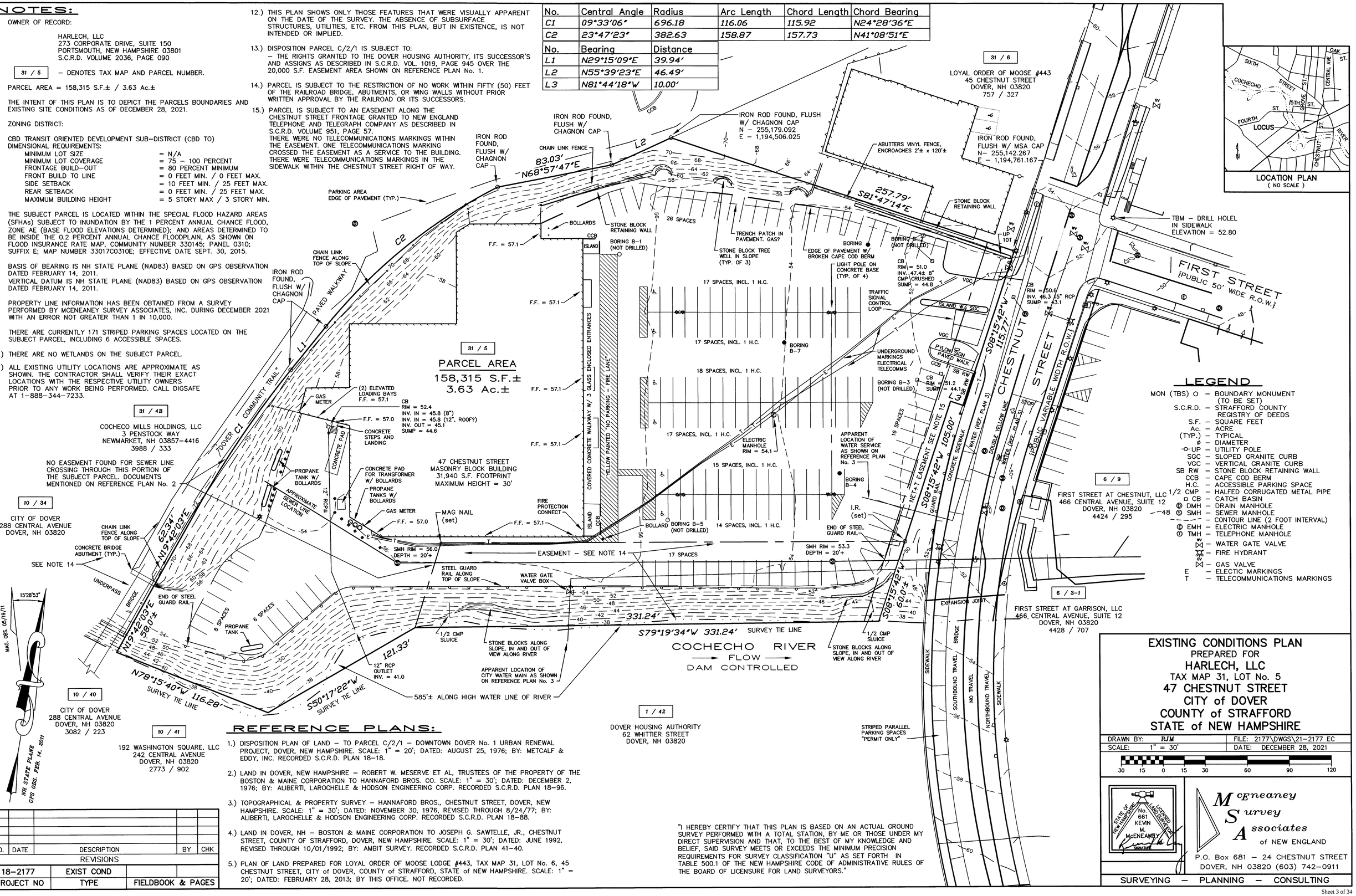
13.) DISPOSITION PARCEL C/2/1 IS SUBJECT TO:
– THE RIGHTS GRANTED TO THE DOVER HOUSING AUTHORITY, ITS SUCCESSOR'S AND ASSIGNS AS DESCRIBED IN S.C.R.D. VOL. 1019, PAGE 945 OVER THE 20,000 S.F. EASEMENT AREA SHOWN ON REFERENCE PLAN No. 1.

14.) PARCEL IS SUBJECT TO THE RESTRICTION OF NO WORK WITHIN FIFTY (50) FEET OF THE RAILROAD BRIDGE, ABUTMENTS, OR WING WALLS WITHOUT PRIOR WRITTEN APPROVAL BY THE RAILROAD OR ITS SUCCESSORS.

15.) PARCEL IS SUBJECT TO AN EASEMENT ALONG THE CHESTNUT STREET FRONTAGE GRANTED TO NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY AS DESCRIBED IN S.C.R.D. VOLUME 951, PAGE 57.
THERE WERE NO TELECOMMUNICATIONS MARKINGS WITHIN THE EASEMENT. ONE TELECOMMUNICATIONS MARKING CROSSED THE EASEMENT AS A SERVICE TO THE BUILDING. THERE WERE TELECOMMUNICATIONS MARKINGS IN THE SIDEWALK WITHIN THE CHESTNUT STREET RIGHT OF WAY.

No.	Central Angle	Radius	Arc Length	Chord Length	Chord Bearing
C1	09°33'06"	696.18	116.06	115.92	N24°28'36"E
C2	23°47'23"	382.63	158.87	157.73	N41°08'51"E

No.	Bearing	Distance
L1	N29°15'09"E	39.94'
L2	N55°39'23"E	46.49'
L3	N81°44'18"W	10.00'



LEGEND

MON (TBS) O – BOUNDARY MONUMENT (TO BE SET)
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
ø – DIAMETER
-o- UP – UTILITY POLE
SGC – SLOPED GRANITE CURB
VGC – VERTICAL GRANITE CURB
SB RW – STONE BLOCK RETAINING WALL
CCB – CAPE COD BERM
H.C. – ACCESSIBLE PARKING SPACE
1/2 CMP – HALFED CORRUGATED METAL PIPE
CB – CATCH BASIN
DMH – DRAIN MANHOLE
SMH – SEWER MANHOLE
– – – –

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

15°28'53"

MAG. DEC. 06/9/11

NH STATE PLANE
GPS OBS. FEB. 14, 2011

ALTUS ENGINEERING, INC.

133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

4/5/22

NOT FOR CONSTRUCTION

ISSUED FOR: TRC

ISSUE DATE: APRIL 5, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" - 1" = 100'
11" x 17" - 1" = 200'

OWNER:

HARLECH, LLC

273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:

REDGATE REAL ESTATE ADVISORS, LLC

265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:

47 CHESTNUT SITE REDEVELOPMENT

TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:

NEIGHBORHOOD PLAN

SHEET NUMBER:

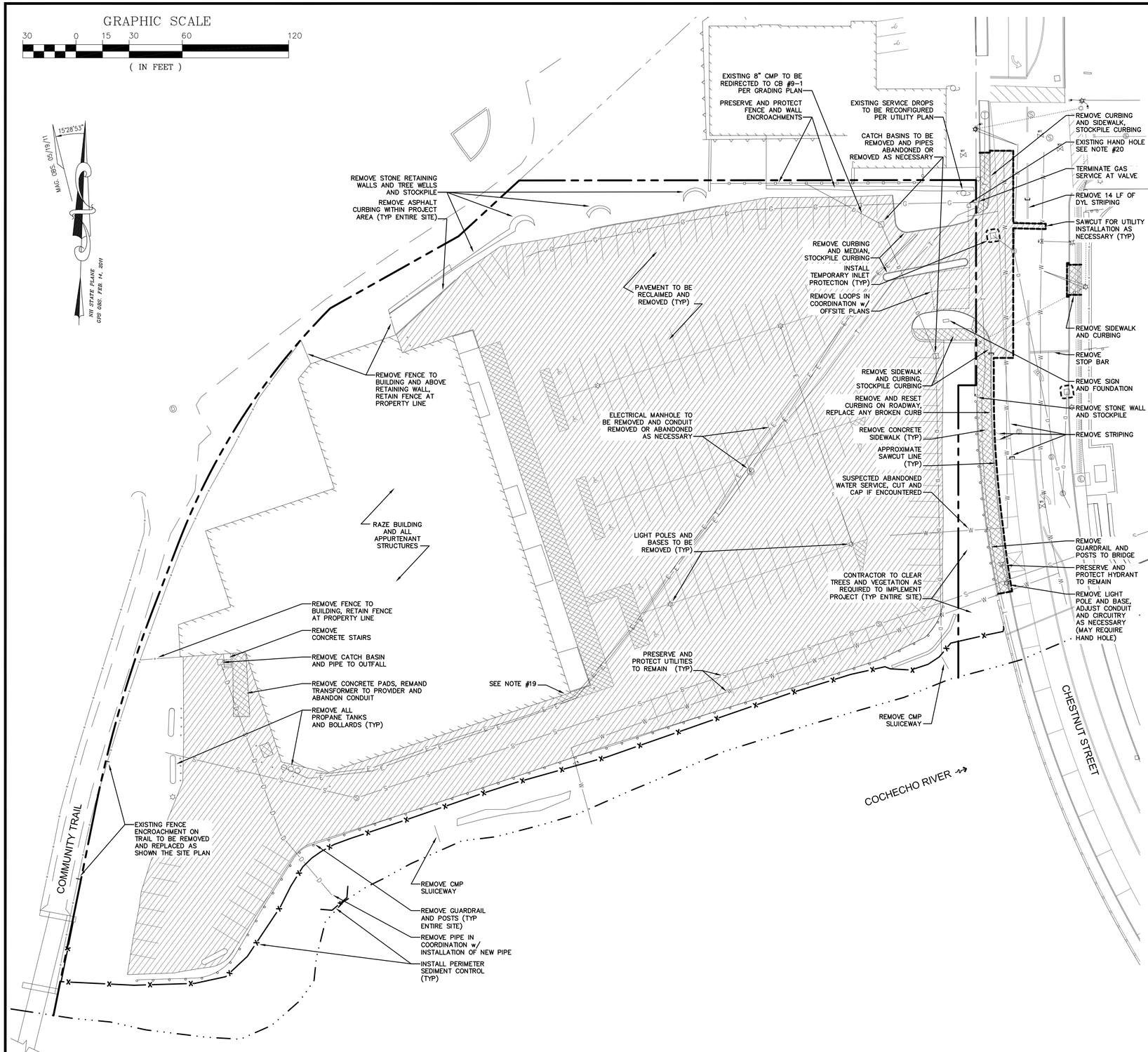
C-1

P4904

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)



DEMOLITION NOTES

1. CITY DEMOLITION PERMIT REQUIRED PRIOR TO ANY BUILDING DEMOLITION ACTIVITIES. CONTRACTOR IS NOTIFIED THAT THIS PERMIT PROCESS MAY REQUIRE A 30-DAY LEAD TIME.
2. CONTRACTOR SHALL SAFELY SECURE THE SITE AND WORK LIMITS WITH SECURITY FENCING WHICH SHALL BE LOCKED DURING NON-WORK HOURS.
3. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.
5. ALL UTILITY DISCONNECTIONS/DEMOLITIONS/RELOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES, DOVER DPW AND ABUTTING PROPERTY OWNERS. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
6. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ETC. SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
7. SEE EROSION CONTROL PLANS FOR EROSION AND SEDIMENT CONTROL MEASURES THAT SHALL BE IN PLACE PRIOR TO DEMOLITION ACTIVITIES.
8. ALL MATERIALS SCHEDULED FOR DEMOLITION OR REMOVAL ON PRIVATE PROPERTY SHALL REMAIN THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ITEMS INDICATED TO BE STOCKPILED SHALL BE REUSED ON-SITE IF DEEMED SUITABLE BY THE ENGINEER.
9. ALL MATERIAL SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS/CODES.
10. UTILITY PROVIDERS AND CONTACTS:
    - WATER & SEWER: DOVER COMMUNITY SERVICES, BILL BOULANGER, (603) 516-6450.
    - GAS: UNITIL, DAVID MACLEAN, (603) 294-5144.
    - TELECOMMUNICATIONS: CONSOLIDATED, JASON CUNHA, (603) 325-2041.
    - CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
    - ELECTRICAL: EVERSOURCE, NICK KOSKO, (603) 332-4227. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL, 48-HOUR MINIMUM NOTICE REQUIRED
11. CONTRACTOR TO CONTACT DOVER DPW A MINIMUM OF TWO WEEKS PRIOR TO ANY DEMOLITION TO COORDINATE ALL WORK CONCERNING DISCONNECTION/DEMOLITION OF ANY PROPOSED WATER AND SEWER LINE IMPROVEMENTS.
12. ALL WATER MAIN AND SERVICE DISCONNECTIONS SHALL CONFORM TO DOVER DPW STANDARDS.
13. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
14. HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
15. EXISTING UTILITIES TO BE DISCONTINUED SHALL BE ABANDONED IN PLACE UNLESS OTHERWISE NOTED TO BE REMOVED OR ENCOUNTERED DURING THE INSTALLATION OF NEW WORK. ALL CONDUIT, CULVERT OR PIPE TO BE ABANDONED THAT IS 6" OR GREATER IN SIZE SHALL BE FILLED WITH FLOWABLE FILL.
16. IN AREAS WHERE CONSTRUCTION IS TO BE ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG THE PROPERTY LINE IN ALL AREAS WHERE PERIMETER SEDIMENT CONTROLS OR SITE SECURITY FENCING IS NOT OTHERWISE REQUIRED.
17. LOCATIONS OF PAVEMENT REMOVAL & SAWCUT LIMITS ARE SHOWN TO DEPICT THE GENERAL LIMITS OF WORK. CONTRACTOR'S MEANS & METHODS & PAVEMENT CONDITION WILL DICTATE THE EXACT LIMITS OF PAVEMENT REMOVAL.
18. SHOULD GROUNDWATER BE ENCOUNTERED DURING EXCAVATION, APPROPRIATE BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO ENSURE SEDIMENT LADEN WATER IS NOT DISCHARGED INTO THE CITY DRAINAGE SYSTEM OR ADJACENT WETLANDS.
19. THE LOCATION(S) OF EXISTING WATER AND SEWER SERVICES TO THE EXISTING BUILDING ARE UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING WHATEVER EXPLORATORY INVESTIGATIONS ARE REQUIRED TO ASCERTAIN THE SIZE, LOCATION AND DEPTH OF THESE SERVICES. CONTRACTOR SHALL TERMINATE THESE EXISTING SERVICES AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH CITY OF DOVER STANDARDS.
20. ALL ELECTRIC, TELEPHONE, WATER, SEWER AND OTHER UTILITY STRUCTURES TO REMAIN SHALL BE RELOCATED OR ADJUSTED TO PROPOSED FINISH GRADE AS APPROPRIATE. EXISTING PEDESTRIAN-RATED STRUCTURES IN PROPOSED PAVEMENT AREAS SHALL BE REPLACED WITH H-20 RATED STRUCTURES.
21. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL BUILDINGS, PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, BOLLARDS, FENCES, TREES, VEGETATION, STUMPS AND ANY OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.
22. ALSO SEE OFFSITE IMPROVEMENTS PLANS FOR ADDITIONAL DEMOLITION AND SITE PREPARATION IN THE CHESTNUT STREET RIGHT OF WAY.
23. PEST CONTROL – THE CONTRACTOR SHALL ENGAGE A LICENSED EXTERMINATOR WHO PRACTICES INTEGRATED PEST MANAGEMENT (IPM) TO INSPECT THE PROJECT SITE AND PREPARE A PEST MANAGEMENT PLAN TO ELIMINATE RODENTS, NOXIOUS INSECTS AND ALL OTHER PESTS PRIOR TO DEMOLITION ACTIVITIES. THE PEST MANAGEMENT PLAN SHALL BE COORDINATED WITH THE OWNER WHOSE WRITTEN APPROVAL SHALL BE REQUIRED PRIOR TO THE APPLICATION OF ANY PEST CONTROL MEASURE. THE PROPOSED PLAN SHALL BE SUBMITTED TO THE OWNER AND ARCHITECT FOR REVIEW AND SHALL CLEARLY INDICATE THE FOLLOWING:
    - AREAS TO BE TREATED.
    - MANUFACTURER'S PRINTED INSTRUCTIONS AND MSDS FOR EACH CHEMICAL TO BE USED.
    - POLLUTION PREVENTATIVE MEASURES TO BE EMPLOYED.
24. SEE SHEET C-11 FOR LEGEND.

ALTUS ENGINEERING, INC.

133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE
ERIC D. WEINREB
No. 7634
LICENSED
PROFESSIONAL ENGINEER
8/1/22

NOT FOR CONSTRUCTION

ISSUED FOR: FINAL APPROVAL

ISSUE DATE: AUGUST 8, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22
3	CONDITIONS OF APPROVAL	EBS	08/08/22

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" – 1" = 30'
11" x 17" – 1" = 60'

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
DEMOLITION AND SITE PREPARATION PLAN

SHEET NUMBER:
C-2

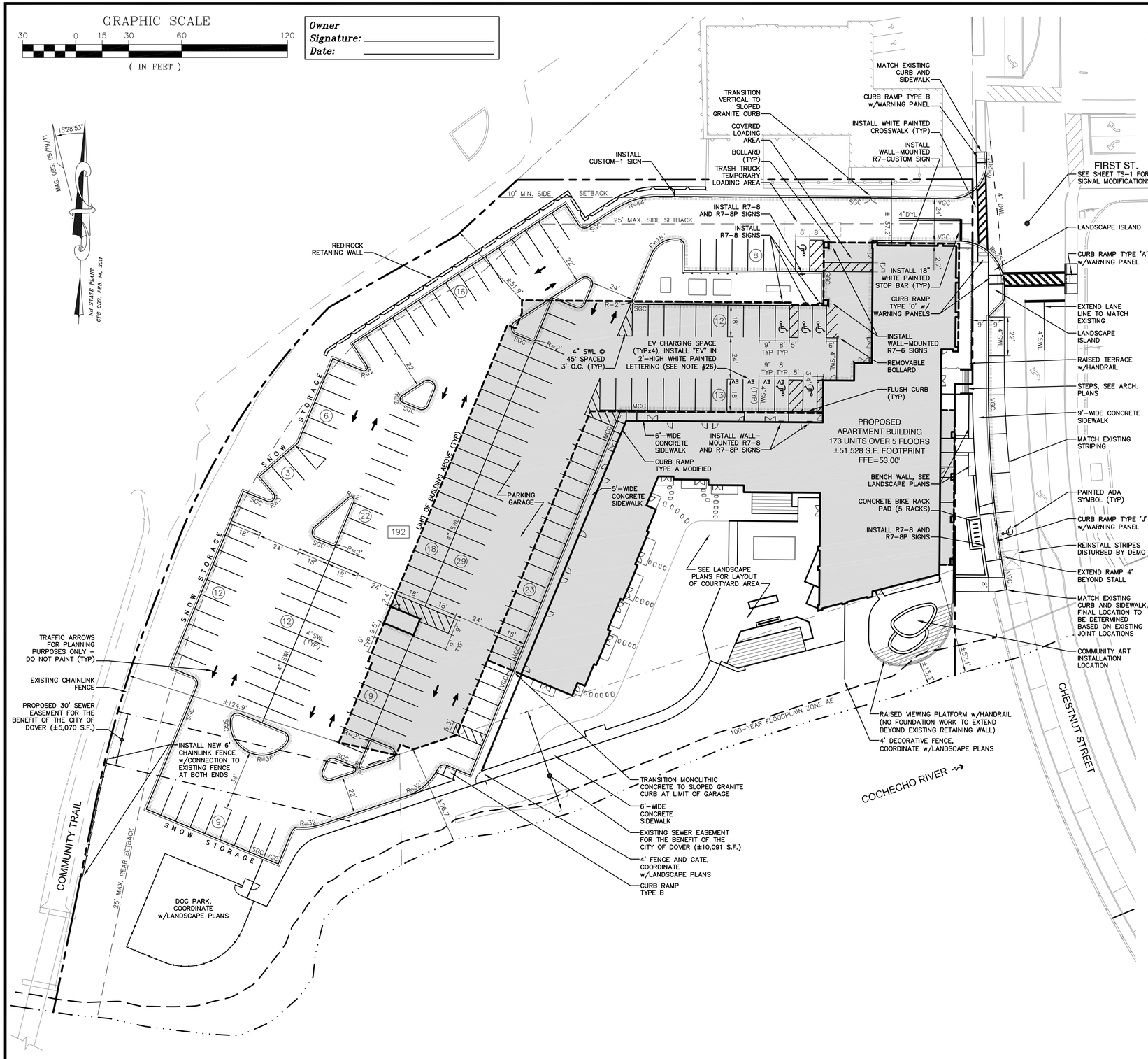
P4904

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

Owner
Signature: _____
Date: _____



SITE NOTES

1. DESIGN INTENT – THIS PLAN SET IS INTENDED TO PROVIDE THE NECESSARY INFORMATION FOR THE DESIGN AND REVIEW OF THE REDEVELOPMENT OF THE SITE FOR A MULTI-FAMILY RESIDENTIAL USE COMPRISED OF 173 UNITS AND ±2,500 SF OF RESTAURANT/COMMERCIAL SPACE WITH ASSOCIATED ACCESSWAYS, PARKING AND INFRASTRUCTURE.
2. LOT AREA: ±158,446 S.F. (±3.64 AC.)
3. THE SUBJECT PARCEL IS SHOWN AS DOVER TAX MAP 31, LOT 5.
4. REFERENCE DEED: STRAFFORD COUNTY REGISTRY OF DEEDS BOOK 2036 PAGE 090
5. THE SUBJECT PROPERTY IS ENCUMBERED BY AN EXISTING SEWER EASEMENT FOR THE BENEFIT OF THE CITY OF DOVER AS SHOWN. THE PUBLIC SHALL BE ALLOWED ACCESS TO THE VIEWING PLATFORM LOCATED WITHIN SAID EASEMENT.
6. ZONE: CENTRAL BUSINESS DISTRICT TRANSIT-ORIENTED DEVELOPMENT SUBDISTRICT DIMENSIONAL REQUIREMENTS (CBD-TOD):

MIN. LOT AREA:	NR (3.64 AC. PROVIDED)
MIN. STREET FRONTAGE:	NR (290.77' PROVIDED)
FRONT SETBACK:	0' MIN./0' MAX. (0' PROVIDED)
SIDE SETBACK:	10' MIN./25' MAX. (±37.2' PROVIDED**)
REAR SETBACK:	0' MIN./25' MAX. (±51.9' PROVIDED**)
MAX. BUILDING HEIGHT:	3 STORY MIN./5 STORY MAX.
LOT COVERAGE (BLDG.):	75-100% (38.41% PROVIDED, EXCLUDING EASEMENT**) (32.52% PROVIDED, INCLUDING EASEMENT**)
PARKING SETBACK:	10' (FRONT), 5' (SIDE & REAR)
FRONTAGE BUILD-OUT:	80% MIN. (66.14% PROVIDED**)
OPEN SPACE:	NR (34.18% PROVIDED)

(** INDICATES CONDITIONAL USE PERMIT UNDER ZONING SECTION 170-20B GRANTED 05/10/22)

7. PARKING:
MAXIMUM PARKING PERMITTED:
RESIDENTIAL (1.9 SPACES/UNIT): 1.9 x 173 = 329 SPACES
RETAIL/SERVICE (1 SPACE/275 S.F.): 2,500 S.F./275 = 9 SPACES
TOTAL MAXIMUM PARKING PERMITTED = 338 SPACES
TOTAL PARKING PROVIDED = 192 SPACES (6 ADA, 4 EV, 6 EV-READY, 176 REG.)
PARKING LOT LANDSCAPING: 8% REQUIRED (8.41% PROVIDED)
8. PORTIONS OF THE PROJECT SITE ARE IN SPECIAL FLOOD HAZARD ZONE AE.
9. NO WETLANDS ARE LOCATED ON THE PROJECT SITE PER GOVE ENVIRONMENTAL SERVICES, INC. (LUKE HURLEY, NH CERTIFIED WETLANDS SCIENTIST #232, NOVEMBER 16, 2021).
10. NHDES ALTERATION OF TERRAIN PERMIT AoT-2139 GRANTED 04/22/22 AND WETLANDS PERMIT 2021-03652 GRANTED 04/20/22 (NO DIRECT WETLANDS IMPACTS PROPOSED). SITE IS LOCATED IN URBAN EXEMPTION ZONE, NHDES SHORELAND PERMIT NOT REQUIRED.
11. PER DOVER ZONING ORDINANCE SECTION 170-20.H(1)a. "ANY REDEVELOPMENT WITHIN THE CBD IS EXEMPT FROM (CITY) WETLANDS REGULATIONS"
12. SNOW SHALL BE STORED AT THE EDGE OF PAVEMENT, IN AREAS SHOWN HEREON, AND/OR TRUCKED OFF SITE AS APPROPRIATE.
13. PAVEMENT MARKINGS SHALL BE CONSTRUCTED USING WHITE, YELLOW OR BLUE TRAFFIC PAINT (WHERE SPECIFIED) MEETING THE REQUIREMENTS OF AASHTO M248, TYPE F OR EQUAL. PAINTED ISLANDS AND LOADING ZONES SHALL BE 4"-WIDE DIAGONAL WHITE LINES 3'-0" O.C. BORDERED BY 4"-WIDE WHITE LINES. PARKING STALLS SHALL BE SEPARATED BY 4"-WIDE WHITE LINES. SEE DETAILS FOR HANDICAP SYMBOLS, SIGNS AND SIGN DETAILS.
14. PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC DEVICES," "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE AMERICANS WITH DISABILITIES ACT (ADA), LATEST EDITIONS.
15. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITIONS. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
16. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINES WITH RS-1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
17. ALL BONDS AND FEES SHALL BE PAID/POSTED PRIOR TO INITIATING CONSTRUCTION.
18. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
19. CONSTRUCTION HOURS SHALL BE LIMITED TO MON-FRI 7AM-6PM, SAT-SUN 9AM-4PM. THE HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASST. CITY MANAGER.
20. UNLESS OTHERWISE NOTED, ALL NEW CURBING SHALL BE VERTICAL OR SLOPED GRANITE WITH A MINIMUM RADIUS OF 4'.
21. THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR RESOLUTION.
22. BUILDING AREA SHOWN IS BASED ON FOOTPRINT MEASURED TO THE EDGE OF FOUNDATIONS AND/OR SLABS. ACTUAL INTERIOR SPACE WILL DIFFER.
23. 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.
24. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
25. THIS SITE PLAN IS DESIGNED IN COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED BUILDING IS DESIGNED IN COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY REGULATIONS INCLUDING NH RSA 155-A:5-d&b, THE IBC AND ANSI 117.1.
26. FOUR PARKING SPACES WILL BE EQUIPPED WITH EV CHARGING STATIONS AND AN ADDITIONAL SIX SPACES WILL BE EV-READY, COORDINATE WITH MEP PLANS.
27. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
28. RESIDENTS OF THE DEVELOPMENT SHALL NOT PLACE TRASH OR DEBRIS ON THE COMMUNITY TRAIL OR TRAILHEAD.
29. SUBJECT PROPERTY WAS GRANTED A VARIANCE ON 08/17/95 FOR SIGNAGE (DOVER REF. Z95-15).
30. PAVEMENT MARKING ABBREVIATIONS:
SWL: SINGLE WHITE LINE (4" SOLID LINE)
DWL: DOTTED WHITE LINE (4" x 2' LINES EVERY 6', ALSO REFERRED TO AS A SKIP LINE)
DYL: DOUBLE YELLOW LINE (2 x 4" SOLID LINES SEPARATED BY 4")
31. MAINTENANCE OF LANDSCAPING AND HARDSCAPING ALONG THE SITE FRONTAGE ON CHESTNUT STREET AND THE OVERLOOK DECK AND IT'S RELATED LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE OWNER.
32. TRASH SHALL BE STORED INTERNAL TO THE BUILDING IN ROLL-OUT DUMPSTERS WHICH SHALL BE STAGED FOR PICK UP WITHIN THE SITE ON A DEMAND-BASED FREQUENCY.
33. TRASH RECEPTACLE AT DOG PARK TO BE SERVICED DAILY.
34. TOTAL ROOF AREA = 51,528 SF
30% OF ROOF = 14,458
GREEN ROOF AREA = 10,767 SF
COURTYARD = 9,306 SF

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
8/1/22

NOT FOR CONSTRUCTION

ISSUED FOR: FINAL APPROVAL

ISSUE DATE: AUGUST 8, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22
3	PLANNING BOARD	EBS	04/19/22
4	CONDITIONS OF APPROVAL	EBS	08/08/22

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" – 1" = 30'
11" x 17" – 1" = 60'

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
SITE PLAN

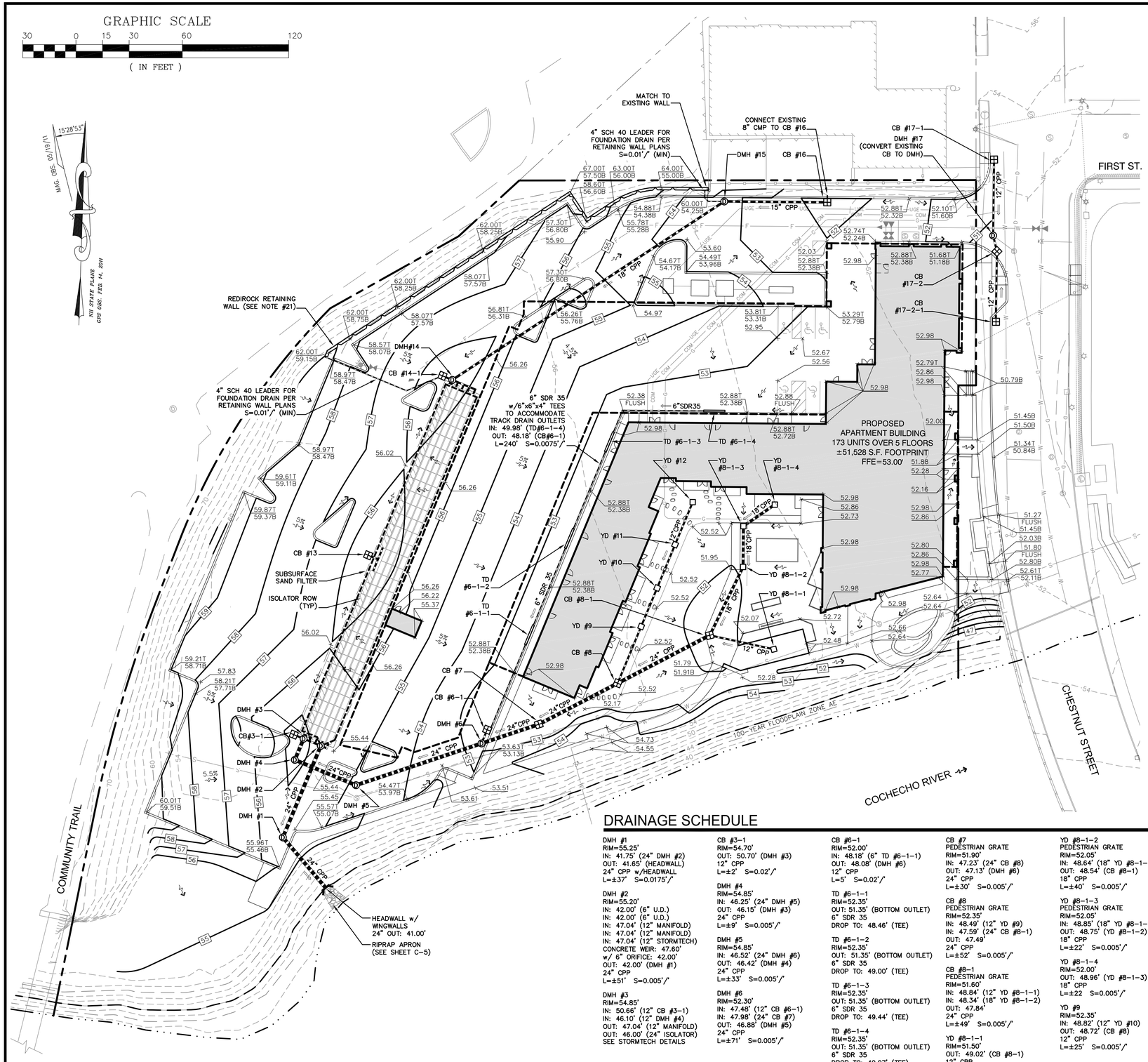
SHEET NUMBER:
C-3

P4904

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)



GRADING AND DRAINAGE NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. 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.
3. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
4. 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.
5. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
6. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION.
7. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
8. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING STORMWATER AND UTILITY LINES. PRESERVE AND PROTECT LINES TO BE RETAINED.
9. PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY 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 RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, 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 OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
10. IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
11. DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR PVC SDR 35 WHERE SPECIFIED.
12. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED.
13. ALL ROOF DRAIN LEADERS SHALL BE LOCATED IN COORDINATION WITH THE ARCHITECTURAL PLANS TO MATCH DOWNSPOUTS. RISERS SHALL BE SET TO FINISH GRADE PLUS 6" (MIN.) IF APPLICABLE.
14. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE.
15. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. SYMBOLS MAY NOT BE INDICATIVE OF THE CENTER OF A STRUCTURE, PARTICULARLY WHEN SHOWN ADJACENT TO A CURB LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
16. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
17. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
18. THE APPLICANT SHALL COMPLETE A LAND USE TRACKING FORM, MOST RECENT REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL AT https://www.unh.edu/unhsc/ptapp.
19. 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.
20. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
21. CONTRACTOR SHALL PROVIDE RETAINING WALL DESIGN DRAWINGS STAMPED BY A NH-LICENSED PROFESSIONAL STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. DESIGN MUST BE PRE-APPROVED BY SELECTED WALL MANUFACTURER.
22. CONTRACTOR SHALL CONNECT BUILDING FOUNDATION DRAINS TO THE NEAREST DRAINAGE STRUCTURE PROVIDED A MINIMUM 1% SLOPE BETWEEN THE BUILDING AND THE STRUCTURE CAN BE OBTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FOUNDATION DRAINS WITH THE BUILDING PLANS.
23. SEE SHEET C-11 FOR LEGEND.

DRAINAGE SCHEDULE

DMH #1
RIM=55.25'
IN: 41.75' (24" DMH #2)
OUT: 41.65' (HEADWALL)
24" CPP w/HEADWALL
L=±37' S=0.0175'/'

DMH #2
RIM=55.20'
IN: 42.00' (6" U.D.)
IN: 42.00' (6" U.D.)
IN: 47.04' (12" MANIFOLD)
IN: 47.04' (12" MANIFOLD)
IN: 47.04' (12" STORMTECH)
CONCRETE WEIR: 47.60'
w/ 6" ORIFICE: 42.00'
OUT: 42.00' (DMH #1)
24" CPP
L=±51' S=0.005'/'

DMH #3
RIM=54.85'
IN: 50.66' (12" CB #3-1)
IN: 46.10' (12" DMH #4)
OUT: 47.04' (12" MANIFOLD)
OUT: 46.00' (24" ISOLATOR)
SEE STORMTECH DETAILS

CB #3-1
RIM=54.70'
OUT: 50.70' (DMH #3)
12" CPP
L=±2' S=0.02'/'

DMH #4
RIM=54.85'
IN: 46.25' (24" DMH #5)
OUT: 46.15' (DMH #3)
24" CPP
L=±9' S=0.005'/'

DMH #5
RIM=54.85'
IN: 46.52' (24" DMH #6)
OUT: 46.42' (DMH #4)
24" CPP
L=±33' S=0.005'/'

DMH #6
RIM=52.30'
IN: 47.48' (12" CB #6-1)
IN: 47.98' (24" CB #7)
OUT: 46.88' (DMH #5)
24" CPP
L=±71' S=0.005'/'

CB #6-1
RIM=52.00'
IN: 48.18' (6" TD #6-1-1)
OUT: 48.08' (DMH #6)
12" CPP
L=5' S=0.02'/'

TD #6-1-1
RIM=52.35'
OUT: 51.35' (BOTTOM OUTLET)
6" SDR 35
DROP TO: 48.46' (TEE)

TD #6-1-2
RIM=52.35'
OUT: 51.35' (BOTTOM OUTLET)
6" SDR 35
DROP TO: 49.00' (TEE)

TD #6-1-3
RIM=52.35'
OUT: 51.35' (BOTTOM OUTLET)
6" SDR 35
DROP TO: 49.44' (TEE)

TD #6-1-4
RIM=52.35'
OUT: 51.35' (BOTTOM OUTLET)
6" SDR 35
DROP TO: 49.97' (TEE)

CB #7
PEDESTRIAN GRATE
RIM=51.90'
IN: 47.23' (24" CB #8)
OUT: 47.13' (DMH #6)
24" CPP
L=±30' S=0.005'/'

CB #8
PEDESTRIAN GRATE
RIM=52.35'
IN: 48.49' (12" YD #9)
IN: 47.59' (24" CB #8-1)
OUT: 47.49'
24" CPP
L=±52' S=0.005'/'

CB #8-1
PEDESTRIAN GRATE
RIM=51.60'
IN: 48.84' (12" YD #8-1-1)
IN: 48.34' (18" YD #8-1-2)
OUT: 47.84'
24" CPP
L=±49' S=0.005'/'

YD #8-1-1
RIM=51.50'
OUT: 49.02' (CB #8-1)
12" CPP
L=±35' S=0.005'/'

YD #8-1-2
PEDESTRIAN GRATE
RIM=52.05'
IN: 48.64' (18" YD #8-1-3)
OUT: 48.54' (CB #8-1)
18" CPP
L=±40' S=0.005'/'

YD #8-1-3
PEDESTRIAN GRATE
RIM=52.05'
IN: 48.85' (18" YD #8-1-4)
OUT: 48.75' (YD #8-1-2)
18" CPP
L=±22' S=0.005'/'

YD #8-1-4
RIM=52.00'
OUT: 48.96' (YD #8-1-3)
18" CPP
L=±22 S=0.005'/'

YD #9
RIM=52.35'
IN: 48.82' (12" YD #10)
OUT: 48.72' (CB #8)
12" CPP
L=±25' S=0.005'/'

YD #10
RIM=52.35'
IN: 49.04' (12" YD #11)
OUT: 48.94' (YD #9)
12" CPP
L=±23' S=0.005'/'

YD #11
RIM=52.35'
IN: 49.27' (12" YD #12)
OUT: 49.17' (YD #10)
12" CPP
L=±26' S=0.005'/'

YD #12
RIM=52.35'
OUT: 49.40' (YD #11)
12" CPP
L=±26' S=0.005'/'

CB #13
RIM=55.45'
OUT: 46.00' (TEE)
12" CPP
L=±4' S=0.0'/'

DMH #14
RIM=55.65'
IN: 51.41' (12" CB #14-1)
IN: 46.10' (18" DMH #15)
OUT: 47.04' (12" MANIFOLD)
OUT: 46.00' (24" ISOLATOR)
SEE STORMTECH DETAILS

CB #14-1
RIM=55.45'
IN: 51.45' (4" WALL DRAIN)
OUT: 51.45' (DMH #14)
12" CPP
L=±2' S=0.02'/'

DMH #15
RIM=53.30'
IN: 49.30' (4" WALL DRAIN)
IN: 47.25' (15" CB #16)
OUT: 47.00' (DMH #14)
18" CPP
L=±180' S=0.005'/'

CB #16
RIM=51.55'
IN: ±47.88' (8" FROM EXIST.-CORE IN FIELD)
OUT: 47.55' (DMH #15)
15" CPP
L=±54' S=0.0056'/'

DMH #17
(CONVERT EXISTING CB)
RIM=50.55' (MATCH EXISTING)
IN: 46.40' (12" CB #17-1)
IN: 46.40' (12" CB #17-2)
OUT: 46.30' (EXISTING)
15" CMP (EXISTING)

CB #17-1
RIM=52.00'
OUT: 48.00' (DMH #17)
12" CPP
L=±39' S=0.041'/'

CB #17-2
RIM=50.45'
IN: 46.53' (12" CB #17-2-1)
OUT: 46.43' (DMH #17)
12" CPP
L=±5' S=0.005'/'

CB #17-2-1
RIM=50.45'
OUT: 46.68' (CB #17-2)
12" CPP
L=±29' S=0.005'/'

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

4/19/22

NOT FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD

ISSUE DATE: APRIL 19, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22
3	PLANNING BOARD	EBS	04/19/22

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" - 1" = 30'
11" x 17" - 1" = 60'

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
GRADING AND DRAINAGE PLAN

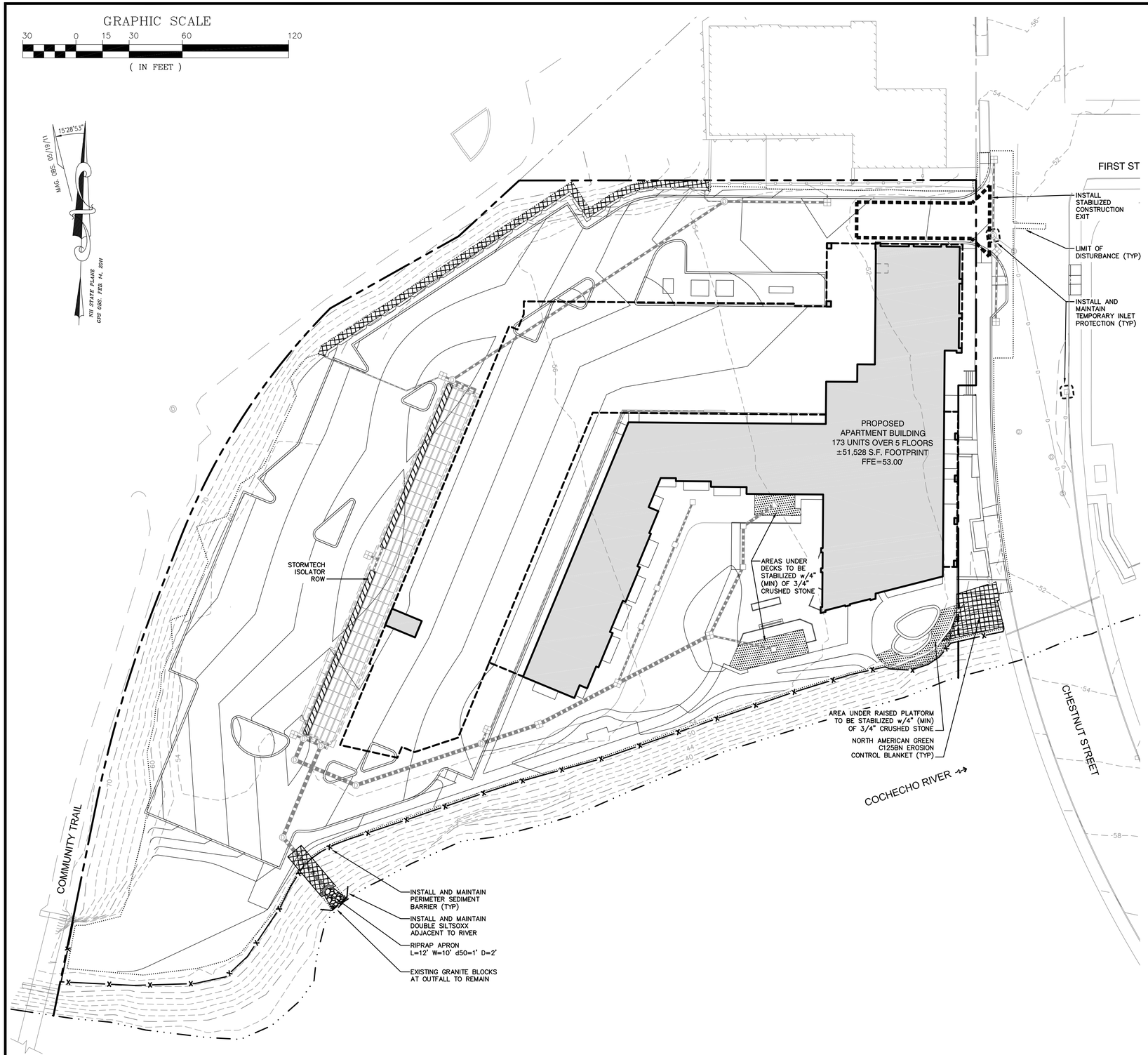
SHEET NUMBER:
C-4

P4904

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)



EROSION AND SEDIMENT CONTROL NOTES

1. PROJECT SUBJECT TO EPA NPDES PHASE II. NOI, SWPPP AND MINIMUM WEEKLY INSPECTIONS REQUIRED. NOI TO BE PREPARED AND SUBMITTED BY CONTRACTOR, SWPPP AND INSPECTIONS TO BE PREPARED AND PERFORMED BY CONTRACTOR. CONTRACTOR SHALL FILE NOI WITH EPA 2 WEEKS PRIOR TO CONSTRUCTION.
2. AREA OF DISTURBANCE = ±139,250 S.F. (INCLUDES OFFSITE WORK). NHDES ALTERATION OF TERRAIN PERMIT REQUIRED.
3. PERIMETER SEDIMENT CONTROLS AND CULVERT AND CATCH BASIN INLET PROTECTION MEASURES SHALL BE INSTALLED AFTER TREE CLEARING OPERATIONS HAVE CEASED AND BEFORE ANY STUMPING, GRUBBING OR OTHER EARTH DISTURBANCE.
4. GRIND STUMPS AND REUSE GRINDINGS FOR EROSION CONTROL WHERE POSSIBLE OR TRUCK OFFSITE. NO STUMPS SHALL BE BURIED ON SITE.
5. NO EARTHWORK SHALL COMMENCE UNTIL ALL APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND THE SITE IS STABILIZED.
6. SEE DETAIL SHEETS FOR PERTINENT SEDIMENT AND EROSION CONTROL DETAILS AND ADDITIONAL NOTES.
7. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE NEW HAMPSHIRE OF ENVIRONMENTAL SERVICES.
8. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT EROSION, PREVENT SEDIMENT FROM LEAVING THE SITE AND/OR ENTERING WETLANDS AND ENSURE PERMANENT SOIL STABILIZATION.
9. TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED IN ALL CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.
10. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIODEGRADEABLE.
11. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.
12. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
13. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND MULCH USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.
14. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
15. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.
16. CONTRACTOR SHALL READ AND FOLLOW ALL CONDITIONS OF APPROVAL IN THE SITE'S NHDES ALTERATION OF TERRAIN, NHDES WETLANDS, ARMY CORPS OF ENGINEER'S AND CITY OF DOVER SITE PLAN PERMITS.
17. CONSTRUCTION ACTIVITIES SHALL BE MANAGED IN STRICT ACCORDANCE WITH NH RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES. NO INVASIVE SPECIES SHALL BE INSTALLED ON THE PROJECT SITE FOR ANY REASON.
18. FUGITIVE DUST SHALL BE CONTROLLED DURING CONSTRUCTION IN ACCORDANCE WITH ENV-A 1000. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DUST FROM LEAVING THE SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE PROACTIVE MANAGEMENT OF STOCKPILES, MATERIALS PROCESSING ACTIVITIES, VEHICULAR TRAFFIC, THE EXCAVATION AND PLACEMENT OF EARTH MATERIALS, SPRAYING WATER, SWEEPING PAVED SURFACES, PROVIDING TEMPORARY VEGETATION, AND/OR MULCHING EXPOSED AREAS AND STOCKPILES.
19. SEE SHEET C-11 FOR LEGEND.

ALTUS ENGINEERING, INC.

133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

4/19/22

NOT FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD

ISSUE DATE: APRIL 19, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22
3	PLANNING BOARD	EBS	04/19/22

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" - 1" = 30'
11" x 17" - 1" = 60'

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
EROSION AND SEDIMENT CONTROL PLAN

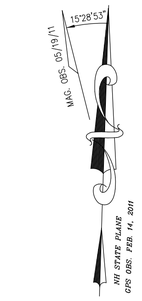
SHEET NUMBER:
C-5

P4904

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)



1,000 GAL. GREASE TRAP
RIMS=52.30'
IN: 48.90' (4" SDR 35)
OUT: 48.73' (4" SDR 35)
COORDINATE w/ MEP PLANS

8"x6" REDUCER

UNDERGROUND ELECTRIC AND COMMS CONDUIT, COORDINATE w/SERVICE PROVIDERS

UTILIZE EXISTING POLE AS DROP FOR NEW SERVICES, INSTALL BRACE AS NEEDED

CONNECT NEW GAS SERVICE TO EXISTING SERVICE COORDINATE w/MEP PLANS

THRUST BLOCK AT ALL BENDS AND TEES (TYP)

FIRST ST.

INSTALL 8" LIVE TAP AND THRUST BLOCK ON EXISTING 12" MAIN

GATE VALVE (TYP)

6" D.I.

8" D.I.

RESTAURANT GAS SERVICE ENTRANCE

4" DOMESTIC AND 6" FIRE SERVICE ENTRANCES w/VALVE ON EACH SERVICE (TYP)

INSTALL HYDRANT ASSEMBLY AND GATE VALVE

GENERATOR, TRANSFORMERS AND PRIMARY SWITCH

UNDERGROUND COMMS SERVICE CONDUIT(S)

UNDERGROUND ELECTRICAL DUCT BANK

ELECTRIC AND COMMS SERVICE ENTRANCE TO ELECTRICAL AND IT ROOM

GAS SERVICE TO FIRE PITS AND GRILLS, SIZE PER MEP PLANS

SLEEVE GAS LINE WITHIN BUILDING LIMITS, COORDINATE w/MEP AND STRUCTURAL PLANS

PROPOSED APARTMENT BUILDING
173 UNITS OVER 5 FLOORS
±51,528 S.F. FOOTPRINT
FFE=53.00'

EXTEND GAS SERVICE TO GRILLS AND FIREPITS PER MEP PLANS

FIRE DEPT. SERVICE CONNECTION

8" SDR 35 SANITARY BLDG. OUT: 47.00'

8" SDR 35 SANITARY S=0.02'/'

CORE NEW INVERT IN: 46.56' (8") INSTALL INTERNAL DROP

EXISTING SEWER MANHOLE INV: ±33.30' (30") ADJUST RIM TO NEW FINISH GRADE: 52.70' AND MODIFY SHELF TO ACCOMMODATE NEW DROP INLET

PROPOSED 30' SEWER EASEMENT FOR THE BENEFIT OF THE CITY OF DOVER (±5,070 S.F.)

COMMUNITY TRAIL

EXISTING SEWER EASEMENT FOR THE BENEFIT OF THE CITY OF DOVER (±10,091 S.F.)

ADJUST SEWER MANHOLE RIM TO FINISH GRADE: 54.75'

COCHECHO RIVER

CHESTNUT STREET

UTILITY NOTES

1. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST. THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, CITY OF DOVER DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.
2. PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF NECESSARY, EXISTING UTILITIES SHALL BE RELOCATED AT NO EXTRA COST TO THE OWNER. ALL CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, DPW AND APPROPRIATE UTILITIES.
3. THE SITE IS SERVED BY MUNICIPAL WATER AND SEWER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
5. ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS SHALL BE COORDINATED WITH THE DOVER POLICE DEPARTMENT AND DPW AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.
7. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.
8. SEE ARCHITECTURAL/MECHANICAL DRAWINGS FOR EXACT LOCATIONS & ELEVATIONS OF UTILITY CONNECTIONS AT BUILDING. COORDINATE ALL WORK WITHIN FIVE (5) FEET OF BUILDINGS WITH BUILDING CONTRACTOR AND ARCHITECTURAL/MECHANICAL DRAWINGS. ALL CONFLICTS AND DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY AND PRIOR TO COMMENCING RELATED WORK.
9. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED. SITE PLANS SHALL SHOW ANY EASEMENTS FOR THESE SERVICES.
10. APPROVED BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
11. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
12. FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE ARCHITECT, CONTRACTOR, APPROPRIATE UTILITY COMPANIES AND THE DOVER DPW.
13. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
14. UTILITY PROVIDERS AND CONTACTS:
    - WATER & SEWER: CITY OF DOVER COMMUNITY SERVICES, BILL BOULANGER, (603) 516-6450.
    - GAS: UNITIL, DAVID MACLEAN, (603) 294-5144.
    - TELECOMMUNICATIONS: CONSOLIDATED, JASON CUNHA, (603) 325-2041.
    - CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
    - ELECTRICAL: EVERSOURCE, NICK KOSKO, (603) 332-4227. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL, 48-HOUR MINIMUM NOTICE REQUIRED.
15. CONTRACTOR TO PROVIDE BOLLARDS AT SERVICE ENTRANCES PER THE SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.
16. ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL BE CONSTRUCTED AND TESTED PER DOVER DPW STANDARDS AND SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE TO THE STANDARDS AND SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.
17. WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.
18. WATER AND SANITARY SEWER LINES SHALL BE LOCATED AT LEAST 10' HORIZONTALLY FROM EACH OTHER. WHERE CROSSING, 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER INSTALLED OVER SEWER.
19. THE CONTRACTOR SHALL CONFIRM ALL UTILITY LINE AND CONDUIT SIZES WITH THE MEP PLANS AND SERVICE PROVIDERS PRIOR TO INSTALLATION. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
20. FIRE ALARM PANELS SHALL BE MONITORED THROUGH A THIRD-PARTY SECURITY COMPANY. CONTRACTOR SHALL COORDINATE PANEL LOCATIONS AND INTERCONNECTIONS WITH CITY FIRE DEPARTMENT AND ARCHITECT.
21. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE BUILDING AS SHOWN. COORDINATE WITH THE MEP PLANS AND THE CITY FIRE DEPARTMENT. ACCESS TO THE FDC SHALL BE MAINTAINED AS A CLEAR AND UNOBSTRUCTED PATH AT ALL TIMES.
22. THE PROPOSED STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 109-30 OF THE CODE OF THE CITY OF DOVER AND THE 2015 STATE BUILDING CODES.
23. 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.
24. THE CITY OF DOVER SHALL BE GRANTED A BLANKET EASEMENT FOR ACCESS TO ALL WATER VALVES AND FIRE HYDRANTS.
25. THE CITY OF DOVER SHALL BE GRANTED A 30'-WIDE SEWER EASEMENT OVER THE EXISTING SEWER MAIN AS SHOWN.
26. COORDINATE WITH MEP PLANS FOR ELECTRIC VEHICLE CHARGING STATIONS.
27. UNLESS OTHERWISE DETERMINED BY THE UTILITY PROVIDER, ALL ELECTRICAL TRANSFORMERS AND SWITCHES SHALL REMAIN THE PROPERTY OF EVERSOURCE.
28. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL HANDHOLES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS IN ORDER TO RENDER THE FULL INSTALLATION OF COMPLETE AND OPERATIONAL UTILITY AND DRAINAGE SYSTEMS.
29. SEE SHEET C-11 FOR LEGEND.

WATER / SEWER FLOW CALCULATIONS

EXISTING -
RETAIL:
TOTAL = 280 GPD
(CALCULATED AS A NINE MONTH AVERAGE OF ACTUAL METERED USE FROM 12/05/18 TO 09/09/19)

PROPOSED -
APARTMENT (173 UNITS):
38 GPD/PERSON
(108) 1 PERSON UNITS = 108 PEOPLE
(65) 2 PERSON UNITS = 130 PEOPLE
238 PEOPLE x 38 GPD/PERSON = 9,044 GPD
RESTAURANT:
7 GPD/PERSON
80 SEATS (7 GPD) = 560 GPD
TOTAL = 9,604 GPD
(CALCULATED FROM METCALF & EDDY/AECOM "WASTEWATER ENGINEERING TREATMENT AND RESOURCE RECOVERY", 5TH EDITION)

NET FLOW INCREASE:
9,604 - 280 = 9,324 GPD

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ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
4/19/22

NOT FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD

ISSUE DATE:
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REVISIONS

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DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" - 1" = 30'
11" x 17" - 1" = 60'

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
UTILITY PLAN

SHEET NUMBER:
C-6

P4904

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

LIGHTING NOTES

1. SITE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF UNDERGROUND UTILITY AND DRAINAGE INFRASTRUCTURE BEFORE INSTALLING POLE BASES.
2. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES TO INCLUDE LIGHTING CONDUIT, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
3. LIGHTING CONDUIT SHALL BE PVC SCH 40.
4. ALL LIGHTING MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
5. ALL PARKING LOT AND DRIVEWAY LIGHTING FIXTURES SHALL BE FULL CUT-OFF AND 3000K COLOR TEMPERATURE SO AS TO BE DARK-SKY COMPLIANT.
6. CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND BUILDING ELECTRICAL CONTRACTOR FOR ALL SITE ELECTRICAL WORK INCLUDING BUT NOT LIMITED TO ALL SERVICE ENTRANCES/EXITS, RISERS, CIRCUITRY, METERS, SUB-METERS, ETC.
7. COORDINATE WITH ARCHITECTURAL PLANS FOR ALL BUILDING-MOUNTED AND LANDSCAPE FIXTURES, TYPES, LOCATIONS AND WIRING.
8. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP BALLAST AND LUMINAIRE MAY AFFECT FIELD RESULTS.
9. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER DOVER CODE CHAPTER 153-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
10. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION PROVIDED BY VISIBLE LIGHT, INC., 24 STICKNEY TERRACE, SUITE 6, HAMPTON, NH 03842. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, CIRCUITRY, ETC.) SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ARCHITECT AND SPECIFIER.
11. SEE DETAIL SHEETS POLE BASE AND CONDUIT TRENCH DETAILS.
12. SEE SHEET C-11 FOR LEGEND.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Landscape Island	+	0.7 fc	2.0 fc	0.1 fc	20.0:1	7.0:1
Outside of Parking Lot	+	0.3 fc	3.4 fc	0.0 fc	N/A	N/A
Parking Lot	+	1.2 fc	3.3 fc	0.3 fc	11.0:1	4.0:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens per Lamp	LLF	Wattage	Distribution
	2S4	3	Lithonia Lighting	DSXO LED P3 30K TFTM MVOLT SPA DDBXD with SSS 20 4C DM28AS DDBXD	DSXO LED Area Fixture; mounted at 20ft	LED	DSXO_LED_P3_30K_TFTM_MVOLT.ies	7841	0.9	142	TYPE IV, SHORT, BUG RATING: B2 - U0 - G2
	S3	1	Lithonia Lighting	DSXO LED P3 30K T3M MVOLT SPA DDBXD with SSS 20 4C DM19AS DDBXD	DSXO LED Area Fixture; mounted at 20ft	LED	DSXO_LED_P3_30K_T3M_MVOLT.ies	7616	0.9	71	TYPE III, MEDIUM, BUG RATING: B2 - U0 - G2
	S4-HS	2	Lithonia Lighting	DSXO LED P3 30K TFTM MVOLT HS SPA DDBXD with SSS 20 4C DM19AS DDBXD	DSXO LED Area Fixture with houseside shield; mounted at 20ft	LED	DSXO_LED_P3_30K_TFTM_MVOLT.ies	6122	0.9	71	TYPE III, VERY SHORT, BUG RATING: B1 - U0 G2
	W3	1	Lithonia Lighting	WDGE2 LED P3 30K 80CRI T3M SRM DDBXD	WDGE2 LED Wallpack; mounted at 12ft	LED	WDGE2_LED_P2_30K_80CRI_T3M.ies	3063	0.9	32.1375	TYPE III, MEDIUM, BUG RATING: B1 - U0 G1
	W4	10	Lithonia Lighting	WDGE2 LED P3 30K 80CRI TFTM SRM DDBXD	WDGE2 LED Wallpack; mounted at 12ft	LED	WDGE2_LED_P3_30K_80CRI_TFTM.ies	3015	0.9	32.1375	TYPE IV, SHORT, BUG RATING: B1 - U0 G1

ALTUS ENGINEERING, INC.

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VISIBLELIGHT

NOT FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD

ISSUE DATE: APRIL 19, 2022

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3	PLANNING BOARD	EBS	04/19/22

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APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
PARKING LOT LIGHTING PLAN

SHEET NUMBER:
C-7

P4904

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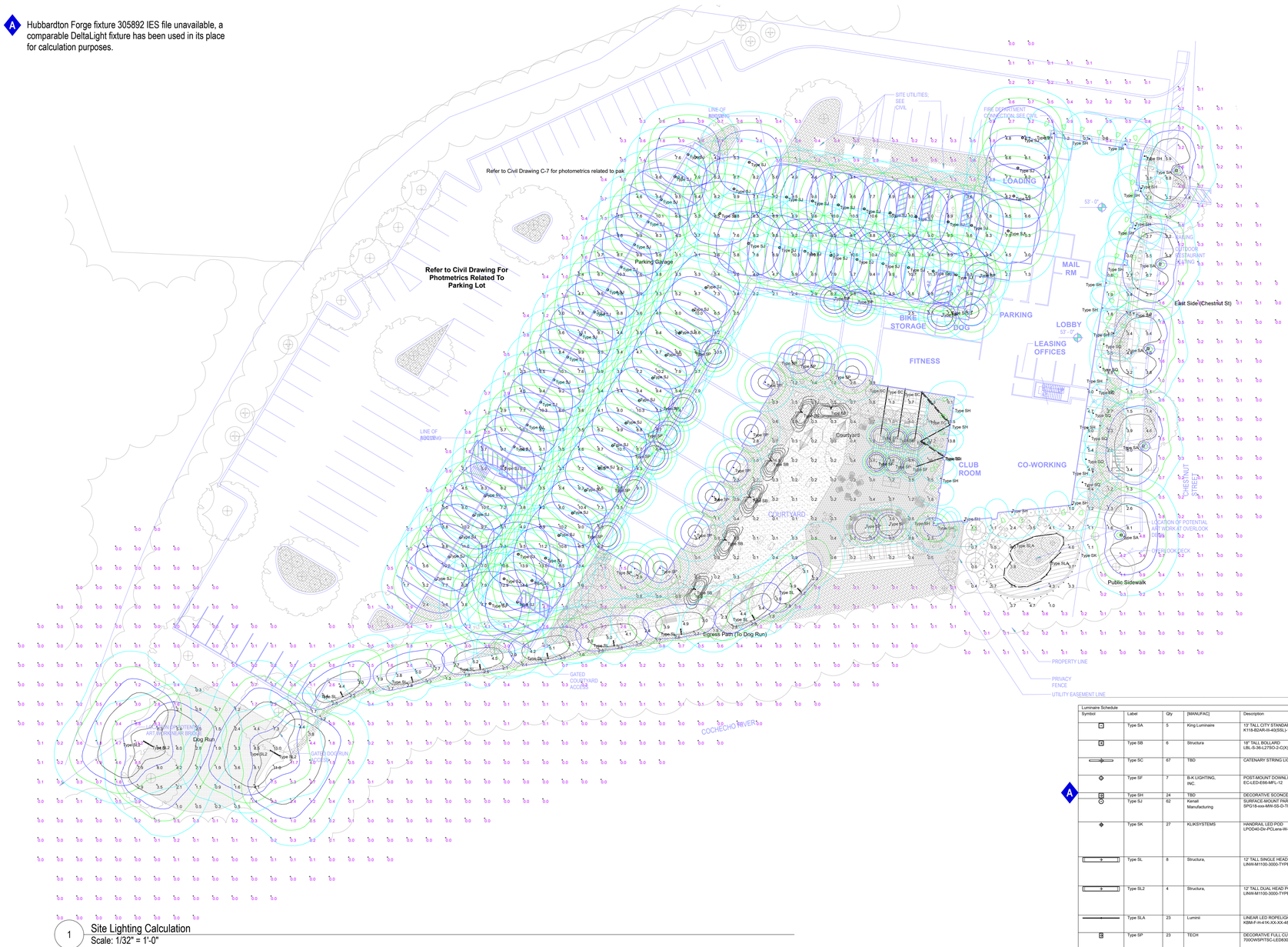
Reference Notes *(Specific to this sheet only)*

A Hubbardton Forge fixture 305892 IES file unavailable, a comparable DeltaLight fixture has been used in its place for calculation purposes.

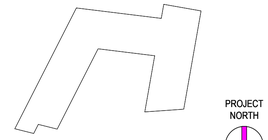


1 Site Lighting Calculation
Scale: 1/32" = 1'-0"

Statistics						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Courtyard	Fc	2.52	45.3	0.1	25.20	453.00
Dog Run	Fc	4.04	15.0	0.3	13.47	50.00
East Side (Chestnut St)	Fc	0.36	4.8	0.0	N.A.	N.A.
Egress Path (To Dog Run)	Fc	3.00	5.4	1.1	2.73	4.91
Outside of Parking Lot	Fc	0.62	13.2	0.0	N.A.	N.A.
Parking Garage	Fc	6.91	14.5	0.1	69.10	145.00
Public Sidewalk	Fc	3.07	10.1	0.0	N.A.	N.A.

Luminaire Schedule

Symbol	Label	Qty	[MANUFAC]	Description	Filename	Luminaire Lumens	LLF	BUG Rating	IES Class
	Type SA	5	King Luminaire	13' TALL CITY STANDARD LIGHT POLE K118-BZAR-III-40(SSL)-1042-4K	Type SA 0100ntc2ar3x0404 0xeh.ies	4637	0.810	B1-U3-G2	Type III
	Type SB	6	Structura	18" TALL BOLLARD LBL-S-36-L27SO-2-CXX-PXX-UNV-STD.ies	LBL-S-36-L27SO-2-CXX-PXX-UNV-STD.ies	721	0.810	B0-U1-G1	Type III
	Type SC	67	TBD	CATENARY STRING LIGHTS	CLE-4LSK-30K-VHO-SF-X-SA-XXX_IESNA2002.IES	2042	0.130	B1-U3-G1	Type VS
	Type SF	7	B-K LIGHTING, INC.	POST-MOUNT DOWNLIGHT EC-LED-E66-MFL-12	Type SF-e66-MFL-12-ITL8502.IES	458	0.810	N.A.	N.A.
	Type SH	24	TBD	DECORATIVE SCONCE	23231883.ies	1113	0.810	B0-U3-G1	N.A.
	Type SJ	62	Kenall Manufacturing	SURFACE-MOUNT PARKING DOWNLIGHT SPG18-xxx-MW-5S-D-TP-30L-35K8-	Type SJ- SPG18-xxx-MW-5S-D-TP-30L-35K8-DCC-DY-yyy.ies	3783	0.810	B2-U1-G1	Type VS
	Type SK	27	KLIKSYSTEMS	HANDRAIL LED POD LPOD40-Dir-PCLens-W-S	Type SK-LPOD40-Dir-PCLens-W-SymRail-LPOD-350mA-3000K-0.025m-451797-A.ies	109	0.810	B0-U0-G0	Type I
	Type SL	8	Structura,	12' TALL SINGLE HEAD POLE LINW-M1100-3000-TYPE II	LINW-M1100-2700K-TYPE II.IES	2648	0.810	B1-U0-G1	Type III
	Type SL2	4	Structura,	12' TALL DUAL HEAD POLE LINW-M1100-3000-TYPE IV	LINW-M1100-2700K-TYPE IV.IES	2695	2.810	B1-U0-G1	Type IV
	Type SLA	23	Luminii	LINEAR LED ROPELIGHT KBM-F-H-41K-XX-XX-48	KBM-F-H-41K-XX-XX-48 IESNA2002.IES	487	0.810	B0-U1-G0	Type VS
	Type SP	23	TECH	DECORATIVE FULL CUT-OFF SCONCE 7000WSPITSC-LED830	10217122BCH6-032-GB 7000WSPITSC-LED830.ies	803	0.810	B1-U0-G0	Type VS
	Type SQ	7	Gotham	RECESSED DOWNLIGHT EVO4 30_10 AR WD LD	EVO4_30_10_AR_WD_LD.ies	738	0.810	B1-U0-G0	Type VS



KEY PLAN

AVAILABLE LIGHT

This Drawing Shows Design Intent Only And Is **Not** To Be Used As A Construction Document

CLIENT:

REDGATE™

Redgate Real Estate Advisor, LLC
286 Franklin Street, Suite 602
Boston, MA 02110

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut
#P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR TRC RESUBMISSION

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

Site Lighting Calc

Project No. 21033.00
Drawn By LND/NAD
Date 02/24/22
Scale

DRAWING NUMBER:

AL-1

SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION

47 CHESTNUT STREET
DOVER, NEW HAMPSHIRE
TAX MAP 31 LOT 5

LATITUDE: 43.197° N
LONGITUDE: 70.878° W

OWNER:
HARLECH, LLC
273 CORPORATE DRIVE
PORTSMOUTH, NH 03821

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKILN ST., SUITE 602
BOSTON, MA 02110

DESCRIPTION

The project consists of the redevelopment of the site to include the construction of a new 173–unit apartment building together with a restaurant, amenity space and associated site improvements.

DISTURBED AREA

The total area to be disturbed for the development is ±139,250 S.F. (±3.20 acres).

PROJECT PHASING

The project will be completed in one phase.

NAME OF RECEIVING WATER

The site drains to the Cochecho River.

SEQUENCE OF MAJOR ACTIVITIES

1. Install temporary erosion control measures including perimeter controls, stabilized construction entrance and inlet sediment filters as noted on the plan. All temporary erosion control measures shall be maintained in good working condition for the duration of the project.
2. Remove landscaping and trees, strip loam and stockpile.
3. Demolish existing site features, buildings, utilities, pavement, etc. as shown on Demolition Plan.
4. Construct building foundations.
5. Rough grade site including placement of borrow materials.
6. Construct new buildings and associated improvements.
7. Construct drainage structures, culverts, utilities & pavement base course materials.
8. Install base course paving & curbing.
9. Install top course paving and sidewalks.
10. Loam (6" min) and seed on all disturbed areas not paved or otherwise stabilized.
11. Install landscaping.
12. When all construction activity is complete and site is stabilized, remove all temporary erosion control measures and any sediment that has been trapped by these devices.

TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual, Volumes 1 – 3", issued December 2008, as amended. As indicated in the sequence of Major Activities, perimeter controls shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area and permanent measures are established, perimeter controls shall be removed.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through appropriate perimeter controls. All storm drain inlets shall be provided with inlet protection measures.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion and sediment control measures shall be maintained until permanent vegetation is established.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the plan:

1. The smallest practical portion of the site shall be denuded at one time.
2. All control measures shall be inspected at least once each week and following any storm event of 0.25 inches or greater.
3. All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours.
4. Built–up sediment shall be removed from perimeter barriers when it has reached one–third the height of the barrier or when "bulges" occur.
5. All diversion dikes shall be inspected and any breaches promptly repaired.
6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
8. An area shall be considered stable if one of the following has occurred:
   a. Base coarse gravels have been installed in areas to be paved;
   b. A minimum of 85% vegetated growth as been established;
   c. A minimum of 3 inches of non–erosive material such as stone of riprap has been installed; – or –
   d. Erosion control blankets have been properly installed.
9. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. MULCHING

Mulch shall be used on highly erodible soils, on critically eroding areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.

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. This is applicable when working within 100 feet of wetlands. 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 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment 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. Guidelines for Winter Mulch Application –

Type	Rate per 1,000 s.f.	Use and Comments
Hay or Straw	70 to 90 lbs.	Must be dry and free from mold. May be used with plantings.
Wood Chips or Bark Mulch	460 to 920 lbs.	Used mostly with trees and shrubs.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CONTINUED)

Jute and Fibrous Matting (Erosion Blanket	As per manufacturer Specifications	Used in slope areas, water courses and other Control areas.
Crushed Stone 1/4" to 1–1/2" dia.	Spread more than 1/2" thick	Effective in controlling wind and water erosion.
Erosion Control Mix	2" thick (min)	* The organic matter content is between 80 and 100%, dry weight basis. * Particle size by weight is 100% passing a 6"screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen. *The organic portion needs to be fibrous and elongated. *Large portions of silts, clays or fine sands are not acceptable in the mix. * Soluble salts content is less than 4.0 mmhos/cm. *The pH should fall between 5.0 and 8.0.

3. 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.

C. PERMANENT SEEDING –

1. Bedding – stones larger than 1/2", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" 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 organic 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 organic fertilizer @ 12 lbs. per 1,000 s.f.

3. Seed Mixture (for lawns**):

Type	Lbs. / Acre	Lbs. / 1,000 sf
Tall Fescue	24	0.55
Creeping Red Fescue	24	0.55
Total	48	1.10

Seed Mixture (For slope embankments**):
Grass Seed: Provide fresh, clean, new–crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide seed mixture composed of grass species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed, as specified:

Type	Min. Purity (%)	Min. Germination (%)	Kg./Hectare (Lbs/Acre)
Creeping Red Fescue (c)	96	85	45 (40)
Perennial Rye Grass (a)	98	90	35 (30)
Redtop	95	80	5 (5)
Alsike Clover	97	90(e)	5 (5)
		Total	90 (80)

a. Ryegrass shall be a certified fine–textured variety such as Pennfine, Fiesta, Yorktown, Diplomat, or equal.
b. Fescue varieties shall include – Creeping Red and/or Hard Reliant, Scaldis, Koket, or Jamestown.
** In the event that the seed mixes shown here conflict with the project landscape plans, the landscape plans shall govern.

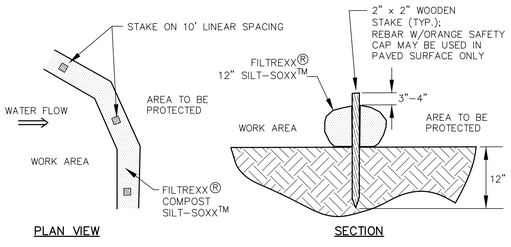
4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

WINTER CONSTRUCTION NOTES

1. 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 elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. 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;

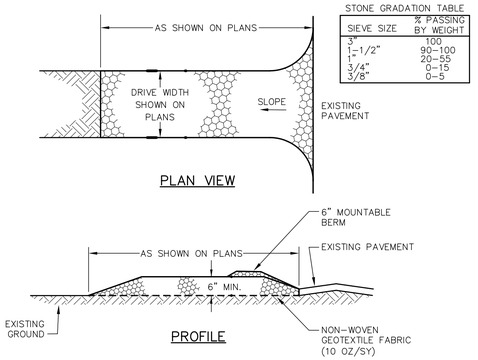
2. All ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions; and

3. 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.



NOTES:
1. SILTSOXX MAY BY USED IN PLACE OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
2. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
3. SILTSOXX COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.
4. ALL SEDIMENT TRAPPED BY SILTSOXX SHALL BE DISPOSED OF PROPERLY.

TUBULAR SEDIMENT BARRIER — NOT TO SCALE



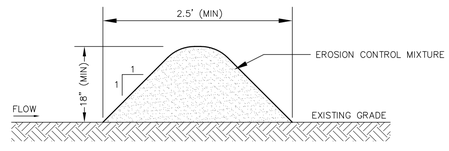
STONE GRADATION TABLE

SIEVE SIZE	% PASSING BY WEIGHT
3"	100
1–1/2"	90–100
1"	20–55
3/4"	0–15
3/8"	0–5

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – NHDOT STANDARD STONE SIZE #4 – SECTION 703 OF NHDOT STANDARD.
2. LENGTH – DETAILED ON PLANS (50 FOOT MINIMUM).
3. THICKNESS – SIX (6) INCHES (MINIMUM).
4. WIDTH – FULL DRIVE WIDTH UNLESS OTHERWISE SPECIFIED.
5. FILTER FABRIC – MIRAFI 600X OR EQUAL APPROVED BY ENGINEER.
6. SURFACE WATER CONTROL – 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. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AT ALL ENTRANCES TO PUBLIC RIGHTS–OF–WAY, AT LOCATIONS SHOWN ON THE PLANS, AND/OR WHERE AS DIRECTED BY THE ENGINEER.

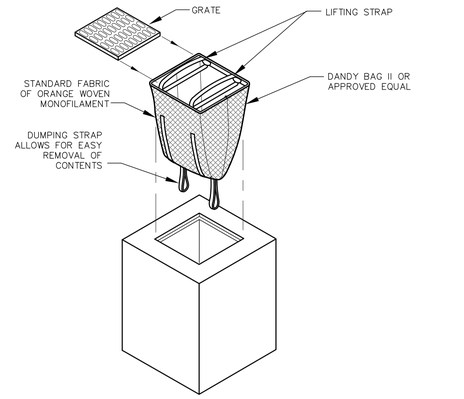
STABILIZED CONSTRUCTION EXIT — NOT TO SCALE



NOTES

1. ORGANIC FILTER BERMS MAY BE UTILIZED IN LIEU OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
2. THE EROSION CONTROL MIXTURE USED IN FILTER BERMS SHALL BE A WELL–GRADED MIX OF PARTICLE SIZES THAT MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER, STUMP GRINDINGS, SHREDDED OR COMPOSTED BARK, AND/OR ACCEPTABLE MANUFACTURED PRODUCTS AND SHALL BE FREE OF REFUSE, PHYSICAL CONTAMINANTS AND MATERIAL TOXIC TO PLANT GROWTH. EROSION CONTROL MIXTURE SHALL MEET THE FOLLOWING STANDARDS:
   a) THE ORGANIC CONTENT SHALL BE 80–100% OF DRY WEIGHT.
   b) PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN, AND 70–85% PASSING A 0.75" SCREEN.
   c) THE ORGANIC PORTION SHALL BE FIBROUS AND ELONGATED.
   d) LARGE PORTIONS OF SILTS, CLAYS, OR FINE SANDS SHALL NOT BE INCLUDED IN THE MIXTURE.
   e) SOLUBLE SALTS CONTENT SHALL BE >4.0mmhos/cm.
   f) THE pH SHALL BE BETWEEN 5.0 AND 8.0.
3. ORGANIC FILTER BERMS SHALL BE INSTALLED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BERM.
4. ON SLOPES LESS THAN 5%, OR AT THE BOTTOM OF SLOPES NO STEEPER THAN 3:1 AND UP TO 20' LONG, THE BERM SHALL BE A MINIMUM OF 12" HIGH (AS MEASURED ON THE UPHILL SIDE) AND A MINIMUM OF 36" WIDE. ON LONGER AND/OR STEEPER SLOPES, THE BERM SHALL BE TALLER AND WIDER TO ACCOMMODATE THE POTENTIAL FOR ADDITIONAL RUNOFF (MAXIMUM HEIGHT SHALL NOT EXCEED 2').
5. FROZEN GROUND, OUTCROPS OF BEDROCK, AND VERY ROOTED FORESTED AREAS PRESENT THE MOST PRACTICAL AND EFFECTIVE LOCATIONS FOR ORGANIC FILTER BERMS. OTHER BMP'S SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT HAVE A LARGE CONTRIBUTING AREA.
6. SEDIMENT SHALL BE REMOVED FROM BEHIND THE FILTER BERMS WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE BERM.
7. ORGANIC FILTER BERMS MAY BE LEFT IN PLACE ONCE THE SITE IS STABILIZED PROVIDED ANY SEDIMENT DEPOSITS TRAPPED BY THEM ARE REMOVED AND DISPOSED OF PROPERLY.
8. FILTER BERMS ARE PROHIBITED AT THE BASE OF SLOPES STEEPER THAN 8% OR WHERE THERE IS FLOWING WATER WITHOUT THE SUPPORT OF ADDITIONAL MEASURES SUCH AS SILTFENCE.

ORGANIC FILTER BERM — NOT TO SCALE



INSTALLATION AND MAINTENANCE:

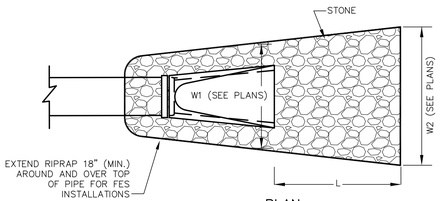
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

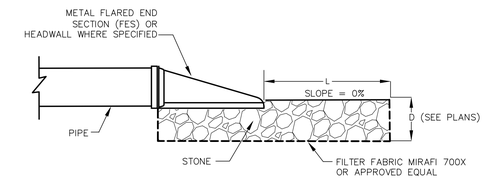
MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

UNACCEPTABLE INLET PROTECTION METHOD:

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

STORM DRAIN INLET PROTECTION — NOT TO SCALE





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.

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.

RIPRAP OUTLET PROTECTION — NOT TO SCALE

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE – ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER
2/24/22

NOT FOR CONSTRUCTION

ISSUED FOR: TRC

ISSUE DATE: FEBRUARY 24, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904–DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

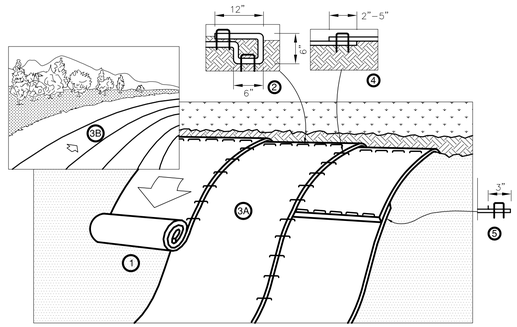
APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

TITLE:
DETAIL SHEET

SHEET NUMBER:
C-8

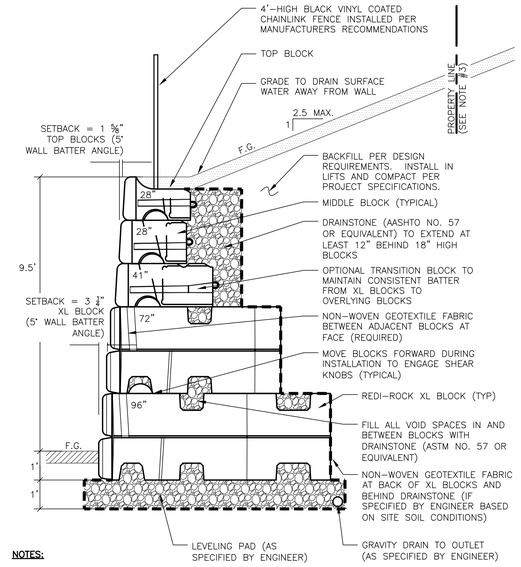
P4904



NOTES

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET 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 BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

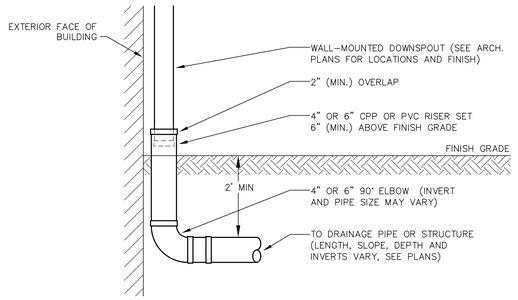
EROSION CONTROL BLANKET - SLOPE NOT TO SCALE



NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY SHORING, SHEETING AND/OR BRACING OF EXCAVATION WALLS AGAINST PROPERTY LINES OR OTHER AREAS THAT ARE NOT TO BE UNDERMINED.
2. WALL SHALL BE REDI-ROCK OR APPROVED EQUAL.
3. NO RETAINING WALL WORK SHALL EXTEND BEYOND THE LIMITS OF THE PROJECT SITE.
4. THIS DRAWING IS FOR REFERENCE ONLY. FINAL PROJECT DESIGNS, INCLUDING ALL CONSTRUCTION DETAILS, SHALL BE PREPARED BY A NH LICENSED PROFESSIONAL STRUCTURAL ENGINEER USING THE ACTUAL CONDITIONS OF THE PROPOSED SITE. FINAL WALL DESIGN MUST ADDRESS BOTH INTERNAL AND EXTERNAL DRAINAGE AND ALL MODES OF WALL STABILITY.
5. FINAL WALL DESIGN PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

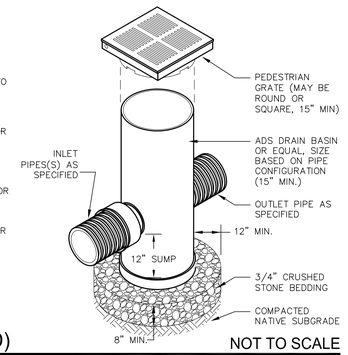
MODULAR BLOCK RETAINING WALL NOT TO SCALE



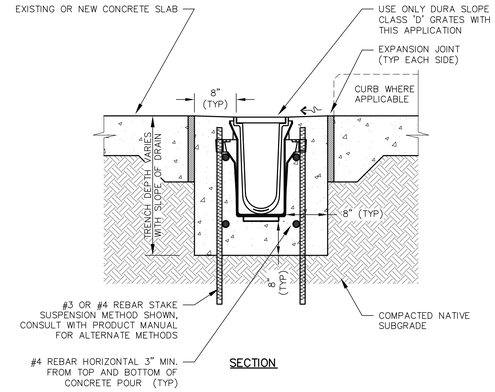
EXTERIOR ROOF DRAIN CONNECTION NOT TO SCALE

NOTES:

1. FRAMES AND GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN AND DETAILS.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE, N-12HP AND PVC SEWER.
4. INLINE DRAIN TO BE PVC, DIAMETER AS SPECIFIED AND AS MANUFACTURED BY ADS OR APPROVED EQUAL.
5. THE CONTRACTOR SHALL INSTALL THE DRAIN BASIN PER THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.
6. FOR INSTALLATION IN PEDESTRIAN AND LANDSCAPE AREAS ONLY.



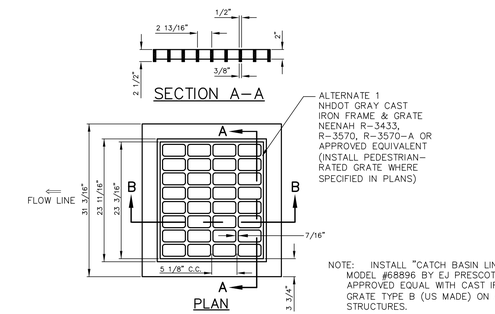
YARD DRAIN (YD) NOT TO SCALE



NOTES:

1. TRENCH DRAIN SYSTEM SHALL BE NDS DURA SLOPE OR APPROVED EQUAL.
2. CHANNELS SHALL HAVE NEUTRAL SLOPE AND BOTTOM OUTLET WITH 8" CONCRETE ENCASEMENT FOR CLASS 'D' LOADING.
3. CHANNELS TO BE INSTALLED WITH BLANK GRATE. GRATE TO BE PROTECTED FROM CONCRETE POUR (COVER HOLES WITH TAPE).
4. BLANK GRATES TO BE REMOVED AND REPLACED WITH APPLICABLE GRATES AFTER CHANNEL INSTALLATION.
5. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
6. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

TRENCH DRAIN (TD) NOT TO SCALE

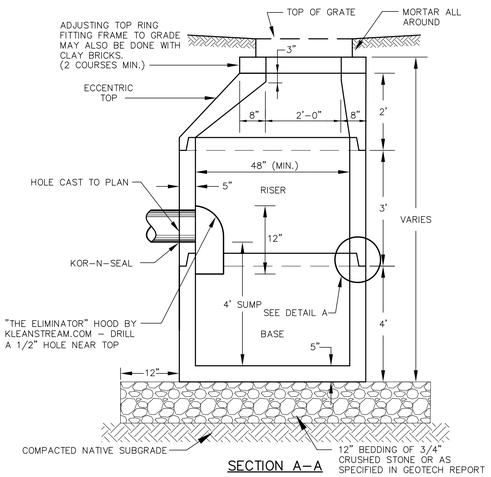


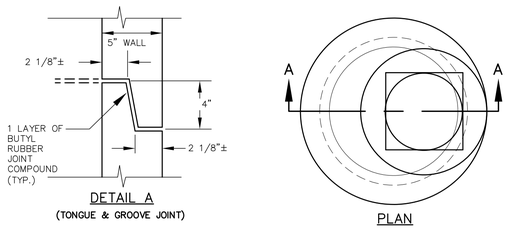
NOTE: INSTALL "CATCH BASIN LINER", MODEL #68896 BY EJ PRESCOTT OR APPROVED EQUAL WITH CAST IRON GRATE TYPE B (US MADE) ON ALL STRUCTURES.

NOTES

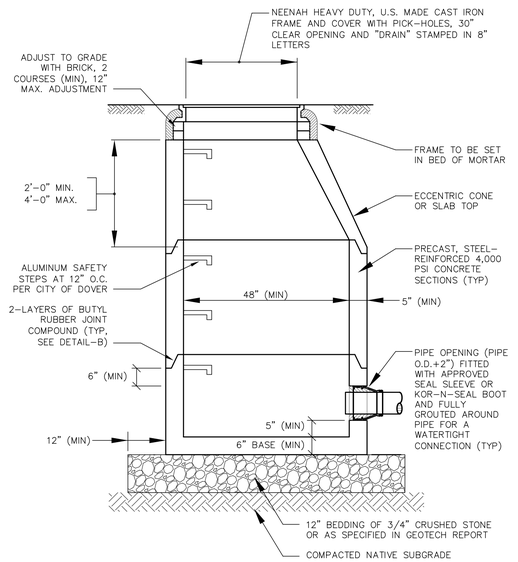
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. USE H20 LOADING SLAB TOP SECTION IN LIEU OF ECCENTRIC TOP WHERE PIPE INVERT IS WITHIN 4' OF FINISH GRADE.
7. FRAME AND GRATE DIMENSIONS ARE TYPICAL BUT MAY VARY BASED ON PRODUCT SELECTED OR EQUIVALENT APPROVED BY THE ENGINEER.

DEEP SUMP CATCH BASIN (CB) NOT TO SCALE



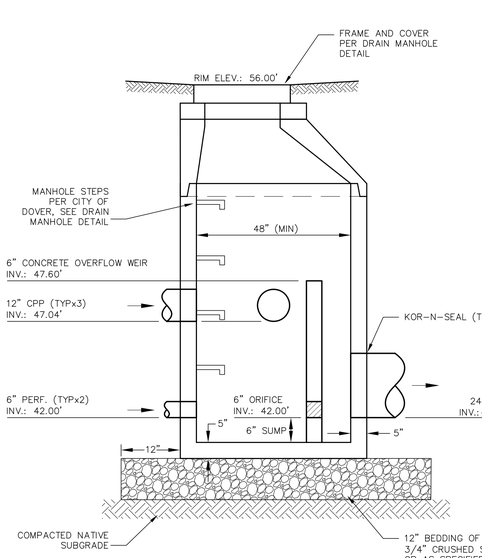


DRAIN MANHOLE (DMH) NOT TO SCALE



NOTES

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. ALL MANHOLE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. USE H-20 LOADING SLAB TOP SECTION IN LIEU OF ECCENTRIC TOP WHERE PIPE INVERT IS WITHIN 4 FT OF GRADE.
7. MANHOLE STEPS ARE REQUIRED PER THE CITY OF DOVER.



NOTES

1. SEE CATCH BASIN AND DRAIN MANHOLE DETAILS FOR ADDITIONAL INFORMATION APPLICABLE TO ALL CONCRETE DRAIN STRUCTURES.

DRAIN MANHOLE DMH #2 NOT TO SCALE

ALTUS ENGINEERING, INC.
133 Court Street
Portsmouth, NH 03801
(603) 433-2335
www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
4/5/22

NOT FOR CONSTRUCTION

ISSUED FOR: TRC

ISSUE DATE: APRIL 5, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904-DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

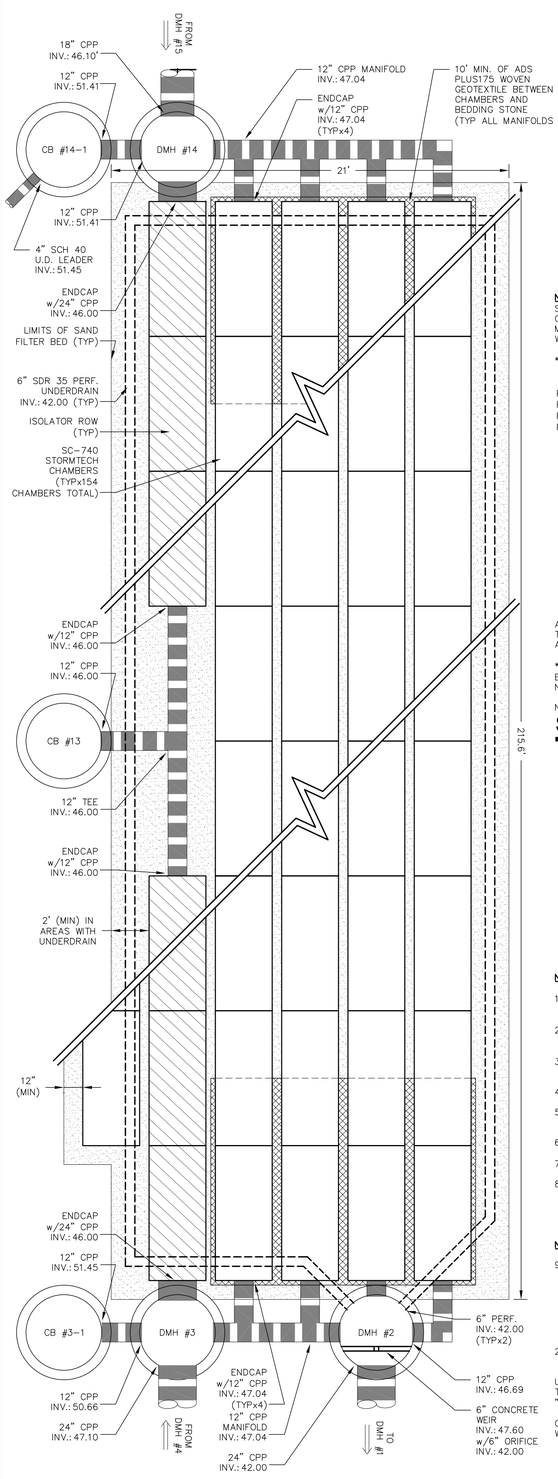
APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

TITLE:
DETAIL SHEET

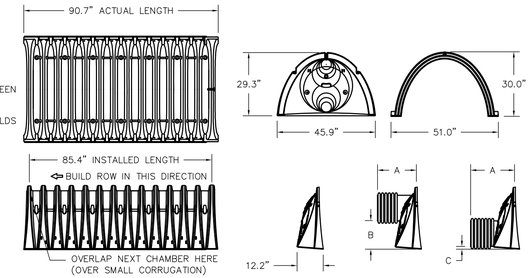
SHEET NUMBER:
C-9

P4904



STORMTECH SYSTEM AND SAND FILTER BED - PLAN

NOT TO SCALE



NOMINAL CHAMFER SPECIFICATIONS:

SIZE (W X H X INSTALLED LENGTH):	51.0" X 30.0" X 85.4"
CHAMBER STORAGE	45.9 CUBIC FEET
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET
WEIGHT	75.0 lbs.

*ASSUMES 6" STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6"	10.9"	18.5"	---
SC740EPE06B / SC740EPE06BPC			---	0.5"
SC740EPE08T / SC740EPE08TPC	8"	12.2"	16.5"	---
SC740EPE08B / SC740EPE08BPC			---	0.6"
SC740EPE10T / SC740EPE10TPC	10"	13.4"	14.5"	---
SC740EPE10B / SC740EPE10BPC			---	0.7"
SC740EPE12T / SC740EPE12TPC	12"	14.7"	12.5"	---
SC740EPE12B / SC740EPE12BPC			---	1.2"
SC740EPE15T / SC740EPE15TPC	15"	18.4"	9.0"	---
SC740EPE15B / SC740EPE15BPC			---	1.3"
SC740EPE18T / SC740EPE18TPC	18"	19.7"	5.0"	---
SC740EPE18B / SC740EPE18BPC			---	1.6"
SC740EPE24BT	24"	18.5"	---	0.1"
SC740EPE24BR*	24"	18.5"	---	0.1

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

STORMTECH SC-740

NOT TO SCALE

NOTES -

1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FOUNDATION STONE AND EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE; AASHTO M43 #3,357, 4, 467, 5, 56, OR 57.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES CONCERNING CHAMBER FOUNDATION DESIGN AND SUBGRADE BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
6. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
7. MAINTAIN MINIMUM 6" SPACING BETWEEN THE CHAMBER ROWS.
8. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.

NOTES FOR CONSTRUCTION EQUIPMENT -

9. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. FULL 36" OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

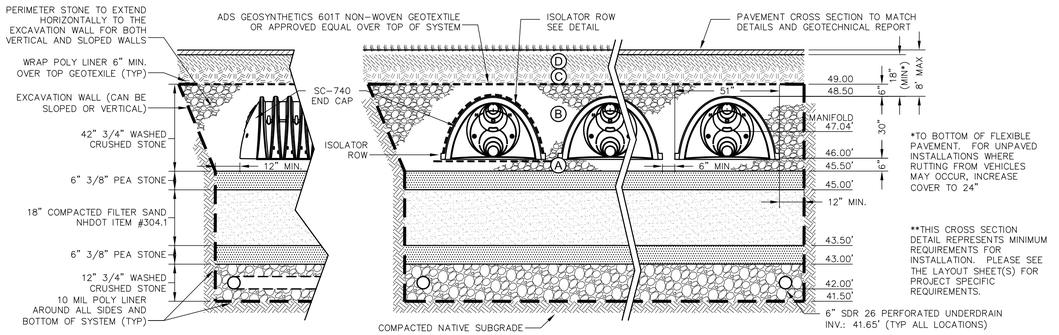
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 14" ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 -OR- AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

NOTES -

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, CLEAN COMMON BORROW FILL CAN BE PLACED IN LAYER 'D' UP TO 6" BELOW FINISHED GRADE IN LANDSCAPE AREAS ONLY. IN PAVED AREAS, PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' ONLY AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER.



STORMTECH SYSTEM AND SAND FILTER BED - CROSS SECTION

NOT TO SCALE

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT:

A. INSPECTION PORTS
   - A.1. REMOVE/OPEN LID ON INSPECTION PORT.
   - A.2. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG.
   - A.3. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL).
   - A.4. IF SEDIMENT IS AT, OR ABOVE, 3" PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

B. ALL ISOLATOR PLUS ROWS:
   - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS.
   - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE.
     i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY.
     ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE.
   - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS:

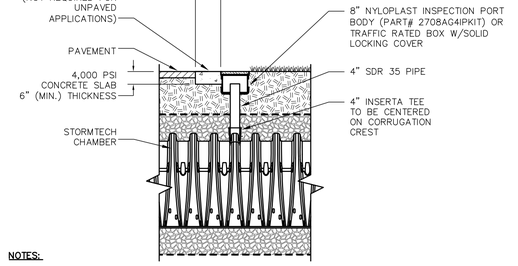
A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" OR MORE IS PREFERRED.
B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN.
C. VACUUM STRUCTURE SUMP AS REQUIRED.

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

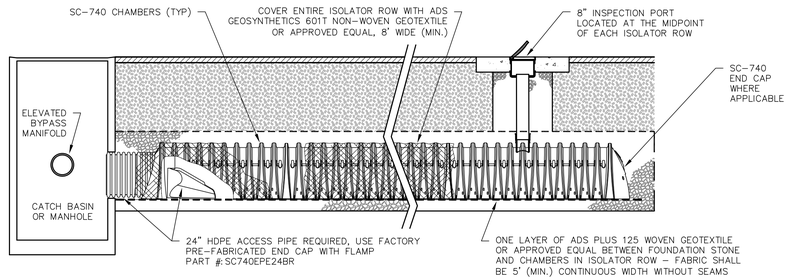


NOTES:

1. INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.
2. SEE ISOLATOR ROW DETAIL FOR LOCATION(S).

4" INSPECTION PORT

NOT TO SCALE



ISOLATOR ROW

NOT TO SCALE

ALTUS ENGINEERING, INC.
133 Court Street
(603) 433-2335
Portsmouth, NH 03801
www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
2-24-22

NOT FOR CONSTRUCTION

ISSUED FOR: TRC

ISSUE DATE: FEBRUARY 24, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904-DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

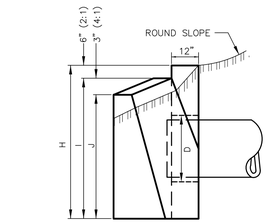
TITLE: DETAIL SHEET

SHEET NUMBER: C-10

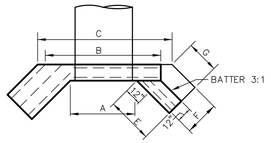
P4904

LEGEND

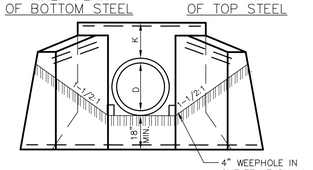
- PROPERTY LINE
- BUILDING SETBACK
- ZONE X — FLOODPLAIN
- ZONE AE — EDGE OF WATER
- TP #11 — TESTPIT OR BORING LOCATION
- EXISTING/PROPOSED GRAVEL
- VGC SGC — EXISTING PAVEMENT/VERTICAL/SLOPED GRANITE CURB
- VGC/SGC/MCC — PROP. PAVEMENT/VERTICAL/SLOPED GRANITE/CONCRETE CURB
- SWL SYL DYL — SINGLE WHITE LINE/SINGLE YELLOW LINE/DOUBLE YELLOW LINE
- EXISTING/PROPOSED GUARDRAIL
- EXISTING/PROPOSED STOCKADE FENCE
- EXISTING/PROPOSED CHAINLINK FENCE
- 60 — EXISTING CONTOUR
- 60 — PROPOSED CONTOUR
- x 100.00 — x 104.00T 100.00B — PROPOSED SPOT GRADE/TOP & BOTTOM OF WALL OR CURB
- PROPOSED RETAINING WALL
- W — EXISTING WATER/CURB STOP/VALVE/HYDRANT
- S — EXISTING SEWER/MANHOLE
- G — EXISTING GAS/VALVE
- OHW — UGU — EXIST. OVERHEAD/UNDERGROUND UTILITIES/POLE
- T — EXIST. UNDERGROUND TELEPHONE
- D — EXISTING DRAINAGE/CB/DMH
- W — PROPOSED THRUST BLOCK/CURB STOP/VALVE/HYDRANT
- PW — F — PROPOSED DOMESTIC/FIRE WATER SERVICE LINE
- S — PROPOSED SEWER/MANHOLE/CLEANOUT
- G — PROPOSED GAS OR PROPANE
- OHW — PROPOSED OVERHEAD UTILITIES/UTILITY POLE
- UGE — PROPOSED UNDERGROUND ELECTRIC
- COM — PROPOSED UNDERGROUND PHONE/TV/INTERNET
- PROPOSED DRAINAGE (HARD PIPE)/CB/YD/DCB/DMH/FES
- PROPOSED DRAINAGE (PERFORATED PIPE)/CLEANOUT
- CPP FES HDWL — CORRUGATED PLASTIC PIPE/FLARED END SECTION/HEADWALL
- 4% — PROPOSED GROUND SLOPE/APPROX. GRADE/STONE CHECK DAM
- X — X — SILTFENCE/SEDIMENT BARRIER/CONST. FENCE
- STABILIZED CONSTRUCTION EXIT
- PROPOSED LIMIT OF DISTURBANCE/TREE CLEARING
- (44) 226 — PARKING COUNT PER ROW/FOR TOTAL SITE
- PROPOSED RIPRAP
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED 3/4" STONE SURFACE



SIDE ELEVATION



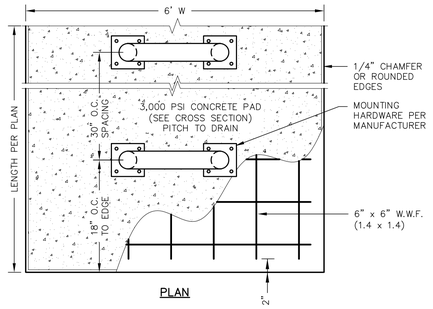
HALF PLAN OF BOTTOM STEEL — HALF PLAN OF TOP STEEL



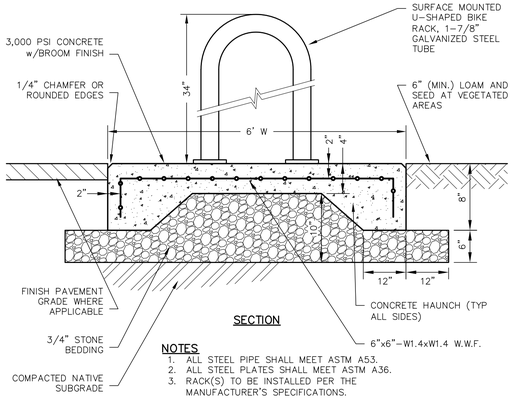
END ELEVATION

D (PIPE DIA.)	DIMENSIONS (2:1 SLOPE)									
	A	B	C	E	F	G	H	I	J	K
24"	2'-6"	5'-4"	6'-7"	3'-0"	1'-11"	2'-3"	5'-0"	4'-6"	3'-10"	1'-6"

CONCRETE HEADWALL w/WINGWALLS NOT TO SCALE



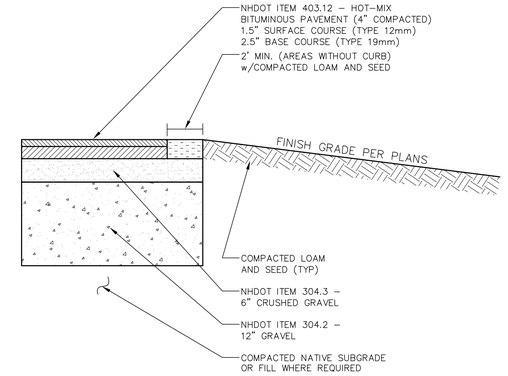
PLAN



SECTION

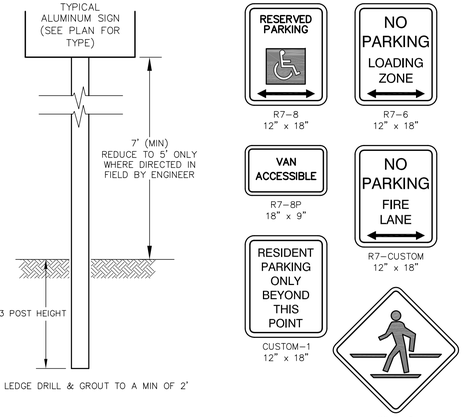
NOTES
1. ALL STEEL PIPE SHALL MEET ASTM A53.
2. ALL STEEL PLATES SHALL MEET ASTM A36.
3. RACK(S) TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.

BICYCLE RACK AND PAD NOT TO SCALE



NOTES
1. PROJECT GEOTECHNICAL REPORT MAY REQUIRE A DIFFERENT PAVEMENT CROSS SECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FOLLOWING ALL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. IN THE EVENT THAT THE REPORT AND CIVIL PLANS DIFFER, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. ALL EXISTING FILL, BURIED ORGANIC MATTER, CLAY, LOAM, MUCK, AND/OR OTHER QUESTIONABLE MATERIAL SHALL BE REMOVED FROM BELOW ALL PAVEMENT, SHOULDERS AND UNDERGROUND PIPING/UTILITIES TO DEPTHS RECOMMENDED IN GEOTECHNICAL REPORT.
3. SUBGRADE SHALL BE PROOFROLLED A MINIMUM OF 6 PASSES WITH A 10-TON VIBRATORY COMPACTOR OPERATING AT PEAK RATED FREQUENCY OR BY MEANS APPROVED BY THE ENGINEER.
4. FILL BELOW PAVEMENT GRADES SHALL BE GRANULAR BORROW COMPACTED PER DOT REQUIREMENTS.
5. SITEWORK CONTRACTOR SHALL COORDINATE GEOTECHNICAL ENGINEERING INSPECTIONS WITH THE CONSTRUCTION MANAGER PRIOR TO PLACING GRAVELS.
6. TACK COAT SHALL BE APPLIED BETWEEN SUCCESSIVE LIFTS OF ASPHALT.
7. THE BITUMINOUS PAVEMENT SHALL BE COMPACTED TO 95 PERCENT OF ITS THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D-2041. THE BASE AND SUBBASE MATERIALS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THEIR MAXIMUM DRY DENSITIES AS DETERMINED BY ASTM D-1557.

SITE PAVEMENT CROSS SECTION NOT TO SCALE



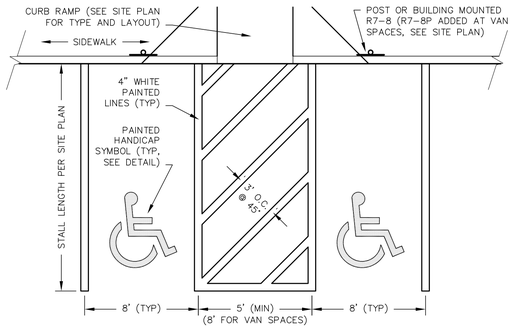
LENGTH: AS REQUIRED

WEIGHT PER LINEAR FOOT: 1.50 LBS (MIN.)

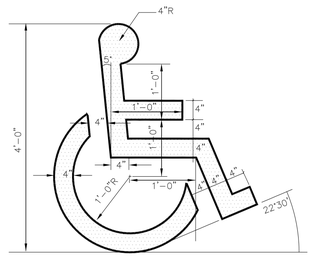
STEEL: 2-3/8" 16 GAUGE RUST-RESISTANT GALVANIZED TUBULAR STEEL, 0.065" MIN. WALL THICKNESS

NOTES
1. ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

SIGN DETAILS NOT TO SCALE

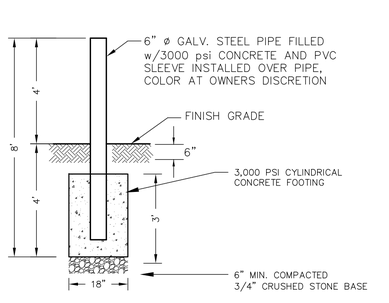


HANDICAP PARKING STALL LAYOUT NOT TO SCALE

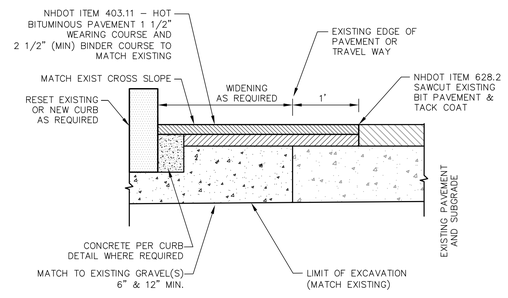


NOTES
1. SYMBOL TO BE PAINTED IN ALL HANDICAPPED ACCESSIBLE SPACES IN WHITE PAINT (BLUE-PAINTED SQUARE BACKGROUND AND WHITE BORDER OPTIONAL).

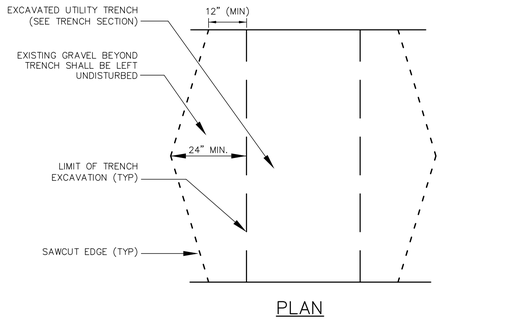
PAINTED HANDICAP SYMBOL NOT TO SCALE



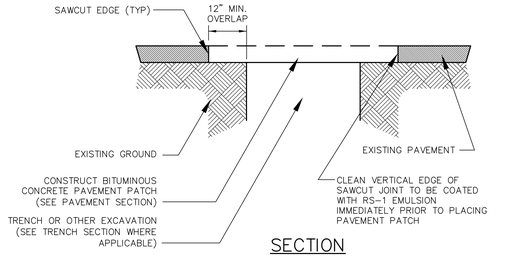
BOLLARD NOT TO SCALE



SAWCUT AND PAVEMENT PATCH NOT TO SCALE



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

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
4/19/22

NOT FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD

ISSUE DATE: APRIL 19, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22
3	PLANNING BOARD	EBS	04/19/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904-DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

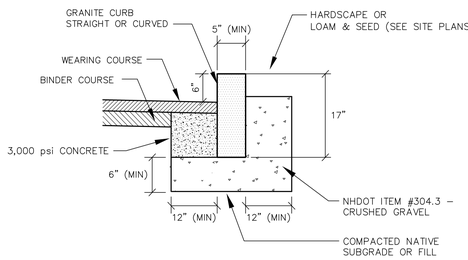
APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

TITLE:
DETAIL SHEET

SHEET NUMBER: C-11

P4904

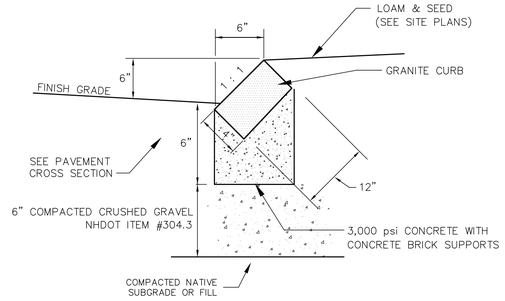


NOTES:

1. SEE PLANS FOR CURB LOCATION.
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF CURB STONES = 3'
4. MAXIMUM LENGTH OF CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES – SEE CHART.
6. CURB ENDS TO ROUNDED AND BATTERED FACES TO BE CUT WHEN CALLED FOR ON THE PLANS.

RADIUS	MAX. LENGTH
21'	3'
22'–28'	4'
29'–35'	5'
36'–42'	6'
43'–49'	7'
50'–56'	8'
57'–60'	9'
OVER 60'	10'

VERTICAL GRANITE CURB NOT TO SCALE

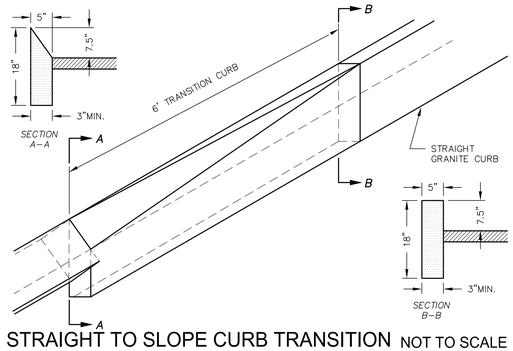


NOTES

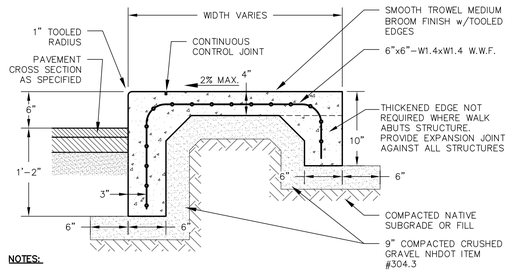
1. SEE SITE PLAN FOR LIMITS OF CURBING
2. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES – SEE 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 CURB NOT TO SCALE



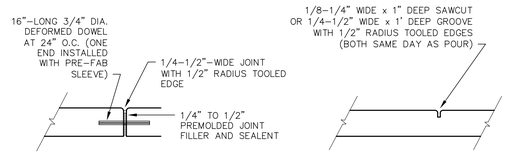
STRAIGHT TO SLOPE CURB TRANSITION NOT TO SCALE



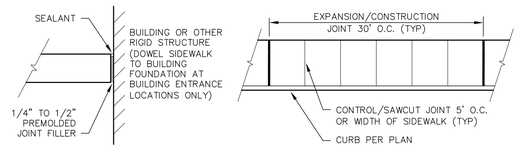
NOTES:

1. CONCRETE TO BE 4,000 PSI AIR ENTRAINED WITH POLY–FIBER REINFORCING.
2. JOINT SPACING TO BE EQUAL TO SIDEWALK WIDTH. SEE CONCRETE SIDEWALK DETAIL.
3. SEAL ALL JOINTS PER DETAILS AND SPECIFICATIONS.

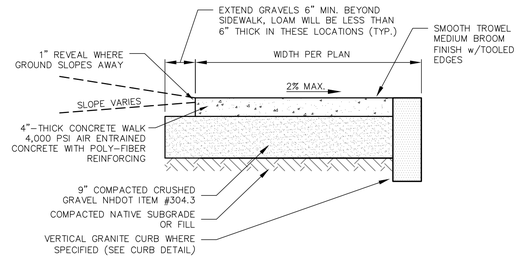
MONOLITHIC CONCRETE CURB AND SIDEWALK



EXPANSION/CONSTRUCTION JOINT CONTROL/SAWCUT JOINT

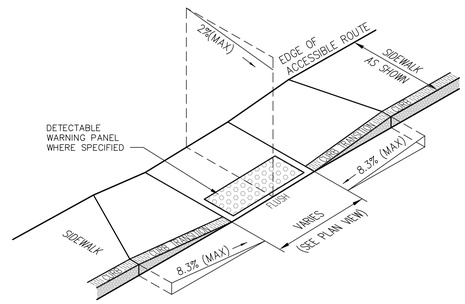


ISOLATION JOINT PLAN

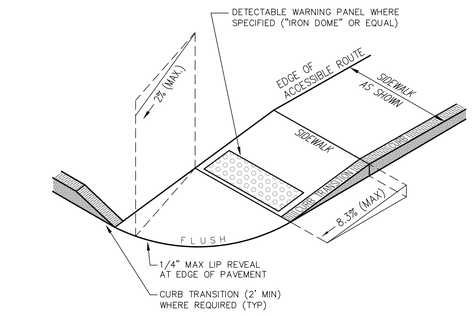


SECTION

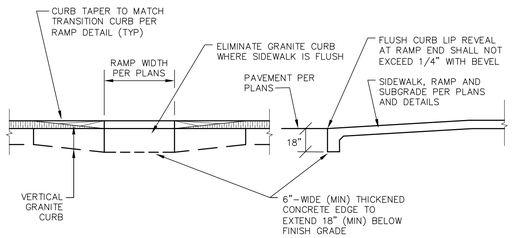
CONCRETE SIDEWALK NOT TO SCALE



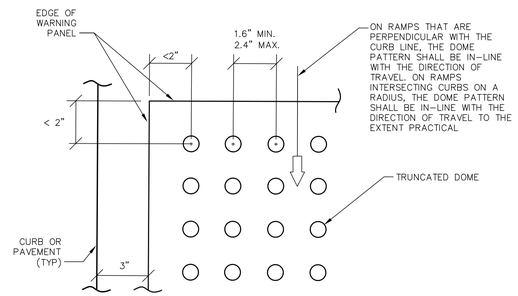
CURB RAMP (TYPE 'A') NOT TO SCALE



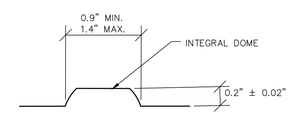
CURB RAMP (TYPE 'B') NOT TO SCALE



FLUSH CURB AT RAMP DETAIL NOT TO SCALE



PLAN VIEW



TRUNCATED DOME

NOTES APPLICABLE TO ALL CURB RAMPS:

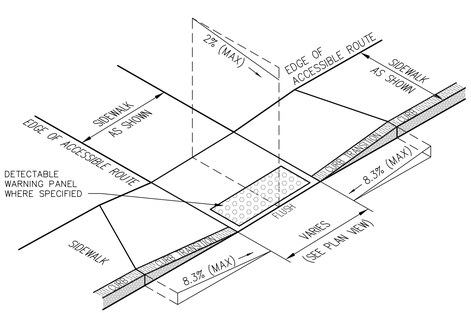
1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 2%.
2. THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) CURB RAMP SHALL BE 8.3% FOR A MAXIMUM ELEVATION CHANGE OF 6".
4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
5. BASE OF RAMP SHALL BE GRADED TO PREVENT THE PONDING OF WATER.
6. SEE CONCRETE SIDEWALK SECTION FOR RAMP CONSTRUCTION.
7. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT (ADA), PROWAG R305.21 AND ALL APPLICABLE CODES.
8. FLUSH CURB SECTIONS SHALL HAVE A MAXIMUM LIP REVEAL OF 1/4" WITH A BEVEL AT THE EDGE OF PAVEMENT.
9. EDGES OF CONCRETE SIDEWALK FOOTINGS ALONG FLUSH CURBS SHALL BE HAUNCHED SO AS TO EXTEND TO A MINIMUM DEPTH OF 1' BELOW FINISH GRADE.
10. NO RAMP SHALL BE LESS THAN 4' IN WIDTH.
11. CURB RAMPS SHALL HAVE A FLAT 2% MAX LANDING AT THE TOP AND BOTTOM OF THE RAMPS WHEN THERE IS A CHANGE IN DIRECTION.

CURB RAMP NOTES NOT TO SCALE

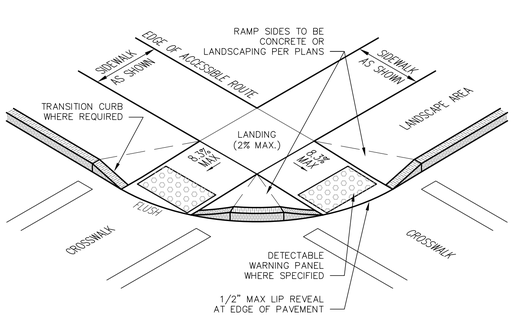
NOTES:

1. BASE–TO–BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.
2. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND 2' DEPTH IN THE DIRECTION OF TRAVEL.
3. THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.
4. WARNING PANELS TO BE CAST IRON ("IRON DOME" OR EQUAL).
5. PANEL SHALL BE INSTALLED SO THAT THE EDGE 3" FROM THE CURB LINE OR GUTTER.

DETECTABLE WARNING PANEL NOT TO SCALE



CURB RAMP (TYPE 'J') NOT TO SCALE



CURB RAMP (TYPE 'O') NOT TO SCALE

ALTUS ENGINEERING, INC.
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ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
4/5/22

NOT FOR CONSTRUCTION

ISSUED FOR: TRC

ISSUE DATE: APRIL 5, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904–DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

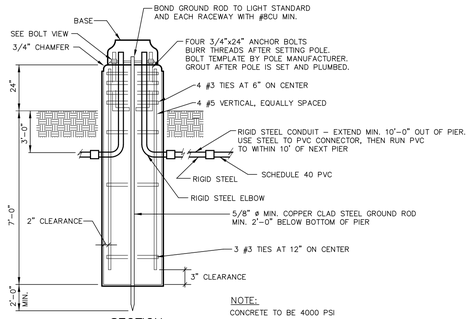
APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

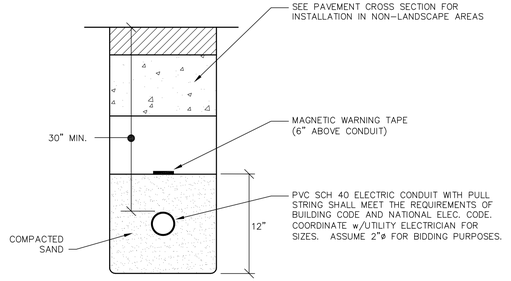
TITLE:
DETAIL SHEET

SHEET NUMBER: C-12

P4904



LIGHT POLE BASE NOT TO SCALE



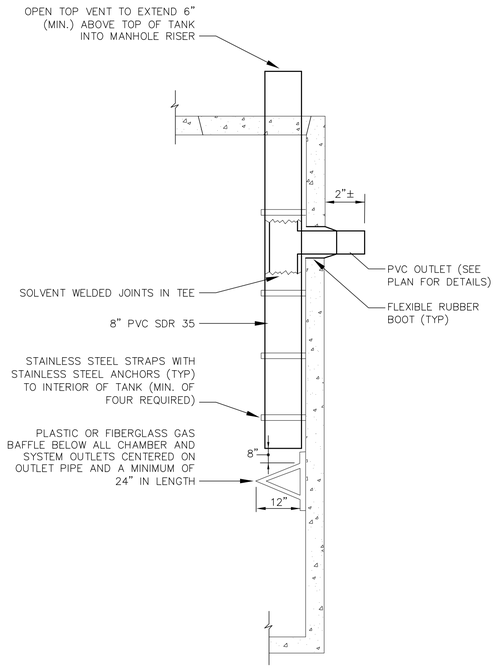
SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

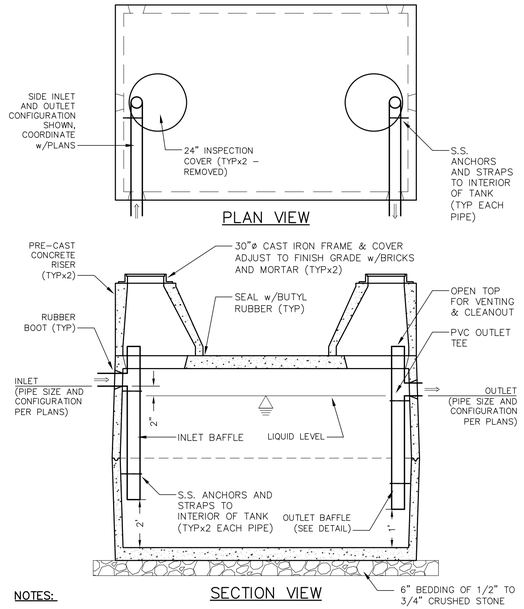
NOTES

1. CONTRACTOR TO COORDINATE WITH MEP PLANS AND ELECTRICIAN AND PROVIDE ALL EXCAVATION, COMPACTION AND BACKFILL REQUIRED FOR CONDUIT INSTALLATION.
2. 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 ALL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

LIGHTING TRENCH SECTION NOT TO SCALE



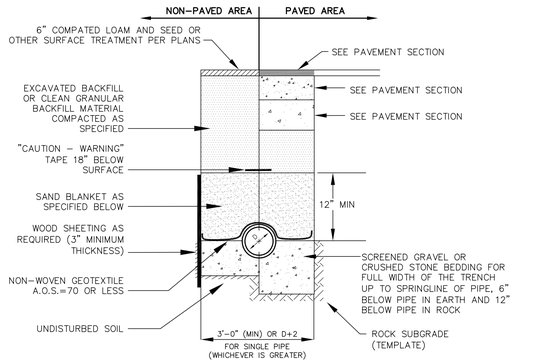
GREASE TRAP OUTLET BAFFLE DETAIL NOT TO SCALE



NOTES:

1. TANK SHALL BE 4,000 PSI (MIN.) STEEL REINFORCED CONCRETE CAPABLE OF H–20 LOADING.
2. KEYED TANK JOINTS SHALL BE SEALED WITH BUTYL RUBBER.
3. TANK SHALL BE MANUFACTURED BY EF SHEA OR APPROVED EQUAL TO THE CAPACITY SHOWN. TANK DIMENSIONS MAY VARY DEPENDING ON THE MANUFACTURER.
4. INLET AND OUTLET PIPE SIZES AND CONFIGURATION SHALL BE CONSTRUCTED PER THE PLANS.

1,000 GALLON GREASE TRAP NOT TO SCALE



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.
2. INSULATE GRAVITY SEWER AND FORCEMAINS WHERE THERE IS LESS THAN 5'–0" OF COVER WITH 2" THICK CLOSED CELL RIGID BOARD INSULATION, 18" ON EACH SIDE OF PIPE.
3. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

SAND BLANKET/BARRIER

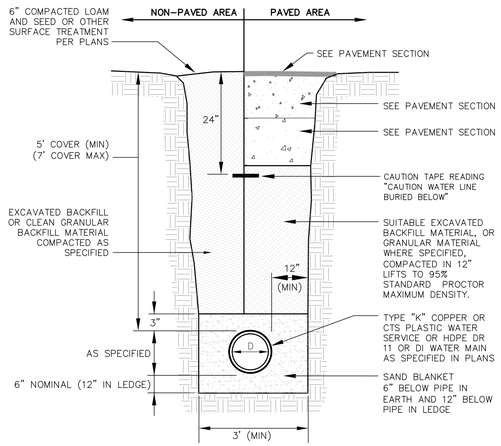
SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 – 10
# 8	0 – 5

* EQUIVALENT TO STANDARD STONE SIZE #67 – SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

DRAINAGE TRENCH NOT TO SCALE



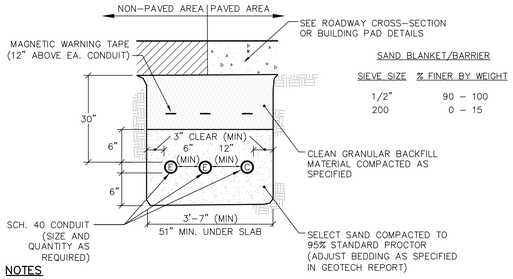
SAND BLANKET/BARRIER

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.
2. ALL TRENCHING AND BACKFILL SHALL CONFORM WITH THE STANDARDS OF THE KITTERY WATER DISTRICT.

WATER MAIN TRENCH NOT TO SCALE



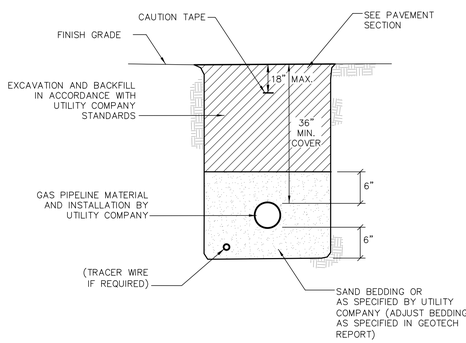
SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

NOTES

1. ALL CONDUIT IS TO BE SCHEDULE 40 PVC, ELECTRICAL GRADE, GRAY IN COLOR AND INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. A 10–FOOT HORIZONTAL SECTION OF RIGID GALVANIZED STEEL CONDUIT WILL BE REQUIRED AT EACH SWEEP, UNLESS IN THE OPINION OF THE SERVICE PROVIDER DESIGNER, THE SWEEP–PVC JOINT IS NOT SUBJECT TO FAILURE DURING PULLING OF THE CABLE. ALL JOINTS ARE TO BE WATERTIGHT.
2. ALL 90 DEGREE SWEEPS WILL BE MADE WITH RIGID GALVANIZED STEEL WITH A MINIMUM RADIUS OF 36 INCHES FOR PRIMARY CABLES AND 24 INCHES FOR SECONDARY CABLES.
3. BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPARABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY SERVICE PROVIDER. BACKFILL SHALL BE FREE OF FROZEN LUMPS, ROCKS, DEBRIS, AND RUBBISH. ORGANIC MATERIAL SHALL NOT BE USED AS BACKFILL. BACKFILL SHALL BE IN 6–INCH LAYERS AND THOROUGHLY COMPACTED.
4. A SUITABLE PULLING STRING, CAPABLE OF 300 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE SERVICE PROVIDER IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT. A MINIMUM OF TWENTY–FOUR (24") INCHES OF ROPE SLACK SHALL REMAIN AT THE END OF EACH DUCT. PULL ROPE SHALL BE INSTALLED IN ALL CONDUIT FOR FUTURE PULLS. PULL ROPE SHALL BE NYLON ROPE HAVING A MINIMUM TENSILE STRENGTH OF THREE HUNDRED (300#) LBS.
5. SERVICE PROVIDER SHALL BE GIVEN THE OPPORTUNITY TO INSPECT ALL CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD SERVICE PROVIDER BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. TYPICAL CONDUIT SIZES ARE 3–INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4–INCH FOR THREE PHASE SECONDARY, AND 5–INCH FOR THREE PHASE PRIMARY. HOWEVER, SERVICE PROVIDERS MAY REQUIRE DIFFERENT NUMBERS, TYPES AND SIZES OF CONDUIT THAN THOSE SHOWN HERE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDUIT SIZES, TYPES AND NUMBERS WITH EACH SERVICE PROVIDER PRIOR TO ORDERING THEM.
7. ROUTING OF CONDUIT, LOCATION OF MANHOLES, TRANSFORMERS, CABINETS, HANDHOLES, ETC., SHALL BE DETERMINED BY SERVICE PROVIDER DESIGN PERSONNEL. THE CONTRACTOR SHALL COORDINATE WITH ALL SERVICE PROVIDERS PRIOR TO THE INSTALLATION OF ANY CONDUIT.
8. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE. WHERE REQUIRED BY UTILITY PROVIDER, CONDUIT SHALL BE SUPPORTED IN PLACE USING PIPE STANCHIONS PLACED EVERY FIVE (5') FEET ALONG THE CONDUIT RUN.
9. UNDER A BUILDING SLAB THE CONDUIT SHALL BE ENCASED IN 8" OF CONCRETE ON ALL SIDES.
10. ALL CONDUIT TERMINATIONS SHALL BE CAPPED TO PREVENT DEBRIS FROM ENTERING CONDUIT.

ELECTRIC / COMMUNICATION TRENCH NOT TO SCALE



SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

NOTES

1. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY AND PROVIDE ALL EXCAVATION, COMPACTION AND BACKFILL REQUIRED FOR PIPE INSTALLATION.
2. 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.

GAS TRENCH NOT TO SCALE

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE
2-24-22

NOT FOR CONSTRUCTION

ISSUED FOR:

ISSUE DATE: FEBRUARY 24, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904–DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

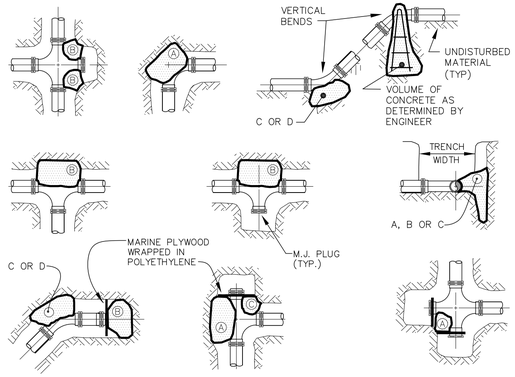
APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

TITLE:
DETAIL SHEET

SHEET NUMBER:
C-13

P4904



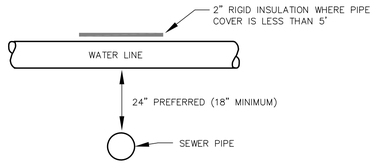
TEST PRESSURE = 150 psi	SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL					
	REACTION TYPE	PIPE SIZE				
		4"	6"	8"	10"	12"
	A 90°	0.89	2.19	3.82	11.14	17.24
	B 180°	0.65	1.55	2.78	8.38	12.00
	C 45°	0.48	1.19	2.12	6.02	9.32
	D 22-1/2°	0.25	0.60	1.06	3.08	4.74
	E 11-1/4°	0.13	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.
2. NO JOINTS SHALL BE COVERED WITH CONCRETE. POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.
3. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
4. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.

THRUST BLOCKING

NOT TO SCALE

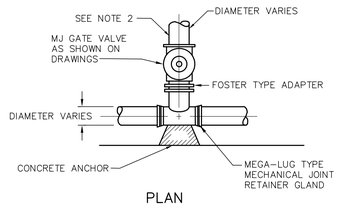


NOTES

1. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. A MINIMUM VERTICAL DISTANCE WITH WATER ABOVE SEWER SHALL BE MAINTAINED.
2. SEWER PIPE JOINTS SHALL BE LOCATED A MINIMUM OF 6 FEET HORIZONTALLY FROM WATER MAIN.
3. IF THE REQUIRED CONFIGURATION CANNOT BE MET, THE SEWER MAIN SHALL BE CONSTRUCTED TO MEET THE NHDES REQUIREMENTS FOR FORCE MAIN CONSTRUCTION.

WATER MAIN / SEWER CROSSING

NOT TO SCALE



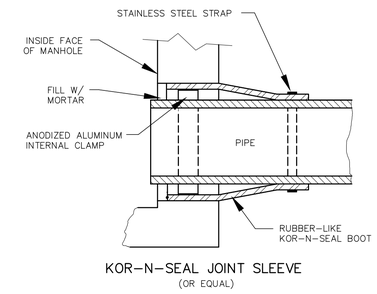
PLAN

NOTES:

1. GATE VALVES SHALL OPEN RIGHT, PER CITY STANDARDS.
2. BRANCH PIPING SHALL BE MECHANICALLY RESTRAINED AS NOTED UNDER THRUST BLOCK DETAIL REQUIREMENTS.

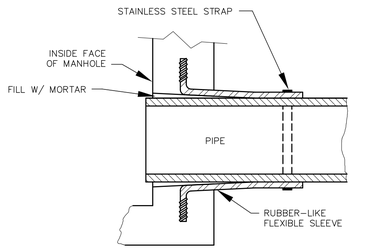
TEE & GATE VALVE ASSEMBLY

NOT TO SCALE



KOR-N-SEAL JOINT SLEEVE
(OR EQUAL)

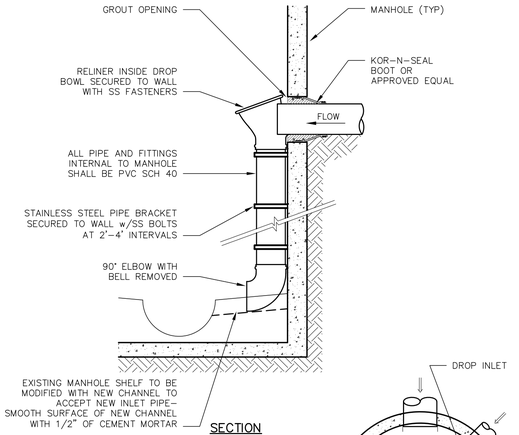
NOTE: ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.



LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR EQUAL)

SEWER MANHOLE DETAIL A

NOT TO SCALE



SECTION

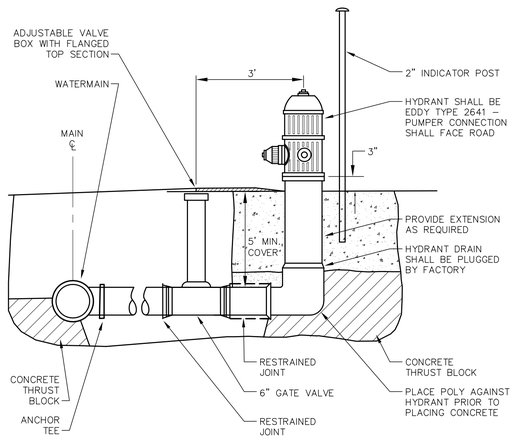
PLAN

NOTES:

1. DROP PIPE DIAMETER TO MATCH INLET PIPE DIAMETER.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF DOVER REGULATIONS AND NHDES STANDARDS.
3. DROP INLET REQUIRED WHERE DISTANCE BETWEEN PIPE INVERT AND MANHOLE INVERT EXCEEDS 2 VERTICAL FEET.
4. ANCHOR STRAPS AND BOLTS SHALL BE TYPE 316 STAINLESS STEEL AND SPACED 2'-4" ON CENTER.
   STRAPS - 2" WIDE
   BOLTS - 1/2" X 2-1/2" LONG

INTERNAL DROP

NOT TO SCALE

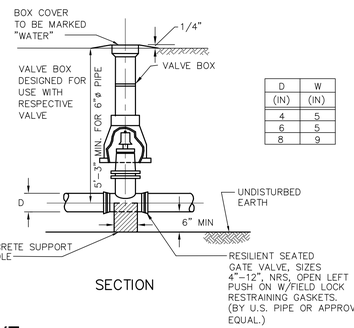


NOTES

1. HYDRANT INSTALLATION AND OPERATION TO CONFORM TO REGULATIONS OF THE CITY OF DOVER WATER & FIRE DEPARTMENTS.
2. FIRE HYDRANT TO BE EDDY 2641.
3. HYDRANT TO BE PAINTED RED WITH WHITE "REFLECTOR" PAINT ON BONNET.
4. FIRE HYDRANT CONNECTION SHALL USE MEGALUG (RODS NOT ALLOWED) PER CITY OF DOVER REQUIREMENTS.

FIRE HYDRANT

NOT TO SCALE

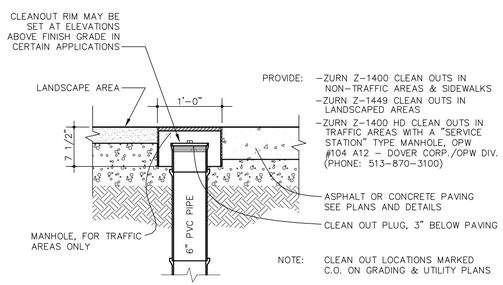


D (IN)	W (IN)
4	5
6	5
8	9

SECTION

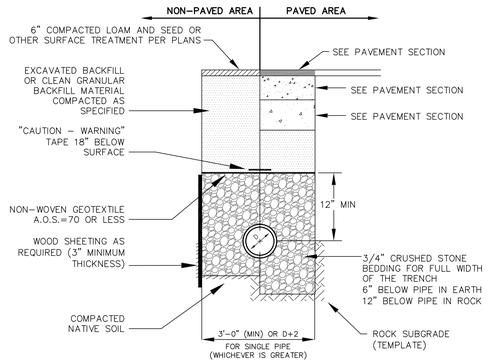
WATER VALVE

NOT TO SCALE



CLEANOUT

NOT TO SCALE



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.
2. INSULATE GRAVITY SEWER AND FORCEMAINS WHERE THERE IS LESS THAN 5'-0" OF COVER WITH 2" THICK CLOSED CELL RIGID BOARD INSULATION, 18" ON EACH SIDE OF PIPE.
3. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 - 100
200	0 - 15

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 - 100
3/8"	20 - 55
# 4	0 - 10
# 8	0 - 5

* EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

SEWER TRENCH

NOT TO SCALE

STANDARD TRENCH NOTES

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWING.
2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. BLANKET MAY BE REPLACED WITH BEDDING MATERIAL FOR CAST-IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE AND THE GEOTEXTILE IS RELOCATED ACCORDINGLY.
4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS 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, ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, AND 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 ONLY IF SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION WILL BE PRESERVED.
5. BASE COURSE AND PAVEMENT SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND 400 RESPECTIVELY.
6. 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 1 FOOT ABOVE THE TOP OF 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 THAT 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 IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
8. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL, FILL AND/OR LOAM SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
9. CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE NEW HAMPSHIRE DOT STANDARD SPECIFICATION REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS:
   CEMENT: 6.0 BAGS PER CUBIC YARD
   WATER: 5.75 GALLONS PER BAG
   CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH
   CONCRETE ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.
10. CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
11. NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE TEN FEET (10') SEPARATION BETWEEN WATER AND SEWER. REFER TO CITY STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE REQUIREMENTS.
12. THE CONTRACTOR SHALL INSTALL TRENCH DAMS IN ACCORDANCE WITH NHDES REGULATIONS.
13. SEWER TRENCHES SHALL BE CONSTRUCTED IN ACCORANCE WITH NHDES STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWAGE AND WASTEWATER FACILITES, LATEST EDITION.

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE
4/5/22

NOT FOR CONSTRUCTION

ISSUED FOR: TRC

ISSUE DATE: APRIL 5, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 4904-DS.dwg

SCALE: NOT TO SCALE

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

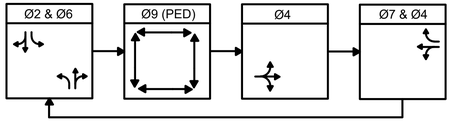
PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH

TITLE:
DETAIL SHEET

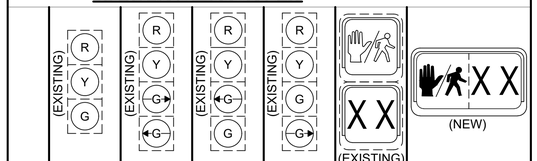
SHEET NUMBER:
C-14

P4904

PREFERENTIAL PHASE SEQUENCE



SIGNAL HEADS



	2, 6	4	8A	8B	P1-P4	P5 - P8
QTY:	4	2	1	1	6	4

SIGNAL PHASING

	Ø2	Ø4	Ø6	Ø8	Ø9
TIMING IN SECONDS					
INITIAL INTERVAL	10	6	10	6	-
VEHICLE EXTENSION	5	5	5	3	-
MAX I (6am - 9am)	41	10	41	10	-
MAX II	31	10	31	10	-
YELLOW	4	4	4	4	-
ALL RED	2	2	2	2	-
WALK/DONT WALK	N/A	N/A	N/A	N/A	7 / 10
RECALL	MAX	OFF	MAX	OFF	OFF
DETECTOR	N/A	PR	N/A	PR	N/A
FLASH	FY	FR	FY	FR	N/A

TRAFFIC SIGNAL NOTES:

1. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RETAINED UNLESS OTHERWISE NOTED. THE EXISTING CONDUITS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE EXISTING CONDUITS PRIOR TO CONSTRUCTION.
2. PROPOSED TRAFFIC SIGNAL WORK AT THIS LOCATION INCLUDES THE INSTALLATION OF 25' MAST ARM AND FOUNDATION AS SHOWN, INSTALLATION OF A 10' SIGNAL POST, AND INSTALLATION OF FOUR PEDESTRIAN SIGNAL POSTS WITH BASE AND FOUNDATIONS. WORK INCLUDES THE INSTALLATION OF A NEW DETECTION SYSTEM WITH A 360° GRIDSMART CAMERA AND DETECTION ZONES AS SHOWN.
3. WORK ALSO INCLUDES THE INSTALLATION OF 14" CONCRETE PULL BOXES AND CONDUIT WITH 14 AWG WIRE TO CONNECT THE PROPOSED SIGNALS BACK TO THE EXISTING CONTROLLER.
4. THE FINAL LOCATION OF TRAFFIC SIGNS AND SIGNAL SUPPORTS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
5. MAST ARMS SHALL BE POSITIONED PERPENDICULAR TO THE ROADWAY APPROACH SERVED UNLESS OTHERWISE INDICATED ON THE PLAN.
6. MAST ARM FOUNDATION SHALL CONFORM TO NH-DOT STANDARD PLAN NUMBER TS-4
7. TRAFFIC SIGNALS MOUNTED OVERHEAD ON MAST ARM SHALL BE A MINIMUM OF 16 FEET AND A MAXIMUM OF 19 FEET ABOVE THE TOP OF PAVEMENT. TRAFFIC SIGNALS MOUNTED ON THE VERTICAL SUPPORT OF THE MAST ARM OR SIGNAL POST SHALL BE A MINIMUM OF 10 FEET ABOVE THE TOP OF PAVEMENT. PEDESTRIAN SIGNAL HEADS SHALL BE A MINIMUM OF 8 FEET ABOVE THE TOP OF THE SIDEWALK.

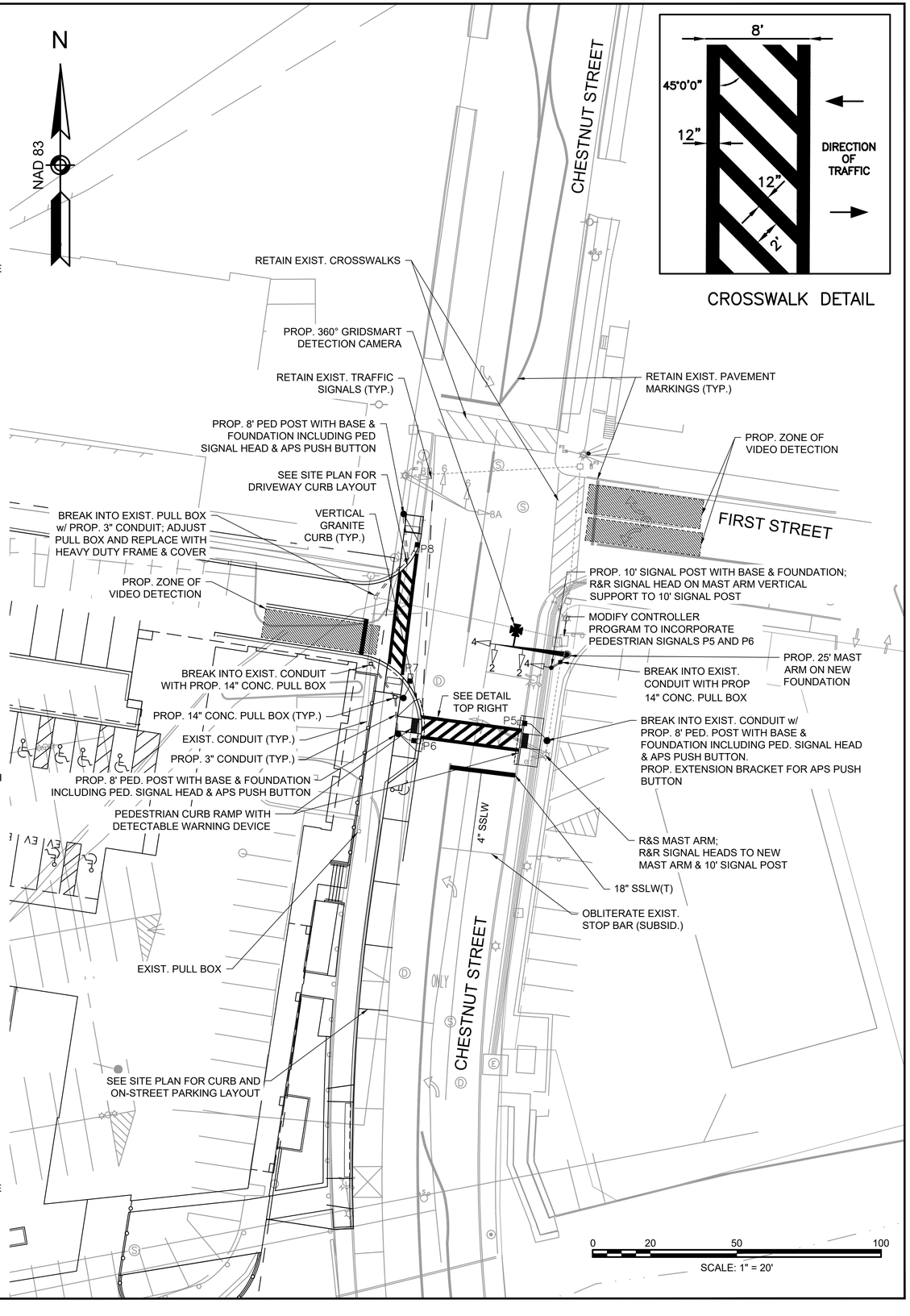
GENERAL NOTES

1. EXISTING CONDITIONS INFORMATION IS BASED ON SURVEY BY: MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND, P.O. BOX 681 - 24 CHESTNUT STREET DOVER, NH 03820 TEL: (603) 742-0911
2. 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.
3. CONTRACTOR SHALL TAKE SPECIAL CARE IN NOT DISTURBING EXISTNG MONUMENTS, BOUNDS, AND/OR BENCHMARKS WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
4. 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.
5. 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.
6. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
7. 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.
8. 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).
9. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS NOTED OTHERWISE.
10. ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS) LANE LINES AND ALL OTHER MARKINGS NOTED WITH (T) SHALL BE THERMOPLASTIC.
11. THE CONTRACTOR SHALL CONTACT THE DOVER ENGINEERING DEPARTMENT AT (603) 516-6450 ONE WEEK PRIOR TO PAVEMENT MARKING.
12. ALL EXISTING STATE, COUNTY, CITY AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED. ALL PROPERTY LINES BETWEEN ABUTTERS ARE APPROXIMATE ONLY.
13. 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.
14. THE LIMIT OF WORK AREA SHALL BE THE STREET RIGHT OF WAY UNLESS SHOWN OTHERWISE.
15. PRIOR TO THE START OF ANY NEW UTILITY WORK, ALL ELEVATIONS OF EXISTING UTILITIES IN THOSE AREAS ARE TO BE VERIFIED. THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY SHOULD ANY DISCREPANCIES OCCUR.
16. ALL CASTINGS SHALL BE SET FLUSH WITH FINISHED GRADE.
17. ALL GATE BOXES, SERVICE BOXES AND PUBLICLY OWNED MANHOLE FRAMES AND COVERS SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR. ADJUSTMENT OF THESE CASTINGS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE.

PROPOSED

TRAFFIC SIGNAL LEGEND

- CONTROL CABINET GROUND MOUNTED (WITH & WITHOUT CONC. PAD)
- METER PEDESTAL
- PULL BOX (14" CONCRETE PULL BOX TYPE A)
- MAST ARM, POLE
- SIGNAL POST & BASE (ALPHA-NUMERIC DESIGNATION NOTED)
- VEHICULAR SIGNAL HEAD (ALPHA-NUMERIC DESIGNATION NOTED)
- EMERGENCY PREEMPTION CONFIRMATION STROBE
- OMNIDIRECTIONAL VIDEO DETECTOR
- EMERGENCY PREEMPTION DETECTOR
- ø1 CONTROLLER PHASE ACTUATED
- ZONE OF VIDEO DETECTION
- TRAFFIC SIGNAL CONDUIT



CROSSWALK DETAIL

GPI Engineering Design Planning Construction Management
603.891.2213 GPINET.COM
Greenman-Pedersen, Inc.
21 Daniel Street, Second Floor
Portsmouth, NH 03801

PREPARED FOR
Altus Engineering, Inc.
133 Court Street
Portsmouth, NH 03801

47 CHESTNUT STREET OFF-SITE IMPROVEMENT PLAN DOVER, NH

REVISIONS

NO.	REVISION	DATE

APRIL 4, 2022

DRAWN/DESIGN BY	CHECKED BY
RSK/TN	MJD

TRAFFIC SIGNAL PLAN

SCALE: 1"=20'

TS-1

21386 DOVER 47 CHESTNUT_TS.DWG 4/4/2022

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PLANTING SCHEDULE

Symbol	Qty	Botanical Name	Common Name	Size	Root / Cont.	Comments
Deciduous Trees						
AG	13	Amelanchier grandiflora 'Robin Hill'	Serviceberry	2-2.5" cal.	B&B	Single Stem, headedat 4', matched specimens
AR	5	Acer rubrum 'Redpointe'	Red Maple	3"-3.5" cal.	B&B	Limbed to 7', Matched, Specimen, Central Leader
BP	5	Betula populifolia 'Whitespire Senior'	Whitespire Gray Birch	14'-16' ht.	B&B	Multi-stem, min. 4 stems, matched specimens
CC	5	Cercis canadensis 'Alba'	White Redbud	8-10' ht.	B&B	Multi-stem, min. 3 stems, matched specimens
CCN	7	Carpinus caroliniana 'Native Flame'	American Hornbeam	3"-3.5" cal.	B&B	Limbed to 4', Matched, Specimen, Central Leader
CK	4	Cladastris kentukea	Yellowwood	3"-3.5" cal.	B&B	Limbed to 7', Matched, Specimen, Central Leader
LS	4	Liquidambar styraciflua 'Happidaze'	American Sweetgum	3"-3.5" cal.	B&B	Limbed to 7', Matched, Specimen, Central Leader
QB	2	Quercus bicolor	Swamp White Oak	3"-3.5" cal.	B&B	Limbed to 7', Specimen, Central Leader
UAJ	6	Ulmus americana 'Jefferson'	Jefferson Elm	3"-3.5" cal.	B&B	Limbed to 7', Matched, Specimen, Central Leader
Evergreen Trees						
PPF	5	Picea pungens 'Iseli Fastigiate'	Columnar Blue Spruce	8-10' ht.	B&B	full to ground
PG	2	Picea glauca	White Spruce	8-10' ht.	B&B	full to ground
TO	3	Thuja occidentalis 'Techny'	Techny Arborvitae	8-10' ht.	B&B	full to ground
Shrubs						
CAS		Clethra alnifolia 'Sixteen Candles'	Sixteen Candles Summersweet	18"-24" ht.	#3 Cont.	30" o.c., staggered rows
CSF		Cornus sericea 'Farrow'	Arctic Fire Dogwood	18"-24" ht.	#3 Cont.	30" o.c., staggered rows
HQA		FINA	Dwarf Oakleaf Hydrangea	18"-24" ht.	#3 Cont.	36" o.c., staggered rows
HV		Hamamelis virginiana	Witchhazel	5-6' ht.	B&B	as shown
IGS		Ilex glabra 'Shamrock'	Shamrock Inberry	24"-30" ht.	#3 Cont.	30" o.c., staggered rows
IVJ		Ilex verticillata 'Jim Dandy'	Jim Dandy Winterberry	24"-30" ht.	#3 Cont.	30" o.c., male, staggered rows
IVS		Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	24"-30" ht.	#3 Cont.	30" o.c., staggered rows
RAG						
VD		Viburnum dentatum	Arrowwood Viburnum	24"-30" ht.	#3 Cont.	36" o.c., staggered rows
Perennials						
AH		Amsonia hubrichtii	Blue Star	12"-18" ht.	#1 Cont.	18" o.c., staggered rows
CP		Carex pensylvanica	Pennsylvania Sedge	12"-18" ht.	#1 Cont.	12" o.c., staggered rows
DC		Deschampsia cespitosa	Tufted Hair Grass	12"-18" ht.	#1 Cont.	12" o.c., staggered rows
DP		Dennstaedtia puntilobula	Eastern Hay-scented Fern	12"-18" ht.	#1 Cont.	18" o.c., staggered rows
EP		Echinacea purpurea	Pale Purple Coneflower	12"-18" ht.	#1 Cont.	18" o.c., staggered rows
GM		Geranium maculatum	Wild Geranium	12"-18" ht.	#1 Cont.	12" o.c., staggered rows
MP		Monarda punctata	Spotted Bee Balm	18"-24" ht.	#1 Cont.	18" o.c., staggered rows
PVS		Panicum virgatum 'Shenandoah'	Switchgrass	18"-24" ht.	#1 Cont.	18" o.c., staggered rows
RH		Rudbeckia hirta	Black Eyed Susan	18"-24" ht.	#1 Cont.	12" o.c., staggered rows
SS		Schizachyrium scoparium	Little Bluestem	18"-24" ht.	#1 Cont.	18" o.c., staggered rows
VA		Vaccinium angustifolium	Lowbush Blueberry	12-15" ht.	#1 Cont.	12" o.c., staggered rows

PLANTING AND SOIL NOTES

1. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE PLANT LIST, THE PLANTING PLAN SHALL GOVERN.
2. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. IN ADDITION, ALL NEW PLANT MATERIAL FOR THE PROJECT SHALL BE OF SPECIMEN QUALITY.
3. THE LANDSCAPE ARCHITECT SHALL ONLY REVIEW TREES THAT ARE IN THE GROUND AT THE NURSERY. NO PRE-DUG TREES WILL BE ACCEPTED. THEREFORE TIMING OF IN-GROUND REVIEWS MUST BE COORDINATED WITH EXPECTED INSTALLATION DATES.
4. ALL NEW PLANTS TO BE BALLED & BURLAPPED OR CONTAINER GROWN, UNLESS OTHERWISE NOTED ON THE PLANT LIST.
5. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
6. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
7. ALL NEW PLANTS SHALL BE TAGGED AND APPROVED BY THE LANDSCAPE ARCHITECT AT THE NURSERY PRIOR TO DIGGING OR DELIVERY TO THE SITE.
8. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.
9. STAKE LOCATION OF ALL PROPOSED PLANTINGS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF PLANTING.
10. NEW SHRUBS AND GROUNDCOVER SHALL BEAR THE SAME RELATIONSHIP TO GRADE AS IT BORE TO PREVIOUS GRADE. TREES SHALL BE SET 3" HIGHER THAN PREVIOUS GRADE. NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING.
11. ALL PLANT BEDS TO RECEIVE UN-DYED, AGED AND SHREDDED BARK MULCH AS PER SPECIFICATIONS.
12. ALL EXISTING TREES TO REMAIN SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. PROTECTION TECHNIQUES SHALL BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT.
13. PRUNE TREES IN ACCORDANCE WITH THE SPECIFICATIONS.
14. ALL PLANT MATERIAL SHALL BE MAINTAINED BY CONTRACTOR UNTIL FINAL ACCEPTANCE AND GUARANTEED FOR 1 CALENDAR YEAR.
15. CONFIRM ALL QUANTITIES AGAINST PLANTING PLANS, GRADING PLANS, AND SPECIFICATIONS, INCLUDING SITE DISTURBANCE OUTSIDE OF THE LIMIT OF GRADING NECESSITATED TO FACILITATE CONSTRUCTION.
16. WHERE SAND AND GRAVEL ARE SPECIFIED FOR A DRAINAGE LAYER, EXTEND DRAINAGE LAYER TO ASSOCIATED DRAIN LINES, DRAINAGE AREAS, OR DAYLIGHT.
17. WHERE ONE SOIL TYPE MEETS ANOTHER SOIL TYPE, FORM A 1:1 SLOPED BOUNDARY TRANSITION.
18. WHERE A SOIL PROFILE ENCROACHES WITHIN THE DRIP LINE OF EXISTING TREES, CONSULT WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING EXCAVATION.
19. ALL EXCAVATION AND PLACEMENT OF SOILS WITHIN THE DRIP LINE OF EXISTING TREES TO BE PERFORMED BY HAND.
20. SCARIFY SUBGRADE AS SPECIFIED BEFORE PLACEMENT OF ANY PLANTING SOILS.
21. DO NOT PLACE OR HANDLE SOILS THAT ARE WET.
22. PROTECT ALL EXISTING SOILS AGAINST COMPACTION, CONTAMINATION WITH CONSTRUCTION MATERIALS, AND ALL DISTURBANCE.
23. CONTRACTOR IS RESPONSIBLE FOR ACTUAL SITE CONDITIONS, COORDINATION OF SOILS PLACEMENT, AND PLANTING SUBDRAINAGE.
24. DO NOT PLACE ANY PLANTING SOIL PRIOR TO INSPECTION BY LANDSCAPE ARCHITECT.
25. EXTENTS OF SAND BASED STRUCTURAL SOIL (SBSS) ARE APPROXIMATE. PROVIDE A MINIMUM OF 1,000 C.F. OF SBSS FOR EACH TREE.

TREE PROTECTION AND REMOVAL NOTES

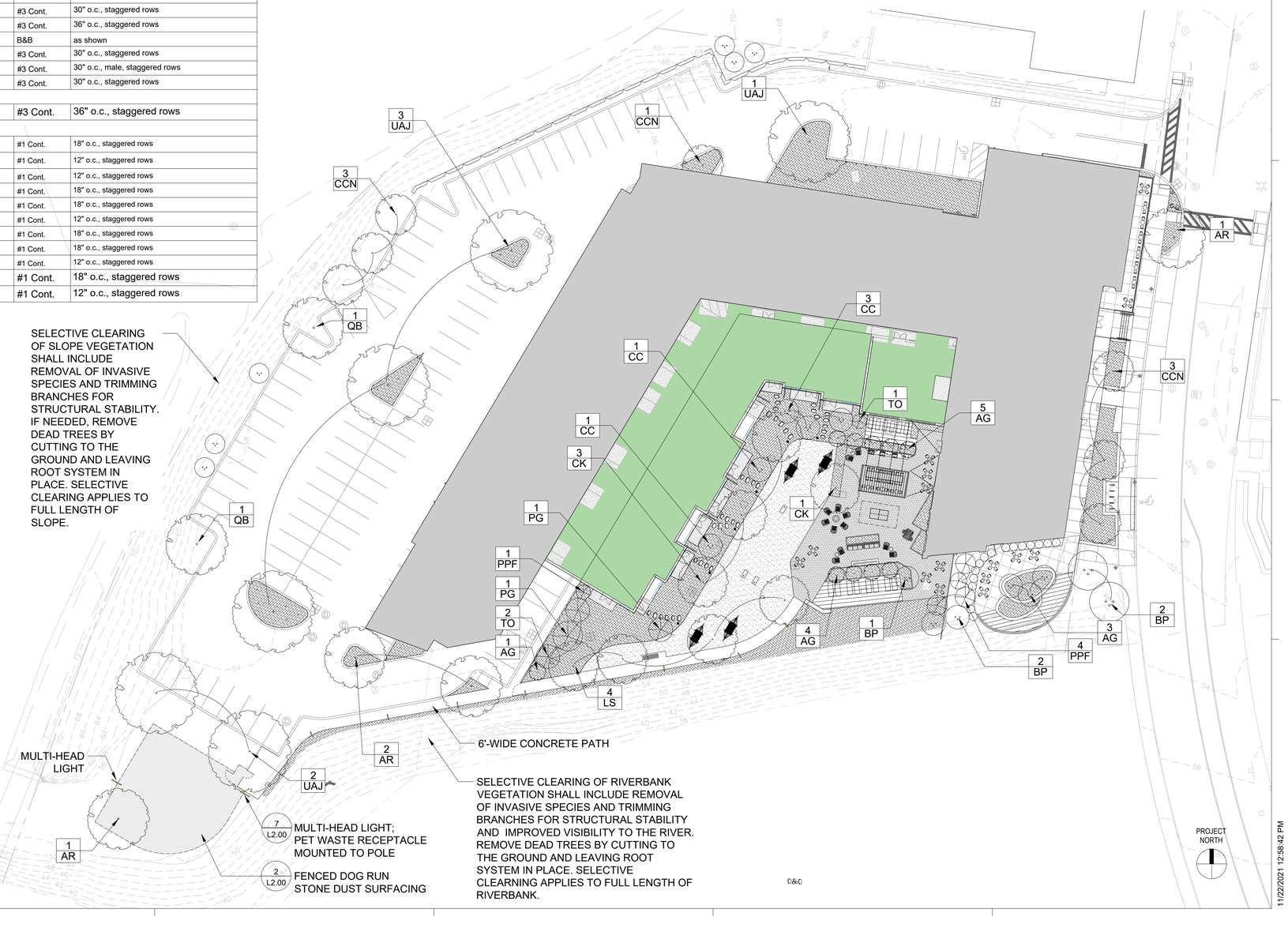
1. THIS SHEET DESCRIBES EXISTING TREE PRESERVATION AND REMOVAL WORK ONLY. REFER TO CIVIL ENGINEER'S DRAWINGS FOR COMPLETE SITE PREP AND DEMO REQUIREMENTS.
2. TREE REMOVAL SCOPE SHALL INCLUDE THE FELLING, CUTTING, AND SATISFACTORY DISPOSAL OF ALL TREES, STUMPS AND VEGETATIVE DEBRIS PRODUCED THROUGH THE CLEARING OPERATIONS.
3. FELL TREES IN SUCH A WAY AS TO NOT INJURE TREES TO BE SAVED. EXCAVATION OR GRADING WITHIN THE BRANCH SPREAD OF TREES TO BE SAVED SHALL BE PERFORMED ONLY UNDER THE DIRECTION OF THE OWNER'S REPRESENTATIVE UNLESS OTHERWISE DIRECTED.
4. STUMPS TO BE REMOVED OUTSIDE THE TREE PRESERVATION AREA SHALL BE GRUBBED TO THEIR FULL DEPTH. ROOTS 3 INCHES AND LARGER SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW FINISHED GRADE. STUMPS SHALL BE LEGALLY DISPOSED OF OFF-SITE
5. STUMPS TO BE REMOVED WITHIN THE TREE PRESERVATION AREA SHALL BE GROUND DOWN USING A MECHANICAL STUMP GRINDER TO A DEPTH OF 2 FEET BELOW FINISHED GRADE.
6. TREE PROTECTION FENCING SHALL BE INSTALLED AS SHOWN ON THIS PLAN AND REMAIN THROUGHOUT THE TIME OF CONSTRUCTION AS SPECIFIED AND DIRECTED BY THE OWNER'S REPRESENTATIVE.
7. CONTRACTOR SHALL TAG ALL TREES TO BE REMOVED AND VERIFY WITH OWNER'S REPRESENTATIVE PRIOR TO THE START OF DEMOLITION.
8. FOR ALL SITE PREP AND DEMO WORK OUTSIDE TREE PROTECTION AREA, SEE CIVIL ENGINEER'S DRAWINGS.
9. NO STORAGE OF ANY TYPE OF MATERIAL, CHEMICAL OR EQUIPMENT SHALL BE ALLOWED IN THE PROTECTED FENCED IN AREA.
10. BEFORE THE START OF ANY WORK ON THE SITE, PRECEDING THE ARRIVAL OF EQUIPMENT, MATERIALS OR VEHICLES TO THE SITE, AND PRIOR TO THE COMMENCEMENT OF ANY CLEARING ON THE SITE, THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE ON THE SITE WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT TO IDENTIFY TREES AND SHRUBS THAT ARE TO BE PROTECTED OR REMOVED. DO NO CLEARING WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED. REFER TO SPECIFICATION SECTION 01 56 39 FOR MORE INFORMATION.
11. REMOVE AND DISPOSE OF DEBRIS AS DIRECTED BY THE OWNER.
12. ALL EXCAVATION WITHIN THE TREE PROTECTION ZONE TO BE DONE BY HAND TO MINIMIZE DISTURBANCE TO ROOT ZONES.

LANDSCAPE MAINTENANCE

1. THE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL REQUIRED LANDSCAPING, SCREENING AND BUFFERING MATERIALS.
2. ALL REQUIRED PLANT MATERIALS SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION, REPLACED AS NECESSARY, AND KEPT FREE OF WEEDS, INVASIVE PLANTS, REFUSE AND DEBRIS.
3. THE PROPERTY OWNER SHALL REMOVE AND REPLACED DEAD OR DISEASED PLANTS AND TREES IMMEDIATELY DURING THE GROWING SEASON AND AFTER WINTER MONTHS WITH THE SAME TYPE, SIZE AND QUANTITY OF PLANTS MATERIALS AS ORIGINALLY INSTALLED, UNLESS ALTERNATIVE PLANTINGS ARE REQUESTED AND APPROVED BY THE PLANNING BOARD.
4. IRRIGATION SYSTEM SHALL INCLUDED AUTOMATIC PLANTER BED, LAWN, AND TREE PIT WATERING WITH SOIL-MOISTURE BASED SMART CONTROLLER.
5. AFTER ESTABLISHMENT PERIOD (TWO GROWING SEASONS), IRRIGATION SYSTEM WILL BE TURNED OFF AT PLANT BEDS AND TREE PIT ZONES. IRRIGATION AT THESE ZONES WILL BE ACTIVATED ON AN AS-NEEDED BASES THEREAFTER, SUCH AS DURING PERIODS OF EXTENDED DROUGHT OR PLANT REPLACEMENT.
6. MAINTENANCE OF GREEN ROOF:
   - 6.1. DURING PERIODS OF PROLONGED DROUGHT, PLANTS SHALL BE WATERED AT A RATE OF 1" PER WEEK UNTIL NORMAL PRECIPITATION RESUMES.
   - 6.2. GREEN ROOF SHALL BE VISUALLY INSPECTED AND SPOT-WEEDED EVERY 4-6 WEEKS DURING THE GROWING SEASON, OR AS NEEDED. MORE FREQUENT WEEDING MAY BE REQUIRED DURING THE ESTABLISHMENT PERIOD.
   - 6.3. IF NEEDED, A SLOW-RELEASE FERTILIZER MAY BE APPLIED DURING THE GROWING SEASON. ALL FERTILIZER APPLICATIONS SHALL FOLLOW MANUFACTURER'S INSTRUCTIONS.

LEGEND

- CONCRETE PAVEMENT
- UNIT PAVERS, TYPE 1
- UNIT PAVERS, TYPE 2
- STONE DUST PAVEMENT
- WOOD DECK
- PLANTING AREA
- GREEN ROOF
- LAWN AREA
- BICYCLE RACKS
- SITE FENCE
- BOLLARD
- STREET LIGHT
- PATH LIGHTS (SINGLE AND DOUBLE)



CLIENT:

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Redgate Real Estate Advisor, LLC
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Boston, MA 02110

ARCHITECT:

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617.623.5555
arrowstreet.com

CONSULTANTS:

CWDG
Copley Wolff Design Group
Landscape Architects & Planners

PROJECT INFORMATION:

47 Chestnut
#P21-84
47 Chestnut Street,
Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW
ISSUED FOR PLANNING BOARD REVIEW

STAMP:

JAMES A. HEBERT 096 LICENSED LANDSCAPE ARCHITECT STATE OF NEW HAMPSHIRE

REVISIONS:

No.	Date	Description

DRAWING TITLE:

Project No.	**21033.00**
Drawn By	**SS/JM**
Date	**4/19/22**
Scale	

DRAWING NUMBER:

Sheet 20 of 34

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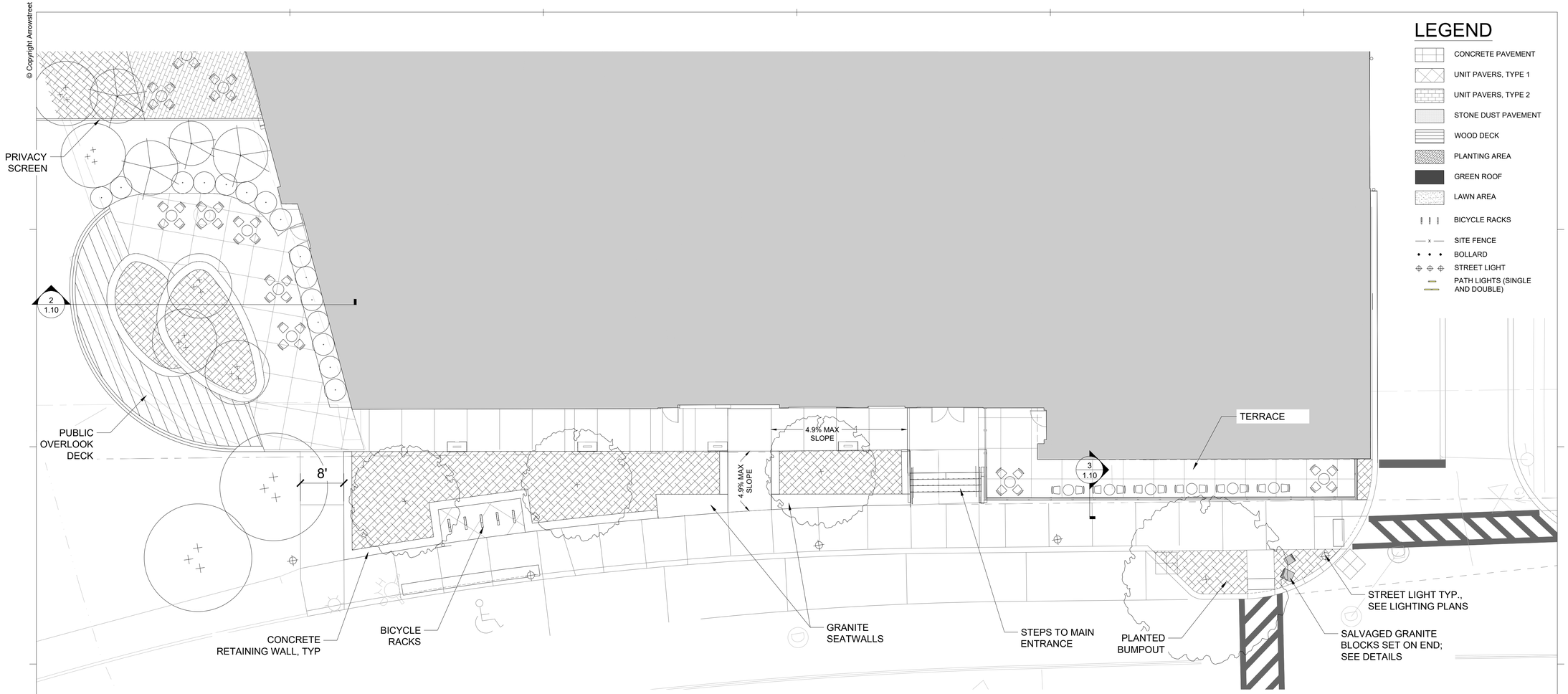
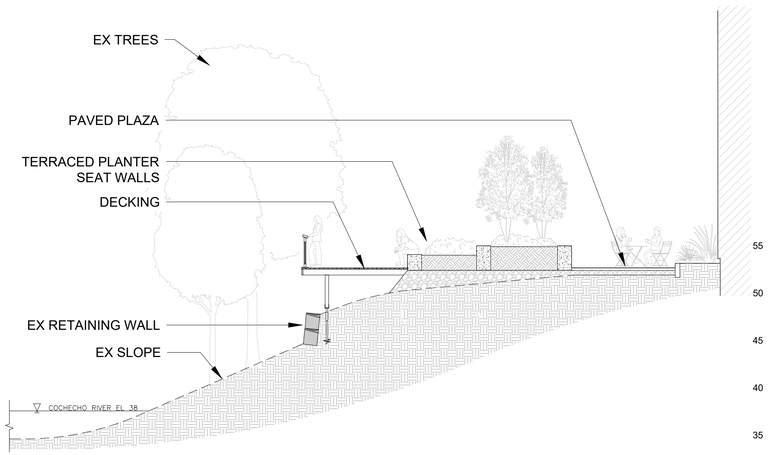


CHESTNUT STREET ENLARGEMENT

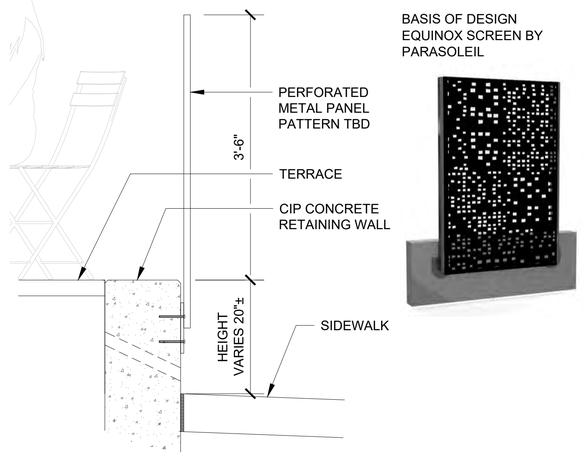
SCALE: 1" = 10'-0"

PROJECT NORTH



PUBLIC OVERLOOK

SCALE: 1/8" = 1'-0"



RAIL SCREEN AT TERRACE

SCALE: 1" = 1'-0"

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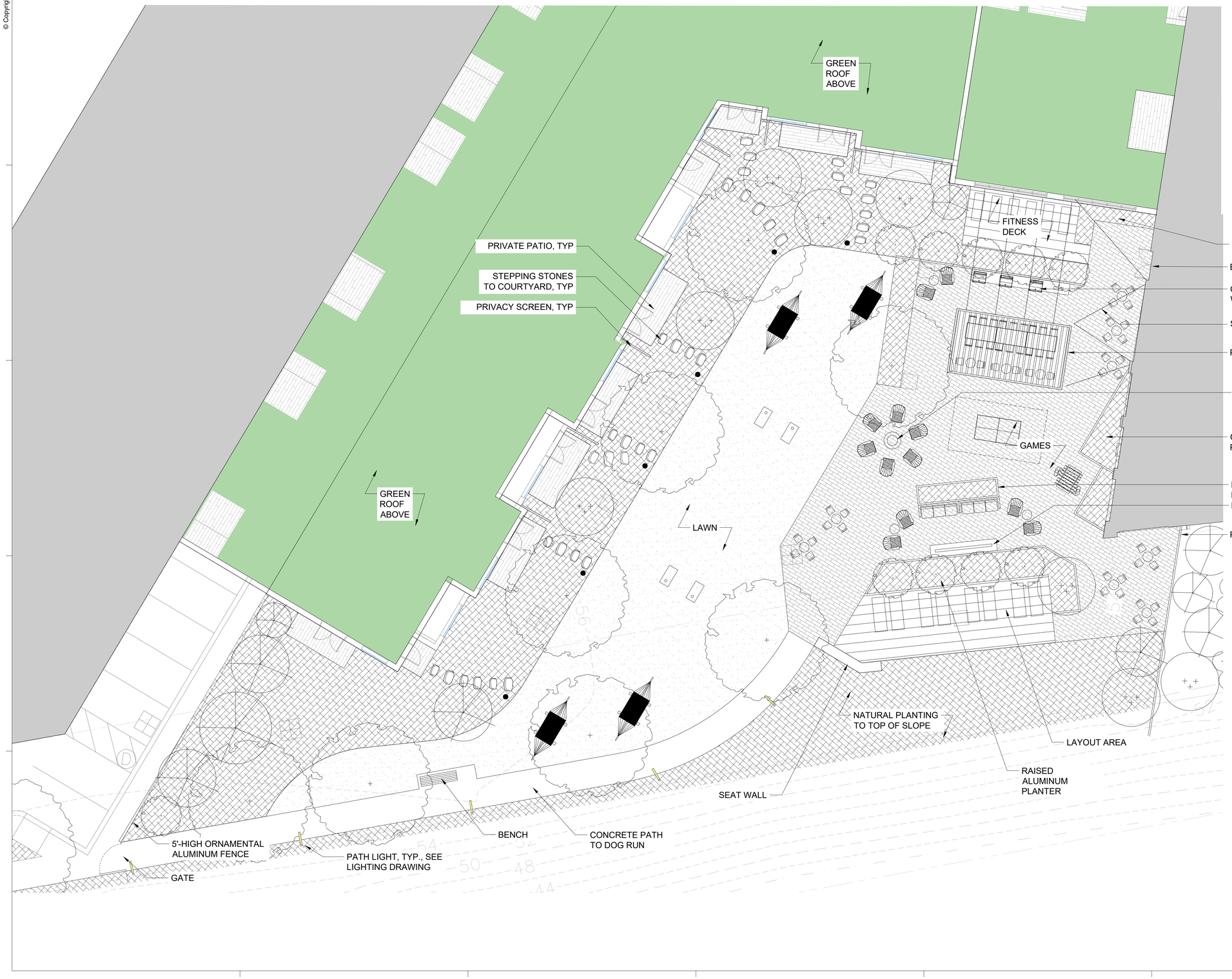

LEGEND

- CONCRETE PAVEMENT
- UNIT PAVERS, TYPE 1
- UNIT PAVERS, TYPE 2
- STONE DUST PAVEMENT
- WOOD DECK
- PLANTING AREA
- GREEN ROOF
- LAWN AREA
- BICYCLE RACKS
- SITE FENCE
- BOLLARD
- STREET LIGHT
- PATH LIGHTS (SINGLE AND DOUBLE)

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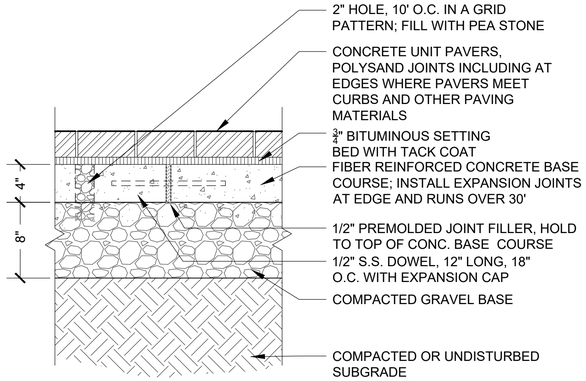
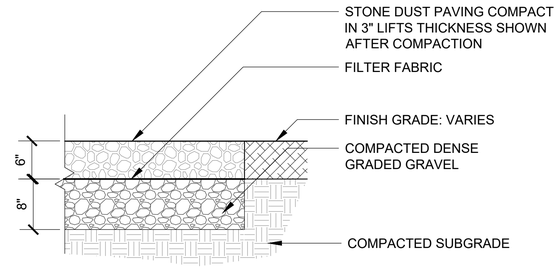
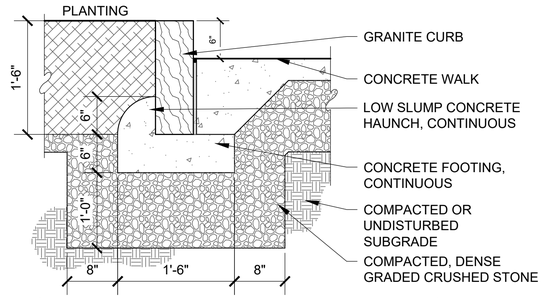


1 UNIT PAVING ON CONCRETE BASE
SCALE: 1-1/2" = 1'-0"



NOTE:
1. SUBMIT SAMPLE OF STONE DUST FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO ORDERING.

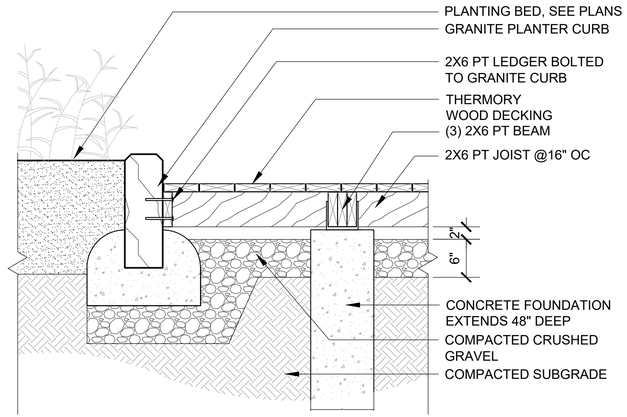
2 STONEDUST PAVING
SCALE: 1" = 1'-0"



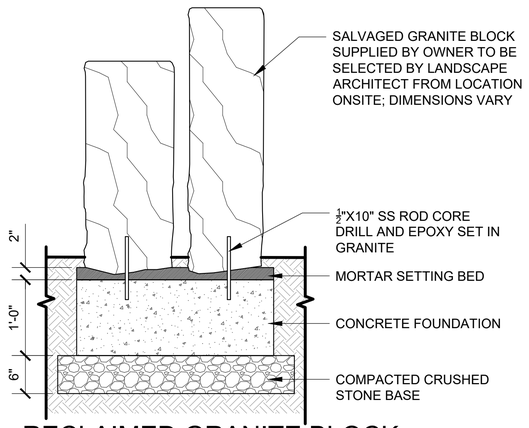
NOTE:
1. SHOP DRAWINGS REQUIRED PRIOR TO INSTALLATION.

3 GRANITE CURB
SCALE: 1" = 1'-0"

NOTES:
1. CONTRACTOR TO PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT/ARCHITECT.

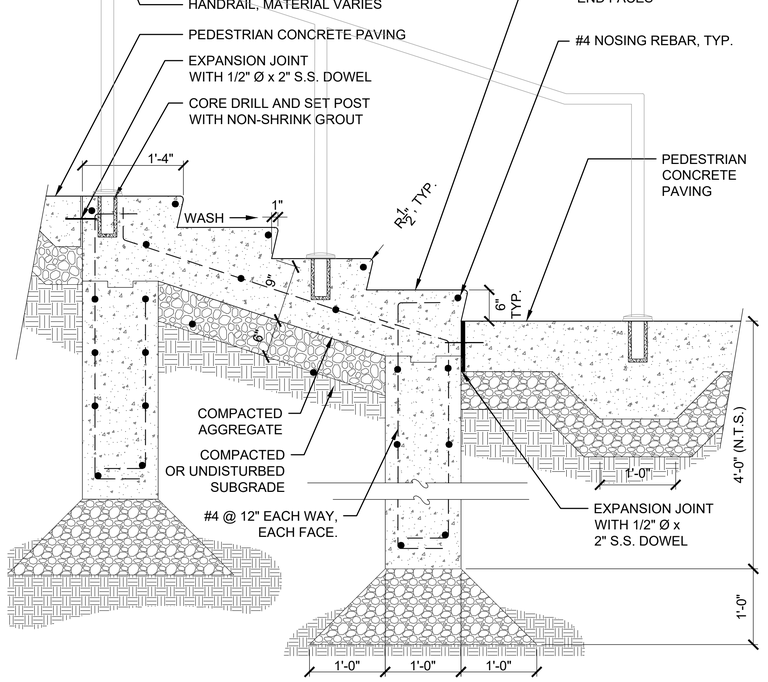


4 WOOD DECKING AT GRADE
SCALE: 1" = 1'-0"

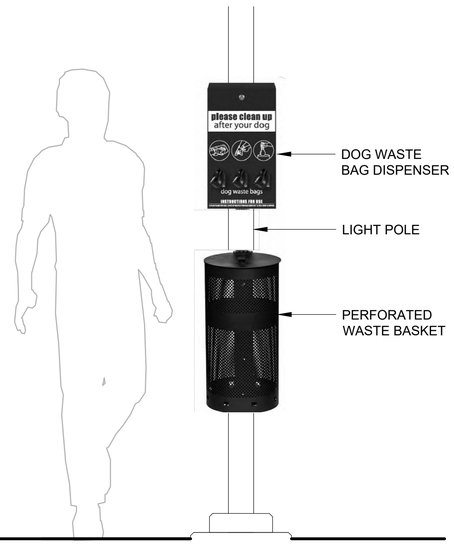


5 RECLAIMED GRANITE BLOCK
SCALE: 1" = 1'-0"

NOTE:
1. CONTRACTOR TO PROVIDE SHOP DRAWINGS
2. EACH TREAD WITHIN RUN TO BE EQUAL WIDTH. SEE PLAN DRAWINGS FOR TREAD WIDTH AT EACH RUN.



6 CIP CONCRETE STEPS
SCALE: 1" = 1'-0"



7 PET WASTE RECEPTACLE
SCALE: 1" = 1'-0"

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LANDSCAPE DETAILS

Project No.	**21033.00**
Drawn By	**SS/JM**
Date	**4/19/22**
Scale	

DRAWING NUMBER:

L2.00
Sheet **23** of **34**

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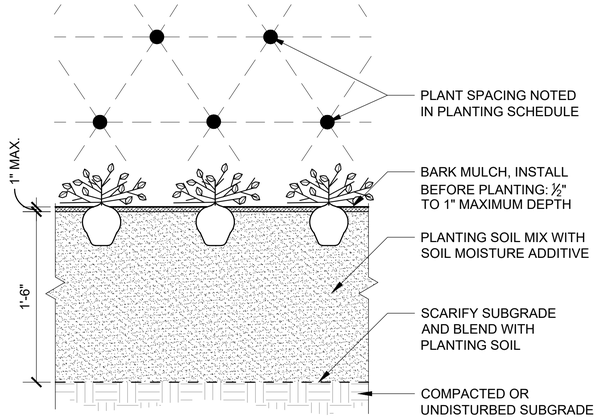
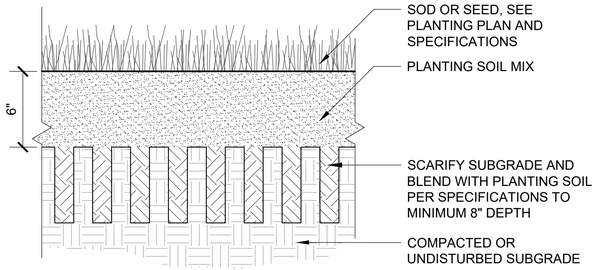
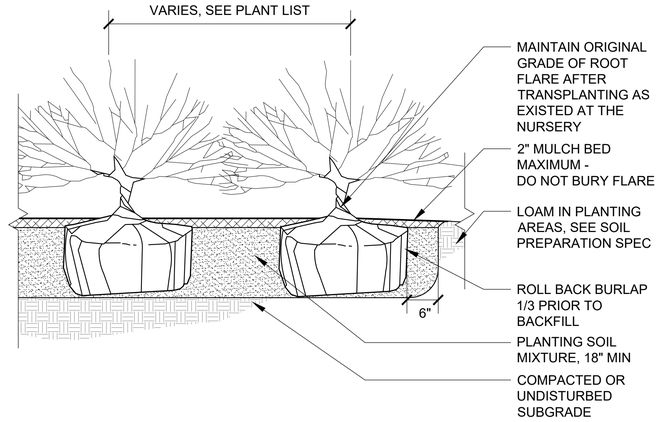
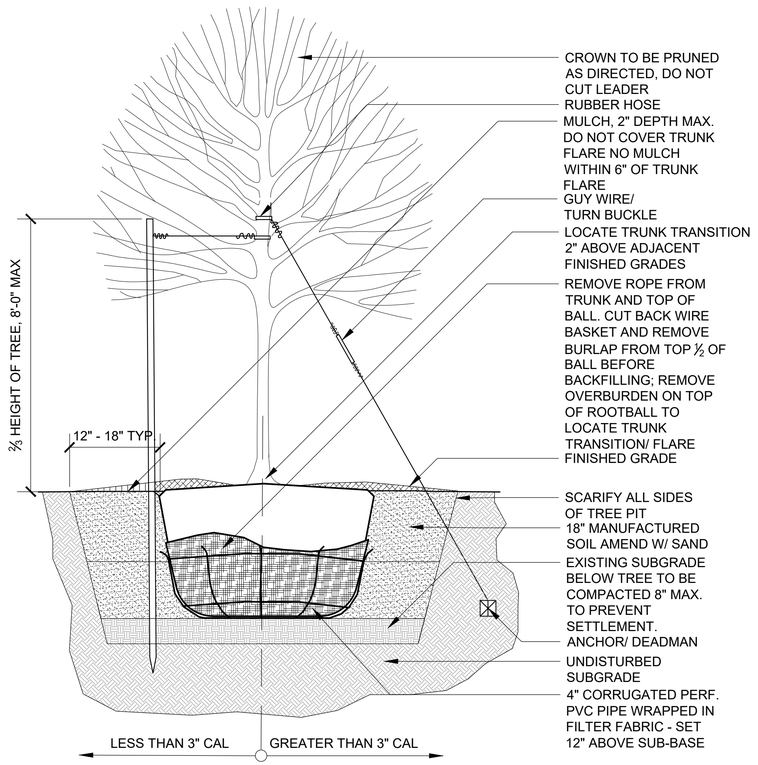


PERENNIAL / GROUNDCOVER PLANTING
SCALE: 1-1/2" = 1'-0"

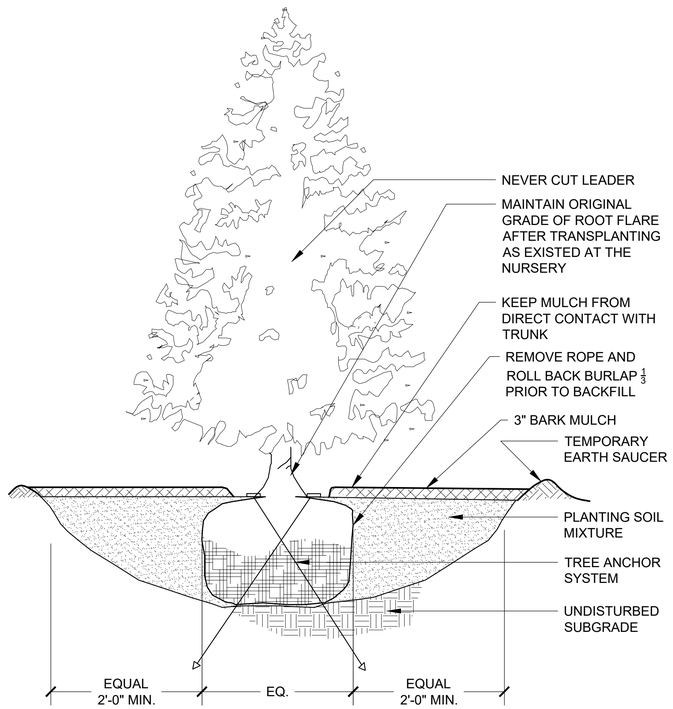


SOD DETAIL
SCALE: 1-1/2" = 1'-0"





DECIDUOUS TREE PLANTING
SCALE: 1/2" = 1'-0"



EVERGREEN TREE
SCALE: 3/4" = 1'-0"

CLIENT:

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Redgate Real Estate Advisor, LLC
286 Franklin Street, Suite 602
Boston, MA 02110

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

CONSULTANTS:

CWDG
Copley Wolff Design Group
Landscape Architects & Planners

PROJECT INFORMATION:

47 Chestnut
#P21-84
47 Chestnut Street,
Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW
ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

LANDSCAPE DETAILS

Project No.	**21033.00**
Drawn By	**SS/JM**
Date	**4/19/22**
Scale	

DRAWING NUMBER:

L2.01
Sheet **24** of **34**

11/22/2021 12:58:42 PM

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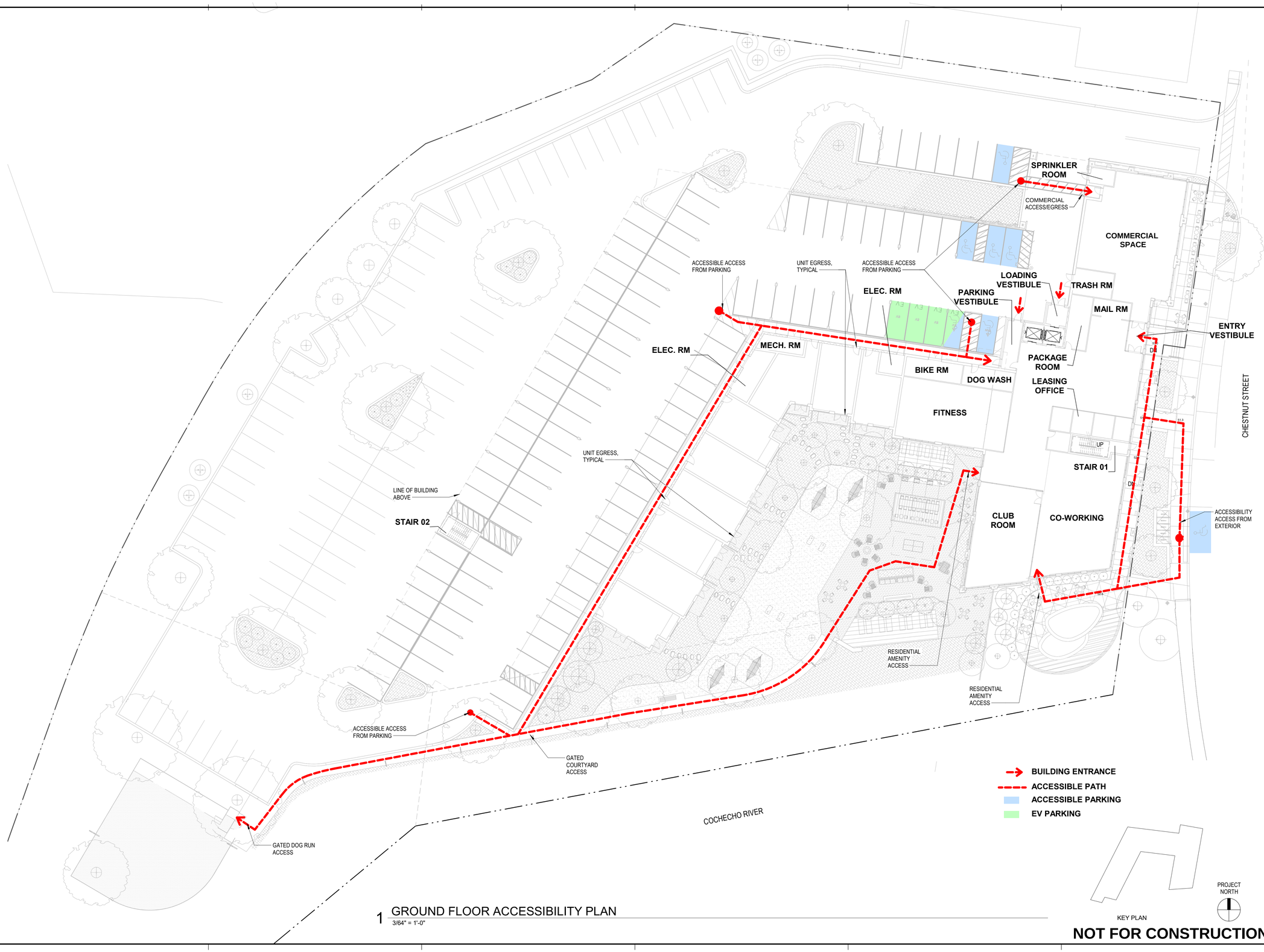

1 GROUND FLOOR ACCESSIBILITY PLAN
3/64" = 1'-0"

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4/18/2022 8:30:05 AM

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

GROUND FLOOR ACCESSIBILTY PLAN

Project No.	**21033.00**
Drawn By	**LN**
Date	**04/19/22**
Scale	**3/64" = 1'-0"**

DRAWING NUMBER:

A0.01

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1 SIDING STUDY
3/64" = 1'-0"

KEY PLAN

PROJECT NORTH

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

GROUND FLOOR PLAN

Project No.	**21033.00**
Drawn By	**LN**
Date	**04/19/22**
Scale	**3/64" = 1'-0"**

DRAWING NUMBER:

A2.11

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1 TYPICAL FLOOR PLAN 2-5
3/64" = 1'-0"

KEY PLAN

PROJECT NORTH

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2/21/2022 12:24:28 PM

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

TYPICAL FLOOR PLAN (2-5)

Project No.	**21033.00**
Drawn By	**LN**
Date	**04/19/22**
Scale	**3/64" = 1'-0"**

DRAWING NUMBER:

A2.12

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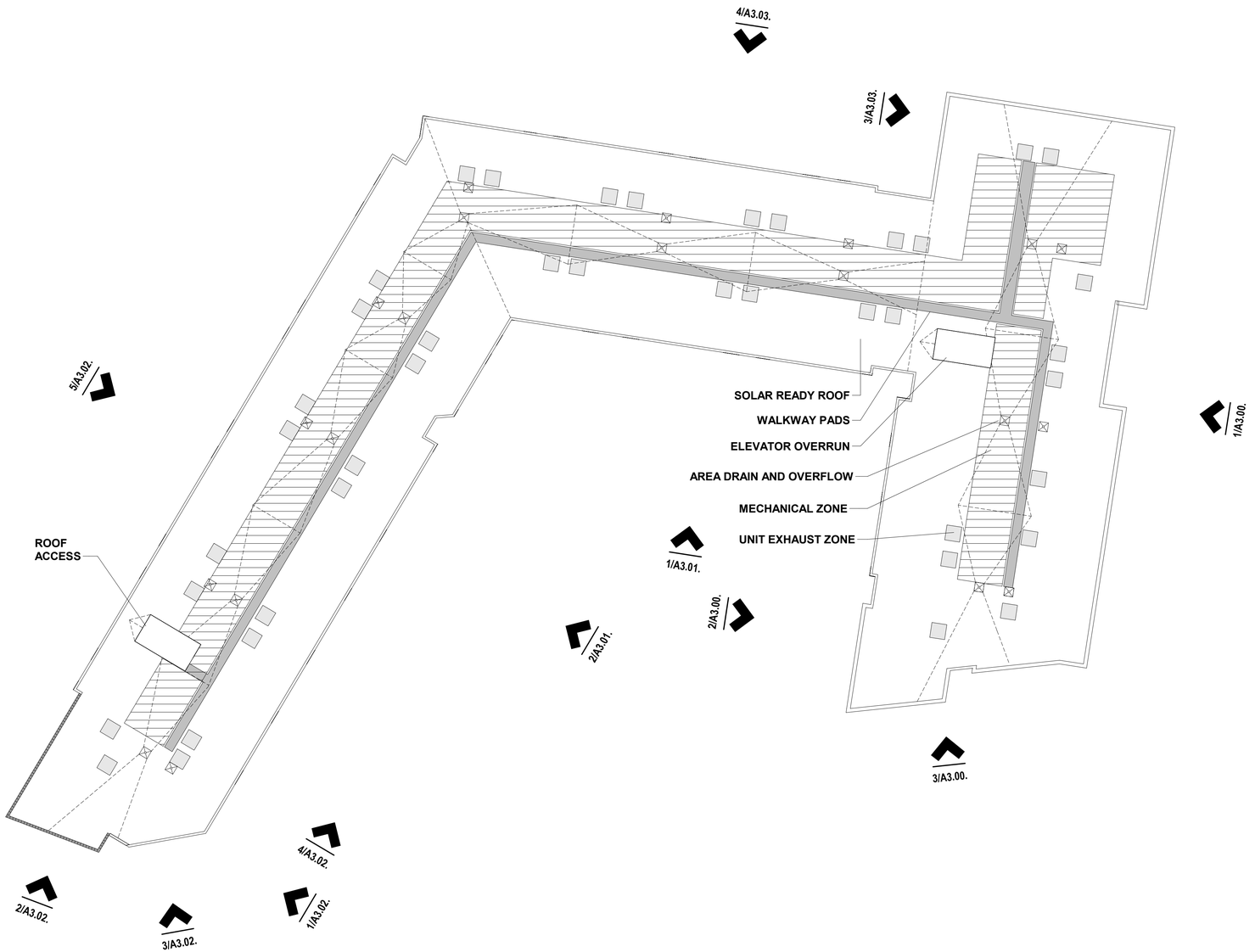

1 ROOF PLAN
3/64" = 1'-0"

KEY PLAN

PROJECT NORTH

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CONSULTANTS:

PROJECT INFORMATION:

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47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

ROOF PLAN

Project No.	**21033.00**
Drawn By	**LN**
Date	**04/19/22**
Scale	**3/64" = 1'-0"**

DRAWING NUMBER:

A2.13

2/23/2022 5:25:03 PM

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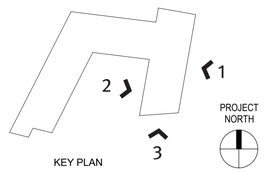
MATERIALS LEGEND

- 1A Primary Masonry
- 1B Primary Masonry Textured
- 2 Secondary Masonry
- 3 Tertiary Masonry
- 4 Fiber Cement Siding
- 5 Fiber Cement Siding
- 6 Metal Panel
- 7 Granite
- 8 Ground Face CMU

1 EAST ELEVATION
3/32" = 1'-0"

2 WEST ELEVATION - COURTYARD
3/32" = 1'-0"

3 SOUTH ELEVATION - EAST
3/32" = 1'-0"



KEY PLAN

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2/20/2022 2:33:25 PM

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

BUILDING ELEVATIONS

Project No.	**21033.00**
Drawn By	**Author**
Date	**04/19/22**
Scale	**3/32" = 1'-0"**

DRAWING NUMBER:

A3.00

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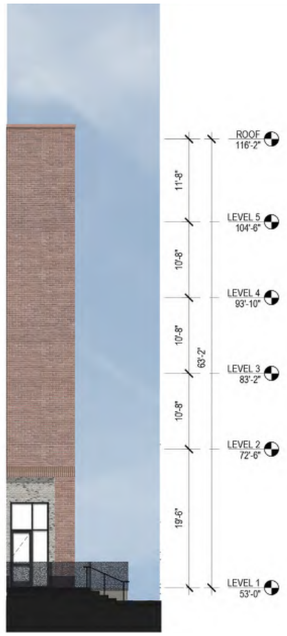
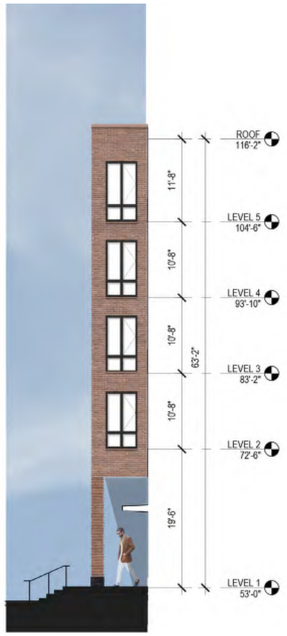
MATERIALS LEGEND

- 1A Primary Masonry
- 1B Primary Masonry Textured
- 2 Secondary Masonry
- 3 Tertiary Masonry
- 4 Fiber Cement Siding
- 5 Fiber Cement Siding
- 6 Metal Panel
- 7 Granite
- 8 Ground Face CMU



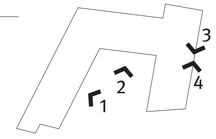
4 SOUTH ELEVATION @ ENTRY
3/32" = 1'-0"



3 NORTH ELEVATION @ ENTRY
3/32" = 1'-0"

2 SOUTH ELEVATION - COURTYARD
3/32" = 1'-0"

1 EAST ELEVATION - COURTYARD
3/32" = 1'-0"



KEY PLAN

PROJECT NORTH

NOT FOR CONSTRUCTION

2/20/2022 2:37:24 PM

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

LICENSED ARCHITECT
DAVID A. BOIS No. 04928
THE STATE OF NEW HAMPSHIRE

REVISIONS:

No.	Date	Description

DRAWING TITLE:

BUILDING ELEVATIONS

Project No.	**21033.00**
Drawn By	**Author**
Date	**04/19/22**
Scale	**3/32" = 1'-0"**

DRAWING NUMBER:

A3.01

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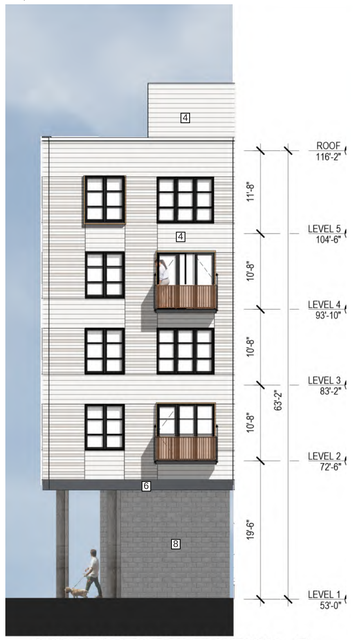
MATERIALS LEGEND

- 1A Primary Masonry
- 1B Primary Masonry Textured
- 2 Secondary Masonry
- 3 Tertiary Masonry
- 4 Fiber Cement Siding
- 5 Fiber Cement Siding
- 6 Metal Panel
- 7 Granite
- 8 Ground Face CMU

1 SOUTHEAST ELEVATION
3/32" = 1'-0"

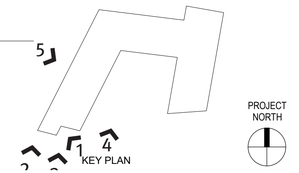
2 SOUTHWEST ELEVATION - A
3/32" = 1'-0"



3 SOUTHWEST ELEVATION - B
3/32" = 1'-0"

4 SOUTH ELEVATIONS - TOWN HOUSE
3/32" = 1'-0"

5 WEST ELEVATION
3/32" = 1'-0"



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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut
#P21-84
47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW
ISSUED FOR PLANNING BOARD REVIEW

STAMP:

LICENSED ARCHITECT
DAVID A. BOIS
No. 04928
STATE OF NEW HAMPSHIRE

REVISIONS:

No.	Date	Description

DRAWING TITLE:

BUILDING ELEVATIONS

Project No.	**21033.00**
Drawn By	**Author**
Date	**04/19/22**
Scale	**3/32" = 1'-0"**

DRAWING NUMBER:

A3.02

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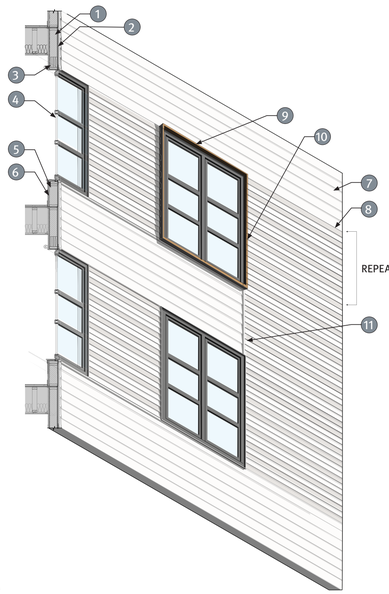
MATERIALS LEGEND

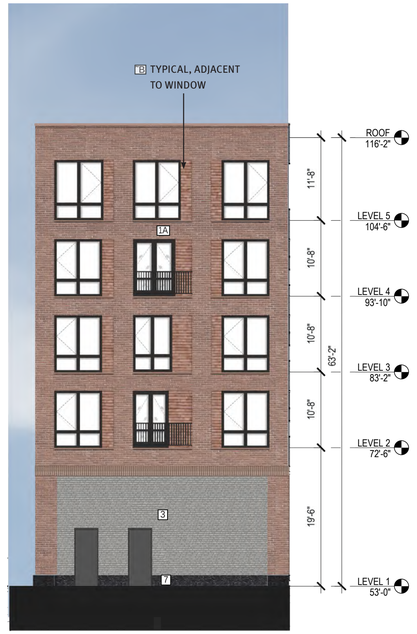
- 1A Primary Masonry
- 1B Primary Masonry Textured
- 2 Secondary Masonry
- 3 Tertiary Masonry
- 4 Fiber Cement Siding
- 5 Fiber Cement Siding
- 6 Metal Panel
- 7 Granite
- 8 Ground Face CMU

NORTH ELEVATION - ENLARGED
1/4" = 1'-0"



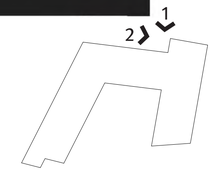
SIDING STUDY

1. 2X6 THERMALLY INSULATED WALL
2. CONTINUOUS 1" EXTERIOR INSULATION BETWEEN 1-1/2" GIRTS
3. STRUCTURAL HEADER
4. INSULATED VINYL WINDOW SYSTEM WITH DIVIDED LITES AND COMBINATION OF FIXED AND OPERABLE WINDOWS
5. WOOD SILL
6. PAINTED GYPSUM BOARD
7. FIBER CEMENT LAP SIDING EXPOSURE TYPE A
8. FIBER CEMENT LAP SIDING EXPOSURE TYPE B WITH ALTERNATING COLORWAY
9. SHEET METAL HEAD FLASHING
10. COLORED PROJECTING WINDOW TRIM FOR SHADOW REVEAL
11. TRIM REVEAL AT PATTERN BREAKS



2 NORTHWEST ELEVATION
3/32" = 1'-0"

1 NORTH ELEVATION
3/32" = 1'-0"



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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

REVISIONS:

No.	Date	Description

DRAWING TITLE:

BUILDING ELEVATIONS

Project No.	**21033.00**
Drawn By	**Author**
Date	**04/19/22**
Scale	**3/32" = 1'-0"**

DRAWING NUMBER:

A3.03

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

LICENSED ARCHITECT
DAVID A. BOIS
No. 04928
THE STATE OF NEW HAMPSHIRE

REVISIONS:

No.	Date	Description
1	8.3.22	Rendering Update

DRAWING TITLE:

PERSPECTIVE VIEW

Project No.	**21033.00**
Drawn By	**CR**
Date	**04/19/22**
Scale	

DRAWING NUMBER:

A5.01

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CONSULTANTS:

PROJECT INFORMATION:

47 Chestnut #P21-84

47 Chestnut Street, Dover, NH 03820

ISSUANCE:

SITE PLAN REVIEW

ISSUED FOR PLANNING BOARD REVIEW

STAMP:

LICENSED ARCHITECT
DAVID A. BOIS
No. 04928
THE STATE OF NEW HAMPSHIRE

REVISIONS:

No.	Date	Description
1	8.3.22	Rendering Update

DRAWING TITLE:

PERSPECTIVE VIEW

Project No.	**21033.00**
Drawn By	**CR**
Date	**04/19/22**
Scale	

DRAWING NUMBER:

A5.02

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2024-0005

Application Type:	Conditional Use Permit
Applicant(s):	Future Automation, LLC
Owner(s):	Dover Business Industrial and Development Authority (DBIDA)
Location:	Quality Way (Assessor's Map D, Lot 11-8)
Meeting Date:	April 23, 2024

INTENT: To obtain a Conditional Use Permit (CUP) to allow 39,820± square feet of wetland buffer impact and 1,631 square feet of wetland impact related to Site Plan for two light manufacturing facilities (Site 2024-0002)

UNITS PROPOSED: N/A

AGENDA ITEM #: 4-C

ACREAGE: 8.61± ac.

ZONING DISTRICT: IT

EXISTING USE: Vacant

PROPOSED USE: Light Manufacturing

SURROUNDING USE: Light Manufacturing, Residential

ZBA ACTION: None

ATTACHMENTS: Application materials including site plan

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

PERMITS REQUIRED:
- City of Dover CUP for §170-27.1, Wetland Protection District
- NH DES Wetlands Permit and Alteration of Terrain

WAIVERS REQUESTED:
- §153-14G(3)(a)- Perimeter landscaping, to allow a minimum caliper of 2.5".
- §153-15C(2)- To allow parking in the front of the building.

CONSERVATION COMMISSION: 4/8/24

TRC: 2/15/24 and 3/21/24

Summary of Request and Background
The applicant is proposing to construct a light manufacturing facility consisting of two buildings, 24,000 square feet and 10,000 square feet, each with office space, parking, and associated infrastructure.

In total, the project will create 39,820± square feet of wetland buffer impact and the proposed access driveway for the facility will require a culverted wetland crossing which will create 1,631 square feet of wetland impact. One (1) Conditional Use Permit (CUP) is proposed as part of this project.

The parcel is currently owned by the Dover Business & Industrial Development Authority (DBIDA) and the applicant has met with DBIDA and received an endorsement to proceed with the project.

The Conservation Commission endorsed the application at their April 8, 2024 meeting. (minutes attached)

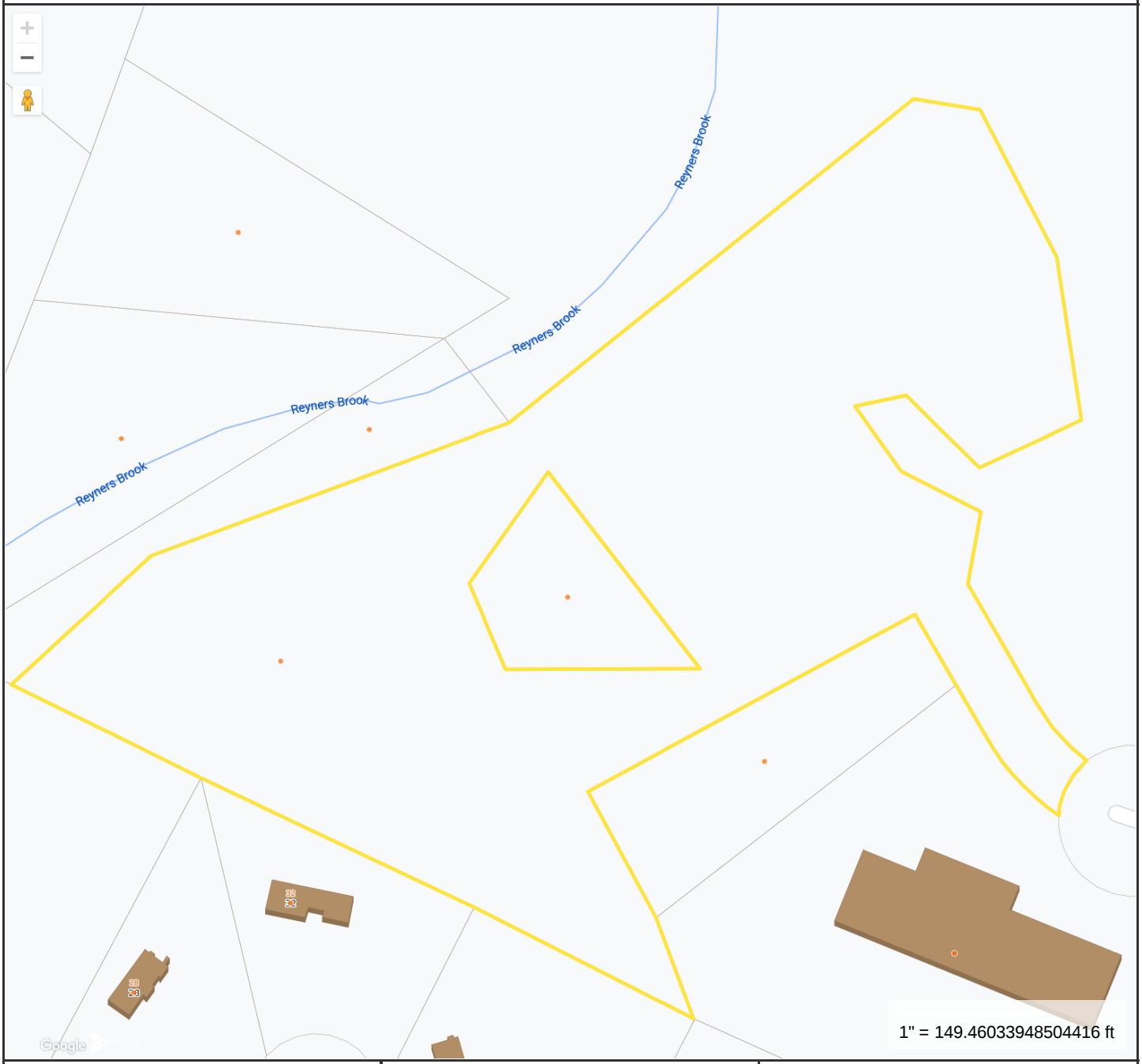
Consistency with Land Use Regulations – CUP 170.27.1.F
The Wetlands Protection District ordinance §170.27.1.F provides for Conditional Use Permits to allow impacts to wetlands and wetland buffers if standards related to demonstration that no practicable alternative exists, impact avoidance was considered, impacts were minimized, and mitigation has been sought.

Planning Staff feels that the applicant considered the criteria and located the two buildings, driveways, and associated infrastructure to minimize wetland buffer impacts and has limited wetland impact to the access driveway. The design for the project has incorporated site characteristics such as the existing slope and soil type to further minimize wetland buffer and wetland impacts. The applicant has applied for the relevant NHDES Wetlands Permit and Alteration of Terrain Permit. Applicant has received endorsement by the Conservation Commission.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to approve the Conditional Use Permit with the following subsequent conditions:

Subsequent Conditions to Be Met Prior to Issuance of a Conditional Use Permit :
1. Approval of SITE-2024-0002;
2. Copies of the NHDES Wetlands Permit and NHDES Alteration of Terrain Permit be submitted to the Planning Department and added to the plan set coversheet.

COND-2024-0005 Quality Way



Property Information

Location	QUALITY WY
Owner	DOVER BUSINESS & IND DEV AUTHORITY
Land Use	
Zoning Code	IT
Property Id	D0011-008000

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 10/30/2023
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

PERMIT SNAPSHOT REPORT COND-2024-0005
FOR CITY OF DOVER, N.H.

Permit Type	Conditional Use	**Project:**		**App Date:**	03/01/2024
Work Class:	Environmental	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:	Wetland Protection District				

Parcel: D0011-008000 Main	**Address:** Quality Wy Main Dover, NH	**Zone:** R-40(Residential - Rural) IT(Non-Residential - Innovative Technolo

Owner
Michael Joyal
Business: (603) 516-6008

Applicant
Alun Williams
Business: (603) 742-9181

Plan Preparer
Stephen Haight
Business: (603) 749-0443

Plan Preparer
Dover Test Company
Dover Webmaster
288 Central Ave
Dover, NH 03820
Home: (603) 516-1234
Business: (603) 516-6099
Mobile: (603) 516-6789

Applicant
Civilworks New England
Steve Haight
181 Watson Road PO Box 1166
Dover, NH 03820
Business: (603) 749-0443
Mobile: (603) 817-6651

Permit Custom Fields

Select Permit Type	Wetland Protection District	General Purpose	New Construction	Project Zone	Non-Residential
What is the parcel zoned?	IT	New Change in Impervious/Paved Area (sq ft)	60610	Work	Wetland buffer impact of 39,820± s.f. for the construction of 2 commercial buildings totaling 35,000 s.f., driveway and parking areas with associated utility and drainage improvements.
permitstatefed	NH DES Alteration of Terrain (pending) NH DES Wetland Permit (minimum expedited) (pending)				

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Steve_Haight_3/1/2024.jpg	03/01/2024 10:48	Haight, Steve		Uploaded via CSS
Permit Snapshot Report.pdf	03/01/2024 10:48	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot
6 Authorization Letter_v1.pdf	04/01/2024 10:05	Haight, Steve		
7 City Agreement Email_v1.pdf	04/01/2024 10:05	Haight, Steve	Available Online	

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00006973	Planning Impervious Paved Area Fee	$4,242.70	$4,242.70
	Planning General Application Fee	$200.00	$200.00
	Total for Invoice INV-00006973	$4,442.70	$4,442.70
	Grand Total for Permit	**$4,442.70**	**$4,442.70**

PERMIT SNAPSHOT REPORT (COND-2024-0005)

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Conditional Use Review v.1	Requires Re-submit	03/06/2024	04/03/2024	04/01/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Kaspari, Jackson	Requires Re-submit	03/06/2024	04/03/2024	04/01/2024

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		03/06/2024 10:02	04/09/2024 10:59
Confirm application complete v.1	Generic Action		03/06/2024 10:02
Conditional Use Review v.1	Receive Submittal	03/06/2024 0:00	04/01/2024 9:41
Planning Board v.1		04/09/2024 10:59	
Planning Board Agenda v.1	Task	04/09/2024 10:59	04/09/2024 11:00
Invoice for Notices v.1	Task	04/09/2024 11:00	
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Permit Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Permit Activity		
NOD Sent to Applicant v.1	Create Report		
Issue Permit v.1			
Verify Fees Prior to Permit v.1	Generic Action		
Issue and Review Permit v.1	Generic Action		
Print and Email Permit v.1	Generic Action		
Plans uploaded to Treeno v.1	Generic Action		
Internal Notification of Plan Completion v.1	Generic Action		
Recording v.1	Task		

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Future Automation, Inc. Telephone # N/A

Address of Applicant: 127 Venture Drive Dover, NH 03820

E-Mail Address: alun.williams@futureautomation.co.uk

Name of Property Owner (if different from applicant): Dover Business & Industrial Development Authority Telephone # N/A

Address of Property Owner: 288 Central Avenue Dover, NH 03820

PROPERTY INFORMATION

Assessor's Map # D Lot(s) # 11-8

Address of Property: Quality Way

Zoning District(s) IT - Innovation Technology Overlay District(s) N/A

Existing Use of Property: Vacant

CONDITIONAL USE PERMIT INFORMATION

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

☐ Conservation District	☐ RCM Use Overlay District	☐ Gateway District
☐ 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:

The project proposes two (2) buildings with a total floor area of 34,856, accessed via a single shared drive with each having separate parking and loading areas. A box culvert is required at the entrance of the access drive resulting in a wetland impact of 1,631± sf.

In addition to the proposed buildings, access drive, parking and loading areas are associated utility and drainage improvements. Portions of the proposed grading, drainage, pavement, and buildings are within 50 feet of a wetland resulting in a wetland buffer impact of 39,820± sf.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status:

1) NHDES Wetland Permit - not yet submitted
2) NHDES Alteration of Terrain Permit - not yet submitted

Name of Professional That Prepared Plans: Stephen J. Haight, PE - Civilworks New England

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-7429-0443

Professional License #: NH PE # 7978 E-mail address: shaight@civilworksne.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~~ Applicant: _____ Date: 16 Jan 24

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

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~~ Applicant: _____ Date: 16 Jan 24

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
D	11-8	Dover Business & Industrial Dev Authority	288 Central Avenue Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
	Future Automation, Inc.	127 Venture Drive Dover, NH 03820

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stehpen J. Haight, PE	Civilworks New England	P.O. Box 1166 Dover, NH 03821
Kevin McEneaney, LLS	McEneaney Survey Associates	P.O. Box 1166 Dover, NH 03821

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

COND-2024-0005 **QUALITY WAY**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
A0047-010000	11 REYNERS BROOK DR	ARVENITIS KERRY A		11 REYNERS BROOK DR	DOVER	NH	03820
A0047-012000	15 REYNERS BROOK DR	MCCONNELL GEOFFREY R & DEBORAH H TRUSTEE	MCCONNELL REVOCABLE LIVING TRUST	15 REYNERS BROOK DR	DOVER	NH	03820
A0048-B00000	SIXTH ST	MENDENHALL JON L &	MENDENHALL KAREN E	475 SIXTH ST	DOVER	NH	03820
A0049-011000	28 QUAIL DR	TRICONI CHRISTOPHER E & ELIZABETH C TRUS	TRICONI FAMILY LIVING TRUST 2021	28 QUAIL DR	DOVER	NH	03820
A0049-012000	32 QUAIL DR	MOREAU SCOTT &	CURTIS MARCY	32 QUAIL DR	DOVER	NH	03820
A0049-013000	29 QUAIL DR	PORTER DOUGLAS W &	PORTER YUKARI	29 QUAIL DRIVE	DOVER	NH	03820
D0011-001000	9 VENTURE DR	DOVER BUSINESS & IND DEV AUTHORITY		288 CENTRAL AVE	DOVER	NH	03820
D0011-004000	110 VENTURE DR	QUALITY WAY LLC		5 DANIELS ST APT 2	SALEM	MA	01970-5214
D0011-006000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-007000	QUALITY WY	WEAVE FILTRATION LLC		100 TRI CITY RD UNIT 117	SOMERSWORTH	NH	03878
D0011-007SN2	QUALITY WY	WEAVE FILTRATION LLC		100 TRI CITY RD UNIT 117	SOMERSWORTH	NH	03878
D0011-008SN1	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN2	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN3	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-009SND	INNOVATION WY	HEINE USA		10 INNOVATION WAY	DOVER	NH	03820
D0012-001000	SIXTH ST	TSB PROPERTIES LLC		385 SIXTH ST	DOVER	NH	03820
D0012-002000	SIXTH ST	TSB PROPERTIES LLC		385 SIXTH ST	DOVER	NH	03820
D0011-008000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEVE HAIGHT	PO BOX 1166	DOVER	NH	03820

CONDITIONAL USE NARRATIVE
§170-27.1
WETLAND PROTECTION DISTRICT
for
FUTURE AUTOMATION
Quality Way
Tax Map D, Lot 11-8

F. Conditional use approval.

(1) Conditional use approval may be granted by the PLANNING BOARD (RSA 674:21II) after proper public notice and public hearing, for construction within the Wetland Protection District or buffer. Said construction may include but is not limited to a road or other accessway, utility right-of-way, communication lines, power lines and pipelines, STRUCTUREs, and parking LOTs provided that the proposed construction complies with the following standards:

(a) Practicable Alternative: There is no practicable alternative that would have a less adverse impact on the area. **The proposed driveways, buildings, side slopes, and bio-retention basin location were chosen to avoid wetland impacts and to minimize wetland buffer impacts. The areas of impervious impact to the wetland buffer were minimized by utilizing the site characteristics including existing slope and ledge probe information to minimize additional side slope impacts.**

(b) Avoidance: The potential impacts have been avoided to the maximum extent practicable. The APPLICANT will demonstrate by plan and example that the proposed construction represents the least impacting alternative. **With the exception of the 1,631 sf of wetland impact for the access drive, wetland impacts have been avoided. There are 39,820 sf of wetland buffer impacts associated with the grading and drainage and the access drive and emergency vehicle maneuvering for the project. The design incorporated the unique site characteristics including existing slope, depth to ledge, and soil type to minimize wetland buffer impacts. The buildings have been situated to provide for the drive aisle and parking areas to further reduce wetland buffer impacts.**

(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. **There are 1,631 sf of wetland impacts for the access drive and utilities and 39,820 sf of wetland buffer impacts. All impacts have been minimized to the greatest extent practicable. The design utilizes retaining walls, headwalls, and 2:1 side slope to further minimize grading in the wetland buffer. Increasing the slopes from 3:1 to 2:1 in the area of the bio-retention basin is not allowed per Env-Wq 1508.08(m) (5).**

(d) Mitigation: If the APPLICANT is required by State rules to prepare a compensatory mitigation plan, the APPLICANT shall provide the Conservation Commission and PLANNING BOARD with one copy each of said plan for their review. **Mitigation is not required.**

(e) Approval for the wetlands impact has been received from the NHDES Wetlands Bureau pursuant to Section G (3), below. **A NHDES wetland permit application will be filed.**

CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

Meeting Type:	Regular Meeting
Meeting Location:	City Council Conference Room - 288 Central Avenue, Dover, NH
Meeting Date:	Monday, April 8, 2024
Meeting Time:	**5:30 pm**

MEMBERS PRESENT: Bill Hunt (Chair), Steve Fellows (Vice Chair), Kristen Murphy, Jake Geddes
Absent (Excused):, Amy Kramer Perry, Abigail Lyon, Robert Atwood (Secretary), Russ Warnock (Alternate)
STAFF PRESENT: Jackson Kaspari – Resilience Manager
OTHERS PRESENT: Autumn Scott, Sarah Large, Tom Fargo, Councilor Williams

1. CALL TO ORDER AND ROLL CALL
The meeting was convened at 5:30 PM.

2. CITIZENS' FORUM
None

3. APPROVAL OF THE PRIOR MEETING MINUTES- March 11, 2024
S. Fellows moved to approve the minutes of March 11 as submitted. K. Murphy seconded.
Vote: 3 yes with Geddes abstaining

4. OLD BUSINESS:
None

5. NEW BUSINESS:
A. City of Dover Conditional Use Permit and NHDES Expedited Minimum Impact Wetlands Permit for Future Automation, Inc. (Owners: DBIDA), Assessor's Map D, Lot 11-8, zoned IT, located at Quality Way. Proposal is to construct a 24,856 square foot building and a 10,000 square foot building creating 39,820 square feet of wetland buffer impact and 1,631 square feet of wetland impact.

Steve Haight, Civilworks Engineering represented the applicant and presented the item. The applicant has an existing facility on Venture Dr and is looking to purchase property from the City of Dover and expand their operation with two buildings on the lot. He highlighted details including:

- Wetland buffer areas
- Facility usage- light manufacturing
- DES permits
- Drainage
- Access
- No seasonal stream
- Landscaping plan
- The plan has been to TRC twice as well as Planning Board (minor changes required)

Questions of the committee were asked and answered regarding:

- Vernal pools
- Snow storage

J. Kaspari noted staff has worked with the applicant through the TRC process and he has no concerns.

- Property location/ details explained

DRAFT

S. Fellows commented that the site has limitations and the applicants are minimizing impact and doing what they can within the guidelines.

S. Fellows moved to endorse the conditional use permit application and NHDES application given the nature of the site and the applicants effort to address the CUP criteria. J. Geddes seconded. Vote: 4 yes.

Chair Hunt signed the Expedited Minimum Impact Wetlands Permit Application copies following the vote.

B. Natural Resources Inventory Project Update

The goal of the project is to develop an inventory of Dover's natural resources to be used as a tool for land use boards, staff and public to utilize.
Autumn Scott, Strafford Regional Planning Commission updated and discussed the following with the Commission:

- Feedback and updates from first draft of the NRI
    - More time needed by the committee for review
- Surveys are live and responses are being received
- Conversation about integration with the master plan
- Optional studies to be included as supplement to the NRI
- Timeline discussion
- Brainstorming of ideas

C. Conservation and Open Space Chapter Update

J. Kaspari updated the committee on this item including:

- On site conservation tour
- Lengthy discussion to categorize and rank inputs to emphasize the segments that need it
- No draft yet- should come by the end of the summer

6. REPORT FROM THE CHAIR

A. Review of Correspondence Received from NH Department of Environmental Services

Replacement work on two bridges coming up

7. OTHER BUSINESS

A. Update from Forest Management Subcommittee

S. Fellows reported on the latest discussion topics

- Pocket forest – search for location
    - Ideal location is if the City owns the land, but having trouble finding a location that works well for the pocket forest purpose.
- Street trees and future downtown redesign

8. ADJOURNMENT

S. Fellows moved to adjourn. J. Geddes seconded. Vote: U/A
The meeting was adjourned at 6:43 PM.

DRAFT

Cheryl Andreason

From: Parker, Christopher <C.Parker@dover.nh.gov>
Sent: Thursday, December 28, 2023 9:48 AM
To: Steve Haight
Cc: Cheryl Andreason
Subject: RE: Future Automation DIBDA authorization

Good morning Steve

This is confirmation that on August 9, 2022, DBIDA approved a purchase and sales agreement for Future Automation for an approximately for a 8.1 acre lot on Quality Way in Enterprise Park, and two accompanying TDR sending lots.

As part of the PnS DBIDA acknowledged the expectation that Future Automaton will seek site plan approval from the City of Dover Planning Board.

The applicant should sign the application as the applicant and the City Manager will sign as the owner.

Chris

Christopher G. Parker, AICP
Deputy City Manager: Development and Strategic Initiatives
City of Dover, NH
288 Central Avenue
Dover, NH 03820-4169
e: c.parker@dover.nh.gov
p: 603.516.6024 f: 603.516.6049

Dover: First in New Hampshire, First with you!
www.dover.nh.gov

Join me for the Dover Download Podcast, a weekly look at what's happening in the City. The Dover Download podcast can be found on Apple Podcasts, Spotify, Amazon, or wherever you get your podcasts.

From: Steve Haight <shaight@civilworksne.com>
Sent: Wednesday, December 27, 2023 3:42 PM
To: Parker, Christopher <C.Parker@dover.nh.gov>
Cc: Cheryl Andreason <cheryl@surveynh.com>
Subject: Future Automation DIBDA authorization

Security Notice: External sender. Use caution with hyperlinks or attachments.

Good afternoon Chris

We are preparing the application for Future Automation …since the property is owned by DIBDA we will need an authorization memo or email from the City to represent Future Auto in front of the PB.

You had provided this for Weave

Thanks

Steve

Stephen J. Haight, P.E.
President
Civilworks New England/Haight Engineering, PLLC
181 Watson Road
P.O. Box 1166
Dover, New Hampshire 03821
O: 603.749-0443
C: 603.817.6651
F: 603.749.7348
shaight@civilworksne.com
www.civilworksne.com

Please consider conserving our natural resources before printing this e-mail and/or any attachments.

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MINIMUM EXPEDITED WETLANDS PERMIT APPLICATION

For

FUTURE AUTOMATION, INC.
MAP D, LOT 11-8
Quality Way
Dover, NH
Strafford County

April 2024

Prepared For:

FUTURE AUTOMATION, INC
127 Venture Drive
Dover, NH 03820

Prepared By:

CIVILWORKS NE
P.O. Box 1166
181 Watson Road
Dover, New Hampshire 03820

CIVILWORKS NEW ENGLAND

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

April 1, 2024

Re: Wetland Bureau – Minimum Expedited Permit
Wetland Permit Application

Subject: Wetland Permit Application – Minimum Expedited Review
Tax Map D, Lot 11-8
Quality Way
Dover, NH 03821

Our Reference No. 22075

Dear NHDES Wetlands Bureau:

On behalf of Future Automation Inc., we are pleased to submit (1) full size set of the attached Expedited Wetlands Permit plans and materials for wetland bureau consideration.

If you have any questions that we might be able to answer, please do not hesitate to contact our office.

Sincerely,

CIVILWORKS NEW ENGLAND

Stephen J Haight, PE

Project Narrative

PROJECT NARRATIVE
ACCOMPANYING MINIMUM EXPEDITED WETLANDS PERMIT
For:
Future Automation
Quality Way, Dover, NH
Tax Map D, Lot 11-8

PROJECT OVERVIEW & SITE CHARACTERISTICS

The project parcel is shown on Tax Map D as Lot 11-8, is located within the IT District and consists of 8.61± acres, currently undeveloped.

The project, as proposed by Future Automation, will provide two buildings with a total floor area of about 34,856 square feet (sf) as follows:

- one 24,856± sf building having a floor area consisting of 21,992± sf of light manufacturing and 2,864 sf of office space, and
- one 10,000 sf build-to-suit building presumed to have a floor area consisting of 6,670 sf of light manufacturing and 3,330 sf of office space.

The two buildings will be accessed via a single shared access driveway but will be served by separate parking and loading areas. The parcel is currently owned by the Dover Business & Industrial Development Authority (DBIDA). The Applicant has met with DBIDA and received an endorsement to proceed.

The proposed site will include public water and sewer connections, underground electric service, natural gas service, and associated drainage improvements. The proposed access driveway will require a culverted wetland crossing resulting in 1,631± sf of wetland impacts. Additionally, a portion of the proposed grading, drainage, pavement, and buildings are proposed within the 50' wetland buffer. The resulting buffer impacts a total of 39,820± sf.

The project site consists of the following general improvements:

- Erosion and sediment control
- Log and clear the site for construction.
- Construction of one new entrance on Quality Way.
- Construction of on-site stormwater detention and treatment system, grading, and other drainage requirements.
- Site utility construction.
- Construction of the two buildings with associated parking, passenger vehicle and truck access, and loading docks.
- Stabilize remaining areas with loam and seed.

WETLAND CROSSING

The project's entrance driveway and associated utilities requires wetland crossing, the project proposes an 18"H x 48" W x 40'L Box Culvert to accommodate flow and wildlife passage. This culvert can accommodate the 215,000± sf upslope watershed without

ponding or damming. Rip rap aprons are included to prevent erosion at the inlet and outlet, although from the soils on site and the resulting flows, energy dissipation structures are not required. Minimal sizes for the rip rap aprons were used to minimize impacts. Approximately 1,631± sf of wetlands will be impacted along with 39,820± sf of wetland buffer. The project does not impact bogs, marshes, sand dunes, tidal wetlands, cedar swamps, undisturbed tidal buffer zone, or involve any work within 50 feet of a salt marsh. The project is not located within 100 feet of prime wetlands.

MINIMUM IMPACT TYPE

The project involves alteration of less than 3,000 square feet in the wetlands located on the east side of the site. As verified using the Wetlands Permit Planning Tool (WPPT), the wetlands to be disturbed are not classified as Prime Wetlands or in a PRA. A NHB was filed that resulted in no record of any habitats or endangered wildlife. Therefore, this project is in conformance to the “Minimum Impact Projects” as described under Env-Wt 303.04, subject “(f)”. Damon E. Burt N.H.C.W.S #163 delineated the wetlands on, September 2, 2022. The proposed disturbance to the wetland will be 1,631± sf for the installation of culverts. This application will require the acceptance of the Town of Dover’s Conservation Commission and a conditional use permit from the Town of Dover’s Planning Board.

Wetlands Permit Application

EXPEDITED MINIMUM IMPACT (EXP) WETLANDS PERMIT APPLICATION

Water Division / Land Resources Management

Check the Status of your Application

RSA/Rule: RSA 482-A/Env-Wt 100-900 (Env-Wt 310.01)

APPLICANT'S NAME: Future Automation, Inc. **TOWN NAME:** Dover

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

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; Env-Wt 603.03; Env-Wt 603.05)

Please use the Wetland Permit Planning Tool (WPPT), the Natural Heritage Bureau (NHB) DataCheck Tool, the Aquatic Restoration Mapper, or other sources to assist in identifying key features such as: Priority Resource Areas (PRAs), protected species or habitats, coastal areas, designated rivers, or designated prime wetlands.

Does the property contain a PRA? If yes, provide the following information:	○ Yes ◉ No
• Does the project qualify for an Impact Classification Adjustment (such as an NH Fish and Game Department (NHFG) and NHB agreement for a classification downgrade) or a Project-Type Exception (such as a Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04).	○ Yes ◉ No
• Protected species or habitat? ○ If yes, species or habitat name(s): ○ NHB Project ID #: NHB23-3353	○ Yes ◉ No
• Bog?	○ Yes ◉ No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	○ Yes ◉ No
• Designated prime wetland or duly-established 100-foot buffer?	○ Yes ◉ No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	○ Yes ◉ No
Is the property within a Designated River corridor? If yes, provide the following information: • Name of Local River Management Advisory Committee (LAC): • A copy of the application was sent to the LAC on Month: ☐ Day ☐ Year:	○ Yes ◉ No
For dredging projects, is the subject property contaminated? • If yes, list contaminant(s):	○ Yes ◉ No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	○ Yes ◉ No
For stream crossing projects, provide watershed size (see Wetland Permit Planning Tool or Stream Stats): N/A	

SECTION 2 - ELIGIBILITY (Env-Wt 306.03; Env-Wt 310.01; Env-Wt 310.03)

You must confirm that your project meets *all* of the following statements to qualify for the EXP process:

- The project qualifies as minimum impact project (Env-Wt 306.03).
- The project does not include activities that are prohibited under RSA 482-A (Env-Wt 306.03(a)).
- The project does not include any work in a jurisdictional area that was started without first obtaining the applicable approval (Env-Wt 306.03(b)).
- No work has been done on the subject property pursuant to another EXP or a Statutory Permit-by-Notification (SPN) within 12 months of the date this EXP will be issued. Alternatively, if any work has been done on the subject property pursuant to another EXP or a SPN within 12 months of the date this EXP will be issued, then you are submitting information, including a plan, with this application demonstrating that:
  - The work proposed in this EXP application is wholly unrelated to and separate from the work already done under the EXP or SPN; and
  - The work proposed in this EXP application, when combined with work that has been done under previously issued EXPs or SPNs within the last 12 months, does not constitute a project for which a Standard Permit is required (Env-Wt 310.03(a)).
- If the project is located in a PRA, it also qualifies for an impact classification adjustment under Env-Wt 407.02 or a project-type exception (PTE) under Env-Wt 407.04 (Env-Wt 310.01(d)(6)).

☒ My project meets all statements above. Proceed to Section 3.

☐ My project does not meet all of the statements above. **Your project does not qualify for the EXP process. Your project either is not permittable or requires a Standard Permit.**

SECTION 3 - INFORMATION ON THE PROPOSED PROJECT (Env-Wt 310.01(c))

Identify the rule(s)/provision(s) which make the project a minimum impact project. Refer to the project list below and the Expedited Minimum Impact (EXP) Project Classification Guidance Document.

☐ Aquatic Vegetation Control Projects (Env-Wt 510.08(a))
☐ Water Access Structure Construction Projects (Env-Wt 511.06(a))
☐ Beach Replenishment Projects (Env-Wt 511.07(a))
☐ Deck or Patio Repair Projects (Env-Wt 511.08(a))
☐ Breakwater Maintenance and Repair Projects (Env-Wt 512.07(b))
☐ Docking and Accessory Docking Structure Construction, Repair, and Replacement Projects (Env-Wt 513.24(a))
☐ Docking Structure Modification Projects (Env-Wt 513.25(a))
☐ Accessory Docking Structure Installation, Construction, Modification, Repair, and Replacement Projects (Env-Wt 513.26(a))
☐ Canopy Projects (Env-Wt 513.27(a))
☐ Bank/Shoreline Stabilization Construction Projects (Env-Wt 514.07(a))
☐ Dug-in Basins and Boathouse Construction or Modification Projects (Env-Wt 515.06(a), (b))
☐ Dug-in Basins and Boathouse Maintenance and Repair Projects (Env-Wt 515.07(a))
☐ Intake and Outflow Structure Construction, Maintenance and Repair Projects (Env-Wt 516.05; Env-Wt 516.06(b))
☐ Trail or Pathway Projects (Env-Wt 517.06(a); Env-Wt 517.06(d))
☐ Boardwalk Projects (Env-Wt 517.07(a); (Env-Wt 517.09)
☐ Dry Hydrants and Other Non-Docking Structure Projects (Env-Wt 518.07(a)(1), (b))
☐ Pond Construction, Maintenance, and Repair Projects (Env-Wt 519.08(a), (b); Env-Wt 519.09(a))
☐ Residential Utility Installation Projects (Env-Wt 521.06(a)(7))

- ☐ Non-tidal Dredging Projects (Env-Wt 523.04(a))
- ■ Residential, Commercial, and Industrial Development Projects (Env-Wt 524.06(b))
- ☐ Restoration/Enhancement Projects (Env-Wt 525.05)
- ☐ Dam Construction, Reconstruction, or Replacement Projects (Env-Wt 526.06(a))
- ☐ Dam Modification, Repair, or Maintenance Projects (Env-Wt 526.07(a))
- ☐ Pubic Highway Projects (Env-Wt 527.06; Env-Wt 527.07)
- ☐ Coastal Projects (Env-Wt 600)
- ☐ Stream Crossing Projects (Env-Wt 903.01(e))
- ☐ All Other Projects (Env-Wt 407.03)

Provide the project-specific information required by the rule(s)/provision(s). Refer to Chapters Env-Wt 400, Env-Wt 500, Env-Wt 600, and/or Env-Wt 900, as applicable, for project-specific application and design requirements. *Please see applicable standard Project Specific Worksheets for guidance.*

Env-Wt 400: Wetland Delineated by Certified Wetland Scientist (ENV-Wt 406.02); Jurisdictional area delineated (Env-Wt 406.05); Each wetland is classified in accordance with the federal classification method (Env-Wt 406.06); The project does not impact a PRA (Env-Wt 407.02); Propose impact is less that 3,000 sf, therefore "minimum" classification (Env-Wt 408.03).
Env-Wt: 500: Project avoids and minimizes impacts to wetlands (Env-Wt 524.02); The project provides setbacks and water quality protection measure to protect priovate and public drinking water supplies, source water protection areas, and fisheries (Env-Wt 524.04); A construction notice will be filed at least 48 hours prior to commencing work (Env-Wt 524.05)
Env-Wt 600 and Env-Wt 900: N/A

For projects located on waterbodies, provide the linear feet of shoreline frontage on the property: linear feet

(■ Not applicable)

Provide a brief description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. *Do not* reply “See attached".

This project proposes the construction of two (2) industrial buildings, 24,856 sf and 10,000 sf, with associated site improvements including; parking, driveway, loading docks, and stormwater management. For the site to gain access to Quality Way a 490 ft drive isle is proposed, with the aforementioned wetland crossing. Headwalls will be utilized to minimize impacts.

Identify the type of jurisdictional resources to be impacted and the area of impact in square feet and/or linear feet:

1,631 s.f. of disturbance is being proposed in the wetland. A W48" x H18" Box culvert is being proposed with associated headwalls, and minimal outlet protection. Outlet protection is not required due to the velocity and underlying soil, but riprap is being proposed to prevent soil scouring.

(☐ Not applicable)

SECTION 4 - PROJECT LOCATION (Env-Wt 310.01(b))

ADDRESS: Quality Way

TOWN/CITY: Dover

TAX MAP/LOT NUMBER: Tax Map D, Lot 11-8

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Reyners Brook
☐ N/A

LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 43.22420° North
-70.91300° West

SECTION 5 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 310.01(a))

If the applicant is a trust or a company, then the name of the trust or company should be written as the applicant's name.

NAME: Future Automation, Inc.

MAILING ADDRESS: 127 Venture Drive

TOWN/CITY: Dover | STATE: NH | ZIP CODE: 03820

PHONE: 07973 505409 (UK) | EMAIL ADDRESS (OPTIONAL): alun.williams@futureautomation.co.uk

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

SECTION 6 - AUTHORIZED AGENT INFORMATION (Env-Wt 310.01(a))

If the agent is a company, then the name of the company should be written as the agent's name.

NAME: Civilworks NE (Steve Haight)

MAILING ADDRESS: P.O. Box 1166

TOWN/CITY: Dover | STATE: NH | ZIP CODE: 03820

PHONE: 603-749-0443 | EMAIL ADDRESS (OPTIONAL): shaight@civilworksne.com

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

SECTION 7 - PROPERTY OWNER INFORMATION, IF DIFFERENT FROM APPLICANT (Env-Wt 310.01(a)) If the owner is a trust or a company, then the name of the trust or company should be written as the owner's name.		
NAME: Dover Business & Industrial Development Authority (DBIDA)		
MAILING ADDRESS: 288 Central Ave		
TOWN/CITY: Dover	STATE: NH	ZIP CODE: 03820
PHONE: 603-516-6008	EMAIL ADDRESS (OPTIONAL):	
ELECTRONIC COMMUNICATION: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 8 - APPLICATION FEE (RSA 482-A:3, I)		
■ $400 for minimum impact projects. Please make your check or money order payable to: "Treasurer - State of NH".		
SECTION 9 - REQUIRED CERTIFICATIONS (Env-Wt 310.01(d))		
Initial each box below to certify:		

Initials:	
AW	The proposed project meets the conditions and limits of the applicable minimum impact project rule.
Initials: AW	All abutters have been notified.
Initials: AW	If the project is to repair or replace a docking structure, the docking structure is an existing legal structure. (■ N/A)
Initials: AW	The proposal is the alternative with the least adverse impact to jurisdictional areas, as required by Env-Wt 310.01(d)(4).
Initials: AW	The project is not an after-the-fact application.
Initials: AW	The project is: • Not located in a PRA, or • Is located in a PRA but is subject to a classification adjustment under Env-Wt 407.02 or a project-type exception under Env-Wt 407.04.
Initials: AW	The applicant is aware of the limits of the EXP and understands and will comply with all conditions in the EXP and all applicable conditions in Env-Wt 307.

Initials: AW	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: AW	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.
Initials: AW	The signer understands that: • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1.
Initials: AW	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 10 - REQUIRED SIGNATURES (Env-Wt 310.01(d))

SIGNATURE (OWNER)*:	PRINT NAME LEGIBLY: DBIDA (Chris Parker)	DATE:

*Note: If the applicant is not the owner of the property, each property owner also shall sign and date the application provided that property owner signatures shall not be required for transportation projects adjacent to existing rights-of-way where an easement will be obtained prior to the start of construction (Env-Wt 311.11(d)). Check the following box if your project meets this exception: ☐.

SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):	PRINT NAME LEGIBLY: Future Automation (Alun Williams)	DATE: 3-4-24
SIGNATURE (AGENT, IF APPLICABLE):	PRINT NAME LEGIBLY: Civilworks NE (Steve Haight)	DATE: 3/4/24

SECTION 11 - CONSERVATION COMMISSION SIGNATURE (Env-Wt 310.01(h))**

The signed statement from the Conservation Commission may be submitted electronically.

The signature below certifies that the municipal Conservation Commission or, if there is no conservation commission, the local governing body, has reviewed this application and the municipality waives its right to intervene on the project, per RSA 482-A:11.

AUTHORIZED COMMISSION SIGNATURE:	PRINT NAME LEGIBLY:	DATE:

SECTION 12 - LOCAL RIVER MANAGEMENT ADVISORY COMMITTEE SIGNATURE (Env-Wt 310.01(i))**		
The signature below certifies that the LAC waives its right to intervene per RSA 482-A:11: (■ N/A This project is **not** within a Designated River Corridor)		
AUTHORIZED LAC REPRESENTATIVE SIGNATURE:	PRINT NAME LEGIBLY:	DATE:

**Note: If the application is administratively complete, except for the signed statement from the Conservation Commission and/or LAC, the application will be processed under the application processing times established in RSA 482-A:3, XIV (Env-Wt 310.02(h)). The applicant may also indicate that they are applying for a minimum impact application under standard processing timelines.

SECTION 14 - TOWN / CITY CLERK SIGNATURE (Env-Wt 310.01(f))	
As required by RSA 482-A:3, I(a)(1), I hereby certify that the municipality has received four copies of the application, including all attachments.	
TOWN/CITY CLERK SIGNATURE:	PRINT NAME LEGIBLY:
TOWN/CITY: Dover NH	DATE:

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. 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.
3. 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.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:
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 at the address at the bottom of this page.

Signed Check

FUTURE AUTOMATION INC.
127 VENTURE DR.
DOVER, NH 03820-5915

53-179/113

3241

DATE 3/4/2024.

TREASURER - STATE OF NH

$ 400.0/100

PAY TO THE ORDER OF

FOUR HUNDRED 0/100 DOLLARS

Security Features Included. Details on Back.

Eastern Bank
Boston, MA 02110
easternbank.com
1-800-EASTERN

MEMO WETLANDS

MP

⑈011301798⑈ 10101263772⑈ 3241

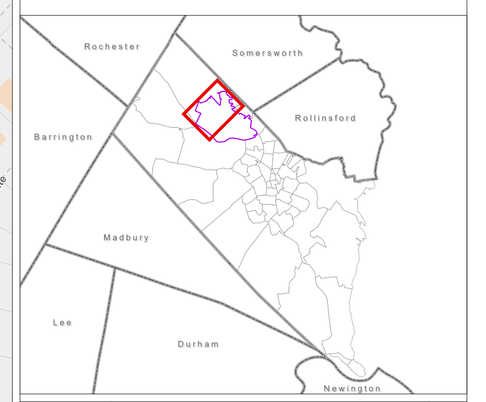
© DELUXE deluxe.com/checks STERLING GENTRY

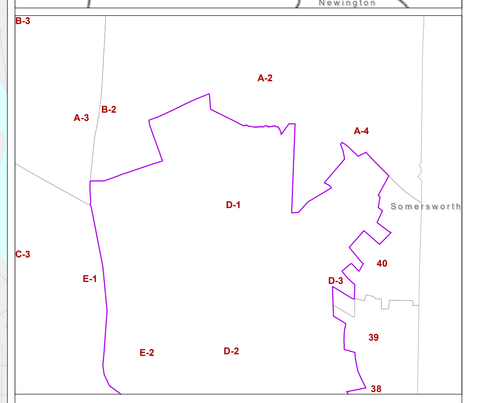
Tax Map

CITY OF DOVER
STAFFORD COUNTY NH
TAX ASSESSORS MAP

Map Page: D-1

Parcels
Parcel on Adjacent Maps
Buildings
Rail Road
Water Body
Swamp/Marsh
Streams
A-20-0-0 Parcel Number
0.24 AC Parcel Acreage
240 Address Number





400 200 0 400
Feet

1:2,400
1 " = 200 '

This map is for assessment and planning purposes only. It is not intended to be used for description, conveyance, authoritative definition of any legal boundary, or property title. This is not a survey product. Users are encouraged to examine the documentation associated with the data on which this map is based for information related to its accuracy, currentness and limitations.

Map Generated: Wednesday, March 21, 2018

AppGeo

Abutters List & Notifications

Abutters List – March 29, 2024
Future Automation, Inc.
Property Location
Quality Way
Dover, NH 03820
Tax Map D, Lot 11-8

Map/Lot	Owner Name & Address
D/11-8 (Owner)	Dover Business & Industrial Development Authority, F/K/A Dover Industrial Development Authority 288 Central Ave Dover, NH 03820
D/11-8SN1	Dover Business & Industrial Development Authority, F/K/A Dover Industrial Development Authority 288 Central Ave Dover, NH 03820
D/11-8SN2	Dover Business & Industrial Development Authority, F/K/A Dover Industrial Development Authority 288 Central Ave Dover, NH 03820
D/11-1	Dover Business & Industrial Development Authority 288 Central Ave Dover, NH 03820
D/11-7	Weave Filtration LLC. 100 Tri City Road Unit 117 Somersworth, NH 03878
D/11-7SN2	Weave Filtration LLC. 100 Tri City Road Unit 117 Somersworth, NH 03878
A/48-B	Mendenhall Jon L & Mendenhall Karen E 475 Sixth Street Dover, NH 03820

A/49-11	Triconi Christopher E & Elizabeth C Trust, Triconi Family Living Trust 2021 28 Quail Drive Dover, NH 03820
A/49-12	Moreau Scott & Curtis Marcy 32 Quail Drive Dover, NH 03820
A/49-13	Porter Douglas W & Porter Yukari 29 Quail Drive Dover, NH 03820
D/12-1	TSB Properties LLC. 385 Sixth Street Dover, NH 03820
Engineer:	Civilworks New England P.O. Box 1166, 181 Watson Road Dover, NH 03821
Surveyor:	McEneaney Survey Associates of New England P.O. Box 681 Dover, NH 03820

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

April 1, 2024

To: Dover Business & Industrial Development Authority,
F/K/A Dover industrial Development Authority
Tax Map D Lot 11-8SN1
Tax Map D Lot 11-8SN2
Tax Map D Lot 11-1
288 Central Ave
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

Dear Abutter:

The purpose of this letter is to inform you that a permit application will be filed with the N.H. Department of Environmental Services for a Minimum Expedited Wetlands Permit associated with the above referenced project. Under state law RSA 483-B:5-b, iv-a, I am required to notify you about the application.

A copy of the application, including plans, will be made available for your review at the Dover town offices and at the NH Department of Environmental Services Wetlands Bureau, 29 Hazen Drive, in Concord.

If you have any questions that we might be able to answer, please do not hesitate to contact our office.

Sincerely,

Stephen J. Haight, P.E.,
CIVILWORKS NEW ENGLAND
P.O. Box 1166, Dover, NH 03821
603.749.0443

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

April 1, 2024

To: Mendenhall Jon L & Mendenhall Karen E
Tax Map A Lot 48-B
475 Sixth Street
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

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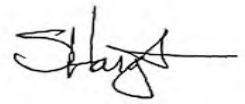
Sincerely,



Stephen J. Haight, P.E.,
CIVILWORKS NEW ENGLAND
P.O. Box 1166, Dover, NH 03821
603.749.0443

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

April 1, 2024

To: Moreau Scott & Curtis Marcy
Tax Map A Lot 49-12
32 Quail Drive
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

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

April 1, 2024

To: Porter Douglas W & Porter Yukari
Tax Map A Lot 49-13
32 Quail Drive
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

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603.749.0443

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

April 1, 2024

To: Triconi Christopher E & Elizabeth C Trust,
Triconi Family Living Trust 2021
Tax Map A Lot 49-11
28 Quail Drive
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

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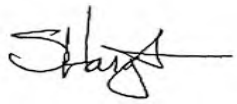

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181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

April 1, 2024

To: TSB Properties LLC.
Tax Map D Lot 12-1
385 Sixth Street
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

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Sincerely,

Stephen J. Haight, P.E.,
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603.749.0443

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

April 1, 2024

To: Weave Filtration LLC.
Tax Map D Lot 11-7
Tax Map D Lot 11-7SN2
100 Tri City Road Unit 117
Somersworth, NH 03878

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

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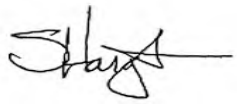

Stephen J. Haight, P.E.,
CIVILWORKS NEW ENGLAND
P.O. Box 1166, Dover, NH 03821
603.749.0443

STATE NOTIFICATION FOR MINIMUM EXPEDITED WETLANDS PERMIT APPLICATION

VIA CERTIFIED MAIL

April 1, 2024

STATE OF NEW HAMPSHIRE
P.O. BOX 483
CONCORD, NH 03302-0483

Re: Minimum Expedited Wetlands Permit Application
Future Automation, Inc.
Tax Map D, Lot 11-8
Quality Way, Dover, NH 03820

Our Reference No. 22075

Dear Sir or Madam:

This letter is to inform you that a permit application will be filed with the N.H. Department of Environmental Services for a Minimum Expedited Wetlands Permit associated with the above referenced project. Under state law RSA 483-B:5-b, iv-a, I am required to notify you about the application.

Once it is filed, the permit application, including plans that show the proposed project, will be available for viewing at the City of Dover Clerk's office.

Sincerely,

Stephen J. Haight, P.E.,
CIVILWORKS NEW ENGLAND
P.O. Box 1166, Dover, NH 03821
603.749.0443

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

April 1, 2024

To: City of Dover
288 Central Avenue
Dover, NH 03820

Ref: Minimum Expedited Wetlands Permit
Future Automation, Inc.
Tax Map D, Lot 11-8
Quality Way, Dover, NH 03820

CNE Reference No. 22075

Dear City of Dover:

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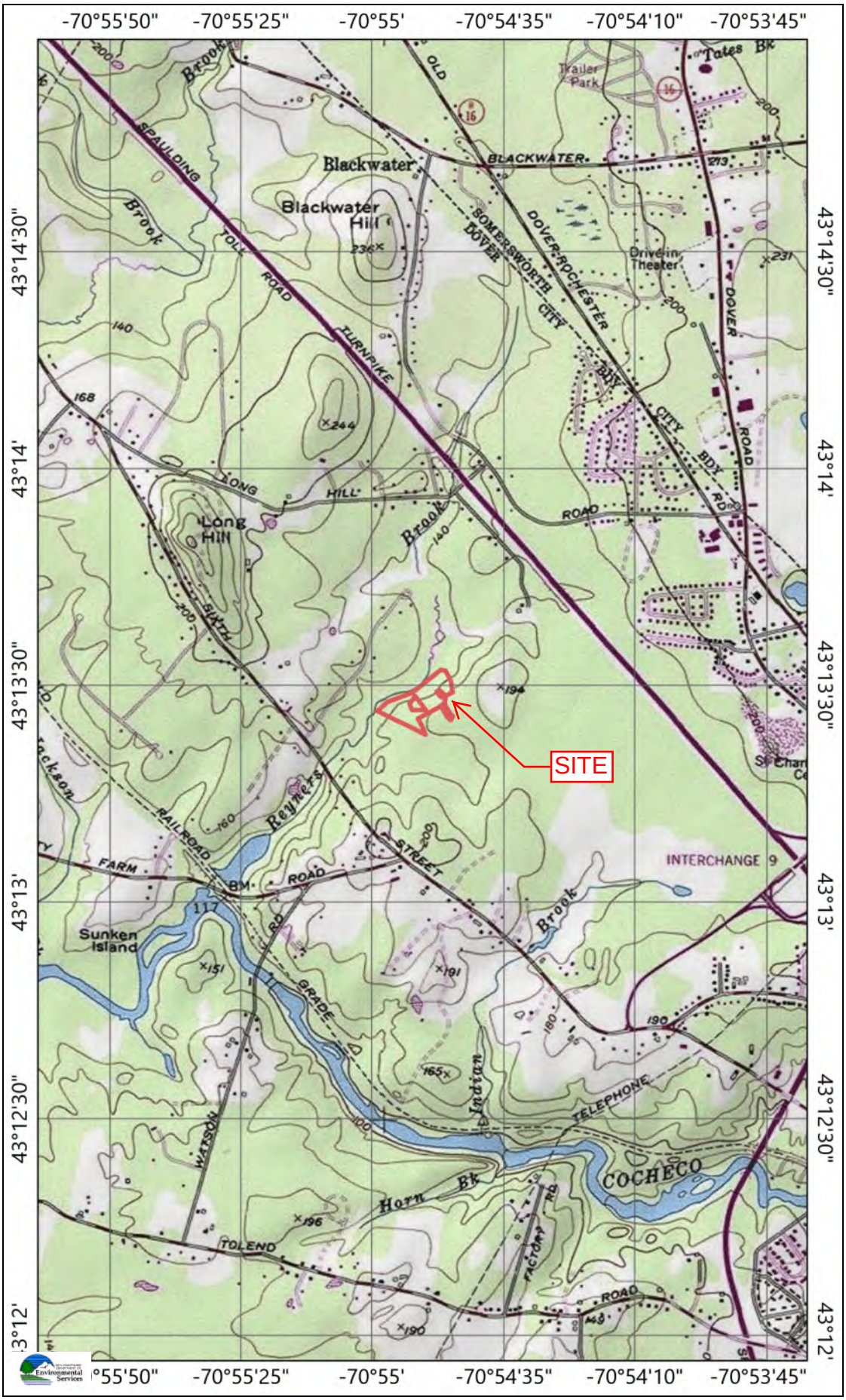
Sincerely,

Stephen J. Haight, P.E.,
CIVILWORKS NEW ENGLAND
P.O. Box 1166, Dover, NH 03821
603.749.0443

USGS Map

22075 - Future Automation - USGS



Legend

Map Scale

1: 24,000

© NH DES, http://des.nh.gov

Map Generated: 1/16/2023

Notes

Prepared by: Civilworks New England

Site Photographs

PHOTO 1

PHOTO 2

PHOTO 3

PHOTO 4

PHOTO 5

PHOTO 6

PHOTO 7

PHOTO 8

PHOTO 9

PHOTO 10

PHOTO 11

PHOTO 12

PHOTO 13

PHOTO 14

PHOTO 15

PHOTO 16

PHOTO 17

PHOTO 18

PHOTO 19

PHOTO 20

PHOTO 21

PROPOSED 25,000 S.F. BUILDING
F.F.=158.0

PROPOSED 10,000 S.F. BUILDING
F.F.=158.0

PARCEL AREA
375,192 S.F.
8.61 Ac.

WETLAND BUFFER

50' WETLAND BUFFER

QUALITY WAY

NH STATE PLANE, NAD 83, CCRS DBS.

LOCATION PLAN
(NO SCALE)

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

DATE: XXX
SCALE: XX
DRAWN BY: XX
DESIGN BY: XX
APPROVED BY:XX
PROJECT NO:XX
FILE: XXX

GRADING, DRAINAGE & EROSION CONTROL PLAN

XXX
CLIENT
NAME
ADDRESS

PROJECT
NAME
LOCATION
DATA

C-X

NHB Datacheck

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

To: Michael Menary
181 Watson Road
Dover, NH 03820

From: NH Natural Heritage Bureau

Date: 11/20/2023 (This letter is valid through 11/20/2024)

Re: Review by NH Natural Heritage Bureau of request dated 11/20/2023

Permit Types: Alteration of Terrain Permit
Stormwater Pollution Prevention
Wetland Standard Dredge & Fill - Minimum

NHB ID: NHB23-3353

Applicant: Michael Menary

Location: Dover
Tax Map: D, Tax Lot: 11-8
Address: Quality Way

Proj. Description: a 25,000 sq. ft manufacturing building with associated parking, loading area, drainage, and utility.

The NH Natural Heritage database has been checked 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. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

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: NHB23-3353

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

Supporting Documents

AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management

Wetlands Bureau

Check the Status of your Application

RSA/Rule: RSA 482-A/ Env-Wt 311.07(c)

This checklist can be used in lieu of the written narrative required by Env-Wt 311.07(a) to demonstrate compliance with requirements for Avoidance and Minimization (A/M), pursuant to RSA 482-A:1 and Env-Wt 311.07(c).

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in Attachment A: Minor and Major Projects (NHDES-W-06-013).

The following definitions and abbreviations apply to this worksheet:

- "A/M BMPs" stands for Wetlands Best Management Practice Techniques for Avoidance and Minimization dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION	
APPLICANT LAST NAME, FIRST NAME, M.I.: Future Automation, Inc.	
PROJECT STREET ADDRESS: Quality Way	PROJECT TOWN: Dover
TAX MAP/LOT NUMBER: D/11-8	

SECTION 2 - PRIMARY PURPOSE OF THE PROJECT		
Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.	☒ Yes ☐ No

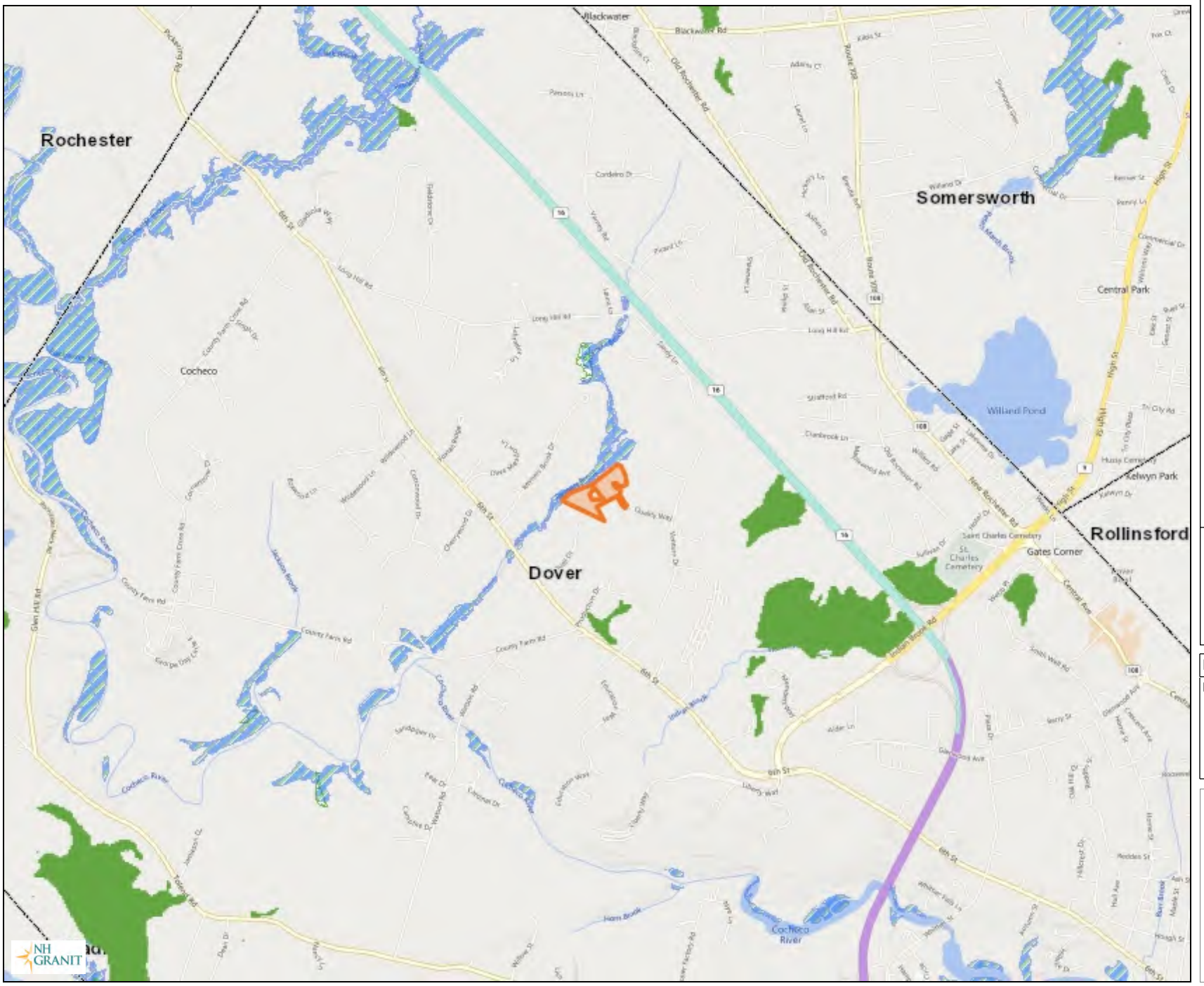
If you answered "no" to this question, describe the purpose of the "non-access" project type you have proposed:

The primary purpose of this permit is to reach a buildable portion of the propoerty.

SECTION 3 - A/M PROJECT DESIGN TECHNIQUES Check the appropriate boxes below in order to demonstrate that these items have been considered in the planning of the project. Use N/A (not applicable) for each technique that is not applicable to your project.		
Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	☐ Check ☒ N/A
Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	☒ Check ☐ N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	☐ Check ☒ N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	☒ Check ☐ N/A
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	☒ Check ☐ N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	☒ Check ☐ N/A
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	☒ Check ☐ N/A
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	☒ Check ☐ N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	☒ Check ☐ N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	☐ Check ☒ N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	☒ Check ☐ N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	☐ Check ☒ N/A

A/M BMPs	The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	☒ Check ☐ N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	☒ Check ☐ N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	☒ Check ☐ N/A
A/M BMPs	Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges.	☐ Check ☒ N/A
SECTION 4 - NON-TIDAL SHORELINE STRUCTURES		
Env-Wt 313.03(c)(1)	The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure.	☐ Check ☒ N/A
Env-Wt 313.03(c)(2)	The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage.	☐ Check ☒ N/A
Env-Wt 313.03(c)(3)	The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties.	☐ Check ☒ N/A
Env-Wt 313.03(c)(4)	The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.	☐ Check ☒ N/A
Env-Wt 313.03(c)(5)	The non-tidal shoreline structure has been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.	☐ Check ☒ N/A
Env-Wt 313.03(c)(6)	The non-tidal shoreline structure has been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.	☐ Check ☒ N/A

CNE#22075 - Future Automation - WPPT



Legend

- Additional Lines
- City/Town
- Prime Wetlands
- Prime Wetlands with 100
- Peatland
- Tidal Wetland
  - Brackish Marsh
  - High Marsh Mix
  - High Marsh, J. gerardii
  - High Marsh, S.patens / D.sp
  - Low Marsh
  - Mudflat
  - Open Water
  - Panne
  - Phragmites australis
  - Pool
  - Recently Flooded Forest
  - Short form S. alterniflora
  - Terrestrial border
  - Wrack
- Flood Plain Wetlands Adj

Map Scale

1: 25,977

© NH GRANIT, www.granit.unh.edu

Map Generated: 11/21/2023

Notes

Prepared by: Civilworks New England

National Flood Hazard Layer FIRMette

FEMA

70°55'6"W 43°13'41"N

70°54'28"W 43°13'15"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

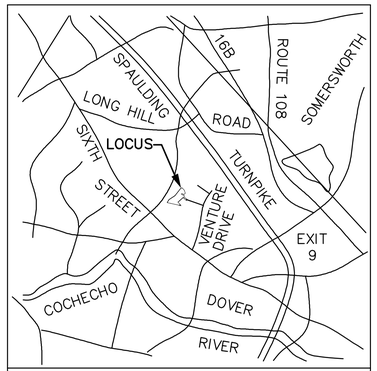
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/21/2023 at 4:43 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Design Plans



LOCATION PLAN
(NO SCALE)

SITE PLAN
FOR
FUTURE AUTOMATION

TAX MAP D, LOT 11-8

QUALITY WAY
DOVER, NH
JANUARY 2024
FEBRUARY 2024
APRIL 2024

OWNER

DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A)
288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

_____ DATE

APPLICANT

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

_____ DATE

SITE CIVIL ENGINEER

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

LAND SURVEYOR

MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 1166
DOVER, NH 03821
(603) 742-0911

ARCHITECT

JOHN M. TUTTLE, ARCHITECT
TW DESIGNS, LLC
254 DRAKE HILL ROAD
STRAFFORD, NH 03884
(603) 664-2181

WETLAND SCIENTIST

MICHEAL R. CUOMO
6 YORK POND ROAD
YORK, ME 03909
(207) 363-4532

LANDSCAPE ARCHITECT

TERRAIN PLANNING & DESIGN, LLC
311 KAST HILL ROAD
HOPKINTON, NH 03229
(603) 491-2322

WILDLIFE PROTECTION NOTES:

- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: NHB23-3353, FUTURE AUTOMATION INC., WILDLIFE SPECIES OBSERVATION.
- PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE.
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04.
- THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

SHEET INDEX	SHEET
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STREET VIEW RENDERING	R1.3
CAMPUS AERIAL VIEW RENDERING	R1.4
AUX BUILDING 10,000 SF	
PROJECT COVER SHEET	PCS
FLOOR PLAN	A1.1
EXTERIOR ELEVATIONS	A3.1
AUX BUILDING STREET VIEW RENDERING	R1.1
LANDSCAPE PLANS	
LANDSCAPE PLAN	L1.0
LANDSCAPE DETAILS	L2.0

PLANNING FILE NO.: SITE-2024-0002

ABUTTERS LIST
(WITHIN 200 FT)

TAX MAP	LOT NO.	NAME & ADDRESS
D	11-1-0	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D	11-9-SND	HEINE USA 10 INNOVATION WAY 288 CENTRAL AVE DOVER, NH 03820
D	11-8-SN3	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D	11-8-SN2	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
A	47-12-0	MCCONNELL GEOFFERY R & DEBORAH TRUSTEE MCCONNELL REVOCABLE LIVING TRUST 15 REYNERS BROOK DRIVE DOVER, NH 03820
A	47-10-0	ARVENITIS KERRY A 11 REYNERS BROOK DRIVE DOVER, NH 03820
A	48-B-0	MENDENHALL JON L & MENDENHALL KAREN E 475 SIXTH STREET DOVER, NH 03820
A	49-11-0	TRICONI CHRISTOPHER E & ELIZABETH C TRUS TRICONI FAMILY LIVING TRUST 2021 28 QUAIL DRIVE DOVER, NH 03820
A	49-12-0	MOREAU SCOTT & CURTIS MARCY 32 QUAIL DRIVE DOVER, NH 03820
A	49-13-0	PORTER DOUGLAS W & PORTER YUKARI 29 QUAIL DRIVE DOVER, NH 03820
D	12-1-0	TSB PROPERTIES LLC 385 SIXTH STREET DOVER, NH 03820
D	12-2-0	TSB PROPERTIES LLC 385 SIXTH STREET DOVER, NH 03820
D	11-7-SN2	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D	11-7-0	WEAVE FILTRATION QUALITY WAY DOVER, NH 03820
D	11-4-0	QUALITY WAY LLC 55 MAIN STREET, UNIT 407 NEWMARKET, NH 03857
D	11-6-0	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820

SYMBOL LEGEND

D / 11 — TAX MAP / LOT NUMBER

NH STATE PLANE
NAD 83 - GPS OBS:

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

PLANNING FILE NO.: SITE-2024-0002

NEIGHBORHOOD PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

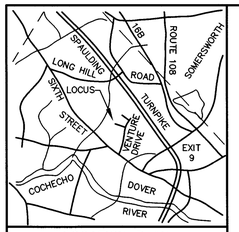
2

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: JFG
DRAWN BY: SRD
SCALE: 1"=200'
DATE: 1-18-24
PROJECT NO: 22075
FILE: SITE.DWG
APPROVED BY: SJH

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443



LOCATION PLAN
(NO SCALE)

REFERENCE PLANS:

1.) AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & Co., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5/3/06; BY THIS OFFICE. RECORDED S.C.R.D. PLANS 85–99 & 85–100.

2.) ROADWAY AS–BUILT PLAN & PROFILE PREPARED FOR DOVER INDUSTRIAL DEVELOPMENT AUTHORITY, QUALITY WAY AT VENTURE DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 40'; DATED: JANUARY 16, 2006, REVISED THROUGH 3/16/06; BY: McENEANEY SURVEY ASSOCIATES, INC. ON FILE WITH CITY OF DOVER ENGINEERING DEPARTMENT.

NOTES:

1.) OWNERS OF RECORD:

DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A.)
288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOL. 1559 / 394
TITLE REF. SEE SCRD 1738 / 130, 1027 / 790, 773 / 481

2.) D / 11–8 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PLAN INTENT: TO SHOW THE SITE EXISTING CONDITIONS.

4.) PARCEL AREA = 375,192 S.F. / 8.61 Ac.

5.) ZONING DISTRICT IS INNOVATIVE TECHNOLOGY (IT)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 2 ACRES
MINIMUM LOT COVERAGE	= 33 PERCENT
MINIMUM FRONTAGE	= 200 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 50 FEET
SIDE SETBACK	= 50 FEET
REAR SETBACK	= 50 FEET
MAXIMUM BUILDING HEIGHT	= 55 FEET MAXIMUM

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 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPTEMBER 30, 2015.

7.) BASIS OF BEARING IS THE CITY OF DOVER / GEOD CORP. GRID PER REFERENCE PLAN No. 1. (G.I.S. STATIONS TR 390 AND TR 391A) VERTICAL DATUM IS CITY OF DOVER / GEOD CORP. PER CITY G.I.S. STATIONS TR 390 AND TR 391A.

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

9.) WETLANDS SHOWN WERE IDENTIFIED BY DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES ON SEPTEMBER 2, 2022 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY McENEANEY SURVEY ASSOCIATES OF NEW ENGLAND.

10.) THE PARCEL IS SERVED BY MUNICIPAL SEWER AND WATER.

11.) TOPOGRAPHY DEPICTED IS BASED ON FIELD OBSERVATIONS BY THIS OFFICE.

12.) LOT D/11–8 WAS CREATED USING THE CITY OF DOVER TDR ORDINANCE.

LEGEND

S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
– STONE WALL
– EDGE OF WET
f/k/a – FORMERLY KNOWN AS
D.H.(fnd) – DRILL HOLE FOUND
S.S.(fnd) – STEEL STAKE FOUND
I.R.(fnd) – IRON ROD FOUND
TBM – TEMPORARY BENCH MARK
– FIRE HYDRANT
SMH – SEWER MANHOLE
8"S – SEWER MAIN PIPE AND SIZE
S – SEWER SERVICE
W – WATER MAIN PIPE AND SIZE
W – WATER SERVICE
– WATER GATE VALVE
G – GAS MAIN
U/G E,T,C – UNDERGROUND ELECTRIC, TELEPHONE AND CABLE BROADBAND
174 – EXISTING CONTOUR (2 FOOT INTERVAL)

No.	Bearing	Distance
L1	N30°30'05"W	55.67'
L2	N30°29'16"W	80.58'
L3	S38°23'21"E	61.89'
L4	S81°38'07"E	66.39'
L5	S77°08'15"W	52.06'
L6	S35°56'47"E	78.76'
L7	S09°40'20"W	72.30'
L8	S30°30'05"E	76.90'
L9	S30°30'05"E	59.35'

No.	Central Angle	Radius	Arc Length	Chord Length	Chord Bearing
C1	24°49'33"	253.78	109.96	109.10	N42°54'51"W
C2	22°24'32"	193.79	75.80	75.31	S41°42'21"E
C3	47°44'43"	75.00	62.50	60.71	S26°56'10"W

NO.	DATE	DESCRIPTION	BY	CHK
		REVISIONS		

22–2463	EC	22–10	53–64
PROJECT NO	TYPE	FIELDBOOK & PAGES	

"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."

NEW STATE PLANE NAD 83 – GRID ODS:

EXISTING CONDITIONS PLAN OF LAND
PREPARED FOR
FUTURE AUTOMATION
TAX MAP D, LOT No. 11–8
QUALITY WAY
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DRAWN BY: KJF	FILE: MSA\2463\D\22–2463
SCALE: 1" = 50'	DATE: NOVEMBER 2, 2022

50 25 0 25 50 100 150 200

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

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

SURVEYING – PLANNING – CONSULTING

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DOVER NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED CONSTRUCTION OF A 25,000 S.F. AND A 10,000 S.F. BUILDING WITH ASSOCIATED SITE IMPROVEMENTS.
2. OWNER(S) OF RECORD:
   DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
   f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A.)
   288 CENTRAL AVENUE
   DOVER, NEW HAMPSHIRE 03820
3. D/11-8 – DENOTES TAX MAP AND PARCEL NUMBER.
4. PARCEL AREA: 375,192 S.F. / 8.61 Ac.
5. TITLE REFERENCE: SEE SCRD 1559/394, 1738/130, 1027/790, 773/481
6. REFERENCE PLANS:
   A. AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & Co., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, CITY OF DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5/3/06; BY THIS OFFICE. RECORDED S.C.R.D. PLAN NOS. 85–99 & 85–100
   B. ROADWAY AS–BUILT PLAN & PROFILE PREPARED FOR DOVER INDUSTRIAL DEVELOPMENT AUTHORITY, QUALITY WAY AT VENTURE DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 40'; DATED: JANUARY 16, 2006, REVISED THROUGH 3/16/06; BY: McENEANEY SURVEY ASSOCIATES, INC. ON FILE WITH CITY OF THE DOVER ENGINEERING DEPARTMENT.
7. PROJECT DOES NOT PROPOSE ANY RIGHT–OF–WAY, CONSERVATION, SLOPE, CONSTRUCTION, POWER LINE, CROSS TRAVEL, OR OTHER EASEMENTS.
8. ZONING DISTRICT: INNOVATIVE TECHNOLOGY (IT)
   DIMENSIONAL REQUIREMENTS:

	REQUIRED	PROPOSED
MINIMUM LOT SIZE:	2 AC	8.61 AC
MAXIMUM LOT COVERAGE (BUILDING):	33%	±9.3%
MINIMUM FRONTAGE:	*200'	62.5'
MINIMUM OPEN SPACE:	33%	±72.8%
BUILDING SETBACK REQUIREMENTS:		
FRONT SETBACK:	*50'	±280'
SIDE SETBACK:	*50'	11.32'
REAR SETBACK:	50'	>145'
ABUT A STREET:	50'	N/A
MAXIMUM BUILDING HEIGHT:	55'	35'
PARKING SETBACK REQUIREMENTS:		
PARKING AREA SETBACK:	*25'	23.71'

*SENDING AREAS ALLOWED FOR REDUCED LOT FRONTAGE, FRONT SETBACK, SIDE SETBACK, AND PARKING AREA SETBACKS. RELIEF WAS GRANTED PER THE FOLLOWING: LOT D/11–8 WAS CREATED USING THE CITY OF DOVER TDR ORDINANCE THROUGH THE AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & CO., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT NOS 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1"= 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5–3–06; BY MCENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLANS 85–99 & 85–100.
LOT D/11–8 SENDING AREAS ARE IDENTIFIED IN THE EXISTING CONDITIONS PLAN PROVIDED BY MCENEANEY SURVEY ASSOCIATES.

9. LIST ANY VARIANCE 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. (SEE PROJECT VARIANCE/PERMIT SECTION)
10. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES, NOVEMBER 2022, WITH AN ERROR NOT GREATER THAN 1 IN 10,000.
11. THE SUBJECT PARCEL IS NOT LOCATED WITHIN THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPTEMBER 30, 2015.
12. WETLANDS WERE DELINEATED BY DAMON E. BURT, CERTIFIED WETLANDS SCIENTIST, CERTIFICATION NUMBER 163, IN ACCORDANCE WITH CHAPTER 170–27.1 OF THE ZONING ORDINANCE, ON SEPTEMBER 2, 2022.
13. AS–BUILT PLANS OF THE SUBDIVISION 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.
14. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
15. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
16. 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.
17. EROSION CONTROL NOTES 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.
18. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
19. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
20. 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.
21. 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.
22. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY–FRIDAY 7 AM–6 PM, SATURDAY 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 PLANNING DIRECTOR. WORK PRECLUDED ON SUNDAYS AND FEDERAL HOLIDAYS.
23. BUILDING ADDRESSES (INCLUDING APT/UNIT NUMBERS, IF APPLICABLE) SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
24. THE PROPOSED USE FOR THE SITE IS LIGHT MANUFACTURING.
25. THE FOLLOWING FEDERAL AND STATE PERMINTS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY: (SEE PROJECT VARIANCE/PERMIT SECTION)

DOVER NOTES CONTINUED:

26. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
27. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
28. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
29. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL.
    HTTPS://PTAPP.UNH.EDU/
30. IF APPLICABLE, 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.
31. 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.
32. THE MAXIMUM PARKING SPACE CALCULATION IS 59, INCLUDING 3 ACCESSIBLE SPACES, AND 45, INCLUDING 4 ACCESSIBLE SPACES, ARE PROVIDED.
33. EXTERIOR LIGHTING SHALL BE CUT–OFF TYPE FIXTURES PER CHAPTER 153–14–E AND SHALL PROVIDE LIGHTING DIRECTED ON–SITE ONLY.
34. TOPOGRAPHIC SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATE, OCTOBER 2022.
35. ELEVATIONS DEPICTED ARE BASED ON INFORMATION OBTAINED FROM THE CITY ENGINEER'S OFFICE AND WAS DERIVED FROM COORDINATES FOR CONTROL STATIONS TR390 AND TR391A. THESE COORDINATES HAVE NOT BEEN ADJUSTED TO 1983 DATUM.
36. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 45, ARTICLE I, SECTION 45–2 OF THE CODE OF THE CITY OF DOVER. (AS APPLICABLE)
37. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
38. THE PROPOSED STRUCTURES SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED BY CHAPTER 81– 30 OF THE CODE OF THE CITY OF DOVER AND THE ADOPTED STATE OF NH BUILDING AND FIRE CODES.
39. 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 AND APPROVED BY INSPECTION SERVICES PRIOR TO CONNECTION OF THE BACKFLOW DEVICE.
40. FIRE DEPARTMENT CONNECTION(S) SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13. ACCESS TO THE FDC SHALL MAINTAIN A CLEAR AND UNOBSTRUCTED PATH AT ALL TIMES.
41. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. (I.E. IBC, ANSI–117.1) AND NH RSA 155–A:5.
42. DESIGN ENGINEER SHALL PROVIDE SIGNED LETTER TO CITY ENGINEER CERTIFYING THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
43. ALL MANHOLE COVERS SHALL BE LIFTMATE R–1743–LM OR APPROVED EQUAL WITH 90 DEGREE HINGE.
44. REQUIRED BLASTING AND EXCAVATION – DOVER FIRE DEPARTMENT SHALL BE NOTIFIED PRIOR TO ANY BLASTING ACTIVITIES AND A BLASTING PERMIT FROM THE DOVER FIRE DEPARTMENT MUST BE OBTAINED.
45. THE WATER MAIN SHALL BE POLY WRAPPED IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS.
46. ALL SEWER MAINS AND MANHOLES SHALL BE TESTED IN ACCORDANCE WITH NHDES ENV–WQ 700 REQUIREMENTS. COPIES OF TEST RESULTS SHALL BE PROVIDED TO THECITY OF DOVER ENGINEERING DEPARTMENT.
47. WETLAND PLACARDS SHOULD IDENTIFY THE NO CUT WETLAND BUFFER AND SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION AND AFTER.
48. ALL FITTINGS MUST BE CLASS 140 WATER FITTINGS.
49. ALL GATE VALVES MUST BE MANUFACTURED BY MUELLER OR CLOW.

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.
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. STONES FROM REMOVED STONEWALLS SHALL REMAIN ON–SITE. STONES SHALL BE REPURPOSED ON–SITE AND SHALL NOT BE USED AS FILL.
9. 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.
10. 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.

SITE NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
3. ALL CONSTRUCTION LAYOUT SHALL BE DONE BY A LICENSED SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
4. SEE DETAILS FOR SIGN LEGENDS.
5. 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.
6. 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.
7. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S 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.
8. 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.
9. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
10. REFUSE PICKUP WILL BE BY PRIVATE CONTRACTOR AND WILL BE VIA DUMPSTER ON–SITE.
11. SNOW STORAGE WILL BE ACCORDING TO THE OPERATION AND MAINTENANCE PLAN AND WITHIN AREAS AS INDICATED. ON–SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
12. ALL EXTERIOR DOORS ARE MANUAL AND OPENED FROM THE INTERIOR BY PANIC HARDWARE. ALL EXTERIOR DOORS SHALL COMPLY WITH ADA AND ALL LOCAL BUILDING CODE REQUIREMENTS.
13. ANY DEED RELATED ITEMS TO THE TRANSFER OF THE PROPERTY WILL BE REVIEWED BY THE CITY ATTORNEY WHILE STILL OWNED BY DIBDA.

GRADING NOTES:

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING.
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. 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.
10. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF THE FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
11. 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 OF REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.
12. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
13. CONTRACTOR SHALL NOTIFY THE CITY OF DOVER AND THE DESIGN ENGINEER 48 HOURS PRIOR TO THE INSTALLATION OF PERMANENT STORMWATER BMP'S TO PROVIDE THE CITY AND THE ENGINEER THE OPPORTUNITY TO WITNESS THE CONSTRUCTION AND MATERIALS. THE DESIGN ENGINEER MUST CERTIFY THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
14. 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.

PROJECT VARIANCE / PERMIT SUMMARY:

1. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:

   NHDES ALTERATION OF TERRAIN: PENDING

   NHDES WETLANDS: PENDING

2. 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.

   SITE PLAN: SITE–2024–0002 – PENDING

   CONDITIONAL USE PERMIT: P24–XX

   WAVERS REQUESTED: 153–15–C(2) – PENDING

UTILITY NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR 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 AT NO ADDITIONAL COST TO THE OWNER.
3. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
6. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR CITY APPROVED MATERIAL.
7. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF DOVER WATER DEPARTMENT.
8. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER SEWER DEPARTMENT STANDARDS.
9. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
15. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
16. 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.
17. THE CONTRACTOR SHALL CONTACT "DIG–SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG–SAFE" NUMBER ON SITE AT ALL TIMES.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.
21. 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.
22. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
23. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
24. THE PROPOSED STRUCTURE SHALL COMPLY WITH CHAPTER 81, ARTICLE IV, SECTION 81–27 AND THE STATE BUILDING CODES OF THE CODE OF THE CITY OF DOVER.
25. FIRE SUPPRESSION PLANS SHALL BE PROVIDED TO THE FIRE/INSPECTION DEPARTMENT PRIOR TO INSTALLATION.
26. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
27. SEWAGE LOADING (PER NHDES ENV–WQ 1008.03)
    BUILDING 1:
    - OFFICE = 2,864 SF x 5 GPD/100 SF = 144 GPD
    - LIGHT MANUF. (FACTORY)=25 EMPLOYEES x 10 GPD/ EMPL = 250 GPD
    - TOTAL = 394 GPD

    BUILDING 2:
    - OFFICE = 3,330 SF x 5 GPD/100 SF = 166.5 = 167 GPD
    - LIGHT MANUF. (FACTORY) = 20 EMPLOYEES x 10 GPD/EMP = 200 GPD
    - TOTAL = 367 PGD
28. PUMP CHAMBERS ARE UNCLASSIFIED.
29. AN EASEMENT WILL BE GRANTED TO THE CITY ALONG THE WATER LINES TO ALLOW ACCESS FOR OPERATION OF THE WATER INFRASTRUCTURE TO MAINTAIN WATER QUALITY.

UTILITY CONTACTS

NATURAL GAS: –
CONTACT: UNITIL CORPORATION
DAVID MACLEAN
325 WEST ROAD
PORTSMOUTH, NH 03801
TEL: (603)–294–5261
EMAIL: MACLEAND@UNITIL.COM

WATER & SEWER: – CITY OF DOVER COMMUNITY SERVICES DEPARTMENT
PUBLIC WORKS & UTILITIES
CONTACT: KEN MAVROGEORGE, PE
271 MAST ROAD
DOVER, NH 03820
TEL: (603)–516–6450
EMAIL: K.MAVROGEORGE@DOVER.NH.GOV

ELECTRIC: – EVERSOURCE
CONTACT: TREVER EMMONS
4 OLD DOVER ROAD
ROCHESTER, NH 03867
TEL: (603)–332–7515
EMAIL: TREVER.EMMONS@EVERSOURCE.COM

PLANNING FILE NO.: SITE–2024–0002

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & MUNICIPAL ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4–1–24
1	REV PER TRC COMMENTS #1	SJH	2–29–24

DATE: 1–18–24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

NOTE SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
TBR	TO BE REMOVED
R.O.W.	RIGHT OF WAY
	EXISTING UTILITY POLE
	EXISTING WATER SHUT-OFF
	EXISTING WATER VALVE
	EXISTING GAS VALVE
	EXISTING HYDRANT
	EXISTING SEWER MANHOLE
U/G T.E.	EXISTING ELECTRIC
W	EXISTING WATER LINE
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
G	EXISTING GAS LINE
	EDGE OF WET
	50' WETLAND BUFFER

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

PROPOSED TREELINE

PROPOSED TREELINE

PROPOSED TREELINE

PROPOSED TREELINE

50' WETLAND BUFFER

TREELINE TO BE REMOVED

REMOVE SEWER STUB FOR PROPOSED SEWER CONNECTION AT TIME OF FORCE MAIN CONSTRUCTION

SMH
RIM=170.48
INV.IN(STUB)=161.28 (T.B.R.)
INV.IN(PFM)=161.50
INV.OUT=161.28

ELECTRIC CABINET
5C/SC9
TBM NORTHEAST
CORNER CONCRETE
ELEVATION = 170.75'

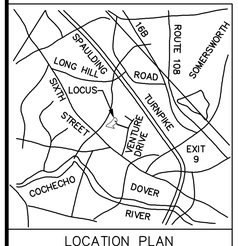
SAW CUT FOR WATER SERVICE CONNECTION

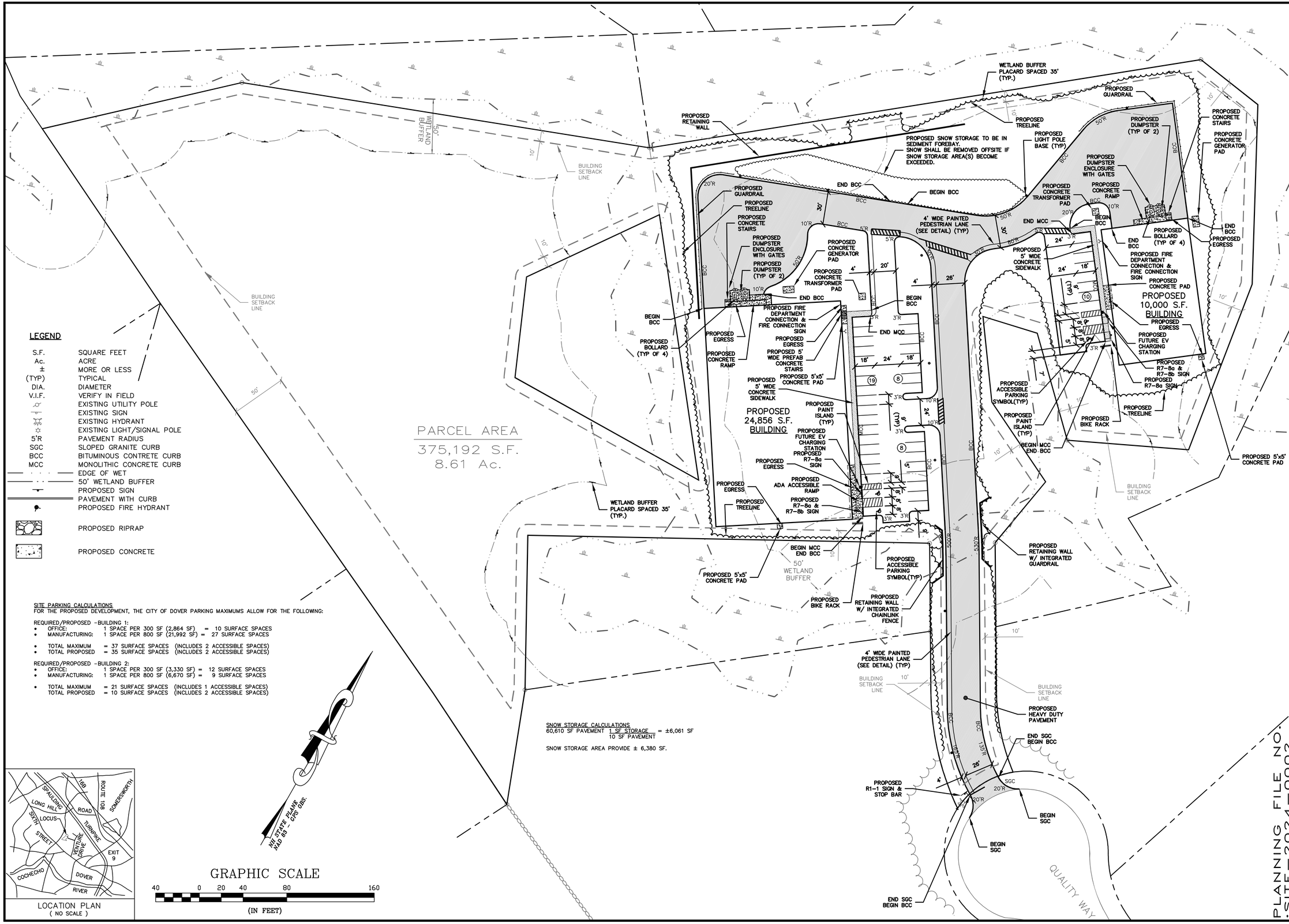
QUALITY WAY

END GAS LINE

NH STATE PLANE NAD 83 CRS DBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)


SPAULDING
LONG HILL
ROAD
SIXTH
STREET
LOCUS
I-95
NEWINGTON
I-95
TURNPIKE
I-95
I-95
I-95



LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
V.I.F.	VERIFY IN FIELD
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING HYDRANT
	EXISTING LIGHT/SIGNAL POLE
5'R	PAVEMENT RADIUS
SGC	SLOPED GRANITE CURB
BCC	BITUMINOUS CONTRETE CURB
MCC	MONOLITHIC CONCRETE CURB
	EDGE OF WET
	50' WETLAND BUFFER
	PROPOSED SIGN
	PAVEMENT WITH CURB
	PROPOSED FIRE HYDRANT
	PROPOSED RIPRAP
	PROPOSED CONCRETE

SITE PARKING CALCULATIONS
FOR THE PROPOSED DEVELOPMENT, THE CITY OF DOVER PARKING MAXIMUMS ALLOW FOR THE FOLLOWING:

REQUIRED/PROPOSED -BUILDING 1:
- OFFICE: 1 SPACE PER 300 SF (2,864 SF) = 10 SURFACE SPACES
- MANUFACTURING: 1 SPACE PER 800 SF (21,992 SF) = 27 SURFACE SPACES
- TOTAL MAXIMUM = 37 SURFACE SPACES (INCLUDES 2 ACCESSIBLE SPACES)
- TOTAL PROPOSED = 35 SURFACE SPACES (INCLUDES 2 ACCESSIBLE SPACES)

REQUIRED/PROPOSED -BUILDING 2:
- OFFICE: 1 SPACE PER 300 SF (3,330 SF) = 12 SURFACE SPACES
- MANUFACTURING: 1 SPACE PER 800 SF (6,670 SF) = 9 SURFACE SPACES
- TOTAL MAXIMUM = 21 SURFACE SPACES (INCLUDES 1 ACCESSIBLE SPACES)
  TOTAL PROPOSED = 10 SURFACE SPACES (INCLUDES 2 ACCESSIBLE SPACES)

SNOW STORAGE CALCULATIONS
60,610 SF PAVEMENT 1 SF STORAGE / 10 SF PAVEMENT = ±6,061 SF

SNOW STORAGE AREA PROVIDE ± 6,380 SF.

LOCATION PLAN
(NO SCALE)

NO STATE PLANE MAD 83 CORS DBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	REV PER TRC COMMENTS #1	SJH	2-29-24
2	REV PER TRC COMMENTS #2	SJH	4-1-24

DESIGN BY: JFG
DRAWN BY: SRD
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG
DATE: 1-18-24
SCALE: 1"=40'

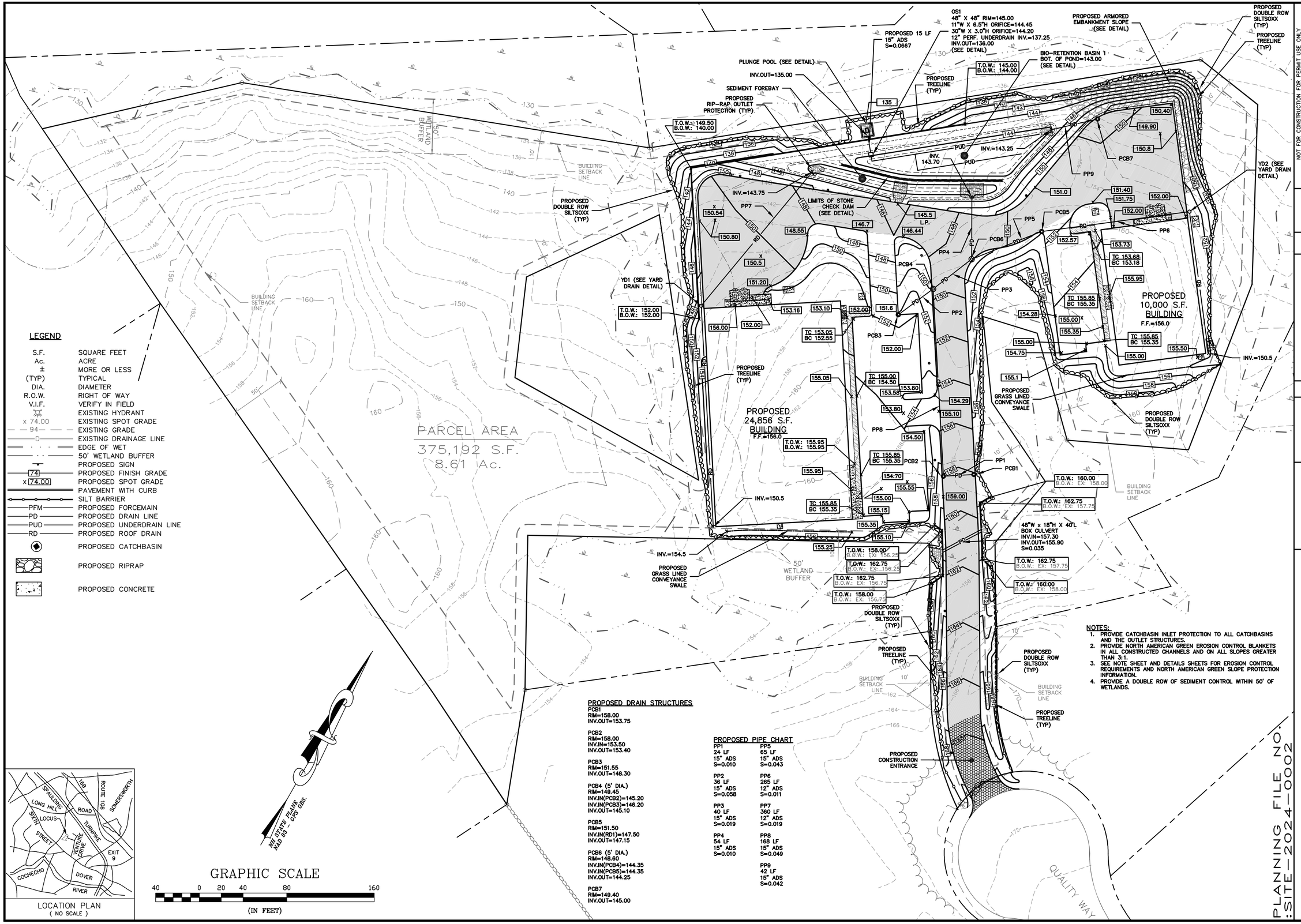
PLANNING FILE NO. :SITE-2024-0002

SITE PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

6



LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
R.O.W.	RIGHT OF WAY
V.I.F.	VERIFY IN FIELD
	EXISTING HYDRANT
x 74.00	EXISTING SPOT GRADE
94	EXISTING GRADE
D	EXISTING DRAINAGE LINE
	EDGE OF WET
	50' WETLAND BUFFER
	PROPOSED SIGN
74	PROPOSED FINISH GRADE
x 74.00	PROPOSED SPOT GRADE
	PAVEMENT WITH CURB
	SILT BARRIER
PFM	PROPOSED FORCEMAIN
PD	PROPOSED DRAIN LINE
PUD	PROPOSED UNDERDRAIN LINE
RD	PROPOSED ROOF DRAIN
	PROPOSED CATCHBASIN
	PROPOSED RIPRAP
	PROPOSED CONCRETE

LOCATION PLAN
(NO SCALE)

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

PROPOSED DRAIN STRUCTURES

PCB1
RIM=158.00
INV.OUT=153.75

PCB2
RIM=158.00
INV.IN=153.50
INV.OUT=153.40

PCB3
RIM=151.55
INV.OUT=148.30

PCB4 (5' DIA.)
RIM=149.45
INV.IN(PCB2)=145.20
INV.IN(PCB3)=146.20
INV.OUT=145.10

PCB5
RIM=151.50
INV.IN(RD1)=147.50
INV.OUT=147.15

PCB6 (5' DIA.)
RIM=148.60
INV.IN(PCB4)=144.35
INV.IN(PCB5)=144.35
INV.OUT=144.25

PCB7
RIM=149.40
INV.OUT=145.00

PROPOSED PIPE CHART

PP1	24 LF	15" ADS	S=0.010
PP2	36 LF	15" ADS	S=0.058
PP3	40 LF	15" ADS	S=0.019
PP4	54 LF	15" ADS	S=0.010
PP5	65 LF	15" ADS	S=0.043
PP6	265 LF	12" ADS	S=0.011
PP7	360 LF	12" ADS	S=0.019
PP8	168 LF	15" ADS	S=0.049
PP9	42 LF	15" ADS	S=0.042

NOTES:
1. PROVIDE CATCHBASIN INLET PROTECTION TO ALL CATCHBASINS AND THE OUTLET STRUCTURES.
2. PROVIDE NORTH AMERICAN GREEN EROSION CONTROL BLANKETS IN ALL CONSTRUCTED CHANNELS AND ON ALL SLOPES GREATER THAN 3:1.
3. SEE NOTE SHEET AND DETAILS SHEETS FOR EROSION CONTROL REQUIREMENTS AND NORTH AMERICAN GREEN SLOPE PROTECTION INFORMATION.
4. PROVIDE A DOUBLE ROW OF SEDIMENT CONTROL WITHIN 50' OF WETLANDS.

PLANNING FILE NO.
:SITE-2024-0002

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CIVIL & MUNICIPAL ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

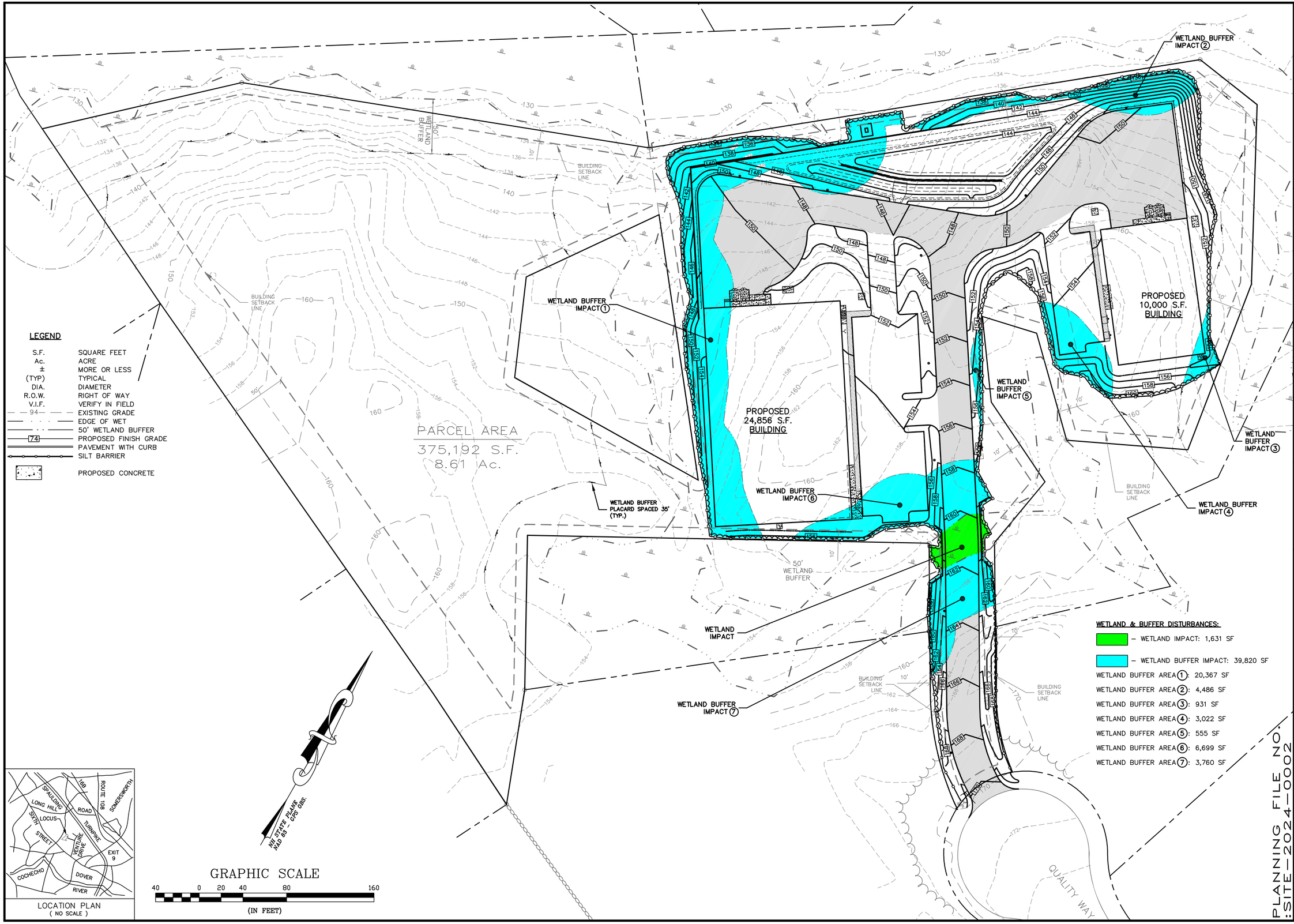
DATE: 1-18-24
SCALE: 1"=40'
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

GRADING, DRAINAGE & EROSION CONTROL PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

7



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PROJECT NO: 22075
FILE: SITE.DWG
DATE: 1-18-24
SCALE: 1"=40'

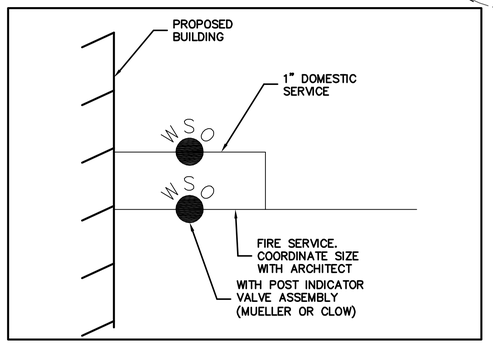
PLANNING FILE NO. :SITE-2024-0002

WETLAND / WETLAND BUFFER IMPACT PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

8



TYPICAL FIRE AND DOMESTIC WATER SERVICE CONNECTION DETAIL

SCALE: NOT TO SCALE

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

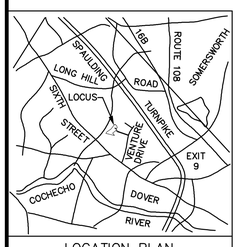
PROPOSED 10,000 S.F. BUILDING

PROPOSED 24,856 S.F. BUILDING

TRANSFORMER TO BE COORDINATED WITH EVERSOURCE (TYP)
PUMP STATION PS-2 (SEE DETAIL)
PROPOSED SEWER LINE
GEN SET
CURB STOP/ CHECK VALVE (SEE "STAINLESS STEEL LATERAL KIT 1-1/2" SDR 11 HDPE PIPE DETAIL)
PUMP STATION PS-1 (SEE DETAIL)
GEN SET TO BE SIZED BY ELECTRICAL ENGINEER (TYP)
COORDINATE CONTROL PANEL LOCATION WITH ARCHITECT FOR LOCATION IN MECH ROOM
SEE "TYPICAL FIRE AND DOMESTIC WATER SERVICE CONNECTION DETAIL
FDC CONNECTION
6" D.I.
HYDRANT ASSEMBLY W/ GATE VALVE ANCHORED TO MAIN
6" GATE VALVE ANCHORED TO MAIN
8" TO 6" REDUCER
8"X6" TEE
COORDINATE GAS SERVICE WITH UNITIL
8"X6" TEE WITH GATE VALVE WITH THRUST BLOCK OR EQUAL (TYP)
PROPOSED FUTURE EV CHARGING STATION ELECTRICAL LINE
COORDINATE CONTROL PANEL LOCATION WITH ARCHITECT FOR LOCATION IN MECH ROOM (TYP.)
SEE "TYPICAL FIRE AND DOMESTIC WATER SERVICE CONNECTION DETAIL
FDC CONNECTION
6" D.I.
6" GATE VALVE ANCHORED TO MAIN
HYDRANT ASSEMBLY W/ GATE VALVE ANCHORED TO MAIN
PROPOSED FUTURE EV CHARGING STATION ELECTRICAL LINE
4-4" SCHEDULE 40 CONDUIT. COORDINATE W/ EVERSOURCE (TYP)
1-4" SDR11 FORCE MAIN
50' WETLAND BUFFER
8" D.I. CLASS 52
REMOVE EXISTING GRAVITY SEWER STUB. CONNECT FM TO SMH
SMH
RIM=170.48
INV.IN(STUB)=161.28 (T.B.R.)
INV.IN(PFM)=161.50
INV.OUT=161.28
ELECTRIC CABINET
5C/SC9
TBM NORTHEAST
CORNER CONCRETE
ELEVATION = 170.75'
12"X8" TEE WITH GATE VALVE
END GAS LINE
QUALITY WAY
U/G T.E.
W 12" C.I.P.
4" W
6" S
PUD
PD
PG
PE
PFM
PW
RD
PS

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
V.I.F.	VERIFY IN FIELD
	EXISTING UTILITY POLE
	EXISTING WATER SHUT-OFF
	EXISTING WATER VALVE
	EXISTING GAS VALVE
	EXISTING HYDRANT
	EXISTING LIGHT/SIGNAL POLE
	EXISTING SEWER MANHOLE
OHU	OVERHEAD UTILITY
E	EXISTING ELECTRIC
W	EXISTING WATER LINE
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
G	EXISTING GAS LINE
	EDGE OF WET
	50' WETLAND BUFFER
	PAVEMENT WITH CURB
	SILT BARRIER
PG	PROPOSED GAS
PW	PROPOSED WATER
PE	PROPOSED ELECTRIC
RD	PROPOSED ROOF DRAIN
PS	PROPOSED SEWER
PFM	PROPOSED FORCEMAIN
PD	PROPOSED DRAIN LINE
PUD	PROPOSED UNDERDRAIN LINE
PFES	PROPOSED FLARED END SECTION
	PROPOSED CATCHBASIN
	PROPOSED THRUST BLOCK
	PROPOSED WATER SHUTOFF
	PROPOSED FIRE HYDRANT
	PROPOSED UTILITY POLE
	PROPOSED RIPRAP
	PROPOSED CONCRETE



LOCATION PLAN
(NO SCALE)

NO STATE PLANE MAD 83 - GPS OBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

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CIVIL & WATERSHED ENGINEERING
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DESIGN BY: JFG
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PROJECT NO: 22075
FILE: SITE.DWG
DATE: 1-18-24
SCALE: 1"=40'

PLANNING FILE NO.
:SITE-2024-0002

UTILITY PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

9

DESCRIPTION

1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A 25,000 S.F. BUILDING AND A 10,000 S.F. BUILDING AS WELL AS DRAINAGE AND UTILITY IMPROVEMENTS, AND SITE ACCESS.

PROJECT NAME AND LOCATION

FUTURE AUTOMATION
TAX MAP D, LOT 11–8 *LATITUDE N43° 13' 26"*
QUALITY WAY *LONGITUDE W70° 54' 46"*
DOVER, NH

DISTURBED AREA

±164,238 S.F..

NOTES:

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

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. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
7. 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.
8. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
9. INSTALL FOUNDATION FOOTINGS AND WALLS.
10. INSTALL UTILITIES.
11. PLACE GRAVELS AND FINE GRADE.
12. STABILIZE ROADWAYS AND PARKING AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
13. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
14. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
15. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
16. 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 IF 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. SILT BARRIER

1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP–GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE–THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

B. MULCHING

1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 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.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. 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 150–200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

C. TEMPORARY SEEDING

1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% 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 FABRICS, CHECK DAMS, ETC.).

D. PERMANENT SEEDING

1. BEDDING – STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING 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
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. 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 @ 138 LBS. PER 1,000 S.F.
   LOW PHOSPHATE (N–P205–K20) FERTILIZER @ 13.8 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. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

E. STORM DRAIN INLET PROTECTION

1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND–DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE SILT BARRIERS 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 PERSONEL 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.

MAINTENACE 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.

SPIL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RICK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCE DURING CONSTRUCTION TO STORMWATER RUNOFF:
GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING

1. THE CONSTRUCTION PROJECT:
   a. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
   b. 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.
   c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
   d. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
   e. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
   f. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
2. HAZARDOUS PRODUCTS:
   a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
   b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
   c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
   d. 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:

1. PETROLEUM PRODUCTS:
   a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENACE 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.
2. FERTILIZERS:
   a. 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 FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
3. PAINTS:
   a. 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 THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
4. CONCRETE TRUCKS:
   a. 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:

a. 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.
b. 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.
c. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
d. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OF LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
f. 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 OCCURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
g. 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 INCLUDED 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 EMITS FUGITIVE DUST, OTHER THAT 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:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

PER 153–10 F.

ALL SITE IMPROVEMENTS WHICH REQUIRE BLASTING OF LAND SHALL MEET THE FOLLOWING REQUIREMENTS PRIOR TO ANY BLASTING OCCURING.

1. THE APPLICANT SHALL PREPARE A PRE–BLAST SURVEY OF ALL STRUCTURES WITHIN FIVE HUNDRED (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 ONE THOUSAND (1000) FEET OF THE EXTERNAL BOUNDARY OF THE PROJECT PARCEL SHALL BE NOTIFIED BY THE CERTIFIED MAIL (PAID FOR BY THE APPLICANT) OF THE MEETING NO LESS THAN TEN (10) DAYS PRIOR TO THE MEETING AND NO MORE THAN FIFTEEN (15) DAYS PRIOR TO THE MEETING. THE NOTICE SHALL STATE THE TIME AND DATE OF THE BLASTING AND CONTAIN A MAP SHOWING THE BLASTING AREA, THE 1,000–FOOT–RADIUS AREA, AND THE 500–FOOT–RADIUS AREA.
3. PERMIT HOLDERS SHALL BE IN COMPLIANCE WITH NFPA 495, EXPLOSIVE MATERIALS CODE, IN ADDITION TO ALL OTHER ORDINANCES AND CODES SET FORTH IN THE CITY OF DOVER CODE, § 153–14A, STORMWATER MANAGEMENT, EROSION CONTROL AND FLOOD HAZARDS, OF THIS CHAPTER AND THE CITY OF DOVER FIRE PREVENTION CODE, WHICH SPECIFICALLY PROHIBITS THE OVERNIGHT STORAGE OF EXPLOSIVES 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 THE PERFORMANCE OF THE WORK.
6. HOURS OF OPERATION FOR THE BLASTING SHALL BE NO EARLIER THAN 8:00AM AND NO LATER THAN 6:00PM, MONDAY THROUGH FRIDAY, EXCLUDING FEDERAL HOLIDAYS.

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 DITCHES & SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3–INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

ENV–WQ 1510: BEST MANAGEMENT PRACTICES FOR BLASTING

1) ALL ACTIVITIES ASSOCIATED WITH BLASTING NEED TO BE OPTIMIZED TO PREVENT THE RELEASE OF CHEMICALS ASSOCIATED WITH BLASTING ACTIVITIES TO THE ENVIRONMENT.
2) IF MORE THAN 5,000 CY OF ROCK REMOVAL IS REQUIRED DRINKING WATER WELLS MUST BE IDENTIFIED AND LOCATED WITHIN 2000 FEET OF THE PROPOSED BLASTING ACTIVITIES. DEVELOP A GROUNDWATER QUALITY SAMPLING PROGRAM TO MONITOR FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA. THE PLAN MUST INCLUDE PRE AND POST BLAST WATER QUALITY MONITORING AND BE APPROVED BY NHDES PRIOR TO INITIATING BLASTING. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NHDES.
3) THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
   (1) LOADING PRACTICES. THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
      (A) DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL IND

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)

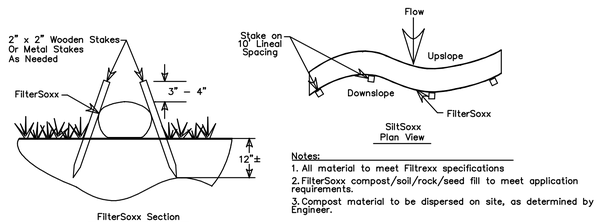
- Small terrestrial turtle with highly domed shell
- Irregular yellow or orange markings over brown/black base

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.



Notes:
1. All material to meet Filtrexx specifications
2. SiltSoxx compost/jsoil/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.

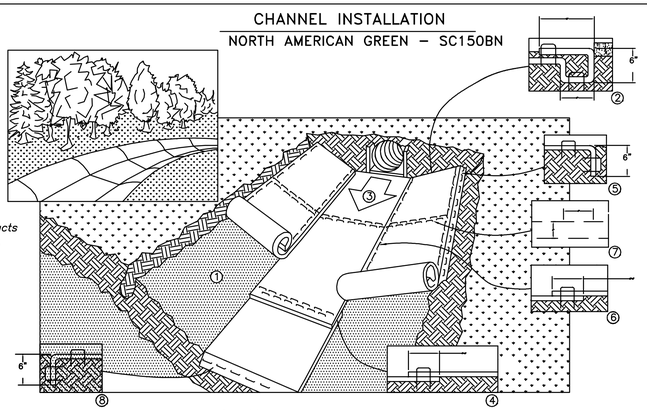
SiltSoxx Details

NOT TO SCALE

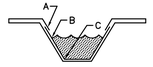
CHANNEL INSTALLATION

NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



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

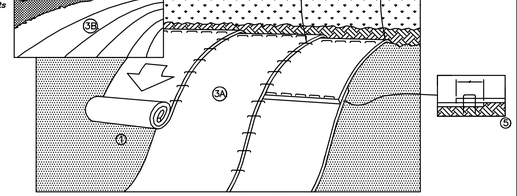
NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

SLOPE INSTALLATION

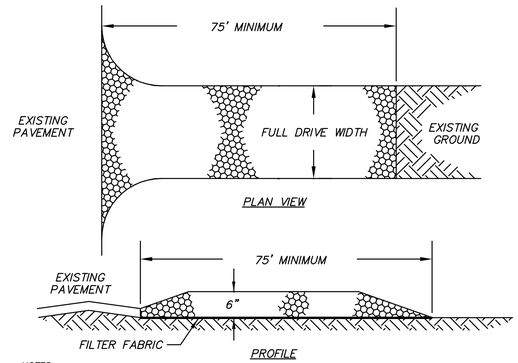
NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



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.



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

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
2	REV PER TRC COMMENTS #2	4-1-24	SJH
1	REV PER TRC COMMENTS #1	2-29-24	SJH

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

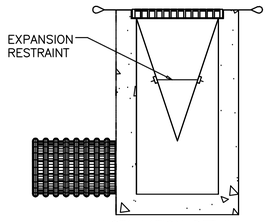
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

11



INSTALLATION DETAIL

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	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
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)

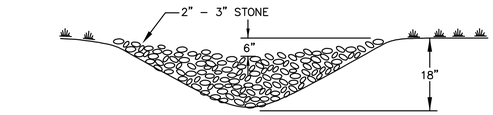
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

OIL-ABSORBANT SILTSACK®
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

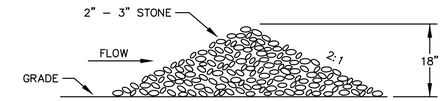
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK®, WITH A WOVEN PILLOW INSERT.

DETAIL OF INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE

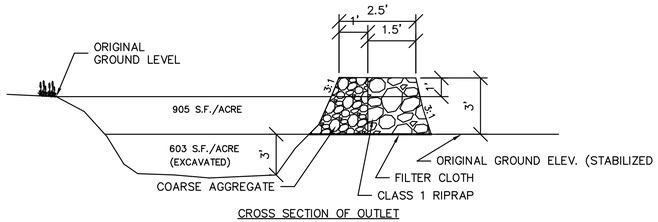
BERM STONE SIZE		
SIEVE DESIGNATION (METRIC)	SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
300 mm	12 in	100
150 mm	6 in	84-100
75 mm	3 in	68-83
25.4 mm	1 in	42-55
4.75 mm	No. 4	8-12



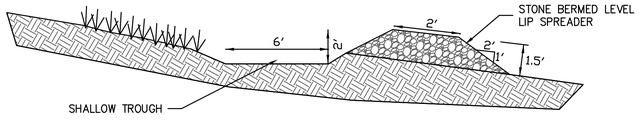
SWALE SECTION



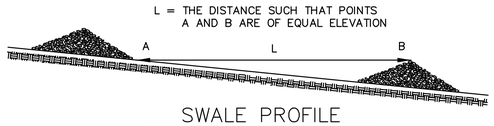
SWALE PROFILE



CROSS SECTION OF OUTLET

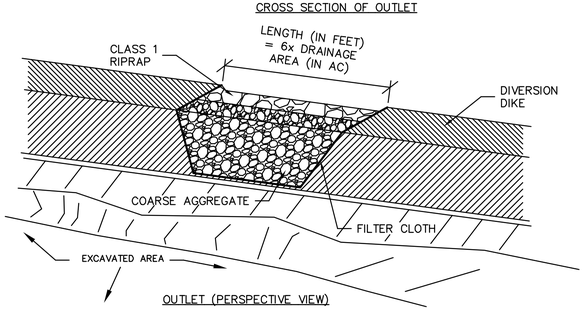


STONE BERMED LEVEL LIP SPREADER DETAIL
NOT TO SCALE



SWALE PROFILE

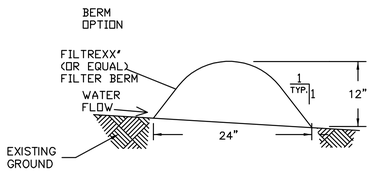
STONE GRADE STABILIZATION STRUCTURE DETAIL (CHECK DAMS)
NOT TO SCALE



OUTLET (PERSPECTIVE VIEW)

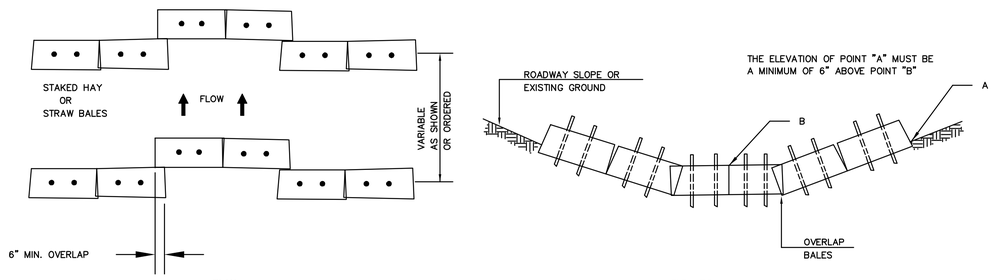
NOTES:
1. COARSE AGGREGATE SHALL MEET NHDOT 304.5 SPECIFICATIONS AND SHALL NOT CONTAIN MORE THAN 5% FINES PASSING THE #200 SIEVE.
2. FILTER CLOTH SHALL BE MIRAFI 700X OR APPROVED EQUAL.
3. CLASS I RIPRAP SHALL MEET NHDOT 583 SS SPECIFICATIONS.
4. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHALL BE LESS 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



MULCH BERM DETAIL
NOT TO SCALE

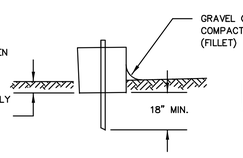
NOTES:
1. CONTRACTOR SHALL DISCUSS THE APPLICATION OF THIS PRODUCT WITH MANUFACTURE TO ENSURE PROPER PRODUCT SPECIFICATIONS.
2. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS OR EQUAL.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
4. WHERE THE BERM REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
5. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
6. THE COMPOST FILTER BERM WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.



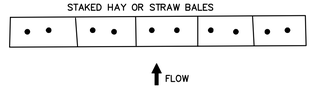
HAYBALE GRADE STABILIZATION STRUCTURE

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY 2" x 2" STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.



EMBEDDING DETAIL



HAYBALE BARRIER AT TOE OF SLOPE

HAYBALE NOTES AND DETAILS
NOT TO SCALE

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

NO.	REVISION	DATE	APP'D
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DATE: 1-18-24
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DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO:22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

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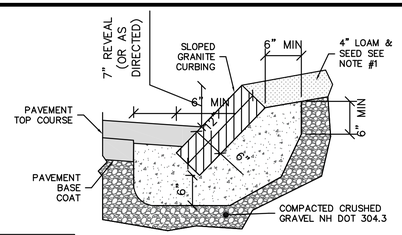
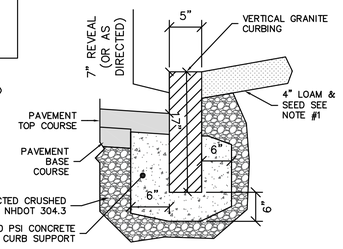


SLOPED GRANITE CURB

RADIUS	MAX LENGTH
< 21'	USE CURVED CURB
12'	3'
22' – 28'	4'
29' – 35'	5'
36' – 42'	6'
43' – 49'	7'
50' – 56'	8'
57' – 60'	9'
OVER 60'	10'

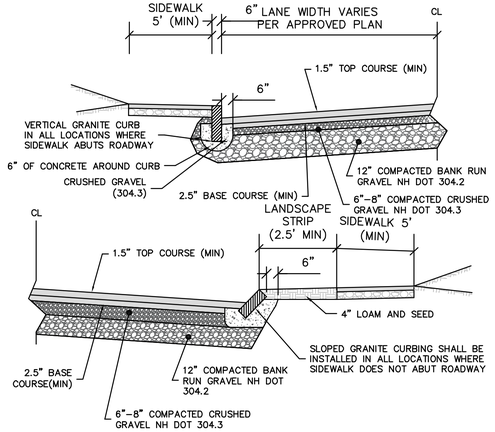
NOTES:
1. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.
2. CONCRETE CURB SUPPORT SHOULD BE SET 1/2" BELOW THE TOP OF THE PAVEMENT BASE COURSE.



VERTICAL GRANITE CURB

CITY OF DOVER D–8 GRANITE CURB DETAIL

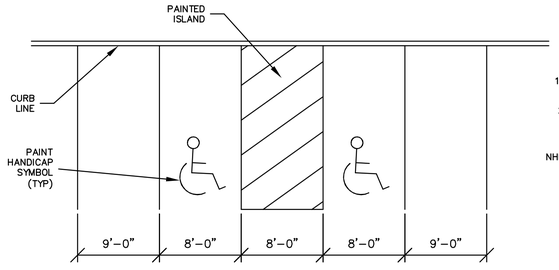
NOT TO SCALE



NOTES:
1. THIS DETAIL IS FOR GENERAL REVIEW PURPOSES ONLY, FINAL DESIGN SHALL BE BASED ON SPECIFIC SITE CONDITIONS AND APPROVED PLANS.
2. SIDEWALK LOCATION AND MATERIAL SHALL BE AS APPROVED BY THE CITY OF DOVER.

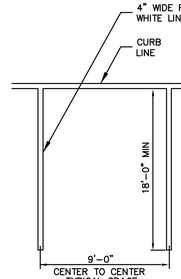
CITY OF DOVER D–5 ROADWAY CROSS SECTION DETAIL

NOT TO SCALE



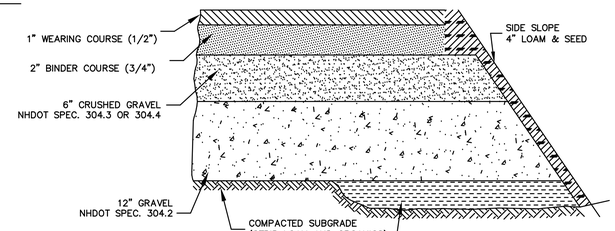
ACCESSIBLE PARKING LAYOUT

NOT TO SCALE



STANDARD PARKING STALL

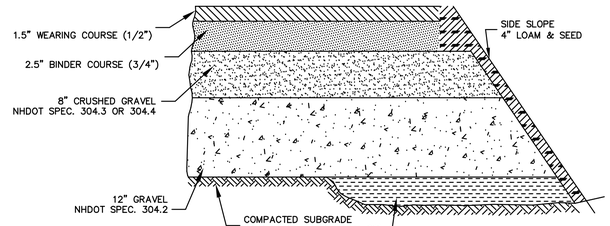
NOT TO SCALE



NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS–SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

TYPICAL PAVEMENT SECTION

NOT TO SCALE

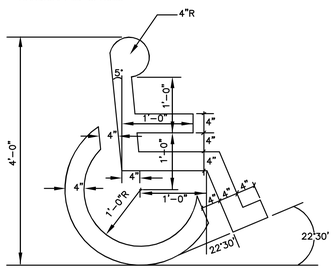


NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS–SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

HEAVY DUTY TYPICAL PAVEMENT SECTION

NOT TO SCALE

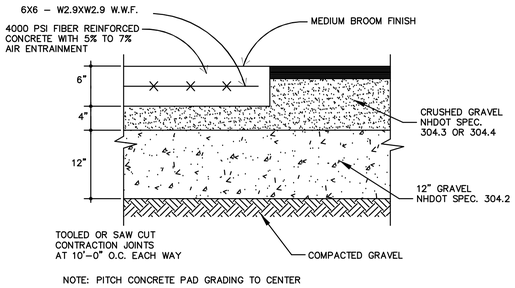
NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES



PAINTED

ACCESSIBLE PARKING SYMBOL

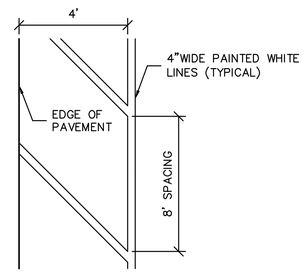
NOT TO SCALE



NOTE: PITCH CONCRETE PAD GRADING TO CENTER

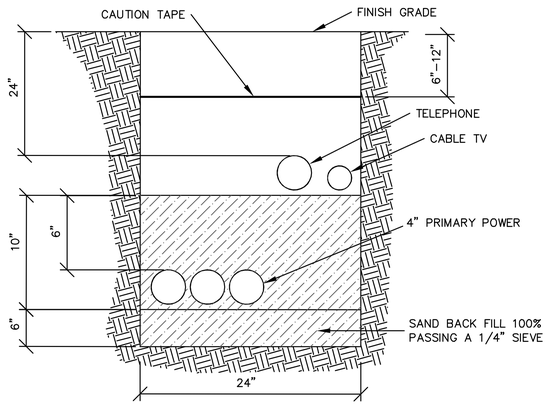
DUMPSTER PAD DETAIL

NOT TO SCALE



4' WIDE PAINTED PEDESTRIAN LANE

NOT TO SCALE



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 "REQUIREMENTS FOR ELECTRIC SERVICE CONNECTIONS – INFORMATIONS AND REQUIREMENTS FOR ELECTRIC SUPPLY BY EVERSOURCE ENERGY".
4. CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES PROVIDERS.

UTILITY TRENCH

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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CIVIL & WATERSHED ENGINEERING
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SCALE: AS SHOWN
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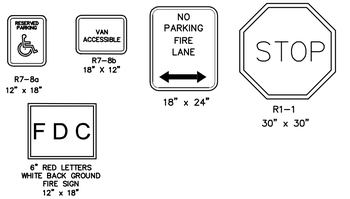
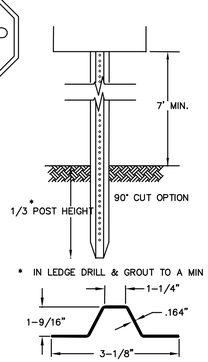


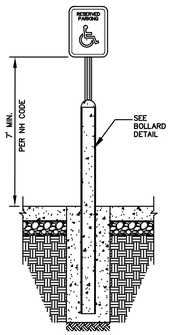
NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

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

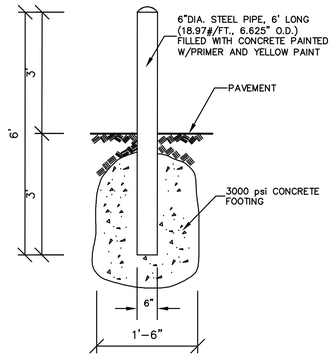
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY.
ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

SIGN LEGEND & SIGN POST
NOT TO SCALE

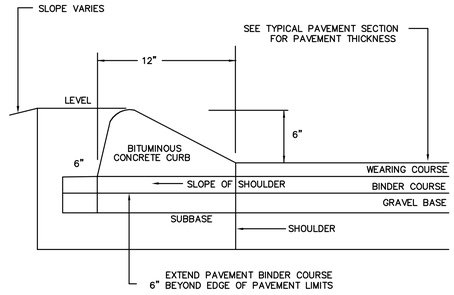




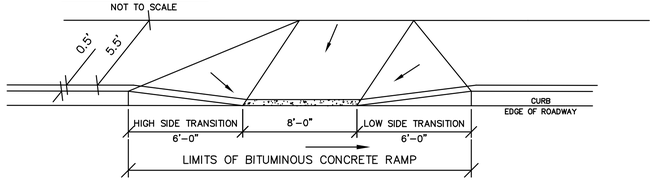
SIGN IN BOLLARD
NOT TO SCALE



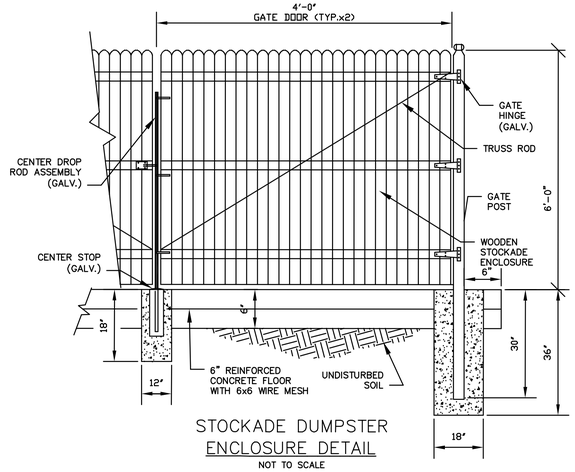
BOLLARD DETAIL
NOT TO SCALE



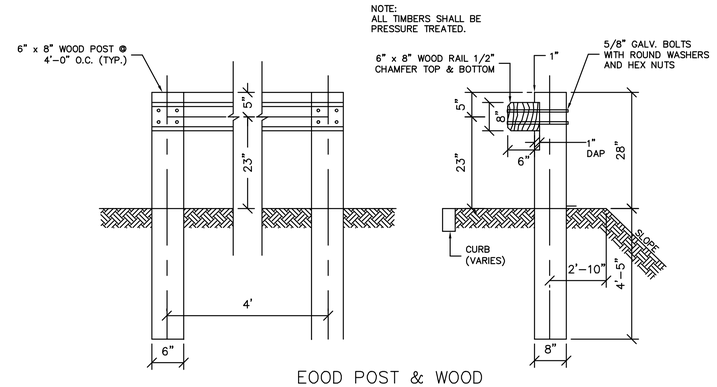
BITUMINOUS SLOPED CURB
NOT TO SCALE



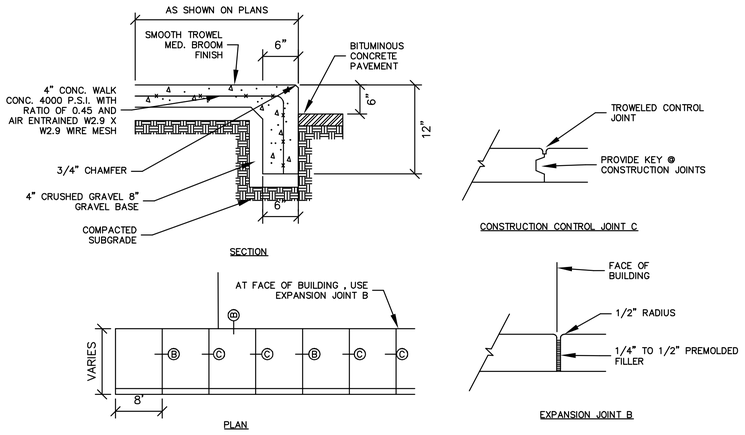
SIDEWALK APRON
NOT TO SCALE



STOCKADE DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE



EOOD POST & WOOD BEAM GUARDRAIL DETAIL
NOT TO SCALE



CONCRETE WALKWAY WITH MONOLITHIC CONCRETE CURB
NOT TO SCALE

chargepoint+

CT4000 Family

ChargePoint® Level 2 Commercial Charging Stations

The CT4000 family is the latest generation of ChargePoint commercial charging stations. Refined yet rugged, these stations set the industry standard for functionality and aesthetics.

The CT4000 full motion color LCD display instructs drivers and supports dynamic updates of custom branded videos and advertisements.

Intelligent power management options double the number of parking spaces served by allowing two charging ports to share a single circuit. Sites with single port EV stations can upgrade to dual port stations without requiring additional electrical services.

The CT4000 is the first ENERGY STAR® certified EV charger because it charges efficiently and conserves power when not charging. As an ENERGY STAR certified EV charger, the CT4000 uses significantly less energy than a standard EV charger when in standby mode to help you save money on your utility bill.

All CT4000 models offer one or two standard SAE J1772™ Level 2 charging ports with locking holsters, each port supplying up to 7.2kW. With this standard connector, ChargePoint level 2 stations can charge any EV.

Stations are available in bollard and wall mount configurations for easy installation anywhere. All stations are fully software upgradeable remotely over the air.

Stations come in both 6' and 8' tall models with 18" and 23" cords, respectively. With multiple options for size and cord reach, your station can service up to four parking spaces, reach all car models regardless of parking style or car sizes and increase the usability of your EV spots.

Driver Friendly User Interface

- Instructional video shows how to use the station
- Multi-language: English, French, Spanish
- Touch button interface; works in rain, ice and with gloves
- Backed by ChargePoint's world class 24/7 driver phone support

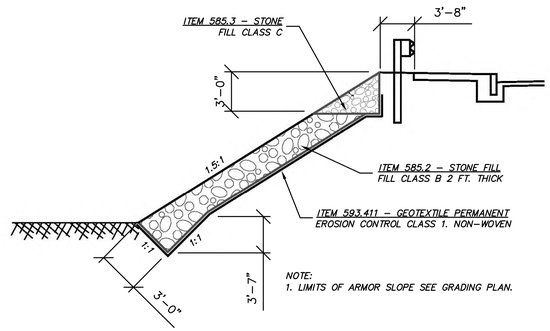
Easily Communicate with Your Drivers

Whether you're a retail establishment wanting to advertise your latest product, a workplace looking to communicate with employees or a municipality wanting to welcome visitors, ChargePoint's prominent LCD screen makes it easy to reach EV drivers:

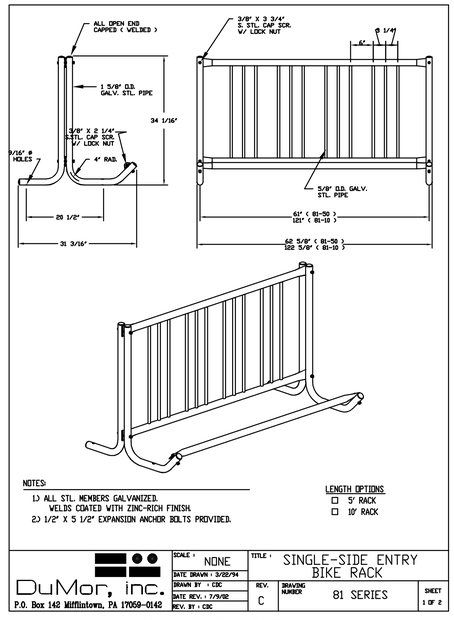
- Daylight readable, with auto brightness control
- 640 X 480 resolution active matrix
- Full motion 30fps video support
- Upload up to 60 seconds of high quality video on a color LCD screen to individual stations as often as desired
- Brand your charging stations to communicate with drivers
- Instructional video in English, Spanish or French

The First ENERGY STAR® Certified EV Charger

EV CHARGING STATION DETAIL
NOT TO SCALE



ARMORED EMBANKMENT SLOPE
NOT TO SCALE



BIKE RACK DETAIL
NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WASTEWATER ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

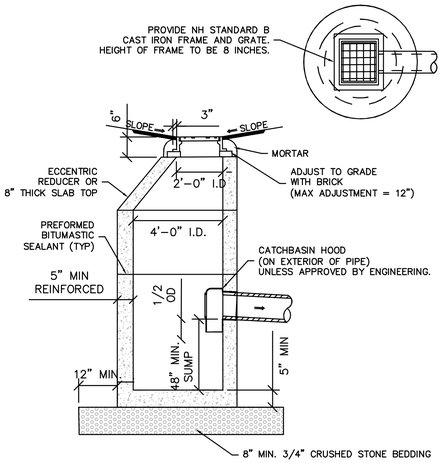
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

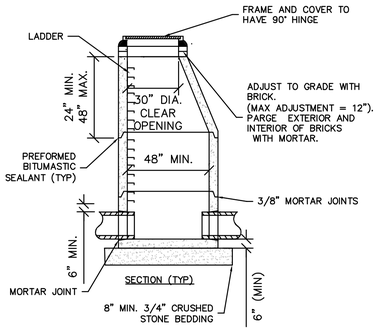
14



NOTES:
1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.

CITY OF DOVER D-19
CATCHBASIN DETAIL

NOT TO SCALE



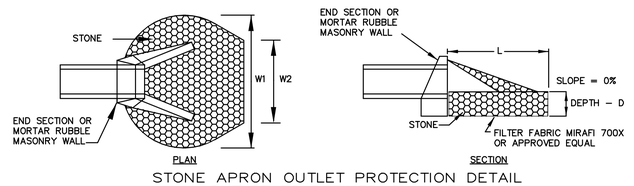
NOTES:
1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

CITY OF DOVER D-20
DRAIN MANHOLE DETAIL

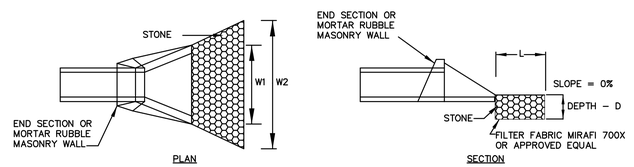
NOT TO SCALE

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. STORM DRAINS SHALL BE ADS N12 OR APPROVED EQUAL, AND SHALL BE JOINTED WITH NEOPRENE "O" RINGS.
3. 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).
4. 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.
5. 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.
6. 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.
7. TRENCH CONSTRUCTION WILL CONFORM WITH SECTION 603.3.1 OF THE STANDARD SPECIFICATIONS (1974).
8. 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.
9. BEDDING SHALL CONFORM WITH SECTION 603.3.2 OF THE STANDARD SPECIFICATIONS (1974).
10. 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.
11. ALL BACKFILL AND BEDDING COMPACTION SHALL MEET THE REQUIREMENTS OF AASHO T 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.
12. 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.
13. 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.
14. ALL TRENCHES WILL BE COVERED AND DEBRIS, INCLUDING ANY REJECTED MATERIALS, SHALL BE REMOVED DAILY. STRICT SAFETY PRECAUTIONS SHALL BE MAINTAINED AT ALL TIMES.
15. 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.
16. 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.
17. SHOP DRAWINGS FOR FLAT CONCRETE COVERS SHALL BE STAMPED PRIOR TO SUBMISSION FOR APPROVAL BY A NEW HAMPSHIRE REGISTERED PROFESSIONAL ENGINEER.
18. BRICK MASONRY FOR SETTING FRAMES AND BRICK AND MORTAR PLUGS SHALL CONFORM TO THE STANDARD SPECIFICATION SECTION 604.2.4.



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

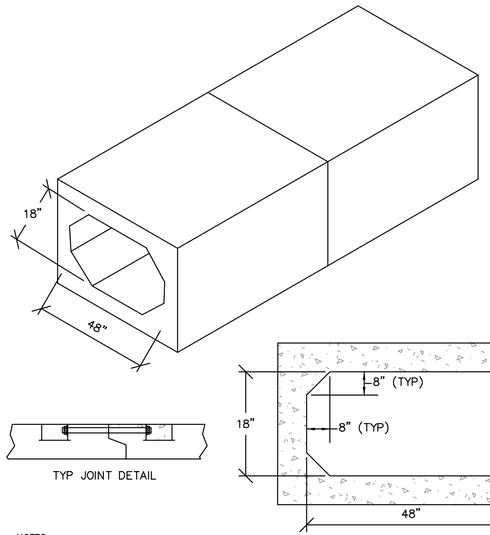
CONSTRUCTION SPECIFICATIONS

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	W1(ft)	W2(ft)	L(ft)	D (ft)	D50(IN)	CHANNEL TYPE
PCB6	11	3	17	1	6	DEFINED
PCB7	11	3	12	1	6	DEFINED
RD2	9	3	13	1	6	DEFINED
BOX CULVERT (IN)	6	10	5	1	6	UNDEFINED
BOX CULVERT (OUT)	6	18	10	1	6	UNDEFINED

RIP RAP OUTLET PROTECTION

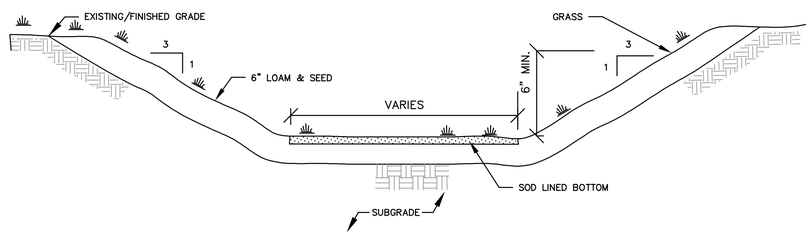
NOT TO SCALE



NOTES:
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS
2. DESIGN PER ASTM C1433 BOX CULVERT
3. ALL REINFORCEMENT PER ASTM A615
4. DESIGNED DOE AASHTO HS-20 LOADING
5. SHEA CONCRETE OR APPROVED EQUAL.
6. SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER WILL BE PROVIDED PRIOR TO CONSTRUCTION.

BOX CULVERT

NOT TO SCALE



MAINTENANCE

TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY, MAINTAIN A MINIMUM 4" STAND OF VEGETATION. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.

THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

GRASS LINED CONVEYANCE SWALE DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

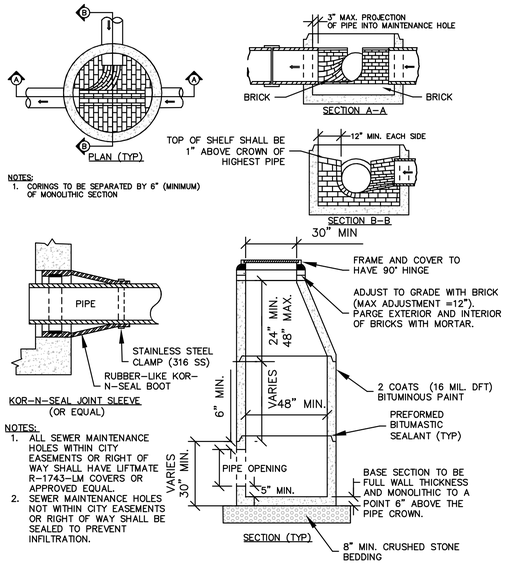
DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

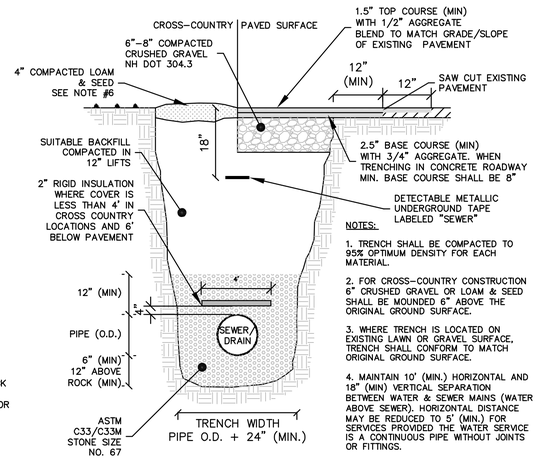


NOTES:
1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

NOTES:
1. ALL SEWER MAINTENANCE HOLES WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL HAVE LIFTMATE R-1743-LM COVERS OR APPROVED EQUAL.
2. SEWER MAINTENANCE HOLES NOT WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL BE SEALED TO PREVENT INFILTRATION.

CITY OF DOVER D-16
SEWER MANHOLE DETAIL

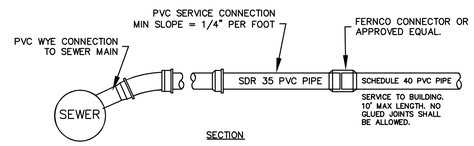
NOT TO SCALE



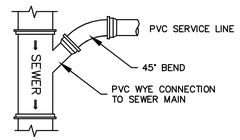
NOTES:
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT AND ROCKS OVER 6" IN LARGEST DIMENSION
6. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

CITY OF DOVER D-3
SEWER TRENCH DETAIL

NOT TO SCALE



SECTION

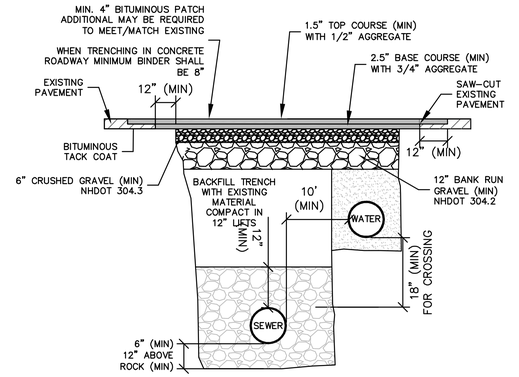


PLAN

NOTES:
1. TRENCHING AND BEDDING REQUIREMENTS PER CITY SEWER TRENCH DETAIL (D-3).
2. SERVICE LATERAL DIAMETER VARIES PER APPLICATION. REVIEW SIZE WITH CITY ENGINEER PRIOR TO INSTALLATION.
3. SDR 35 SHALL NOT EXTEND INTO THE BUILDING

CITY OF DOVER D-17
SEWER SERVICE DETAIL

NOT TO SCALE



NOTES:
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES
3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

CITY OF DOVER
TYPICAL TRENCH DETAIL

NOT TO SCALE

TRELLEBORG PIPE SEALS

TRELLEBORG

Kor-N-Seal® I
Stainless Steel Wedge Connector
(WS Series)

Installation Instructions

CONNECTOR INSTALLATION

1. Check to be sure the Stainless Steel Waveband® is properly located in Connector groove.
2. Inspect the inside surface of the cored/formed hole. If there is porosity or wire-to-concrete separation, use patching or hydraulic cement to smooth the surface.
3. Insert Connector Assembly into hole with Wedge Expander at top of hole.
4. Position Connector so it is square to manhole both vertically and horizontally.
5. Tighten Wedge Expander using 1/2" socket wrench to 12 foot pounds.
6. Retorquing prior to shipment is recommended but not required.

Note if Vacuum Testing

Testing should be done prior to backfilling so that leaks can be easily located and repaired.

All lift holes need to be plugged with a nonshrinking mortar.

Plug all pipes entering the manhole, taking care to securely brace the pipes and plugs.

Patented Waveband technology "captures" the rubber between itself and the concrete, creating a more effective seal.

*Covered under US Patent No.: 5,738,359

PIPE INSTALLATION

1. Be sure sealing area of pipe is smooth and free of defects. Repair if needed.
2. Center pipe in Connector opening. (Pipe must not rest on Connector Korband)
3. Position the Pipe Clamp in the Connector's Pipe Clamp groove with the screw at the top.
4. Tighten the Pipe Clamp screw to 60 inch pounds with a T-handle Torque Wrench, P/N 80090

Note:

On minimum pipe O.D. installations, tension the rubber under the pipe clamp by lifting the rubber toward pipe clamp screw housing by hand. This will help prevent the rubber from wrinkling or folding over during tightening of hose clamp. Application of a very small amount pipe lube on the pipe clamp track will allow the pipe clamp to slide on the rubber and improve the performance of the hose clamp. Make sure to torque all screw locations on the pipe clamps.

Caution:

Do not use an impact wrench for installation.

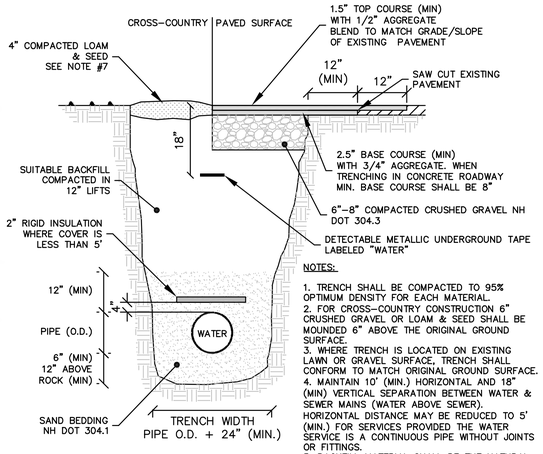
All pipe stubs must be restrained.

Adapters are required when using Corrugated Pipe. Refer to the Corrugated Pipe Adapter Data Sheet for more information.

Check calibration of torque limiters monthly

Torque limiters are available for connectors that can be used with cordless drills and hand or air ratchets.

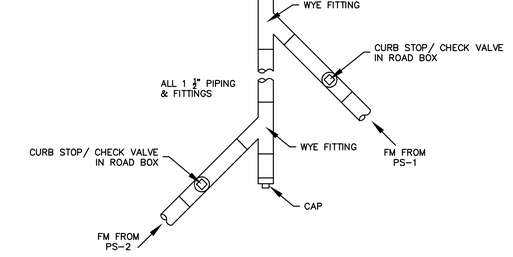
Call 800-626-2180 for information.



NOTES:
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT, AND ROCKS OVER 6" IN LARGEST DIMENSION
6. PROVIDE MINIMUM 5' OF COVER. ENGINEERING APPROVAL REQUIRED FOR LESS THAN 5' OF COVER.
7. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.
8. CLASS 52 DUCTILE IRON PIPE

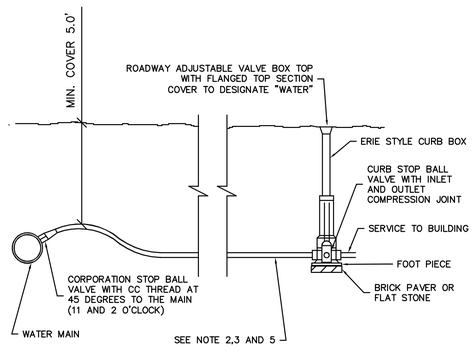
CITY OF DOVER D-4
WATER TRENCH DETAIL

NOT TO SCALE



FORCE MAIN CONNECTION DETAIL

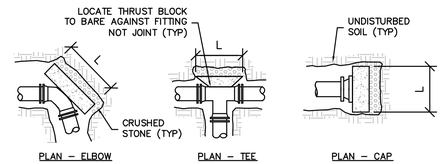
NOT TO SCALE



NOTES:
1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP, INCLUDING TEE AND OTHER CONNECTIONS.
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE (BLUE OR BLACK) CTS SDR 9 PLASTIC POLYETHYLENE RATED FOR 250 psi.
4. CAM-LOCK REQUIRED FOR CTS OR IPS, MJ ADAPTER REQUIRED FOR HDPE
5. 3/4"- COPPER, CTS
   1"- COPPER, CTS
   2"- CTS, HDPE, IPS

CITY OF DOVER D-13
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE



THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)

	PIPE SIZE					
Nominal Dia. (in)	4	6	8	10	12	16
Pipe Fittings	*	*	5.18	7.96	11.43	20.29
90 Degree Bends	*	4.11	7.33	11.26	16.17	28.69
45 Degree Bends	*	*	*	6.10	8.75	15.53
22-1/2 Degree Bends	*	*	*	*	4.46	7.92
11-1/4 Degree Bends	*	*	*	*	*	*
*SEE NOTE 2	System Pressure: 125 psi Safety Factor: 1.5 Soil Bearing Capacity: 2,000 psf					

NOTES:
1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED, ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

CITY OF DOVER D-15
THRUST BLOCK DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

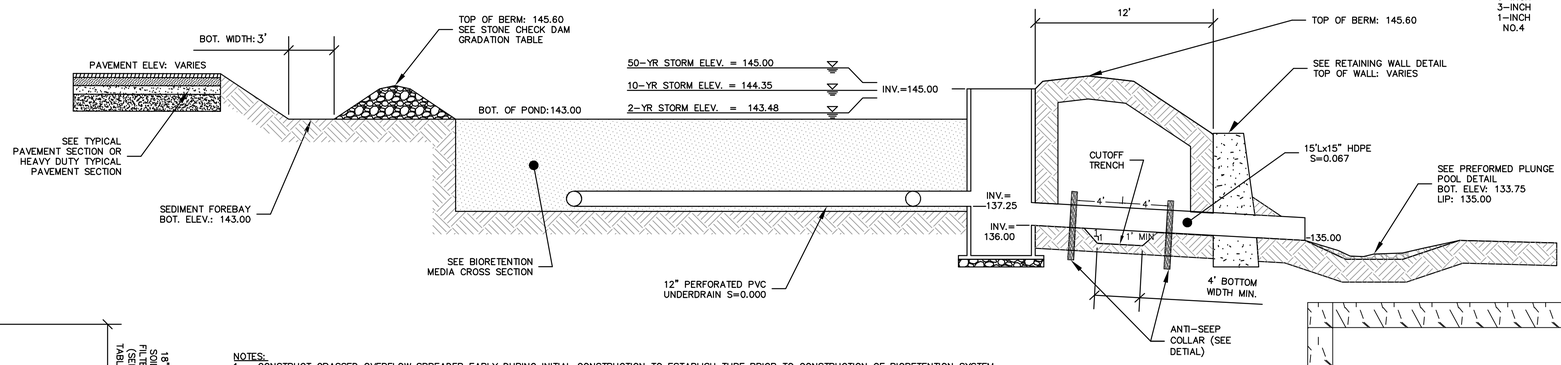
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

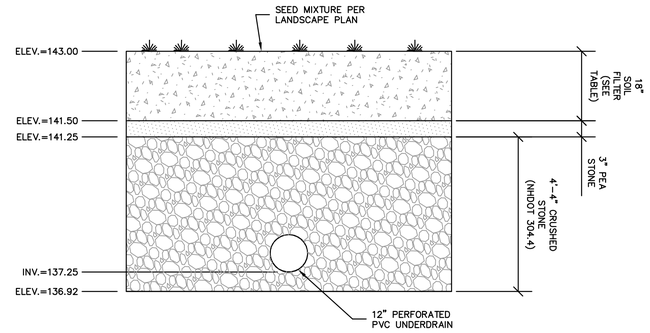
FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

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



STONE CHECK DAM GRADATION

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE
12-INCH	100%
6-INCH	84%-100%
3-INCH	68%-83%
1-INCH	42%-55%
NO.4	8%-12%



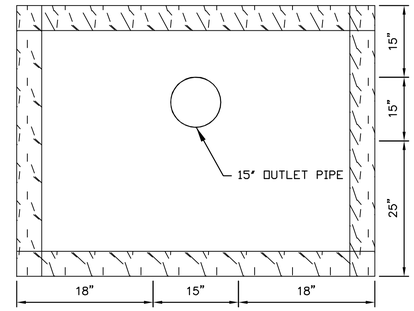
BIORETENTION MEDIA CROSS SECTION

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. DO NOT DRIVE CONSTRUCTION EQUIPMENT THE FILTER MATERIAL. INSTALL FILTER MATERIAL BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER AREA.
4. 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.
5. REFER TO LANDSCAPING DRAWINGS FOR GRASS SEED MIXES. FERTILIZATION OF THE FILTER AREA SHALL BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.
6. 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).
7. 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. 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.

BIORETENTION BASIN 1

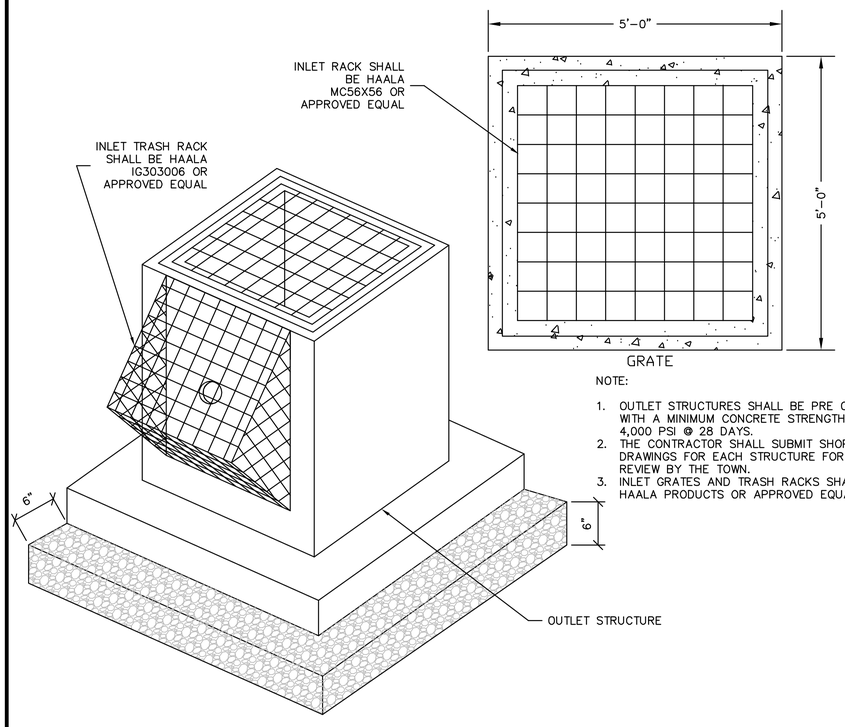
NOT TO SCALE



NOTES:
1. ANTI-SEEP COLLARS SHALL BE WATERPROOF AND HAVE A WATERPROOF CONNECTION TO THE PIPE.
2. ANTI-SEEP COLLARS TO BE AGRI DRAIN OR APPROVED EQUAL.

ANTI-SEEP COLLAR DETAIL

NOT TO SCALE

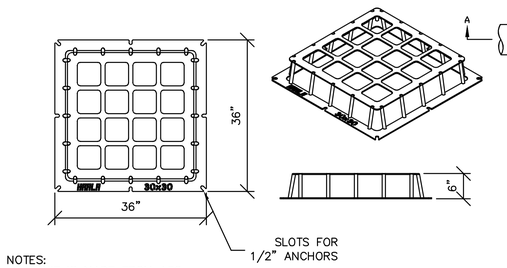


GRATE

NOTE:
1. OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.
3. INLET GRATES AND TRASH RACKS SHALL BE HAALA PRODUCTS OR APPROVED EQUAL.

TYPICAL INLET TRASH RACKS

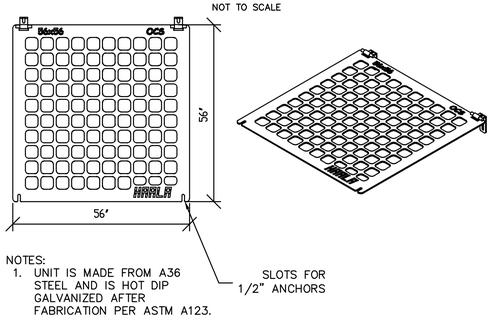
NOT TO SCALE



NOTES:
1. UNIT IS MADE FROM A36 STEEL AND IS HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A123.

HAALA IG303006

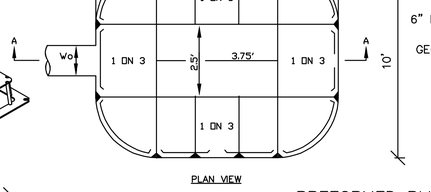
NOT TO SCALE



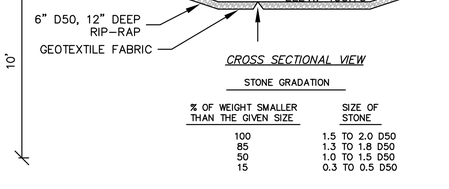
NOTES:
1. UNIT IS MADE FROM A36 STEEL AND IS HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A123.

HAALA MC56X56

NOT TO SCALE



PLAN VIEW



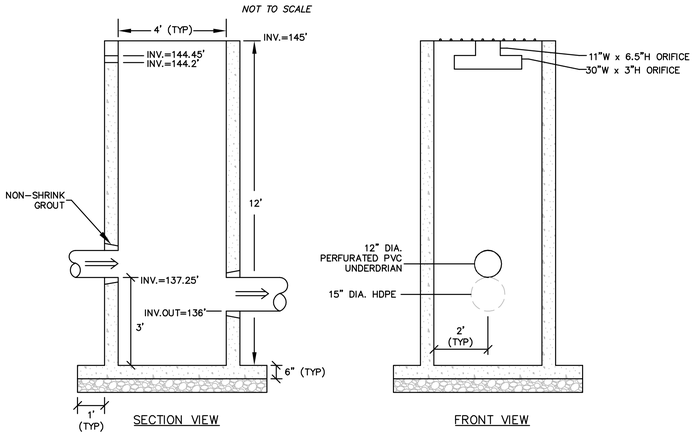
CROSS SECTIONAL VIEW

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

PREFORMED PLUNGE POOL DETAIL

NOT TO SCALE



NOTE:
1) ALL OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.
3) SUMPS SHALL NOT BE GREATER THAN 8 INCHES.

OUTLET STRUCTURE 1 (OS1) DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

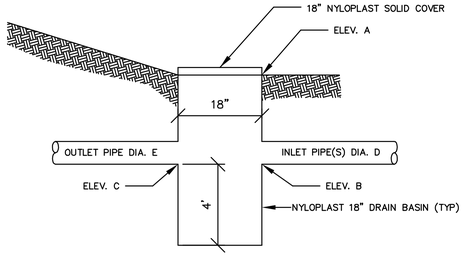
DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

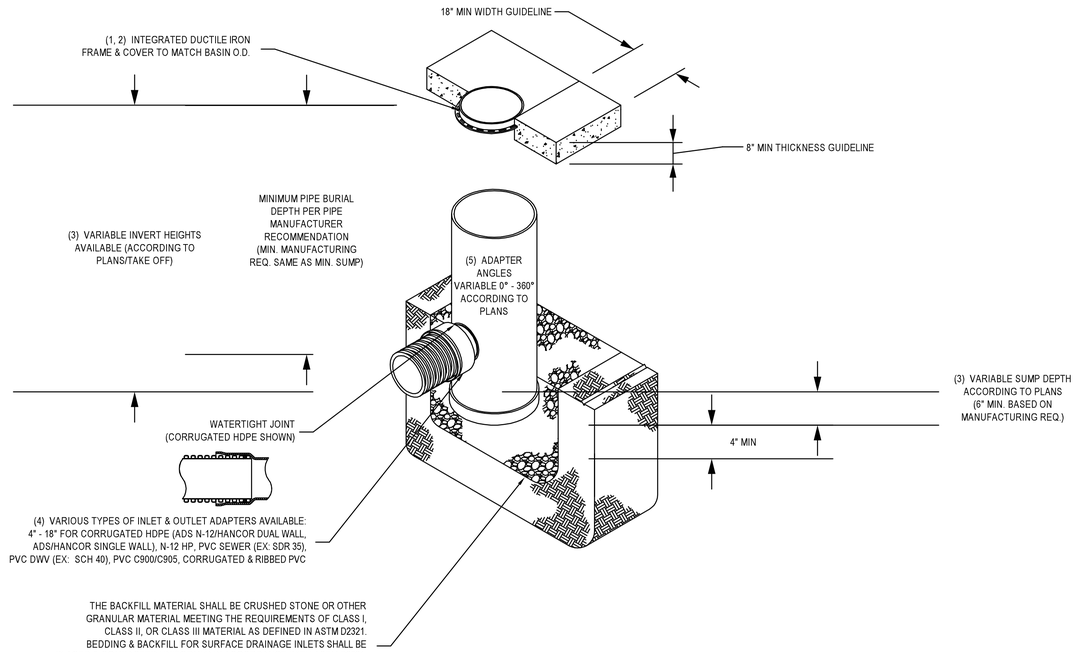


OS	ELEV. A (FT)	ELEV. B (FT)	ELEV. C (FT)	DIA. D (IN)	DIA. E (IN)
YD1	152.25	148.50	148.50	12"	12"
YD2	152.50	148.50	148.50	12"	12"

NOTE:
1) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE CITY.
2) SEE NYLOPLAST 18" DRAIN BASIN DETAIL.

YARD DRAIN DETAIL
NOT TO SCALE

NYLOPLAST 18" DRAIN BASIN: 2818AG



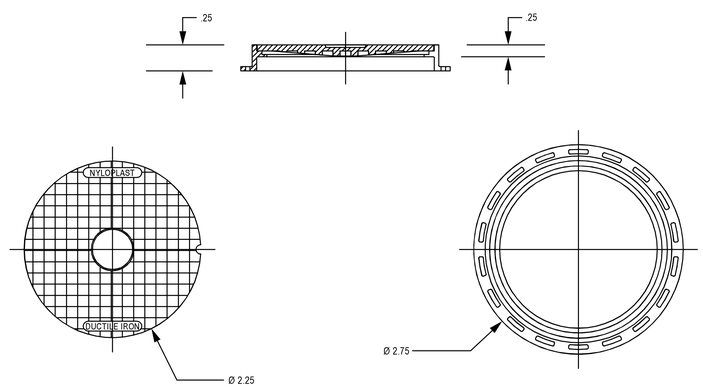
1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
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.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2013 NYLOPLAST

DRAWN BY EBC	MATERIAL	ADS Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 03-29-06			
REVISED BY NMH	PROJECT NO./NAME	TITLE	12 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DATE 03-11-16			
DWG SIZE A	SCALE NTS SHEET 1 OF 1	DWG NO. 7001-110-189	REV E

1899CGC

APPROX. WEIGHT WITH FRAME = 68.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-027

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DRAWN BY EBC	MATERIAL DUCTILE IRON	ADS Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 03-08-06			
REVISED BY CCA	PROJECT NO./NAME	TITLE	18 IN SOLID COVER ASSEMBLY - TYPE C
DATE 08-30-13			
DWG SIZE A	SCALE 1:10 SHEET 1 OF 1	DWG NO. 7001-110-214	REV D

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WASTEWATER ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

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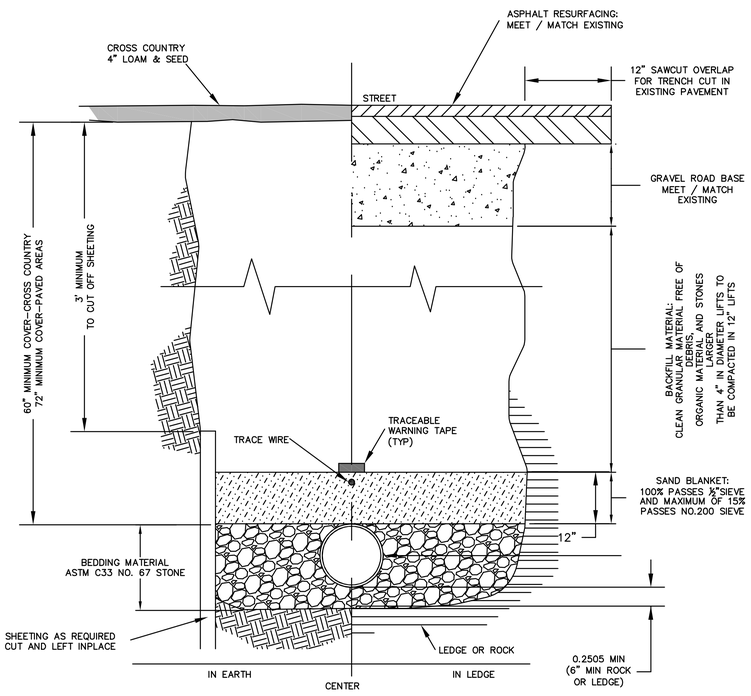
DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

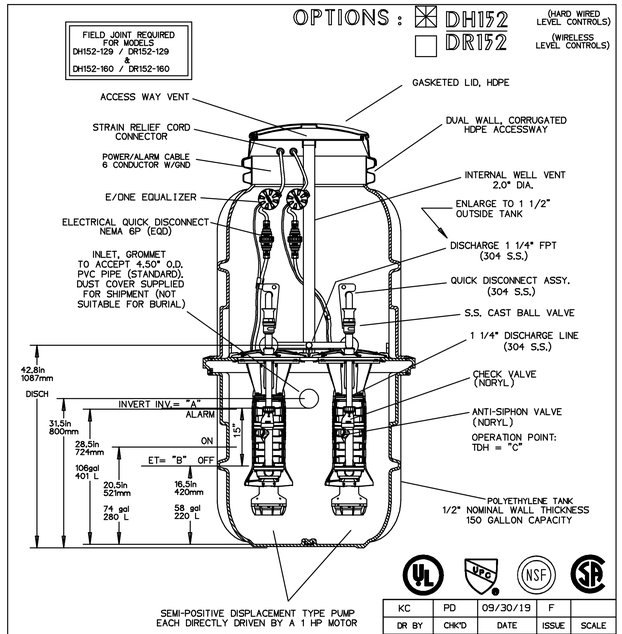
FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

18



SEWER FORCEMAIN TRENCH

NOT TO SCALE



KC	PD	09/30/19	F	
DR BY	CHK'D	DATE	ISSUE	SCALE

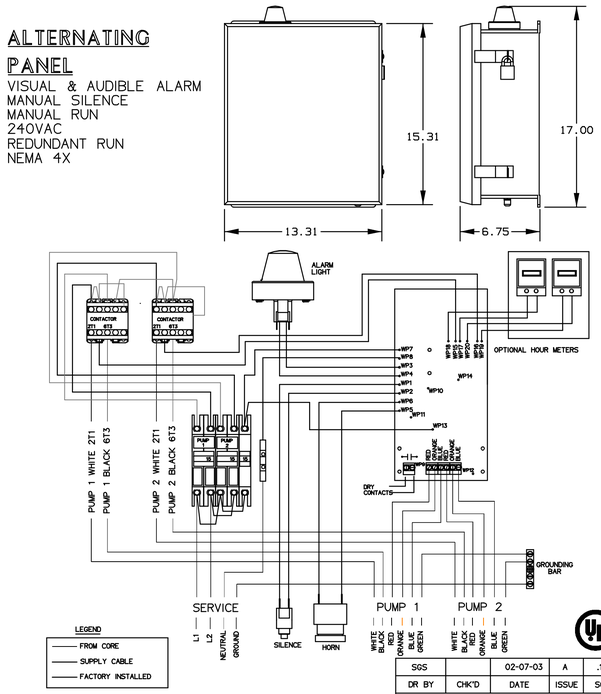
e/one SEWER SYSTEMS

MODEL DH152 / DR152 DETAIL SHEET

NA0052P02

ALTERNATING PANEL

VISUAL & AUDIBLE ALARM
MANUAL SILENCE
MANUAL RUN
240VAC
REDUNDANT RUN
NEMA 4X



SGS		02-07-03	A	.156
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

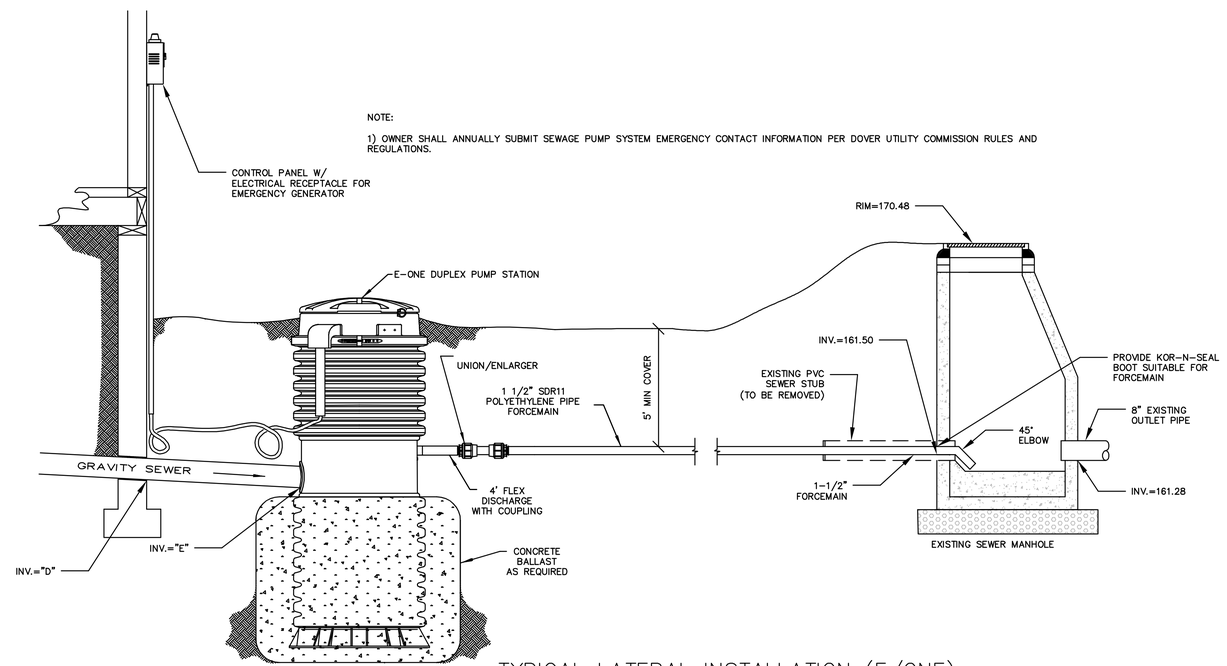
DUPLEX SPLIT TIME ALTERNATING PANEL

LM000270

BURIED NON-METALLIC UTILITIES SHALL RECEIVE A TRACER WIRE.

1. THE TRACER WIRE SHALL BE INSTALLED ON TOP OF THE BURIED UTILITY CROWN.
2. THE TRACER WIRE SHALL BE POSITIVELY ATTACHED TO THE NON-METALLIC BURIED UTILITIES BY PLASTIC WIRE TIES OF SIMILAR TYPE OF ATTACHMENT EVERY 6 FEET FOR STRAIGHT RUN OF UTILITY AND AT ALL CHANGES OF DIRECTION. TAPE SHALL BE POLYKEN "930-35," PROTECTO-WRAP "310", OR EQUAL.
3. THE ENDS OF THE TRACER WIRE SHALL BE EXPOSED ABOVE THE FINISHED GRADE.
4. INSTALL APPROVED CAST IRON VALVE BOXES AT ALL LOCATIONS WHERE THE ENDS OF THE TRACER WIRE ARE EXPOSED ABOVE THE FINISHED GRADE. THE BOXES SHALL NOT BE MORE THAN 200 FEET APART AND SHALL CONTAIN A 24" COIL OF WIRE FROM EACH END OF THE TRACER WIRE.
5. TRACER WIRE SHALL BE CONTINUOUS BETWEEN BOXES AND SHALL BE TESTED FOR CONTINUITY IN THE PRESENCE OF THE INSPECTOR.
6. TRACER WIRE SHALL BE NO. 10 AWG, COPPER WIRE WITH TW INSULATION (BLUE IN COLOR FOR USE WITH POTABLE WATER, GREEN FOR USE WITH SEWER). CONNECTORS SHALL BE DRY-CON TYPE CONNECTORS FOR SPECIFIED WIRE GAGE AND SUITABLE FOR USE WITH BURIED TRACER WIRE.
7. TRACER WIRE SHALL BE EXPOSED ABOVE FINISHED GRADE IN THE CAST IRON BOXES AT THE TRANSITION WHERE THE NON-METALLIC BURIED UTILITY CONNECTS TO THE EXISTING METALLIC UTILITY.
8. EXTEND WIRE INTO VALVE BOXES AND TERMINATE WITH A WIRE CONNECTOR. TERMINATE WIRE FROM LINES EXTENDING FROM MAINS TO FIRE RISERS OR BUILDING SERVICES 12" (300MM) ABOVE GRADE AND CAP WITH A WIRE CONNECTOR.

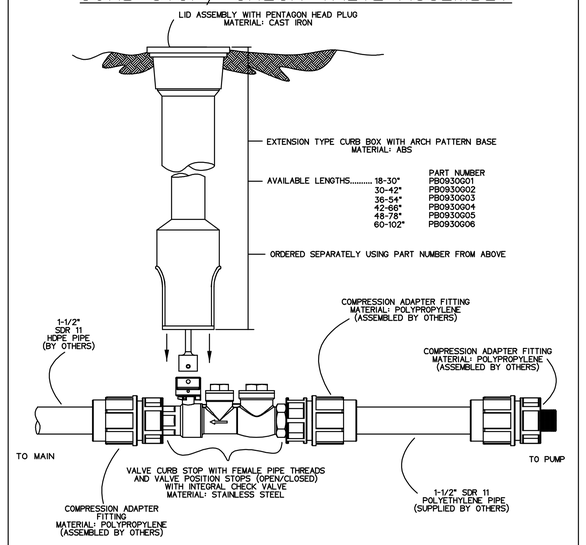
INVERT	PUMP STATION P.S.-1	PUMP STATION P.S.-2
A	148.00	147.50
B	146.90	146.40
C	22 FT @ 12.7 GPM	23.5 FT @ 12.6 GPM
D	148.50	148.0
E	148.00	147.50



TYPICAL LATERAL INSTALLATION (E/ONE)

NOT TO SCALE

CURB STOP/ CHECK VALVE ASSEMBLY



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 EITHER 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 NC0193G02
6. CURB BOX IS TO BE ORDERED SEPARATELY, SEE ABOVE

KIT PARTS ARE NOT ASSEMBLED

SGS	DN	11/02/11	B	3/16
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

STAINLESS STEEL LATERAL KIT 1-1/2" SDR 11 HDPE PIPE

NA0330P03

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CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
2	REV PER TRC COMMENTS #2	4-1-24	SJH
1	REV PER TRC COMMENTS #1	2-29-24	SJH

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO:22075
FILE: SITE.DWG

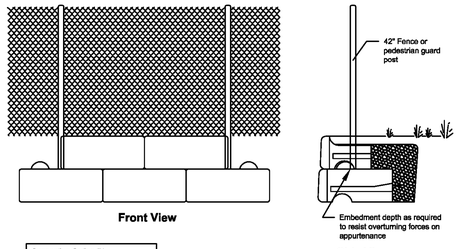
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

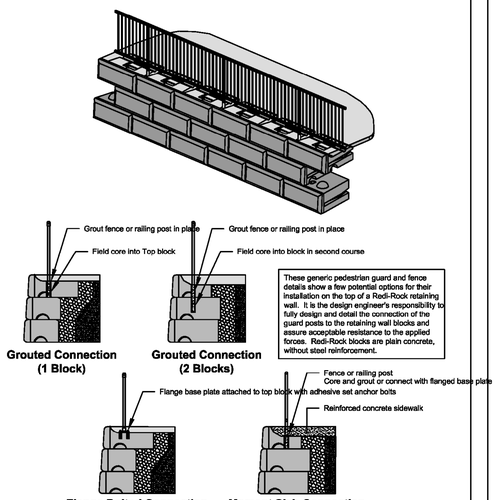
Fence or Pedestrian Guard Connection Locations



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

DRAWN BY:	JRJ
APPROVED BY:	JRJ
DATE:	06-22-2015
SHEET:	1 of 1
TITLE:	Fence or Pedestrian Guard Connection Locations
FILE:	6 Fence or Pedestrian Guard Connection Locations 062215.dwg

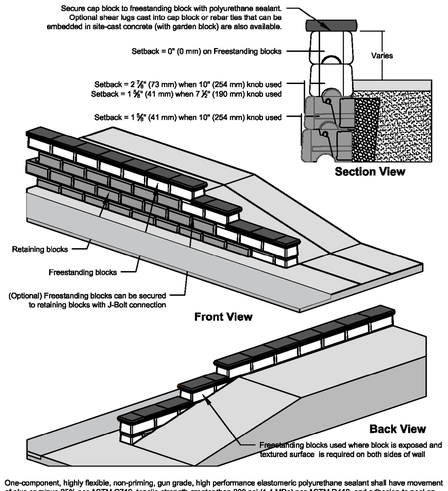
Fence or Pedestrian Guard Connection Options



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

DRAWN BY:	JRJ
APPROVED BY:	JRJ
DATE:	06-22-2015
SHEET:	1 of 1
TITLE:	Fence or Pedestrian Guard Connection Options
FILE:	5 Fence or Pedestrian Guard Connection Options 062215.dwg

Freestanding Blocks with Cap at Top of Wall



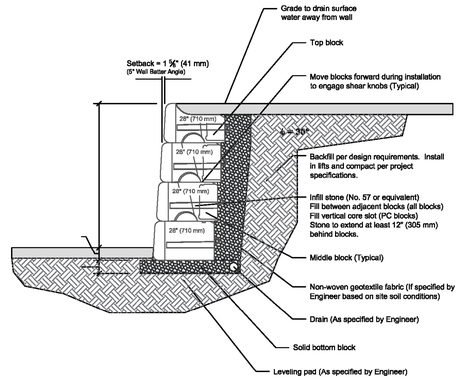
One-component, highly flexible, non-priming, gun grade, high performance elastomeric polyurethane sealant shall have movement of plus or minus 25% per ASTM C719, tensile strength greater than 200 psi (1.4 MPa) per ASTM D412, and adhesion to peel on concrete greater than 20 PLI per ASTM C794. Apply sealant in one and one half-inch (1.5") (38 mm) diameter round "hersey kiss" shaped dollops located in two rows at the top of the Freestanding blocks at 8" (203 mm) on center.

This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

DRAWN BY:	JRJ
APPROVED BY:	JRJ
DATE:	06-22-2015
SHEET:	1 of 1
TITLE:	Freestanding Blocks with Cap at Top of Wall
FILE:	3 Freestanding Blocks with Cap at Top of Wall 062215.dwg

ϕ = 30°	FINE TO MEDIUM SAND (SILTY SAND)
LOAD CONDITION A	NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

4 BLOCK HIGH SECTION
(4) 28" (710 mm) Blocks



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site. Final wall design must address both internal and external drainage and all modes of wall stability.

DRAWN BY:	C. Kruger
APPROVED BY:	J. Johnson
DATE:	June 8, 2015
SHEET:	1 of 1
TITLE:	**Preliminary Wall Section** Fine to Medium Sand or Silty Sand, ϕ = 30° No Live Load Surcharge, No Back Slope, No Toe Slope
FILE:	A_30_B_28_72_csd.dwg

CONTRACTOR TO COORDINATE WITH OWNER FOR FENCE STYLE

GENERAL NOTES

1. SEGMENTAL CONCRETE UNIT RETAINING WALL SHALL BE PROVIDED BY redi-rock ? OR SHEA WALL SYSTEMS OR APPROVED EQUAL.
2. RETAINING WALL DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S STANDARDS.
3. STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
4. BENCH CUT ALL EXCAVATED SLOPES.
5. DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE SOIL ENGINEER TO REMOVE UNSUITABLE SOIL.
6. SITE SOILS ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
7. LEVELING PAD SHALL CONSIST OF COMPACTED COARSE SAND OR CRUSHED GRAVEL, 6" THICK MIN. AS STIPULATED BY THE MANUFACTURER.
8. CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD. CONCRETE PAD SHALL BE UNREINFORCED, 3" THICK MAXIMUM.
9. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE 6" FOR WALL HEIGHTS UNDER 4 FT. AND 12" FOR WALLS OVER 4 FT. UNLESS SHOWN DIFFERENTLY.
10. FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
11. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
12. COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.(ASTM D-698)
13. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF 3 TESTS PER WALL AND/OR AS DETERMINED BY THE SITE SOILS ENGINEER.
14. COMPACTION WITHIN 3 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
15. IF REQUIRED SEE ELEVATION DRAWINGS FOR GEOSYNTHETIC TYPE, LENGTH AND LOCATION.
16. IF REQUIRED GEOSYNTHETIC SHALL BE PLACED WITH STRONGEST DIRECTION PERPENDICULAR TO WALL. FOLLOW GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
17. CONTRACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
18. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
19. FOLLOW APPLICABLE PROVISIONS AS DICTATED BY THE MANUFACTURER.

1.4 REQUIREMENTS FOR CONTRACTOR PREPARED DESIGN AND PLANS

A. THE FINAL DESIGN TO BE SUBMITTED PRIOR TO AWARD OF CONTRACT AND SHALL INCLUDE DETAILED DESIGN COMPUTATIONS AND ALL DETAILS, DIMENSIONS, QUANTITIES AND CROSS SECTIONS NECESSARY TO CONSTRUCT THE WALL. THE DESIGN SHALL CONFORM TO ALL OF THE REQUIREMENTS OUTLINED IN SECTION 1.3 ABOVE. THE FULLY DETAILED PLANS SHALL BE ON PERMANENT, ARCHIVAL QUALITY, 24" X 36" DOUBLE MATTE MYLAR WITH PROJECT NAME, NUMBER AND DESIGN FIRM. THE PLANS TO BE SUBMITTED SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

1. A PLAN AND ELEVATION SHEET OR SHEETS FOR EACH WALL, CONTAINING THE FOLLOWING:
   A. AN ELEVATION VIEW OF THE WALL WHICH SHALL INDICATE THE ELEVATION AT THE TOP OF THE WALL, AT ALL HORIZONTAL AND VERTICAL BREAK POINTS AND AT LEAST EVERY FIFTY (50) FEET ALONG THE WALL. ELEVATIONS AT THE TOP OF LEVELING PADS. THE DESIGNATION AS TO THE TYPE OF UNIT, AND THE LOCATION OF THE ORIGINAL AND FINAL GROUND LINE.
   B. A PLAN VIEW OF THE WALL WHICH SHALL INDICATE THE OFFSET FROM THE CONSTRUCTION CENTERLINE OR BASELINE TO THE FACE OF THE WALL AT ALL CHANGES IN HORIZONTAL ALIGNMENT AND THE LIMIT OF THE WIDEST UNIT.
   C. ANY GENERAL NOTES REQUIRED FOR DESIGN AND CONSTRUCTION OF THE WALL.
   D. ALL HORIZONTAL AND VERTICAL CURVE DATA AFFECTING WALL CONSTRUCTION.
2. ALL DETAILS FOR LEVELING PADS, AS WELL AS ALLOWABLE AND CALCULATED MAXIMUM BEARING PRESSURES.
3. DETAILED DESIGN COMPUTATIONS.
4. THE PLANS SHALL BE PREPARED, STAMPED AND SIGNED BY A NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.
5. FENCE HEIGHT TO BE 42".
6. FENCE SHALL BE DESIGNED FOR APPROPRIATE CRASH RATING BY A NEW NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.

RETAINING WALL SYSTEM

PART 1.0 – GENERAL

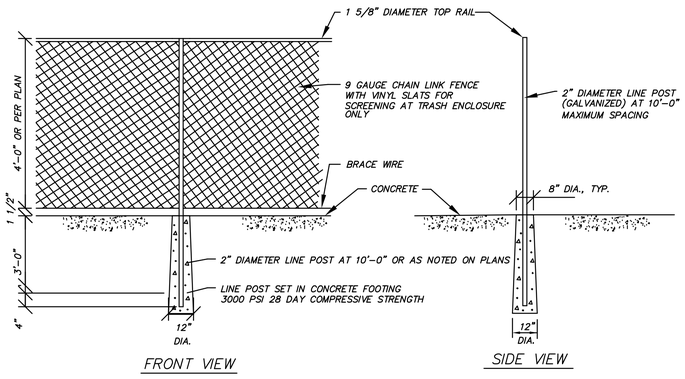
1.1 THIS WORK SHALL CONSIST OF FURNISHING ALL COMPONENTS AND ERECTING A RETAINING WALL SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN AND DIMENSIONS SHOWN ON THE PLANS OR AS ORDERED.

1.2 THIS FOLLOWING TYPE OF RETAINING WALL SYSTEMS ARE ACCEPTABLE TO BE USED ON THIS PROJECT:

REDI-ROCK	(603) 428-3218
SHEA WALL SYSTEMS	(800) 696-7432

1.3 STRUCTURAL AND GEOTECHNICAL DESIGN REQUIREMENTS

A. THE DESIGN OF THE WALL SYSTEM SHALL BE BY THE MANUFACTURER.
B. MINIMUM SAFETY FACTORS SHALL BE AS FOLLOWS:
   1. OVERTURNING: 2.0
   2. BASE SLIDING: 1.5
   3. GLOBAL STABILITY: 1.3
   4. GRID PULLOUT:
C. ALLOWABLE NET BEARING PRESSURE = 6 KIPS PER SQUARE FOOT MOIST SOIL UNIT WEIGHT = 125 POUNDS PER CUBIC FOOT FRICTION ANGLE = 32 DEGREES
D. DESIGN LOADING SHALL CONSIDER SEISMIC LOADS IN ACCORDANCE WITH THE NEW HAMPSHIRE STATE BUILDING CODE.



CHAIN LINK FENCE DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: XX
DRAWN BY: XX
SCALE: XX
DATE: XXX
APPROVED BY:XX
PROJECT NO:XX
FILE: XXX

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

20

Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
	1	S3	Single	MRS-LED-06L-SIL-3-UNV-DIM-30-70CRI-CXX / 4SQ B3 S11G20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	2	S3-HS	Single	MRS-LED-06L-SIL-3-UNV-DIM-30-70CRI-IL-CXX / 4SQ B3 S11G20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	3	S4-HS	Single	MRS-LED-06L-SIL-4-UNV-DIM-30-70CRI-IH-CXX / 4SQ B3 S11G20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	3	S5-2	Back-Back	MRS-LED-06L-SIL-5W-UNV-DIM-30-70CRI-CXX / 4SQ B3 S11G20 SD180 GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	8	W	Single	EOF1MV3KBZ / WALL MTD 12' AFG	NICOR, Inc.
	2	W3	Single	XWM-3-LED-06L-30-UE-CXX / WALL MTD 18' AFG	LSI INDUSTRIES, INC.
	4	W4	Single	XWM-4-LED-06L-30-UE-CXX / WALL MTD 18' AFG	LSI INDUSTRIES, INC.

50' WETLAND BUFFER

PROPOSED 24,856 S.F. BUILDING

PROPOSED 10,000 S.F. BUILDING

50' WETLAND BUFFER

QUALITY WAY

PARCEL AREA
375,192 S.F.
8.61 Ac.

PARKING LOT AT 25K SF BLDG

Illuminance (Fc)
Average = 1.39
Maximum = 2.8
Minimum = 0.5
Avg/Min Ratio = 2.78
Max/Min Ratio = 5.60

TRUCK YARD-DOCK AREA 25K BLDG

Illuminance (Fc)
Average = 0.87
Maximum = 2.4
Minimum = 0.3
Avg/Min Ratio = 2.90
Max/Min Ratio = 8.00

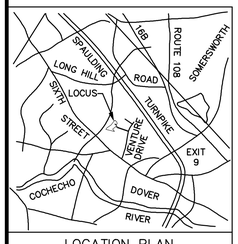
PARKING LOT AT 10K SF BLDG

Illuminance (Fc)
Average = 1.18
Maximum = 2.3
Minimum = 0.4
Avg/Min Ratio = 2.95
Max/Min Ratio = 5.75

TRUCK YARD-DOCK AREA 10K BLDG_1

Illuminance (Fc)
Average = 0.98
Maximum = 2.3
Minimum = 0.4
Avg/Min Ratio = 2.45
Max/Min Ratio = 5.75

NH STATE PLANE NAD 83 _ CRD DBS.



LOCATION PLAN
(NO SCALE)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

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CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: JFG
DRAWN BY: SRD
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG
DATE: 1-18-24
SCALE: 1"=40'

PLANNING FILE NO. :SITE-2024-0002

LIGHTING PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

21

Catalog # _____ Project: _____
Prepared By: _____ Date: _____

Mirada Small Area (MRS)

Outdoor LED Area Light

IP66 IK08

OVERVIEW	
Lumen Package	6,000 - 30,000
Wattage Range	39 - 209
Efficacy Range (LPW)	112 - 163
Weight lbs(kg)	20 (9.1)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 27 lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types 2, 3, 4, 5W, FT, and LC/RC.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377.
- Minimum CRI of 70.
- Integral louver (IL) and integral half louver (IH) options available for enhanced backlight control.

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F). 30L lumen packages rated to +40°C.
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation

- Designed to mount to square or round poles.
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga. wire.
- Utilizes LSI's traditional B3 drill pattern.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.
- IK08 rated luminiare per IEC 66262 mechanical impact code
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Catalog # _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Mirada Medium Wall Sconce (XWM)

Outdoor Wall Sconce

IP65 IK08

OVERVIEW	
Lumen Package	3,000 - 21,000
Wattage Range	23 - 175
Efficacy Range (LPW)	125 - 158
Weight lbs(kg)	27 (12.2)
Control Options	IMSBT, ALB, ALS, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Hinged die-cast aluminum wiring access door located underneath.
- Galvanized-steel universal wall mount bracket comes standard with hinging mechanism to easily access the junction box wire connections without removing the luminaire.
- Optional pole-mounting bracket (XPMA) permits mounting to standard poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Max shipping weight: 30lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 70.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours
- Total harmonic distortion (THD): <20%
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F).
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to + 95°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule.

Installation

- Universal wall mounting plate easily mounts directly to 4" octagonal or square junction box.
- 2 fasteners secure the hinged door underneath the housing and provide quick & easy access to the electrical compartment for installing/servicing.
- Optional terminal block accepts up to 12 ga wire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.
- 1 Year warranty on Battery Back-up option.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K or lower color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet Locations.
- IP65 rated luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications when pole mounted (using optional XPMA bracket) or wall mounted.
- IK08 rated luminiare per IEC 66262 mechanical impact code
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Catalog # _____ Project: _____
Prepared By: _____ Date: _____

Steel Poles

Square Straight

QUICK LINKS

Ordering Guide | Configurations | Dimensions | EPA

FEATURES & SPECIFICATIONS

Pole Shaft

- Straight poles are 4", 5", or 6" square.
- Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 50,000 psi.
- On Tenon Mount steel poles, tenon is 2-3/8" O.D. high-strength pipe. Tenon is 4-3/4" in length.

Hand-Hole

- Standard hand-hole location is 12" above pole base.
- Poles 22' and above have a 3" x 6" reinforced hand-hole. Shorter poles have a 2" x 4" non-reinforced hand-hole.

Base

- Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi.
- Two-piece square base cover is optional.

Anchor Bolts

- Poles are furnished with anchor bolts featuring zinc-plated double nuts and washers. Galvanized anchor bolts are optional.
- Anchor Bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 PSI.

Ground Lug

- Ground lug is standard.

Duplex Receptacle

- Weatherproof duplex receptacle is optional.

Ground Fault Circuit Interrupter

- Self-testing Ground fault circuit interrupter is optional.

Finishes

- Every pole is provided with the DuraGrip Protection System and a 5-year limited warranty.
- When the top-of-the line DuraGrip Plus Protection System is selected, in addition to the DuraGrip Protection System, a non-porous, automotive-grade corrosion coating is applied to the lower portion of the pole interior sealing and further protecting it from corrosion. This option extends the limited warranty to 7 years.

Determining The Luminaire/Pole Combination For Your Application:

- Select luminaire from luminaire ordering information.
- Select bracket configuration if required
- Determine EPA value from luminaire/bracket EPA chart
- Select Pole Height
- Select MPH to match wind speed in the application area (See windspeed maps).
- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA
- Consult factory for special wind load requirements and banner brackets.

Pole Vibration Damper

- A pole vibration damper is recommended in open terrain areas of the country where low steady state winds are common.
- Non-tapered poles and lightly loaded poles are more susceptible to destructive vibration if a damper is not installed.

Listings

- UL Listed
- BAA/TAA Compliant

EOF

LED Emergency Outdoor Full Cutoff

Project _____
Catalog _____
Type _____
Date _____

Product Description

The LED Emergency Outdoor Full Cutoff combines 90-minute emergency lighting with a low-profile, architectural design. The EOF is designed for outdoor use, with an optional cold-weather kit for added reliability in northern climates. The EOF comes standard with a photocell, with an optional motion sensor adding even more energy efficiency. An internal selector switch allows bypassing the photocell to control the unit from a wall switch. A non-emergency unit is available for locations not requiring battery-backup, providing a uniform look for all fixtures.

Construction
- IP65 Rated enclosure
- Durable die-cast Aluminum body
- Separable backplate for easy installation and maintenance

Optical System
- Polycarbonate lens
- Utilizes advanced LED technology with CCT of 3000K and 5000K
- CRI 70+

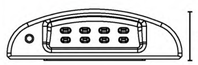
Electrical
- Input voltage of 120/277VAC
- Maintenance-free NiCad battery provides 90-minute emergency operation
- LED Indicator light & test button with self-testing, self-diagnostic option
- Photocell standard with wall switch control
- Motion sensor option for additional energy saving
- Operating Temperature:
  - EM: 32°F to 122°F (0°C to +50°C)
  - Non-EM and EM Cold Weather: -13°F to +122°F (-25°C to +50°C)

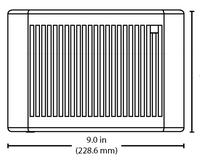
Mounting and installation
- Fixture mounts directly to J-Boxes and walls with screws
- Wiring possible through backplate or 1/2" conduit knockout
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel

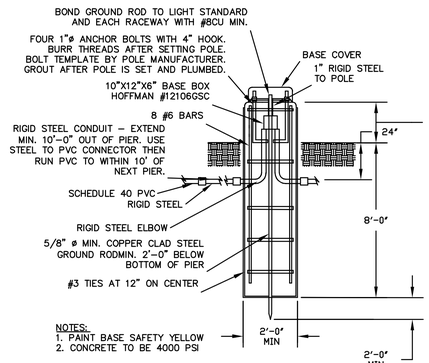
Finish
- Fine-textured, UV-stabilized powder coat bronze finish

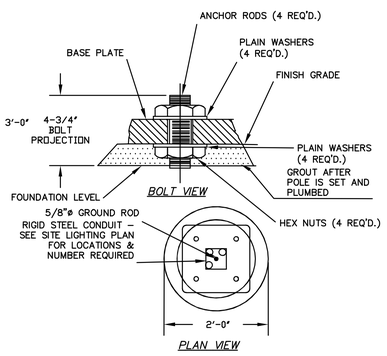
Listings
- LM-79, LM-80 testing performed in accordance with IESNA standards.
- UL & cUL 924 Listed
- Meets or exceeds requirements of NFPA 70 & NFPA 101
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions
- TM-21 Projected L70(9k) life >72,000 hours

Warranty
- 1-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge.)









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CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	REV PER TRC COMMENTS #1	SJH	2-29-24
2	REV PER TRC COMMENTS #2	SJH	4-1-24

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

LIHGTING DETAILS

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

22

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DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO: SITE-2024-0002

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

PROPOSED 24,856 S.F. BUILDING

PROPOSED 10,000 S.F. BUILDING

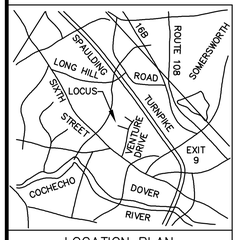
50' WETLAND BUFFER

QUALITY WAY

45.50
8.50 20.00

Dover ladder feet

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 44.0



LOCATION PLAN
(NO SCALE)

NH STATE PLANE MAD 83 CORS DBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

DOVER LADDER TRUCK MOVEMENT PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

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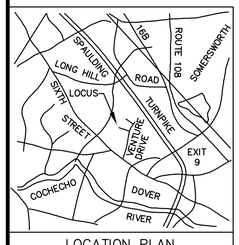


LOCATION PLAN
(NO SCALE)

NH STATE PLANE
NAD 83 CRS DBS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

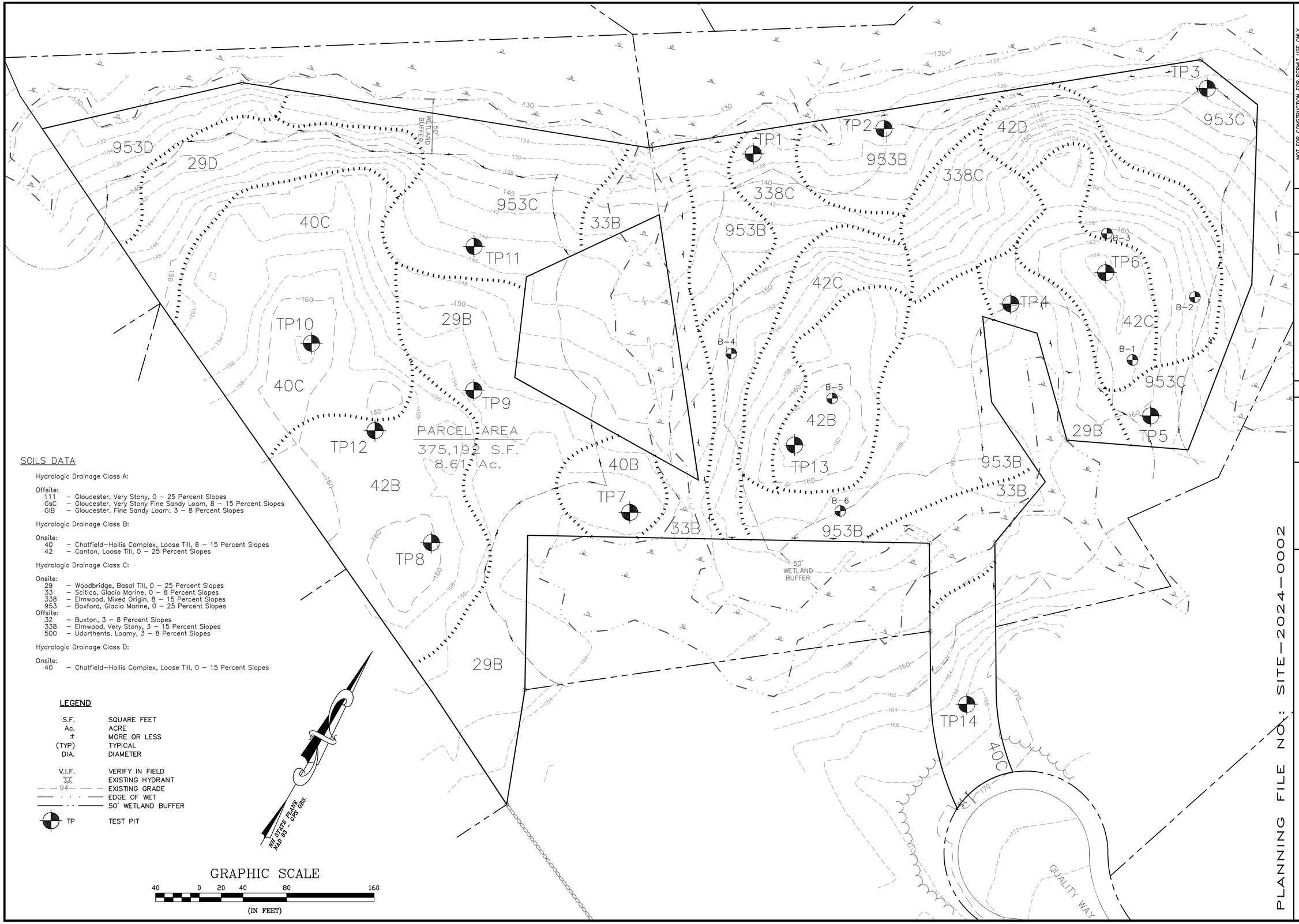
PLANNING FILE NO: SITE-2024-0002

DOVER LADDER TRUCK MOVEMENT PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

24



SOILS DATA

Hydrologic Drainage Class A:

Offsite:
111 – Gloucester, Very Stony, 0 – 25 Percent Slopes
GsC – Gloucester, Very Stony Fine Sandy Loam, 8 – 15 Percent Slopes
GlB – Gloucester, Fine Sandy Loam, 3 – 8 Percent Slopes

Hydrologic Drainage Class B:

Onsite:
40 – Chatfield–Hollis Complex, Loose Till, 8 – 15 Percent Slopes
42 – Canton, Loose Till, 0 – 25 Percent Slopes

Hydrologic Drainage Class C:

Onsite:
29 – Woodbridge, Basal Till, 0 – 25 Percent Slopes
33 – Scitico, Glacio Marine, 0 – 8 Percent Slopes
338 – Elmwood, Mixed Origin, 8 – 15 Percent Slopes
953 – Boxford, Glacio Marine, 0 – 25 Percent Slopes
Offsite:
32 – Buxton, 3 – 8 Percent Slopes
338 – Elmwood, Very Stony, 3 – 15 Percent Slopes
500 – Udorthents, Loamy, 3 – 8 Percent Slopes

Hydrologic Drainage Class D:

Onsite:
40 – Chatfield–Hollis Complex, Loose Till, 0 – 15 Percent Slopes

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
V.I.F.	VERIFY IN FIELD
	EXISTING HYDRANT
94	EXISTING GRADE
	EDGE OF WET
	50' WETLAND BUFFER
TP	TEST PIT

NH STATE PLANE NAD 83 GPS OBS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

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CIVIL & WATERSHED ENGINEERING
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SITE SPECIFIC SOILS PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

25

Michael Cuomo, Soil Scientist
6 York Pond Road, York, Maine 03909
207 363 4532
mcuomosoil@gmail.com

TEST PIT DATA

Client: Civilworks
Location: Quality Way, Dover, NH
Date: 1 December 2022

Test Pit Number: One

Depth	Description
1"	Leaf litter.
0-8"	Very dark grayish brown (10YR 3/2) stony fine sandy loam, granular, friable.
8-15"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
15-24"	Light olive brown (2.5Y 5/3) silt loam, blocky, friable, redox.
24-36"	Olive gray (5Y 5/2) silt loam, blocky, firm, redox.
36-63"	Olive brown (2.5Y 4/4) stony fine sandy loam, blocky, firm, redox.
63"+	Bedrock.

Soil Series: Elmwood
Depth to Seasonal High Water Table: 15"
Depth to Restrictive Layer: 24"
Observed Water: 60"
Depth to Bedrock: 63"

Test Pit Number: Two

Depth	Description
2"	Leaf litter.
0-4"	Dark grayish brown (2.5Y 4/2) silt loam, granular, friable, redox.
4-10"	Light brownish gray (2.5Y 6/2) silt loam, blocky, friable, redox.
10-20"	Olive brown (2.5Y 4/4) silt loam, blocky, friable, redox.
20-30"	Gray (5Y 5/1) silt loam, blocky, firm, redox.
30-72"	Olive gray (5Y 4/2) silty clay loam, blocky, firm, redox.

Soil Series: Scitico
Depth to Seasonal High Water Table: Surface
Depth to Restrictive Layer: 20"
Observed Water: 6"
Depth to Bedrock: None

Test Pit Number: Three

Depth	Description
1"	Leaf litter.
0-8"	Dark brown (10YR 3/3) silt loam, granular, friable.
8-12"	Olive yellow (2.5Y 6/6) silt loam, blocky, friable.
12-16"	Dark grayish brown (2.5Y 4/2) silt loam, blocky, friable, redox.
16-28"	Olive brown (2.5Y 4/4) silt loam, blocky, firm, redox.
28-72"	Olive (5Y 5/3) silty clay loam, blocky, firm, redox.

Soil Series: Boxford
Depth to Seasonal High Water Table: 12"
Depth to Restrictive Layer: 16"
Observed Water: 12"
Depth to Bedrock: None

Test Pit Number: Four

Depth	Description
1"	Leaf litter.
0-6"	Dark brown (10YR 3/3) very fine sandy loam, granular, friable.
6-15"	Dark yellowish brown (10YR 4/6) very fine sandy loam, blocky, friable.
15-28"	Olive brown (2.5Y 4/4) silt loam, blocky, friable, redox.
28-80"	Light olive brown (2.5Y 5/4) stony fine sandy loam, blocky, firm, redox.
80-96"	Light yellowish brown (2.5Y 6/4) fine sand, massive, friable, redox.

Soil Series: Woodbridge variant
Depth to Seasonal High Water Table: 15"
Depth to Restrictive Layer: 28"
Observed Water: 15"
Depth to Bedrock: None

Test Pit Number: Five

Depth	Description
1"	Leaf litter.
0-8"	Very dark gray (2.5Y 3/1) silt loam, granular, friable.
8-10"	Light olive brown (2.5Y 5/3) silt loam, blocky, friable.
10-15"	Olive (5Y 5/3) silt loam, blocky, friable, redox.
15-38"	Olive (5Y 5/3) silt loam, blocky, firm, redox.
38-60"	Olive brown (2.5Y 4/3) stony fine sandy loam, blocky, firm, redox.
60-84"	Olive gray (5Y 5/2) silt loam, blocky, firm, redox.

Soil Series: Boxford variant
Depth to Seasonal High Water Table: 10"
Depth to Restrictive Layer: 15"
Observed Water: 15"
Depth to Bedrock: None

Test Pit Number: Six

Depth	Description
1"	Leaf litter.
0-6"	Very dark grayish brown (10YR 3/2) fine sandy loam, granular, friable.
6-24"	Yellowish brown (10YR 5/6) stony fine sandy loam, blocky, friable.
24-60"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.
60"+	Bedrock

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 60"

Test Pit Number: Seven

Depth	Description
2"	Leaf litter.
0-6"	Very dark brown (10YR 2/2) stony fine sandy loam, granular, friable.
6-12"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
12"+	Bedrock.

Soil Series: Hollis
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 12"

Test Pit Number: Eight

Depth	Description
2"	Leaf litter.
0-6"	Dark brown (10YR 3/3) stony fine sandy loam, granular, friable.
6-12"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
12-33"	Brownish yellow (10YR 6/6) stony fine sandy loam, blocky, friable.
33-60"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: None

Test Pit Number: Nine

Depth	Description
3"	Leaf litter.
0-7"	Dark brown (10YR 3/3) stony fine sandy loam, granular, friable.
7-20"	Yellowish brown (10YR 5/6) stony fine sandy loam, blocky, friable.
20-25"	Light olive brown (2.5Y 5/4) stony fine sandy loam, blocky, friable, redox.
25-57"	Olive brown (2.5Y 4/4) stony fine sandy loam, massive, firm, redox.
57"+	Bedrock

Soil Series: Woodbridge
Depth to Seasonal High Water Table: 20"
Depth to Restrictive Layer: 25"
Observed Water: None
Depth to Bedrock: 57"

Test Pit Number: Ten

Depth	Description
2"	Leaf litter.
0-7"	Dark yellowish brown (10YR 3/6) fine sandy loam, granular, friable.
7-12"	Dark yellowish brown (10YR 4/6) fine sandy loam, blocky, friable.
12"+	Bedrock.

Soil Series: Hollis
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 12"

Test Pit Number: Eleven

Depth	Description
1"	Leaf litter.
0-6"	Very dark grayish brown (2.5Y 3/2) silt loam, granular, friable.
6-12"	Olive brown (2.5Y 4/4) silt loam, blocky, friable.
12-22"	Light olive brown (2.5Y 5/4) silt loam, blocky, friable, redox.
22-32"	Olive gray (5Y 4/2) silt loam, blocky, firm, redox.
32-63"	Olive brown (2.5Y 4/4) stony fine sandy loam, blocky, firm, redox.

Soil Series: Boxford variant
Depth to Seasonal High Water Table: 12"
Depth to Restrictive Layer: 22"
Observed Water: 15"
Depth to Bedrock: None

Test Pit Number: Twelve

Depth	Description
3"	Leaf litter.
0-7"	Dark brown (10YR 3/3) stony fine sandy loam, granular, friable.
7-17"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
17-30"	Brownish yellow (10YR 6/6) stony fine sandy loam, blocky, friable.
30-48"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.
48"+	Bedrock

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 48"

Test Pit Number: Thirteen

Depth	Description
2"	Leaf litter.
0-6"	Very dark grayish brown (10YR 3/2) fine sandy loam, granular, friable.
6-16"	Dark yellowish brown (10YR 4/6) fine sandy loam, blocky, friable.
16-26"	Brownish yellow (10YR 6/6) fine sandy loam, blocky, friable.
26-64"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: None

Test Pit Number: Fourteen

Depth	Description
3"	Leaf litter.
0-5"	Dark brown (10YR 3/3) fine sandy loam, granular, friable.
5-16"	Dark yellowish brown (10YR 4/6) fine sandy loam, blocky, friable.
16-23"	Yellowish brown (10YR 5/6) fine sandy loam, blocky, friable.
23"+	Bedrock.

Soil Series: Chatfield
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 23"

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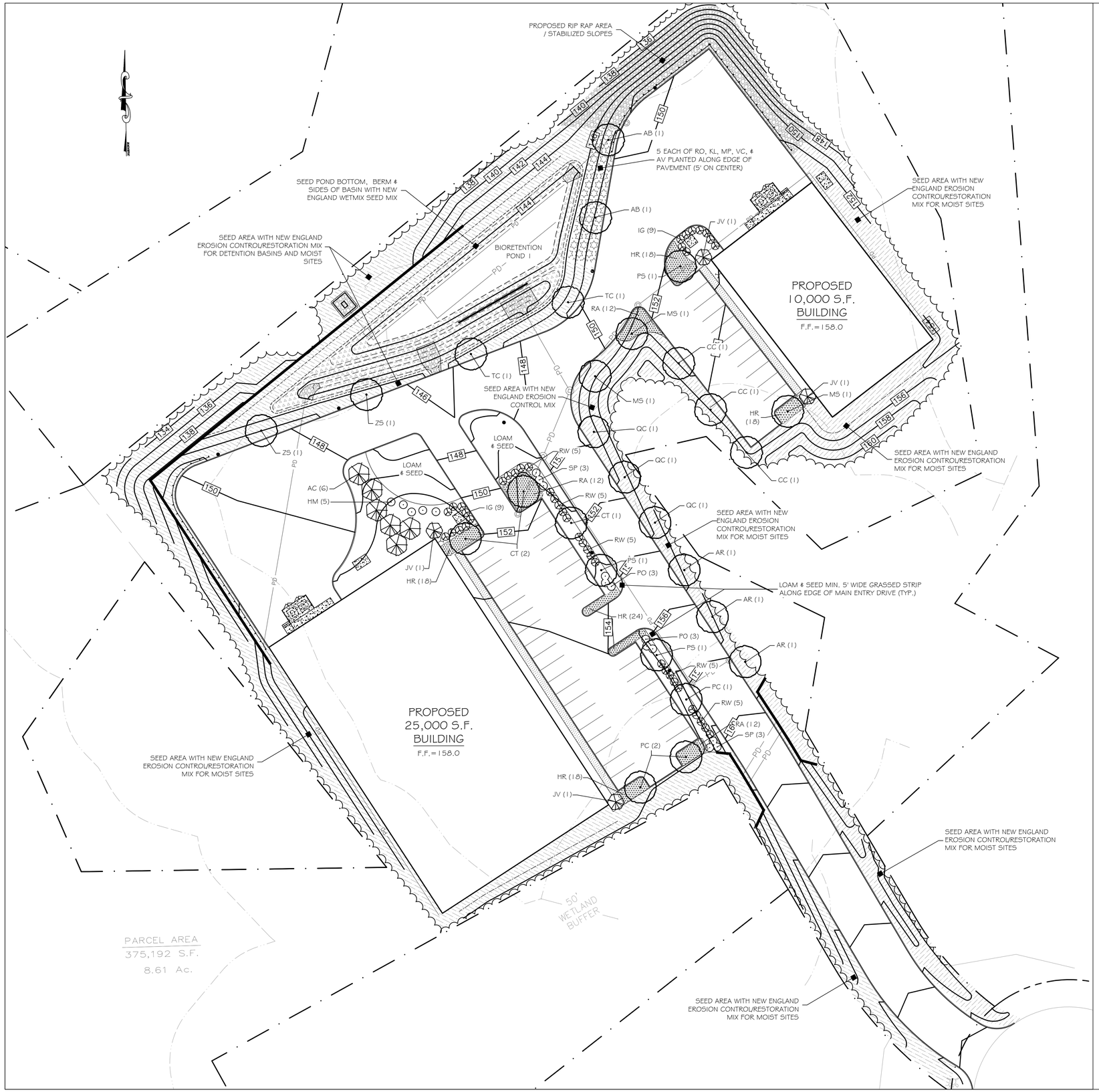
TEST PIT LOGS

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820



PLANTING SCHEDULE

Botanical Name/ Common Name	Size*	Label	Quantity
TREES			
Abies concolor / White Fir	6-7' B&B	AC	6
Acer rubrum 'Bowhall' / Bowhall Red Maple	2.5-3" Cal	AB	2
Acer rubrum 'October Glory' / October Glory Red Maple	2.5-3" CAL.	AR	3
Carpinus betulus 'Frans Fontaine' / Frans Fontaine European Hornbeam	2.5-3" CAL.	CC	3
Crataegus crusgalli inermis 'Crusader' / Crusader Thornless Hawthorne	2.5-3" CAL.	CT	3
Juniperus virginiana 'Hillspire' / Hillspire Eastern Red Cedar	5-6' B&B	JV	4
Malus 'Spring Snow' / Spring Snow Crabapple	2.5-3" CAL.	MS	3
Prunus serrulata 'Kwanzan' / Kwanzan Flowering Cherry	2.5-3" CAL.	PS	3
Pyrus calleryanna 'Aristocrat' / Aristocrat Flowering Pear	2.5-3" CAL.	PC	3
Quercus coccinea / Scartlet Oak	2.5-3" CAL.	QC	3
Tilia cordata 'Greenspire' / Greenspire Littleleaf Linden	2.5-3" CAL.	TC	2
Zelkova serrata 'Village Green' / Village Green Zelkova	2.5-3" Cal	ZS	2
SHRUBS			
Hydrangea macrophylla 'Endless Summer' / Endless Summer Bigleaf Hydrangea	2-2.5'	HM	5
Ilex glabra 'Compacta' / Compact Inkberry Holly	2-2.5'	IG	18
Physocarpus opulifolius 'Little Devil' / Little Devil Ninebark	2-2.5'	PO	6
Rhododendron 'Wilsoni' / Wilson Rhododendron	2-2.5'	RW	25
Syringa x hyacinthiflora 'Pocahontas' / Pocahontas Lilac	2-2.5'	SP	6
PERENNIALS			
Hemerocallis 'Happy Returns'/ Happy Returns Daylily	#1	HR	96
GROUNDCOVER			
Rhus aromatica 'Grow Low' / Grow Low Sumac	18-24"	RA	36
BIORETENTION POND #1			
Cornus sericea / Red-Osier Dogwood	#1	RO	5
Kalmia latifolia / Mountain Laurel	#1	KL	5
Myrica pensylvanica / Northern Bayberry	#1	MP	5
Vaccinium corymbosum / Highbush Blueberry	#1	VC	5
Viburnum dentatum / Arrowwood Viburnum	#1	AV	5
SEED MIX			
Grass Seed Mix			3,000 S.F.
New England Wetmix			10,000 S.F.
New England Erosion Control / Restoration Mix for Detention Basins & Moist Sites			35,000 S.F.

* TREES WITH A 2-2.5" CALIPER GENERALLY ESTABLISH THEMSELVES MORE QUICKLY AND BEGIN TO PRODUCE NEW GROWTH SOONER AND WITH LESS MAINTENANCE THAN THOSE OF THE REQUIRED 3.5-4" CALIPER.

PLANTING NOTES

1. CONTRACTOR SHALL OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO PURCHASING AND/OR INSTALLING SUBSTITUTE PLANT MATERIAL PRIOR TO PURCHASE OF ANY SUBSTITUTE MATERIALS.
2. CONSTRUCTION ACCESS WILL BE AS DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ACCESS ROUTE AND ALL AREAS DISTURBED BY PLANTING OPERATIONS UPON COMPLETION OF CONSTRUCTION OPERATIONS, AT NO ADDITIONAL COST TO THE OWNER.
3. LAYOUT OF ALL PLANTING BEDS AND LOCATION OF PLANTS TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO CONSTRUCTION AND INSTALLATION.
4. CONTRACTOR TO REMOVE ALL DEBRIS GENERATED BY PLANT INSTALLATION. DEBRIS TO BE DISPOSED OF IN A LEGAL MANNER.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR TWO (2) YEARS FROM THE DATE OF FINAL INSTALLATION APPROVAL BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE, WITHOUT COST TO OWNER, AND AS SOON AS WEATHER CONDITIONS PERMIT, ALL DEAD AND NON-FLOURISHING PLANTS AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACEMENT PLANTS SHALL BE BE GUARANTEED IDENTICALLY TO ORIGINAL PLANTS, TIME PERIOD COMMENCING FROM DATE OF REPLACEMENT PLANTING APPROVAL BY LANDSCAPE ARCHITECT.
6. ALL BEDS TO BE MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.
7. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.
8. ALL LANDSCAPED AREAS SHALL RECEIVE REGULAR MAINTENANCE AND UPKEEP. SEVERELY INJURED, DISEASED, OR DEAD PLANT MATERIAL SHALL BE REPLACED IN KIND IN PERPETUITY (AVOID REPLACING LANDSCAPE MATERIALS IN THE PERIOD FROM NOVEMBER TO MARCH.)
9. BEST PRACTICES TO MINIMIZE ENVIRONMENTAL IMPACTS SUCH AS THE USE OF LOW PHOSPHOROUS FERTILIZER AND SLOW RELEASE NITROGEN, SHALL BE IMPLEMENTED.
10. IF OWNERSHIP OF A SITE IS CONVEYED TO A NEW PROPERTY OWNER, THE NEW OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING IN ACCORDANCE WITH THE APPROVED FINAL LANDSCAPING PLAN.

LANDSCAPE CALCULATIONS:

INTERIOR PARKING LOT LANDSCAPING:
5% MIN. INTERIOR LANDSCAPING REQUIRED FOR LOTS WITH BETWEEN 21-125 PARKING SPACES
47 PARKING SPACES PROPOSED - 37,000 SF PARKING LOT AREA X .05 = 1,850 SF INTERIOR LANDSCAPING REQUIRED
PROVIDED: 5,800 SF INTERIOR PARKING LOT LANDSCAPING

PERIMETER LANDSCAPING:
REQUIRED: 1 DECIDUOUS SHADE TREE / 35' OF PARKING LOT PERIMETER
533 L.F.OF PARKING LOT PERIMETER / 35 = 15.2 = 15 TREES REQUIRED
PROVIDED: 27 TREES PROPOSED

terrain
planning & design llc
311 kast hill road
hopkinton nh 03229
603. 491. 2322
terrainplanning.com

QUALITY WAY

Site Location:
Quality Way
Dover, NH 03820

Prepared For:
Civilworks New England
181 Watson Road
PO Box 1166
Dover, NH 03821

LANDSCAPE PLAN

DATE: 11 - 30 - 23

SCALE: 1"=30'

PROJECT #: 23090

Drawn By: ID

Checked By: RM

REVISIONS: DATE:
Issued for Review 11-30-23
Revised per City comments 02-29-24

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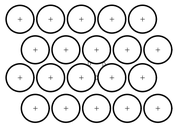
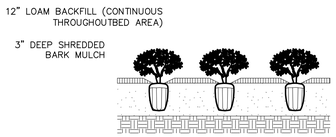
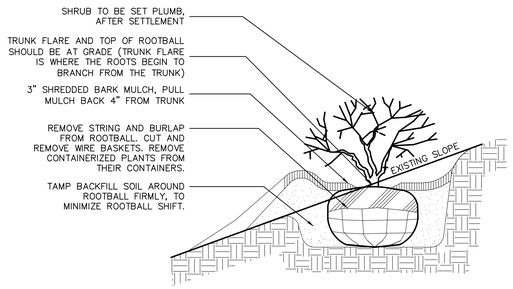


TYPICAL BED PLANT SPACING

NOTE:
D = DIMENSION OF PLANT SPACING (SHRUB OR GROUNDCOVER AS INDICATED ON PLANS)

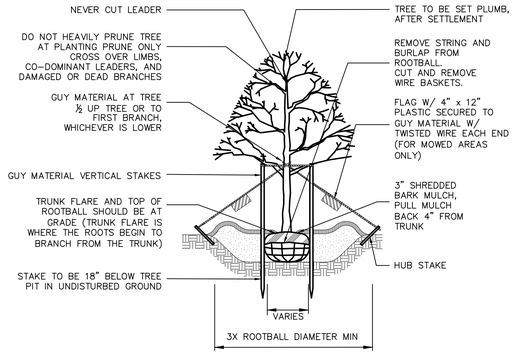


1 TYPICAL PERENNIAL PLANTING
NO SCALE



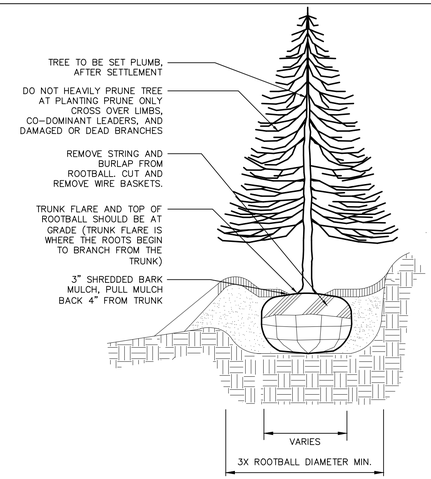
NOTE:
1. DO NOT HEAVILY PRUNE SHRUB AT PLANTING, PRUNE ONLY CROSSOVER LIMBS AND DAMAGED OR DEAD BRANCHES.
2. BACKFILL WITH LOAM, AMEND AS REQUIRED BY LANDSCAPE ARCHITECT.
3. SHRUBS & GROUNDCOVER PLANTED ADJACENT TO CITY SIDEWALKS NEED TO BE PLACED SO THE PLANTS, AT THEIR MATURE HEIGHT & WIDTH, WILL NOT ENCROACH INTO THE CITY'S SIDEWALK.

2 TYPICAL SHRUB PLANTING
NO SCALE



NOTES:
1. GUYING AND STAKING TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. LOCAL FIELD CONDITIONS AS WELL AS PLANT CHARACTERISTICS WILL DETERMINE THE NECESSITY OF GUYING AND STAKING.
2. TYPICALLY ONLY TREES WITH A 3" OR GREATER CALIPER NEED TO BE STAKED. TREES WITH LESS THAN A 3" CALIPER NEED TO BE STAKED ONLY AS REQUIRED BY LANDSCAPE ARCHITECT.
3. ONLY WRAP TREE TRUNKS AS REQUIRED BY LANDSCAPE ARCHITECT.
4. TREE SHALL BE SET PLUMB, AFTER SETTLEMENT.
5. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
6. CITY TREES PLANTED ON PRIVATE PROPERTY, ADJACENT TO A PUBLIC RIGHT-OF-WAY, NEED TO BE PLANTED A MINIMUM OF 5 FEET FROM THE EDGE OF THE CITY SIDEWALK.

3 DECIDIOUS TREE PLANTING
NO SCALE



NOTES:
1. DO NOT STAKE EVERGREEN TREES.
2. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
3. TAMP BACKFILL SOIL AROUND ROOTBALL FIRMLY TO MINIMIZE ROOTBALL SHIFT.

4 EVERGREEN TREE PLANTING
NO SCALE

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terrainplanning.com

QUALITY WAY

Site Location:
Quality Way
Dover, NH 03820

Prepared For:
Civilworks New England
181 Watson Road
PO Box 1166
Dover, NH 03821

LANDSCAPE DETAILS

DATE: 11 - 30 - 23

SCALE: AS NOTED

PROJECT #: 23090

Drawn By: ID

Checked By: RM

REVISIONS:	DATE:
Issued for Review	11-30-23
Revised per City comments	02-29-24

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CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2024-0002

Application Type:	Site Review
Applicant(s):	Future Automation, LLC
Owner(s):	Dover Business Industrial and Development Authority (DBIDA)
Location:	Quality Way (Assessor's Map D, Lot 11-8)
Meeting Date:	April 23, 2024

INTENT: Proposal is to construct a light manufacturing facility consisting of two buildings, 24,000 square feet and 10,000 square feet, each with office space, parking, and associated infrastructure. The project will create 39,820± square feet of wetland buffer impact and 1,631 square feet of wetland impact. One (1) Conditional Use Permit (CUP) is proposed as part of this project.

UNITS PROPOSED: N/A

AGENDA ITEM #: 4-D

ACREAGE: 8.61± ac.

ZONING DISTRICT: IT

EXISTING USE: Vacant

PROPOSED USE: Light Manufacturing

SURROUNDING USE: Light Manufacturing, Residential

ZBA ACTION: None

ATTACHMENTS: Application materials including site plan

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

PERMITS REQUIRED:

- City of Dover CUP for §170-27.1, Wetland Protection District
- NH DES Wetlands Permit and Alteration of Terrain

WAIVERS REQUESTED:

- §153-14G(3)(a)- Perimeter landscaping, to allow a minimum caliper of 2.5".
- §153-15C(2)- To allow parking in the front of the building.

CONSERVATION COMMISSION: 4/8/24

TRC: 2/15/24 and 3/21/24

Summary of Request and Background

The applicant is proposing to construct a light manufacturing facility consisting of two buildings, 24,000± square feet and 10,000± square feet, each with office space, parking, and associated infrastructure.

Both of the proposed buildings will consist of floor area for light manufacturing and office space with separate parking and loading areas but both buildings will be accessed by a shared driveway.

In total, the project will create 39,820± square feet of wetland buffer impact and the proposed access driveway for the facility will require a culverted wetland crossing which will create 1,631 square feet of wetland impact. One (1) Conditional Use Permit (CUP) is proposed as part of this project.

The parcel is currently owned by the Dover Business & Industrial Development Authority (DBIDA) and the applicant has met with DBIDA and received an endorsement to proceed with the project.

The Conservation Commission endorsed the application at their April 8, 2024 meeting. (minutes attached)

Summary of Waiver Requests:

The applicant is seeking two waivers as part of this proposal.

The applicant is seeking a waiver from §153-14G(3)(a), Perimeter Landscaping, to allow a minimum caliper of 2.5" for new trees where a minimum caliper of 3" is required.

The applicant is seeking a waiver from §153-15C(2), Parking areas and pedestrian circulation (specific to the IT District), to allow parking in the front of the buildings where it is required that a majority of parking spaces shall be located to the side or rear of the buildings.

Consistency with Land Use Regulations – Site Plan

§153-4 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.

Consistency with Land Use Regulations –Waivers/Relief

§153-21 of the Site Plan Review Regulations state the "Planning Board may waive specific provisions of these regulations. The Planning Board may only grant a waiver if the Planning Board finds, by majority vote, that:

(1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or
(2) Specific circumstances relative to the subdivision, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations."

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2024-0002

Application Type:	Site Review
Applicant(s):	Future Automation, LLC
Owner(s):	Dover Business Industrial and Development Authority (DBIDA)
Location:	Quality Way (Assessor's Map D, Lot 11-8)
Meeting Date:	April 23, 2024

Planning Staff believes the applicant's rational for the waivers meets criterion (1) and waiving such standards and requirements is not contrary to the spirit or intent of the ordinance.

STAFF RECOMMENDATION - Waivers/Relief:
The Planning Department recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to grant the waivers with the following subsequent condition:

Subsequent Condition to be Met Prior to the Signing of the Plans:

1. Add a note that the Planning Board approved waivers for §153-14G(3)(a) to allow a minimum caliper of 2.5" and §153-15C(2) to allow parking in the front of the building and that the Board found the criteria of Chapter 153-21 have been met.

STAFF RECOMMENDATION- Site Plan:
The Planning Department recommends that the Planning Board make the necessary and supporting findings of fact, and vote to approve the Site Plan with the following subsequent conditions:

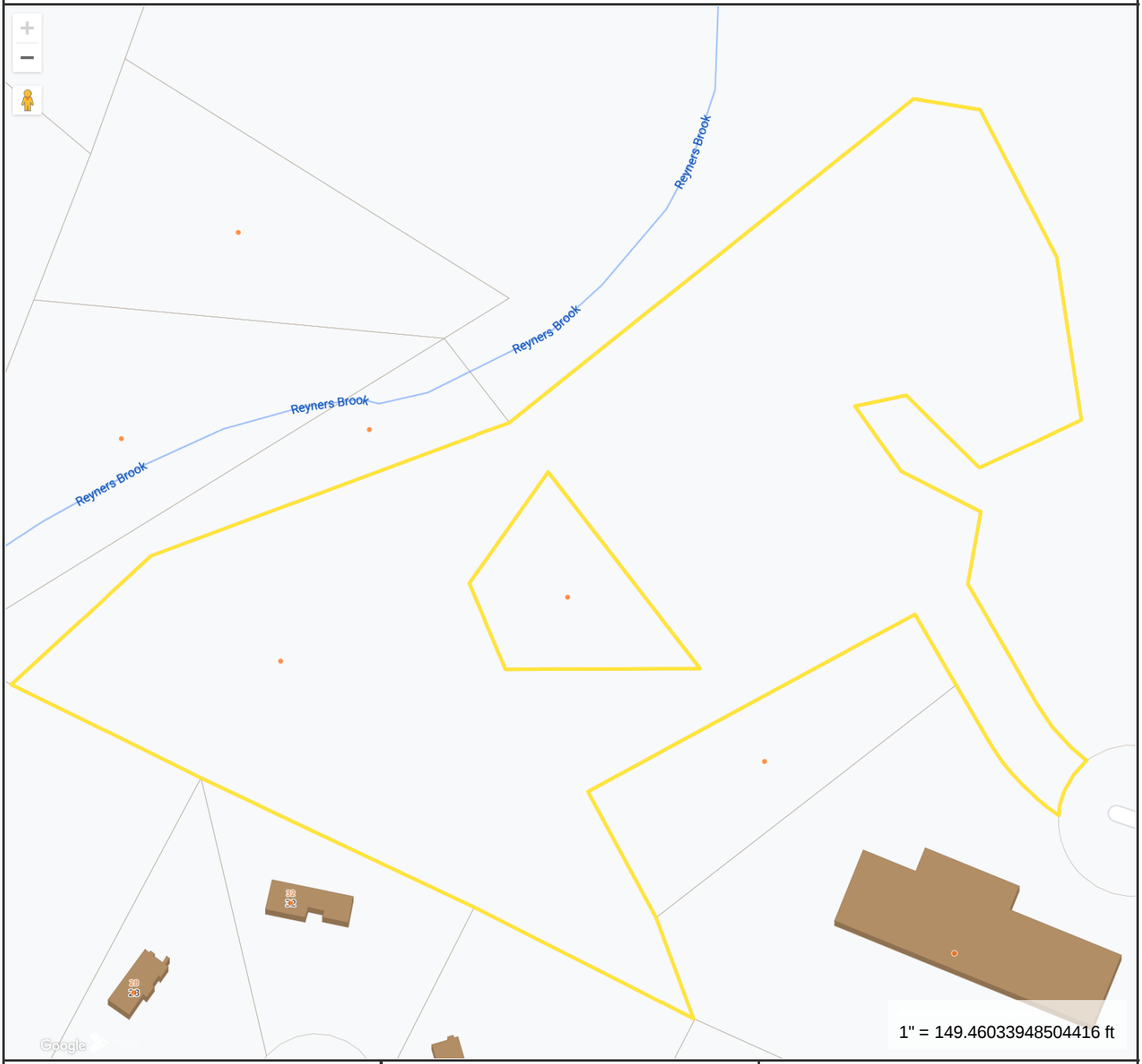
Subsequent Conditions to Be Met Prior to Signing of the Plans:
1. Approval of COND-2024-0005;
2. Copies of the NHDES Wetlands Permit and NHDES Alteration of Terrain Permit be submitted to the Planning Department and added to the plan set coversheet;
3. Include note indicating solar readiness of buildings;

Subsequent Condition to Be Met Prior to Construction:
4. A site construction sign with the contact information for the general contractor must be displayed in a location approved by the City Engineer or Planning Director;

Subsequent Conditions to Be Met Prior to Building Permit:
5. Payment of Water and Sewer Investment Fees if applicable at time or request of service.

Subsequent Conditions to Be Met Prior to Occupancy:
6. Issuance of Certificate of Occupancy;
7. Payment of Impact Fees as noted in the invoice attached to the Decision Letter unless a change is made to the impact fee policy;
8. Confirmation, by staff, that the wetlands buffer signs are in place, or replaced if damaged during construction; and
9. Surety or other form of security acceptable to the City is provide for any unfinished work.

SITE-2024-0002 Quality Way



Property Information

Location	QUALITY WY
Owner	DOVER BUSINESS & IND DEV AUTHORITY
Land Use	
Zoning Code	IT
Property Id	D0011-008000

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 10/30/2023
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

PLAN SNAPSHOT REPORT SITE-2024-0002
FOR CITY OF DOVER, N.H.

Plan Type:	Site Plan - Major	**Project:**		**App Date:**	01/24/2024
Work Class:	New Construction	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	Fees Due	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:	Light Manufacturing w/Office				

Parcel: D0011-008000 Main	**Address:** Quality Wy Main Dover, NH	**Zone:** IT(Non-Residential - Innovative Technolo

Plan Preparer
Dover Planning Support Account
288 Central Ave
Dover, NH 03820
Business: (603) 516-6008

Applicant
Alun Williams
Home: (000) 000-0000
Business: (000) 000-0000
Mobile: (000) 000-0000

Applicant
Civilworks New England
Steve Haight
181 Watson Road PO Box 1166
Dover, NH 03820
Business: (603) 749-0443
Mobile: (603) 817-6651

Plan Custom Fields

Total	0	Total2	0	Total3	0
Total4	0	Total5	0	Total6	0
Total7	0	Total8	0	Total9	0
Street Classification Type	Municipal	Net Change in # Parking Spaces (+/-)	45	Water Service	Municipal
Recording Number		Sewer Service	Municipal	Total Acres (GIS)	8.61
Deed Book	1559	Total SQFT	375052	Deed Page	394
Deed Date		Proposed Property Use	Light Manufacturing w/Office	Area of Parcel to be Developed (SQFT)	164238
Number of Parking Spaces Existing	0	Number of Parking Spaces Proposed	45	Number of Employees Total	45
Number of Employees in Max Shift	2	Distance to City Water	25	Distance to City Sewer	25
Type of Building to be Built	Steel Frame with Ribbed Metal Exterior	Estimated Construction Value	3500000.00	Refuse Removal	Private
Is there an existing Conservation Easement?	No	Existing Conservation Easement Details		TotalImpactFeeSDTOD	0.00
TotalImpactFeeTHTOD	0.00	TotalImpactFee23FTOD	0.00	TotalImpactFeeA4TOD	0.00
TotalImpactFeeMHTOD	0.00	TotalImpactFeeADUTOD	0.00	TotalImpactFeeAONRTOD	0.00
TotalImpactFeeAR55TOD	0.00	TotalImpactFeeAR62TOD	0.00	Sub Total Residential	0.00
TotalImpactFeeRIRCTOD	0.00	TotalImpactFeeOCSTOD	0.00	TotalImpactFeeITWCTOD	0.00
TotalImpactFeeNHALTOD	0.00	TotalImpactFeeOIUTOD	0.00	TotalImpactFeeAFAOTOD	0.00
Sub Total Non-Residential	0.00	Total of Impact Fees to be Assessed	0.00		

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Steve_Haight_1/24/2024.jpg	01/24/2024 15:36	Haight, Steve		Uploaded via CSS
2024.02.15_PlanningTechnicalReviewCommittee.Agenda.pdf	01/31/2024 16:54	Blonigen, Rachel		TRC Agenda
Owner Autorization (FA, City)_v1.pdf	04/01/2024 10:50	Haight, Steve	Available Online	
2024.03.21_PlanningTechnicalReviewC	04/01/2024 12:47	Blonigen, Rachel		Approved TRC Minutes

ommittee.Quality Way_SITE-2024-0002.pdf

2024.02.15_PlanningTechnicalReviewCommittee.Quality Way_SITE-2024-0002.pdf	04/01/2024 13:41	Blonigen, Rachel	Approved TRC Minutes

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00006548	Planning General Application Fee	$200.00	$0.00
	Total for Invoice INV-00006548	$200.00	$0.00
	Grand Total for Plan	**$200.00**	**$0.00**

Meeting Type	Location	Scheduled Date	Subject
Technical Review Committee Meeting v.1	City Hall, Second Floor Conference Room	02/15/2024	Technical Review Committee Meeting

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	02/13/2024	03/12/2024	02/15/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Meyers, Kathleen	Requires Re-submit	02/13/2024	03/12/2024	02/15/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Requires Re-submit	02/13/2024	03/12/2024	02/15/2024

Comments: Project: Quality Way – Future Automation
TRC Meeting: Meeting #1
Reviewer: Ken Mavrogeorge
Checked by: Engineering Staff
- General Comment:
o Applicant and Contractor shall review the Dover Construction Guidelines prior to scheduling a Preconstruction meeting with City staff. The guidelines can be found on the City of Dover Website on the Engineering page. https://www.dover.nh.gov/Assets/government/city-operations/1form/community-services/engineering/engineering-documents/Construction%20Guidelines.pdf
o Confirm that the plans are tied into the City's GIS coordinate system (NAD83 NH State Plane in feet) and topography is on the NAVD88 datum.
o Change "handicap" references to "accessible" where applicable throughout documents.
o Emergency contacts shall be provided for pump system after construction is complete.
o Applicant shall provide an easement to the City along the private drives within the property to allow for access and operation of the water infrastructure (hydrants and shut offs) to maintain water quality.
- Sheet 6:
o Show the location of the building egresses
o Does retaining wall on main entrance require guardrail?
o How is the bike rack mounted? It appears to be in the grass. It appears that a bikes might be close to doors in the parking space.
- Sheet 7:
o Show labels for contours on main drive and grading outside of paved surfaces.
o Show spot grades on top and bottom of retaining wall on main entrance.
o Recommend adding a DMH at the end of PP7 where it changes direction to provide access for maintenance.
o How will the wetland be prevented from flowing directly into parking area?
- Sheet 9:
o Show both fire and domestic services.
o Add notes calling out hydrants, fittings, and water main sizes and connections.
o Identify how the proposed force mains, water, and electric conduit cross the drainage (below or above?).
o Call out how the force main will tie into the existing SMH.
- Sheet 13:
o Remove Trench Patch Detail as it conflicts with Dover standard.
o Is a 6 inch pad for the dumpster sufficient? Recommend a minimum 12" concrete pad be provided.
o Note in Utility trench references Public Service specifications. Please check that the correct document is noted (Eversource).
- Sheet 14:
o Provide bike rack pad detail.
o Depth of embedment for guardrail seems insufficient. Please confirm depth is sufficient for behind a retaining wall.
o Detail calls out Monolithic concrete curb but plans show integrated concrete curb. Recommend coordinating terms.
- Sheet 15:
o Add note to box culvert detail that a stamped design shall be provided by a professional engineer.
- Sheet 16:
o Show class of water main in water service detail.
- Sheet 17:
o Provide detail/spec on anti-seep collar
o Provide detail on how the force mains are joined. Recommend providing the ability to isolate each station.
o Please confirm that the common force main can handle both pump stations running at the same time.
- Sheet L-1:
o Snow storage areas conflict with landscaping. Recommend storing snow in areas where landscaping won't get in the way.
- Landscape O&M
o Snow Storage section prohibits dumping snow storage on stormwater basin. This appears to conflict with the site plan. Please revise snow storage to meet the recommendations of the O&M plan.

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Fire / Inspection Services	Maxfield, Jim	Requires Re-submit	02/13/2024	03/12/2024	02/14/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Kaspari, Jackson	Requires Re-submit	02/13/2024	03/12/2024	02/15/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	Requires Re-submit	02/13/2024	03/12/2024	02/15/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Requires Re-submit	02/13/2024	03/12/2024	02/15/2024

Comments:
- Sheet 4, Dover Note 22: site construction hours should probably exclude Sundays due to proximity to Quail Drive residential
- Zoom out the Neighborhood Plan to provide more context
- At 10,000 SF building, is there an accessible route behind the proposed EV charging station?
- Will your workforce create more demand for EV stations?
- Do the proposed dumpster locations interfere with loading dock doors?
- Bike racks not shown or provided
- Lack of employee amenities outdoors for break time
- Campus walkability – particularly between the two buildings – seems lacking
- Would like to see a connection to existing Quality Way sidewalk

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.2	Requires Re-submit	02/29/2024	03/13/2024	03/29/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Requires Re-submit	02/29/2024	03/28/2024	03/29/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Requires Re-submit	02/29/2024	03/13/2024	03/29/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Fire / Inspection Services	Maxfield, Jim	Requires Re-submit	02/29/2024	03/13/2024	03/29/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Benton, Donna	Requires Re-submit	02/29/2024	03/28/2024	03/29/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	Requires Re-submit	02/29/2024	03/13/2024	03/29/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Requires Re-submit	02/29/2024	03/13/2024	03/29/2024

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		01/25/2024 16:45	03/29/2024 14:26
Confirm application complete v.1	Generic Action		01/25/2024 16:46
Technical Review Committee Meeting Agenda v.1	Task	01/25/2024 16:45	02/13/2024 12:10
Land Use Plan Technical Review v.1	Receive Submittal	02/13/2024 0:00	02/15/2024 16:30
Land Use Plan Technical Review v.2	Receive Submittal	02/29/2024 0:00	03/29/2024 14:24
Technical Review Committee Meeting v.1	Hold Meeting	02/13/2024 12:10	02/15/2024 16:31
Planning Board v.1		04/01/2024 15:32	
Planning Board Agenda v.1	Task	04/01/2024 15:32	04/09/2024 11:38
Invoice for Notices v.1	Task	04/09/2024 11:38	
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Plan Activity		
NOD Sent to Applicant v.1	Create Report		
Final Plan v.1			
Land Use Plan Stamped and Signed v.1	Generic Action		

Recording v.1	Task
Document Archival v.1	Generic Action
Internal Notification of Plan Completion v.1	Generic Action
Building Official Notifies Address v.1	Generic Action
Pre-Con Meeting v.1	Hold Meeting
Create/Link to Records v.1	
Create / Link to Permit - Building Major v.1	Create Sub Permit
Create / Link to Permit - Site Work, Construction v.1	Create Sub Permit

City of Dover, New Hampshire
SITE REVIEW APPLICATION

[Revision Date: July 1, 2021]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Future Automation, Inc. Telephone # N/A

Address of Applicant: 127 Venture Drive Dover, NH 03820

E-Mail Address: alun.williams@futureautomation.co.uk

Name of Property Owner (*if different from applicant*): Dover Business & Industrial Development Authority Telephone # N/A

Address of Property Owner: 288 Central Avenue Dover, NH 03820

PROPERTY INFORMATION

Address of Property: Quality Way

Assessor's Map # D Lot(s) # 11-8

Zoning District(s) IT - Innovation Technology Overlay District(s) N/A

Size of Parcel: 375,192 sq. ft. 8.61 ac. Property Deed: Book 1559 Page: 394

Existing Use of Property: vacant

SITE PLAN INFORMATION

Describe Proposed Use: Construct a light manufacturing facility consisting of two buildings, each with office space, and associated infrastructure.

Area of Parcel to be Developed: 164,238± sq. ft.

If Multi-family Residential: Number of Units N/A & Buildings Proposed N/A

If lodging: Number of Units N/A & number of Buildings N/A

Number of Parking Spaces: Existing N/A Proposed 45

Highway Access (check where applicable): ✓ City Street ____ State Highway

Number of Employees Total: 45 In Maximum Shift: 2

Disposition of Parcel:

Building Footprint Building 1 - 24,856 Building 2 - 10,000 sq. ft.

Total Building Area 34,856 sq. ft.

Paved Area 60,610± sq. ft.

Building Setbacks:

Front Yard 50 ft.

Rear Yard 50 ft.

Side Yard: Right 50 ft. Left 50 ft.

City Water? X Yes ___ No How far is city water from the property? at Quality Way

City Sewer? X Yes ___ No How far is city sewer from the property? at Quality Way

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION N/A

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 □ 30' Buffer □ Increase by _____ units

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

BUILDING INFORMATION

Type of Building to be Built: Steel Frame with Ribbed Metal Exterior

Height of Building: 35'± Finished Floor Elevation: 156.0'

Number of Seats (where applicable) N/A

Estimated value of construction: $3,500,000 Refuse removal: Public / (Private) (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: None Requested

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

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Kevin McEneaney, LLS - McEneaney Survey Associates

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-742-0911

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

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Stephen J. Haight, PE - Civilworks New England

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH PE # 7978 E-mail address: shaight@civilworksne.com

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) John M. Tuttle, AIA - TW Designs, LLC

Address 254 Drake Hill Road Strafford, NH 03884 Telephone #: 603-664-2181

Professional License #: NH AIA # 4015 E-mail address: john@tw-designs.com

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) Romy N. Maurer, PLA - Terrain Planning & Design, LLC

Address 311 Kast Hill Road Hopkinton, NH 03229 Telephone #: 603-491-2322

Professional License #: NH PLA # 086 E-mail address: romy@terrainplanning.com

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) Michael R. Cuomo, CWS, CSS

Address 6 York Pond Road York, ME 03909 Telephone #: 207-363-4532

Professional License #: NH CWS # 004 , NH CSS # 006 E-mail address: mcuomosoil@gmail.com

CONSERVATION EASEMENT HOLDER

Name of Easement Holder: N/A 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~~ Applicant: _____ Date: 16 Jan 24

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

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: _____ Date: _____

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

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

Signature of Property ~~Owner~~ Applicant: _____ Date: 16 Jan 24

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

CERTIFICATION OF FEES

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

Signature of Property ~~Owner~~ Applicant: _____ Date: 16 Jan 24

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

CITY OF DOVER SITE REVIEW
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
D	11-8	Dover Business & Industrial Dev. Authority	288 Central Avenue Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
Alun P. Williams, President	Future Automation, Inc.	127 Venture Drive Dover, NH 03820

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stehpen J. Haight, PE	Civilworks New England	P.O. Box 1166 Dover, NH 03821
Kevin McEneaney, LLS	McEneaney Survey Associates	P.O. Box 1166 Dover, NH 03821

Conservation Easement Holder: N/A

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

City of Dover, New Hampshire
SITE PLAN REVIEW SUBMISSION CHECKLIST

[Revision Date: June 4, 2019]

This site plan review checklist, as required by Chapter 153-6-B(2), should be completed by the applicant. It is intended to assist the applicant in the planning process of preparing a Site Plan Review application for Planning Board action. The size of the project will determine the types of information required for review, therefore, a **pre-application conference** with the Planning Department to determine the list of items that must be completed is strongly encouraged.

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 site plan review requirements. Please refer to the Site Plan Review Regulations for full details.

APPLICANT: Future Automation, Inc. File Number: _____

PROJECT TITLE: Future Automation

PROPERTY LOCATION: Quality Way Tax Map: D Lot: 11-8

	Where/How Provided	Reviewed
1. Completed and signed Application form	✓	
2. Plan Review Fees are provided	✓	
3. Electronic copy of the engineered/surveyed plan layout	✓	
4. Electronic copy of supplementary materials and application	✓	
5. Traffic Impact Assessment and Analysis (Standard or Advanced)	✓	
6. Waiver requests to the Site Plan Review Regulations, with written justification	none requested	
7. Conditional Use Permit applications	✓	
8. A colored rendering of the streetscape that will be created along the existing public right-of-way	✓	
9. A colored architectural plan showing all sides of buildings	✓	
10. Folded copies of site plan w/scale of not less than 1"=50' or 1"=100' for larger site plans, for TRC. Plans shall contain the following items as appropriate:	✓	
Location map at appropriate scale	✓	
Proposed Project name and title and Planning File #	✓	
Date, north arrow and scale	✓	
Names of all abutting property owners	✓	
Name and address of owners and/or applicants	✓	
Signature & stamp of NH licensed land surveyor and/or engineer	✓	
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 proposed streets, including pavement widths, grades, curbs and crosswalks	✓	
Location and widths of existing & proposed easements & right of ways	N/A	
Location and width of existing and proposed access/egress ways	✓	

Type text here

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

REVIEWED BY: _____ DATE_____ TRC DATE_____

future automation
Enterprise Park
127 Venture Drive
Dover, NH 03820

December 27, 2023

City of Dover
Planning Board
288 Central Avenue
Dover, NH 03820

Re: Future Automation Site Plan
Tax Map D, Lot 11-8
Quality Way - Dover, NH

LETTER OF AUTHORIZATION

Future Automation, Inc. as Applicant for the referenced project, hereby authorizes Civilworks New England to represent the firm to the State of New Hampshire, the City of Dover Planning Board and any other Dover Boards or Committees relative to the pursuit of permits for the development of the subject parcel.

Respectfully,

Alun P. Williams, President
Future Automation, Inc.

SITE-2024-0002 **QUALITY WAY**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
A0047-010000	11 REYNERS BROOK DR	ARVENITIS KERRY A		11 REYNERS BROOK DR	DOVER	NH	03820
A0047-012000	15 REYNERS BROOK DR	MCCONNELL GEOFFREY R & DEBORAH H TRUSTEE	MCCONNELL REVOCABLE LIVING TRUST	15 REYNERS BROOK DR	DOVER	NH	03820
A0048-B00000	SIXTH ST	MENDENHALL JON L &	MENDENHALL KAREN E	475 SIXTH ST	DOVER	NH	03820
A0049-011000	28 QUAIL DR	TRICONI CHRISTOPHER E & ELIZABETH C TRUS	TRICONI FAMILY LIVING TRUST 2021	28 QUAIL DR	DOVER	NH	03820
A0049-012000	32 QUAIL DR	MOREAU SCOTT &	CURTIS MARCY	32 QUAIL DR	DOVER	NH	03820
A0049-013000	29 QUAIL DR	PORTER DOUGLAS W &	PORTER YUKARI	29 QUAIL DRIVE	DOVER	NH	03820
D0011-001000	9 VENTURE DR	DOVER BUSINESS & IND DEV AUTHORITY		288 CENTRAL AVE	DOVER	NH	03820
D0011-004000	110 VENTURE DR	QUALITY WAY LLC		5 DANIELS ST APT 2	SALEM	MA	01970-5214
D0011-006000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-007000	QUALITY WY	WEAVE FILTRATION LLC		100 TRI CITY RD UNIT 117	SOMERSWORTH	NH	03878
D0011-007SN2	QUALITY WY	WEAVE FILTRATION LLC		100 TRI CITY RD UNIT 117	SOMERSWORTH	NH	03878
D0011-008SN1	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN2	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN3	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-009SND	INNOVATION WY	HEINE USA		10 INNOVATION WAY	DOVER	NH	03820
D0012-001000	SIXTH ST	TSB PROPERTIES LLC		385 SIXTH ST	DOVER	NH	03820
D0012-002000	SIXTH ST	TSB PROPERTIES LLC		385 SIXTH ST	DOVER	NH	03820
D0011-008000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEVE HAIGHT	PO BOX 1166	DOVER	NH	03820

PROJECT NARRATIVE

for

FUTURE AUTOMATION

Site Plan

Quality Way

Tax Map D, Lot 11-8

PROJECT OVERVIEW & SITE CHARACTERISTICS

The project parcel is shown on Tax Map D as Lot 11-8, is located within the IT District and consists of 8.61± acres, currently undeveloped.

The project, as proposed by Future Automation, will provide two buildings with a total floor area of about 34,856 square feet (sf) as follows:

- one 24,856± sf building having a floor area consisting of 21,992± sf of light manufacturing and 2,864 sf of office space, and
- one 10,000 sf build-to-suit building presumed to have a floor area consisting of 6,670 sf of light manufacturing and 3,330 sf of office space.

The two buildings will be accessed via a single shared access driveway but will be served by separate parking and loading areas. The parcel is currently owned by the Dover Business & Industrial Development Authority (DBIDA). The Applicant has met with DBIDA and received an endorsement to proceed.

The proposed site will include public water and sewer connections, underground electric service, natural gas service, and associated drainage improvements. The proposed access driveway will require a culverted wetland crossing resulting in 1,631± sf of wetland impacts. Additionally, a portion of the proposed grading, drainage, pavement, and buildings are proposed within the 50' wetland buffer. The resulting buffer impacts a total of 39,820± sf. Please see Conditional Use Permit application.

The project site consists of the following general improvements:

- Log and clear the site for construction.
- Construction of one new entrance on Quality Way.
- Construction of the two buildings with associated parking, passenger vehicle and truck access, and loading docks.
- Construction of on-site stormwater detention and treatment system, grading, and other drainage requirements.
- Site utility construction.
- Stabilize remaining areas with loam and seed.

DRIVEWAY AND PARKING LOT

Employee and visitor parking will be segregated from the truck delivery entrance. The entrance drive and truck access will be 30' wide and the parking area will have a 24' wide driveway entrance and drive aisle. Lighting for the proposed parking lot and driveway will be per the Lighting Plan and will be LED fixtures that are dark sky compliant.

PROJECT NARRATIVE
for
FUTURE AUTOMATION
Site Plan
Quality Way
Tax Map D, Lot 11-8

For the proposed development, the City of Dover parking maximums allow for the following:

Required/Proposed – Building 1:

- Office: 1 space per 300 sf (2,864 sf) = 10 surface spaces
- Manufacturing: 1 space per 800 sf (21,992 sf) = 27 surface spaces

    - Total Maximum = 37 Surface Spaces (includes 2 Accessible Spaces)
    - Total Proposed = 35 Surface Spaces (includes 2 Accessible Spaces)

Required/Proposed – Building 2:

- Office: 1 space per 300 sf (3,330 sf) = 12 surface spaces
- Manufacturing: 1 space per 800 sf (6,670 sf) = 9 surface spaces

    - Total Maximum = 21 Surface Spaces (includes 1 Accessible Spaces)
    - Total Proposed = 10 Surface Spaces (includes 2 Accessible Spaces)

WETLAND SETBACK IMPACT TYPE

The project work requires a Conditional Use Permit from the City of Dover. Approximately 1,631± sf of wetlands will be impacted along with 39,820± sf of wetland buffer. The project does not impact bogs, marshes, sand dunes, tidal wetlands, cedar swamps, undisturbed tidal buffer zone, or involve any work within 50 feet of a salt marsh. The project is not located within 100 feet of prime wetlands.

DRAINAGE

The parcel is located on the northwest side of the Quality Way cul-de-sac. The proposed development of the 8.61-acre lot will be surrounded by other commercial properties, open space, sending areas, and residential lots (to the south and southwest) within a previously established industrial park. The site is undeveloped, and the groundcover primarily consists of wooded vegetation with grassed areas along the edge of the Quality Way cul-de-sac. The 16.14± acre watershed of the parcel includes the project site as well as a portion of Quality Way. On site soils are a mix of Canton, Chatfield-Hollis Complex, Woodbridge, Scitico, Elmwood and Boxford soils. The Canton series soils are HSG B with Woodbridge, Scitico, Elmwood and Boxford series soils being classified as HSG C. The Chatfield-Hollis series soils are classified as HSG B & D.

PROJECT NARRATIVE
for
FUTURE AUTOMATION
Site Plan
Quality Way
Tax Map D, Lot 11-8

The project proposes 164,238± sf of disturbance including the construction of the two commercial buildings, corresponding site improvements including site grading, paved parking and loading areas, as well as stormwater quality and detention drainage improvements. The post development watershed is modeled utilizing the same points of analysis as the predevelopment watershed, allowing direct comparison of the peak runoff between the pre- and post- developed conditions (see drainage report).

TRAFFIC

A traffic assessment was completed for the project and is attached as a report to this submittal. Overall, and as expected, there is a minimal increase in traffic due to the proposed development.

UTILITIES

The proposed project will connect to City of Dover water and sewer as well as Unitil for natural gas, and Eversource for electricity. Water, sewer, electric lines, and natural gas lines are currently located within Quality Way. Building connections will be made per the City's Community Services Utility Division and Fire Department requirements and standards.

IT DISTRICT NARRATIVE

for

FUTURE AUTOMATION

Site Plan

Quality Way

Tax Map D, Lot 11-8

SITE DESIGN AND DEVELOPMENT CRITERIA NARRATIVE - §153-15

The project parcel is shown on Tax Map D as Lot 11-8, is located within the IT District and consists of 8.61± acres, currently undeveloped. The project is located at the cul-de-sac end of Quality Way which is in Dover's Enterprise Park. The project, as proposed by Future Automation, will provide two buildings with a total floor area of about 34,856 square feet (sf) as follows:

- one 24,856 sf building having a floor area consisting of 21,992 sf of light manufacturing and 2,864 sf of office space, and
- one 10,000 sf build-to-suit building presumed to have a floor area consisting of 6,670 sf of light manufacturing and 3,330 sf of office space.

The parcel is currently owned by the Dover Business & Industrial Development Authority (DBIDA). The Applicant has met with DBIDA and received an endorsement to proceed.

The following responses (**Responses in Bold**) provide narrative in support of meeting the requirements identified in §153-15 Design Standards for Innovative Technology (IT) District of the Dover Site Design and Development Criteria.

A. Purpose. These design standards are adopted to regulate development within the Innovative Technology (IT) District, which provides an area for large-scale high technology, research, professional office and clean manufacturing uses needing large sites and high aesthetic standards. The design standards are intended to:

(1) Establish and maintain high aesthetic standards in the IT District. **The project proposes two aesthetically pleasing buildings and will incorporate landscaping to maintain the aesthetics of the industrial neighborhood.**

(2) Preserve the district's natural resources and visual character by assuring that improvements are properly related to their sites and to neighboring developments. **The proposed buildings incorporate the site's natural grading to minimize building height as seen from the road. The site layout shields the shipping and receiving portion of the site behind the building, thus maintaining the visual character of the neighborhood. The project includes a landscape plan to further enhance the site as seen from Quality Way. The project requires a limited wetland disturbance to allow access to the site and has otherwise minimized disturbances within the wetland setback.**

(3) Encourage good design and innovation in site planning and development, including architecture, landscaping, and graphic design. **The project proposes aesthetically pleasing buildings and will incorporate landscaping to maintain the aesthetics of the industrial neighborhood.**

(4) Encourage the compatible and complementary development of each site in the district. **The project proposed is compatible and complimentary of the developed industrial/manufacturing parcels within the area.**

(5) Minimize conflicts between residential and nonresidential uses. **The project is in an industrial park (Enterprise Park).**

IT DISTRICT NARRATIVE
for
FUTURE AUTOMATION
Site Plan
Quality Way
Tax Map D, Lot 11-8

B. Building siting and design. The general character of the IT District is intended to be a campus or parklike setting, with emphasis on the natural characteristics of the site. The site design should create a sense of entry into the site and into the businesses within the site through landscaping, facade treatment, and signage. The architectural character of each building shall be of contemporary design and style. The design should integrate the building's form, textures and colors with the landscape and topographical character of each site. Specific requirements are as follows:

(1) All exterior building walls and structures shall be constructed with attractive, durable materials such as textured concrete, masonry, stone, brick, clapboard, finishing wood, stucco, or glass. **The building exteriors are consistent with other buildings in the Dover Industrial Park as accepted by DBIDA.**

(2) Buildings with exterior walls made of metal or corrugated steel shall not be permitted. **The building exteriors are consistent with other buildings in the Dover Industrial Park as accepted by DBIDA.**

(3) Building roofs shall be uncluttered, and when flat roofs are visible from public roads, pitched roofs or parapets are required. **The project does not propose flat roofs or rooftop equipment.**

(4) Rooftop and ground-mounted mechanical units and ventilating fans are to be either integrated into the design of the building or screened from view. **The project does not propose rooftop mounted mechanical units. Mechanical units visible from Quality Way include vegetative screening.**

(5) All exterior service, loading, storage, and utility areas shall be located at the side or rear of the building and screened or sheltered so as not to be visible from the public road or adjacent parcels. **The shipping and receiving areas are located at the back of the site and are not visible from Quality Way.**

C. Parking areas and pedestrian circulation.

(1) Parking areas shall be screened from public streets and existing residential uses to minimize the visibility of such areas. **The parking areas are screened with proposed and existing vegetation.**

(2) A majority of the parking spaces shall be located to the side or rear of the buildings. **The parking area locations have utilized as much of the sides of the building as possible based on site characteristics and wetland setbacks. The parking areas are screened with vegetation.**

(3) All sites shall be designed to promote safe pedestrian access, not only within the development but to adjacent properties and public streets. **The project proposes manufacturing facilities located at the end of a cul-de-sac in the Dover Industrial Park. A sidewalk along Quality Way is accessible from the site. The project proposes a 4' painted stripped pedestrian lane for pedestrian circulation throughout the site and to Quality Way.**

D. Landscaping.

(1) A landscaping plan shall be submitted as part of the development application. The landscaping plan shall depict a scheme that creates a parklike setting. Maintenance of existing vegetation should be incorporated in the landscaping plan when appropriate. **The landscape plan is submitted as part of the application process and includes an inspection and maintenance manual.**

(2) Existing trees of significant size or special character should be preserved wherever possible. **Tree removal that is necessary for site development has been minimized to maintain as much existing woodland and buffer as possible.**

(3) All trees should be planted in a permeable area of no less than a three-foot-wide radius from the base of the tree. **Tree locations are situated to ensure the maximum likelihood of survival and at a minimum 3' from edge of pavement.**

(4) Planting islands should be used to define vehicular and pedestrian circulation patterns and to break up large expanses of pavement. A combination of end cap islands and linear islands running parallel to parking rows is preferred. Islands should be planted with either grass or evergreen shrubs and include trees. **The project does not propose planting islands as the parking areas are relatively small. The large expanse of pavement at the back of the proposed buildings is necessary to support shipping and receiving for the facilities while allowing truck access.**

(5) Landscaping should be maintained to present a healthy appearance, and dead materials should be replaced. **The landscape plan is submitted as part of the application process and includes an inspection and maintenance manual.**

E. Exterior lighting. Exterior lighting shall be low profile. High-intensity directional lighting shall be prohibited. Lighting shall be designed and oriented to avoid glare onto adjacent property or streets. **The lighting is proposed to be cut-off type fixtures that provide on-site lighting.**

SITE DEVELOPMENT DESIGN CRITERIA NARRATIVE
§153-14
STORMWATER MANAGEMENT
for
FUTURE AUTOMATION
Quality Way
Tax Map D, Lot 11-8

A. Stormwater management, erosion control and flood hazards.

(1) Purpose and objective. These regulations establish standards to manage the discharge of runoff to the City of Dover's municipal storm sewer system and water bodies, in a manner compliant with the requirements of state and federal law, including provisions of the federal stormwater management legislation for municipal separate storm sewer systems (MS4), as amended. These provisions and standards are implemented for the purpose of:

(a) Managing stormwater runoff to protect water quality and quantity. **The proposed development has been designed in accordance with NH DES AoT permitting requirements to include the treatment and mitigation of stormwater runoff from the site.**

(b) Minimizing the contribution of a pollutant for which a water body is impaired to the maximum extent practicable (MEP). **The proposed development has been designed in accordance with NH DES AoT permitting requirements to include the treatment of stormwater runoff from all impervious areas of the site (and a small portion of the existing pavement within Quality Way) to minimize pollutant runoff.**

(c) Causing no discharge of runoff to an adjacent property in excess of runoff discharge in the existing developed or undeveloped condition. **The proposed development does not propose an increase in the peak rate of runoff from the project site.**

(d) Encouraging the use of low-impact development (LID) strategies. **The project proposes the use of a bioretention practice for stormwater treatment.**

(2) Applicability of the stormwater standards.

(a) All projects requiring site plan or major subdivision approval shall be subject to the following set of stormwater standards according to the amount and type of disturbance. Applicability is as follows: **The project does not qualify for the redevelopment standards and will disturb greater than 20,000 square feet, as such, the stormwater standards apply.**

[1] The minimum protections and management standards shall apply to all projects. **The design incorporates these standards.**

[2] The stormwater management for new development standards shall apply to any project that results in a contiguous land disturbance of more than 20,000 square feet or creates more than 4,000 square feet of new impervious area. **The design incorporates these standards.**

[3] The stormwater management for redevelopment standards shall apply to any project that results in a contiguous land disturbance of more than 20,000 square feet or creates more than 4,000 square feet of new impervious area where the existing land use has been previously developed as commercial, industrial, institutional, governmental, recreational, or multifamily. **The redevelopment standards are not applicable to this project.**

(b) All projects of such magnitude as to require a permit from the National Pollutant Discharge Elimination System (NPDES) Program or the New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain (AoT) Program shall also comply with the standards of the Environmental Protection Agency (EPA) and/or NHDES permits and this section, whereas the stricter standards shall apply. **The project will require NH DES AoT permitting, a NH DES Wetland Permit, and a NPDES CGP through the EPA. The design of the project has incorporated the associated standards of these agencies.**

(3) Design standards.

(a) Minimum protections and management standards.

[1] Where applicable, all development must comply with the EPA Phase II Stormwater Rules and the City's MS4 permit, as amended. **The project complies with the City's design and stormwater requirements.**

[2] Existing surface waters, including ponds, rivers, perennial and intermittent streams (natural or channelized), and wetlands (including vernal pools), shall be protected by the minimum buffer setback as specified in Chapter 170, Zoning, § 170-27.1. Stormwater and erosion and sediment control best management practices (BMPs) shall be located outside the specified buffer zone unless otherwise approved by the Planning Board. **The project proposes a wetland crossing for access to the site and wetland buffer impacts as part of the construction. A Conditional Use Permit application has been submitted as part of the application process.**

[3] Low-impact development (LID) site planning and design strategies shall be used to the MEP in order to reduce the generation of the stormwater runoff Volume for both new and redevelopment projects. An owner/applicant must document why LID strategies are not appropriate if not used to manage stormwater. **LID strategies were implemented to the maximum extent practicable. The site was evaluated for infiltration practices but the site characteristics, including soil types, topography, depth to the SHWT and depth to ledge prevent the use of infiltration practices.**

[4] All proposed stormwater practices and measures shall be installed and maintained in accordance with manufacturers' specifications and performance specifications outlined in the New Hampshire Stormwater Management Manual Volume 2 (December 2008 or current revision) a copy of which can be found on The NHDES website. **The project incorporates stormwater BMP designed in accordance with NH DES AoT permitting requirements. Details provided for construction are aligned with the NH Stormwater Manual and the engineer of design will be required to review material submittals and witness the installation of the practices. NH DES AoT will require a letter from the design engineer indicating the site stormwater BMP's were installed as designed and permitted.**

[5] All storage facilities for fuel, chemicals, chemical or industrial wastes, and biodegradable raw materials shall meet the regulations of the NHDES, including but not limited to those involving underground storage tanks, aboveground storage tanks, hazardous waste, and best management practices for groundwater protection (Part Env Wq 401). **The project does not propose the storage of the referenced materials onsite.**

[6] Salt and other deicing materials shall be stored under cover or located such that no direct discharges to receiving waters are possible. Snow storage areas shall be located such that no direct discharges to receiving waters are possible. See the NHDES

guidance fact sheet on road salt and snow disposal. **The project does not propose the storage of deicing materials onsite.**

[7] The use of sodium-chloride-based materials for winter maintenance shall be the minimum necessary for safety. The use of sodium-chloride-based materials is discouraged within the groundwater protection districts. **The project I&M manual directs the owner/operator to produce salt minimization plan as part of the winter maintenance of the site.**

[8] Impervious surfaces for parking areas and roads shall be minimized to the extent possible. **The project design incorporated the minimization of impervious areas to the maximum extent possible. All aspects of the design including road width, required number of parking spaces, drive aisle widths, and truck loading and turning areas were evaluated.**

[9] Stormwater runoff from new impervious surfaces shall be directed to a best management practice for flow mitigation, treatment and/or infiltration. **The proposed design includes the treatment of stormwater runoff from all impervious areas of the site (and a small portion of the existing pavement within Quality Way).**

(b) Stormwater management for new development.

[1] Runoff of impervious surfaces shall be treated to provide 80% removal of total suspended solids (TSS) and 50% removal of both total nitrogen and phosphorus. Removal rates shall be determined using approved manufacturer's pollutant removal efficiency analysis or the pollutant removal efficiencies outlined in the New Hampshire Stormwater Management Manual Volume 1, Appendix E (December 2008 or current revision), a copy of which is available from the NHDES website. **The project utilizes a bioretention basin for treatment of all impervious areas on site and the small portion of Quality way. This system provides 90% removal of TSS and 65% removal of both total nitrogen and phosphorous per the NH Stormwater Manual.**

[2] Rainfall amount shall be based on current extreme precipitation estimates obtained from the Northeast Regional Climate Center. **The design incorporates NRCC precipitation amounts and the associated storm distribution data. As the project will require a NH DES AoT permit, the precipitation amounts have been increased by 15% accordingly.**

[3] Measures shall be taken to control the post-development peak rate runoff so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. **The proposed design mitigates post-development peak rate runoff to less than the pre-developed conditions.**

[4] Measures shall be taken to control the post-development surface water runoff volume so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. For sites where infiltration/recharge is limited or not practicable, the owner/applicant must demonstrate that the project will not cause or contribute to flooding or functional impairments to streets, adjacent properties, and downstream properties. **The site was evaluated for the inclusion of infiltration practices but the site characteristics, including soil types, topography, depth to the SHWT and depth to ledge prevent the use of infiltration practices. The project proposes an increase in the volume of runoff from the site. Although the site increases runoff, the project design will still meet the Channel Protection requirements of Env-Wq 1507.05 as required by NH DES AoT regulation. The**

increased volume of runoff will be discharged directly to a large wetland complex associated with Reyner's Brook. The increase in volume will not cause flooding to adjacent or downstream properties.

[5] Infiltration rates for designing groundwater recharge practices shall be determined in accordance with Section Env-Wq 1504.14. **The site was not feasible for infiltration practices and as such infiltration rates were not calculated.**

[6] Stormwater conveyance practices shall be sized appropriately to convey the ten-year, twenty-four-hour storm event without overtopping or causing flooding on the property. **Stormwater conveyance practices are designed to ensure they pass the 50-yr, 24-hour storm events without overtopping.**

[7] For large projects adding greater than or equal to 10 acres of impervious cover, or projects located in known areas of flooding concern, or specifically within areas with a 1% chance of being inundated by water in any given year, the owner/applicant shall submit a supplementary report that describes how the project will not increase the future flooding potential and complies with the AoT requirements pertaining to floodplain impacts as described in Section Env-Wq 1503.09, regardless of whether an AoT permit is required. **The project is located outside of the 0.2 percent annual chance floodplain. The project does not propose permanent or temporary disturbance or alteration of terrain within the flood plain.**

[8] The design of the stormwater management systems shall take into account upstream and upgradient runoff that flows onto, over, or through the site to be developed or redeveloped and provide for this contribution of runoff. **The project has incorporated offsite and upgradient stormwater runoff in support of the design for the wetland crossing culvert and the area of Quality Way captured by the closed drainage system.**

[9] Seasonal high-water table elevations must be accounted for in all BMP design criteria. **Test pit information and design intent (underdrained system) were utilized in determining the SHWT associated with the bioretention basin design.**

[10] Access for maintenance of stormwater facilities must be included as part of the design, where necessary. Access easements may be required. **Stormwater facilities are included on site and the site will be solely owned by the applicant. Stormwater access easements are not required for this project.**

[11] Plantings in treatment areas shall be native grasses, shrubs and/or other native plants in sufficient numbers and density to prevent soil erosion and to achieve water-quality treatment. **A licensed Landscape Architect has produced a site-specific planting plan and O&M document in support of site revegetation including the stormwater BMP(s).**

(c) Stormwater management for redevelopment. In order to determine the stormwater requirements for redevelopment projects, the percentage of the site covered by existing impervious areas must be calculated. Stormwater requirements for redevelopment will vary based upon the amount of site surface area that is covered by existing impervious surfaces. **The project does not meet redevelopment requirements and this section is Not Applicable (N/A).**

[1] For sites meeting the definition of a redevelopment project and having less than 40% existing impervious surface coverage, the stormwater management requirements will be the same as new development projects, with the important distinction that the applicant can meet those requirements either on site or at an approved off-site location (i.e., off-site mitigation). The applicant must satisfactorily demonstrate that impervious area reduction, LID strategies and BMPs have been implemented on site to the MEP. **N/A**

[2] For sites meeting the definition of a redevelopment project and having more than 40% existing impervious surface coverage, stormwater shall be managed in accordance with one or more of the following techniques, listed in order of preference: **N/A**

[a] Implement measures on site that result in mitigation and treatment of at least 30% of the existing impervious cover as well as 50% of the additional proposed impervious surfaces and pavement areas through the application of LID; or

[b] Implement other LID techniques on site to the MEP to provide mitigation and treatment for at least 50% of the entire site area.

[3] The owner/applicant may utilize off-site mitigation to meet the redevelopment requirements when the following standards have been met. **N/A**

[a] The owner/applicant shall demonstrate, to the satisfaction of the Planning Board, that on-site treatment has been implemented to the MEP.

[b] The owner/applicant shall find an approved, off-site location within the same watershed as the project site or within the drainage area of the same receiving water body.

[c] Off-site mitigation shall be equivalent to no less than the total area of pervious cover not treated on site.

[d] The owner/applicant shall submit a full design of the proposed off-site measures for review and approval.

[e] The owner/applicant must also demonstrate that there is no downstream drainage or flooding impact as a result of not providing on-site management.

(d) Erosion control standards during construction. The following standards shall be applied in project planning and shall be implemented prior to and during construction activity: **The plan set includes temporary and permanent sediment and erosion control practice notes and details in support of meeting the erosion control standards.**

[1] All proposed measures shall meet, at a minimum, the design standards for best management practices set forth in the New Hampshire Stormwater Management Manual Volume 3 (December 2008 or current revision), a copy of which is available from the NHDES website. **The sediment and erosion control details provided in the plan set are all designed in accordance with the NH Stormwater Manual.**

[2] When a project requires a stormwater permit from the EPA Construction General Permit (CGP) Program, copies of the stormwater pollution prevention plan (SWPPP) inspections shall be provided to the Community Services Department. **If required, the SWPPP will be provided prior to construction.**

[3] Stripping of vegetation shall be done in a manner that minimizes soil erosion. Whenever practical, natural vegetation shall be retained, protected, or supplemented. **The Erosion Control Notes in the provided plan set indicate that the smallest practical area shall be disturbed during construction.**

[4] The area of land disturbance shall be kept to a minimum and be limited to an area only large enough to accommodate construction activities for a particular construction phase. **The Erosion Control Notes in the provided plan set indicate that the smallest practical area shall be disturbed during construction and that in no case shall greater than 5 acres be disturbed at any time.**

[5] Off-site surface water and runoff from undisturbed areas shall be diverted away from disturbed areas where feasible, or measures to convey stormwater through the project area without causing erosion of sediment must be included. The integrity of downstream drainage systems shall be maintained. **Direction to ensure that stormwater conveyance practices shall be stabilized prior to receiving stormwater runoff is included on the Erosion Control Notes sheet provided as part of this submittal.**

[6] Appropriate 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. **Construction scheduling and inspections will be discussed with Community Services at the required pre-construction meeting.**

[7] Perimeter site controls shall not be placed within wetland areas, stream channels or wetland buffers. **This project will require a NH DES wetland permit and a City of Dover Conditional Use Permit for work within the wetland and wetland buffers. Sediment and erosion control will be limited within the wetland and wetland buffer as identified and approved through these permits.**

[8] 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 calendar days for exposed soil areas that are within 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 calendar days following completion of final grading of exposed soil areas. **The definitions of, and direction for, stabilization of the site is provided on the Erosion Control Notes sheet provided as part of this submittal.**

[9] All temporary erosion and sediment control measures shall be maintained in functioning condition until final site stabilization is accomplished. A proposed BMP inspection schedule shall be included in the submittal. **The erosion control inspection scheduling requirements are identified on the Erosion Control Notes sheet provided as part of this submittal.**

[10] Additional temporary stabilization for the winter season consistent with NHDES guidelines shall be in place for disturbed areas that are not permanently stabilized by October 1, or at the discretion of the Community Services Department. **The NH DES AoT winter construction notes are identified on the Erosion Control Notes sheet provided as part of this submittal.**

[11] Special stabilization details shall be provided with the submission for any land disturbance on slopes equal to or steeper than 3:1. **Slopes greater than 3:1 require erosion control matting and a detail is provided in the plan set.**

[12] All temporary erosion and sediment control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within 30 calendar days unless conditions dictate otherwise. **Temporary practice details identify the need to remove sediment and/or stabilize the area once the practices have been removed.**

[13] For projects proposing to disturb and expose soils in areas of 10 acres or more at one time, a temporary (or permanent) sediment basin must be provided with storage for a calculated volume of runoff from a drainage area from a two-year, twenty-four-hour storm, or equivalent control measures, where attainable, until final stabilization of the site. Alternatively, the sediment of storage per acre of drainage area until final stabilization of the site. In determining appropriate locations and number of sediment basins needed, the operators may consider such factors as erodibility of site soils, slope lengths, available area on site, construction period and other unique site considerations. **The project does not propose the disturbance of greater than 10 acres of area. A temporary sediment trap detail, designed with a maximum contributing area of 5 acres, has been provided in accordance with NH DES AoT requirements.**

[14] Use of temporary sediment basins should avoid any additional vegetation clearing or site land disturbance not otherwise needed for post-construction. Sediment basin locations must be reviewed by the Community Services Department prior to construction and must consider the potential for off-site impacts, including public safety, especially as it relates to sediment movement and/or sediment basin failure, and alternative sediment controls must be used where site limitations preclude a safe design. **Temporary sediment basin locations, if constructed, will be discussed with Community Services prior to the construction of the practices. These discussions will occur upon submission/review of the SWPPP, if required.**

(e) Installation and construction inspections. The owner/applicant shall be responsible for inspection requirements as follow:

[1] The Community Services Department or its designated agent shall have access to the site to complete routine inspections. **Community Services access and inspection requirements will be discussed at the pre-construction meeting.**

[2] The Community Services Department shall be notified 24 hours prior to installation of a stormwater BMP in order to schedule an inspection. These inspections shall be completed during normal working hours. **The project notes provide direction for the contractor to notify the design engineer and the Community Services Department as required.**

[3] The Planning Board or Community Services Department may require the design engineer and/or an independent third party to provide inspection and oversight of the construction of the stormwater management facilities and erosion and sediment control measures at its discretion. Such oversight may be especially important for implementing techniques such as porous pavement or subsurface stormwater infiltration systems. The owner/applicant shall be responsible for all fees associated with third-party inspections. **NH DES AoT permitting requires the design engineer to provide a letter at the completion of work that indicates the stormwater practices were installed as designed.**

[4] 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 shall be submitted to the Community Services Department. **The project notes provide direction for the inspector to be qualified and for all reports to be submitted to the Community Services Department.**

[5] The owner is ultimately responsible for the installation, construction, inspection, and disposition of all stormwater management and erosion control measures required by the provisions of these regulations. **The project notes identify the owner as having the responsibility for ensuring the stormwater management and erosion control measures are installed as approved.**

(f) Stormwater management plan (SWMP) submittal requirements. At the discretion of the Planning Board or Community Services Department, a technical review by an independent third party may be required of any SWMP prepared under these regulations. Such a review shall be performed by a qualified professional consultant and the expense of which shall be the full responsibility of the owner/applicant. **The SWMP is a comprehensive set of documents that include, at a minimum, a drainage report, plan set, and Stormwater I&M Manual. These documents each serve a role in presenting the necessary information to the appropriate audience. The information required in this section is provided within the SWMP documents.**

[1] For projects requiring minimum protection standards, a plan including the following information shall be submitted:

[a] Description of erosion and sediment control measures as well as sequence for final stabilization of the project site. **This information is provided within the Erosion Control Notes within the plan set.**

[b] Proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns. **This information is provided within the drainage report and the Pre/Post Development Watershed Plans.**

[c] Description of LID proposed measures. **This information is provided in the drainage report and throughout the plan set and details.**

[2] For projects requiring new development or redevelopment standards, a drainage report that contains the following items shall be submitted: **The SWMP documents include the proposed information when applicable.**

[a] Description of construction period and earth movement schedule, including anticipated project start and completion dates, sequence and duration of grading and construction activities, sequence, and timing of installation and/or application of soil erosion and sediment control measures as well as sequence for final stabilization of the project site. **The SWMP documents include the proposed information when applicable.**

[b] Description of the on-site and adjacent wetlands, streams and other water resources, including methods used to identify these resources, and a description of any buffer setbacks that may apply, steep slopes, critical habitat, existing vegetation, areas with a 1% chance of being inundated by water in any given year, and whether any downstream water bodies are listed as impaired according

to NHDES's most recent 303(d) list. **The SWMP documents include the proposed information when applicable.**

[c] Soils information for proposed disturbed areas shall be delineated by a certified soil scientist. For all other areas that contribute runoff to the project site, soil types may be identified in accordance with Natural Resources Conservation Service (NRCS) countywide soil survey. **The SWMP documents include the proposed information when applicable.**

[d] Description of existing drainage patterns, receiving water bodies or drainage infrastructure and soil types for recharge potential. **The SWMP documents include the proposed information when applicable.**

[e] Watershed area limits, including any off-site and upstream areas contributing flow to shared drainage channels and/or infrastructure. **The SWMP documents include the proposed information when applicable.**

[f] Description of proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns. **The SWMP documents include the proposed information when applicable.**

[g] Methods and assumptions used to calculate pre- and post-development runoff volume, peak discharge, and discharge velocity for the specified design storm events. **The SWMP documents include the proposed information when applicable.**

[h] Methods and assumptions used to calculate the pollutant load removal. **The SWMP documents include the proposed information when applicable.**

[i] Description of LID measures that are proposed to limit the development footprint, preserve existing vegetation and mimic existing hydrology to the extent feasible. **The SWMP documents include the proposed information when applicable.**

[j] If not used, provide rationale why LID measures are not practical for the site. **The SWMP documents include the proposed information when applicable.**

[k] Describe measures and calculations for proposed practices used to achieve no net increase in runoff volumes leaving the site. **The SWMP documents include the proposed information when applicable.**

[l] Provide calculations for the infiltration or exfiltration system. **The SWMP documents include the proposed information when applicable.**

[m] If an increase in post-development runoff volume is anticipated due to limited applicability for LID measures and site constraints, provide an assessment and supporting calculations to demonstrate no adverse impacts to downstream infrastructure, adjacent properties, or aquatic habitat. **The SWMP documents include the proposed information when applicable.**

[n] Descriptions, details, and design criteria and calculations for all structural, nonstructural, permanent, and temporary erosion and sedimentation control measures and BMPs. This information should include seeding mixtures and rates, types of sod, methods of seedbed preparation, expected seeding dates (or

limitations on seeding time frames), type and rate of lime and fertilizer application, and type and quantity of mulching for temporary and permanent control facilities. **The SWMP documents include the proposed information when applicable.**

[o] Where proposed changes are anticipated within mapped limits of the areas with a 1% chance of being inundated by water in any given year, provide hydrologic and hydraulic analysis to show no net increase in flood elevations. **The SWMP documents include the proposed information when applicable.**

[p] Proposed schedule for the inspection and maintenance of all erosion control measures on site prior to achieving final site stabilization. **The SWMP documents include the proposed information when applicable.**

[q] Describe procedures for removing temporary erosion control measures and removal of accumulated sediment captured by such measures. **The SWMP documents include the proposed information when applicable.**

[r] Any other specific study, calculation, or investigation as requested by the City. **Additional information is provided as requested and may include traffic studies, structural designs, septic/sewer designs, geotechnical reports, etc. These documents are provided on a case-by-case basis and as requested by the City.**

[s] Describe procedures to limit and/or optimize the use of deicing materials and minimize off-site increases in chloride levels in adjacent surface water and groundwater. **The Stormwater I&M Manual includes the implementation of a salt minimization plan.**

[t] Provide a maintenance and inspection plan for post-construction monitoring of stormwater BMPs to ensure long-term performance and functionality, including details of who will be responsible for inspections and maintenance, proposed schedule, documentation, submittal procedures and contingency plans if future maintenance is required. **A Stormwater I&M Manual is provided as part of the submission.**

[u] Provide copies of pertinent state and federal permits. **Copies of permits will be provided to the City.**

(g) Long-term operation and maintenance. The owner shall be responsible for continued inspection and maintenance requirements. **An I&M Manual that identifies the owner's responsibilities has been provided as a part of the submission.**

[1] An operation and maintenance manual shall be created with the following information:

[a] The names of the responsible qualified professionals who will implement the required reporting, inspections, and maintenance activities. **The Owner, Responsible Party, and the Management Company are identified in the I&M Manual.**

[b] An inspection checklist, identifying item or BMP, inspection frequency, and components to be inspected. The list shall clearly outline performance thresholds and triggers for maintenance. **Inspection requirements and maintenance thresholds are identified in the I&M Manual.**

[c] Snow and ice removal shall be performed by a contractor certified by the "Green SnoPro" Program, or approved equivalent, following best management practices for the application of deicing materials. **The I&M Manual requires the use of a Green SnowPro contractor.**

[d] Deicing log to track amount and type of deicing material applied. **The I&M Manual requires the implementation of a salt minimization plan that also requires the owner or operator to track salt usage onsite through a quantity usage log.**

[e] A site plan clearly identifying the locations of all stormwater practices to be inspected and maintained. **The approved Grading and Drainage Plan accompanies the I&M Manual.**

[f] Inspection and maintenance log to be submitted to the City of Dover Community Services Department on an annual basis. Documents shall be submitted no later than December 15 of each year. **The I&M Manual identifies this requirement.**

[2] 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 of the requirements for maintenance and reporting. **Not Applicable.**

CIVILWORKS NEW ENGLAND
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JOB 22075 - FUTURE AUTOMATION
SHEET NO. 1 OF 7
CALCULATED BY MEB DATE 10/26/23
~~CHECKED BY~~ REVISED DATE 1/10/24
~~SCALE~~ * NHPE #7101

PUMP STATION DESIGN – PS-1

25,000 SF BLDG. – 2,000 SF OFFICE
– 23,000 SF LIGHT MANUF.

- DESIGN FLOW:

OFFICE = 2,864 SF × 5 GPD/100 SF = 144 GPD

LIGHT MANUF. = 25 EMPL. × 10 GPD/EMPL. = 250 GPD
(NO CAFE, NO SHOWERS)

TOT. = 394 GPD

AVE. FLOW = $394 \frac{\text{GAL}}{\text{DAY}} \times \frac{1 \text{ DAY}}{8 \text{ HR}} \times \frac{1 \text{ HR}}{60 \text{ MIN}}$

= 0.82 GPM

PEAK FACTOR = 6.0 ⇒ PEAK DISCHARGE
= 4.93 GPM

- TOT. DYNAMIC HEAD (TDH)

$= H_s + H_L + V^2/2g$

H_s = STATIC HEAD

H_L = FRICTION LOSS IN PIPES ⇒ PIPE LENGTH + EQUIV. FITTING LENGTH

$V^2/2g$ = VELOCITY HEAD ($g = 32.2 \text{ FT/S}^2$)

- STATIC HEAD:

– SEWER MANHOLE INV. IN = 161.3

– PUMP CHAMBER INV. IN = 148.0
" " PUMP OFF = 146.9

STATIC HEAD = 161.3 – 146.9
= 14.4'

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JOB 22075 - FUTURE AUTO
SHEET NO. 2 OF 7
CALCULATED BY MEB DATE 10/26/23
~~CHECKED BY~~ REVISED DATE 1/10/24
SCALE PS-1

- DYNAMIC HEAD:

FORCE MAIN L = 520'
LENGTH IN PC = 3' ±
TOT. PIPE L = 523'

1.25" IN PC PRESUME 1.5" TO BE CONSERV.

ASSUME 1.5" HDPE (or LLPDE) SDR-11

FITTING	PIPE (ϕ) DIA. (IN)	QUAN.	EQUIV. L (EA)	FITTING EQUIV. L (FT)
90° ELBOW (IN PC)	0.125"	1	30ϕ	3.75'
CHECK VALVE		1	135ϕ	16.88'
GATE VALVE		1	13ϕ	1.63'
UNION/ENLARGER		1	2ϕ	0.25'
45° ELBOW (IN SMH)		1	16ϕ	2.0'

(SEE TABLE 1)

TOT. = 24.51
= 25'

TOT. EFFECTIVE L = 523' + 25' = 548'
(PIPE) (FITTINGS)

(GPM) FLOW	H_f (FT/100)	H_L ($H_f \times 548/100$)	V (FPS)	$V^2/2g$	$H_L + V^2/2g$
8	0.54	2.96	1.35	0.03	2.99
10	0.82	4.49	1.69	0.04	4.53
12	1.15	6.30	2.03	0.06	6.36
15	1.74	9.54	2.54	0.10	9.64
18	2.43	13.32	3.05	0.14	13.46

(SEE TABLE 2)

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JOB 22075- FUTURE AUTO
SHEET NO. 3 OF 7
CALCULATED BY MEB DATE 10/26/23
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SCALE PS-1

FLOW (GPM)	H_S (FT)	$H_L + V^2/2g$ (FT)	TDH (FT)
8	14.40	2.99	17.39
10	↓	4.53	18.93
12		6.36	20.76
15		9.64	24.04
18		13.46	27.86

- PUMP SELECTION:

TRY E-ONE DH152 PACKAGE SYSTEM WITH E-ONE SPD GRINDER PUMP (1 HP, 1725 RPM)

REFER TO SPD PUMP PERFORMANCE CURVE

OPERATING POINT = 22.0' TDH @ 12.7 GPM

→ WITHIN "TYP. OPERATING PRESSURE" ∴ OK

→ 12.7 GPM VS. PEAK INFLOW = 4.93 GPM ∴ OK

DH152 TANK CAPACITY = 150 GAL

TANK DIA. = 38" ± = 3.17'

$$\text{VOLUME/FT} = \frac{\pi(3.17)^2}{4} \times 1' = 7.9 \text{ FT}^3/\text{FT}$$

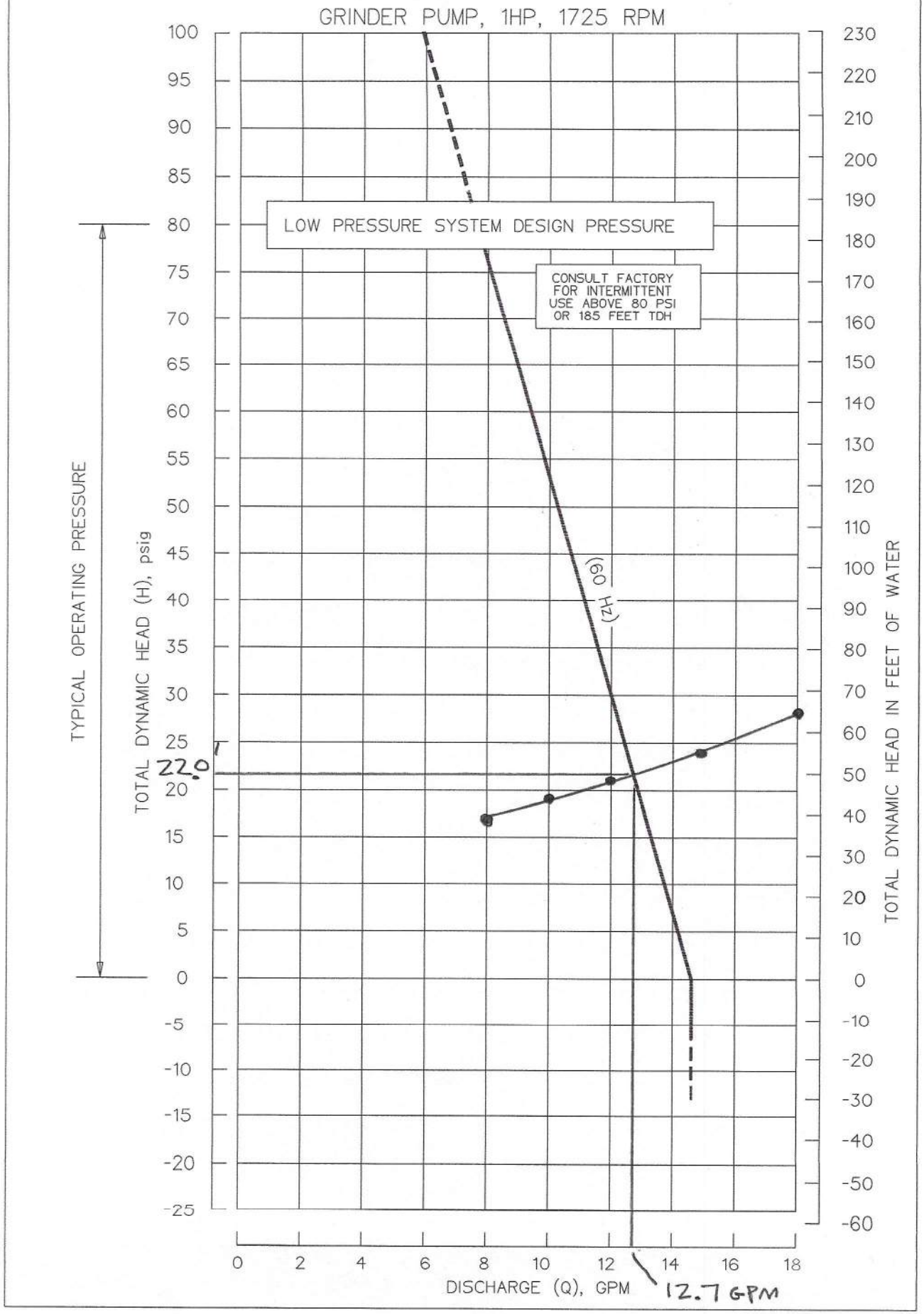
$$7.9 \text{ FT}^3/\text{FT} \times 7.48 \text{ GAL}/\text{FT}^3 = 59 \text{ GAL/FT}$$

DH152 DRAWDOWN = 4" = 0.33 FT

DRAWDOWN VOL. = 59(0.33) = 19.6 GAL

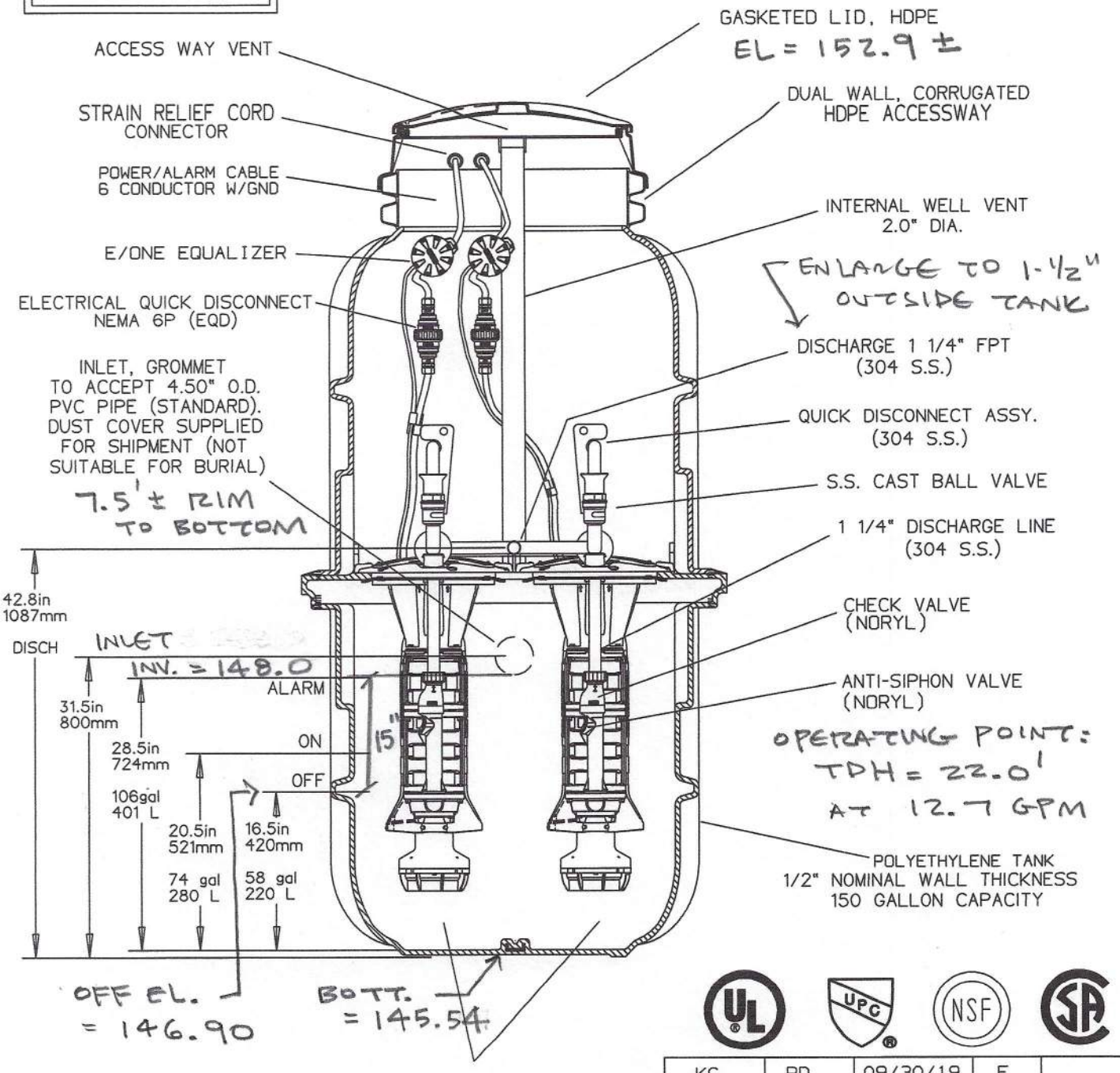
$$\text{DRAWDOWN TIME} = 19.6 \text{ GAL} / 12.7 \text{ GPM} = 1.54 \text{ MIN}$$ OK

E|ONE SPD PUMP PERFORMANCE CURVE



OPTIONS: ☒ DH152 (HARD WIRED LEVEL CONTROLS) ☐ DR152 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH152-129 / DR152-129 & DH152-160 / DR152-160



SEMI-POSITIVE DISPLACEMENT TYPE PUMP EACH DIRECTLY DRIVEN BY A 1 HP MOTOR

JTC B-4 ~ EL = 151.5
REF. = 143.0
WATER = 144.5

CONCRETE BALLAST MAY BE REQUIRED SEE INSTALLATION INSTRUCTIONS FOR DETAILS
APPEARS NOT REQ'D ~ V.I.F.

NOTE: DIMENSIONS ARE FOR REF ONLY

KC	PD	09/30/19	F	
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

MODEL DH152 / DR152
DETAIL SHEET

NA0052P02

TABLE 1

A Staff Re

Valves, Pipe and Fittings

By JAMES A. EDWARDS, Field Editor, POLLUTION ENGINEERING

Valves and fittings that serve to direct and control the flow of fluids are the critical sections of a piping layout in a waste treatment process. Properly applied, they can provide either ON-OFF or proportional control, manual or automatic adjustment, good corrosion resistance, cleanouts in slurry lines, fluid blending, and backflow prevention. Good piping design depends on the proper application and use of valves and fittings through understanding of the equipment capability and how it was intended to be used.

Valves are available in a number of designs: **globe, ball, gate, plug, butterfly, diaphragm, and needle.** All of these types can be equipped with motor operators to automate the application. Despite the wide range of designs, all valves have only one purpose: to slow down or stop the flow of fluid. This is done by blocking the flow of the fluid with an obstruction that can be adjusted inside the pipe, with little leakage from the pipe to the outside.

Table 1. Representative Equivalent Length in Pipe Diameters (L/D) of Various Valves and Fittings

	Description of Product		Equivalent Length in Pipe Diameters (L/D)
Globe Valves	Stem Perpendicular to Run — With no obstruction in flat, bevel, or plug type seat	Fully open	340
	— With wing or pin guided disc	Fully open	450
	Y-Pattern (No obstruction in flat, bevel, or plug type seat) — With stem 60 degrees from run of pipe line	Fully open	175
	— With stem 45 degrees from run of pipe line	Fully open	145
Angle Valves	With no obstruction in flat, bevel, or plug type seat	Fully open	145
	With wing or pin guided disc	Fully open	200
Gate Valves	Wedge Disc, Double Disc, or Plug Disc	Fully open	13
		Three-quarters open	35
		One-half open	160
		One-quarter open	900
	Pulp Stock	Fully open	17
		Three-quarters open	50
		One-half open	260
		One-quarter open	1200
Conduit Pipe Line Gate, Ball, and Plug Valves		Fully open	3**
Check Valves	Conventional Swing	0.5† ... Fully open	135
	Clearway Swing	0.5† ... Fully open	50
	Globe Lift or Stop; Angle Lift or Stop In-Line Ball	2.0† ... Fully open	Same as Globe
	Stem Perpendicular to Run or Y-Pattern	2.0† ... Fully open	Same as Angle
	2.5 vertical and 0.25 horizontal	† ... Fully open	150
Foot Valves with Strainer	With poppet lift-type disc	0.3† ... Fully open	420
	With leather-hinged disc	0.4† ... Fully open	75
Butterfly Valves (2-inch and larger)		Fully open	40
Cocks	Straight-Through	Fully open	18
	Three-Way — Rectangular plug port area equal to 80% of pipe area (fully open)	Flow straight through	44
		Flow through branch	140
Fittings	90 Degree Standard Elbow		30
	45 Degree Standard Elbow		16
	90 Degree Long Radius Elbow		20
	90 Degree Street Elbow		50
	45 Degree Street Elbow		26
	Square Corner Elbow		57
	Standard Tee — With flow through run		20
	With flow through branch		60
	Close Pattern Return Bend		50

Reprinted from Crane Technical Paper No. 410.

**Exact equivalent length is equal to the length between flange faces or welding ends.

†Minimum calculated pressure drop (psi) across valve to provide sufficient flow to lift disc fully.

TABLE 2

150 C	DR-11 200 PSI Poly Pipe IPS Size PE 4710													
Size:	1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"	
GALS PER MIN	OD 1.315 Wall 0.120 ID 1.075		OD 1.660 Wall 0.151 ID 1.358		OD 1.900 Wall 0.173 ID 1.554		OD 2.375 Wall 0.216 ID 1.943		OD 2.875 Wall 0.261 ID 2.353		OD 3.500 Wall 0.318 ID 2.864		OD 4.500 Wall 0.409 ID 3.682	
	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss
2	0.71	0.25	0.44	0.08										
4	1.41	0.90	0.89	0.29	0.68	0.15								
6	2.12	1.91	1.33	0.61	1.02	0.32								
8	2.83	3.25	1.77	1.04	1.35	0.54	0.87	0.18						
10	3.54	4.92	2.22	1.58	1.69	0.82	1.08	0.28						
12	4.24	6.90	2.66	2.21	2.03	1.15	1.30	0.39	0.89	0.15				
15	5.30	10.42	3.32	3.34	2.54	1.74	1.62	0.59	1.11	0.23				
18	6.36	14.61	3.99	4.69	3.05	2.43	1.95	0.82	1.33	0.32	0.90	0.12		
20	7.07	17.76	4.43	5.70	3.38	2.96	2.16	1.00	1.48	0.39	1.00	0.15	0.60	0.04
25	8.84	26.8	5.54	8.61	4.23	4.47	2.71	1.51	1.84	0.59	1.25	0.23	0.75	0.07
30	10.61	37.6	6.65	12.07	5.08	6.26	3.25	2.11	2.21	0.83	1.49	0.32	0.90	0.09
35	12.38	50.1	7.75	16.1	5.92	8.33	3.79	2.81	2.58	1.11	1.74	0.43	1.05	0.13
40	14.14	64.1	8.86	20.6	6.77	10.67	4.33	3.60	2.95	1.42	1.99	0.54	1.21	0.16
45			9.97	25.6	7.61	13.27	4.87	4.48	3.32	1.76	2.24	0.68	1.36	0.20
50			11.08	31.1	8.46	16.1	5.41	5.44	3.69	2.14	2.49	0.82	1.51	0.24
55			12.2	37.1	9.31	19.2	5.95	6.49	4.06	2.56	2.74	0.98	1.66	0.29
60			13.3	43.6	10.15	22.6	6.49	7.63	4.43	3.00	2.99	1.15	1.81	0.34
65			14.4	50.5	11.00	26.2	7.04	8.84	4.80	3.48	3.24	1.34	1.96	0.39
70			15.5	58.0	11.8	30.1	7.58	10.15	5.17	4.00	3.49	1.54	2.11	0.45
75					12.7	34.2	8.12	11.53	5.53	4.54	3.74	1.75	2.26	0.51
80					13.5	38.5	8.66	12.99	5.90	5.12	3.99	1.97	2.41	0.58
85					14.4	43.1	9.20	14.5	6.27	5.73	4.23	2.20	2.56	0.65
90					15.2	47.9	9.74	16.2	6.64	6.37	4.48	2.45	2.71	0.72
95							10.28	17.9	7.01	7.04	4.73	2.70	2.86	0.80
100							10.82	19.6	7.38	7.74	4.98	2.97	3.01	0.88
110							11.9	23.4	8.12	9.23	5.48	3.55	3.32	1.04
120							13.0	27.5	8.86	10.85	5.98	4.17	3.62	1.23
130							14.1	31.9	9.59	12.58	6.48	4.83	3.92	1.42
140							15.2	36.6	10.33	14.4	6.97	5.55	4.22	1.63
150									11.07	16.4	7.47	6.30	4.52	1.86
160									11.8	18.5	7.97	7.10	4.82	2.09
170									12.5	20.7	8.47	7.95	5.12	2.34
180									13.3	23.0	8.97	8.83	5.43	2.60
190									14.0	25.4	9.46	9.76	5.73	2.88
200									14.8	27.9	9.96	10.74	6.03	3.16
220									16.2	33.3	10.96	12.81	6.63	3.77
240											12.0	15.0	7.23	4.43
260											13.0	17.5	7.84	5.14
280											13.9	20.0	8.44	5.90
300											14.9	22.7	9.0	6.70
320											15.9	25.6	9.6	7.55
340													10.2	8.4
360													10.9	9.4
380													11.5	10.4
400													12.1	11.4
450													13.6	14.2
500													15.1	17.3
550													16.6	20.6

Vel = Velocity (ft/s)

Loss = Friction Loss (ft/100' of pipe)

1/16/2017

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

JOB 22075 - FUTURE AUTOMATION
SHEET NO. 1 OF 7
CALCULATED BY MEB* DATE 10/26/23
~~CHECKED~~ BY REVISED DATE 1/9/24
~~SCALE~~ * NH PE # 7101

PUMP STATION DESIGN — PS-2

10,000 SF BLDG. — 3,330 SF OFFICE
— 6,770 SF LIGHT MANUF.

OFFICE = 3,330 SF × 5 GPD/100 SF = 167 GPD

LIGHT MANUF. = 20 EMPL. × 10 GPP/EMPL = 200 GPD
(NO CAFE, NO SHOWERS)

TOT. = 367 GPD

AVE. FLOW = $367 \frac{GAL}{DAY} \times \frac{1\ DAY}{8\ HR} \times \frac{1\ HR}{60\ MIN}$

= 0.76 GPM

PEAK FACTOR = 6.0 ⇒ PEAK DISCHARGE
= 4.56 GPM

- TOT. DYNAMIC HEAD (TDH):
  - $= H_S + H_L + V^2/2g$
  - H_S = STATIC HEAD
  - H_L = FRICTION LOSS IN PIPES ⇒ PIPE LENGTH + EQUIV. FITTING LENGTH
  - $V^2/2g$ = VELOCITY HEAD ($g = 32.2\ FT/S^2$)

- STATIC HEAD:
  - SEWER MANHOLE INV. IN = 161.30
  - PUMP CHAMBER INV. IN = 147.50
  - " " PUMP OFF = 146.40

STATIC HEAD = 161.30 − 146.40
= 14.9'

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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

JOB 22075 - FUTURE AUTO.
SHEET NO. 2 OF 7
CALCULATED BY MEB DATE 10/26/23
~~CHECKED BY~~ REVISED DATE 1/9/24
~~SCALE~~ PS-2

- DYNAMIC HEAD:

FORCE MAIN L = 630'
LENGTH IN PC = 3' ±
TOT. PIPE L = 633'

ASSUME 1.5" HDPE (OR LLPDE) SDR-11

FITTING	PIPE (ϕ) DIA. (IN)	QUAN.	EQUIV. L (EA.)	FITTING EQUIV. L (FT)
90° ELBOW (IN PC)	0.125"	1	30ϕ	3.75'
CHECK VALVE		1	135ϕ	16.88'
GATE VALVE		1	13ϕ	1.63'
UNION/ENLARGER		1	2ϕ	0.25'
45° ELBOW (IN SMH)		1	16ϕ	2.0'
			TOT. =	24.51'

(PIPE) (FIT'S) = 25'

TOT. EFFECTIVE L = 633' + 25' = 658'

(GPM) FLOW	H_f (FT/100)	H_L ($H_F \times 658/100$)	V (FPS)	$V^2/2g$	$H_L + V^2/2g$
8	0.54	3.55	1.35	0.03	3.58
10	0.82	5.40	1.69	0.04	5.44
12	1.15	7.57	2.03	0.06	7.63
15	1.74	11.45	2.54	0.10	11.55
18	2.43	15.99	3.05	0.14	16.13

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JOB 22075 – FUTURE AUTO.
SHEET NO. 3 OF 7
CALCULATED BY MEB DATE 10/26/23
~~CHECKED BY~~ REVISED DATE 1/9/24
SCALE PS-2

FLOW (GPM)	Hs (FT)	$H_L + V^2/2g$ (FT)	TDH (FT)
8	14.9'	3.58	18.48
10	↓	5.44	20.34
12		7.63	22.53
15		11.55	26.45
18		16.13	31.03

- PUMP SELECTION:

TRY E-ONE DH152 PACKAGE SYSTEM W/ E-ONE SPD GRINDER PUMP (1 HP, 1725 GPM)

REFER TO SPD PUMP PERFORMANCE CURVE

OPERATING POINT = 23.5' TDH @ 12.6 GPM

→ WITHIN "TYP. OPERATING PRESSURE" ∴ OK

→ 12.6 GPM VS. PEAK INFLOW = 4.56 GPM ∴ OK

DH152 TANK = 38" ± = 3.17'

VOLUME/FT = $\pi\frac{(3.17)^2}{4} \times 1' = 7.9\ FT^3/FT$

$7.9\ FT^3/FT \times 7.48\ GAL/FT^3 = 59\ GAL/FT$

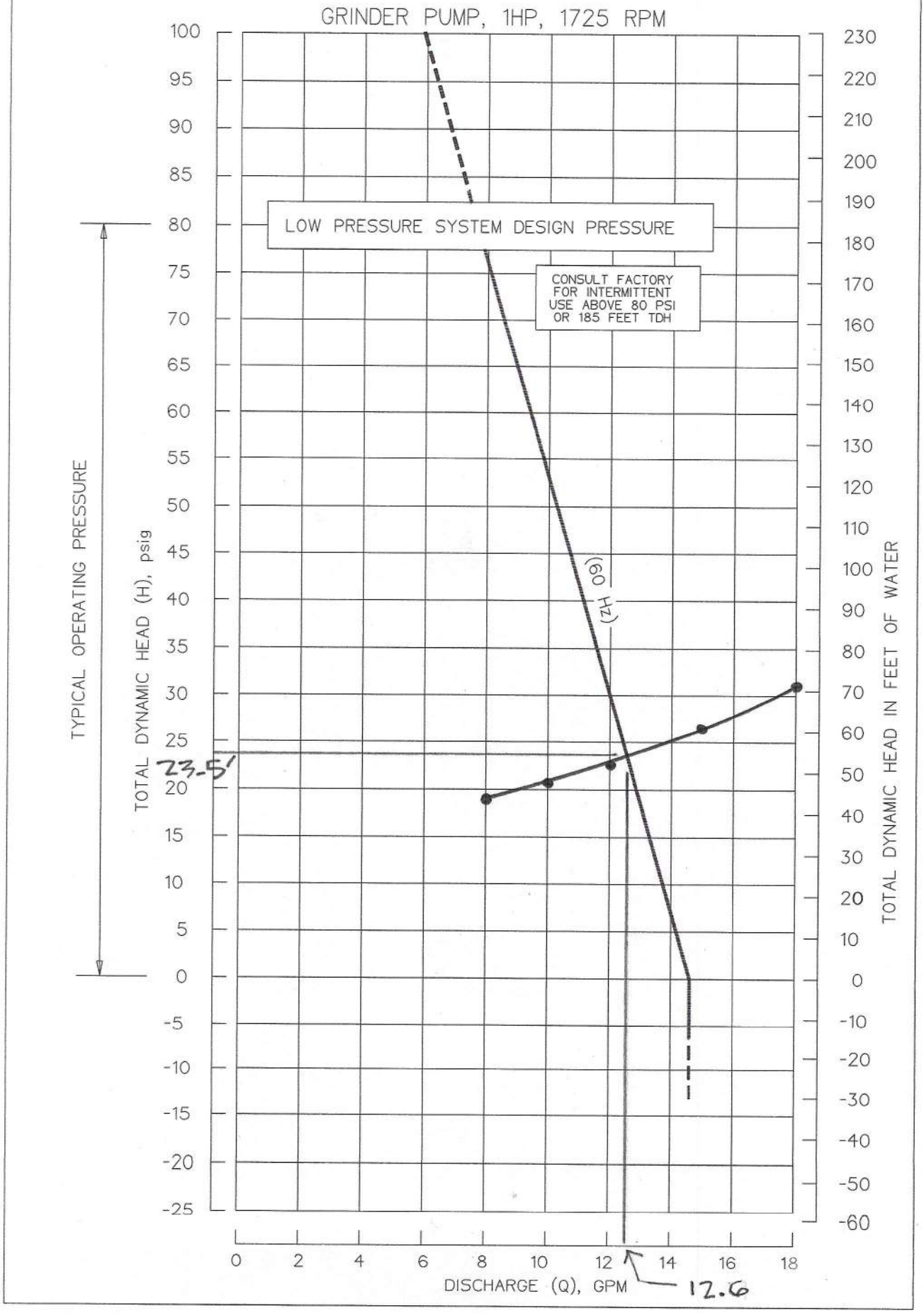
DH152 DRAWDOWN = 4" = 0.33'

DRAWDOWN VOL. = 59(0.33) = 19.6 GAL

DRAWDOWN TIME = 19.6 GAL / 12.6 GPM

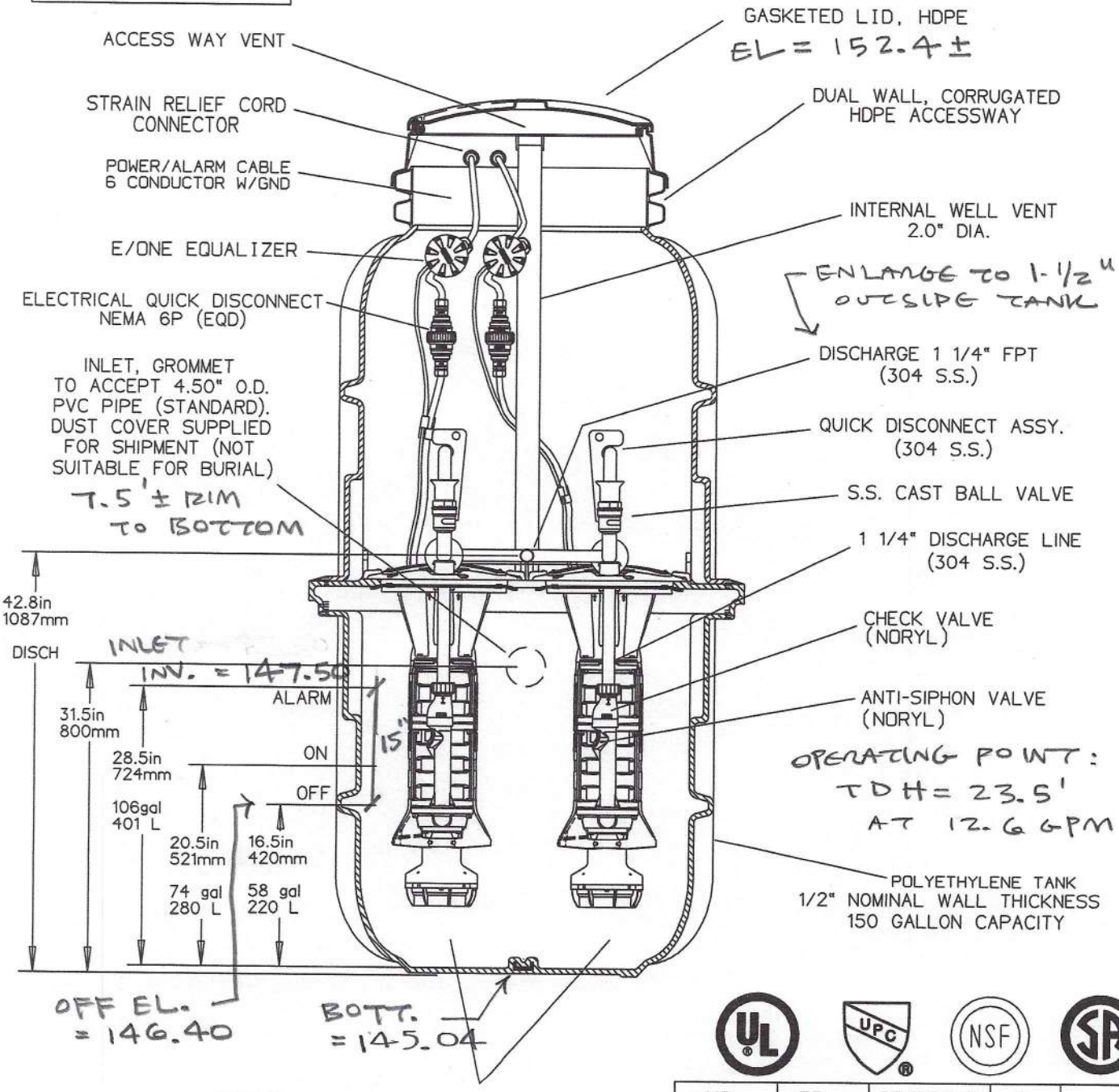
= 1.56 MIN. OK

E|ONE SPD PUMP PERFORMANCE CURVE



OPTIONS: [X] DH152 (HARD WIRED LEVEL CONTROLS)
[ ] DR152 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH152-129 / DR152-129 & DH152-160 / DR152-160



SEMI-POSITIVE DISPLACEMENT TYPE PUMP EACH DIRECTLY DRIVEN BY A 1 HP MOTOR

JTC B-3 – NO WATER ON REFUSAL TO 17' (AT PS-2)

NOT
CONCRETE BALLAST ~~MAY BE~~ REQUIRED SEE INSTALLATION INSTRUCTIONS FOR DETAILS BUT, VIF

NOTE: DIMENSIONS ARE FOR REF ONLY

KC	PD	09/30/19	F	
DR BY	CHK'D	DATE	ISSUE	SCALE

e|one SEWER SYSTEMS

MODEL DH152 / DR152
DETAIL SHEET

NA0052P02

TABLE 1

Valves, Pipe and Fittings

By JAMES A. EDWARDS, Field Editor, POLLUTION ENGINEERING

Valves and fittings that serve to direct and control the flow of fluids are the critical sections of a piping layout in a waste treatment process. Properly applied, they can provide either ON-OFF or proportional control, manual or automatic adjustment, good corrosion resistance, cleanouts in slurry lines, fluid blending, and backflow prevention. Good piping design depends on the proper application and use of valves and fittings through understanding of the equipment capability and how it was intended to be used.

Valves are available in a number of designs: **globe, ball, gate, plug, butterfly, diaphragm,** and **needle.** All of these types can be equipped with motor operators to automate the application. Despite the wide range of designs, all valves have only one purpose: to slow down or stop the flow of fluid. This is done by blocking the flow of the fluid with an obstruction that can be adjusted inside the pipe, with little leakage from the pipe to the outside.

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	Description of Product		Equivalent Length In Pipe Diameters (L/D)
Globe Valves	Stem Perpendicular to Run — With no obstruction in flat, bevel, or plug type seat	Fully open	340
	With wing or pin guided disc	Fully open	450
	Y-Pattern (No obstruction in flat, bevel, or plug type seat) — With stem 60 degrees from run of pipe line	Fully open	175
	—With stem 45 degrees from run of pipe line	Fully open	145
Angle Valves	With no obstruction in flat, bevel, or plug type seat	Fully open	145
	With wing or pin guided disc	Fully open	200
Gate Valves	Wedge, Disc, Double Disc, or Plug Disc	Fully open	13
		Three-quarters open	35
		One-half open	160
		One-quarter open	900
	Pulp Stock	Fully open	17
		Three-quarters open	50
		One-half open	260
		One-quarter open	1200
Conduit Pipe Line Gate, Ball, and Plug Valves		Fully open	3**
Check Valves	Conventional Swing	0.5† ... Fully open	135
	Clearway Swing	0.5† ... Fully open	50
	Globe Lift or Stop; Angle Lift or Stop; In-Line Ball	2.0† ... Fully open	Same as Globe
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		2.5 vertical and 0.25 horizontal † ... Fully open	150
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Butterfly Valves (8 inch and larger)		Fully open	40
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	Three Way — Rectangular plug port area equal to 100% of pipe area	Flow straight through	44
	Rectangular plug port area equal to 80% of pipe area (fully open)	Flow through branch	140
Fittings	90 Degree Standard Elbow		30
	45 Degree Standard Elbow		16
	90 Degree Long Radius Elbow		20
	90 Degree Street Elbow		50
	45 Degree Street Elbow		26
	Square Corner Elbow		57
	Standard Tee — With flow through run		20
	With flow through branch		60
	Close Pattern Return Bend		50

Reprinted from Crane Technical Paper No. 410.

**Exact equivalent length is equal to the length between flange faces or welding ends.

†Minimum calculated pressure drop (psi) across valve to provide sufficient flow to lift disc fully.

TABLE 2

150 C	DR-11 200 PSI Poly Pipe IPS Size PE 4710															
Size:	1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"			
GALS PER MIN	OD Wall ID	1.315 0.120 1.075	OD Wall ID	1.660 0.151 1.358	OD Wall ID	1.900 0.173 1.554	OD Wall ID	2.375 0.216 1.943	OD Wall ID	2.875 0.261 2.353	OD Wall ID	3.500 0.318 2.864	OD Wall ID	4.500 0.409 3.682		
	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss	Vel	Loss		
2	0.71	0.25	0.44	0.08												
4	1.41	0.90	0.89	0.29	0.68	0.15										
6	2.12	1.91	1.33	0.61	1.02	0.32										
8	2.83	3.25	1.77	1.04	1.35	0.54	0.87	0.18								
10	3.54	4.92	2.22	1.58	1.69	0.82	1.08	0.28								
12	4.24	6.90	2.66	2.21	2.03	1.15	1.30	0.39	0.89	0.15						
15	5.30	10.42	3.32	3.34	2.54	1.74	1.62	0.59	1.11	0.23						
18	6.36	14.61	3.99	4.69	3.05	2.43	1.95	0.82	1.33	0.32	0.90	0.12				
20	7.07	17.76	4.43	5.70	3.38	2.96	2.16	1.00	1.48	0.39	1.00	0.15	0.60	0.04		
25	8.84	26.8	5.54	8.61	4.23	4.47	2.71	1.51	1.84	0.59	1.25	0.23	0.75	0.07		
30	10.61	37.6	6.65	12.07	5.08	6.26	3.25	2.11	2.21	0.83	1.49	0.32	0.90	0.09		
35	12.38	50.1	7.75	16.1	5.92	8.33	3.79	2.81	2.58	1.11	1.74	0.43	1.05	0.13		
40	14.14	64.1	8.86	20.6	6.77	10.67	4.33	3.60	2.95	1.42	1.99	0.54	1.21	0.16		
45			9.97	25.6	7.61	13.27	4.87	4.48	3.32	1.76	2.24	0.68	1.36	0.20		
50			11.08	31.1	8.46	16.1	5.41	5.44	3.69	2.14	2.49	0.82	1.51	0.24		
55			12.2	37.1	9.31	19.2	5.95	6.49	4.06	2.56	2.74	0.98	1.66	0.29		
60			13.3	43.6	10.15	22.6	6.49	7.63	4.43	3.00	2.99	1.15	1.81	0.34		
65			14.4	50.5	11.00	26.2	7.04	8.84	4.80	3.48	3.24	1.34	1.96	0.39		
70			15.5	58.0	11.8	30.1	7.58	10.15	5.17	4.00	3.49	1.54	2.11	0.45		
75					12.7	34.2	8.12	11.53	5.53	4.54	3.74	1.75	2.26	0.51		
80					13.5	38.5	8.66	12.99	5.90	5.12	3.99	1.97	2.41	0.58		
85					14.4	43.1	9.20	14.5	6.27	5.73	4.23	2.20	2.56	0.65		
90					15.2	47.9	9.74	16.2	6.64	6.37	4.48	2.45	2.71	0.72		
95							10.28	17.9	7.01	7.04	4.73	2.70	2.86	0.80		
100							10.82	19.6	7.38	7.74	4.98	2.97	3.01	0.88		
110							11.9	23.4	8.12	9.23	5.48	3.55	3.32	1.04		
120							13.0	27.5	8.86	10.85	5.98	4.17	3.62	1.23		
130							14.1	31.9	9.59	12.58	6.48	4.83	3.92	1.42		
140							15.2	36.6	10.33	14.4	6.97	5.55	4.22	1.63		
150									11.07	16.4	7.47	6.30	4.52	1.86		
160									11.8	18.5	7.97	7.10	4.82	2.09		
170									12.5	20.7	8.47	7.95	5.12	2.34		
180									13.3	23.0	8.97	8.83	5.43	2.60		
190									14.0	25.4	9.46	9.76	5.73	2.88		
200									14.8	27.9	9.96	10.74	6.03	3.16		
220									16.2	33.3	10.96	12.81	6.63	3.77		
240											12.0	15.0	7.23	4.43		
260											13.0	17.5	7.84	5.14		
280											13.9	20.0	8.44	5.90		
300											14.9	22.7	9.0	6.70		
320											15.9	25.6	9.6	7.55		
340													10.2	8.4		
360													10.9	9.4		
380													11.5	10.4		
400													12.1	11.4		
450													13.6	14.2		
500													15.1	17.3		
550													16.6	20.6		

Vel = Velocity (ft/s)

Loss = Friction Loss (ft/100' of pipe)

1/18/2017

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – SITE-2024-0002

Application Type:	Site Review
Applicant(s):	Future Automation, LLC
Owner(s):	Dover Business Industrial and Development Authority (DBIDA)
Location:	Quality Way (Assessor's Map D, Lot 11-8)
Date:	March 21, 2024

INTENT: Proposal is to construct a light manufacturing facility consisting of two buildings, 25,000 square feet and 10,000 square feet, each with office space, parking, and associated infrastructure. (SITE-2024-0002) *[This item was previous heard by the Planning Board Technical Review Committee on February 15, 2024.]*

UNITS PROPOSED: None

AGENDA ITEM #: 1

ACREAGE: 8.61± ac.

ZONING DISTRICT: IT

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Light Manufacturing

SURROUNDING LAND USE: Light Manufacturing, Residential

ZBA ACTION: None

PERMITS REQUIRED:
- CUP for §170-27.1, Wetland Protection District
- NH DES Wetlands Permit and Alteration of Terrain

WAIVERS REQUESTED: None requested.

ATTENDANCE:
Donna Benton, Planning
Paul Crouser, Zoning
Marn Speidel, Police
Ken Mavrogeorge, Engineering
James Burdin, Business Development

Others:
Erin Bassegio, Assistant City Planner
Abigail Gilbert, Office of Business Development
Joseph Griffin, Civilworks NE
Michael Menary, Civilworks NE
David Choate, Colliers

Approval of minutes from March 14, 2024:
J. Burdin moved to approve the March 14, 2024 minutes. Seconded by M. Speidel. Vote: U/A.

PLAN REVIEW:
Planning:
- *Reminder: Impact fees, Water and sewer investment fees*
- *Add PE stamp to TAM*
- IT Requirements:
  - *A majority of the parking spaces shall be located to the side or rear of the buildings.* Waiver needed as intent of the regulation is to shield parking with building.
  - IT Zoning Table, Footnote [14]: 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/or a green roof on at least 30 percent of the roof area.
- Revise plans:
  - *Discuss pedestrian connectivity, potentially between buildings, potentially adding sidewalk in-between buildings and to Quality Way.* Potential striping between buildings to enhance connectivity?
  - *Trees within landscape plan require a minimum of 3" caliper or waiver requested and granted.*

Engineering:
- General Comment:
  - *Previous Comment: Applicant shall provide an easement to the City along the private drives within the property to allow for access and operation of the water infrastructure (hydrants and shut offs) to maintain water quality.* **New Comment: Response indicates a new note was added but it cannot be found on sheet 4. Please clarify where this is.**
- Sheet 6:
  - Remove references to ICC (Integrated Concrete Curb) in front of the 25,000 sf building.
- Sheet 9:
  - Show a gate valve on the tees that serve the individual buildings. The valves should be installed with anchor tees at the connection to the main.

- Make sure that the fire service has its own gate valve so that the domestic and fire can be isolated from one another.
- The pump stations appear to have check valves internal to the station. What is the purpose of a second check valve in the road?
- Gate valves for hydrant assemblies shall be anchored to the main.
- Call out how the force main will tie into the existing SMH. The plans show a fernco connection which is different than the detail which shows it using the stub as a sleeve. The City would prefer the stub be removed and the force main tie directly into the MH.

- Sheet 20:
  - Please confirm that the integrated guardrail on the retaining wall is crash rated for vehicles.
- Sheet L-1:
  - *Previous Comment: Snow storage areas conflict with landscaping. Recommend storing snow in areas where landscaping won't get in the way.* **New Comment: Landscape plan L-1 in the site plans is from November and does not reflect the changes in the response to TRC comments. Please provide the latest plan.**

Police:

- Applicant's response to February 15, 2024 Police comment #9 is inaccurate. A sidewalk runs the entire length of the south side of Quality Way and terminates at the cul-de-sac. The police department would like to see a connection to this sidewalk. If there are other reasons why a sidewalk is not feasible, please elaborate on those.
- Suggested striping on driveway for pedestrian use, 4' for pedestrian lane, 13' for each vehicle lane.

Fire/Inspection Services:

- Inspection Services does not have any comments for the Quality Way structures as previous comments have been answered.

Business Development:

- *This application requires architectural review and endorsement by the Dover Business and Industrial Development Authority (DBIDA) prior to review by the Planning Board*
- The next DBIDA meeting will be April 2. Please confirm with Business Development staff by Thursday, March 28 if you wish to be on the agenda.

Planning Board:

- None.

Next Steps: Revise plans to add items mentioned in comments. Submit plans for review at April 2nd DBIDA meeting and April 8th meeting of the Conservation Commission.

Adjournment:
P. Crouser moved to adjourn at 10:47 a.m. Seconded by: K. Mavrogeorge. Vote: U/A.

RECEIVED
Planning Office
APR 01 2024
Dover, New Hampshire

Michael Menary

From:	Michael Menary
Sent:	Wednesday, March 27, 2024 6:32 PM
To:	Mavrogeorge, Kenneth
Cc:	Steve Haight; Joseph Griffin
Subject:	CNE#22075 - Future Automation - Technical Review Committee Comments #2 - SITE-2024-0002
Attachments:	CNE#22075 - Future Automation - Revised Plans to Ken.pdf

Dear Ken Mavrogeorge

In response to Technical Review Committee minutes #2 - SITE-2024-0002 dated March 21, 2024, we submit the following responses in **bold** beneath the review comments in *italic*.

Planning

1. *Reminder: Impact fees, Water and Sewer investment fees.*
   The client has been made aware of all impact fees and investment fees.
2. *Add PE stamp to TAM.*
   PE stamp has been added to the TAM.
3. *IT requirements:*
   a. *A majority of the parking spaces be located to the side or rear of the buildings. Waiver needed as intent of the regulation is to shield parking with building.*
      A waiver will be provided with the Planning board submittal.
   b. *IT Zoning Table, Footnote [14]: Solar/ Green Roof Standard:*
      i. *All buildings must be solar ready*
      A waiver for solar ready buildings will be provided with the Planning Board Submittal.
      ii. *Commercial and mixed use buildings that are 25,000 sq ft or more must also incorporate solar panels and/or a green roof at least 30 percent of the roof area.*
      This building is 24,856 sf, a waiver for solar ready buildings will be provided with the Planning Board Submittal.
4. *Revise Plans:*
   a. *Discuss Pedestrian connectivity, potentially between buildings, potentially adding sidewalk in-between buildings and to Quality Way. Potential striping between buildings to enhance connectivity?*
      Plans have been revised accordingly to include a 4' wide painted pedestrian lane between the buildings and to Quality Way to enhance connectivity, see sheet 6, and see sheet 13, "4' Wide Painted Pedestrian Lane" detail.
   b. *Trees within landscape plan require a minimum of 3" caliper or waiver requested and granted.*
      A waiver will be submitted with the Planning board submittal.

Engineering

1. *General Comment:*
   a. *Previous Comment: Applicant shall provide an easement to the City along the private drives within the property to allow for access and operation of the water infrastructure (hydrants and shut offs) to maintain water quality. New Comment: Response indicates a new note was added but it cannot be found on sheet 4. Please clarify where this is.*
      This note can be found on Sheet 4 Utility Note 29.

2. *Sheet 6:*
    a. *Remove references to ICC (Integrated Concrete Curb) in front of the 25,000 sf building.*
    Reference to ICC in front of the building has been removed, plans have been revised to show MCC (Monolithic Concrete Curb) in front of the buildings, see sheet 6.
3. *Sheet 9:*
    a. *Show a gate valve on the tees that serve the individual buildings. The valves should be installed with anchor tees at the connection to the main.*
    Plans have been revised accordingly.
    b. *Make sure that the fire service has its own gate valve so that the domestic and fire can be isolated from one another.*
    Plans have been revised accordingly to show a gate valve with post indicator valve assembly (Mueller or Clow) on the fire service, see sheet 9 "Typical Fire and Domestic Water Service Connection Detail".
    c. *The pump stations appear to have check valves internal to the station. What is the purpose of a second check valve in the road?*
    The purpose of the curb stop/ check valve in the road is to be able to isolate each pump station. The check valves also prevent effluent from one pump station from going down the other pump station's force main.
    d. *Gate valves for hydrant assemblies shall be anchored to the main.*
    Plans have been revised accordingly to call out that the hydrant assembly will be anchored to main, see sheet 9.
    e. *Call out how the force main will tie into the existing SMH. The plans show a fernco connection which is different than the detail which shows it using the stub as a sleeve. The City would prefer the stub be removed and the force main tie directly into the MH.*
    The plans have been revised accordingly to show the stub being removed, and the force main entering the existing SMH with a Kor-N-Seal, see sheet 19, "Typical Lateral Installation (E/One)" detail. The way the two force mains tie together can be seen on sheet 16, "Force Main Connection Detail".
4. *Sheet 20:*
    a. *Please confirm that the integrated guardrail on the retaining wall is crash rated for vehicles.*
    These details provided are generic fence details to show options for potential installation on the tops of walls. It will be the responsibility of the retaining wall design engineer to fully design and detail the connections of the fence posts to ensure the fence is crash rated. A note has been added that states "fence shall be designed for appropriate crash rating by a New Hampshire Licensed Professional Engineer." see sheet 20, 1.4 Requirements for Contractor Prepared Design and Plans note 6.
5. *Sheet L-1:*
    a. *Previous Comment: Snow storage areas conflict with landscaping. Recommend storing snow in areas where landscaping won't get in the way. New Comment: Landscape plan L-1 in the site plans is from November and does not reflect the changes in the response to TRC comments. Please provide the latest plan.*
    Plan set has been revised to include the latest Landscape plans.

Police

1. *Applicant's response to February 15, 2024 Police comment #9 is inaccurate. A sidewalk runs the entire length of the south side of Quality Way and terminates at the cul-de-sac. The police department would like to see a connection to this sidewalk. If there are other reasons why a sidewalk is not feasible, please elaborate on those.*
    Plans have been revised accordingly to include a 4' wide painted pedestrian lane between the buildings and to Quality Way, see sheet 6, and see sheet 13, "4' Wide Painted Pedestrian Lane" detail.

2. *Suggested striping on driveway for pedestrian use, 4' for pedestrian lane, 13' for each vehicle lane.*
   Plans have been revised accordingly to include a 4' wide painted pedestrian lane between the buildings and to Quality Way, see sheet 6, and see sheet 13, "4' Wide Painted Pedestrian Lane" detail.

Business Development

1. *The next DBIDA meeting will be April 2. Please confirm with Business Development staff by Thursday, March 28 if you wish to be on the agenda.*
   Confirmed with James Burdin that we are on the agenda for the April 2nd DBIDA meeting.

Please find the attached revised plans for your review. If there are no further comments, we will compile the rest of the plan set and submit for Con Com and Planning Board.

Thank you,

Michael Menary
Staff Engineer II
Civilworks New England
181 Watson Road
P.O. Box 1166
Dover, New Hampshire 03821
O: (603) 749-0443
C: (973) 907-0370

WAIVER REQUEST

for

SITE REVIEW APPLICATION

Future Automation

Tax Map D, Lot 11-8

Quality Way

Dover Site Review Regulations: Section 153-14. G (3) (a)

(3) Perimeter landscaping.

(a) Along the perimeter of parking lots with 10 or more spaces, deciduous and/or evergreen shade trees shall be planted at 35 feet on center within the buffer area required by § 153-17C. Trees shall be species tolerant to the climatic conditions of Dover and shall be a minimum caliper of 3 inches (measured at four feet above grade level). Within the perimeter buffer, shrubs shall be planted between the trees at five feet on center. The shrubs shall be a mix of deciduous and evergreen species, tolerant to the climatic conditions of Dover and shall be a minimum height of two feet at the time of planting. All trees, shrubs and landscaping materials shall be maintained in good condition so as to present a healthy, neat, and orderly appearance. ***[Amended 10-12-2021]***

Waiver request: To allow a minimum caliper of 2-1/2".

The Landscape Architect has indicated that trees with a 2-1/2" caliper generally establish themselves quicker and produce new growth sooner and with less maintenance than those of the required sizes.

Granting this waiver is in general conformance with the intent of the Site Review Regulations.

WAIVER REQUEST

for

SITE REVIEW APPLICATION

Future Automation
Tax Map D, Lot 11-8
Quality Way

Dover Site Review Regulations: Section 153-15. C. (2)

A majority of the parking spaces shall be located to the side or rear of the buildings.

Waiver request: To allow parking in the front of the building.

The parcel is located at the end of Quality Way and has a 240 +/- foot long right of way that provides approximately 62 feet of frontage at the end of the cul-de-sac. The parcel configuration is irregular and includes a land locked sending area within the parcel boundaries. The front of the proposed buildings face the proposed access driveway, which bifurcates the site. The rear of both, and one side of each, of the proposed buildings abut property lines due to wetland / sending area locations and parcel configuration. The open side of each of the buildings includes the necessary truck turning and loading areas. The only remaining option for parking is the front of the buildings, which both face internal to the lot. Locating the parking areas in front of the buildings will not negatively affect the visual characteristic to the surrounding parcels or to Quality Way. The parcels that directly abut the buildings in this area are sending areas and open space lots.

Granting this waiver is in general conformance with the intent of the Site Review Regulations.

WAIVER REQUEST

for

SITE REVIEW APPLICATION

Future Automation

Tax Map D, Lot 11-8

Quality Way

Dover Zoning Regulations - Chapter 170A: Table 09 Nonresidential - IT

Innovative Technology (IT) District - Permitted Uses: footnote [14]

[14] 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/or a green roof on at least 30 percent of the roof area.

Waiver request: To allow two building roofs that are not solar ready.

The project proposes two buildings that each consist of light manufacturing and associated office areas. The buildings are 10,000 sq ft and 24,856 sq ft., both proposed with sloped roofs. The roofs of the buildings slope towards (and face) the northeast and the west respectively. The orientation of both roofs is not conducive to efficient solar generation on either of them. The average building height is approximately 25 feet at the center of the sloped roof. The buildings are situated along property lines in which the abutting parcels are an open space and a sending area. The forests in these areas are mature, with tress that are greater than 30 feet in height, and which are located in areas where cutting the trees to provide a clearer view of the open sky is not allowed. In addition to concerns associated with the surrounding foliage, the site characteristics of the parcel are such that the property slopes down and away from Quality Way. The buildings will be located in a shallow valley which will further inhibit access to open skies. Providing solar ready buildings will require additional considerations and added costs for the buildings' structural and electrical designs. The site characteristics, proposed building orientations, and proximity to forests are not conducive for efficient solar generation and would result in an unnecessary hardship.

Granting this waiver would be in general conformance with the spirit of the regulations.

Mark Beaudry

From: Mavrogeorge, Kenneth <K.Mavrogeorge@dover.nh.gov>
Sent: Thursday, January 4, 2024 3:19 PM
To: Mark Beaudry
Cc: Steve Haight; Cheryl Andreason; Joseph Griffin; Nadeau, Mike; Fredrickson, David
Subject: RE: CNE 22075 – Future Automation, Quality Way

Mark,

At this time we have the ability to serve the site with water and sewer with the project demand in your email below.

Regards,

Ken

Ken Mavrogeorge, PE
City Engineer
City of Dover, NH
271 Mast Rd.
Dover, NH 03820-4169
e: k.mavrogeorge@dover.nh.gov
p: 603.516.6454 | c: 603.534.8865
f: 603.516.6463

Dover: First in New Hampshire, First with you!
http://www.dover.nh.gov

From: Mark Beaudry <mbeaudry@civilworksne.com>
Sent: Wednesday, January 3, 2024 10:36 AM
To: Mavrogeorge, Kenneth <K.Mavrogeorge@dover.nh.gov>
Cc: Steve Haight <shaight@civilworksne.com>; Cheryl Andreason <cheryl@surveynh.com>; Joseph Griffin <jgriffin@civilworksne.com>
Subject: FW: CNE 22075 – Future Automation, Quality Way

Security Notice: External sender. Use caution with hyperlinks or attachments.

Hello again Ken. Happy New Year. Just wanted to follow up on my email sent on Dec. 20th since we are getting ready to submit to start the TRC review process. Thx.

Mark

From: Mark Beaudry
Sent: Wednesday, December 20, 2023 12:16 PM
To: Mavrogeorge, Kenneth <K.Mavrogeorge@dover.nh.gov>
Cc: Steve Haight <shaight@civilworksne.com>; Joseph Griffin <jgriffin@civilworksne.com>
Subject: CNE 22075 – Future Automation, Quality Way

Hello Ken: Future Automation is proposing to build two buildings; one 25,000 SF and one 10,000 SF at the end of Quality Way on Tax Map D, Lot 11-8. The buildings will contain a mix of light manufacturing and office space as follows:

Building 1:

- Office = 2,000 SF x 5 GPD/100 SF = 100 GPD
- Light Manuf. (“Factory”) = 25 employees x 10 GPD/empl = 250 GPD
- Total = 350 GPD

Building 2:

- Office = 3,330 SF x 5 GPD/100 SF = 166.5 = 167 GPD
- Light Manuf. (Factory) = 20 employees x 10 GPD/empl = 200 GPD
- Total = 367 GPD

These design flow rates are based on NHDES Env-Wq 1008.03 Table 1008-1 *Unit Design Flow Figures* for “Unspecified Office Space” (5 GPD/100 SF) and “Factories (exclusive of Ind. Waste) without Cafeteria or Showers” (10 GPD/employee). This factory flow rate is the same for any “warehouse” space.

The client has specified that their manufacturing processes do not generate industrial wastewater.

Attached is our utility plan (coordination issuance) that depicts the location, site layout of the buildings and anticipated utility services.

Back in September of 2022 you provided an email to us stating that water and sewer was available for the Weave Filtration project proposed at Lot 11-7; which has not yet been constructed as you know. We request that you now advise on the availability of service to the Future Automation project.

If you have any questions or require more information, please do not hesitate to get back to us.

Thank you for your assistance on these projects.

Mark

_____

Mark Beaudry, PE
Senior Associate/Sr. Project Manager
Civilworks New England
C: (413) 325-3384
O: (603) 749-0443 x113

Please consider conserving our natural resources before printing this e-mail and/or any attachments.

This electronic message and any attachments may contain information that is confidential and/or legally privileged in accordance with NH RSA 91-A and other applicable laws or regulations. It is intended only for the use of the person and/or entity identified as recipient(s) in the message. If you are not an intended recipient of this message, please notify the sender immediately and delete the material. Do not print, deliver, distribute or copy this message, and do not disclose its contents or take any action in reliance on the information it contains unless authorized to do so. Thank you.

EVERSOURCE ENERGY

1700 Lafayette Road
Portsmouth, NH 03801

Michael J Busby
603-436-7708 x555-5678
michael.busby@eversource.com

December 21, 2023

Mark E. Beaudry, PE
Civilworks New England
181 Watson Road, P.O. Box 1166
Dover, NH 03821

Dear Mark:

I am responding to your request to confirm the availability of electric service for the building project being proposed by Future Automation on Quality Way in Dover NH at Tax Map D, Lot 11-8.

The proposed development project consists of two buildings on the lot; one 25,000 SF and one 10,000 SF that will contain a mix of general office space and light manufacturing.

The developer will be responsible for the installation of all underground facilities and infrastructure required to extend electrical service from existing manhole on Venture Drive to proposed buildings. The underground line extension will be designed by Eversource Engineering and will need to be depicted on the utility plan. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed underground/overhead facilities listed above.

This letter serves as confirmation that Eversource has sufficient capacity in Enterprise Park to provide service to this proposed development, however, it will require extending underground infrastructure to proposed site location. The cost of extending service to the location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

The attached drawing titled **"Site Utility Coordination Plan" dated 12/11/2023 prepared by Civilworks New England titled "Future Automation**" shows the location of the underground line extension from Venture Drive to site, required conduit and manholes, and anticipated utility transformer locations to service the proposed project.

Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2).

If you require additional information or I can be of further assistance please do not hesitate to contact me at our Portsmouth Office, 603-436-7708 Ext. 555-5678

Respectfully,

Michael J. Busby, PE
NH Eastern Regional Engineering and Design Manager, Eversource

cc: (via e-mail)
Thomas Boulter, Eastern Region Operations Manager, Eversource
Nickolai Kosko, Field Supervisor, Electric Design, Eversource

Unitil
Northern Utilities, Inc.

January 19th, 2024

Mark Beaudry, PE
Senior Associate/Sr. Project Manager
Civilworks New England

Natural Gas to Future Automation, Quality Way, Dover, NH 03820 Tax Map D, Lot 11-8

Hi Mark,

Unitil/Northern Utilities Natural Gas Division has reviewed the requested site for natural gas Service:

Unitil hereby confirms that natural gas is available for the proposed building at ***, Quality Way, Dover, NH 03820 Tax Map D, Lot 11-8.***

If you have any questions, please contact me at 603-534-2379.

Sincerely,

Dave MacLean
Senior Business Development Rep
Unitil

T 603.294.5261
M 603.534.2379
F 603.294.5264
Email macleand@unitil.com

CIVILWORKS NEW ENGLAND

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

TRAFFIC ASSESSMENT MEMORANDUM

INTRODUCTION

Civilworks New England has prepared this traffic-assessment memorandum (TAM) in regard to the Future Automation development project proposed on Map D, Lot 11-8 on Quality Way in the City of Dover, NH.

This TAM includes:

- existing site description
- proposed project description
- road description
- public transit
- sight distances at the proposed driveways
- trip generation
- trip distribution/assignment
- potential traffic impacts

This TAM concludes that:

- relevant sight distances at the Quality Way/proposed driveway intersection will be adequate.
- The proposed project is not anticipated to add significant new traffic to the area.

EXISTING SITE DESCRIPTION

The site:

- is along the northwesterly side of the cul-de-sac located on Quality Way
- has an area of about 8.61 acres.
- is presently wooded, vacant land.

PROPOSED PROJECT DESCRIPTION

The project will provide:

- two buildings with a total floor area of about 35,000 square feet (sf) as follows:
    - one 25,000 sf building having a floor area consisting of 22,136 sf of light industrial and 2,864 sf of office space.
    - one 10,000 sf build-to-suit building presumed to have a floor area consisting of 6,670 sf of light industrial and 3,330 sf of office space.
- one unsignalized driveway intersecting the west end of Quality Way that will provide access to both buildings.

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

ROAD DESCRIPTION

Quality Way:

- is under the jurisdiction of the City.
- is a local industrial cul-de-sac street.
- Quality Way is oriented about east-west.
- at the east end, intersects with Venture Drive, a local street serving Enterprise Park.
- includes a relatively straight horizontal alignment.
- has minor vertical grades.
- has bituminous concrete pavement in overall good condition.
- has one travel lane per direction, with a pavement width of 28 ft.
- has unmarked pavement.
- has no posted speed limit.
- includes existing utility services.

PUBLIC TRANSIT

Collaborative Alliance for Seacoast Transportation (COAST) Route 33 provides on-call bus service stopping anywhere along Venture Drive. Service is on non-holiday weekdays. Route 33 connects with:

- central Dover, to the southeast
- the Dover Transportation Center, to the southeast
- the NHDOT Park and Ride facility near Indian Brook Drive and Spaulding Turnpike interchange 9, to the east
- the Strafford County Complex, to the west

SIGHT DISTANCES

Quality Way currently services traffic from the SOS Parts LTD loading dock area at 1 Quality Way. The access to the loading area is approximately 240 feet east from the Future Automation project driveway at the westerly end of the cul-de-sac. The American Association of State Highway and Transportation Officials (AASHTO) has established authoritative policy for appropriate sight distances in terms of stopping sight distance (SSD) for vehicles on the main road reacting to existing traffic, and intersection sight distance (ISD) for left turn movements from a stop. Due to Quality Way not being a through road, the project location being at the very end of Quality Way (which is relatively short in length (720± feet)), the very low traffic volume, and vehicles slowing to access the 1 Quality Way driveway before reaching the project driveway, neither SSD or ISD appear to be an issue or even applicable in this case. That said, AASHTO has established the SSD for a 30 mile per hour roadway to be 200 feet and 250 feet for a 35 MPH roadway. The 240± foot distance to the 1 Quality Way driveway would appear to be suitable for a speed of approximately 34 MPH, which is not anticipated. Therefore, sight distance is adequate, if even applicable in this case.

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

CALCULATED TRIP GENERATION

The Institute of Transportation Engineers (ITE) compiles and publishes trip-generation information for a variety of land uses in *Trip Generation Manual*.[1] This authoritative guide for calculating site traffic includes vehicle trip information for Light Industrial (Land Use Code 110) based on floor area[2] and General Office Building (Land Use Code 710) based on floor area.[3] Table 1 shows calculated vehicle trip ends due to the light industrial portion of the proposed development project while Table 2 shows the calculations for the general office building portion of the proposed development. The total vehicle trips generated by the project are:

- Daily (weekday) = 208 total trips (104 into site and 104 out of site)
- AM peak hour (weekday) = 30 total trips (27 in and 3 out)
- PM peak hour (weekday) = 28 total trip (5 in and 23 out)

Table 1: Trip Generation - Light Industrial

			Vehicle Trips*		
Weekday Period	Avg. Trips / 1,000 sf	Proposed s.f. (1,000)	Total	In	Out
Daily	4.87	28.806	140	70	70
AM - Peak Hour of Adjacent Street Traffic	0.74	28.806	21	19	2
PM - Peak Hour of Adjacent Street Traffic	0.65	28.806	19	3	16

* ITE, *Trip Generation Manual,* General Light Industrial - Land Use Code 110

Table 2: Trip Generation - General Office Building

			Vehicle Trips*		
Weekday Period	Avg. Trips / 1,000 sf	Proposed s.f. (1,000)	Total	In	Out
Daily	10.84	6.194	68	34	34
AM - Peak Hour of Adjacent Street Traffic	1.52	6.194	9	8	1
PM - Peak Hour of Adjacent Street Traffic	1.44	6.194	9	2	7

* ITE, *Trip Generation Manual,* General Office Building - Land Use Code 710

[1] ITE, *Trip Generation Manual,* 11th edition (Washington DC, September 2021).

[2] ITE, *Trip Generation Manual,* Volume 3, General Urban/Suburban and Rural (Land Uses 000-399), pages 30 to 46.

[3] ITE, *Trip Generation Manual,* Volume 4, General Urban/Suburban and Rural (Land Uses 400-799), pages 707 to 726.

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

TRIP DISTRIBUTION/ASSIGNMENT

All project-related trips will access the site from Sixth Street via Venture Drive. The calculated vehicle trip generation for the development project is so low that area traffic operations are not sensitive to trip distribution/assignment of project vehicle trips. Vehicle trips to and from the east (and south) may predominate largely due to roadway connections of Sixth Street with central Dover and the Spaulding Turnpike.

POTENTIAL TRAFFIC IMPACTS

The calculations show less than 50 peak-hour primary vehicle trips, due to the proposed project. More specifically, tabulated *peak-hour* trip generation is:

- 28 to 30 vehicle trips.
- These totals are split between vehicles entering and vehicles exiting the site.

Therefore, the proposed project is not anticipated to add significant new traffic to Sixth Street or Venture Drive.

CONCLUSION

In conclusion:

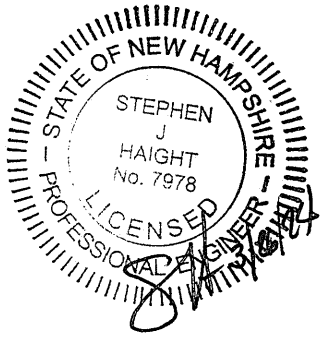
- Sight distances at the Quality Way/proposed driveway intersection will be adequate.
- The proposed project is not anticipated to add significant new traffic to the area.

CIVILWORKS NEW ENGLAND

Sincerely,

Stephen J. Haight, PE

Cc: Future Automation. Inc.



Landscape Best Management Practices
Operations and Maintenance Plan

Commercial Site

Quality Way
Dover, New Hampshire 03820

Prepared for:
Joseph Griffin
Civilworks New England
181 Watson Road
PO Box 1166
Dover, NH 03821

Prepared by:
Terrain Planning & Design, LLC
311 Kast Hill Road
Hopkinton, NH 03229

Landscape Maintenance

Introduction:

The landscape enhancements proposed for the proposed commercial development will require modest maintenance at various times throughout the year. For the site plantings, maintenance is most important during the first 1-2 years following installation when plants are becoming established. Anyone involved in the upkeep of the facility should become familiar with the landscape and its features. Identified below are basic, at minimum, maintenance tasks:

Weekly Tasks:

1. Prune back any shrubs overhanging curbs or sidewalks.
2. Remove litter from plants bed.
3. Remove broken or fallen branches from trees.
4. Prune sucker growth from tree trunks.
5. Remove weeds larger than 2 inches high or wide from plant beds. Weeds 2 inches and larger must be removed, not just killed. **The application of herbicides such as Roundup is discouraged.**
6. Any invasive species seedlings observed should be removed and disposed of properly.
7. Replace bark mulch that may have been washed out of planting beds. Smooth mulch layer if it has been disturbed.
8. Check plants for signs of stress, pests, or disease and notify Owner for authorization to replace.
9. If a significant decline in plant health is attributed to an insect pest, **apply an organic product and/or process** to control the pest.
10. Water plants that are dry and stressed.
11. Notify Owner for authorization to replace dead plants at the appropriate time (see annual tasks, September).
12. Identify other tasks listed on the Annual and Monthly checklist of tasks.

Annual Tasks

Early Spring:

1. Prune winter damage such as broken tree branches that interfere with public safety.
2. Trim dead perennial foliage left in the fall for winter interest to within six inches of the ground.
3. Add new mulch to plant beds where the mulch depth has been reduced to less than 2 inches. Mulch depth shall not exceed two inches (top dressed). Mulch is not required where shrubs or groundcover completely hide the soil surface from view.
4. Gently prune shrubs at appropriate time of year based on species, for shape and form. **Do not shear.**
5. Energize the irrigation system, repair damaged components, test the system, adjust heads, and update programing.
6. Conduct a soil test to measure at a minimum, pH, phosphorus, potassium, calcium, and magnesium. Follow the recommendations provided with the soil test results.
7. Apply fertilizer only when required. A single application of fertilizer per year before Memorial Day is encouraged.

Monthly Tasks

June:

No additional items

July:

No additional items

August:

No additional items

September:

1. Inventory all plant materials, including an exact count of all shrubs and trees.
2. Replace any dead or missing plants.
3. Aerate lawn areas.
4. Apply pelletized lime at a rate of 80 lbs/1,000 square feet or as soil test dictates.

October:

1. Winterize irrigation system.

November:

1. Remove leaves from lawn areas and planting beds.
2. Remove perennial vegetation that has died back for the season.
3. Apply "WILT-PRUF" to broadleaf evergreens, according to label instructions, to protect shrubs from winter die back.

December:

1. Prune any tree branches that interfere with public safety.
2. Prune street and parking lot trees yearly to encourage strong growth the following growing season. Trees adjacent to pedestrian sidewalks shall have branches pruned to 6-foot height.

Management Task or Activity	Time or Frequency						
	Weekly	Monthly	Spring	Summer	Fall	Winter	After Major Rain Events
Replace dead or dying plants			X				
Remove weeds	X		X	X	X		
Cut down grasses			X				
Remove accumulated leaves, litter, and plant debris		X					X

Stormwater Detention Facilities

Introduction:

The stormwater facilities are used to attenuate flow and treat stormwater. The stormwater treatment areas consist of a large bioretention pond and linear swales seeded with a variety of native, adaptable, and rugged perennial grasses, and sometimes additional flowering plants. There are maintenance tasks associated with stormwater facilities.

Erosion:

The soil in the facility and in areas draining to the facility shall be inspected for erosion. Eroded areas shall be filled with soil or mulch and seeded with the approved seed mix for the location.

Sediment Accumulation & Clogging:

The accumulation of sediment within the facility may reduce its infiltration capacity and impair performance. The facility shall be inspected for accumulation of sediment and excessive sediment shall be removed with the area re-mulched and replanted as appropriate and necessary.

Outlet Structure Maintenance:

The facility outlet structure requires monitoring. Periodically, the orifice on the outlet pipe may clog with debris. Any found debris should be removed and appropriately disposed of off-site.

Debris & Litter:

Debris and litter should be removed monthly to maintain aesthetic appearance and public acceptance.

Plant Maintenance:

Healthy vegetation contributes to the optimal operation of the stormwater facility. Planting area maintenance tasks include the removal of accumulated leaves, litter, and plant debris as needed. During the first 1-2 years after planting, the facility should be monitored for invasive species and weeded as needed and appropriate. Well-established facility vegetation should be mowed annually in the fall.

Snow Storage:

Snow shall not be dumped directly onto the facility.

Chlorides:

The stormwater facility is not suitable for treating chlorides. Chloride use on source surface areas tributary to the facility should be avoided if possible. In these locations, it would be prudent to eliminate or reduce application of chloride-containing deicing compounds, use alternative deicers, or apply clean sand as needed. Aggressive sweeping in these areas, along with pretreatment sumps and filter strips, will minimize the negative impact of the sand on the facility.

Management Task or Activity	Time or Frequency						
	Weekly	Monthly	Spring	Summer	Fall	Winter	After Major Rain Events
Inspect for erosion. Rake and redistribute/replenish any soil, rap, or mulch that has eroded		X					X
Inspect for standing water							X
Remove accumulated leaves, litter, and plant debris		X					X
Weed plant material		X					
Mow plant material					X		

Stormwater Management System Inspection & Maintenance Plan

Prepared for:

FUTURE AUTOMATION
Map D, Lot 11-8

Quality Way
Dover, New Hampshire
Strafford County

JANUARY 2024

Owner of Record:

FUTURE AUTOMATION, INC.
127 Venture Drive
Dover, New Hampshire 03820

Prepared By:

CIVILWORKS NEW ENGLAND
P.O. Box 1166
181 Watson Road
Dover, New Hampshire 03821

Introduction

Civilworks NE, has prepared the following Stormwater Management System Inspection & Maintenance Plan for **Future Automation, Inc.** The intent of this plan is to provide a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this site.

The inspection and maintenance requirements outlined in this document are required to be performed in perpetuity. In the event the property is sold, future owners will be responsible for implementing the responsibilities outlined in this document.

The following inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. These measures will also help to minimize potential environmental impacts to the areas surrounding the developed site. By following the enclosed procedures, the property owners, and maintenance personnel 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.

This plan also requires the Owner/Operator to prepare and implement a salt minimization plan to reduce salt usage on-site and ultimately within the watershed. This plan will allow the owner/operator to monitor and modify how much salt is needed, when it should be applied, where it needs to be applied, with the ultimate goal of reducing salt-use without compromising safety. It is expected that salt-use reduction will lead to long-term cost-savings as a result of purchasing less salt and reduced impacts on vegetation (e.g., landscaping) and corrosion of infrastructure.

The salt minimization plan should include the retention of a contractor who has completed the Green SnowPro Training course and obtained NHDES Salt Application Certification.

It is anticipated that this be a living document that will be updated at regular intervals (recommend updating annually in advance of the winter season in order to facilitate adjustments).

Owner:

Future Automation, Inc.
127 Venture Drive
Dover, NH 03820

In the event of a change in ownership, this Inspection and Maintenance Plan shall be transferred to the new party; transfer shall be documented to NH DES in writing.

Contact / Responsible Party:

Future Automation, Inc.
127 Venture Drive
Dover, NH 03820

Alun Williams
Phone: (603) 742-9181
Email: Alun.Williams@futureautomation.co.uk

The contact information for the Contact / Responsible Party shall be kept current; transfer shall be documented to NHDES in writing.

Management Company:

Future Automation, Inc.
127 Venture Drive
Dover, NH 03820

The contact information for the Management Party shall be kept current.

Inspection Schedule / Record Retention

Inspection frequency should, at a minimum, be in accordance with New Hampshire Stormwater Manual, Volume 2, latest edition, as updated by NHDES. See the Inspection and Maintenance Plan for frequency requirements. A copy of the completed Stormwater Management System's Inspection & Maintenance Log and Deicing Salt Quantity Use Log shall be maintained, kept on-site, and be made available to local, state, or federal regulators as applicable by law. All Inspection and Maintenance records must be provided to NHDES upon request and to the City of Dover Community Services Department annually before Dec 15th.

Stormwater Management System Components

The Stormwater Management System associated with the project is designed to mitigate both the quantity and quality of site-generated stormwater runoff. As a result, its design includes the following elements:

- Pipes/Culverts
- Outlet Structures
- Energy Dissipation Structures (Rip Rap)/ Plunge Pool
- Sediment Forebay
- Catch Basins
- Bioretention Basin
- Grassed Lined Conveyance Swale
- Deep Sump Catch Basins
- Pavement
- Litter / Trash Removal

Design elements are identified in the design plans, a copy of which shall be maintained with this Inspection and Maintenance Plan.

Control of Invasive Species

During maintenance activities, check for the presence of invasive plants and remove in a safe manner. Invasive plants shall be controlled to prevent them from reproducing, spreading, or re-growing. See the University of New Hampshire – Cooperative Extension's "Method for Disposing Non-Native Invasive Plants", included at the end of this manual, for guidance on the removal and disposal of invasive species.

Inspection and Maintenance Plan

By implementing the following procedures, the owners will be able to maintain the functional design of the Stormwater Management System and maximize the system's ability to remove sediment and other contaminants from site generated stormwater runoff.

PIPES/CULVERTS:

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

OUTLET STRUCTURE(S):

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

ENERGY DISSIPATION STRUCTURES (RIP RAP)/ PLUNGE POOL:

- Inspect at least once a year.
- Inspect for sediment accumulation.
- Remove all debris immediately.
- Inspect the outlet protection annually for damage and deterioration. Repair damages immediately.
- If stones become displaced from the riprap areas, they should be replaced immediately and chinked in to assure stability. Add additional riprap as needed. Vegetation growing through the riprap should be eliminated at least yearly.

SEDIMENT FOREBAY:

- Vegetated areas shall be mowed to maintain a 4" start of vegetative growth.
- Inspect at least once per year.
- Inspect for sediment accumulation.
- Remove all debris immediately.

CATCH BASIN(S):

- Inspect once per year.
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately and sediment accumulations ≥ 1 foot.
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

BIORETENTION BASIN:

- Inspection, by a **qualified professional**, of the Bioretention Basin at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24-hour period, with maintenance or rehabilitation conducted as warranted by such inspection. If the Bioretention Basin systems do not drain within 72-hours following a rainfall event, a qualified professional should assess the condition and determine measures required to restore filtration practice (as applicable).
- Embankments and spillways should be inspected by a **qualified professional** for settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability for impounding water. Immediate corrective action should be implemented if any such conditions are found.
- Inlet and outlet pipes, inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances should be inspected by a **qualified professional**, and corrective action implemented (e.g., maintenance, repairs, or replacement) as indicated by such inspection.
- The bottoms, interior and exterior side slopes, and crest of earthen detention basins should be mowed, and the vegetation maintained in healthy condition, as appropriate to the function of the facility and type of vegetation.
- Vegetated embankments that serve as “berms” or “dams” that impound water should be mowed at least once annually to prevent the establishment of woody vegetation.
- Trash and debris should be removed from the pond and any inlet or outlet structures whenever observed.
- Accumulated sediment should be removed when it significantly affects pond capacity.

GRASS LINED CONVEYANCE SWALE:

- Inspect once per year.
- Inspect for erosion, sediment accumulation, vegetation loss, and presence of invasive species.
- Remove debris and accumulated sediment, based on inspection.
- Repair eroded areas as needed; remove invasive species and dead vegetation.
- Perform periodic mowing of swale (at least twice annually), maintain a 4” stand of vegetative growth.

DEEP SUMP CATCH BASINS:

- Inspect twice per year (recommended in the spring and fall).
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately.
- Sediment should be removed when it approaches half the sump depth.
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

PAVEMENT:

- Minimize sanding.
- Minimize application of salt for ice control.
- Clean periodically (1-2 times per year) using a sweeper or vacuum sweeper. Vacuum sweeping is the preferred method.

LITTER / TRASH REMOVAL:

- Routinely patrol site for litter pick up.

DE-ICING AGENTS:

- To address the concerns associated with the application of chlorides and other deicing materials, NHDES recommends that the Owner/Operator develop a Road Salt and Deicing Minimization Plan for the parking lots and roadways. The plan should develop the policies that the development will keep in place to minimize salt and other deicer use after the project has been completed. The plan should include tracking the use of salt and other deicers for each storm event and compiling salt use data annually. (See Deicing Salt Quantity Use Log).
- Use sand as primary agent for driveway and access way safety during ice and snow conditions.
- Minimize the use of salt during the winter.
- Use de-icing or anti-caking agents, added to enhance performance and application characteristics of sand mixtures, only as necessary and at minimum application rates.
- Recommend using a certified Winter Operator (Green SnowPro Trained) for applying de-icing agents.
- Monitor weather and apply de-icing agents based on weather conditions and temperatures.

ANTI-ICING AND SALT MINIMIZATION:

- Owner to develop a Road Salt and Deicing Minimization Plan.
- Provide a written policy that the “Development” will keep in place to minimize salt and other deicer use after the project has been completed.
- Use the attached form to track the use of salt and other deicers for each storm event and compiling salt use data annually.

Inspection & Maintenance Table

System Component / BMP	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
Pipes/Culverts	Annually	• Check for clogging • Check for sediment accumulation	Remove when noticed Clean when necessary
Outlet Structure(s)	Annually	• Inspect once per year. • Inspect for clogging and sediment accumulation. • Remove all debris immediately and sediment accumulations ≥ 2 inches.	≥ 2 in. sediment Remove immediately
Energy Dissipation (ED) Structures (Rip Rap)/ Plunge Pool	Annually	• Check for erosion • Check for displaced stones • Check for woody vegetation • Check for sediment accumulation	≥ 3 in. sediment Remove annually Replace/ reset Dislodged stones immediately
Sediment Forebay	Annually	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4” start of vegetative growth.	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Catch Basins	Annually	• Check for sediment accumulation • Check for floatable contaminants • Check for hydrocarbons (oils and grease)	≥ 1 ft. sediment depth Remove all floatables Remove immediately
Bioretention Basin • Outlet Structure • Inlet/Outlet Piping • Embankments • Pond Sediment • Trash/Debris • Vegetation (Veg.)	Bi-Annually “ “ “ “ Periodically “ “ “ “	• See Outlet Structure (OS) Req. • Check for erosion, settlement, seepage, etc. • Check for sediment accumulation in pond • Check for trash (in pond and structures) • Maintain 95% veg. (pond & slopes) • Maintain healthy stand of veg.	See OS Req. Repair immediately ≥ 2 in. sediment Remove all trash/debris Restore veg. in-kind Mow when ≥ 6 in
Grass Lined Conveyance Swale	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4” minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore vegetation in-kind Mow twice per year Remove/Dispose of accordingly
Deep Sump Catch Basins	Bi-Annually	• Check for sediment accumulation • Check for floatable contaminants • Check for Hydrocarbons	Half the sump depth Remove all floatables Remove immediately
Pavement: • Sanding • Salt Applications • Sweep/Vacuum • Trash/Debris	Limit use As required 1 - 2 x’s Year Periodically	• Minimize use to prevent tracking issues • RECORD APPLICATION RATES • Sweep or vacuum to prevent tracking issues • Check for trash/debris	Sweep to prevent issues Minimize (as required) Sweep/Vac as needed Remove when noticed
Litter / Trash Removal	Periodically	• Check for litter and trash	Remove when noticed

Inspection & Maintenance Checklist/Log

The following pages contain a blank copy of the Stormwater Management System's Inspection & Maintenance Log and a Deicing Salt Quantity Use Log. These forms are provided to assist the owners with the inspection and maintenance of the aforementioned Stormwater Management System.

Stormwater Management System's Inspection & Maintenance Log

Date of Inspection/Maintenance_____ Inspector:_____

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

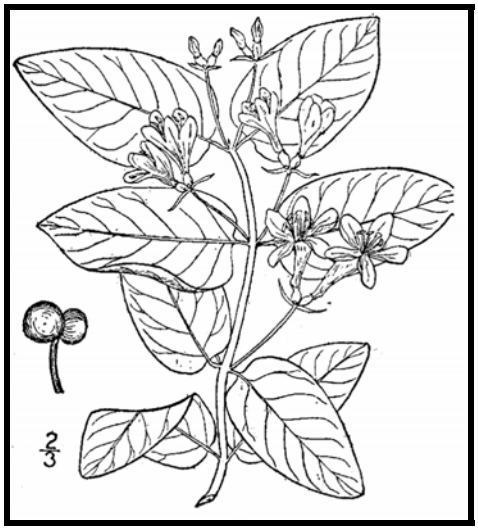
Deicing Salt Quantity Use Log

Date	Amount of Material Applied	Comments

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-viable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

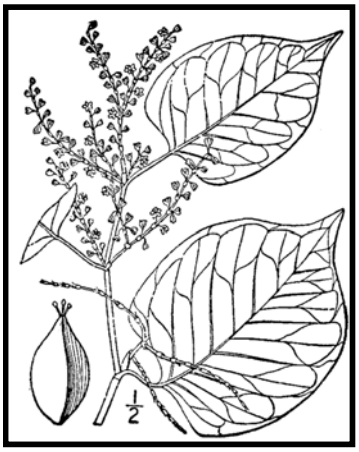
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

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 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Make a brush pile.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

<table>
<tr><th>Non-Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">garlic mustard
(Alliaria petiolata)
spotted knapweed
(Centaurea maculosa)
▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.
black swallow-wort
(Cynanchum nigrum)
▪ May cause skin rash. Wear gloves and long sleeves when handling.
pale swallow-wort
(Cynanchum rossicum)
giant hogweed
(Heracleum mantegazzianum)
▪ Can cause major skin rash. Wear gloves and long sleeves when handling.
dame’s rocket
(Hesperis matronalis)
perennial pepperweed
(Lepidium latifolium)
purple loosestrife
(Lythrum salicaria)
Japanese stilt grass
(Microstegium vimineum)
mile-a-minute weed
(Polygonum perfoliatum)</td><td rowspan="2">Fruits and Seeds
 </td><td>Prior to flowering
Depends on scale of infestation
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>During and following flowering
Do nothing until the following year or remove flowering heads and bag and let rot.

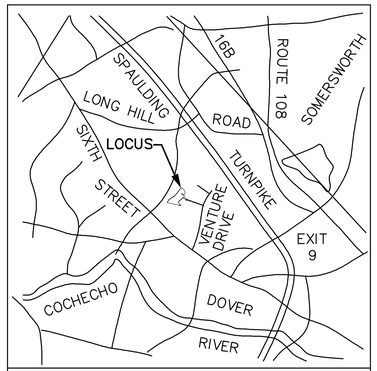
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>common reed
(Phragmites australis)
Japanese knotweed
(Polygonum cuspidatum)
Bohemian knotweed
(Polygonum x bohemicum)</td><td>Fruits, Seeds, Plant Fragments
Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn’t materially influence disposal activities.</td><td>Small infestation
▪ Bag all plant material and let rot.
▪ Never pile and use resulting material as compost.
▪ Burn.

Large infestation
▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.
▪ Monitor and remove any sprouting material.
▪ Pile, let dry, and burn.</td></tr>
</table>

January 2010

UNH Cooperative Extension programs and policies are consistent with pertinent Federal and State laws and regulations, and prohibits discrimination in its programs, activities and employment on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sex, sexual orientation, or veteran’s, marital or family status. College of Life Sciences and Agriculture, County Governments, NH Dept. of Resources and Economic Development, Division of Forests and Lands, NH Fish and Game ,and U.S. Dept. of Agriculture cooperating.



LOCATION PLAN
(NO SCALE)

SITE PLAN
FOR
FUTURE AUTOMATION

TAX MAP D, LOT 11-8

QUALITY WAY
DOVER, NH
JANUARY 2024
FEBRUARY 2024
APRIL 2024

OWNER

DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A)
288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

_____ DATE

APPLICANT

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

_____ DATE

SITE CIVIL ENGINEER

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

LAND SURVEYOR

MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 1166
DOVER, NH 03821
(603) 742-0911

ARCHITECT

JOHN M. TUTTLE, ARCHITECT
TW DESIGNS, LLC
254 DRAKE HILL ROAD
STRAFFORD, NH 03884
(603) 664-2181

WETLAND SCIENTIST

MICHEAL R. CUOMO
6 YORK POND ROAD
YORK, ME 03909
(207) 363-4532

LANDSCAPE ARCHITECT

TERRAIN PLANNING & DESIGN, LLC
311 KAST HILL ROAD
HOPKINTON, NH 03229
(603) 491-2322

WILDLIFE PROTECTION NOTES:

- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: NHB23-3353, FUTURE AUTOMATION INC., WILDLIFE SPECIES OBSERVATION.
- PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE.
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04.
- THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

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PROJECT COVER SHEET	PCS
FLOOR PLAN	A1.1
EXTERIOR ELEVATIONS	A3.1
AUX BUILDING STREET VIEW RENDERING	R1.1
LANDSCAPE PLANS	
LANDSCAPE PLAN	L1.0
LANDSCAPE DETAILS	L2.0

PLANNING FILE NO.: SITE-2024-0002

ABUTTERS LIST
(WITHIN 200 FT)

TAX MAP	LOT NO.	NAME & ADDRESS
D	11-1-0	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D	11-9-SND	HEINE USA 10 INNOVATION WAY 288 CENTRAL AVE DOVER, NH 03820
D	11-8-SN3	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D	11-8-SN2	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
A	47-12-0	MCCONNELL GEOFFERY R & DEBORAH TRUSTEE MCCONNELL REVOCABLE LIVING TRUST 15 REYNERS BROOK DRIVE DOVER, NH 03820
A	47-10-0	ARVENITIS KERRY A 11 REYNERS BROOK DRIVE DOVER, NH 03820
A	48-B-0	MENDENHALL JON L & MENDENHALL KAREN E 475 SIXTH STREET DOVER, NH 03820
A	49-11-0	TRICONI CHRISTOPHER E & ELIZABETH C TRUS TRICONI FAMILY LIVING TRUST 2021 28 QUAIL DRIVE DOVER, NH 03820
A	49-12-0	MOREAU SCOTT & CURTIS MARCY 32 QUAIL DRIVE DOVER, NH 03820
A	49-13-0	PORTER DOUGLAS W & PORTER YUKARI 29 QUAIL DRIVE DOVER, NH 03820
D	12-1-0	TSB PROPERTIES LLC 385 SIXTH STREET DOVER, NH 03820
D	12-2-0	TSB PROPERTIES LLC 385 SIXTH STREET DOVER, NH 03820
D	11-7-SN2	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D	11-7-0	WEAVE FILTRATION QUALITY WAY DOVER, NH 03820
D	11-4-0	QUALITY WAY LLC 55 MAIN STREET, UNIT 407 NEWMARKET, NH 03857
D	11-6-0	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820

SYMBOL LEGEND

D / 11 — TAX MAP / LOT NUMBER

NH STATE PLANE
NAD 83 - GPS OBS:

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

PLANNING FILE NO.: SITE-2024-0002

NEIGHBORHOOD PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

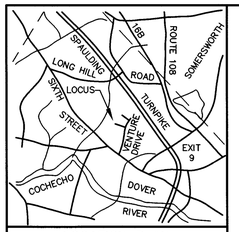
2

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: JFG
DRAWN BY: SRD
SCALE: 1"=200'
DATE: 1-18-24
PROJECT NO: 22075
FILE: SITE.DWG
APPROVED BY: SJH

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443



LOCATION PLAN
(NO SCALE)

REFERENCE PLANS:

1.) AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & Co., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5/3/06; BY THIS OFFICE. RECORDED S.C.R.D. PLANS 85–99 & 85–100.

2.) ROADWAY AS–BUILT PLAN & PROFILE PREPARED FOR DOVER INDUSTRIAL DEVELOPMENT AUTHORITY, QUALITY WAY AT VENTURE DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 40'; DATED: JANUARY 16, 2006, REVISED THROUGH 3/16/06; BY: McENEANEY SURVEY ASSOCIATES, INC. ON FILE WITH CITY OF DOVER ENGINEERING DEPARTMENT.

NOTES:

1.) OWNERS OF RECORD:

DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A.)
288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOL. 1559 / 394
TITLE REF. SEE SCRD 1738 / 130, 1027 / 790, 773 / 481

2.) D / 11–8 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PLAN INTENT: TO SHOW THE SITE EXISTING CONDITIONS.

4.) PARCEL AREA = 375,192 S.F. / 8.61 Ac.

5.) ZONING DISTRICT IS INNOVATIVE TECHNOLOGY (IT)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 2 ACRES
MINIMUM LOT COVERAGE	= 33 PERCENT
MINIMUM FRONTAGE	= 200 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 50 FEET
SIDE SETBACK	= 50 FEET
REAR SETBACK	= 50 FEET
MAXIMUM BUILDING HEIGHT	= 55 FEET MAXIMUM

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 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPTEMBER 30, 2015.

7.) BASIS OF BEARING IS THE CITY OF DOVER / GEOD CORP. GRID PER REFERENCE PLAN No. 1. (G.I.S. STATIONS TR 390 AND TR 391A) VERTICAL DATUM IS CITY OF DOVER / GEOD CORP. PER CITY G.I.S. STATIONS TR 390 AND TR 391A.

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

9.) WETLANDS SHOWN WERE IDENTIFIED BY DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES ON SEPTEMBER 2, 2022 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY McENEANEY SURVEY ASSOCIATES OF NEW ENGLAND.

10.) THE PARCEL IS SERVED BY MUNICIPAL SEWER AND WATER.

11.) TOPOGRAPHY DEPICTED IS BASED ON FIELD OBSERVATIONS BY THIS OFFICE.

12.) LOT D/11–8 WAS CREATED USING THE CITY OF DOVER TDR ORDINANCE.

LEGEND

S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
– STONE WALL
– EDGE OF WET
f/k/a – FORMERLY KNOWN AS
D.H.(fnd) – DRILL HOLE FOUND
S.S.(fnd) – STEEL STAKE FOUND
I.R.(fnd) – IRON ROD FOUND
TBM – TEMPORARY BENCH MARK
– FIRE HYDRANT
SMH – SEWER MANHOLE
8"S – SEWER MAIN PIPE AND SIZE
S – SEWER SERVICE
W – WATER MAIN PIPE AND SIZE
W – WATER SERVICE
– WATER GATE VALVE
G – GAS MAIN
U/G E,T,C – UNDERGROUND ELECTRIC, TELEPHONE AND CABLE BROADBAND
174 – EXISTING CONTOUR (2 FOOT INTERVAL)

No.	Bearing	Distance
L1	N30°30'05"W	55.67'
L2	N30°29'16"W	80.58'
L3	S38°23'21"E	61.89'
L4	S81°38'07"E	66.39'
L5	S77°08'15"W	52.06'
L6	S35°56'47"E	78.76'
L7	S09°40'20"W	72.30'
L8	S30°30'05"E	76.90'
L9	S30°30'05"E	59.35'

No.	Central Angle	Radius	Arc Length	Chord Length	Chord Bearing
C1	24°49'33"	253.78	109.96	109.10	N42°54'51"W
C2	22°24'32"	193.79	75.80	75.31	S41°42'21"E
C3	47°44'43"	75.00	62.50	60.71	S26°56'10"W

NO.	DATE	DESCRIPTION	BY	CHK
		REVISIONS		

22–2463	EC	22–10	53–64
PROJECT NO	TYPE	FIELDBOOK & PAGES	

"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."

NEW STATE PLANE NAD 83 – GRID ODS:

EXISTING CONDITIONS PLAN OF LAND
PREPARED FOR
FUTURE AUTOMATION
TAX MAP D, LOT No. 11–8
QUALITY WAY
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DRAWN BY: KJF	FILE: MSA\2463\D\22–2463
SCALE: 1" = 50'	DATE: NOVEMBER 2, 2022

50 25 0 25 50 100 150 200

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

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

SURVEYING – PLANNING – CONSULTING

File: \\cnetserver1\MSA Projects\2463\Drawings\22-2463.dwg Layout 22x34
11/3/2022 15:45:55

DOVER NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED CONSTRUCTION OF A 25,000 S.F. AND A 10,000 S.F. BUILDING WITH ASSOCIATED SITE IMPROVEMENTS.
2. OWNER(S) OF RECORD:
   DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
   f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A.)
   288 CENTRAL AVENUE
   DOVER, NEW HAMPSHIRE 03820
3. D/11-8 – DENOTES TAX MAP AND PARCEL NUMBER.
4. PARCEL AREA: 375,192 S.F. / 8.61 Ac.
5. TITLE REFERENCE: SEE SCRD 1559/394, 1738/130, 1027/790, 773/481
6. REFERENCE PLANS:
   A. AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & Co., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, CITY OF DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5/3/06; BY THIS OFFICE. RECORDED S.C.R.D. PLAN NOS. 85–99 & 85–100
   B. ROADWAY AS–BUILT PLAN & PROFILE PREPARED FOR DOVER INDUSTRIAL DEVELOPMENT AUTHORITY, QUALITY WAY AT VENTURE DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 40'; DATED: JANUARY 16, 2006, REVISED THROUGH 3/16/06; BY: McENEANEY SURVEY ASSOCIATES, INC. ON FILE WITH CITY OF THE DOVER ENGINEERING DEPARTMENT.
7. PROJECT DOES NOT PROPOSE ANY RIGHT–OF–WAY, CONSERVATION, SLOPE, CONSTRUCTION, POWER LINE, CROSS TRAVEL, OR OTHER EASEMENTS.
8. ZONING DISTRICT: INNOVATIVE TECHNOLOGY (IT)
   DIMENSIONAL REQUIREMENTS:

	REQUIRED	PROPOSED
MINIMUM LOT SIZE:	2 AC	8.61 AC
MAXIMUM LOT COVERAGE (BUILDING):	33%	±9.3%
MINIMUM FRONTAGE:	*200'	62.5'
MINIMUM OPEN SPACE:	33%	±72.8%
BUILDING SETBACK REQUIREMENTS:		
FRONT SETBACK:	*50'	±280'
SIDE SETBACK:	*50'	11.32'
REAR SETBACK:	50'	>145'
ABUT A STREET:	50'	N/A
MAXIMUM BUILDING HEIGHT:	55'	35'
PARKING SETBACK REQUIREMENTS:		
PARKING AREA SETBACK:	*25'	23.71'

*SENDING AREAS ALLOWED FOR REDUCED LOT FRONTAGE, FRONT SETBACK, SIDE SETBACK, AND PARKING AREA SETBACKS. RELIEF WAS GRANTED PER THE FOLLOWING: LOT D/11–8 WAS CREATED USING THE CITY OF DOVER TDR ORDINANCE THROUGH THE AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & CO., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT NOS 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1"= 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5–3–06; BY MCENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLANS 85–99 & 85–100.
LOT D/11–8 SENDING AREAS ARE IDENTIFIED IN THE EXISTING CONDITIONS PLAN PROVIDED BY MCENEANEY SURVEY ASSOCIATES.

9. LIST ANY VARIANCE 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. (SEE PROJECT VARIANCE/PERMIT SECTION)
10. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES, NOVEMBER 2022, WITH AN ERROR NOT GREATER THAN 1 IN 10,000.
11. THE SUBJECT PARCEL IS NOT LOCATED WITHIN THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPTEMBER 30, 2015.
12. WETLANDS WERE DELINEATED BY DAMON E. BURT, CERTIFIED WETLANDS SCIENTIST, CERTIFICATION NUMBER 163, IN ACCORDANCE WITH CHAPTER 170–27.1 OF THE ZONING ORDINANCE, ON SEPTEMBER 2, 2022.
13. AS–BUILT PLANS OF THE SUBDIVISION 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.
14. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
15. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
16. 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.
17. EROSION CONTROL NOTES 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.
18. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
19. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
20. 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.
21. 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.
22. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY–FRIDAY 7 AM–6 PM, SATURDAY 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 PLANNING DIRECTOR. WORK PRECLUDED ON SUNDAYS AND FEDERAL HOLIDAYS.
23. BUILDING ADDRESSES (INCLUDING APT/UNIT NUMBERS, IF APPLICABLE) SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
24. THE PROPOSED USE FOR THE SITE IS LIGHT MANUFACTURING.
25. THE FOLLOWING FEDERAL AND STATE PERMINTS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY: (SEE PROJECT VARIANCE/PERMIT SECTION)

DOVER NOTES CONTINUED:

26. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
27. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
28. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
29. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL.
    HTTPS://PTAPP.UNH.EDU/
30. IF APPLICABLE, 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.
31. 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.
32. THE MAXIMUM PARKING SPACE CALCULATION IS 59, INCLUDING 3 ACCESSIBLE SPACES, AND 45, INCLUDING 4 ACCESSIBLE SPACES, ARE PROVIDED.
33. EXTERIOR LIGHTING SHALL BE CUT–OFF TYPE FIXTURES PER CHAPTER 153–14–E AND SHALL PROVIDE LIGHTING DIRECTED ON–SITE ONLY.
34. TOPOGRAPHIC SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATE, OCTOBER 2022.
35. ELEVATIONS DEPICTED ARE BASED ON INFORMATION OBTAINED FROM THE CITY ENGINEER'S OFFICE AND WAS DERIVED FROM COORDINATES FOR CONTROL STATIONS TR390 AND TR391A. THESE COORDINATES HAVE NOT BEEN ADJUSTED TO 1983 DATUM.
36. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 45, ARTICLE I, SECTION 45–2 OF THE CODE OF THE CITY OF DOVER. (AS APPLICABLE)
37. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
38. THE PROPOSED STRUCTURES SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED BY CHAPTER 81– 30 OF THE CODE OF THE CITY OF DOVER AND THE ADOPTED STATE OF NH BUILDING AND FIRE CODES.
39. 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 AND APPROVED BY INSPECTION SERVICES PRIOR TO CONNECTION OF THE BACKFLOW DEVICE.
40. FIRE DEPARTMENT CONNECTION(S) SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13. ACCESS TO THE FDC SHALL MAINTAIN A CLEAR AND UNOBSTRUCTED PATH AT ALL TIMES.
41. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. (I.E. IBC, ANSI–117.1) AND NH RSA 155–A:5.
42. DESIGN ENGINEER SHALL PROVIDE SIGNED LETTER TO CITY ENGINEER CERTIFYING THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
43. ALL MANHOLE COVERS SHALL BE LIFTMATE R–1743–LM OR APPROVED EQUAL WITH 90 DEGREE HINGE.
44. REQUIRED BLASTING AND EXCAVATION – DOVER FIRE DEPARTMENT SHALL BE NOTIFIED PRIOR TO ANY BLASTING ACTIVITIES AND A BLASTING PERMIT FROM THE DOVER FIRE DEPARTMENT MUST BE OBTAINED.
45. THE WATER MAIN SHALL BE POLY WRAPPED IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS.
46. ALL SEWER MAINS AND MANHOLES SHALL BE TESTED IN ACCORDANCE WITH NHDES ENV–WQ 700 REQUIREMENTS. COPIES OF TEST RESULTS SHALL BE PROVIDED TO THECITY OF DOVER ENGINEERING DEPARTMENT.
47. WETLAND PLACARDS SHOULD IDENTIFY THE NO CUT WETLAND BUFFER AND SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION AND AFTER.
48. ALL FITTINGS MUST BE CLASS 140 WATER FITTINGS.
49. ALL GATE VALVES MUST BE MANUFACTURED BY MUELLER OR CLOW.

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.
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. STONES FROM REMOVED STONEWALLS SHALL REMAIN ON–SITE. STONES SHALL BE REPURPOSED ON–SITE AND SHALL NOT BE USED AS FILL.
9. 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.
10. 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.

SITE NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
3. ALL CONSTRUCTION LAYOUT SHALL BE DONE BY A LICENSED SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
4. SEE DETAILS FOR SIGN LEGENDS.
5. 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.
6. 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.
7. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S 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.
8. 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.
9. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
10. REFUSE PICKUP WILL BE BY PRIVATE CONTRACTOR AND WILL BE VIA DUMPSTER ON–SITE.
11. SNOW STORAGE WILL BE ACCORDING TO THE OPERATION AND MAINTENANCE PLAN AND WITHIN AREAS AS INDICATED. ON–SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
12. ALL EXTERIOR DOORS ARE MANUAL AND OPENED FROM THE INTERIOR BY PANIC HARDWARE. ALL EXTERIOR DOORS SHALL COMPLY WITH ADA AND ALL LOCAL BUILDING CODE REQUIREMENTS.
13. ANY DEED RELATED ITEMS TO THE TRANSFER OF THE PROPERTY WILL BE REVIEWED BY THE CITY ATTORNEY WHILE STILL OWNED BY DIBDA.

GRADING NOTES:

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING.
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. 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.
10. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF THE FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
11. 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 OF REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.
12. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
13. CONTRACTOR SHALL NOTIFY THE CITY OF DOVER AND THE DESIGN ENGINEER 48 HOURS PRIOR TO THE INSTALLATION OF PERMANENT STORMWATER BMP'S TO PROVIDE THE CITY AND THE ENGINEER THE OPPORTUNITY TO WITNESS THE CONSTRUCTION AND MATERIALS. THE DESIGN ENGINEER MUST CERTIFY THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
14. 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.

PROJECT VARIANCE / PERMIT SUMMARY:

1. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:

   NHDES ALTERATION OF TERRAIN: PENDING

   NHDES WETLANDS: PENDING

2. 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.

   SITE PLAN: SITE–2024–0002 – PENDING

   CONDITIONAL USE PERMIT: P24–XX

   WAVERS REQUESTED: 153–15–C(2) – PENDING

UTILITY NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR 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 AT NO ADDITIONAL COST TO THE OWNER.
3. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
6. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR CITY APPROVED MATERIAL.
7. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF DOVER WATER DEPARTMENT.
8. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER SEWER DEPARTMENT STANDARDS.
9. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
15. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
16. 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.
17. THE CONTRACTOR SHALL CONTACT "DIG–SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG–SAFE" NUMBER ON SITE AT ALL TIMES.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.
21. 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.
22. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
23. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
24. THE PROPOSED STRUCTURE SHALL COMPLY WITH CHAPTER 81, ARTICLE IV, SECTION 81–27 AND THE STATE BUILDING CODES OF THE CODE OF THE CITY OF DOVER.
25. FIRE SUPPRESSION PLANS SHALL BE PROVIDED TO THE FIRE/INSPECTION DEPARTMENT PRIOR TO INSTALLATION.
26. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
27. SEWAGE LOADING (PER NHDES ENV–WQ 1008.03)
    BUILDING 1:
    - OFFICE = 2,864 SF x 5 GPD/100 SF = 144 GPD
    - LIGHT MANUF. (FACTORY)=25 EMPLOYEES x 10 GPD/ EMPL = 250 GPD
    - TOTAL = 394 GPD

    BUILDING 2:
    - OFFICE = 3,330 SF x 5 GPD/100 SF = 166.5 = 167 GPD
    - LIGHT MANUF. (FACTORY) = 20 EMPLOYEES x 10 GPD/EMP = 200 GPD
    - TOTAL = 367 PGD
28. PUMP CHAMBERS ARE UNCLASSIFIED.
29. AN EASEMENT WILL BE GRANTED TO THE CITY ALONG THE WATER LINES TO ALLOW ACCESS FOR OPERATION OF THE WATER INFRASTRUCTURE TO MAINTAIN WATER QUALITY.

UTILITY CONTACTS

NATURAL GAS: –
CONTACT: UNITIL CORPORATION
DAVID MACLEAN
325 WEST ROAD
PORTSMOUTH, NH 03801
TEL: (603)–294–5261
EMAIL: MACLEAND@UNITIL.COM

WATER & SEWER: – CITY OF DOVER COMMUNITY SERVICES DEPARTMENT
PUBLIC WORKS & UTILITIES
CONTACT: KEN MAVROGEORGE, PE
271 MAST ROAD
DOVER, NH 03820
TEL: (603)–516–6450
EMAIL: K.MAVROGEORGE@DOVER.NH.GOV

ELECTRIC: – EVERSOURCE
CONTACT: TREVER EMMONS
4 OLD DOVER ROAD
ROCHESTER, NH 03867
TEL: (603)–332–7515
EMAIL: TREVER.EMMONS@EVERSOURCE.COM

PLANNING FILE NO.: SITE–2024–0002

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & MUNICIPAL ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4–1–24
1	REV PER TRC COMMENTS #1	SJH	2–29–24

DATE: 1–18–24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

NOTE SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
TBR	TO BE REMOVED
R.O.W.	RIGHT OF WAY
	EXISTING UTILITY POLE
	EXISTING WATER SHUT-OFF
	EXISTING WATER VALVE
	EXISTING GAS VALVE
	EXISTING HYDRANT
	EXISTING SEWER MANHOLE
U/G T.E.	EXISTING ELECTRIC
W	EXISTING WATER LINE
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
G	EXISTING GAS LINE
	EDGE OF WET
	50' WETLAND BUFFER

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

PROPOSED TREELINE

PROPOSED TREELINE

PROPOSED TREELINE

PROPOSED TREELINE

50' WETLAND BUFFER

TREELINE TO BE REMOVED

REMOVE SEWER STUB FOR PROPOSED SEWER CONNECTION AT TIME OF FORCE MAIN CONSTRUCTION

SMH
RIM=170.48
INV.IN(STUB)=161.28 (T.B.R.)
INV.IN(PFM)=161.50
INV.OUT=161.28

ELECTRIC CABINET
5C/SC9
TBM NORTHEAST
CORNER CONCRETE
ELEVATION = 170.75'

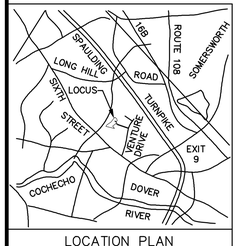
SAW CUT FOR WATER SERVICE CONNECTION

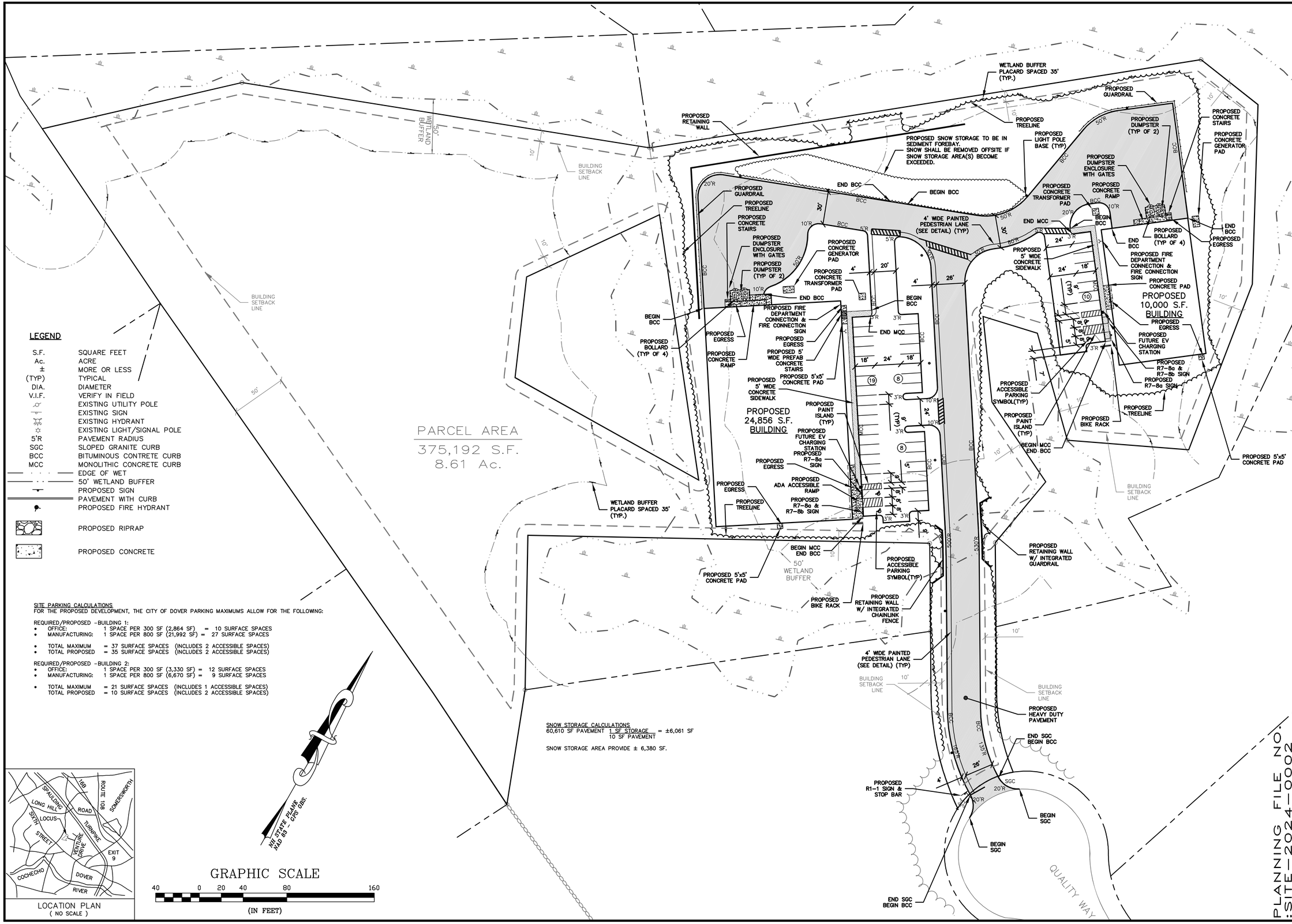
QUALITY WAY

END GAS LINE

NH STATE PLANE NAD 83 CRS DBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)


SPAULDING
LONG HILL
ROAD
SIXTH
STREET
LOCUS
I-95
NEWINGTON
I-95
TURNPIKE
I-95
I-95
I-95



LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
V.I.F.	VERIFY IN FIELD
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING HYDRANT
	EXISTING LIGHT/SIGNAL POLE
5'R	PAVEMENT RADIUS
SGC	SLOPED GRANITE CURB
BCC	BITUMINOUS CONTRETE CURB
MCC	MONOLITHIC CONCRETE CURB
	EDGE OF WET
	50' WETLAND BUFFER
	PROPOSED SIGN
	PAVEMENT WITH CURB
	PROPOSED FIRE HYDRANT
	PROPOSED RIPRAP
	PROPOSED CONCRETE

SITE PARKING CALCULATIONS
FOR THE PROPOSED DEVELOPMENT, THE CITY OF DOVER PARKING MAXIMUMS ALLOW FOR THE FOLLOWING:

REQUIRED/PROPOSED -BUILDING 1:
- OFFICE: 1 SPACE PER 300 SF (2,864 SF) = 10 SURFACE SPACES
- MANUFACTURING: 1 SPACE PER 800 SF (21,992 SF) = 27 SURFACE SPACES
- TOTAL MAXIMUM = 37 SURFACE SPACES (INCLUDES 2 ACCESSIBLE SPACES)
- TOTAL PROPOSED = 35 SURFACE SPACES (INCLUDES 2 ACCESSIBLE SPACES)

REQUIRED/PROPOSED -BUILDING 2:
- OFFICE: 1 SPACE PER 300 SF (3,330 SF) = 12 SURFACE SPACES
- MANUFACTURING: 1 SPACE PER 800 SF (6,670 SF) = 9 SURFACE SPACES
- TOTAL MAXIMUM = 21 SURFACE SPACES (INCLUDES 1 ACCESSIBLE SPACES)
  TOTAL PROPOSED = 10 SURFACE SPACES (INCLUDES 2 ACCESSIBLE SPACES)

SNOW STORAGE CALCULATIONS
60,610 SF PAVEMENT 1 SF STORAGE / 10 SF PAVEMENT = ±6,061 SF

SNOW STORAGE AREA PROVIDE ± 6,380 SF.

LOCATION PLAN
(NO SCALE)

NH STATE PLANE MAD 83 CORS DBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

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CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
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NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: 1"=40'
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

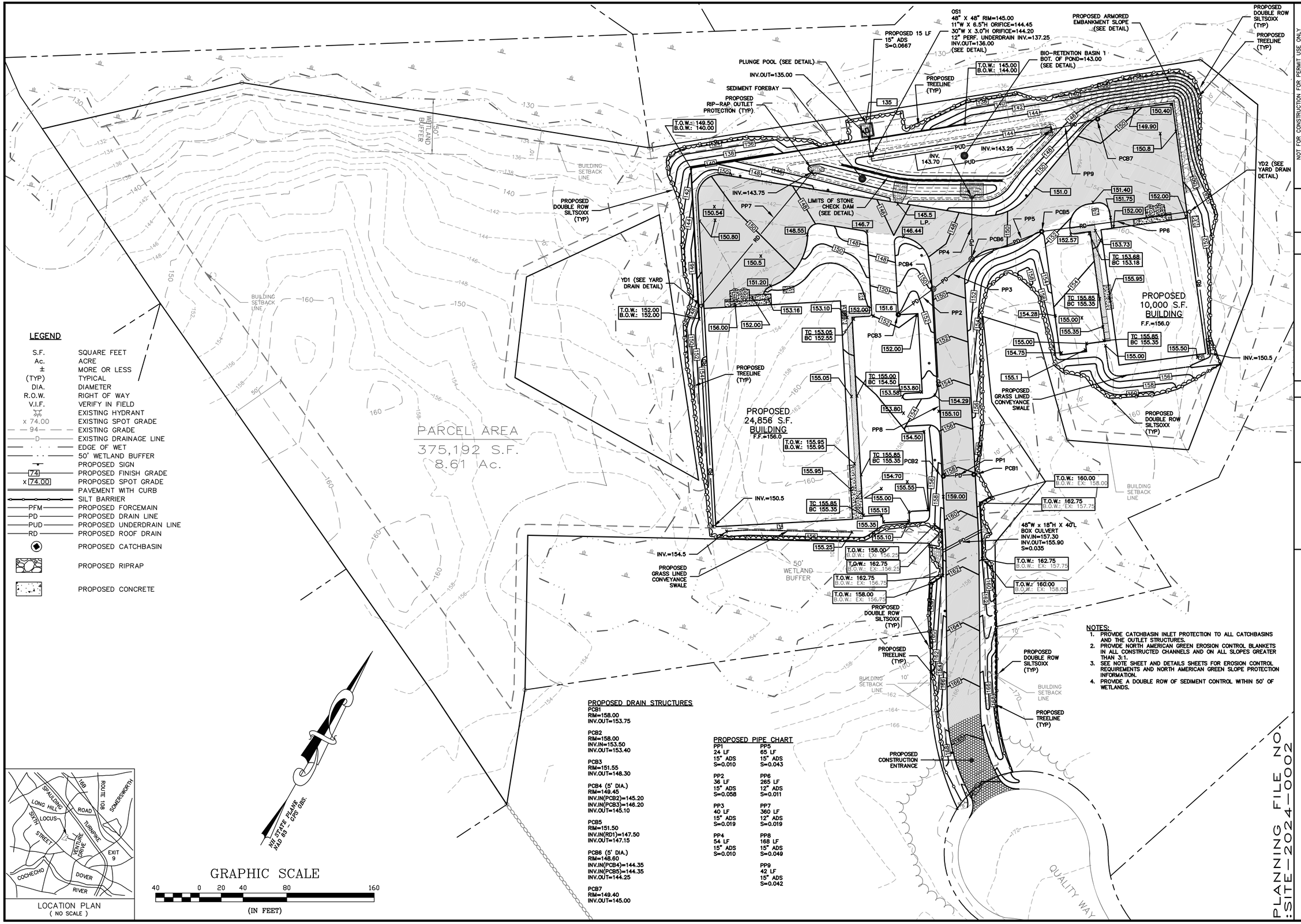
PLANNING FILE NO. :SITE-2024-0002

SITE PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

6



LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
R.O.W.	RIGHT OF WAY
V.I.F.	VERIFY IN FIELD
	EXISTING HYDRANT
x 74.00	EXISTING SPOT GRADE
94	EXISTING GRADE
D	EXISTING DRAINAGE LINE
	EDGE OF WET
	50' WETLAND BUFFER
	PROPOSED SIGN
74	PROPOSED FINISH GRADE
x 74.00	PROPOSED SPOT GRADE
	PAVEMENT WITH CURB
	SILT BARRIER
PFM	PROPOSED FORCEMAIN
PD	PROPOSED DRAIN LINE
PUD	PROPOSED UNDERDRAIN LINE
RD	PROPOSED ROOF DRAIN
	PROPOSED CATCHBASIN
	PROPOSED RIPRAP
	PROPOSED CONCRETE

LOCATION PLAN
(NO SCALE)

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

PROPOSED DRAIN STRUCTURES

PCB1
RIM=158.00
INV.OUT=153.75

PCB2
RIM=158.00
INV.IN=153.50
INV.OUT=153.40

PCB3
RIM=151.55
INV.OUT=148.30

PCB4 (5' DIA.)
RIM=149.45
INV.IN(PCB2)=145.20
INV.IN(PCB3)=146.20
INV.OUT=145.10

PCB5
RIM=151.50
INV.IN(RD1)=147.50
INV.OUT=147.15

PCB6 (5' DIA.)
RIM=148.60
INV.IN(PCB4)=144.35
INV.IN(PCB5)=144.35
INV.OUT=144.25

PCB7
RIM=149.40
INV.OUT=145.00

PROPOSED PIPE CHART

PP1	24 LF	15" ADS	S=0.010
PP2	36 LF	15" ADS	S=0.058
PP3	40 LF	15" ADS	S=0.019
PP4	54 LF	15" ADS	S=0.010
PP5	65 LF	15" ADS	S=0.043
PP6	265 LF	12" ADS	S=0.011
PP7	360 LF	12" ADS	S=0.019
PP8	168 LF	15" ADS	S=0.049
PP9	42 LF	15" ADS	S=0.042

NOTES:
1. PROVIDE CATCHBASIN INLET PROTECTION TO ALL CATCHBASINS AND THE OUTLET STRUCTURES.
2. PROVIDE NORTH AMERICAN GREEN EROSION CONTROL BLANKETS IN ALL CONSTRUCTED CHANNELS AND ON ALL SLOPES GREATER THAN 3:1.
3. SEE NOTE SHEET AND DETAILS SHEETS FOR EROSION CONTROL REQUIREMENTS AND NORTH AMERICAN GREEN SLOPE PROTECTION INFORMATION.
4. PROVIDE A DOUBLE ROW OF SEDIMENT CONTROL WITHIN 50' OF WETLANDS.

PLANNING FILE NO.
:SITE-2024-0002

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1	REV PER TRC COMMENTS #1	SJH	2-29-24

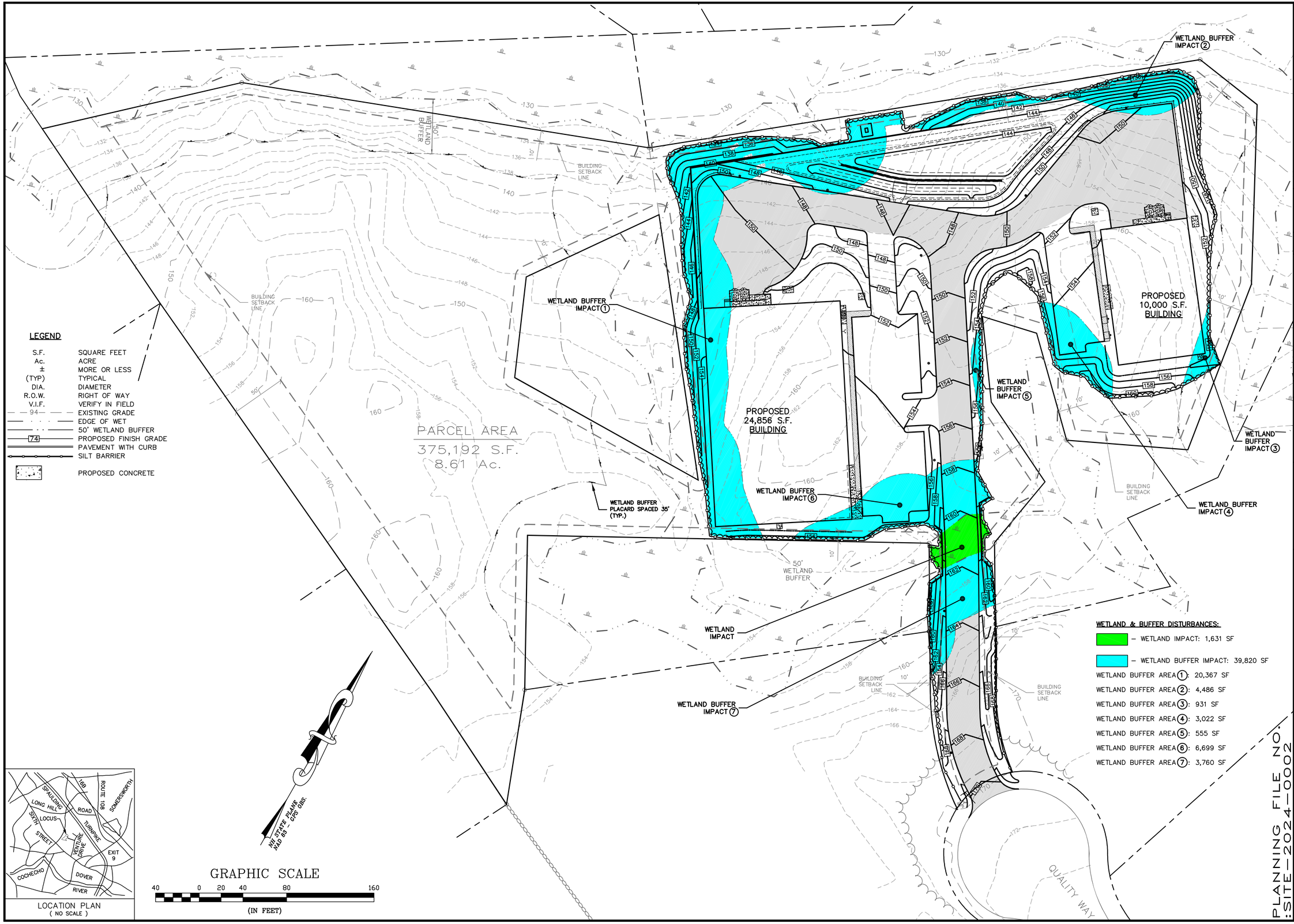
DATE: 1-18-24
SCALE: 1"=40'
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

GRADING, DRAINAGE & EROSION CONTROL PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

7



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CNE CIVILWORKS NEW ENGLAND
CIVIL & MUNICIPAL ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: JFG
DRAWN BY: SRD
APPROVED BY: SJH
PROJECT NO: 22075
FILE: SITE.DWG
DATE: 1-18-24
SCALE: 1"=40'

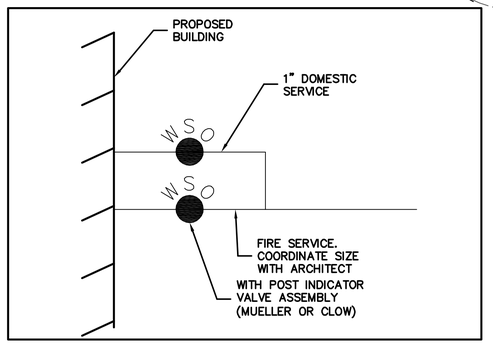
PLANNING FILE NO. :SITE-2024-0002

WETLAND / WETLAND BUFFER IMPACT PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

8



TYPICAL FIRE AND DOMESTIC WATER SERVICE CONNECTION DETAIL

SCALE: NOT TO SCALE

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

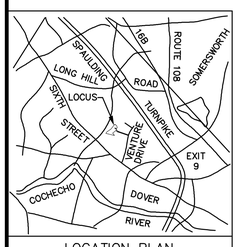
PROPOSED 10,000 S.F. BUILDING

PROPOSED 24,856 S.F. BUILDING

TRANSFORMER TO BE COORDINATED WITH EVERSOURCE (TYP)
PUMP STATION PS-2 (SEE DETAIL)
PROPOSED SEWER LINE
GEN SET
CURB STOP/ CHECK VALVE (SEE "STAINLESS STEEL LATERAL KIT 1-1/2" SDR 11 HDPE PIPE DETAIL)
PUMP STATION PS-1 (SEE DETAIL)
GEN SET TO BE SIZED BY ELECTRICAL ENGINEER (TYP)
COORDINATE CONTROL PANEL LOCATION WITH ARCHITECT FOR LOCATION IN MECH ROOM
SEE "TYPICAL FIRE AND DOMESTIC WATER SERVICE CONNECTION DETAIL
FDC CONNECTION
6" D.I.
HYDRANT ASSEMBLY W/ GATE VALVE ANCHORED TO MAIN
6" GATE VALVE ANCHORED TO MAIN
8" TO 6" REDUCER
8"X6" TEE
COORDINATE GAS SERVICE WITH UNITIL
8"X6" TEE WITH GATE VALVE WITH THRUST BLOCK OR EQUAL (TYP)
PROPOSED FUTURE EV CHARGING STATION ELECTRICAL LINE
COORDINATE CONTROL PANEL LOCATION WITH ARCHITECT FOR LOCATION IN MECH ROOM (TYP.)
SEE "TYPICAL FIRE AND DOMESTIC WATER SERVICE CONNECTION DETAIL
FDC CONNECTION
6" D.I.
6" GATE VALVE ANCHORED TO MAIN
HYDRANT ASSEMBLY W/ GATE VALVE ANCHORED TO MAIN
PROPOSED FUTURE EV CHARGING STATION ELECTRICAL LINE
4-4" SCHEDULE 40 CONDUIT. COORDINATE W/ EVERSOURCE (TYP)
1-4" SDR11 FORCE MAIN
50' WETLAND BUFFER
8" D.I. CLASS 52
REMOVE EXISTING GRAVITY SEWER STUB. CONNECT FM TO SMH
SMH
RIM=170.48
INV.IN(STUB)=161.28 (T.B.R.)
INV.IN(PFM)=161.50
INV.OUT=161.28
ELECTRIC CABINET
5C/SC9
TBM NORTHEAST
CORNER CONCRETE
ELEVATION = 170.75'
12"X8" TEE WITH GATE VALVE
END GAS LINE
QUALITY WAY
U/G T.E.
W 12" C.I.P.
4" W
6" S
PUD
PD
PG
PE
PFM
PW
RD
PS

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
V.I.F.	VERIFY IN FIELD
	EXISTING UTILITY POLE
	EXISTING WATER SHUT-OFF
	EXISTING WATER VALVE
	EXISTING GAS VALVE
	EXISTING HYDRANT
	EXISTING LIGHT/SIGNAL POLE
	EXISTING SEWER MANHOLE
OHU	OVERHEAD UTILITY
E	EXISTING ELECTRIC
W	EXISTING WATER LINE
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
G	EXISTING GAS LINE
	EDGE OF WET
	50' WETLAND BUFFER
	PAVEMENT WITH CURB
	SILT BARRIER
PG	PROPOSED GAS
PW	PROPOSED WATER
PE	PROPOSED ELECTRIC
RD	PROPOSED ROOF DRAIN
PS	PROPOSED SEWER
PFM	PROPOSED FORCEMAIN
PD	PROPOSED DRAIN LINE
PUD	PROPOSED UNDERDRAIN LINE
PFES	PROPOSED FLARED END SECTION
	PROPOSED CATCHBASIN
	PROPOSED THRUST BLOCK
	PROPOSED WATER SHUTOFF
	PROPOSED FIRE HYDRANT
	PROPOSED UTILITY POLE
	PROPOSED RIPRAP
	PROPOSED CONCRETE



LOCATION PLAN
(NO SCALE)

NO STATE PLANE MAD 83 - GPS OBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

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CIVIL & WATERSHED ENGINEERING
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UTILITY PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

9

DESCRIPTION

1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A 25,000 S.F. BUILDING AND A 10,000 S.F. BUILDING AS WELL AS DRAINAGE AND UTILITY IMPROVEMENTS, AND SITE ACCESS.

PROJECT NAME AND LOCATION

FUTURE AUTOMATION
TAX MAP D, LOT 11–8 *LATITUDE N43° 13' 26"*
QUALITY WAY *LONGITUDE W70° 54' 46"*
DOVER, NH

DISTURBED AREA

±164,238 S.F..

NOTES:

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

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. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
7. 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.
8. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
9. INSTALL FOUNDATION FOOTINGS AND WALLS.
10. INSTALL UTILITIES.
11. PLACE GRAVELS AND FINE GRADE.
12. STABILIZE ROADWAYS AND PARKING AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
13. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
14. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
15. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
16. 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 IF 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. SILT BARRIER

1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP–GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE–THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

B. MULCHING

1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 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.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. 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 150–200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

C. TEMPORARY SEEDING

1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% 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 FABRICS, CHECK DAMS, ETC.).

D. PERMANENT SEEDING

1. BEDDING – STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING 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
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. 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 @ 138 LBS. PER 1,000 S.F.
   LOW PHOSPHATE (N–P205–K20) FERTILIZER @ 13.8 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. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

E. STORM DRAIN INLET PROTECTION

1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND–DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE SILT BARRIERS 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 PERSONEL 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.

MAINTENACE 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.

SPIL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RICK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCE DURING CONSTRUCTION TO STORMWATER RUNOFF:
GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING

1. THE CONSTRUCTION PROJECT:
   a. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
   b. 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.
   c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
   d. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
   e. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
   f. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
2. HAZARDOUS PRODUCTS:
   a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
   b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
   c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
   d. 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:

1. PETROLEUM PRODUCTS:
   a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENACE 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.
2. FERTILIZERS:
   a. 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 FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
3. PAINTS:
   a. 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 THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
4. CONCRETE TRUCKS:
   a. 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:

a. 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.
b. 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.
c. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
d. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OF LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
f. 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 OCCURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
g. 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 INCLUDED 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 EMITS FUGITIVE DUST, OTHER THAT 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:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

PER 153–10 F.

ALL SITE IMPROVEMENTS WHICH REQUIRE BLASTING OF LAND SHALL MEET THE FOLLOWING REQUIREMENTS PRIOR TO ANY BLASTING OCCURING.

1. THE APPLICANT SHALL PREPARE A PRE–BLAST SURVEY OF ALL STRUCTURES WITHIN FIVE HUNDRED (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 ONE THOUSAND (1000) FEET OF THE EXTERNAL BOUNDARY OF THE PROJECT PARCEL SHALL BE NOTIFIED BY THE CERTIFIED MAIL (PAID FOR BY THE APPLICANT) OF THE MEETING NO LESS THAN TEN (10) DAYS PRIOR TO THE MEETING AND NO MORE THAN FIFTEEN (15) DAYS PRIOR TO THE MEETING. THE NOTICE SHALL STATE THE TIME AND DATE OF THE BLASTING AND CONTAIN A MAP SHOWING THE BLASTING AREA, THE 1,000–FOOT–RADIUS AREA, AND THE 500–FOOT–RADIUS AREA.
3. PERMIT HOLDERS SHALL BE IN COMPLIANCE WITH NFPA 495, EXPLOSIVE MATERIALS CODE, IN ADDITION TO ALL OTHER ORDINANCES AND CODES SET FORTH IN THE CITY OF DOVER CODE, § 153–14A, STORMWATER MANAGEMENT, EROSION CONTROL AND FLOOD HAZARDS, OF THIS CHAPTER AND THE CITY OF DOVER FIRE PREVENTION CODE, WHICH SPECIFICALLY PROHIBITS THE OVERNIGHT STORAGE OF EXPLOSIVES 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 THE PERFORMANCE OF THE WORK.
6. HOURS OF OPERATION FOR THE BLASTING SHALL BE NO EARLIER THAN 8:00AM AND NO LATER THAN 6:00PM, MONDAY THROUGH FRIDAY, EXCLUDING FEDERAL HOLIDAYS.

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 DITCHES & SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3–INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

ENV–WQ 1510: BEST MANAGEMENT PRACTICES FOR BLASTING

1) ALL ACTIVITIES ASSOCIATED WITH BLASTING NEED TO BE OPTIMIZED TO PREVENT THE RELEASE OF CHEMICALS ASSOCIATED WITH BLASTING ACTIVITIES TO THE ENVIRONMENT.
2) IF MORE THAN 5,000 CY OF ROCK REMOVAL IS REQUIRED DRINKING WATER WELLS MUST BE IDENTIFIED AND LOCATED WITHIN 2000 FEET OF THE PROPOSED BLASTING ACTIVITIES. DEVELOP A GROUNDWATER QUALITY SAMPLING PROGRAM TO MONITOR FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA. THE PLAN MUST INCLUDE PRE AND POST BLAST WATER QUALITY MONITORING AND BE APPROVED BY NHDES PRIOR TO INITIATING BLASTING. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NHDES.
3) THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
   (1) LOADING PRACTICES. THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
      (A) DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL IND

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)

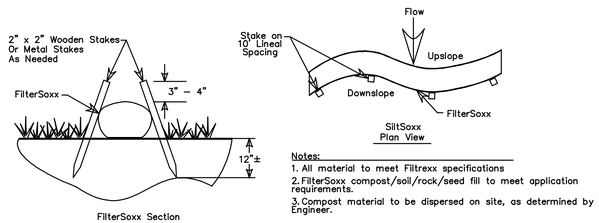
- Small terrestrial turtle with highly domed shell
- Irregular yellow or orange markings over brown/black base

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.



Notes:
1. All material to meet Filtrexx specifications
2. SiltSoxx compost/jsoil/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.

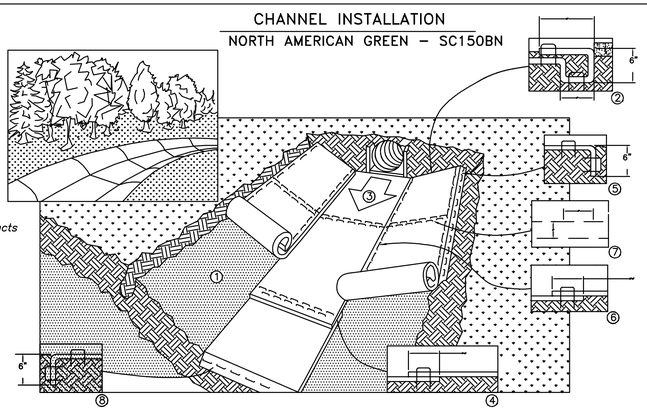
SiltSoxx Details

NOT TO SCALE

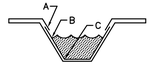
CHANNEL INSTALLATION

NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



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

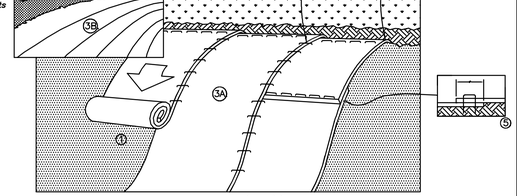
NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

SLOPE INSTALLATION

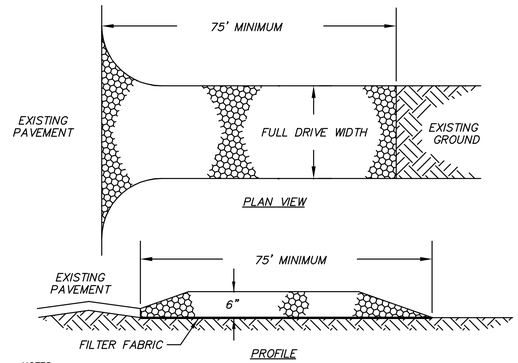
NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



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.



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

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
2	REV PER TRC COMMENTS #2	4-1-24	SJH
1	REV PER TRC COMMENTS #1	2-29-24	SJH

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

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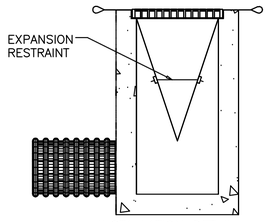


INSTALLATION DETAIL

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	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
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)

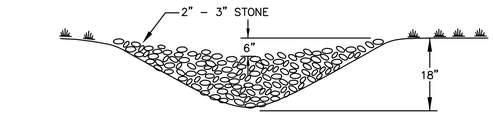
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

OIL-ABSORBANT SILTSACK®
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

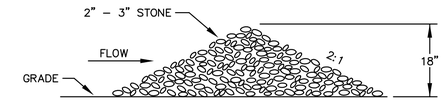
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK®, WITH A WOVEN PILLOW INSERT.

DETAIL OF INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE

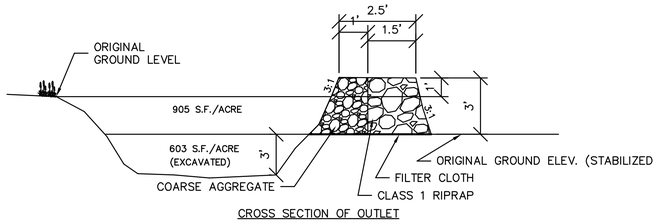
BERM STONE SIZE		
SIEVE DESIGNATION (METRIC)	SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
300 mm	12 in	100
150 mm	6 in	84-100
75 mm	3 in	68-83
25.4 mm	1 in	42-55
4.75 mm	No. 4	8-12



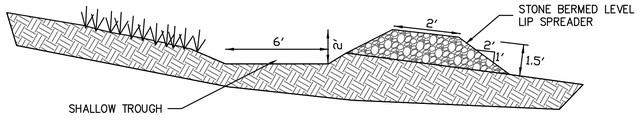
SWALE SECTION



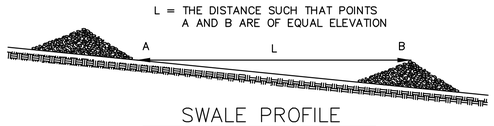
SWALE PROFILE



CROSS SECTION OF OUTLET

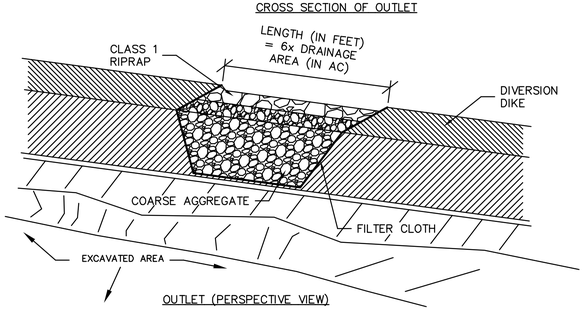


STONE BERMED LEVEL LIP SPREADER DETAIL
NOT TO SCALE



SWALE PROFILE

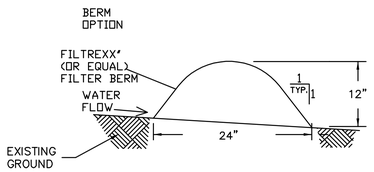
STONE GRADE STABILIZATION STRUCTURE DETAIL (CHECK DAMS)
NOT TO SCALE



OUTLET (PERSPECTIVE VIEW)

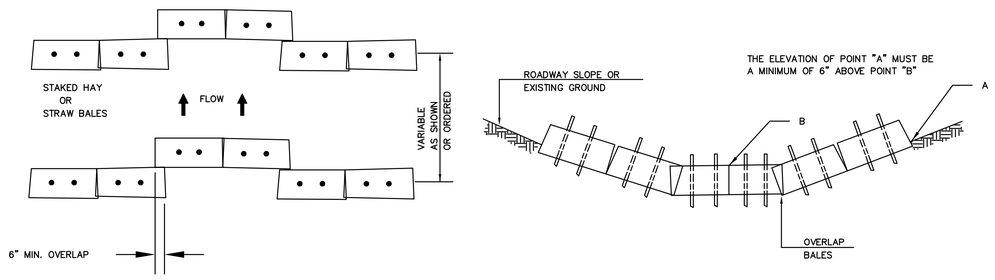
NOTES:
1. COARSE AGGREGATE SHALL MEET NHDOT 304.5 SPECIFICATIONS AND SHALL NOT CONTAIN MORE THAN 5% FINES PASSING THE #200 SIEVE.
2. FILTER CLOTH SHALL BE MIRAFI 700X OR APPROVED EQUAL.
3. CLASS I RIPRAP SHALL MEET NHDOT 583 SS SPECIFICATIONS.
4. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHALL BE LESS 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



MULCH BERM DETAIL
NOT TO SCALE

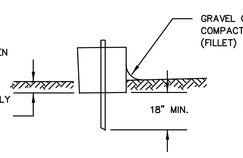
NOTES:
1. CONTRACTOR SHALL DISCUSS THE APPLICATION OF THIS PRODUCT WITH MANUFACTURE TO ENSURE PROPER PRODUCT SPECIFICATIONS.
2. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS OR EQUAL.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
4. WHERE THE BERM REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
5. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
6. THE COMPOST FILTER BERM WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.



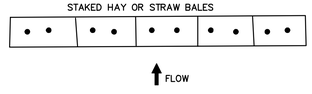
HAYBALE GRADE STABILIZATION STRUCTURE

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY 2" x 2" STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.



EMBEDDING DETAIL



HAYBALE BARRIER AT TOE OF SLOPE

HAYBALE NOTES AND DETAILS
NOT TO SCALE

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

NO.	REVISION	DATE	APP'D
2	REV PER TRC COMMENTS #2	4-1-24	SJH
1	REV PER TRC COMMENTS #1	2-29-24	SJH

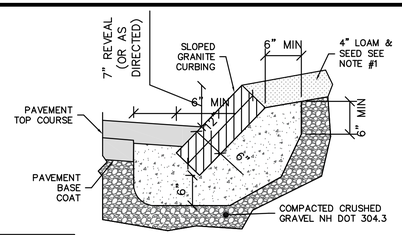
DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO:22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

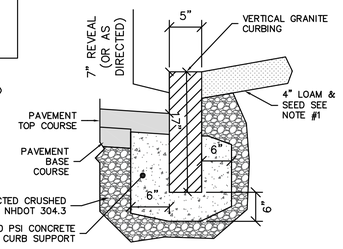
FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820



SLOPED GRANITE CURB

RADIUS	MAX LENGTH
< 21'	USE CURVED CURB
12'	3'
22' – 28'	4'
29' – 35'	5'
36' – 42'	6'
43' – 49'	7'
50' – 56'	8'
57' – 60'	9'
OVER 60'	10'

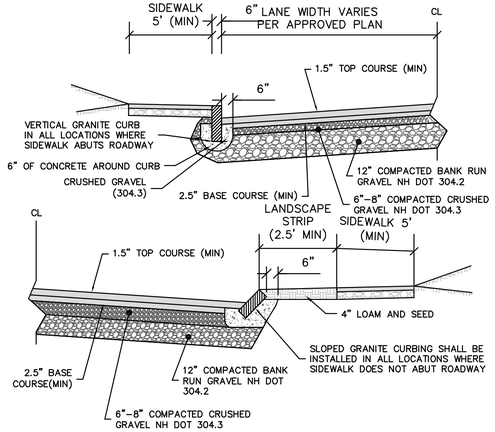
NOTES:
1. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.
2. CONCRETE CURB SUPPORT SHOULD BE SET 1/2" BELOW THE TOP OF THE PAVEMENT BASE COURSE.



VERTICAL GRANITE CURB

CITY OF DOVER D–8 GRANITE CURB DETAIL

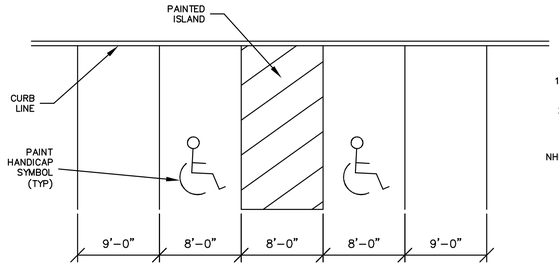
NOT TO SCALE



NOTES:
1. THIS DETAIL IS FOR GENERAL REVIEW PURPOSES ONLY, FINAL DESIGN SHALL BE BASED ON SPECIFIC SITE CONDITIONS AND APPROVED PLANS.
2. SIDEWALK LOCATION AND MATERIAL SHALL BE AS APPROVED BY THE CITY OF DOVER.

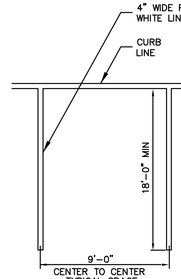
CITY OF DOVER D–5 ROADWAY CROSS SECTION DETAIL

NOT TO SCALE



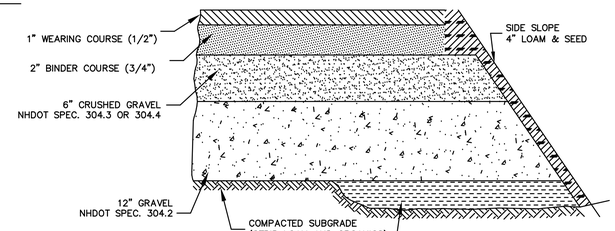
ACCESSIBLE PARKING LAYOUT

NOT TO SCALE



STANDARD PARKING STALL

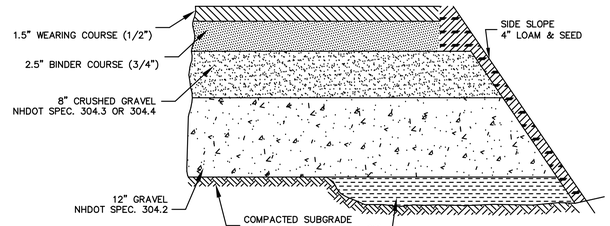
NOT TO SCALE



NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS–SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

TYPICAL PAVEMENT SECTION

NOT TO SCALE

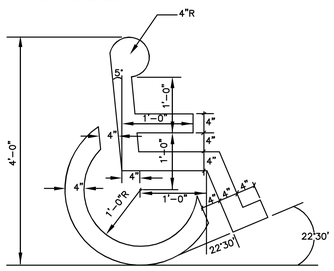


NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS–SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

HEAVY DUTY TYPICAL PAVEMENT SECTION

NOT TO SCALE

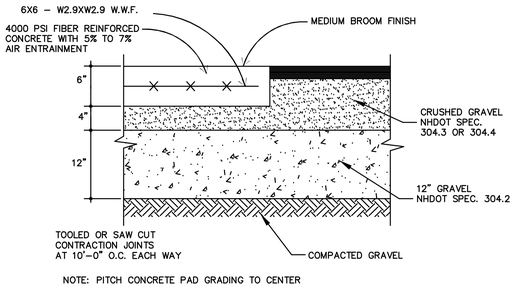
NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES



PAINTED

ACCESSIBLE PARKING SYMBOL

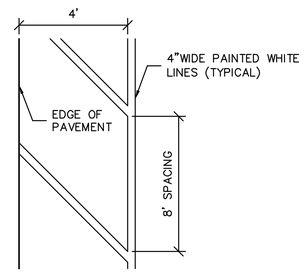
NOT TO SCALE



NOTE: PITCH CONCRETE PAD GRADING TO CENTER

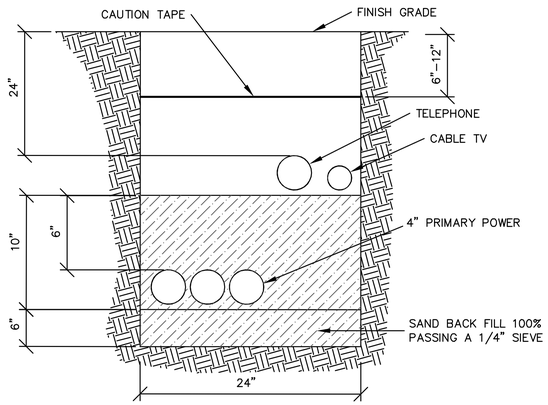
DUMPSTER PAD DETAIL

NOT TO SCALE



4' WIDE PAINTED PEDESTRIAN LANE

NOT TO SCALE



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 "REQUIREMENTS FOR ELECTRIC SERVICE CONNECTIONS – INFORMATIONS AND REQUIREMENTS FOR ELECTRIC SUPPLY BY EVERSOURCE ENERGY".
4. CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES PROVIDERS.

UTILITY TRENCH

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	REV PER TRC COMMENTS #1	SJH	2-29-24
2	REV PER TRC COMMENTS #2	SJH	4-1-24

DESIGN BY: JFG
DRAWN BY: SRD
SCALE: AS SHOWN
DATE: 1-18-24
PROJECT NO: 22075
APPROVED BY: SJH
FILE: SITE.DWG

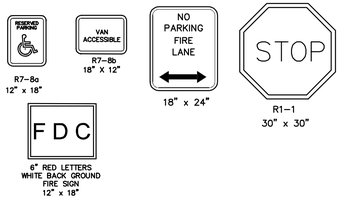
PLANNING FILE NO.: SITE–2024–0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

13

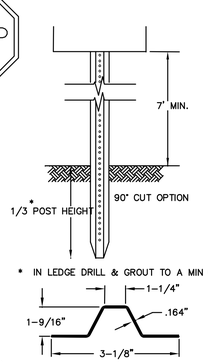


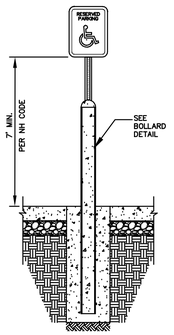
NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

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

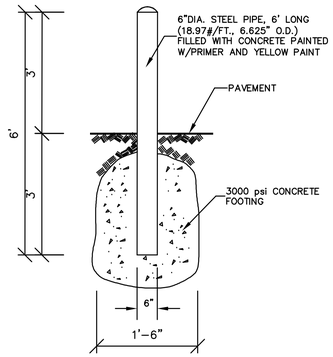
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY.
ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

SIGN LEGEND & SIGN POST
NOT TO SCALE

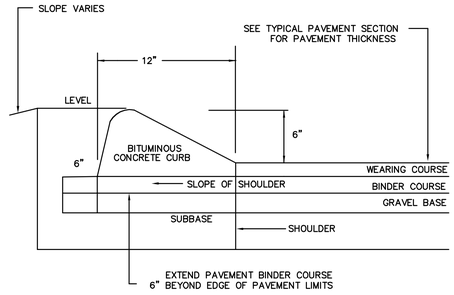




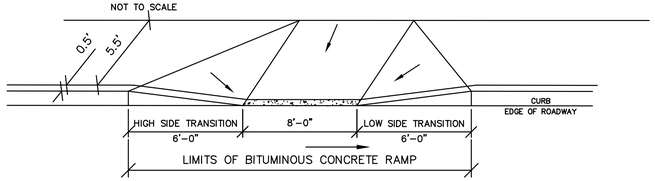
SIGN IN BOLLARD
NOT TO SCALE



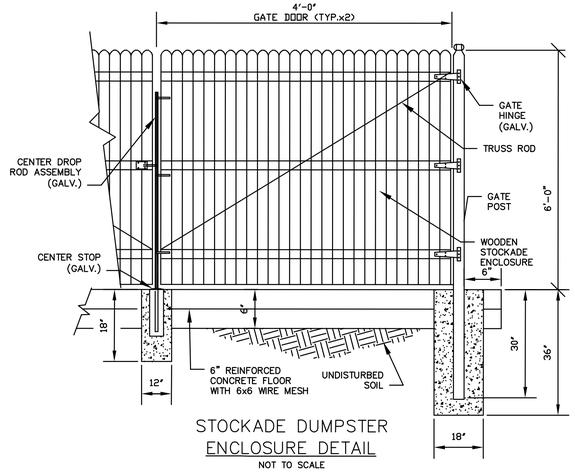
BOLLARD DETAIL
NOT TO SCALE



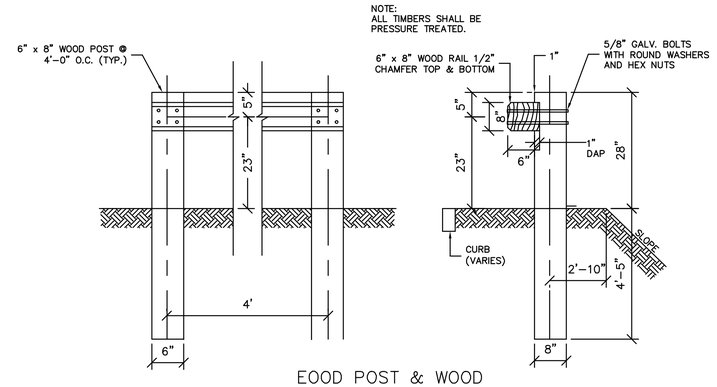
BITUMINOUS SLOPED CURB
NOT TO SCALE



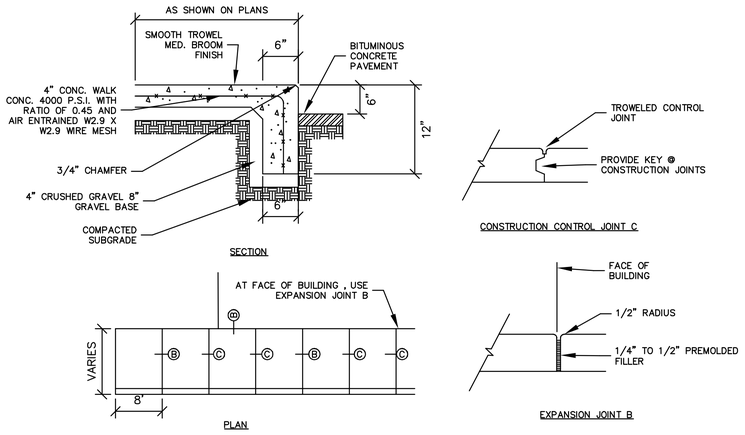
SIDEWALK APRON
NOT TO SCALE



STOCKADE DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE



EOOD POST & WOOD BEAM GUARDRAIL DETAIL
NOT TO SCALE



CONCRETE WALKWAY WITH MONOLITHIC CONCRETE CURB
NOT TO SCALE

chargepoint+

CT4000 Family

ChargePoint® Level 2 Commercial Charging Stations

The CT4000 family is the latest generation of ChargePoint commercial charging stations. Refined yet rugged, these stations set the industry standard for functionality and aesthetics.

The CT4000 full motion color LCD display instructs drivers and supports dynamic updates of custom branded videos and advertisements.

Intelligent power management options double the number of parking spaces served by allowing two charging ports to share a single circuit. Sites with single port EV stations can upgrade to dual port stations without requiring additional electrical services.

The CT4000 is the first ENERGY STAR® certified EV charger because it charges efficiently and conserves power when not charging. As an ENERGY STAR certified EV charger, the CT4000 uses significantly less energy than a standard EV charger when in standby mode to help you save money on your utility bill.

All CT4000 models offer one or two standard SAE J1772™ Level 2 charging ports with locking holsters, each port supplying up to 7.2kW. With this standard connector, ChargePoint level 2 stations can charge any EV.

Stations are available in bollard and wall mount configurations for easy installation anywhere. All stations are fully software upgradeable remotely over the air.

Stations come in both 6' and 8' tall models with 18" and 23" cords, respectively. With multiple options for size and cord reach, your station can service up to four parking spaces, reach all car models regardless of parking style or car sizes and increase the usability of your EV spots.

Driver Friendly User Interface

- Instructional video shows how to use the station
- Multi-language: English, French, Spanish
- Touch button interface; works in rain, ice and with gloves
- Backed by ChargePoint's world class 24/7 driver phone support

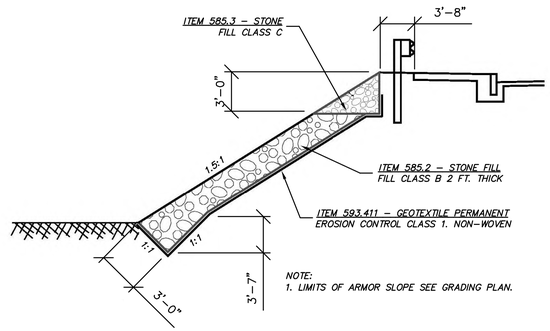
Easily Communicate with Your Drivers

Whether you're a retail establishment wanting to advertise your latest product, a workplace looking to communicate with employees or a municipality wanting to welcome visitors, ChargePoint's prominent LCD screen makes it easy to reach EV drivers:

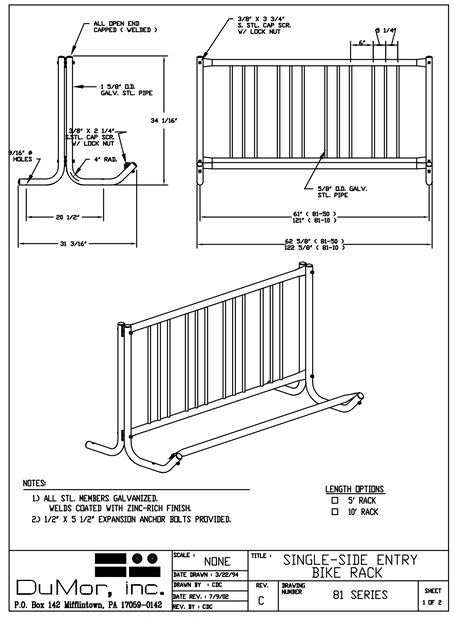
- Daylight readable, with auto brightness control
- 640 X 480 resolution active matrix
- Full motion 30fps video support
- Upload up to 60 seconds of high quality video on a color LCD screen to individual stations as often as desired
- Brand your charging stations to communicate with drivers
- Instructional video in English, Spanish or French

The First ENERGY STAR® Certified EV Charger

EV CHARGING STATION DETAIL
NOT TO SCALE



ARMORED EMBANKMENT SLOPE
NOT TO SCALE



BIKE RACK DETAIL
NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WASTEWATER ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
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DETAIL SHEET

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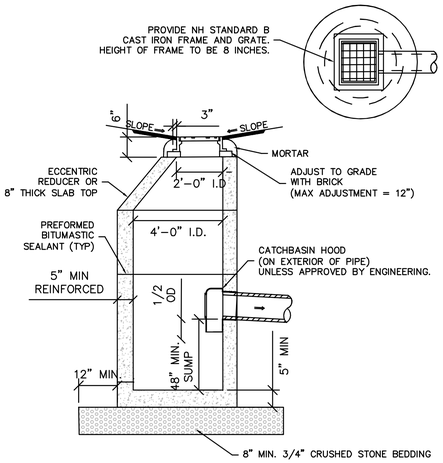
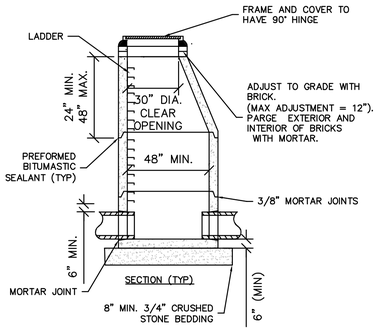
14



NOTES:
1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.

CITY OF DOVER D-19
CATCHBASIN DETAIL

NOT TO SCALE



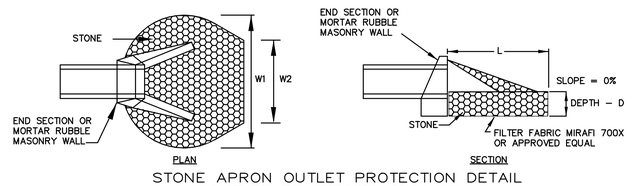
NOTES:
1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

CITY OF DOVER D-20
DRAIN MANHOLE DETAIL

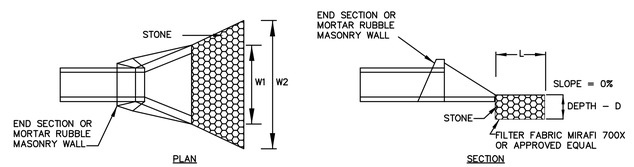
NOT TO SCALE

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. STORM DRAINS SHALL BE ADS N12 OR APPROVED EQUAL, AND SHALL BE JOINTED WITH NEOPRENE "O" RINGS.
3. 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).
4. 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.
5. 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.
6. 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.
7. TRENCH CONSTRUCTION WILL CONFORM WITH SECTION 603.3.1 OF THE STANDARD SPECIFICATIONS (1974).
8. 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.
9. BEDDING SHALL CONFORM WITH SECTION 603.3.2 OF THE STANDARD SPECIFICATIONS (1974).
10. 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.
11. ALL BACKFILL AND BEDDING COMPACTION SHALL MEET THE REQUIREMENTS OF AASHO T 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.
12. 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.
13. 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.
14. ALL TRENCHES WILL BE COVERED AND DEBRIS, INCLUDING ANY REJECTED MATERIALS, SHALL BE REMOVED DAILY. STRICT SAFETY PRECAUTIONS SHALL BE MAINTAINED AT ALL TIMES.
15. 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.
16. 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.
17. SHOP DRAWINGS FOR FLAT CONCRETE COVERS SHALL BE STAMPED PRIOR TO SUBMISSION FOR APPROVAL BY A NEW HAMPSHIRE REGISTERED PROFESSIONAL ENGINEER.
18. BRICK MASONRY FOR SETTING FRAMES AND BRICK AND MORTAR PLUGS SHALL CONFORM TO THE STANDARD SPECIFICATION SECTION 604.2.4.



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

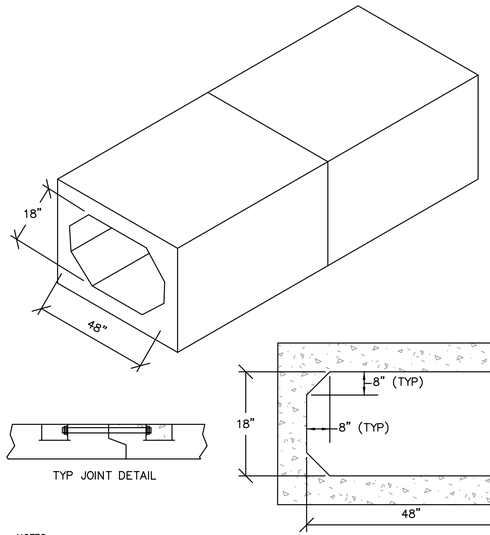
CONSTRUCTION SPECIFICATIONS

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	W1(ft)	W2(ft)	L(ft)	D (ft)	D50(IN)	CHANNEL TYPE
PCB6	11	3	17	1	6	DEFINED
PCB7	11	3	12	1	6	DEFINED
RD2	9	3	13	1	6	DEFINED
BOX CULVERT (IN)	6	10	5	1	6	UNDEFINED
BOX CULVERT (OUT)	6	18	10	1	6	UNDEFINED

RIP RAP OUTLET PROTECTION

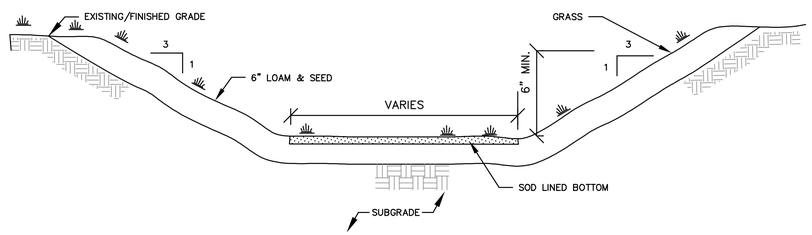
NOT TO SCALE



NOTES:
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS
2. DESIGN PER ASTM C1433 BOX CULVERT
3. ALL REINFORCEMENT PER ASTM A615
4. DESIGNED DOE AASHTO HS-20 LOADING
5. SHEA CONCRETE OR APPROVED EQUAL.
6. SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER WILL BE PROVIDED PRIOR TO CONSTRUCTION.

BOX CULVERT

NOT TO SCALE



MAINTENANCE

TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY, MAINTAIN A MINIMUM 4" STAND OF VEGETATION. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.

THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

GRASS LINED CONVEYANCE SWALE DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

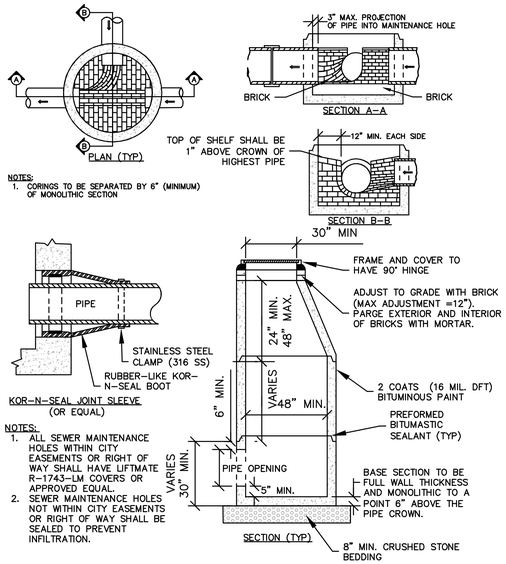
DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

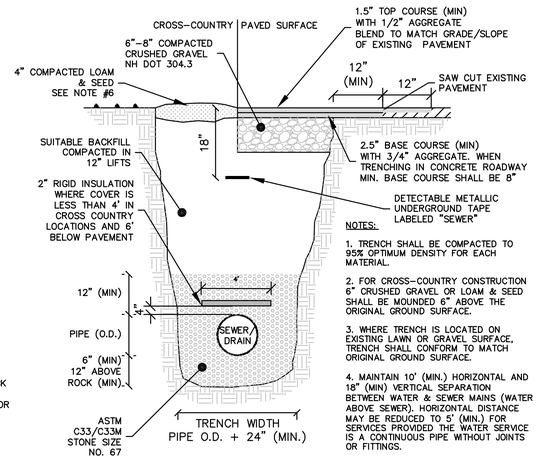


NOTES:
1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

NOTES:
1. ALL SEWER MAINTENANCE HOLES WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL HAVE LIFTMATE R-1743-LM COVERS OR APPROVED EQUAL.
2. SEWER MAINTENANCE HOLES NOT WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL BE SEALED TO PREVENT INFILTRATION.

CITY OF DOVER D-16
SEWER MANHOLE DETAIL

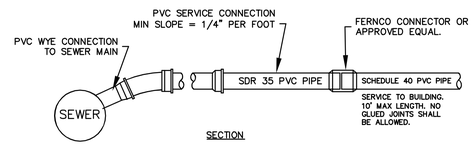
NOT TO SCALE



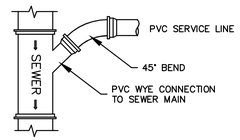
NOTES:
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT AND ROCKS OVER 6" IN LARGEST DIMENSION
6. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

CITY OF DOVER D-3
SEWER TRENCH DETAIL

NOT TO SCALE



SECTION

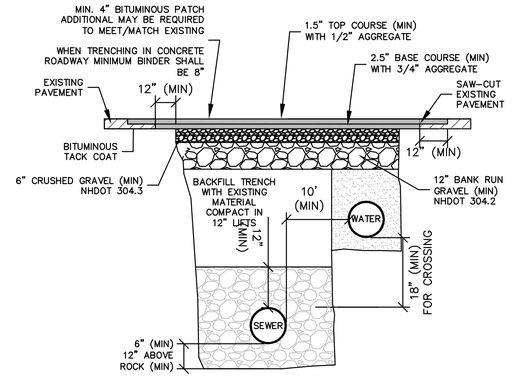


PLAN

NOTES:
1. TRENCHING AND BEDDING REQUIREMENTS PER CITY SEWER TRENCH DETAIL (D-3).
2. SERVICE LATERAL DIAMETER VARIES PER APPLICATION. REVIEW SIZE WITH CITY ENGINEER PRIOR TO INSTALLATION.
3. SDR 35 SHALL NOT EXTEND INTO THE BUILDING

CITY OF DOVER D-17
SEWER SERVICE DETAIL

NOT TO SCALE



NOTES:
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES
3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

CITY OF DOVER
TYPICAL TRENCH DETAIL

NOT TO SCALE

TRELLEBORG PIPE SEALS

TRELLEBORG

Kor-N-Seal® I
Stainless Steel Wedge Connector
(WS Series)

Installation Instructions

CONNECTOR INSTALLATION

1. Check to be sure the Stainless Steel Waveband® is properly located in Connector groove.
2. Inspect the inside surface of the cored/formed hole. If there is porosity or wire-to-concrete separation, use patching or hydraulic cement to smooth the surface.
3. Insert Connector Assembly into hole with Wedge Expander at top of hole.
4. Position Connector so it is square to manhole both vertically and horizontally.
5. Tighten Wedge Expander using 1/2" socket wrench to 12 foot pounds.
6. Retorquing prior to shipment is recommended but not required.

Note if Vacuum Testing

Testing should be done prior to backfilling so that leaks can be easily located and repaired.

All lift holes need to be plugged with a nonshrinking mortar.

Plug all pipes entering the manhole, taking care to securely brace the pipes and plugs.

Patented Waveband technology "captures" the rubber between itself and the concrete, creating a more effective seal.

*Covered under US Patent No.: 5,738,359

PIPE INSTALLATION

1. Be sure sealing area of pipe is smooth and free of defects. Repair if needed.
2. Center pipe in Connector opening. (Pipe must not rest on Connector Korband)
3. Position the Pipe Clamp in the Connector's Pipe Clamp groove with the screw at the top.
4. Tighten the Pipe Clamp screw to 60 inch pounds with a T-handle Torque Wrench, P/N 80090

Note:

On minimum pipe O.D. installations, tension the rubber under the pipe clamp by lifting the rubber toward pipe clamp screw housing by hand. This will help prevent the rubber from wrinkling or folding over during tightening of hose clamp. Application of a very small amount pipe lube on the pipe clamp track will allow the pipe clamp to slide on the rubber and improve the performance of the hose clamp. Make sure to torque all screw locations on the pipe clamps.

Caution:

Do not use an impact wrench for installation.

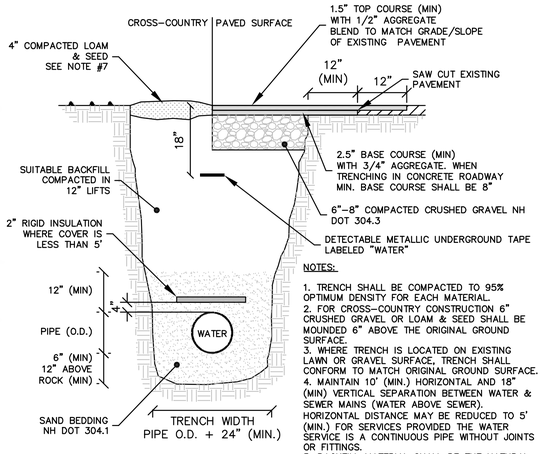
All pipe stubs must be restrained.

Adapters are required when using Corrugated Pipe. Refer to the Corrugated Pipe Adapter Data Sheet for more information.

Check calibration of torque limiters monthly

Torque limiters are available for connectors that can be used with cordless drills and hand or air ratchets.

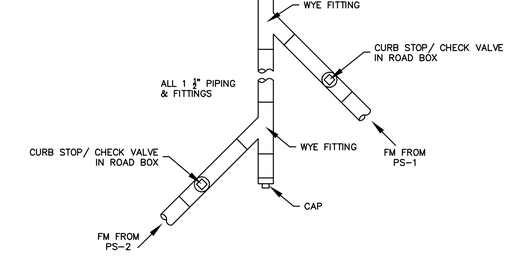
Call 800-626-2180 for information.



NOTES:
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT, AND ROCKS OVER 6" IN LARGEST DIMENSION
6. PROVIDE MINIMUM 5' OF COVER. ENGINEERING APPROVAL REQUIRED FOR LESS THAN 5' OF COVER.
7. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.
8. CLASS 52 DUCTILE IRON PIPE

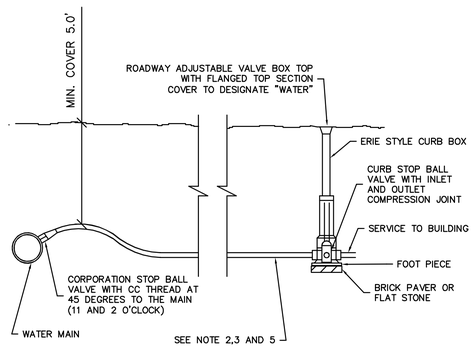
CITY OF DOVER D-4
WATER TRENCH DETAIL

NOT TO SCALE



FORCE MAIN CONNECTION DETAIL

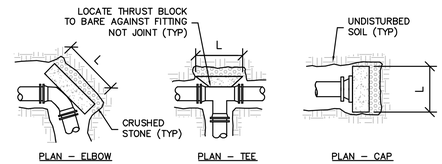
NOT TO SCALE



NOTES:
1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP, INCLUDING TEE AND OTHER CONNECTIONS.
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE (BLUE OR BLACK) CTS SDR 9 PLASTIC POLYETHYLENE RATED FOR 250 psi.
4. CAM-LOCK REQUIRED FOR CTS OR IPS, MJ ADAPTER REQUIRED FOR HDPE
5. 3/4"- COPPER, CTS
   1"- COPPER, CTS
   2"- CTS, HDPE, IPS

CITY OF DOVER D-13
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE



THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)

	PIPE SIZE					
Nominal Dia. (in)	4	6	8	10	12	16
Pipe Fittings	*	*	5.18	7.96	11.43	20.29
90 Degree Bends	*	4.11	7.33	11.26	16.17	28.69
45 Degree Bends	*	*	*	6.10	8.75	15.53
22-1/2 Degree Bends	*	*	*	*	4.46	7.92
11-1/4 Degree Bends	*	*	*	*	*	*
*SEE NOTE 2	System Pressure: 125 psi Safety Factor: 1.5 Soil Bearing Capacity: 2,000 psf					

NOTES:
1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED, ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

CITY OF DOVER D-15
THRUST BLOCK DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

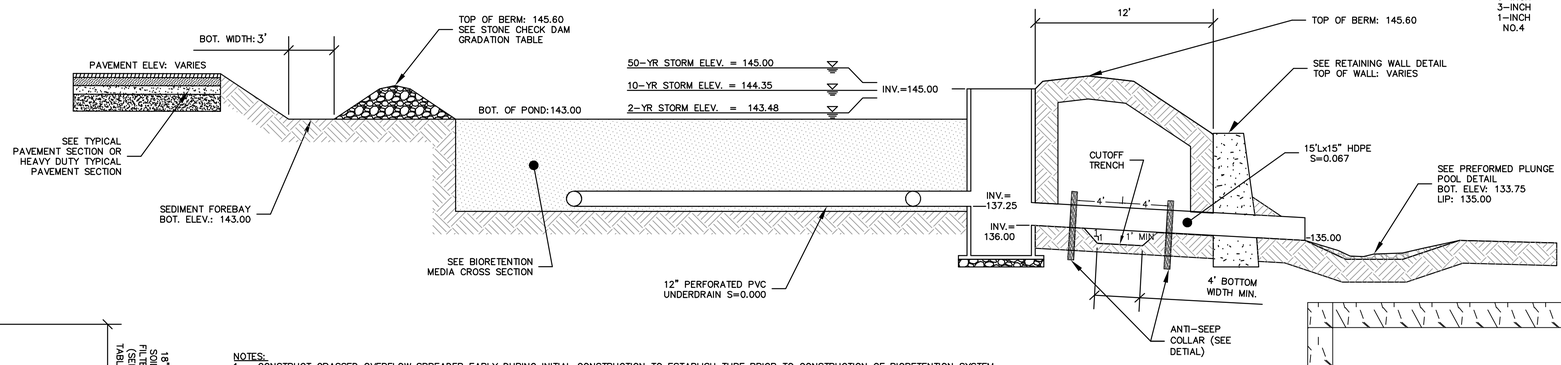
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

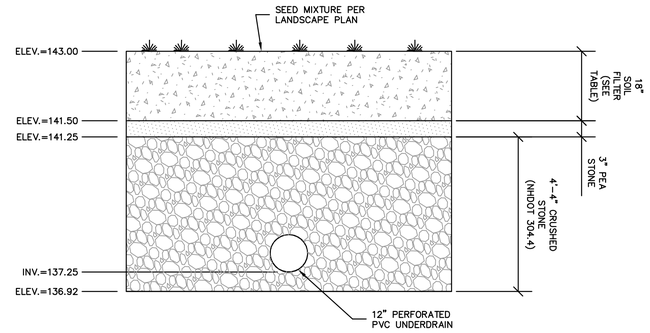
FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

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



STONE CHECK DAM GRADATION

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE
12-INCH	100%
6-INCH	84%-100%
3-INCH	68%-83%
1-INCH	42%-55%
NO.4	8%-12%



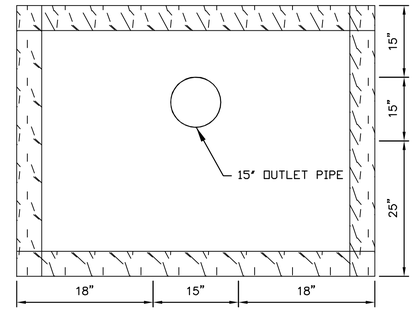
BIORETENTION MEDIA CROSS SECTION

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. DO NOT DRIVE CONSTRUCTION EQUIPMENT THE FILTER MATERIAL. INSTALL FILTER MATERIAL BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER AREA.
4. 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.
5. REFER TO LANDSCAPING DRAWINGS FOR GRASS SEED MIXES. FERTILIZATION OF THE FILTER AREA SHALL BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.
6. 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).
7. 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. 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.

BIORETENTION BASIN 1

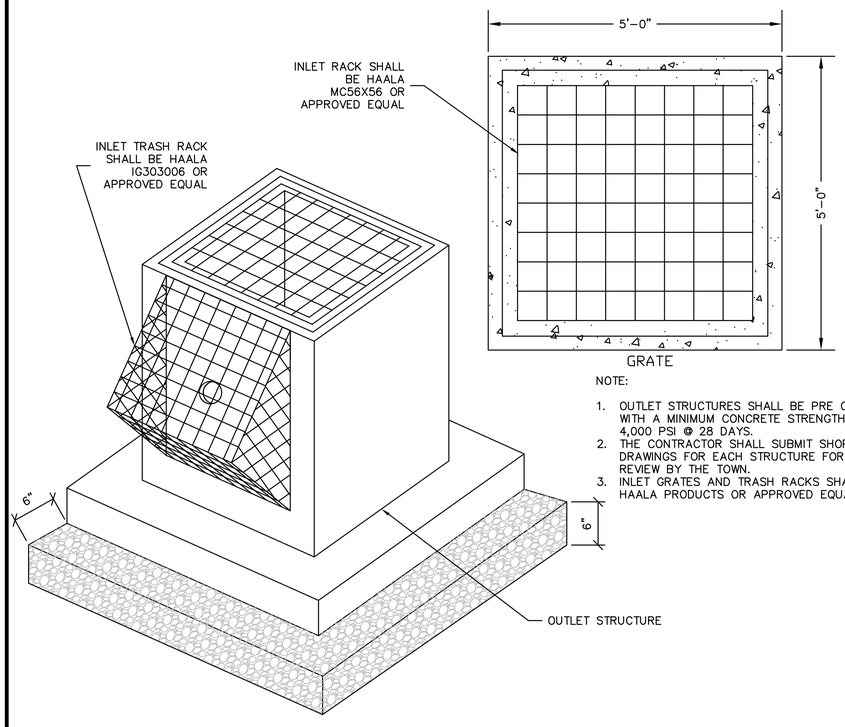
NOT TO SCALE



NOTES:
1. ANTI-SEEP COLLARS SHALL BE WATERPROOF AND HAVE A WATERPROOF CONNECTION TO THE PIPE.
2. ANTI-SEEP COLLARS TO BE AGRI DRAIN OR APPROVED EQUAL.

ANTI-SEEP COLLAR DETAIL

NOT TO SCALE

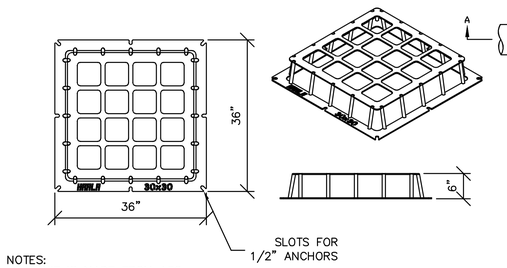


GRATE

NOTE:
1. OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.
3. INLET GRATES AND TRASH RACKS SHALL BE HAALA PRODUCTS OR APPROVED EQUAL.

TYPICAL INLET TRASH RACKS

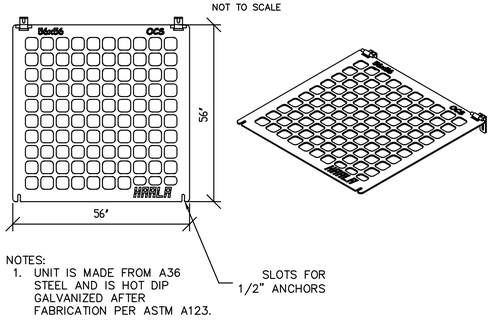
NOT TO SCALE



NOTES:
1. UNIT IS MADE FROM A36 STEEL AND IS HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A123.

HAALA IG303006

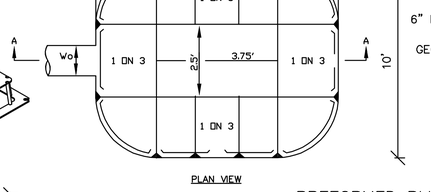
NOT TO SCALE



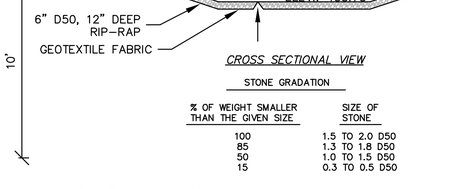
NOTES:
1. UNIT IS MADE FROM A36 STEEL AND IS HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A123.

HAALA MC56X56

NOT TO SCALE



PLAN VIEW



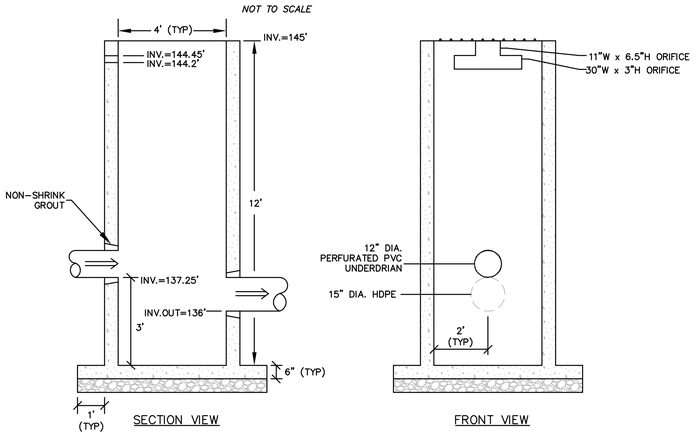
CROSS SECTIONAL VIEW

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

PREFORMED PLUNGE POOL DETAIL

NOT TO SCALE



NOTE:
1) ALL OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.
3) SUMPS SHALL NOT BE GREATER THAN 8 INCHES.

OUTLET STRUCTURE 1 (OS1) DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

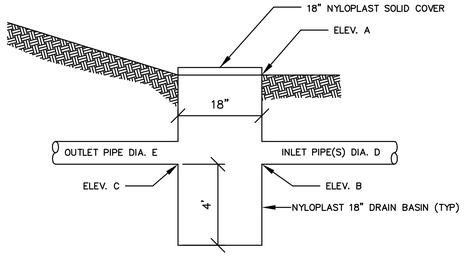
DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

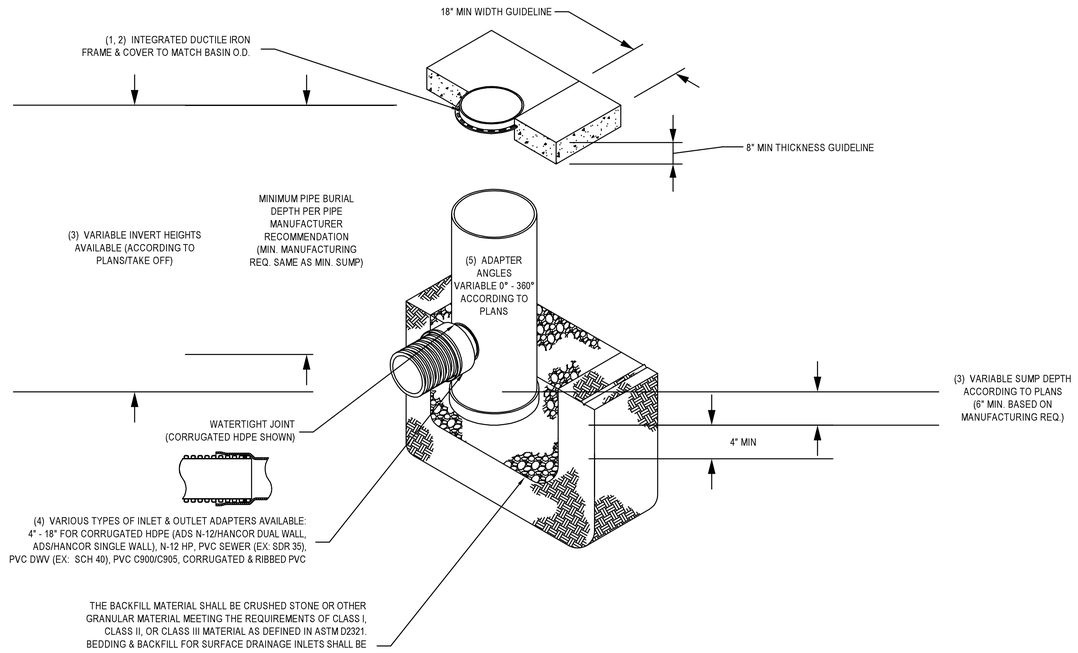


OS	ELEV. A (FT)	ELEV. B (FT)	ELEV. C (FT)	DIA. D (IN)	DIA. E (IN)
YD1	152.25	148.50	148.50	12"	12"
YD2	152.50	148.50	148.50	12"	12"

NOTE:
1) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE CITY.
2) SEE NYLOPLAST 18" DRAIN BASIN DETAIL.

YARD DRAIN DETAIL
NOT TO SCALE

NYLOPLAST 18" DRAIN BASIN: 2818AG



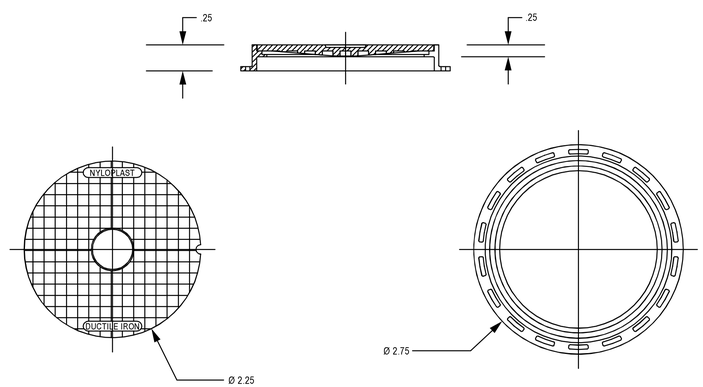
1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
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.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2013 NYLOPLAST

DRAWN BY EBC	MATERIAL	ADS Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 03-29-06			
REVISED BY NMH	PROJECT NO./NAME	TITLE	12 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DATE 03-11-16			
DWG SIZE A	SCALE NTS SHEET 1 OF 1	DWG NO. 7001-110-189	REV E

1899CGC

APPROX. WEIGHT WITH FRAME = 68.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-027

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DRAWN BY EBC	MATERIAL DUCTILE IRON	ADS Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 03-08-06			
REVISED BY CCA	PROJECT NO./NAME	TITLE	18 IN SOLID COVER ASSEMBLY - TYPE C
DATE 08-30-13			
DWG SIZE A	SCALE 1:10 SHEET 1 OF 1	DWG NO. 7001-110-214	REV D

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CIVIL & WASTEWATER ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
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1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

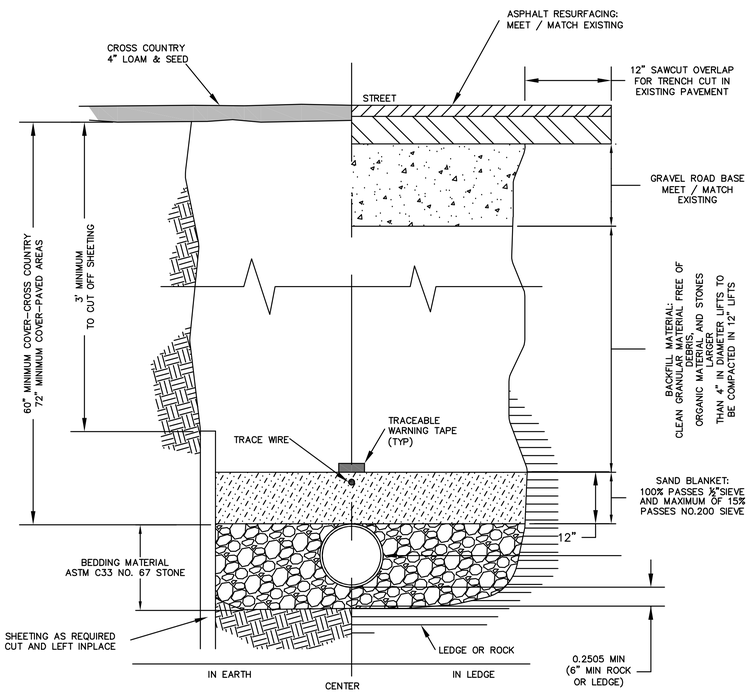
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

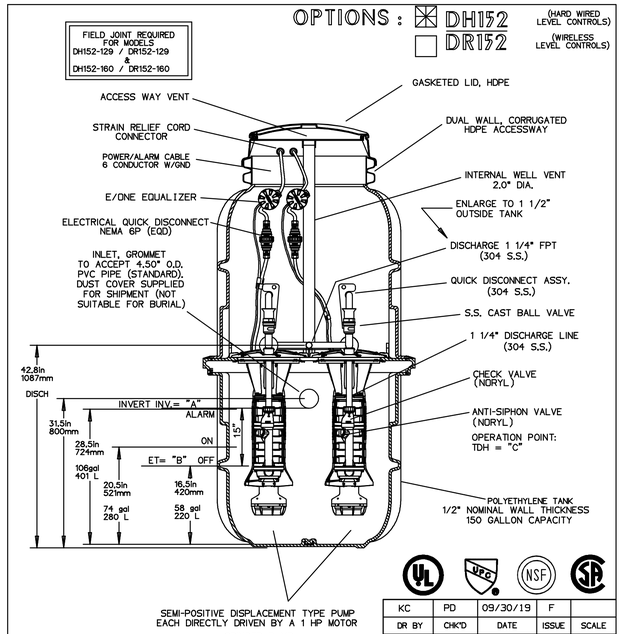
FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

18



SEWER FORCEMAIN TRENCH

NOT TO SCALE



KC	PD	09/30/19	F	
DR BY	CHK'D	DATE	ISSUE	SCALE

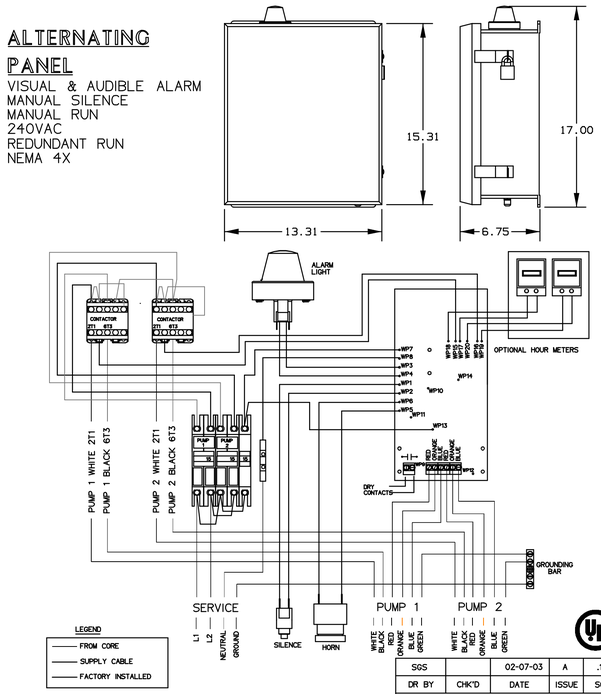
e/one SEWER SYSTEMS

MODEL DH152 / DR152 DETAIL SHEET

NA0052P02

ALTERNATING PANEL

VISUAL & AUDIBLE ALARM
MANUAL SILENCE
MANUAL RUN
240VAC
REDUNDANT RUN
NEMA 4X



SGS		02-07-03	A	.156
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

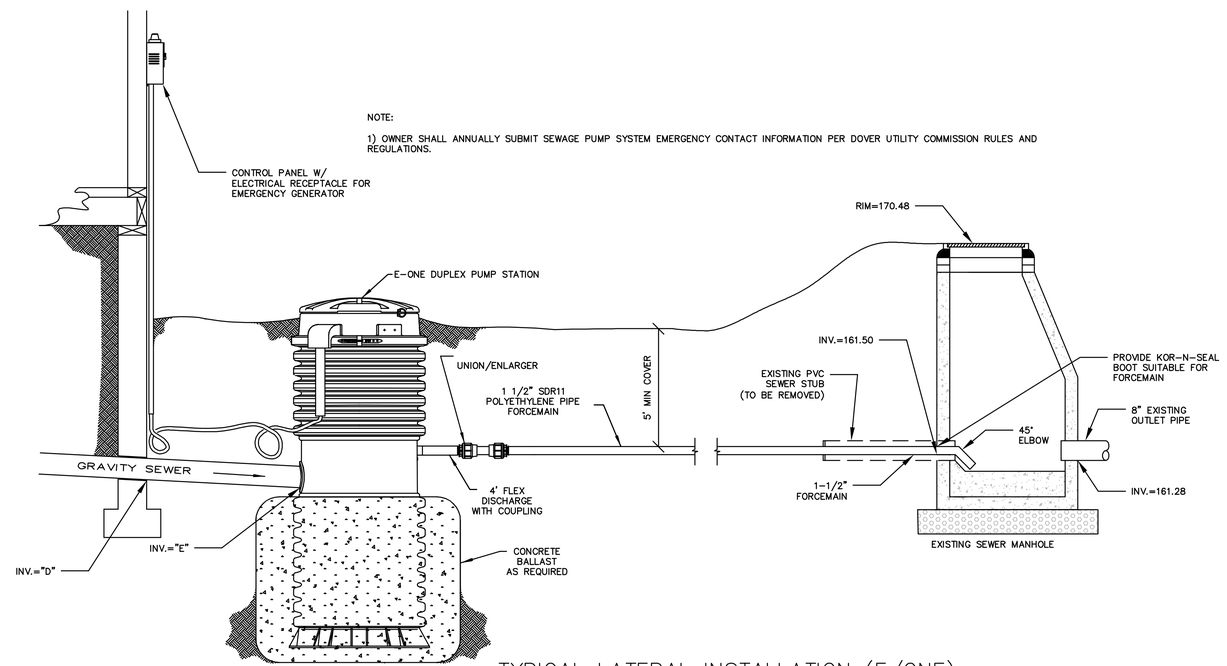
DUPLEX SPLIT TIME ALTERNATING PANEL

LM000270

BURIED NON-METALLIC UTILITIES SHALL RECEIVE A TRACER WIRE.

1. THE TRACER WIRE SHALL BE INSTALLED ON TOP OF THE BURIED UTILITY CROWN.
2. THE TRACER WIRE SHALL BE POSITIVELY ATTACHED TO THE NON-METALLIC BURIED UTILITIES BY PLASTIC WIRE TIES OF SIMILAR TYPE OF ATTACHMENT EVERY 6 FEET FOR STRAIGHT RUN OF UTILITY AND AT ALL CHANGES OF DIRECTION. TAPE SHALL BE POLYKEN "930-35," PROTECTO-WRAP "310", OR EQUAL.
3. THE ENDS OF THE TRACER WIRE SHALL BE EXPOSED ABOVE THE FINISHED GRADE.
4. INSTALL APPROVED CAST IRON VALVE BOXES AT ALL LOCATIONS WHERE THE ENDS OF THE TRACER WIRE ARE EXPOSED ABOVE THE FINISHED GRADE. THE BOXES SHALL NOT BE MORE THAN 200 FEET APART AND SHALL CONTAIN A 24" COIL OF WIRE FROM EACH END OF THE TRACER WIRE.
5. TRACER WIRE SHALL BE CONTINUOUS BETWEEN BOXES AND SHALL BE TESTED FOR CONTINUITY IN THE PRESENCE OF THE INSPECTOR.
6. TRACER WIRE SHALL BE NO. 10 AWG, COPPER WIRE WITH TW INSULATION (BLUE IN COLOR FOR USE WITH POTABLE WATER, GREEN FOR USE WITH SEWER). CONNECTORS SHALL BE DRY-CON TYPE CONNECTORS FOR SPECIFIED WIRE GAGE AND SUITABLE FOR USE WITH BURIED TRACER WIRE.
7. TRACER WIRE SHALL BE EXPOSED ABOVE FINISHED GRADE IN THE CAST IRON BOXES AT THE TRANSITION WHERE THE NON-METALLIC BURIED UTILITY CONNECTS TO THE EXISTING METALLIC UTILITY.
8. EXTEND WIRE INTO VALVE BOXES AND TERMINATE WITH A WIRE CONNECTOR. TERMINATE WIRE FROM LINES EXTENDING FROM MAINS TO FIRE RISERS OR BUILDING SERVICES 12" (300MM) ABOVE GRADE AND CAP WITH A WIRE CONNECTOR.

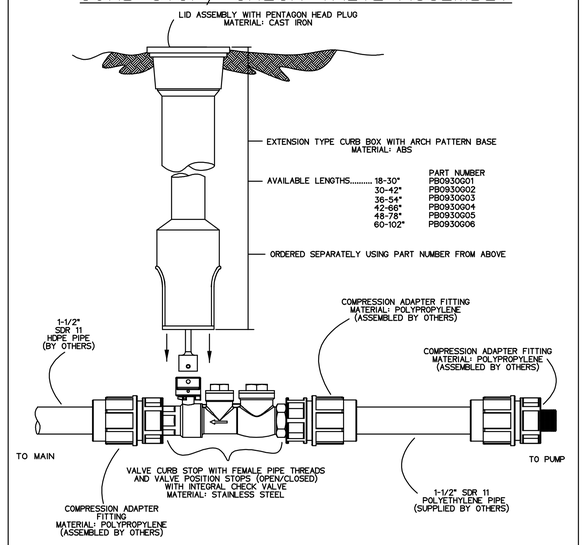
INVERT	PUMP STATION P.S.-1	PUMP STATION P.S.-2
A	148.00	147.50
B	146.90	146.40
C	22 FT @ 12.7 GPM	23.5 FT @ 12.6 GPM
D	148.50	148.0
E	148.00	147.50



TYPICAL LATERAL INSTALLATION (E/ONE)

NOT TO SCALE

CURB STOP/ CHECK VALVE ASSEMBLY



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 EITHER 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 NC0193G02
6. CURB BOX IS TO BE ORDERED SEPARATELY, SEE ABOVE

KIT PARTS ARE NOT ASSEMBLED

SGS	DN	11/02/11	B	3/16
DR BY	CHK'D	DATE	ISSUE	SCALE

e/one SEWER SYSTEMS

STAINLESS STEEL LATERAL KIT 1-1/2" SDR 11 HDPE PIPE

NA0330P03

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CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
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DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO:22075
FILE: SITE.DWG

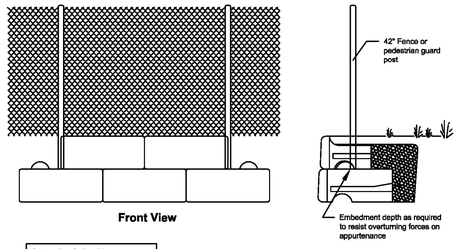
PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

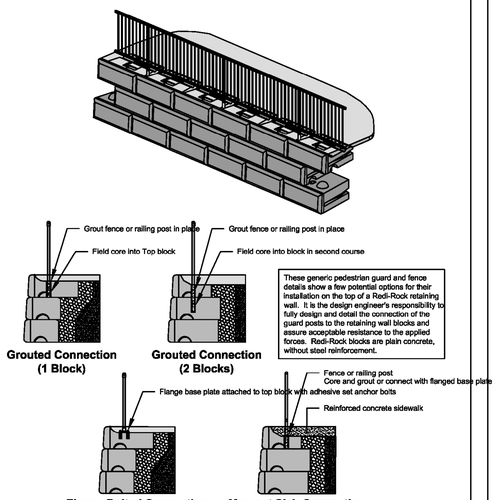
Fence or Pedestrian Guard Connection Locations



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

DRAWN BY:	JRJ
APPROVED BY:	JRJ
DATE:	06-22-2015
SHEET:	1 of 1
TITLE:	Fence or Pedestrian Guard Connection Locations
FILE:	6 Fence or Pedestrian Guard Connection Locations 062215.dwg

Fence or Pedestrian Guard Connection Options



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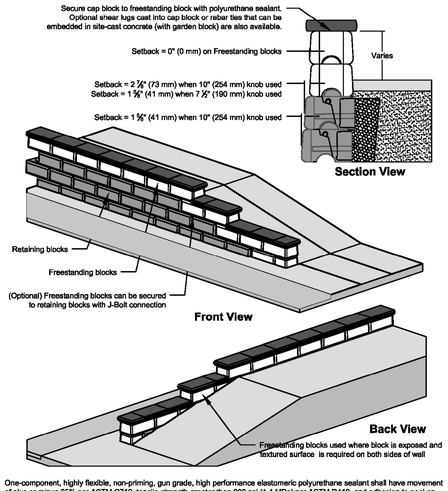
DRAWN BY:	JRJ
APPROVED BY:	JRJ
DATE:	06-22-2015
SHEET:	1 of 1
TITLE:	Fence or Pedestrian Guard Connection Options
FILE:	5 Fence or Pedestrian Guard Connection Options 062215.dwg

Freestanding Blocks with Cap at Top of Wall



One-component, highly flexible, non-priming, gun grade, high performance elastomeric polyurethane sealant shall have movement of plus or minus 25% per ASTM C719, tensile strength greater than 200 psi (1.4 MPa) per ASTM D412, and adhesion to peel on concrete greater than 20 PLI per ASTM C794. Apply sealant in one and one half-inch (1.5") (38 mm) diameter round "hersey kiss" shaped dollops located in two rows at the top of the Freestanding blocks at 8" (203 mm) on center.

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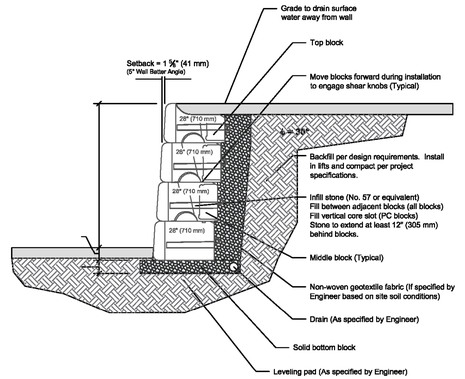
DRAWN BY:	JRJ
APPROVED BY:	JRJ
DATE:	06-22-2015
SHEET:	1 of 1
TITLE:	Freestanding Blocks with Cap at Top of Wall
FILE:	3 Freestanding Blocks with Cap at Top of Wall 062215.dwg

ϕ = 30°	FINE TO MEDIUM SAND (SILTY SAND)
LOAD CONDITION A	NO LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

4 BLOCK HIGH SECTION
(4) 28" (710 mm) Blocks



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site. Final wall design must address both internal and external drainage and all modes of wall stability.

DRAWN BY:	C. Kruger
APPROVED BY:	J. Johnson
DATE:	June 8, 2015
SHEET:	1 of 1
TITLE:	**Preliminary Wall Section** Fine to Medium Sand or Silty Sand, ϕ = 30° No Live Load Surcharge, No Back Slope, No Toe Slope
FILE:	A_30_B_28_72_csd.dwg

CONTRACTOR TO COORDINATE WITH OWNER FOR FENCE STYLE

GENERAL NOTES

1. SEGMENTAL CONCRETE UNIT RETAINING WALL SHALL BE PROVIDED BY redi-rock ? OR SHEA WALL SYSTEMS OR APPROVED EQUAL.
2. RETAINING WALL DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S STANDARDS.
3. STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
4. BENCH CUT ALL EXCAVATED SLOPES.
5. DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE SOIL ENGINEER TO REMOVE UNSUITABLE SOIL.
6. SITE SOILS ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
7. LEVELING PAD SHALL CONSIST OF COMPACTED COARSE SAND OR CRUSHED GRAVEL, 6" THICK MIN. AS STIPULATED BY THE MANUFACTURER.
8. CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD. CONCRETE PAD SHALL BE UNREINFORCED, 3" THICK MAXIMUM.
9. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE 6" FOR WALL HEIGHTS UNDER 4 FT. AND 12" FOR WALLS OVER 4 FT. UNLESS SHOWN DIFFERENTLY.
10. FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
11. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
12. COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.(ASTM D-698)
13. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF 3 TESTS PER WALL AND/OR AS DETERMINED BY THE SITE SOILS ENGINEER.
14. COMPACTION WITHIN 3 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
15. IF REQUIRED SEE ELEVATION DRAWINGS FOR GEOSYNTHETIC TYPE, LENGTH AND LOCATION.
16. IF REQUIRED GEOSYNTHETIC SHALL BE PLACED WITH STRONGEST DIRECTION PERPENDICULAR TO WALL. FOLLOW GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
17. CONTRACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
18. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
19. FOLLOW APPLICABLE PROVISIONS AS DICTATED BY THE MANUFACTURER.

1.4 REQUIREMENTS FOR CONTRACTOR PREPARED DESIGN AND PLANS

A. THE FINAL DESIGN TO BE SUBMITTED PRIOR TO AWARD OF CONTRACT AND SHALL INCLUDE DETAILED DESIGN COMPUTATIONS AND ALL DETAILS, DIMENSIONS, QUANTITIES AND CROSS SECTIONS NECESSARY TO CONSTRUCT THE WALL. THE DESIGN SHALL CONFORM TO ALL OF THE REQUIREMENTS OUTLINED IN SECTION 1.3 ABOVE. THE FULLY DETAILED PLANS SHALL BE ON PERMANENT, ARCHIVAL QUALITY, 24" X 36" DOUBLE MATTE MYLAR WITH PROJECT NAME, NUMBER AND DESIGN FIRM. THE PLANS TO BE SUBMITTED SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

1. A PLAN AND ELEVATION SHEET OR SHEETS FOR EACH WALL, CONTAINING THE FOLLOWING:
   A. AN ELEVATION VIEW OF THE WALL WHICH SHALL INDICATE THE ELEVATION AT THE TOP OF THE WALL, AT ALL HORIZONTAL AND VERTICAL BREAK POINTS AND AT LEAST EVERY FIFTY (50) FEET ALONG THE WALL. ELEVATIONS AT THE TOP OF LEVELING PADS. THE DESIGNATION AS TO THE TYPE OF UNIT, AND THE LOCATION OF THE ORIGINAL AND FINAL GROUND LINE.
   B. A PLAN VIEW OF THE WALL WHICH SHALL INDICATE THE OFFSET FROM THE CONSTRUCTION CENTERLINE OR BASELINE TO THE FACE OF THE WALL AT ALL CHANGES IN HORIZONTAL ALIGNMENT AND THE LIMIT OF THE WIDEST UNIT.
   C. ANY GENERAL NOTES REQUIRED FOR DESIGN AND CONSTRUCTION OF THE WALL.
   D. ALL HORIZONTAL AND VERTICAL CURVE DATA AFFECTING WALL CONSTRUCTION.
2. ALL DETAILS FOR LEVELING PADS, AS WELL AS ALLOWABLE AND CALCULATED MAXIMUM BEARING PRESSURES.
3. DETAILED DESIGN COMPUTATIONS.
4. THE PLANS SHALL BE PREPARED, STAMPED AND SIGNED BY A NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.
5. FENCE HEIGHT TO BE 42".
6. FENCE SHALL BE DESIGNED FOR APPROPRIATE CRASH RATING BY A NEW NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.

RETAINING WALL SYSTEM

PART 1.0 – GENERAL

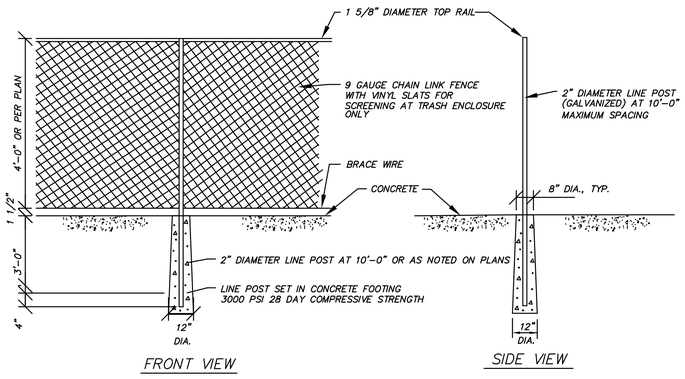
1.1 THIS WORK SHALL CONSIST OF FURNISHING ALL COMPONENTS AND ERECTING A RETAINING WALL SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN AND DIMENSIONS SHOWN ON THE PLANS OR AS ORDERED.

1.2 THIS FOLLOWING TYPE OF RETAINING WALL SYSTEMS ARE ACCEPTABLE TO BE USED ON THIS PROJECT:

REDI-ROCK	(603) 428-3218
SHEA WALL SYSTEMS	(800) 696-7432

1.3 STRUCTURAL AND GEOTECHNICAL DESIGN REQUIREMENTS

A. THE DESIGN OF THE WALL SYSTEM SHALL BE BY THE MANUFACTURER.
B. MINIMUM SAFETY FACTORS SHALL BE AS FOLLOWS:
   1. OVERTURNING: 2.0
   2. BASE SLIDING: 1.5
   3. GLOBAL STABILITY: 1.3
   4. GRID PULLOUT:
C. ALLOWABLE NET BEARING PRESSURE = 6 KIPS PER SQUARE FOOT MOIST SOIL UNIT WEIGHT = 125 POUNDS PER CUBIC FOOT FRICTION ANGLE = 32 DEGREES
D. DESIGN LOADING SHALL CONSIDER SEISMIC LOADS IN ACCORDANCE WITH THE NEW HAMPSHIRE STATE BUILDING CODE.



CHAIN LINK FENCE DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: XX
DRAWN BY: XX
SCALE: XX
DATE: XXX
APPROVED BY:XX
PROJECT NO:XX
FILE: XXX

PLANNING FILE NO.: SITE-2024-0002

DETAIL SHEET

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

20

Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
	1	S3	Single	MRS-LED-06L-SIL-3-UNV-DIM-30-70CRI-CXX / 4SQ B3 S11G20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	2	S3-HS	Single	MRS-LED-06L-SIL-3-UNV-DIM-30-70CRI-IL-CXX / 4SQ B3 S11G20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	3	S4-HS	Single	MRS-LED-06L-SIL-4-UNV-DIM-30-70CRI-IH-CXX / 4SQ B3 S11G20 S GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	3	S5-2	Back-Back	MRS-LED-06L-SIL-5W-UNV-DIM-30-70CRI-CXX / 4SQ B3 S11G20 SD180 GA 4BC (20' AFG)	LSI INDUSTRIES, INC.
	8	W	Single	EOF1MV3KBZ / WALL MTD 12' AFG	NICOR, Inc.
	2	W3	Single	XWM-3-LED-06L-30-UE-CXX / WALL MTD 18' AFG	LSI INDUSTRIES, INC.
	4	W4	Single	XWM-4-LED-06L-30-UE-CXX / WALL MTD 18' AFG	LSI INDUSTRIES, INC.

50' WETLAND BUFFER

PROPOSED 24,856 S.F. BUILDING

PROPOSED 10,000 S.F. BUILDING

50' WETLAND BUFFER

QUALITY WAY

PARCEL AREA
375,192 S.F.
8.61 Ac.

PARKING LOT AT 25K SF BLDG

Illuminance (Fc)
Average = 1.39
Maximum = 2.8
Minimum = 0.5
Avg/Min Ratio = 2.78
Max/Min Ratio = 5.60

TRUCK YARD-DOCK AREA 25K BLDG

Illuminance (Fc)
Average = 0.87
Maximum = 2.4
Minimum = 0.3
Avg/Min Ratio = 2.90
Max/Min Ratio = 8.00

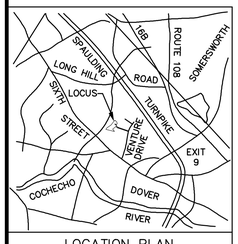
PARKING LOT AT 10K SF BLDG

Illuminance (Fc)
Average = 1.18
Maximum = 2.3
Minimum = 0.4
Avg/Min Ratio = 2.95
Max/Min Ratio = 5.75

TRUCK YARD-DOCK AREA 10K BLDG_1

Illuminance (Fc)
Average = 0.98
Maximum = 2.3
Minimum = 0.4
Avg/Min Ratio = 2.45
Max/Min Ratio = 5.75

NH STATE PLANE NAD 83 _ CRD DBS.



LOCATION PLAN
(NO SCALE)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

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CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DESIGN BY: JFG
DRAWN BY: SRD
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG
DATE: 1-18-24
SCALE: 1"=40'

PLANNING FILE NO. :SITE-2024-0002

LIGHTING PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

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Catalog # _____ Project: _____
Prepared By: _____ Date: _____

Mirada Small Area (MRS)

Outdoor LED Area Light

IP66 IK08

OVERVIEW	
Lumen Package	6,000 - 30,000
Wattage Range	39 - 209
Efficacy Range (LPW)	112 - 163
Weight lbs(kg)	20 (9.1)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 27 lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types 2, 3, 4, 5W, FT, and LC/RC.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377.
- Minimum CRI of 70.
- Integral louver (IL) and integral half louver (IH) options available for enhanced backlight control.

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F). 30L lumen packages rated to +40°C.
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation

- Designed to mount to square or round poles.
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga. wire.
- Utilizes LSI's traditional B3 drill pattern.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.
- IK08 rated luminiare per IEC 66262 mechanical impact code
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Catalog # _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Mirada Medium Wall Sconce (XWM)

Outdoor Wall Sconce

IP65 IK08

OVERVIEW	
Lumen Package	3,000 - 21,000
Wattage Range	23 - 175
Efficacy Range (LPW)	125 - 158
Weight lbs(kg)	27 (12.2)
Control Options	IMSBT, ALB, ALS, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Hinged die-cast aluminum wiring access door located underneath.
- Galvanized-steel universal wall mount bracket comes standard with hinging mechanism to easily access the junction box wire connections without removing the luminaire.
- Optional pole-mounting bracket (XPMA) permits mounting to standard poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Max shipping weight: 30lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 70.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours
- Total harmonic distortion (THD): <20%
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F).
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to + 95°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule.

Installation

- Universal wall mounting plate easily mounts directly to 4" octagonal or square junction box.
- 2 fasteners secure the hinged door underneath the housing and provide quick & easy access to the electrical compartment for installing/servicing.
- Optional terminal block accepts up to 12 ga wire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.
- 1 Year warranty on Battery Back-up option.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K or lower color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet Locations.
- IP65 rated luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications when pole mounted (using optional XPMA bracket) or wall mounted.
- IK08 rated luminiare per IEC 66262 mechanical impact code
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Catalog # _____ Project: _____
Prepared By: _____ Date: _____

Steel Poles

Square Straight

QUICK LINKS

Ordering Guide | Configurations | Dimensions | EPA

FEATURES & SPECIFICATIONS

Pole Shaft

- Straight poles are 4", 5", or 6" square.
- Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 50,000 psi.
- On Tenon Mount steel poles, tenon is 2-3/8" O.D. high-strength pipe. Tenon is 4-3/4" in length.

Hand-Hole

- Standard hand-hole location is 12" above pole base.
- Poles 22' and above have a 3" x 6" reinforced hand-hole. Shorter poles have a 2" x 4" non-reinforced hand-hole.

Base

- Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi.
- Two-piece square base cover is optional.

Anchor Bolts

- Poles are furnished with anchor bolts featuring zinc-plated double nuts and washers. Galvanized anchor bolts are optional.
- Anchor Bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 PSI.

Ground Lug

- Ground lug is standard.

Duplex Receptacle

- Weatherproof duplex receptacle is optional.

Ground Fault Circuit Interrupter

- Self-testing Ground fault circuit interrupter is optional.

Finishes

- Every pole is provided with the DuraGrip Protection System and a 5-year limited warranty.
- When the top-of-the line DuraGrip Plus Protection System is selected, in addition to the DuraGrip Protection System, a non-porous, automotive-grade corrosion coating is applied to the lower portion of the pole interior sealing and further protecting it from corrosion. This option extends the limited warranty to 7 years.

Determining The Luminaire/Pole Combination For Your Application:

- Select luminaire from luminaire ordering information.
- Select bracket configuration if required
- Determine EPA value from luminaire/bracket EPA chart
- Select Pole Height
- Select MPH to match wind speed in the application area (See windspeed maps).
- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA
- Consult factory for special wind load requirements and banner brackets.

Pole Vibration Damper

- A pole vibration damper is recommended in open terrain areas of the country where low steady state winds are common.
- Non-tapered poles and lightly loaded poles are more susceptible to destructive vibration if a damper is not installed.

Listings

- UL Listed
- BAA/TAA Compliant

EOF

LED Emergency Outdoor Full Cutoff

Project _____
Catalog _____
Type _____
Date _____

Product Description

The LED Emergency Outdoor Full Cutoff combines 90-minute emergency lighting with a low-profile, architectural design. The EOF is designed for outdoor use, with an optional cold-weather kit for added reliability in northern climates. The EOF comes standard with a photocell, with an optional motion sensor adding even more energy efficiency. An internal selector switch allows bypassing the photocell to control the unit from a wall switch. A non-emergency unit is available for locations not requiring battery-backup, providing a uniform look for all fixtures.

Construction
- IP65 Rated enclosure
- Durable die-cast Aluminum body
- Separable backplate for easy installation and maintenance

Optical System
- Polycarbonate lens
- Utilizes advanced LED technology with CCT of 3000K and 5000K
- CRI 70+

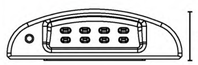
Electrical
- Input voltage of 120/277VAC
- Maintenance-free NiCad battery provides 90-minute emergency operation
- LED Indicator light & test button with self-testing, self-diagnostic option
- Photocell standard with wall switch control
- Motion sensor option for additional energy saving
- Operating Temperature:
  - EM: 32°F to 122°F (0°C to +50°C)
  - Non-EM and EM Cold Weather: -13°F to +122°F (-25°C to +50°C)

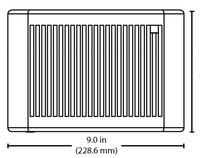
Mounting and installation
- Fixture mounts directly to J-Boxes and walls with screws
- Wiring possible through backplate or 1/2" conduit knockout
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel

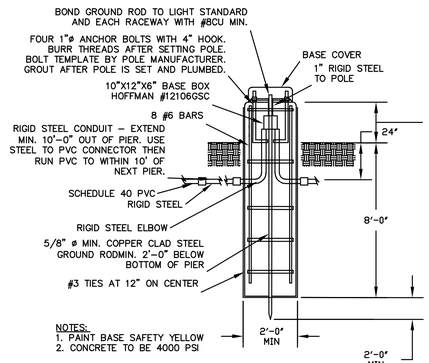
Finish
- Fine-textured, UV-stabilized powder coat bronze finish

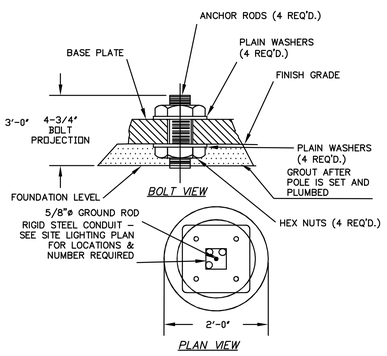
Listings
- LM-79, LM-80 testing performed in accordance with IESNA standards.
- UL & cUL 924 Listed
- Meets or exceeds requirements of NFPA 70 & NFPA 101
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions
- TM-21 Projected L70(9k) life >72,000 hours

Warranty
- 1-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge.)









NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	REV PER TRC COMMENTS #1	SJH	2-29-24
2	REV PER TRC COMMENTS #2	SJH	4-1-24

DATE: 1-18-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO.: SITE-2024-0002

LIHGTING DETAILS

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

22

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: 1"=40'
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PLANNING FILE NO: SITE-2024-0002

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

PROPOSED 24,856 S.F. BUILDING

PROPOSED 10,000 S.F. BUILDING

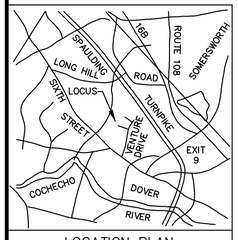
50' WETLAND BUFFER

QUALITY WAY

45.50
8.50 20.00

Dover ladder feet

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 44.0



LOCATION PLAN
(NO SCALE)

NH STATE PLANE MAD 83 CORS DBS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

DOVER LADDER TRUCK MOVEMENT PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

23

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
2	REV PER TRC COMMENTS #2	SJH	4-1-24
1	REV PER TRC COMMENTS #1	SJH	2-29-24

DATE: 1-18-24
SCALE: 1"=40'
DRAWN BY: SRD
DESIGN BY: JFG
APPROVED BY:SJH
PROJECT NO: 22075
FILE: SITE.DWG

PARCEL AREA
375,192 S.F.
8.61 Ac.

50' WETLAND BUFFER

PROPOSED 24,856 S.F. BUILDING

PROPOSED 10,000 S.F. BUILDING

50' WETLAND BUFFER

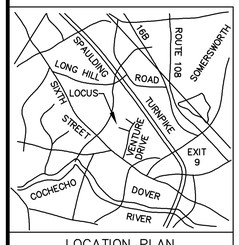
QUALITY WAY

45.50

8.50 20.00

Dover ladder feet

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 44.0



LOCATION PLAN
(NO SCALE)

NH STATE PLANE
NAD 83 CRS DBS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

PLANNING FILE NO: SITE-2024-0002

DOVER LADDER TRUCK MOVEMENT PLAN

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DOVER, NH 03820

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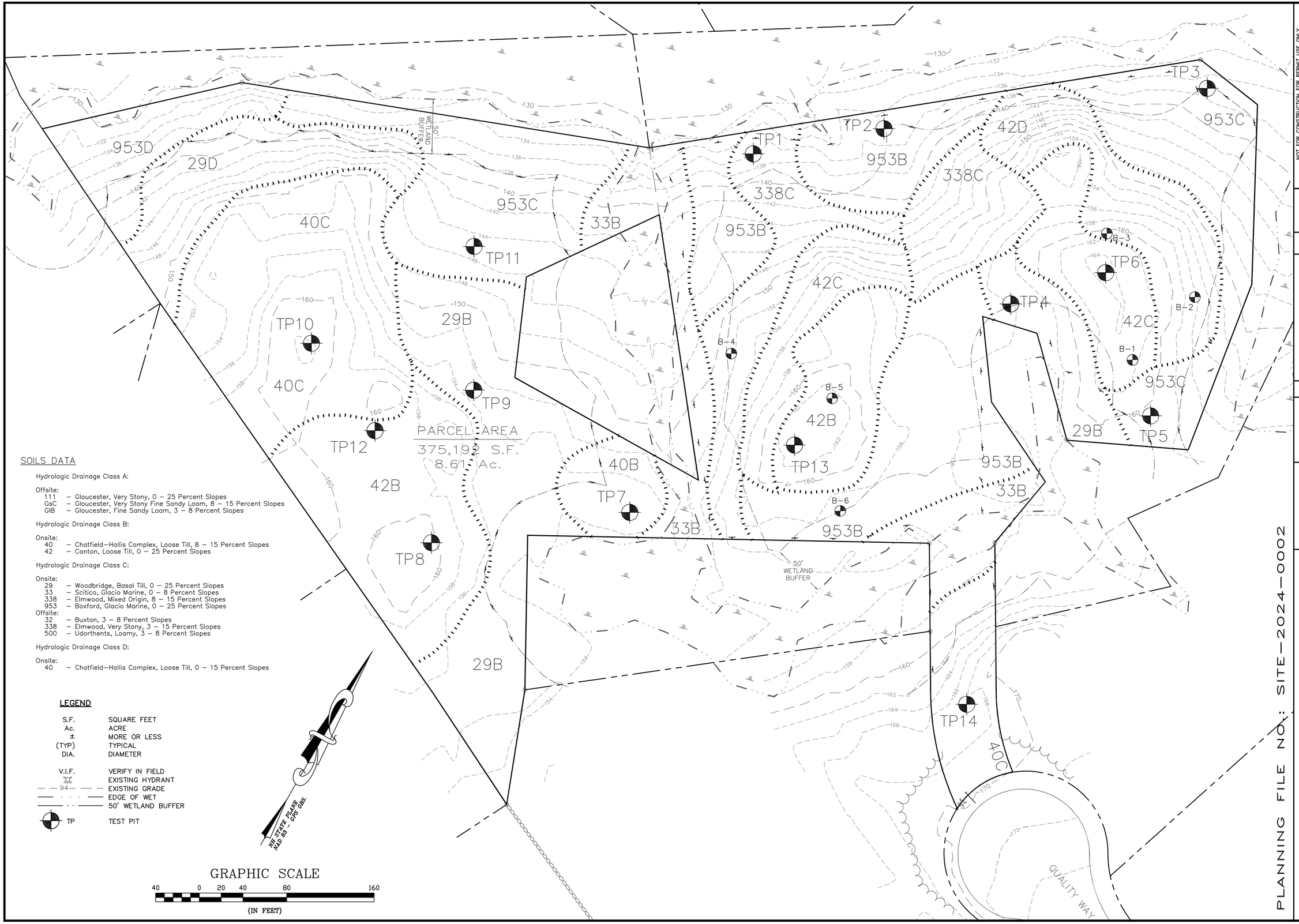

SOILS DATA

Hydrologic Drainage Class A:

Offsite:
111 – Gloucester, Very Stony, 0 – 25 Percent Slopes
GsC – Gloucester, Very Stony Fine Sandy Loam, 8 – 15 Percent Slopes
GlB – Gloucester, Fine Sandy Loam, 3 – 8 Percent Slopes

Hydrologic Drainage Class B:

Onsite:
40 – Chatfield–Hollis Complex, Loose Till, 8 – 15 Percent Slopes
42 – Canton, Loose Till, 0 – 25 Percent Slopes

Hydrologic Drainage Class C:

Onsite:
29 – Woodbridge, Basal Till, 0 – 25 Percent Slopes
33 – Scitico, Glacio Marine, 0 – 8 Percent Slopes
338 – Elmwood, Mixed Origin, 8 – 15 Percent Slopes
953 – Boxford, Glacio Marine, 0 – 25 Percent Slopes
Offsite:
32 – Buxton, 3 – 8 Percent Slopes
338 – Elmwood, Very Stony, 3 – 15 Percent Slopes
500 – Udorthents, Loamy, 3 – 8 Percent Slopes

Hydrologic Drainage Class D:

Onsite:
40 – Chatfield–Hollis Complex, Loose Till, 0 – 15 Percent Slopes

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP)	TYPICAL
DIA.	DIAMETER
V.I.F.	VERIFY IN FIELD
	EXISTING HYDRANT
94	EXISTING GRADE
	EDGE OF WET
	50' WETLAND BUFFER
TP	TEST PIT

NH STATE PLANE NAD 83 GPS OBS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

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SITE SPECIFIC SOILS PLAN

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

25

Michael Cuomo, Soil Scientist
6 York Pond Road, York, Maine 03909
207 363 4532
mcuomosoil@gmail.com

TEST PIT DATA

Client: Civilworks
Location: Quality Way, Dover, NH
Date: 1 December 2022

Test Pit Number: One

Depth	Description
1"	Leaf litter.
0-8"	Very dark grayish brown (10YR 3/2) stony fine sandy loam, granular, friable.
8-15"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
15-24"	Light olive brown (2.5Y 5/3) silt loam, blocky, friable, redox.
24-36"	Olive gray (5Y 5/2) silt loam, blocky, firm, redox.
36-63"	Olive brown (2.5Y 4/4) stony fine sandy loam, blocky, firm, redox.
63"+	Bedrock.

Soil Series: Elmwood
Depth to Seasonal High Water Table: 15"
Depth to Restrictive Layer: 24"
Observed Water: 60"
Depth to Bedrock: 63"

Test Pit Number: Two

Depth	Description
2"	Leaf litter.
0-4"	Dark grayish brown (2.5Y 4/2) silt loam, granular, friable, redox.
4-10"	Light brownish gray (2.5Y 6/2) silt loam, blocky, friable, redox.
10-20"	Olive brown (2.5Y 4/4) silt loam, blocky, friable, redox.
20-30"	Gray (5Y 5/1) silt loam, blocky, firm, redox.
30-72"	Olive gray (5Y 4/2) silty clay loam, blocky, firm, redox.

Soil Series: Scitico
Depth to Seasonal High Water Table: Surface
Depth to Restrictive Layer: 20"
Observed Water: 6"
Depth to Bedrock: None

Test Pit Number: Three

Depth	Description
1"	Leaf litter.
0-8"	Dark brown (10YR 3/3) silt loam, granular, friable.
8-12"	Olive yellow (2.5Y 6/6) silt loam, blocky, friable.
12-16"	Dark grayish brown (2.5Y 4/2) silt loam, blocky, friable, redox.
16-28"	Olive brown (2.5Y 4/4) silt loam, blocky, firm, redox.
28-72"	Olive (5Y 5/3) silty clay loam, blocky, firm, redox.

Soil Series: Boxford
Depth to Seasonal High Water Table: 12"
Depth to Restrictive Layer: 16"
Observed Water: 12"
Depth to Bedrock: None

Test Pit Number: Four

Depth	Description
1"	Leaf litter.
0-6"	Dark brown (10YR 3/3) very fine sandy loam, granular, friable.
6-15"	Dark yellowish brown (10YR 4/6) very fine sandy loam, blocky, friable.
15-28"	Olive brown (2.5Y 4/4) silt loam, blocky, friable, redox.
28-80"	Light olive brown (2.5Y 5/4) stony fine sandy loam, blocky, firm, redox.
80-96"	Light yellowish brown (2.5Y 6/4) fine sand, massive, friable, redox.

Soil Series: Woodbridge variant
Depth to Seasonal High Water Table: 15"
Depth to Restrictive Layer: 28"
Observed Water: 15"
Depth to Bedrock: None

Test Pit Number: Five

Depth	Description
1"	Leaf litter.
0-8"	Very dark gray (2.5Y 3/1) silt loam, granular, friable.
8-10"	Light olive brown (2.5Y 5/3) silt loam, blocky, friable.
10-15"	Olive (5Y 5/3) silt loam, blocky, friable, redox.
15-38"	Olive (5Y 5/3) silt loam, blocky, firm, redox.
38-60"	Olive brown (2.5Y 4/3) stony fine sandy loam, blocky, firm, redox.
60-84"	Olive gray (5Y 5/2) silt loam, blocky, firm, redox.

Soil Series: Boxford variant
Depth to Seasonal High Water Table: 10"
Depth to Restrictive Layer: 15"
Observed Water: 15"
Depth to Bedrock: None

Test Pit Number: Six

Depth	Description
1"	Leaf litter.
0-6"	Very dark grayish brown (10YR 3/2) fine sandy loam, granular, friable.
6-24"	Yellowish brown (10YR 5/6) stony fine sandy loam, blocky, friable.
24-60"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.
60"+	Bedrock

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 60"

Test Pit Number: Seven

Depth	Description
2"	Leaf litter.
0-6"	Very dark brown (10YR 2/2) stony fine sandy loam, granular, friable.
6-12"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
12"+	Bedrock.

Soil Series: Hollis
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 12"

Test Pit Number: Eight

Depth	Description
2"	Leaf litter.
0-6"	Dark brown (10YR 3/3) stony fine sandy loam, granular, friable.
6-12"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
12-33"	Brownish yellow (10YR 6/6) stony fine sandy loam, blocky, friable.
33-60"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: None

Test Pit Number: Nine

Depth	Description
3"	Leaf litter.
0-7"	Dark brown (10YR 3/3) stony fine sandy loam, granular, friable.
7-20"	Yellowish brown (10YR 5/6) stony fine sandy loam, blocky, friable.
20-25"	Light olive brown (2.5Y 5/4) stony fine sandy loam, blocky, friable, redox.
25-57"	Olive brown (2.5Y 4/4) stony fine sandy loam, massive, firm, redox.
57"+	Bedrock

Soil Series: Woodbridge
Depth to Seasonal High Water Table: 20"
Depth to Restrictive Layer: 25"
Observed Water: None
Depth to Bedrock: 57"

Test Pit Number: Ten

Depth	Description
2"	Leaf litter.
0-7"	Dark yellowish brown (10YR 3/6) fine sandy loam, granular, friable.
7-12"	Dark yellowish brown (10YR 4/6) fine sandy loam, blocky, friable.
12"+	Bedrock.

Soil Series: Hollis
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 12"

Test Pit Number: Eleven

Depth	Description
1"	Leaf litter.
0-6"	Very dark grayish brown (2.5Y 3/2) silt loam, granular, friable.
6-12"	Olive brown (2.5Y 4/4) silt loam, blocky, friable.
12-22"	Light olive brown (2.5Y 5/4) silt loam, blocky, friable, redox.
22-32"	Olive gray (5Y 4/2) silt loam, blocky, firm, redox.
32-63"	Olive brown (2.5Y 4/4) stony fine sandy loam, blocky, firm, redox.

Soil Series: Boxford variant
Depth to Seasonal High Water Table: 12"
Depth to Restrictive Layer: 22"
Observed Water: 15"
Depth to Bedrock: None

Test Pit Number: Twelve

Depth	Description
3"	Leaf litter.
0-7"	Dark brown (10YR 3/3) stony fine sandy loam, granular, friable.
7-17"	Dark yellowish brown (10YR 4/6) stony fine sandy loam, blocky, friable.
17-30"	Brownish yellow (10YR 6/6) stony fine sandy loam, blocky, friable.
30-48"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.
48"+	Bedrock

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 48"

Test Pit Number: Thirteen

Depth	Description
2"	Leaf litter.
0-6"	Very dark grayish brown (10YR 3/2) fine sandy loam, granular, friable.
6-16"	Dark yellowish brown (10YR 4/6) fine sandy loam, blocky, friable.
16-26"	Brownish yellow (10YR 6/6) fine sandy loam, blocky, friable.
26-64"	Light yellowish brown (2.5Y 6/3) stony loamy sand, massive, friable.

Soil Series: Canton
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: None

Test Pit Number: Fourteen

Depth	Description
3"	Leaf litter.
0-5"	Dark brown (10YR 3/3) fine sandy loam, granular, friable.
5-16"	Dark yellowish brown (10YR 4/6) fine sandy loam, blocky, friable.
16-23"	Yellowish brown (10YR 5/6) fine sandy loam, blocky, friable.
23"+	Bedrock.

Soil Series: Chatfield
Depth to Seasonal High Water Table: None
Depth to Restrictive Layer: None
Observed Water: None
Depth to Bedrock: 23"

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TEST PIT LOGS

FUTURE AUTOMATION, INC.
127 VENTURE DRIVE
DOVER, NH 03820

FUTURE AUTOMATION
QUALITY WAY LOT
DOVER, NH 03820

Future Automation

Dover, NH

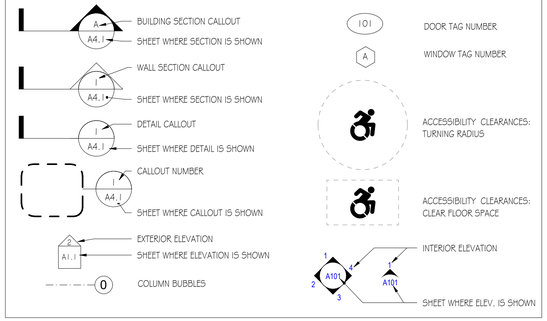
Planning Board
N.F.C. - 011024

LOCUS MAP: (N.T.S.)

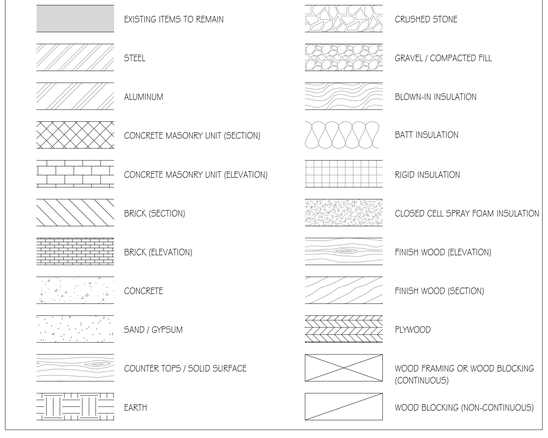
MASTER ABBREVIATION KEY:

AB	ANCHOR BOLT			LAM	LAMINATE	S	SOUTH
AC	AIR CONDITIONER	E	EAST	LAV	LAVATORY	S-TRAP	SEDIMENT TRAP
ACI	AMERICAN CONCRETE INSTITUTE	EJ	EXPANSION JOINT			SC	SOLID CORE
		EJC	EXPANSION JOINT COVER	MAS	MASONRY	SCED	SCHEDULE
ACOUST	ACOUSTIC	EL	ELEVATION	MAT	MATERIAL	SD	STORM DRAIN
AFF	ABOVE FINISH FLOOR	ELEC	ELECTRICAL	MAX	MAXIMUM	SF	SQUARE FOOT
ALT	ALTERNATE	ELEV	ELEVATOR	MECH	MECHANICAL	SH	SHOWER
ALUM	ALUMINUM	EQ	EQUAL	MEM	MEMBRANE	SHT	SHEET
ANCH	ANCHOR	EQUIP	EQUIPMENT	MEP	MECHANICAL, ELECTRICAL, PLUMBING	SIM	SIMILAR
ANOD	ANODIZED	ER	EMERGENCY ROOM			SL	SLIDING
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	EST	ESTIMATE	METTP	METAL TOILET PARTITION	SMR	SINGLE PLY MEMBRANE ROOF
		EWC	ELECTRICAL WATER COOLER	MFR	MANUFACTURER	SP/PT/FIN	SPECIAL PAINT FINISH
BD	BOARD	EXH	EXHAUST	MH	MANHOLE	SPEC	SPECIFICATION
BIT	BITUMINOUS	EXIST	EXISTING	MIN	MINIMUM	SPKR	SPEAKER
BL	BUILDING LINE	EXP	EXPANSION	MISC	MISCELLANEOUS	SQ	SQUARE
BLDG	BUILDING	EXPD	EXPANDED	MO	MASONRY OPENING	SS	STAINLESS STEEL
BLK	BLOCK	EXT	EXTERIOR	MTL	METAL	STA	STATION
BLKG	BLOCKING			MULL	MULLION	STD	STANDARD
BM	BEAM	F/F	FACE OF FOUNDATION WALL			STL	STEEL
BOC	BOTTOM OF CURB			N	NORTH	STOR	STORAGE
BOF	BOTTOM OF FOOTING ELEVATION	FA	FRESH AIR	NAT	NATURAL	STRG	STRINGER
		FAP	FIRE ALARM PANEL	NEC	NECESSARY	STRUCT	STRUCTURAL
BOT	BOTTOM	FD	FLOOR DRAIN	NIC	NOT IN CONTRACT	SU	SITE UTILITY
BRG	BEARING	FE	FIRE EXTINGUISHER	NOM	NOMINAL	SUSP	SUSPEND (SUSPENDED)
BRK	BRICK	FEC	FIRE EXTINGUISHER CABINET	NRC	NOISE REDUCTION COEFFICIENT	SYMM	SYMMETRICAL
BSMT	BASEMENT					SYS	SYSTEM
BTW	BETWEEN	FIN	FINISH	NTS	NOT TO SCALE		
BUR	BUILT-UP ROOF	FL	FLOW LINE			T	TREAD
		FLR	FLOOR	OC	ON CENTER	T&G	TONGUE & GROOVED
CAB	CABINET	FND	FOUNDATION	OD	OUTSIDE DIAMETER	T/FRM	TOP OF FRAME
CB	CATCH BASIN	FOF	FACE OF FINISH	OF/C	OUTSIDE FACE OF CONCRETE	T/SLB	TOP OF SLAB
CER	CERAMIC	FOM	FACE OF MASONRY			TB	TACKBOARD
CF	CUBIC FOOT	FOS	FACE OF STUD	OH	OVERHEAD	TEL	TELEPHONE
CI	CAST IRON	FR	FIRE RATED	OPG	OPENING	TEMP	TEMPORARY
CJ	CONTROL JOINT	FS	FULL SIZE	OPP	OPPOSITE	TERR	TERRAZZO
CL	CLOSET	FT	FOOT	OR	OPERATING ROOM	THK	THICK
CLCB	CURBLESS CATCH BASIN	FTG	FOOTING	PBD	PARTICLE BOARD	THLD	THRESHOLD
CLG	CEILING	FUR	FURRED (FURRING)	PCF	POUNDS PER CUBIC FOOT	TOC	TOP OF CURB
CM	CONTRACT MANAGER	FVC	FIRE VALVE CABINET			TOF	TOP OF FOUNDATION
CMU	CONCRETE MASONRY UNIT			PL	PROPERTY LINE	TOS	TOP OF SLAB
		GA	GAUGE	PLAM	PLASTIC LAMINATE	TOW	TOP OF WALL ELEVATION
CO	CLEAN OUT	GALV	GALVANIZED	PLAS	PLASTER	TR	TO REMAIN
COL	COLUMN	GC	GENERAL CONTRACTOR	PLYWD	PLYWOOD	TYP	TYPICAL
COMP	COMPACTED (COMPOSITION)	GEN	GENERAL	PNL	PANEL		
		GL	GLASS	PSF	POUNDS PER SQUARE FOOT	UH	UNIT HEATER
CONC	CONCRETE	GLZ	GLAZING			UL	UNDERWRITERS LABORATORIES, INC.
CONST	CONSTRUCTION	GRD	GRADE	PSI	POUNDS PER SQUARE INCH	UOD	UNDERSIDE OF DECK
CONT	CONTINUOUS	GYP	GYPSUM			UON	UNLESS OTHERWISE NOTED
CONTR	CONTRACTOR	H&V	HEATING & VENTILATING	PT	PAINT		
CORR	CORRUGATED	HC	HANDICAP	PTD	PAINTED	UR	URINAL
CP	CONTROL PANEL	HDWD	HARDWOOD	PTN	PARTITION	UV	UNIT VENTILATOR
CSG	CASING	HGT	HEIGHT	PVC	POLYVINYL CHLORIDE		
CSMT	CASEMENT	HM	HOLLOW METAL			VAR	VARIES OR VARIABLE
CT	CERAMIC TILE	HP	HIGH POINT	QT	QUARRY TILE	VB	VINYL BASE
CTR	CENTER	HVAC	HEATING, VENTILATION, AIR CONDITIONING			VCT	VINYL COMPOSITION TILE
CY	CUBIC YARD			R	RADIUS	VERT	VERTICAL
		HWH	HOT WATER HEATER	R/A	RETURN AIR	VEST	VESTIBULE
DF	DRINKING FOUNTAIN			RC	REINFORCED CONCRETE	VIF	VERIFY IN FIELD
DIA	DIAMETER	ID	INSIDE DIAMETER	RD	ROOF DRAIN	VNR	VENEER
DIAG	DIAGONAL	IN	INCH	REF	REFERENCE	VOL	VOLUME
DIM	DIMENSION	INSUL	INSULATION	REFR	REFRIGERATOR		
DL	DEAD LOAD	INT	INTERIOR	REINF	REINFORCE	W	WEST
DN	DOWN	INV	INVERT	REQD	REQUIRED	W/	WITH
DR	DOOR			RGH	ROUGH	WC	WATER CLOSET
DS	DOWNSPOUT			RL	RAIN LEADER	WD	WOOD
DS/C	DRIVE SIDE OF CURB	JC	JANITOR'S CLOSET	RM	ROOM	WDW	WINDOW
DTL	DETAIL	JST	JOIST	RO	ROUGH OPENING	WGL	WIRE GLASS
DWG	DRAWING	JT	JOINT	ROW	RIGHT OF WAY	WP	WEATHERPROOF (WATERPROOFING)
				RQMT	REQUIREMENT		
						WWF	WELDED WIRE FABRIC

GRAPHIC SYMBOLS LEGEND



MATERIAL LEGEND



DRAWING SHEET INDEX:

Sheet	Sheet Name	Issued	Revision	Revision Date
PCS	*PROJECT COVER SHEET*	*N.F.C.*		
A1.1	*FLOOR PLAN*	*N.F.C.*		
A3.1	*EXTERIOR ELEVATIONS*	*N.F.C.*		
A3.2	*EXTERIOR ELEVATIONS*	*N.F.C.*		
R1.1	*Main Building Street View Rendering*	*N.F.C.*		
R1.2	*Main Building Front View Rendering*	*N.F.C.*		
R1.3	*Street View Rendering*	*N.F.C.*		
R1.4	*Campus Aerial View Rendering*	*N.F.C.*		

GENERAL NOTES:

1. DO NOT SCALE DRAWING OR DIMENSIONS. FOR MISSING DIMENSIONS OR DIMENSIONS IN CONFLICT, CONTACT THE CONTRACTOR IMMEDIATELY BEFORE CONTINUING WITH WORK.
2. ANY DISCREPANCIES IN THESE PLANS WILL BE BROUGHT TO THE CONTRACTOR'S ATTENTION IN WRITING IMMEDIATELY
3. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DESIGN-BUILD PLANS AND SPECIFICATION FOR LOCATIONS OF ALL BLOCK OUTS, INSERTS, OPENINGS, CURBS, BASES, & PADS THAT ARE NOT DIMENSIONED OR SHOWN ON CONTRACTOR'S DWG'S. OR STRUCTURAL DWG'S.
4. STRUCTURAL STEEL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION PLANS AND SPECIFICATION SHALL BE PROVIDED AND ARE THE RESPONSIBILITY OF THERE RESPECTIVE SUBCONTRACTORS IF NOT CARRIED IN ARCHITECTURAL SERVICES
5. ALL CONSTRUCTION SHALL CONFORM TO AND BE IN ACCORDANCE WITH THE REGULATOR REQUIREMENTS MANDATED BY ALL FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN ACCORDANCE TO THE STATE IN WHICH THE WORK IS PERFORMED (STATE BUILDING CODE, STATE LIFE SAFETY & FIRE CODE ETC.)
6. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS, AND SHALL CONFIRM WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC. SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ARCHITECT FOR CLARIFICATION
7. DIMENSIONS ARE FROM EXTERIOR FACE OF FOUNDATION, VENEER, OR WALL STUD AND TO CENTER OF ALL INTERIOR STUD WALLS OR FACE OF INTERIOR MASONRY. UNLESS NOTED OTHERWISE.
8. CLEAR DIMENSIONS ARE FROM FACE TO FACE OF WALL FINISH. UNLESS NOTED OTHERWISE
9. REFER TO MECHANICAL DRAWINGS / SPEC. FOR ALL SIZES AND LOCATIONS OF MECHANICAL DUCT WORK.
10. UNLESS OBVIOUSLY SHOWN OTHERWISE, DOOR LOCATIONS NOT DESIGNATED BY WRITTEN DIMENSION SHALL BE CENTERED IN THE WALL OR SHALL BE LOCATED FOUR (4) INCHES FROM FINISH WALL TO EDGE OF DOOR JAMB. PER PLAN.
11. PROVIDE METAL CORNER BEAD AT ALL OUTSIDE CORNERS OF PLASTERED OR DRYWALL SURFACES, UNLESS NOTED OTHERWISE.
12. PENETRATIONS OF ALL FIRE RATED ASSEMBLIES SHALL BE PROTECTED BY LIKE RATED CONSTRUCTION DAMPERS, SEALANTS, COLLARS, ETC., TYPICAL.
13. CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL ALL ACCESS PANELS AS REQUIRED AFTER INSTALLATION OF MECHANICAL DUCTS, PLUMBING AND ELECTRICAL WORK, FIRE RATED AS REQUIRED.
14. FURNISH AND INSTALL SOLID BLOCKING BEHIND ALL WALL HUNG MILLWORK ITEMS, RAILS, FIXTURES,GRAB BARS, ETC., WHERE INDICATED OR REQUIRED.
15. CONTRACTOR SHALL LAYOUT OR MARK, ALL EQUIPMENT, SYSTEMS AND MILLWORK ON THE FLOOR FOR ARCHITECT OR OWNER'S APPROVAL PRIOR TO BEGINNING CEILING / OVER HEAD WORK.
16. ALL SPRINKLER HEAD LOCATIONS, MAINS, BRANCHES AND RISER PIPE LOCATIONS MUST BE COORDINATED WITH THE DESIGN / BUILD CONTRACTOR PRIOR TO WORK.
17. FURNISH AND INSTALL FIRE EXTINGUISHERS IN TYPE, QUANTITY, AND LOCATION PER LOCAL FIRE DEPARTMENT. TYPICAL
18. CONTRACTOR SHALL VERIFY, COORDINATE LOCATION WITH THE ARCHITECT ANY SMOKE, CARBON MONOXIDE DETECTOR OR FIRE ALARM DEVICE AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.
19. FURNISH & INSTALL FIRE DAMPERS WITH FUSIBLE LOUVER WHEREVER DUCT WORK PENETRATES ONE OR TWO HOUR CEILINGS OR WALLS. TYPICAL UNLESS NOTED OTHERWISE.
20. PROVIDE PLASTER AND GYPSUM WALL BOARD CONTROL JOINTS AT 30'-0" ON CENTER FROM FLOOR TO CEILING, OR AS NOTED ON THE CONSTRUCTION DOCUMENTS. VERIFY IN FEILD WITH ARCHITECT PRIOR TO WORK.

T | W DESIGNS
254 Drake Hill Rd. Strafford, NH
TW-Designs.com | 603.664.2181

Revision Schedule

No.	Description	Date

Project Info:
23027
Future Automation
Dover, NH
Planning Board

Architect of Record:
T | W Designs, LLC
254 Drake Hill Rd.
Strafford, NH 03884
603-664-2181

Civil Engineer:
XXX

Structural Engineer:
XXX

Electrical Engineer:
XXX

Mechanical Engineer:
XXX

Plumbing Engineer:
XXX

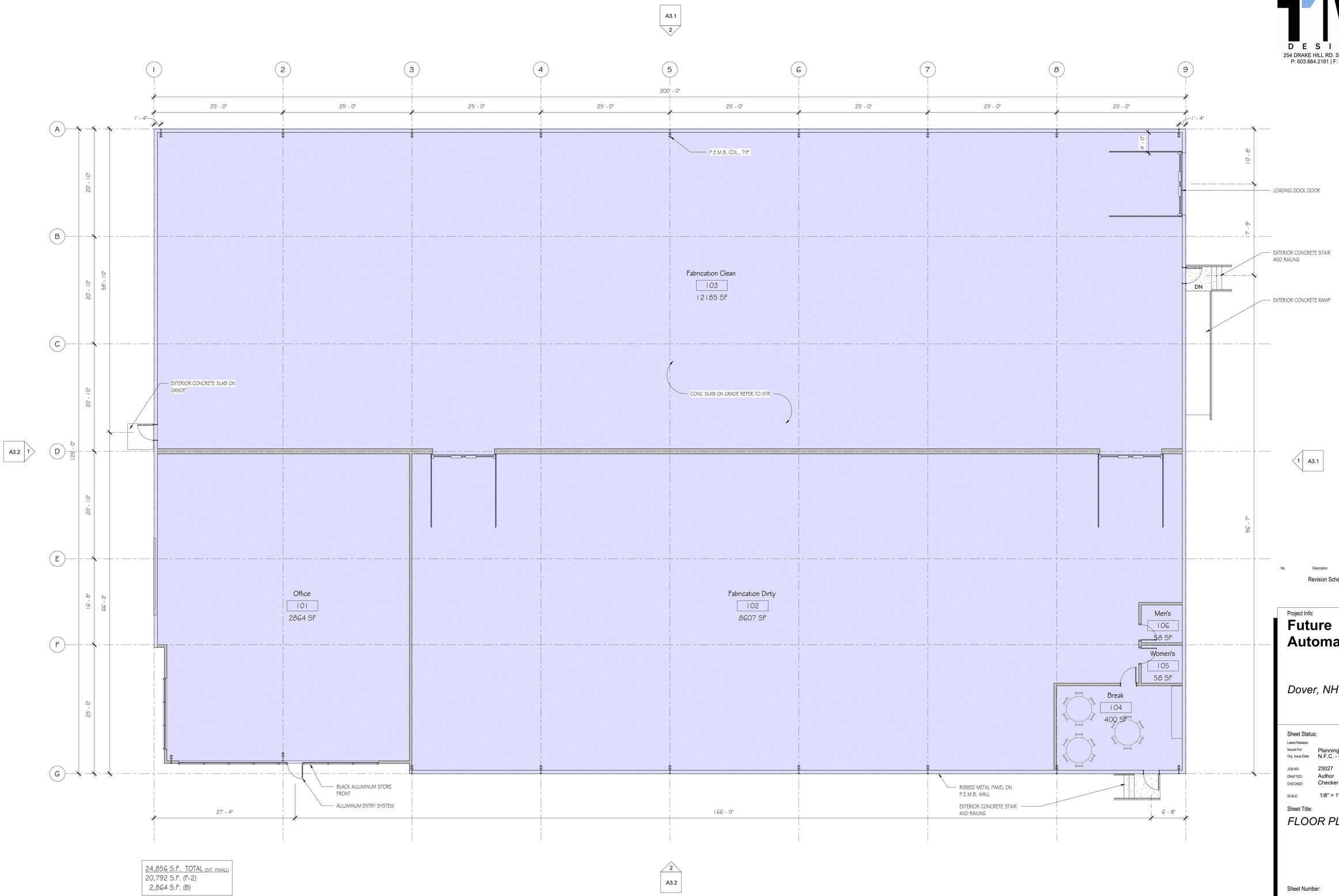
Fire Protection Eng.:
DESIGN / BUILD RESPONSIBILITY OF SPRINKLER CONTRACTOR

Contractor of Record:
XXX

23027
PROJECT COVER SHEET

SHEET NUMBER
PCS

TW DESIGNS LLC
254 DRAKE HILL RD. STRAFFORD, NH
P: 603.664.2181 | F: 603.664.9508



24,856 S.F. TOTAL (EXT. F/WALL)
20,792 S.F. (F-2)
2,864 S.F. (B)

2
A3.2

1 FIRST FLOOR PLAN
1/8" = 1'-0"

No. Description Date

Revision Schedule

Project Info:

Future Automation

Dover, NH

Sheet Status:

Latest Release:
Issued For: Planning Board
Org. Issue Date: N.F.C. - 011024

JOB NO: 23027
DRAFTED: Author
CHECKED: Checker
SCALE: 1/8" = 1'-0"

Sheet Title:

FLOOR PLAN

Sheet Number:

A1.1

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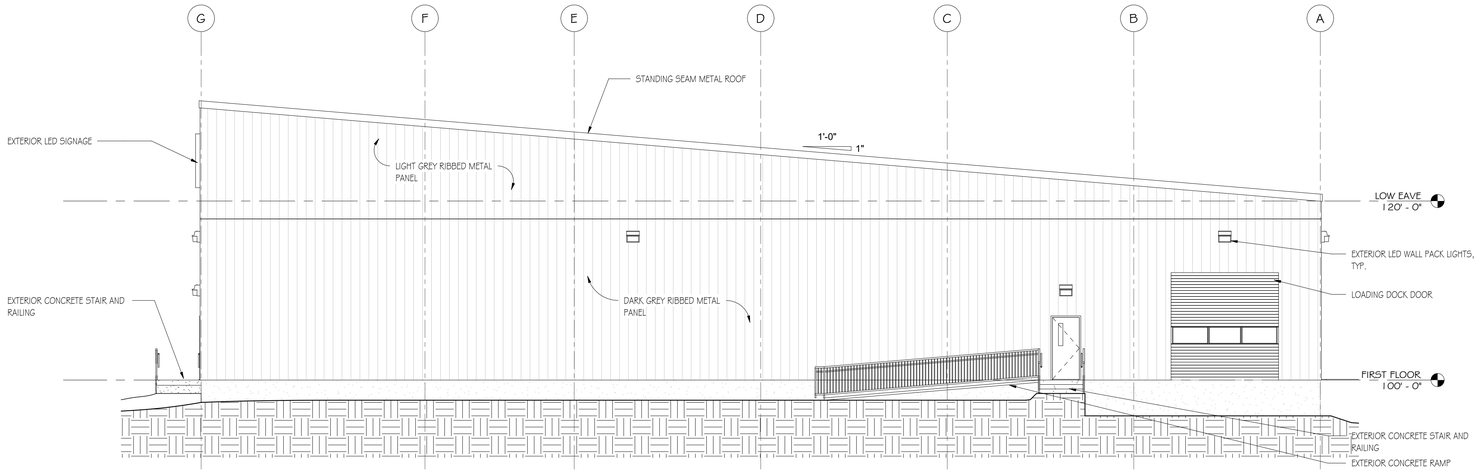
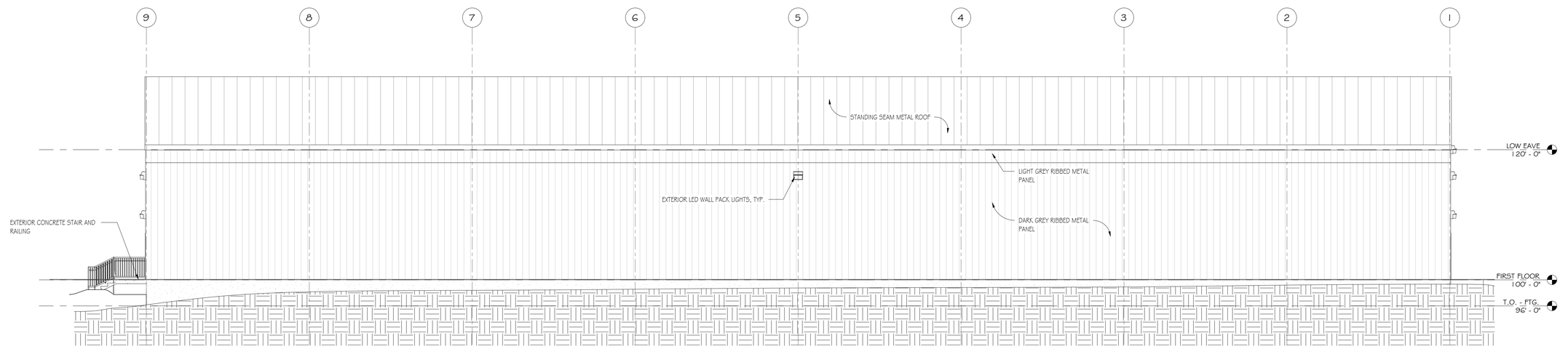


1 EAST EXTERIOR ELEVATION
1/8" = 1'-0"



2 NORTH EXTERIOR ELEVATION
1/8" = 1'-0"

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No.	Description	Date

Revision Schedule

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Future Automation

Dover, NH

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SCALE:	1/8" = 1'-0"

Sheet Title:

EXTERIOR ELEVATIONS

Sheet Number:

A3.1

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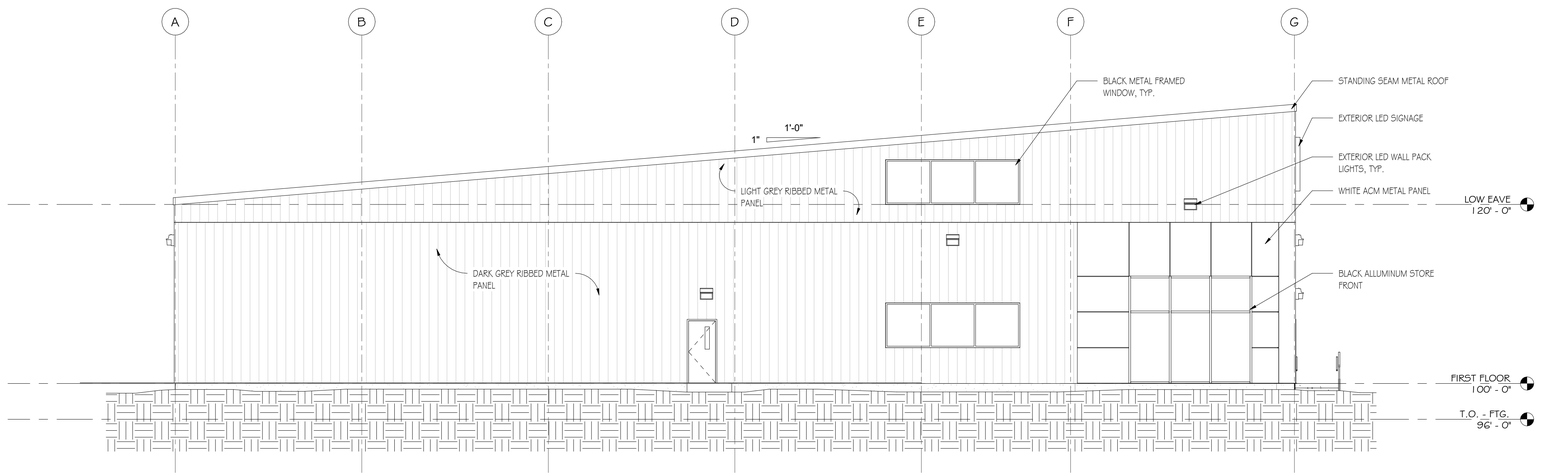
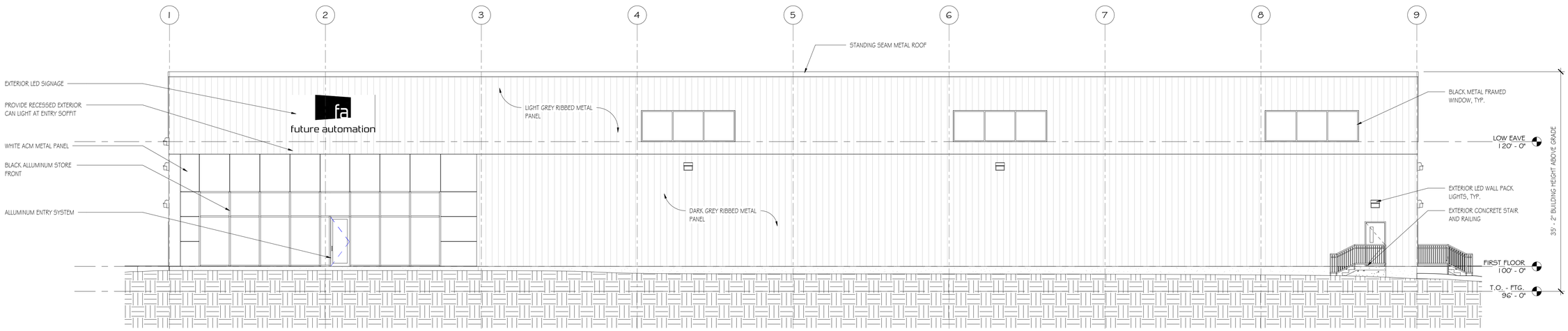


1 WEST EXTERIOR ELEVATION
1/8" = 1'-0"



2 SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"

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Sheet Title:

EXTERIOR ELEVATIONS

Sheet Number:

A3.2

Printed on: 1/10/2024 3:17:28 PM

TW DESIGNS

Main Building Street View Rendering
Future Automation

R1.1

N.F.C.

TW DESIGNS

Main Building Front View Rendering
Future Automation

R1.2

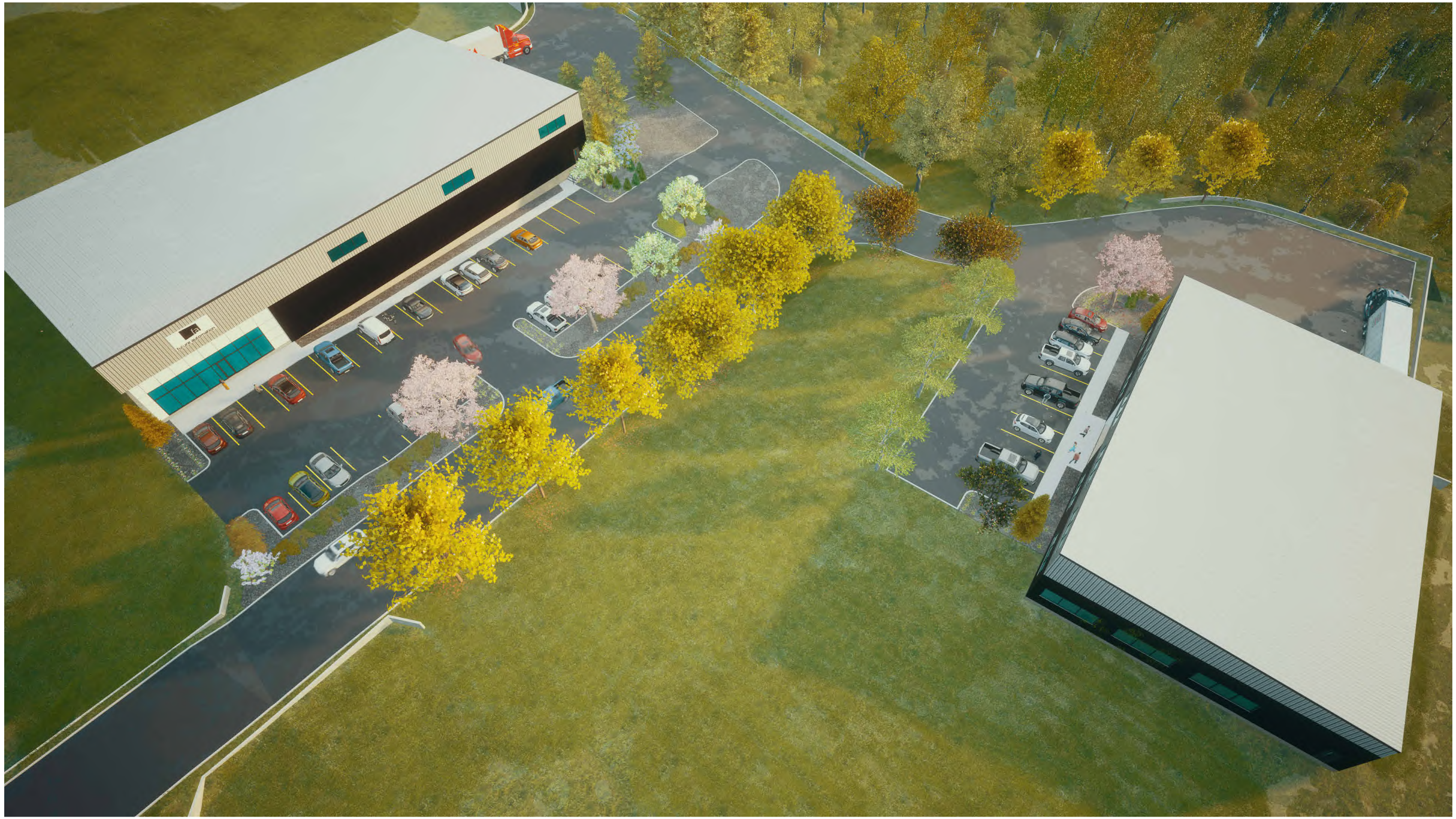
N.F.C.

TW DESIGNS

Street View Rendering
Future Automation

R1.3

N.F.C.



TW DESIGNS

Campus Aerial View Rendering
Future Automation

R1.4

N.F.C.

Future Automation - AUX

Dover, NH

Planning Board

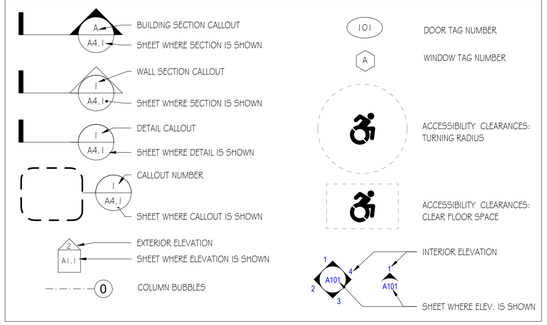
N.F.C. - 011024

LOCUS MAP: (N.T.S.)

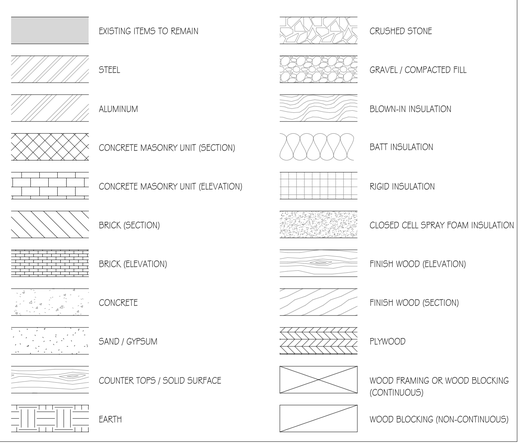
MASTER ABBREVIATION KEY:

AB	ANCHOR BOLT	E	EAST	LAM	LAMINATE	S	SOUTH
AC	AIR CONDITIONER	EJ	EXPANSION JOINT	LAV	LAVATORY	S-TRAP	SEDIMENT TRAP
ACI	AMERICAN CONCRETE INSTITUTE	EJC	EXPANSION JOINT COVER	MAS	MASONRY	SC	SOLID CORE
ACOUST	ACOUSTIC	EL	ELEVATION	MAT	MATERIAL	SCED	SCHEDULE
AFF	ABOVE FINISH FLOOR	ELEC	ELECTRICAL	MAX	MAXIMUM	SD	STORM DRAIN
ALT	ALTERNATE	ELEV	ELEVATOR	MECH	MECHANICAL	SF	SQUARE FOOT
ALUM	ALUMINUM	EQ	EQUAL	MEM	MEMBRANE	SH	SHOWER
ANCH	ANCHOR	EQUIP	EQUIPMENT	MEP	MECHANICAL, ELECTRICAL, PLUMBING	SHT	SHEET
ANOD	ANODIZED	ER	EMERGENCY ROOM	METTP	METAL TOILET PARTITION	SIM	SIMILAR
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	EST	ESTIMATE	MFR	MANUFACTURER	SL	SLIDING
		EWC	ELECTRICAL WATER COOLER	MH	MANHOLE	SMR	SINGLE PLY MEMBRANE ROOF
BD	BOARD	EXH	EXHAUST	MIN	MINIMUM	SP/PT/FIN	SPECIAL PAINT FINISH
BIT	BITUMINOUS	EXIST	EXISTING	MISC	MISCELLANEOUS	SPEC	SPECIFICATION
BL	BUILDING LINE	EXP	EXPANSION	MO	MASONRY OPENING	SPKR	SPEAKER
BLDG	BUILDING	EXPD	EXPANDED	MTL	METAL	SQ	SQUARE
BLK	BLOCK	EXT	EXTERIOR	MULL	MULLION	SS	STAINLESS STEEL
BLKG	BLOCKING					STA	STATION
BM	BEAM	F/F	FACE OF FOUNDATION WALL	N	NORTH	STD	STANDARD
BOC	BOTTOM OF CURB	FA	FRESH AIR	NAT	NATURAL	STL	STEEL
BOF	BOTTOM OF FOOTING ELEVATION	FAP	FIRE ALARM PANEL	NEC	NECESSARY	STOR	STORAGE
		FD	FLOOR DRAIN	NIC	NOT IN CONTRACT	STRG	STRINGER
BOT	BOTTOM	FE	FIRE EXTINGUISHER	NOM	NOMINAL	STRUCT	STRUCTURAL
BRG	BEARING	FEC	FIRE EXTINGUISHER CABINET	NRC	NOISE REDUCTION COEFFICIENT	SU	SITE UTILITY
BRK	BRICK	FIN	FINISH	NTS	NOT TO SCALE	SUSP	SUSPEND (SUSPENDED)
BSMT	BASEMENT	FL	FLOW LINE			SYMM	SYMMETRICAL
BTW	BETWEEN	FLR	FLOOR	OC	ON CENTER	SYS	SYSTEM
BUR	BUILT-UP ROOF	FND	FOUNDATION	OD	OUTSIDE DIAMETER	T	TREAD
CAB	CABINET	FOF	FACE OF FINISH	OF/C	OUTSIDE FACE OF CONCRETE	T&G	TONGUE & GROOVED
CB	CATCH BASIN	FOM	FACE OF MASONRY	OH	OVERHEAD	T/FRM	TOP OF FRAME
CER	CERAMIC	FOS	FACE OF STUD	OPG	OPENING	T/SLB	TOP OF SLAB
CF	CUBIC FOOT	FR	FIRE RATED	OPP	OPPOSITE	TB	TACKBOARD
CI	CAST IRON	FS	FULL SIZE	OR	OPERATING ROOM	TEL	TELEPHONE
CJ	CONTROL JOINT	FT	FOOT			TEMP	TEMPORARY
CL	CLOSET	FTG	FOOTING	PBD	PARTICLE BOARD	TERR	TERRAZZO
CLCB	CURBLESS CATCH BASIN	FUR	FURRED (FURRING)	PCF	POUNDS PER CUBIC FOOT	THK	THICK
CLG	CEILING	FVC	FIRE VALVE CABINET			THLD	THRESHOLD
CM	CONTRACT MANAGER			PL	PROPERTY LINE	TOC	TOP OF CURB
CMU	CONCRETE MASONRY UNIT	GA	GAUGE	PLAM	PLASTIC LAMINATE	TOF	TOP OF FOUNDATION
CO	CLEAN OUT	GALV	GALVANIZED	PLAS	PLASTER	TOS	TOP OF SLAB
COL	COLUMN	GC	GENERAL CONTRACTOR	PLYWD	PLYWOOD	TOW	TOP OF WALL ELEVATION
COMP	COMPACTED (COMPOSITION)	GEN	GENERAL	PNL	PANEL	TR	TO REMAIN
CONC	CONCRETE	GL	GLASS	PSF	POUNDS PER SQUARE FOOT	TYP	TYPICAL
CONST	CONSTRUCTION	GLZ	GLAZING	PSI	POUNDS PER SQUARE INCH	UH	UNIT HEATER
CONT	CONTINUOUS	GRD	GRADE	PT	PAINT	UL	UNDERWRITERS LABORATORIES, INC.
CONTR	CONTRACTOR	GYP	GYPSUM	PTD	PAINTED	UOD	UNDERSIDE OF DECK
CORR	CORRUGATED	H&V	HEATING & VENTILATING	PTN	PARTITION	UON	UNLESS OTHERWISE NOTED
CP	CONTROL PANEL	HC	HANDICAP	PVC	POLYVINYL CHLORIDE	UR	URINAL
CSG	CASING	HDWD	HARDWOOD			UV	UNIT VENTILATOR
CSMT	CASEMENT	HGT	HEIGHT	QT	QUARRY TILE	VAR	VARIES OR VARIABLE
CT	CERAMIC TILE	HM	HOLLOW METAL	R	RADIUS	VB	VINYL BASE
CTR	CENTER	HP	HIGH POINT	R/A	RETURN AIR	VCT	VINYL COMPOSITION TILE
CY	CUBIC YARD	HVAC	HEATING, VENTILATION, AIR CONDITIONING	RC	REINFORCED CONCRETE	VERT	VERTICAL
		HWH	HOT WATER HEATER	RD	ROOF DRAIN	VEST	VESTIBULE
DF	DRINKING FOUNTAIN			REF	REFERENCE	VIF	VERIFY IN FIELD
DIA	DIAMETER	ID	INSIDE DIAMETER	REFR	REFRIGERATOR	VNR	VENEER
DIAG	DIAGONAL	IN	INCH	REINF	REINFORCE	VOL	VOLUME
DIM	DIMENSION	INSUL	INSULATION	REQD	REQUIRED	W	WEST
DL	DEAD LOAD	INT	INTERIOR	RGH	ROUGH	W/	WITH
DN	DOWN	INV	INVERT	RL	RAIN LEADER	WC	WATER CLOSET
DR	DOOR			RM	ROOM	WD	WOOD
DS	DOWNSPOUT	JC	JANITOR'S CLOSET	RO	ROUGH OPENING	WDW	WINDOW
DS/C	DRIVE SIDE OF CURB	JST	JOIST	ROW	RIGHT OF WAY	WGL	WIRE GLASS
DTL	DETAIL	JT	JOINT	RQMT	REQUIREMENT	WP	WEATHERPROOF (WATERPROOFING)
DWG	DRAWING					WWF	WELDED WIRE FABRIC

GRAPHIC SYMBOLS LEGEND



MATERIAL LEGEND



DRAWING SHEET INDEX:

Sheet	Sheet Name	Issued	Revision	Revision Date
PCS	*PROJECT COVER SHEET*	*N.F.C.*		
A1.1	*FLOOR PLAN*	*N.F.C.*		
A3.1	*EXTERIOR ELEVATIONS*	*N.F.C.*		
R1.1	*AUX Buidling Street View Rendering*	*N.F.C.*		

GENERAL NOTES:

1. DO NOT SCALE DRAWING OR DIMENSIONS. FOR MISSING DIMENSIONS OR DIMENSIONS IN CONFLICT, CONTACT THE CONTRACTOR IMMEDIATELY BEFORE CONTINUING WITH WORK.
2. ANY DISCREPANCIES IN THESE PLANS WILL BE BROUGHT TO THE CONTRACTOR'S ATTENTION IN WRITING IMMEDIATELY
3. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DESIGN-BUILD PLANS AND SPECIFICATION FOR LOCATIONS OF ALL BLOCK OUTS, INSERTS, OPENINGS, CURBS, BASES, & PADS THAT ARE NOT DIMENSIONED OR SHOWN ON CONTRACTOR'S DWG'S. OR STRUCTURAL DWG'S.
4. STRUCTURAL STEEL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION PLANS AND SPECIFICATION SHALL BE PROVIDED AND ARE THE RESPONSIBILITY OF THERE RESPECTIVE SUBCONTRACTORS IF NOT CARRIED IN ARCHITECTURAL SERVICES
5. ALL CONSTRUCTION SHALL CONFORM TO AND BE IN ACCORDANCE WITH THE REGULATOR REQUIREMENTS MANDATED BY ALL FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN ACCORDANCE TO THE STATE IN WHICH THE WORK IS PERFORMED (STATE BUILDING CODE, STATE LIFE SAFETY & FIRE CODE ETC.)
6. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS, AND SHALL CONFIRM WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC. SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ARCHITECT FOR CLARIFICATION
7. DIMENSIONS ARE FROM EXTERIOR FACE OF FOUNDATION, VENEER, OR WALL STUD AND TO CENTER OF ALL INTERIOR STUD WALLS OR FACE OF INTERIOR MASONRY. UNLESS NOTED OTHERWISE.
8. CLEAR DIMENSIONS ARE FROM FACE TO FACE OF WALL FINISH. UNLESS NOTED OTHERWISE
9. REFER TO MECHANICAL DRAWINGS / SPEC. FOR ALL SIZES AND LOCATIONS OF MECHANICAL DUCT WORK.
10. UNLESS OBVIOUSLY SHOWN OTHERWISE, DOOR LOCATIONS NOT DESIGNATED BY WRITTEN DIMENSION SHALL BE CENTERED IN THE WALL OR SHALL BE LOCATED FOUR (4) INCHES FROM FINISH WALL TO EDGE OF DOOR JAMB. PER PLAN.
11. PROVIDE METAL CORNER BEAD AT ALL OUTSIDE CORNERS OF PLASTERED OR DRYWALL SURFACES, UNLESS NOTED OTHERWISE.
12. PENETRATIONS OF ALL FIRE RATED ASSEMBLIES SHALL BE PROTECTED BY LIKE RATED CONSTRUCTION DAMPERS, SEALANTS, COLLARS, ETC., TYPICAL.
13. CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL ALL ACCESS PANELS AS REQUIRED AFTER INSTALLATION OF MECHANICAL DUCTS, PLUMBING AND ELECTRICAL WORK, FIRE RATED AS REQUIRED.
14. FURNISH AND INSTALL SOLID BLOCKING BEHIND ALL WALL HUNG MILLWORK ITEMS, RAILS, FIXTURES,GRAB BARS, ETC. . WHERE INDICATED OR REQUIRED.
15. CONTRACTOR SHALL LAYOUT OR MARK, ALL EQUIPMENT, SYSTEMS AND MILLWORK ON THE FLOOR FOR ARCHITECT OR OWNER'S APPROVAL PRIOR TO BEGINNING CEILING / OVER HEAD WORK.
16. ALL SPRINKLER HEAD LOCATIONS, MAINS, BRANCHES AND RISER PIPE LOCATIONS MUST BE COORDINATED WITH THE DESIGN / BUILD CONTRACTOR PRIOR TO WORK.
17. FURNISH AND INSTALL FIRE EXTINGUISHERS IN TYPE, QUANTITY, AND LOCATION PER LOCAL FIRE DEPARTMENT. TYPICAL
18. CONTRACTOR SHALL VERIFY, COORDINATE LOCATION WITH THE ARCHITECT ANY SMOKE, CARBON MONOXIDE DETECTOR OR FIRE ALARM DEVICE AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.
19. FURNISH & INSTALL FIRE DAMPERS WITH FUSIBLE LOUVER WHEREVER DUCT WORK PENETRATES ONE OR TWO HOUR CEILINGS OR WALLS. TYPICAL UNLESS NOTED OTHERWISE.
20. PROVIDE PLASTER AND GYPSUM WALL BOARD CONTROL JOINTS AT 30'-0" ON CENTER FROM FLOOR TO CEILING, OR AS NOTED ON THE CONSTRUCTION DOCUMENTS. VERIFY IN FEILD WITH ARCHITECT PRIOR TO WORK.

T | W DESIGNS
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TW-Designs.com | 603.664.2181

Revision Schedule

No.	Description	Date

Project Info:

23027
Future Automation - AUX
Dover, NH
Planning Board

Architect of Record:

T | W Designs, LLC
254 Drake Hill Rd.
Strafford, NH 03884
603-664-2181

Civil Engineer:

XXX

Structural Engineer:

XXX

Electrical Engineer:

XXX

Mechanical Engineer:

XXX

Plumbing Engineer:

XXX

Fire Protection Eng.:

DESIGN / BUILD
RESPONSIBILITY OF
SPRINKLER CONTRACTOR

Contractor of Record:

XXX

23027
PROJECT
COVER SHEET

SHEET NUMBER
PCS

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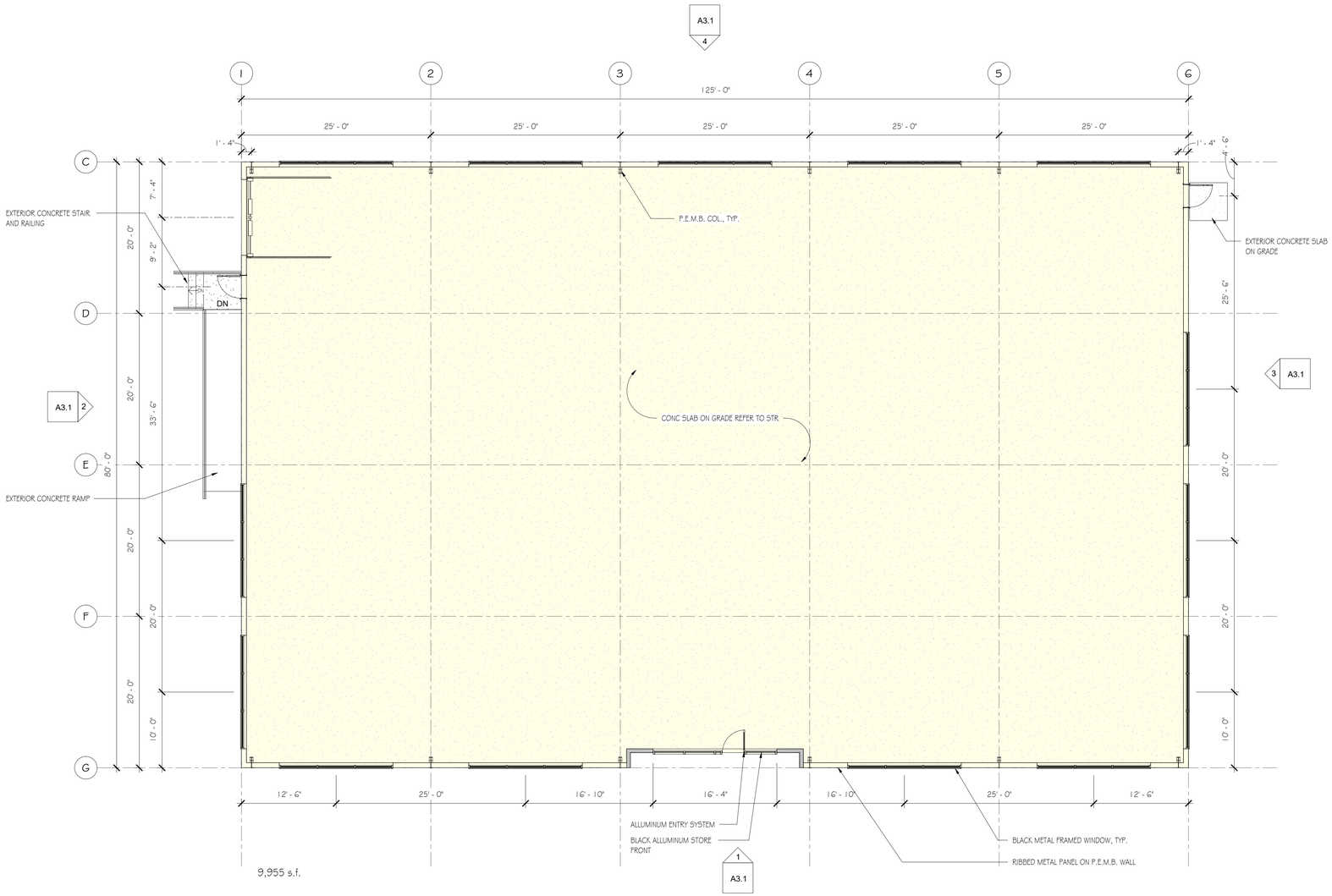
254 DRAKE HILL RD. STRAFFORD, NH
P: 603.664.2181 | F: 603.664.9508



1 FIRST FLOOR
1/8" = 1'-0"

No. Description Date

Revision Schedule

Project Info:

Future Automation - AUX

Dover, NH

Sheet Status:

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JOB NO: 23027
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CHECKED: Checker

SCALE: 1/8" = 1'-0"

Sheet Title:

FLOOR PLAN

Sheet Number:

A1.1

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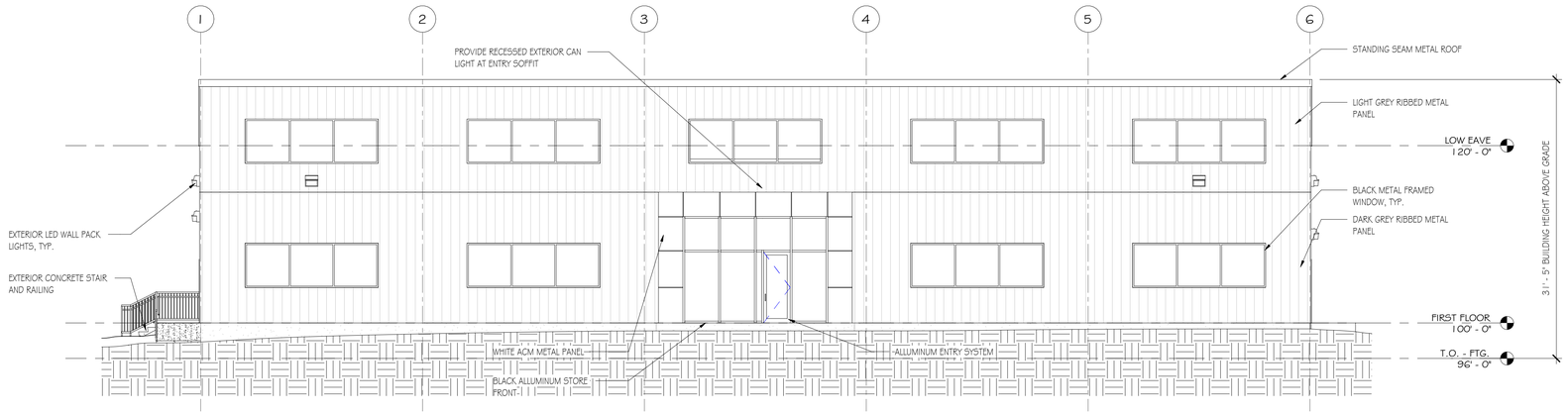
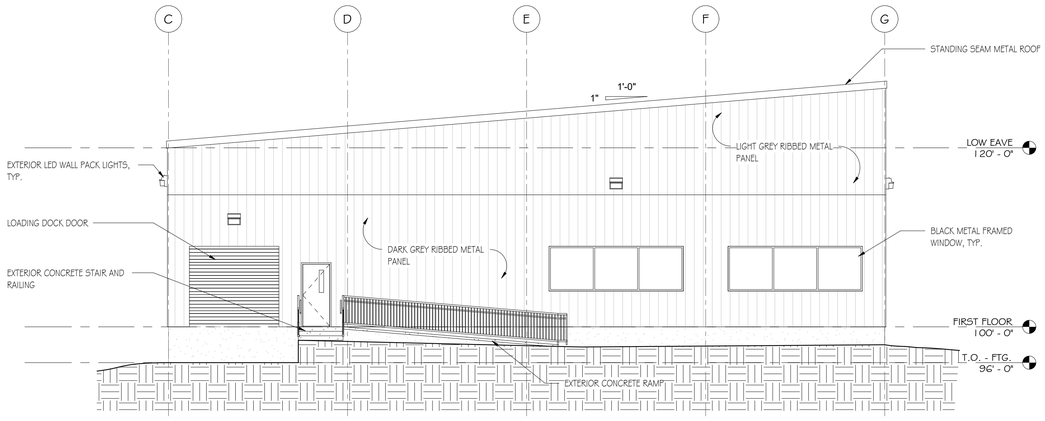
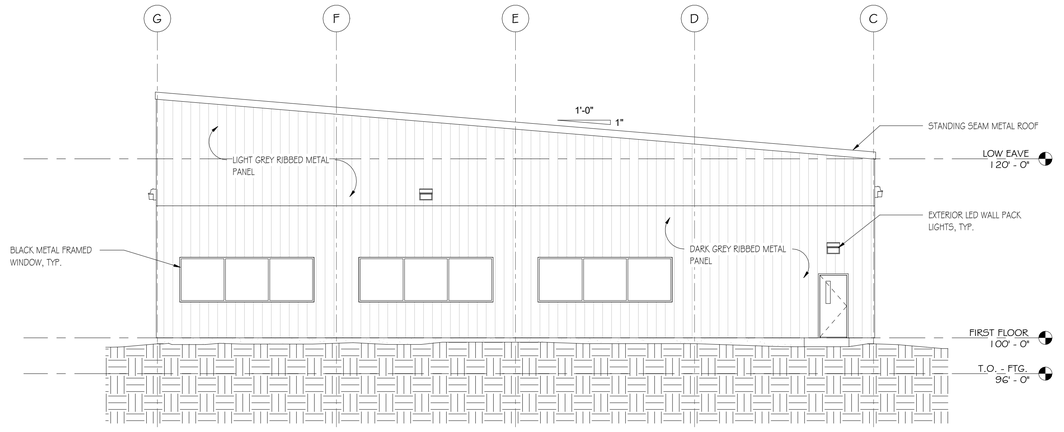


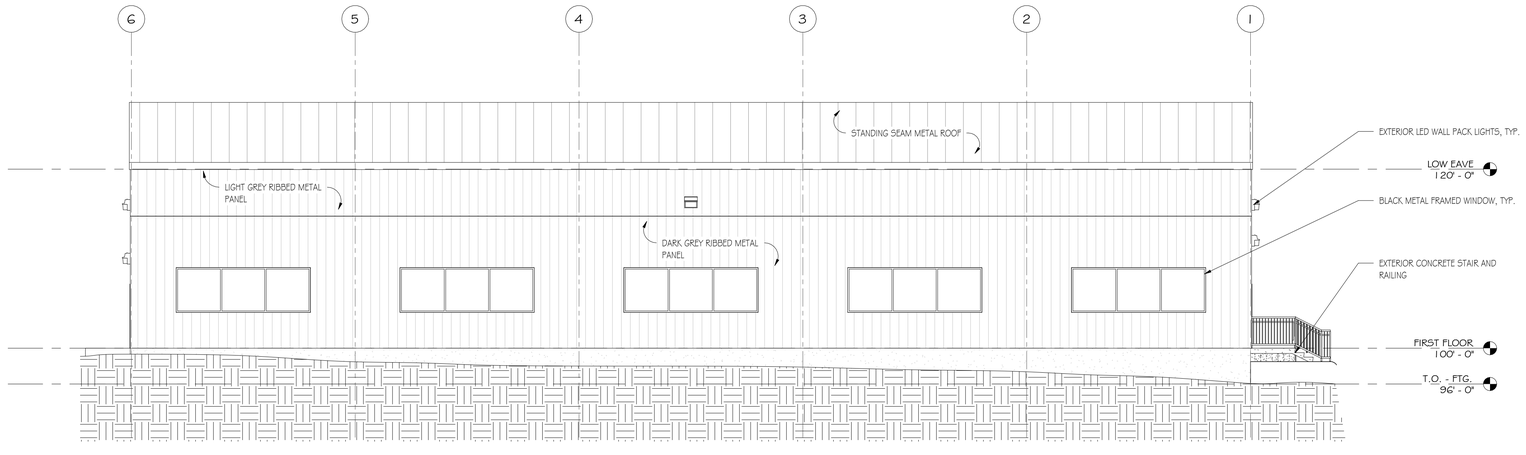
1 SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"



2 WEST EXTERIOR ELEVATION
1/8" = 1'-0"



3 EAST EXTERIOR ELEVATION
1/8" = 1'-0"



4 NORTH EXTERIOR ELEVATION
1/8" = 1'-0"

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JOB NO: 23027
DRAFTED: JMT
CHECKED: Checker
SCALE: 1/8" = 1'-0"

Sheet Title:

EXTERIOR ELEVATIONS

Sheet Number:

A3.1

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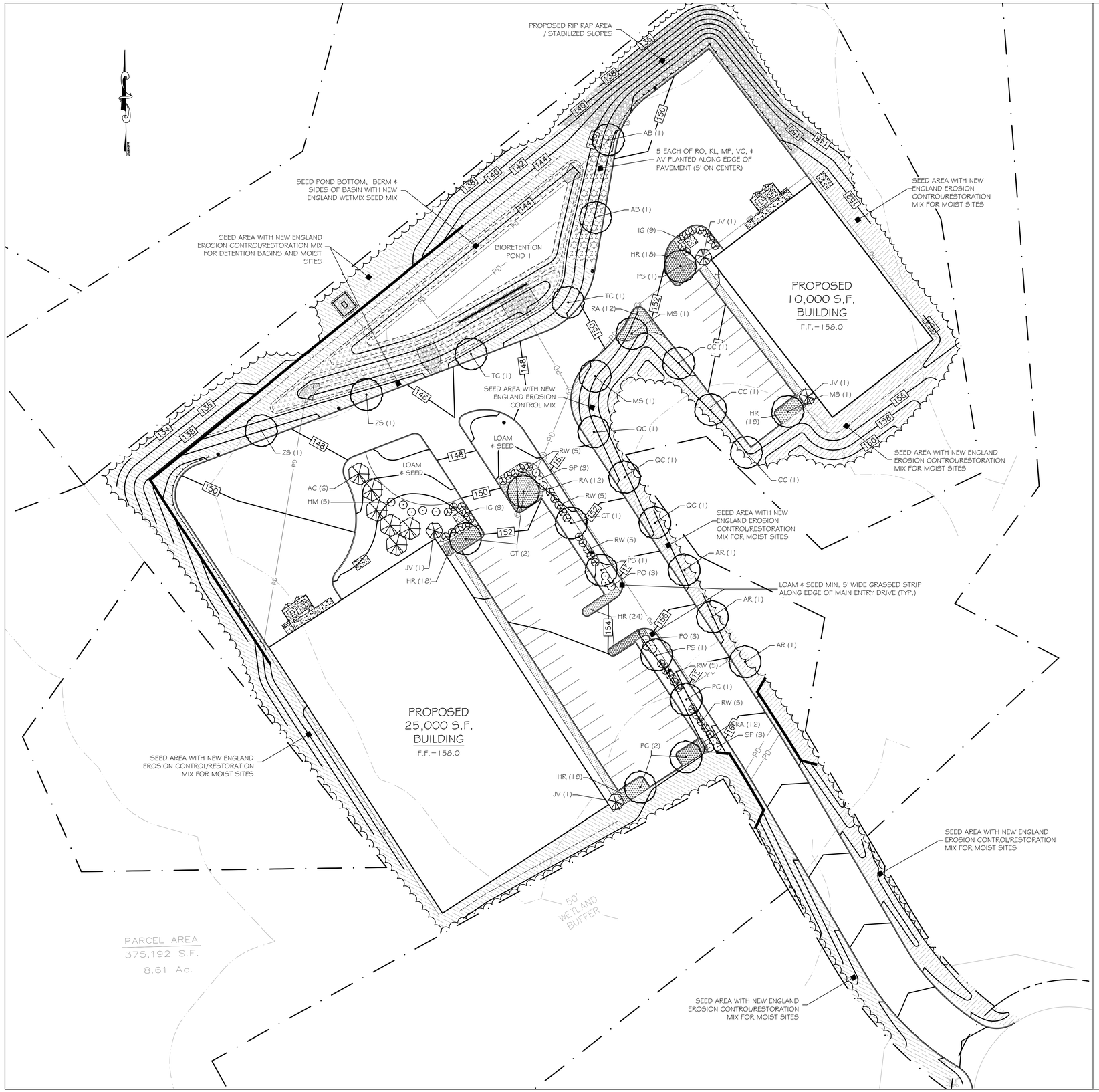
TW DESIGNS

AUX Buidling Street View Rendering
Future Automation - AUX

R1.1

N.F.C.



PLANTING SCHEDULE

Botanical Name/ Common Name	Size*	Label	Quantity
TREES			
Abies concolor / White Fir	6-7' B&B	AC	6
Acer rubrum 'Bowhall' / Bowhall Red Maple	2.5-3" Cal	AB	2
Acer rubrum 'October Glory' / October Glory Red Maple	2.5-3" CAL.	AR	3
Carpinus betulus 'Frans Fontaine' / Frans Fontaine European Hornbeam	2.5-3" CAL.	CC	3
Crataegus crusgalli inermis 'Crusader' / Crusader Thornless Hawthorne	2.5-3" CAL.	CT	3
Juniperus virginiana 'Hillspire' / Hillspire Eastern Red Cedar	5-6' B&B	JV	4
Malus 'Spring Snow' / Spring Snow Crabapple	2.5-3" CAL.	MS	3
Prunus serrulata 'Kwanzan' / Kwanzan Flowering Cherry	2.5-3" CAL.	PS	3
Pyrus calleryanna 'Aristocrat' / Aristocrat Flowering Pear	2.5-3" CAL.	PC	3
Quercus coccinea / Scartlet Oak	2.5-3" CAL.	QC	3
Tilia cordata 'Greenspire' / Greenspire Littleleaf Linden	2.5-3" CAL.	TC	2
Zelkova serrata 'Village Green' / Village Green Zelkova	2.5-3" Cal	ZS	2
SHRUBS			
Hydrangea macrophylla 'Endless Summer' / Endless Summer Bigleaf Hydrangea	2-2.5'	HM	5
Ilex glabra 'Compacta' / Compact Inkberry Holly	2-2.5'	IG	18
Physocarpus opulifolius 'Little Devil' / Little Devil Ninebark	2-2.5'	PO	6
Rhododendron 'Wilsoni' / Wilson Rhododendron	2-2.5'	RW	25
Syringa x hyacinthiflora 'Pocahontas' / Pocahontas Lilac	2-2.5'	SP	6
PERENNIALS			
Hemerocallis 'Happy Returns'/ Happy Returns Daylily	#1	HR	96
GROUNDCOVER			
Rhus aromatica 'Grow Low' / Grow Low Sumac	18-24"	RA	36
BIORETENTION POND #1			
Cornus sericea / Red-Osier Dogwood	#1	RO	5
Kalmia latifolia / Mountain Laurel	#1	KL	5
Myrica pensylvanica / Northern Bayberry	#1	MP	5
Vaccinium corymbosum / Highbush Blueberry	#1	VC	5
Viburnum dentatum / Arrowwood Viburnum	#1	AV	5
SEED MIX			
Grass Seed Mix			3,000 S.F.
New England Wetmix			10,000 S.F.
New England Erosion Control / Restoration Mix for Detention Basins & Moist Sites			35,000 S.F.

* TREES WITH A 2-2.5" CALIPER GENERALLY ESTABLISH THEMSELVES MORE QUICKLY AND BEGIN TO PRODUCE NEW GROWTH SOONER AND WITH LESS MAINTENANCE THAN THOSE OF THE REQUIRED 3.5-4" CALIPER.

PLANTING NOTES

1. CONTRACTOR SHALL OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO PURCHASING AND/OR INSTALLING SUBSTITUTE PLANT MATERIAL PRIOR TO PURCHASE OF ANY SUBSTITUTE MATERIALS.
2. CONSTRUCTION ACCESS WILL BE AS DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ACCESS ROUTE AND ALL AREAS DISTURBED BY PLANTING OPERATIONS UPON COMPLETION OF CONSTRUCTION OPERATIONS, AT NO ADDITIONAL COST TO THE OWNER.
3. LAYOUT OF ALL PLANTING BEDS AND LOCATION OF PLANTS TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO CONSTRUCTION AND INSTALLATION.
4. CONTRACTOR TO REMOVE ALL DEBRIS GENERATED BY PLANT INSTALLATION. DEBRIS TO BE DISPOSED OF IN A LEGAL MANNER.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR TWO (2) YEARS FROM THE DATE OF FINAL INSTALLATION APPROVAL BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE, WITHOUT COST TO OWNER, AND AS SOON AS WEATHER CONDITIONS PERMIT, ALL DEAD AND NON-FLOURISHING PLANTS AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACEMENT PLANTS SHALL BE BE GUARANTEED IDENTICALLY TO ORIGINAL PLANTS, TIME PERIOD COMMENCING FROM DATE OF REPLACEMENT PLANTING APPROVAL BY LANDSCAPE ARCHITECT.
6. ALL BEDS TO BE MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.
7. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.
8. ALL LANDSCAPED AREAS SHALL RECEIVE REGULAR MAINTENANCE AND UPKEEP. SEVERELY INJURED, DISEASED, OR DEAD PLANT MATERIAL SHALL BE REPLACED IN KIND IN PERPETUITY (AVOID REPLACING LANDSCAPE MATERIALS IN THE PERIOD FROM NOVEMBER TO MARCH.)
9. BEST PRACTICES TO MINIMIZE ENVIRONMENTAL IMPACTS SUCH AS THE USE OF LOW PHOSPHOROUS FERTILIZER AND SLOW RELEASE NITROGEN, SHALL BE IMPLEMENTED.
10. IF OWNERSHIP OF A SITE IS CONVEYED TO A NEW PROPERTY OWNER, THE NEW OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING IN ACCORDANCE WITH THE APPROVED FINAL LANDSCAPING PLAN.

LANDSCAPE CALCULATIONS:

INTERIOR PARKING LOT LANDSCAPING:
5% MIN. INTERIOR LANDSCAPING REQUIRED FOR LOTS WITH BETWEEN 21-125 PARKING SPACES
47 PARKING SPACES PROPOSED - 37,000 SF PARKING LOT AREA X .05 = 1,850 SF INTERIOR LANDSCAPING REQUIRED
PROVIDED: 5,800 SF INTERIOR PARKING LOT LANDSCAPING

PERIMETER LANDSCAPING:
REQUIRED: 1 DECIDUOUS SHADE TREE / 35' OF PARKING LOT PERIMETER
533 L.F.OF PARKING LOT PERIMETER / 35 = 15.2 = 15 TREES REQUIRED
PROVIDED: 27 TREES PROPOSED

terrain
planning & design llc
311 kast hill road
hopkinton nh 03229
603. 491. 2322
terrainplanning.com

QUALITY WAY

Site Location:
Quality Way
Dover, NH 03820

Prepared For:
Civilworks New England
181 Watson Road
PO Box 1166
Dover, NH 03821

LANDSCAPE PLAN

DATE: 11 - 30 - 23

SCALE: 1"=30'

PROJECT #: 23090

Drawn By: ID

Checked By: RM

REVISIONS: DATE:
Issued for Review 11-30-23
Revised per City comments 02-29-24

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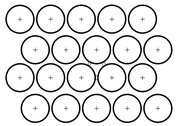
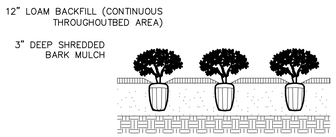
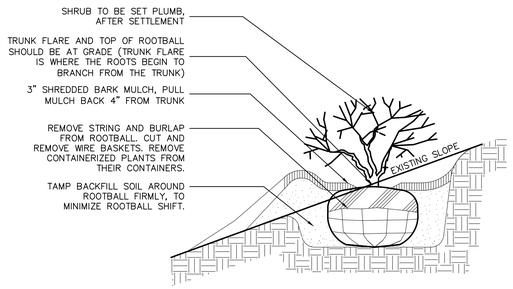


TYPICAL BED PLANT SPACING

NOTE:
D = DIMENSION OF PLANT SPACING (SHRUB OR GROUNDCOVER AS INDICATED ON PLANS)

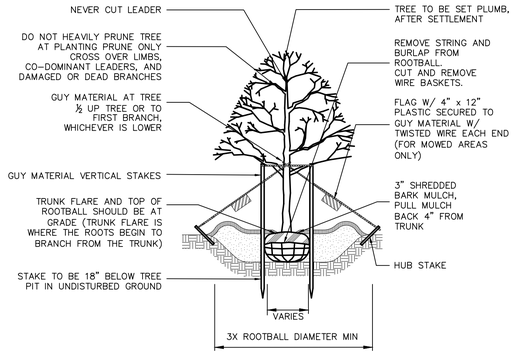


1 TYPICAL PERENNIAL PLANTING
NO SCALE



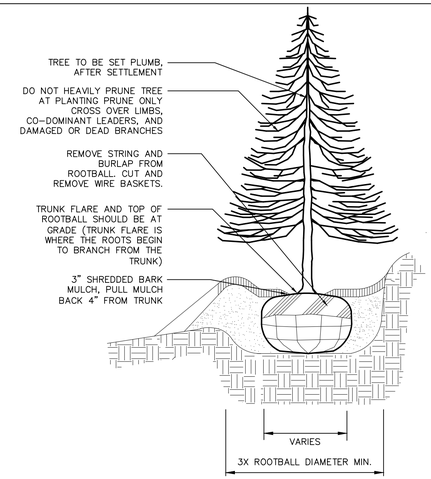
NOTE:
1. DO NOT HEAVILY PRUNE SHRUB AT PLANTING, PRUNE ONLY CROSSOVER LIMBS AND DAMAGED OR DEAD BRANCHES.
2. BACKFILL WITH LOAM, AMEND AS REQUIRED BY LANDSCAPE ARCHITECT.
3. SHRUBS & GROUNDCOVER PLANTED ADJACENT TO CITY SIDEWALKS NEED TO BE PLACED SO THE PLANTS, AT THEIR MATURE HEIGHT & WIDTH, WILL NOT ENCROACH INTO THE CITY'S SIDEWALK.

2 TYPICAL SHRUB PLANTING
NO SCALE



NOTES:
1. GUYING AND STAKING TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. LOCAL FIELD CONDITIONS AS WELL AS PLANT CHARACTERISTICS WILL DETERMINE THE NECESSITY OF GUYING AND STAKING.
2. TYPICALLY ONLY TREES WITH A 3" OR GREATER CALIPER NEED TO BE STAKED. TREES WITH LESS THAN A 3" CALIPER NEED TO BE STAKED ONLY AS REQUIRED BY LANDSCAPE ARCHITECT.
3. ONLY WRAP TREE TRUNKS AS REQUIRED BY LANDSCAPE ARCHITECT.
4. TREE SHALL BE SET PLUMB, AFTER SETTLEMENT.
5. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
6. CITY TREES PLANTED ON PRIVATE PROPERTY, ADJACENT TO A PUBLIC RIGHT-OF-WAY, NEED TO BE PLANTED A MINIMUM OF 5 FEET FROM THE EDGE OF THE CITY SIDEWALK.

3 DECIDIOUS TREE PLANTING
NO SCALE



NOTES:
1. DO NOT STAKE EVERGREEN TREES.
2. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
3. TAMP BACKFILL SOIL AROUND ROOTBALL FIRMLY TO MINIMIZE ROOTBALL SHIFT.

4 EVERGREEN TREE PLANTING
NO SCALE

terrain
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603. 491. 2322
terrainplanning.com

QUALITY WAY

Site Location:
Quality Way
Dover, NH 03820

Prepared For:
Civilworks New England
181 Watson Road
PO Box 1166
Dover, NH 03821

LANDSCAPE DETAILS

DATE: 11 - 30 - 23

SCALE: AS NOTED

PROJECT #: 23090

Drawn By: ID

Checked By: RM

REVISIONS:	DATE:
Issued for Review	11-30-23
Revised per City comments	02-29-24

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CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2023-0054

Application Type:	Conditional Use Permit
Applicant(s):	JP Morgan Chase, NA, c/o: Stonefield Engineering and Design
Owner(s):	Dover Retail Management, LLC & R.W. Realty, Inc.
Location:	1-3 Webb Place (Assessor's Map 38, Lots 15A & B)
Meeting Date:	April 23, 2024

INTENT: Proposal is for a Conditional Use Permit (CUP) to provide additional parking spaces for a total of twenty (20) in excess of the allowed number of spaces twelve (12) per the formula.

AGENDA ITEM #: 4-E

FILE: COND-2023-0054

APPLICANT: JP Morgan Chase, NA, c/o: Stonefield Engineering and Design

OWNER: Dover Retail Management, LLC & R W Realty, Inc.

LOCATION: 1-3 Webb Place (Assessor's Map 38, Lots 15A & B)

UNITS PROPOSED: N/A

ACREAGE: 0.98± ac.

ZONING DISTRICT: Commercial

EXISTING LAND USE:
Commercial

PROPOSED LAND USE:
Commercial – no change

SURROUNDING LAND USE:
Commercial, Residential

PERMITS: CUP for §153-14.(D)(5), Off-Street Parking & Loading (proposed parking exceeds maximum)

WAIVERS REQUESTED:

- §153-14.(E)(2)(b), Parking area lighting, Uniformity Ratio
- §153-14.(E)(2)(b), Parking area lighting, Minimum Illumination Level

ZBA ACTION: None

ATTACHMENTS: Site Plan

TRC: 03/28/2024

Summary of Request and Background
Chase bank is seeking a Conditional Use Permit to allow twenty (20) parking spaces where only twelve (12) are permitted by right, given the gross leasable square footage of the bank itself. It should be noted that this property falls within the Secondary Groundwater Protection District.

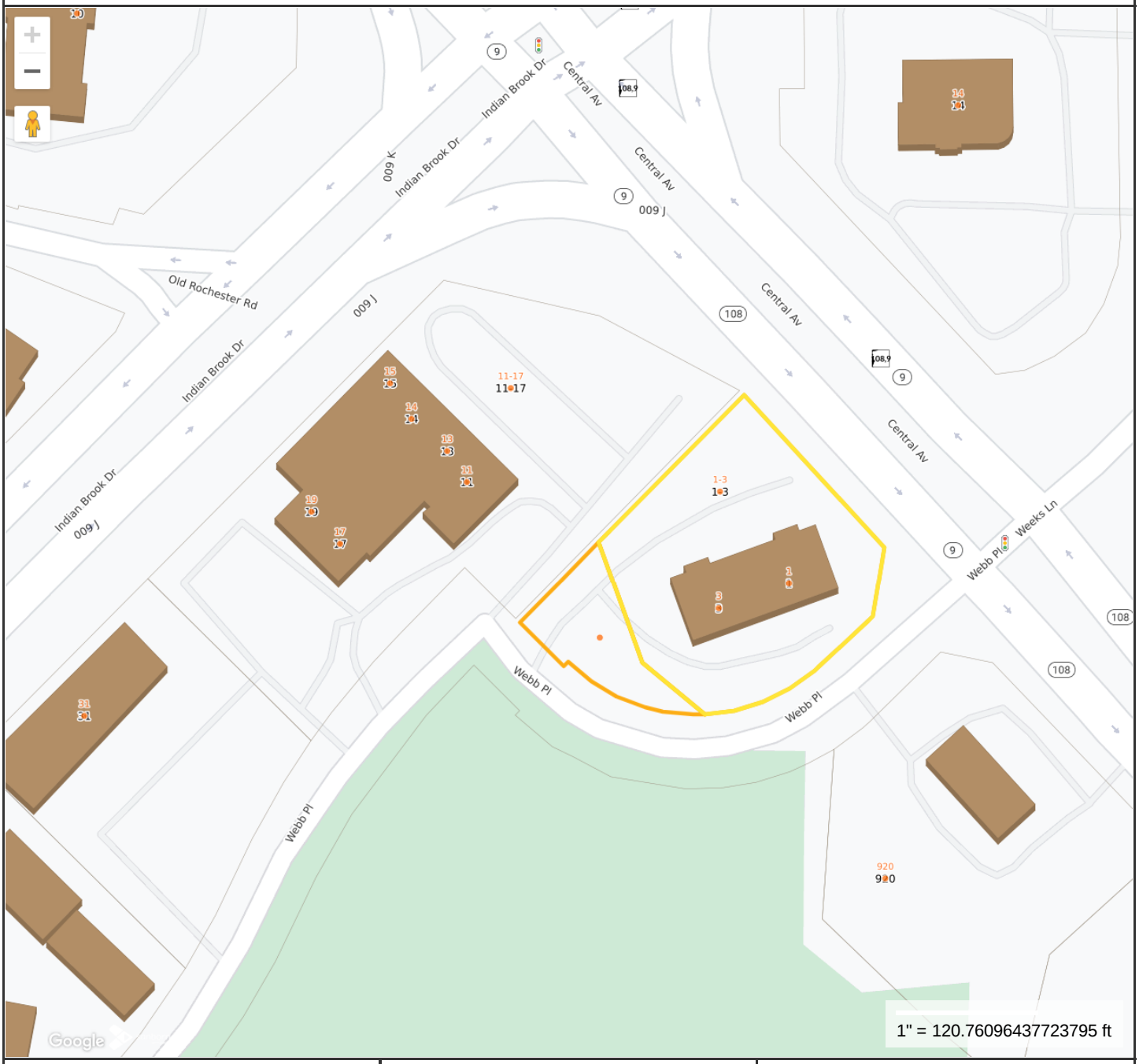
The Technical Review Committee reviewed the site plan application at their March 28, 2024 meeting (minutes attached).

Consistency with Parking Regulations – CUP 153-14.D(5)
The Site Plan Review ordinance §153-14.D(5) allows an avenue for applicants to seek additional parking spaces in excess of the applicable maximums if the applicant provides an analysis as to why the additional spaces are essential to the property's use, that off-street parking is not viable, that the additional spaces be paved using pervious pavement, and that required electric vehicle infrastructure is installed.

Planning Staff feels that the applicant has met all of the criteria as specified in §153-14.D(5).

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to approve the Conditional Use Permit.

COND-2023-0054 1-3 Webb Place



Property Information

Location	1 3 WEBB PL
Owner	DOVER RETAIL MANAGEMENT LLC
Land Use	
Zoning Code	C
Property Id	38015-A00000

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 10/30/2023
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

PERMIT SNAPSHOT REPORT COND-2023-0054
FOR CITY OF DOVER, N.H.

Permit Type	Conditional Use	**Project:**		**App Date:**	08/10/2023
Work Class:	Non-Environmental	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**		**Approval Expire Date:**	

Description: Proposed Chase Bank with drive-up ATM. Conditional Use Permit is to allow additional parking.

Parcel: 38015-A00000 Main	**Address:** 1-3 Webb Pl Dover, NH Main	**Zone:** C(Non-Residential - Commercial)

Applicant
Todd Samms
Home: (614) 580-2613
Business: (614) 580-2613
Mobile: (614) 580-2613

Architect
Jose Sanchez
Home: (314) 270-5085
Business: (314) 270-5085
Mobile: (314) 270-5085

Plan Preparer
Joshua Kline
120 Washington Street Suite 201 Suite 201
Salem, MA 01970
Business: (617) 203-2076
Mobile: (607) 624-0415

Applicant
Joshua Kline
120 Washington Street Suite 201 Suite 201
Salem, MA 01970
Business: (617) 203-2076
Mobile: (607) 624-0415

Owner
Samantha Burgner
Home: (413) 464-2267
Mobile: (413) 464-2267

Permit Custom Fields

Select Permit Type	Off-Street Parking and Loading	General Purpose	New Construction	Project Zone	Non-Residential
What is the parcel zoned?	C	Work	Provide additional parking for the proposed bank with drive-up ATM in order to support the tenant specific operations. The request will not create any adverse impacts to the adjacent properties, surrounding roadway network, and/or the CIty.	permitstatefed	N/A

Attachment File Name	Added On	Added By	Attachment Group	Notes
Permit Snapshot Report.pdf	08/10/2023 12:09	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot
Signature_Joshua_Kline_8/10/2023.jpg	08/10/2023 12:09	Kline, Joshua		Uploaded via CSS

Note	Created By	Date and Time Created
1. Waiting on SITE-2023-0011 to go to TRC on 08/31/2023	Rachel Blonigen	08/22/2023 15:21

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00004630	Planning General Application Fee	$200.00	$200.00
	Total for Invoice INV-00004630	$200.00	$200.00
	Grand Total for Permit	**$200.00**	**$200.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		04/03/2024 12:30	04/03/2024 12:30
Confirm application complete v.1	Generic Action		04/03/2024 12:30
Conditional Use Review v.1	Receive Submittal		04/03/2024 12:30
Technical Review Committee Meeting v.1	Hold Meeting		04/03/2024 12:30
Planning Board v.1		04/03/2024 12:30	

PERMIT SNAPSHOT REPORT (COND-2023-0054)

Planning Board Agenda v.1	Task	04/03/2024 12:30	04/09/2024 11:50
Invoice for Notices v.1	Task	04/09/2024 11:49	
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Permit Activity		
NOD Sent to Applicant v.1	Create Report		
Issue Permit v.1			
Verify Fees Prior to Permit v.1	Generic Action		
Issue and Review Permit v.1	Generic Action		
Print and Email Permit v.1	Generic Action		
Plans uploaded to Treeno v.1	Generic Action		
Property Info Group v.1	Generic Action		
Recording v.1	Task		

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: **JP MORGAN CHASE, NA (C/O STONEFIELD ENGINEERING & DESIGN)** Telephone # **(617) 203-2076**

Address of Applicant: **120 WASHINGTON STREET. SUITE 2021. SALEM. MA 01970**

E-Mail Address: **JKLINE@STONEFIELDENG.COM**

Name of Property Owner (if different from applicant): **KAREN S ARKWELL** Telephone #_____

Address of Property Owner: **67 SENECA STREET, ROCHESTER, NH 03867**

PROPERTY INFORMATION

Assessor's Map # **38** Lot(s) # **15A AND 15B**

Address of Property: **1-3 WEBB PLACE**

Zoning District(s) **COMMERCIAL DISTRICT** Overlay District(s) **N/A**

Existing Use of Property: **MULTI-TENANT COMMERCIAL BUILDING**

CONDITIONAL USE PERMIT INFORMATION

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

☐ Conservation District	☐ RCM Use Overlay District	☐ Gateway District
☐ 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:

PROVIDE ADDITIONAL PARKING FOR THE PROPOSED BANK WITH DRIVE-UP ATM IN ORDER TO SUPPORT THE TENANT SPECIFIC OPERATIONS. THE REQUEST WILL NOT CREATE ANY ADVERSE IMPACTS TO THE ADJACENT PROEPRTIES, SURROUNDING ROADWAY NETWORK, AND/OR THE CITY.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: _____

N/A

Name of Professional That Prepared Plans: **JOSHUA H. KLINE (STONEFIELD ENGINEERING & DESIGN)**

Address **120 WASHINGTON STREET, SUITE 201, SALEM, MA 01970** Telephone #: **(617) 203-2076**

Professional License #: **16530** E-mail address: **JKLINE@STONEFIELDENG.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: Samantha Burgner Date: 04/02/2024

Signature of Applicant (if different from owner): _____ Date: 04/02/2024

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: Samantha Burgner Date: 04/02/2024

CITY OF DOVER, NEW HAMPSHIRE
PLANNING APPLICATION OWNER AUTHORIZATION

OWNER AUTHORIZATION

I/We hereby submit this application to the City of Dover / 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.

Property Owner Name: Dover Retail Management LLC - Samantha Burgner

Signature(s) of Property Owner(s): Samantha Burgner Date: 04/02/2024

Signature of Applicant: Date: 04/02/2024
if different from owner

AUTHORIZATION TO ENTER SUBJECT PROPERTY

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..

Property Owner Name: Dover Retail Management LLC - Samantha Burgner

Signature(s) of Property Owner(s): Samantha Burgner Date: 2023-07-06

Signature of Applicant: Date: 04/02/2024
if different from owner

IF SIGN PERMIT, SIGN PERMIT APPLICATION INFORMATION

If the sign permit applicant is not the property owner, this form must be completed and included as part of application submission.

I have read this application and state that, to the best of my knowledge, the information provided is true and that the proposed sign(s) will comply with all applicable regulations in Section 170-32 of the Zoning Ordinance of the City of Dover and shall conform to the submitted materials and designs. Furthermore, after 90 days, any application still waiting information will be denied.

Address of Sign Location: _____

Sign Permit Application Type:
(check one)

- ☐ Permanent Sign
- ☐ Temporary Sign
- ☐ Community Sign

COND-2023-0054 **1-3 WEBB PLACE**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
38016-000000	920 CENTRAL AV	P P D ORAZIO LLC		143 RIVER RD	WEST NEWBURY	MA	10985
39003-A00000	18 20 WEEKS LN	SOURMAIDIS CHARLES &	SOURMAIDIS MARIA	PO BOX 351	ADAMSVILLE	RI	02801
D0001-000000	40 42 SMITH WELL RD	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
D0002-A00000	11 17 WEBB PL	CENTERCO DOVER LLC	C/O ANDREW SILBERFEIN	222 WEST HILLS RD	NEW CANAAN	CT	06840
D0002-A00001	31 WEBB PL	LORD SHIVA LLC		31 WEBB PL	DOVER	NH	03820
D0002-A00LSE	WEBB PL	CENTERCO DOVER LLC	C/O ANDREW SILBERFEIN	222 WEST HILLS RD	NEW CANAAN	CT	06840
38015-A00000	1 3 WEBB PL	DOVER RETAIL MANAGEMENT LLC		30200 TELEGRAPH RD STE 205	BINGHAM FARMS	MI	48025
38015-B00000	WEBB PL	DOVER RETAIL MANAGEMENT LLC		30200 TELEGRAPH RD SUITE 205	BINGHAM FARMS	MI	48025
		STONEFIELD ENGINEERING & DESI	JOSHUA KLINE	120 WASHINGTON STREET, SUITE	SALEM	MA	01970
		COLLIERS ENGINEERING & DESIGN		41 CHURCH ROAD	BRUNSWICK	ME	04011
		CORE STATES GROUP		220 BURLINGTON MALL ROAD	BURLINGTON	MA	01803
		DESIGN WORKS	JENNIFER DINOVO	125 WASON ROAD	HUDSON	NH	03051

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2023-0011

Application Type:	Site Review
Applicant(s):	JP Morgan Chase, NA, c/o: Stonefield Engineering and Design
Owner(s):	Dover Retail Management, LLC & R W Realty, Inc.
Location:	1-3 Webb Place (Assessor's Map 38, Lots 15A & B)
Meeting Date:	April 23, 2024

INTENT: Proposal is for the demolition of current building and construction of a 3,300 square foot bank with a drive-through ATM and twenty (20) parking spaces.

AGENDA ITEM #: 4-F

APPLICANT: JP Morgan Chase, NA, c/o: Stonefield Engineering and Design

OWNER: Dover Retail Management, LLC & R W Realty, Inc.

LOCATION: 1-3 Webb Place (Map 38, Lots 15A & B)

UNITS PROPOSED: N/A

ACREAGE: Total = 0.98± ac.

ZONING DISTRICT: Commercial

EXISTING & PROPOSED LAND USE: Commercial

SURROUNDING LAND USE: Commercial, Residential, City of Dover land

PERMITS:
- CUP for §153-14.(D)(5), Off-Street Parking & Loading (proposed parking exceeds maximum)

WAIVERS REQUESTED:
- §153-14.(E)(2)(b), Parking area lighting, Uniformity Ratio
- §153-14.(E)(2)(b), Parking area lighting, Minimum Illumination Level
- §157-50(C)(I), Driveways-All Season Sight Distance

ATTACHMENTS: Application materials including site plan

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

TRC: 01/25/2024

Summary of Request and Background
The applicant is proposing to demolish the currently-existing building and construct a 3,330 square foot bank with a drive-through ATM and twenty (20) parking spaces. One (1) related Conditional Use Permit is also appearing before this Board in which the applicant is seeking a total of twenty (20) parking spaces where twelve (12) are permitted.

This application was most recently before the Technical Review Committee on March 28, 2024 (minutes attached).

Consistency with Land Use Regulations – Site Plan
RSA 674:54 provides for Planning Board review of governmental land uses with nonbinding written comments relative to conformity or nonconformity of the proposal with normally applicable land use regulations.

§153-4 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.

Summary of Waiver Requests:
The applicant is requesting the Board grant a waiver from §153-14.(E)(2)(b), Parking area lighting, Uniformity Ratio, and from §153-14.(E)(2)(b), Parking area lighting, Minimum Illumination Level.

The applicant is requesting a waiver from §153-14.(E)(2)(b), to be in excess of the allowable lighting uniformity ratio for minimum illumination, where the maximum of that minimum is .5 foot candles (fc) while 1.0 fc is proposed for site security and compliance standards.

The applicant is also requesting a waiver from §153-14.(E)(2)(b), to be in excess of the allowable maximum lighting uniformity ratio, where a max ratio of 6:1 is permitted, and 11.2:1 is being proposed for site security and compliance standards.

The applicant is also requesting a waiver from §157-50(C)(I), to allow a second driveway with less than the 400' all season sight Distance. This waiver is granted by the Community Services Director so a vote is not required tonight.

Consistency with Land Use Regulations –Waivers/Relief
Section 153-21 of the Site Plan Review Regulations state the "Planning Board may waive specific provisions of these regulations. The Planning Board may only grant a waiver if the Planning Board finds, by majority vote, that:

(1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or

(2) Specific circumstances relative to the subdivision, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations."

Planning Staff finds the waivers requests and the applicant's rationale are supported under criterion (2) above.

STAFF RECOMMENDATION-Waivers:
The Planning Department recommends the Planning Board accept the application, open the public hearing, make findings, and vote to approve the waivers with the following subsequent conditions, as the plans meet the standards outlined:

Subsequent Conditions to Be Met Prior to Signing of Plans:

1. Ensure site lighting is either screened from illuminating adjacent properties, or, provide written permission from any adjacent property owner to permit the illumination of their property.
2. Add a note that the Planning Board approved waivers for §153-14.(E)(2)(b), Parking area lighting, Uniformity Ratio and Parking area lighting, Minimum Illumination Level and that the Board found the criteria of Chapter 153-21 have been met.
3. Add note that the second driveway can be permitted since the Community Services Director found a hardship to comply with Section 157-50.C.
4. 4. Issuance of the Certificate of Occupancy.
5. Payment of Impact Fees as noted in the invoice attached to the Decision Letter unless a change is made to the impact fee policy;
6. Surety or other form of security acceptable to the City is provide for any unfinished work.

STAFF RECOMMENDATION-Site Plan:
The Planning Department recommends the Planning Board make findings, and vote to approve the Site Plan with the following subsequent conditions, as the plans meet the standards outlined:

Subsequent Conditions to Be Met Prior to Signing of Plans:

1. Revise plan and resubmit for Final Planning Board signature with the following revisions:
   - 1.1. Planning Board acknowledge lot merger.
   - 1.2. Add note that no additional parking may be added onto the site without Planning Department review of parking and need of another CUP.
   - 1.3. Update floor plan to reflect changes submitted to TRC on 3/28/24.
   - 1.4. Add note that the building will be solar ready.
   - 1.5. Applicant pay photo copy fees per invoice.
   - 1.6. Add detail of EVSE charging pedestal.

Subsequent Condition to Be Met Prior to Construction:

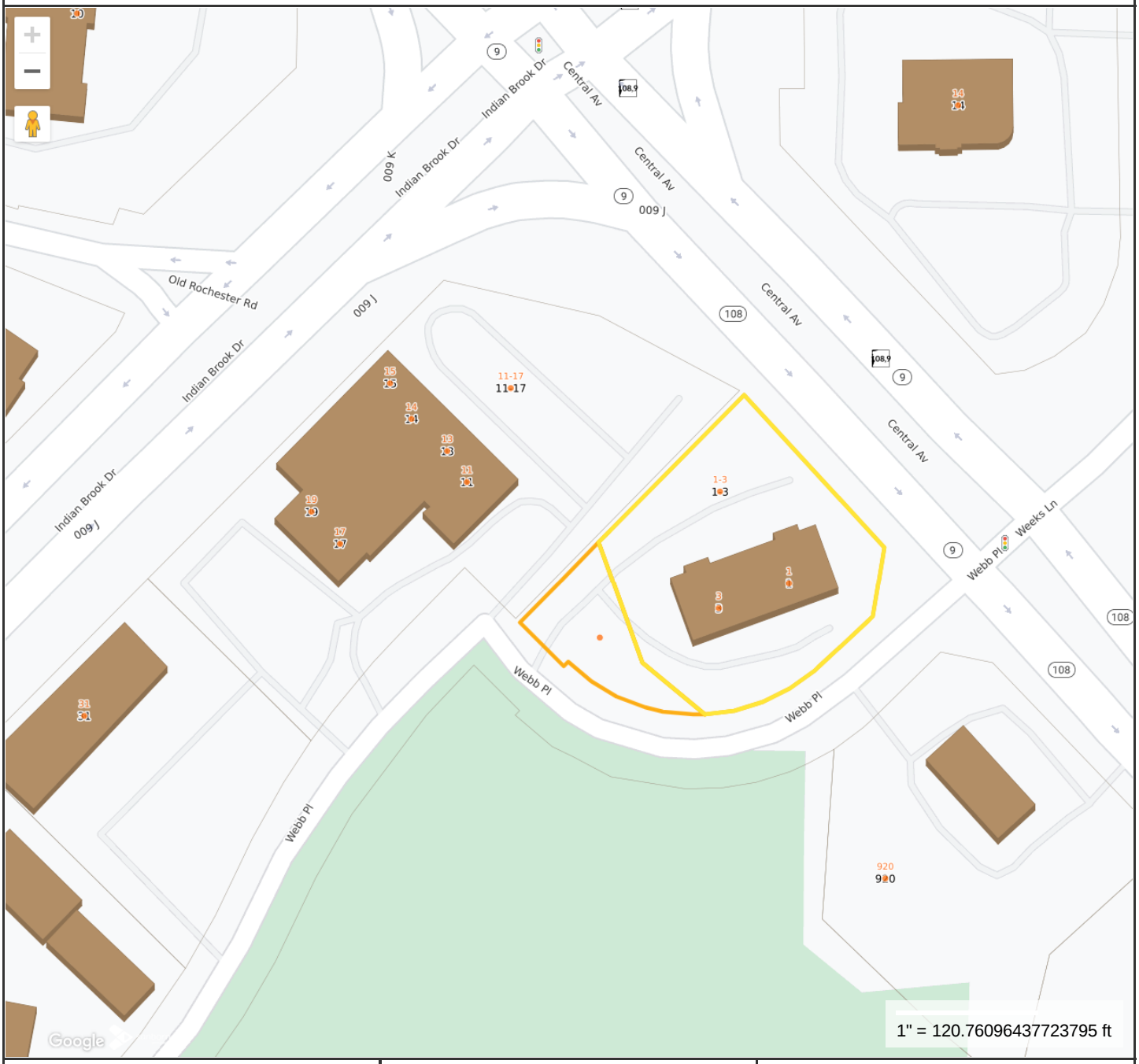
2. A site construction sign with the contact information for the general contractor must be displayed in a location approved by the City Engineer or Planning Director;

Subsequent Conditions to Be Met Prior to Building Permit:

3. Payment of Water and Sewer Investment Fees if applicable at time or request of service.

Subsequent Conditions to Be Met Prior to Completion:

SITE-2023-0011 1-3 Webb Place



Property Information

Location	1 3 WEBB PL
Owner	DOVER RETAIL MANAGEMENT LLC
Land Use	
Zoning Code	C
Property Id	38015-A00000

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 10/30/2023
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

PLAN SNAPSHOT REPORT SITE-2023-0011
FOR CITY OF DOVER, N.H.

Plan Type:	Site Plan - Major	**Project:**		**App Date:**	08/10/2023
Work Class:	New Construction	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:	Proposed 3,300 sq ft - Bank with Drive-Up ATM				

Parcel:	38015-A00000	Main	**Address:**	1-3 Webb Pl Dover, NH	Main

Zone: C(Non-Residential - Commercial)

Architect
Jose Sanchez
Home: (314) 270-5085
Business: (314) 270-5085
Mobile: (314) 270-5085

Applicant
Todd Samms
Home: (614) 580-2613
Business: (614) 580-2613
Mobile: (614) 580-2613

Applicant
Joshua Kline
120 Washington Street Suite 201 Suite 201
Salem, MA 01970
Business: (617) 203-2076
Mobile: (607) 624-0415

Owner
Samantha Burgner
Home: (413) 464-2267
Mobile: (413) 464-2267

Plan Custom Fields

Total	0	Total2	0	Total3	0
Total4	0	Total5	0	Total6	0
Total7	0	Total8	0	Total9	0
Street Classification Type	Municipal	Net Change in # Parking Spaces (+/-)	-17	Water Service	Municipal
Recording Number		Sewer Service	Municipal	Total Acres (GIS)	0.99
Deed Book		Total SQFT	43124.4	Deed Page	
Deed Date		Proposed Property Use	Bank with Drive-Up ATM	Area of Parcel to be Developed (SQFT)	43125
Number of Parking Spaces Existing	45	Number of Parking Spaces Proposed	28	Number of Employees Total	12
Number of Employees in Max Shift	6	Distance to City Water	75	Distance to City Sewer	150
Type of Building to be Built	Bank	Estimated Construction Value	2800000.00	Refuse Removal	Private
Is there an existing Conservation Easement?	No	Existing Conservation Easement Details		TotalImpactFeeSDTOD	0.00
TotalImpactFeeTHTOD	0.00	TotalImpactFee23FTOD	0.00	TotalImpactFeeA4TOD	0.00
TotalImpactFeeMHTOD	0.00	TotalImpactFeeADUTOD	0.00	TotalImpactFeeAONRTOD	0.00
TotalImpactFeeAR55TOD	0.00	TotalImpactFeeAR62TOD	0.00	Sub Total Residential	0.00
TotalImpactFeeRIRCTOD	0.00	TotalImpactFeeOCSTOD	0.00	TotalImpactFeeITWCTOD	0.00
TotalImpactFeeNHALTOD	0.00	TotalImpactFeeOIUTOD	0.00	TotalImpactFeeAFAOTOD	0.00
Sub Total Non-Residential	0.00	Total of Impact Fees to be Assessed	0.00		

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Joshua_Kline_8/10/2023.jpg	08/10/2023 12:02	Kline, Joshua		Uploaded via CSS
2023.11.02_PlanningTechnicalReviewCommittee.Agenda.pdf	10/19/2023 10:33	Blonigen, Rachel		
2023.08.31_PlanningTechnicalReviewCommittee.WebbPlace_SITE-2023-0011.pdf	02/15/2024 14:40	Blonigen, Rachel		Approved TRC Minutes

2023.11.02_PlanningTechnicalReviewCommittee.Webb Place_SITE-2023-0011.pdf	02/15/2024 14:41	Blonigen, Rachel	Approved TRC Minutes
2024.03.28_PlanningTechnicalReviewCommittee.Webb Place_SITE-2023-0011.pdf	04/01/2024 13:26	Blonigen, Rachel	Draft TRC minutes
2024.03.07_PlanningTechnicalReviewCommittee.Webb Place_SITE-2023-0011.pdf	04/01/2024 13:33	Blonigen, Rachel	Approved TRC Minutes

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00004629	Planning General Application Fee	$200.00	$200.00
	Total for Invoice INV-00004629	$200.00	$200.00
	Grand Total for Plan	**$200.00**	**$200.00**

Meeting Type	Location	Scheduled Date	Subject
Technical Review Committee Meeting v.1	City Hall, Second Floor Conference Room	08/31/2023	Technical Review Committee Meeting

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	08/30/2023	09/27/2023	12/05/2023	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Requires Re-submit	08/30/2023	09/27/2023	10/16/2023

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	08/30/2023	09/27/2023	12/05/2023	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Requires Re-submit	08/30/2023	09/27/2023	10/16/2023

Comments: Project: SITE-2023-0011: Proposed Bank (1-3 Webb Place)
TRC Meeting: August 31, 2023
Reviewer: Ken Mavrogeorge, PE – City Engineer
Checked by: Engineering Staff
Comments:
Reviewer should group comments be plan sheet if possible and if the comment applies to multiple sheets then it should be noted as a General Comment.
- General Comment:
o Applicant and Contractor shall review the Dover Construction Guidelines prior to scheduling a Preconstruction meeting with City staff. The guidelines can be found on the City of Dover Website on the Engineering page. https://www.dover.nh.gov/Assets/government/city-operations/1form/community-services/engineering/engineering-documents/Construction%20Guidelines.pdf
o Survey plans show additional right of way lines and NHDOT easements from a formal lot configuration prior to NHDOT work in the area (circa 1997-99). Applicant to coordinate with NHDOT and City to confirm ROW transfer is finalized and that NHDOT does not have ownership of portions of the subject property or have jurisdiction over the number of access points to Webb Place.
o Coordinate with Community Services (Engineering Department) for latest version of the City's Standard Details. It is not the intent for the applicant to copy the details onto the set but to use them as a minimum standard to meet.
o Add note that Design Engineer shall provide signed letter to City Engineer certifying that the stormwater management system has been installed in accordance with approved plans.
o Recommend providing 1 sf of snow storage per 10 sf of pavement to be cleared. Verify snow storage meets or exceeds this recommendation or provide note to remove excess snow when storage areas are filled.
o Provide detail for Construction Sign that conforms to the City of Dover standard details and as noted in the Dover standard notes.
o Applicant shall review the section 153-14 of the Dover Code and clarify how the design meets the City's requirements. In particular the applicant should address stormwater standards.
o Work within the City right of way and roadways will required excavation permit. Note that Central Ave was paved in 2021 and the City has pavement damage escalation costs for roads paved within 5 years.
o Applicant should upgrade existing sidewalks along the northern and eastern property lines especially if they are disturbed to removed curbing (northern sidewalk) and construct utilities (eastern). If northern sidewalk is reconstructed it should be located within the City ROW to avoid encroachment.
o Change "Township" references to "City" throughout documents.
o Please provide a test pit in the proposed infiltration basin location and include the depth of ESHWT.
o Engineering requests a letter certifying the tie in locations or discharge points for all sump pumps and roof leaders for existing and proposed structures on the property.
o Provide drainage analysis that complies with requirements of Dover Code 153-14.
- ALTA Survey (Sheet 1 of 2):
o Plan shows internal property lines that cross into the City's right of way. Please clarify why these are crossing over and if they are proposed to be abandoned or modified.
o Existing NHDOT easements are shown. Applicant to clarify if these will be modified or discontinued. If so, applicant to provided updated deed showing easements are removed/modified.
o There is a note about asphalt encroachment from the sidewalk on the northeast side of the property. It appears that this sidewalk is located in a City right of way but the linetypes make it hard to decipher.
- Sheet C-4:
o Provide ADA access to electric vehicle charging.
o Provide vehicle turning exhibits showing fire and trash vehicles maneuvering around the site.
o Move stop bars near intersections closer to travel way.
o Dumpster pad seems like it could be difficult to access by a vehicle if the dumpsters and totes are not wheeled out into the aisle.
o Remove depressed concrete curb from the right of way. If you wish to use the depressed curb elsewhere, provide detail.
o Off-street Parking Table mentions a maximum of 12 spaces which contradicts the narrative.
o Clarify how traffic will flow at the southern entrance. There are no stop signs for any of the three legs and conflicts could be an issue.
o Will location of southern entrance cause vehicles to stack into the public right of way?
o Recommend making the southern entrance perpendicular to Webb Place.
o Where will delivery vehicles load and unload?
o Provide sidewalk on southern edge of Webb Place to connect to the signalized intersection.
o Adding crosswalk on northeast corner connecting adjacent property to the proposed bank and new sidewalk along Webb Place.
- Sheet C-5:
o Provide pretreatment for stormwater basin. Recommend offline catch basins with deep sumps and oil separator hoods.
o Provide a minimum 3 feet of cover on all storm drainage pipe.
o Grades of driveways exceed 13% in some areas. Recommend keeping grades below 3% within 75 feet of intersections.
o Drop off from parking area is over 5 feet. Clarify if guardrail is required.
o Provide calculations and details for rip rap apron in stormwater basin.
o Show existing structure labels that align with City GIS labels (coordinate with GI department).
- Sheet C-6:
o Water is shown at 1.5" type K copper. See standard City details about types of services and sizes.
o Water meter is to be installed inside the building not externally as called out.
o Is the building to be sprinkled? If so, a fire line should be run directly into the building with a domestic line stubbed off of the fire service. Separate shut offs should be provided for domestic and fire.
o Gate valves should be located at the anchor tees.

o Electric services appears to be coming off an existing pole. If required to install a standalone transformer, where would one be located?
o External cleanouts are not permitted. Applicant should speak as to why the sanitary service cannot run directly into the northern side of the building.
o Applicant should inspect existing sewer lateral and provide report and video on existing condition. Applicant is reminded that they own from the building to the sewer main.
o Existing sewer runs across adjacent property. Applicant should engage with abutter to discuss a sewer easement if one does not exist.
o Sewer in adjacent parking lot has two conflicting sizes noted (6" unk and 12" steel). Applicant should clarify how this data was determined and which is correct.
o 4-inch sewer should have a minimum 2% slope for sewer not 1.08% as noted on the plan.
- Sheet C-7:
o Lighting is spilling across the property lines. Please provide light shields.
- Sheet C-8:
o Two stabilized construction entrances are called out but only one is shown. Please clarify.
- Sheet C-12:
o Detail 14 should be revised to show a minimum 1.5" milled asphalt key per City standard details.
o Provide a minimum of 12-inch slab for dumpster pad.
o Curb ramps in City right of way should comply with City standard details (no flush curb between pavement and ramp and minimum 4 inches of concrete around the ADA detectable warning panel).
o Clear distance below signage should be 7 feet.
o Remove references to Massachusetts on Accessible Parking Signage. Is this additional penalty to be enforced by the bank?
o Curbing in City right of way shall be granite.
- Sheet C-13:
o Provide minimum frost depth on detail no. 8.
o Provide details on foundation for clearance bar. Notes appear to be scanned and are not legible.
- Sheet C-14:
o All valves and hydrants shall open left (counterclockwise)
o Locate water services to eliminate the need for insulation and bends in water line.
o Minimum of 5' of cover is required for water lines.
o Sewer and drainage manhole covers shall be Liftmate R-1743-LM or approved equal with 90 deg hinge
o Storm Drain Utility Trench Section – crushed stone shall extend 12" above top of pipe. See City standard for minimums.
o Utility Trench Section
 Crushed stone shall extend 12" above top of sewer pipe.
 Sand shall extend 12" above top of water pipe.
 See City standard for minimums and required materials.
o Sewer minimum cover shall be 4 feet below non paved areas and 6 feet under pavement unless insulation is provided.
o Water Service Connection: curb box shall be Erie-style
o Water Service Connection: tapping sleeve shall be stainless steel if required.
o Type B Catch basin inlet grate is the City standard.
o Drain Manhole should have 30 inch clear opening. Catch basins may have 24 inch diameter opening.
o Storm basin detail should show ESHWT to ensure it complies with NHDES recommendations.
o Infiltration rates for designing groundwater recharge practices shall be determined in accordance with Section Env-Wq 1504.14 and summarized in a drainage report.
o Where is detail 9 (Curb break and rip rap detail) to be used?
o Detail 10: How will crushed stone be placed in gap below concrete outlet

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	08/30/2023	09/27/2023	12/05/2023	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Fire / Inspection Services	Maxfield, Jim	Requires Re-submit	08/30/2023	09/27/2023	10/16/2023

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Fire / Inspection Services	Maxfield, Jim	Requires Re-submit	10/16/2023	11/13/2023	11/02/2023

Comments: Discuss turning template for T-1 .Applicant note testimony will be provided with respect to drive thru lane.
There does not appear to be information provided to support the need for the second entry off Webb Place- Please provide.
Sheet 4 Revise ADA notes title to Accessibility notes
Sheet 4 EV charger locations and accessible route across parking lot. Relocate for compliance
Provide a site specific street color rendering of the proposed structure. Revised architectural plan was not received.
Confirm design complies with architectural requirements.

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Benton, Donna	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	08/30/2023	09/27/2023	12/05/2023	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Kaspari, Jackson	Requires Re-submit	08/30/2023	09/27/2023	10/16/2023

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning		Requires Re-submit	08/30/2023	09/27/2023	10/16/2023

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Benton, Donna	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Requires Re-submit	10/16/2023	11/13/2023	01/16/2024

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	08/30/2023	09/27/2023	12/05/2023	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Requires Re-submit	08/30/2023	09/27/2023	10/16/2023

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.2	Requires Re-submit	01/16/2024		04/01/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Requires Re-submit	01/16/2024	02/13/2024	03/08/2024

Comments: • Demolition plan notes the existing sidewalk will remain – suggest adding that note to sheet C-4 as well or noting that proposed sidewalk will connect to existing
- The revised Parking Operations Memorandum is acknowledged and appreciated. The revisions provide much better support for the requested parking total.
- The reduction in proposed parking from 26 to 20 is noted and appreciated.
- Re: the 5 proposed “land-banked parking”
  - Monitoring demand before adding spaces seems reasonable and is preferred over installing 25 spaces immediately.
  - How will you evaluate whether more spaces are needed?
  - Please clarify whether the current CUP request would permit 20 spaces or 25 (i.e. would expansion require another CUP?).
  - Please confirm whether those spaces are accounted for in stormwater calculations, impervious surface totals, etc.

PLAN SNAPSHOT REPORT (SITE-2023-0011)

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Requires Re-submit	01/16/2024	01/29/2024	03/08/2024

Comments: Project: SITE-2023-0011: Proposed Bank (1-3 Webb Place)
TRC Meeting: March 7, 2024 (Meeting #3)
Reviewer: Ken Mavrogeorge, PE – City Engineer
Checked by: Engineering Staff
Comments:

- General Comment:
  - Previous Comment: Survey plans show additional right of way lines and NHDOT easements from a formal lot configuration prior to NHDOT work in the area (circa 1997-99). Applicant to coordinate with NHDOT and City to confirm ROW transfer is finalized and that NHDOT does not have ownership of portions of the subject property or have jurisdiction over the number of access points to Webb Place. Recommend this be a condition of approval prior to issuing a CO.
  - Previous Comment: Design Details still do not meet City of Dover Standards for utilities. Coordinate with Community Services (Engineering Department) for latest version of the City's Standard Details. It is not the intent for the applicant to copy the details onto the set but to use them as a minimum standard to meet. New Comment: Reach out to Community Services (City Engineer) for CAD File for standard details.
  - Previous Comment: Please provide a test pit in the proposed infiltration basin location and include the depth of ESHWT. New Comment: Show the location of test pits
  - Proposed Condition of approval prior to issuing CO: Engineering requests a letter certifying the tie in locations or discharge points for all sump pumps and roof leaders for existing and proposed structures on the property.
- ALTA Survey (Sheet 1 of 2):
  - Previous Comment: Existing NHDOT easements are shown. Applicant to clarify if these will be modified or discontinued. If so, applicant to provided updated deed showing easements are removed/modified. Proposed Condition of Approval prior to obtaining CO.
- Sheet C-4:
  - If banked spaces are constructed, vehicles would be parked beyond the stop bar. Is there a better spot for two of the banked spaces?
  - Is the ADA EV space accessible?
- Sheet C-6:
  - Proposed Condition of Approval prior to PB signing: Applicant to locate the sewer lateral and provide final connection detail to City Engineering office to approve.
  - If the water service is relocated to come from a source other than Central Ave, then the existing water service should be terminated at the main in Central Ave and abandoned per CS requirements. If the existing sidewalk is disturbed it will need to be reconstructed.
  - The proposed connection should be made into a finished water/Potable line not the raw water line in Webb Place.
  - The new curb stop should be located on the edge of the right of way in the non-paved surface.
  - Water meter should be inside the building not external.
  - Is the proposed 2-inch service for fire and domestic water?
  - Proposed Condition of Approval prior to obtaining CO: Applicant should engage with abutter to discuss and secure a sewer easement if one does not exist.
- Sheet C-12:
  - Sign posts should meet Dover standards if they are within the right of way.
  - Crosswalks should meet the NHDOT standard PM-15 (https://www.dot.nh.gov/sites/g/files/ehbemt811/files/inline-documents/02222021-pm-15-std.pdf)
- Sheet C-13:
  - Detail 1, 2, and 3 do not meet Dover Standards. See comments from prior TRC
- Sheet C-14:
  - Previous Comment: Provide details on foundation for clearance bar. Notes appear to be scanned and are not legible. New Comment: Provide detail with dimensions for bury depth, reinforcement, and diameter of clearance bar base.
  - Detail 2:
    - Sewer structures must meet NHDES Env Wq 700 requirements (more specifically Env Wq 704.12). Brick shelfs are required for new SMHs.
    - Manhole steps should be plastic. Detail is referenced but not provided
  - Detail 3:
    - Manhole steps should be plastic. Detail referenced but not provided
  - Detail 5:
    - Detail does not meet water and sewer standard Dover trench details.
  - Detail 6:
    - 6 ft of cover over sewer is required below pavement and 4 feet of cover below unpaved areas. If minimum cover is not attainable, 2-inch rigid foam insulation is required.
    - External cleanouts are not permitted.
  - Detail 7:
    - Incorrect Grate is shown. Type B NHDOT grate is the prefer grate.
    - Steps are not required for CB.
    - Please show the sump more accurately.
    - Oil Separator hood is required on CB outlet pipe. Please show.
- Sheet C-15:
  - Detail 2:
    - Does not meet City standard trench detail for water.
  - Detail 3:
    - Typical Trench Detail does not meet standard City detail for storm drain trench.
  - Previous Utility Trench Section
    - Crushed stone shall extend 12" above top of sewer pipe.

- Sand shall extend 12” above top of water pipe.
- See City standard for minimums and required materials.
- Previous Comment: Storm basin detail should show ESHWT to ensure it complies with NHDES recommendations.

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Fire / Inspection Services	Maxfield, Jim	Requires Re-submit	01/16/2024	01/29/2024	01/26/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Kaspari, Jackson	Requires Re-submit	01/16/2024	02/13/2024	03/08/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Benton, Donna	Requires Re-submit	01/16/2024	01/29/2024	03/08/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Requires Re-submit	01/16/2024	01/29/2024	03/08/2024

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.3	Approved	03/15/2024	03/28/2024	04/01/2024	No	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Approved	03/15/2024	04/12/2024	04/01/2024

Comments: Webb Place
- Prior comments have been addressed. No new comments.

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Approved	03/15/2024	03/28/2024	04/01/2024

Comments: Project: SITE-2023-0011: Proposed Bank (1-3 Webb Place)
TRC Meeting: March 28, 2024 (Meeting #4)
Reviewer: Ken Mavrogeorge, PE – City Engineer
Checked by: Engineering Staff
Comments:
- Sheet C-4:
  - Please identify location of ADA sign for EV charging station. Recommend it indicate to drivers to use that space last.
- Sheet C-6:
  - The water service for the existing building is only a 1-inch line. Is that sufficient to serve the building?

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Fire / Inspection Services	Maxfield, Jim	Approved	03/15/2024	03/28/2024	04/01/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Benton, Donna	Approved	03/15/2024	04/12/2024	04/01/2024

Comments: Approved to move forward to planning board review, new documents will be required

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	Approved	03/15/2024	03/28/2024	04/01/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Approved	03/15/2024	03/28/2024	04/01/2024

Comments: • Previous comments addressed. No new comments.

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		08/11/2023 11:16	01/16/2024 10:28
Confirm application complete v.1	Generic Action		08/10/2023 13:16

PLAN SNAPSHOT REPORT (SITE-2023-0011)

Confirm application complete v.1	Generic Action		10/16/2023 10:44
Technical Review Committee Meeting Agenda v.1	Task	10/16/2023 10:44	10/16/2023 11:57
Technical Review Committee Meeting Agenda v.1	Task	08/11/2023 11:16	08/11/2023 11:16
Land Use Plan Technical Review v.1	Receive Submittal	08/30/2023 0:00	12/05/2023 12:55
Land Use Plan Technical Review v.1	Receive Submittal	10/16/2023 0:00	01/16/2024 10:31
Land Use Plan Technical Review v.2	Receive Submittal	01/16/2024 0:00	03/08/2024 11:54
Land Use Plan Technical Review v.3	Receive Submittal	03/15/2024 0:00	04/01/2024 11:50
Technical Review Committee Meeting v.1	Hold Meeting	10/17/2023 10:49	01/16/2024 10:31
Technical Review Committee Meeting v.1	Hold Meeting	08/11/2023 11:16	10/16/2023 10:43
Planning Board v.1		04/03/2024 12:24	
Planning Board Agenda v.1	Task	04/03/2024 12:24	04/09/2024 12:03
Invoice for Notices v.1	Task	04/09/2024 12:03	
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Plan Activity		
NOD Sent to Applicant v.1	Create Report		
Final Plan v.1			
Land Use Plan Final Review v.1	Receive Submittal		
Land Use Plan Stamped and Signed v.1	Generic Action		
Plans uploaded to Treeno v.1	Generic Action		
Recording v.1	Task		
Property Info Group v.1	Generic Action		
Building Official Notifies Address v.1	Generic Action		
Pre-Con Meeting v.1	Hold Meeting		
Create/Link to Records v.1			
Create / Link to Permit - Building Complex v.1	Create Sub Permit		
Create / Link to Permit - Site Work, Construction v.1	Create Sub Permit		

City of Dover, New Hampshire
SITE REVIEW APPLICATION

[Revision Date: July 1, 2021]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: **JP MORGAN CHASE, NA (C/O STONEFIELD ENGINEERING & DESIGN)** Telephone # **(617) 203-2076**

Address of Applicant: **120 WASHINGTON STREET, SUITE 2021, SALEM, MA 01970**

E-Mail Address: **JKLINE@STONEFIELDENG.COM**

Name of Property Owner (*if different from applicant*): **R.W. REALTY KAREN S ARKWELL** Telephone #_____

Address of Property Owner: **67 SENECA STREET, ROCHESTER, NH 03867**

PROPERTY INFORMATION

Address of Property: **1-3 WEBB PLACE**

Assessor's Map # **38** Lot(s) # **15A AND 15B**

Zoning District(s) **COMMERCIAL DISTRICT** Overlay District(s) **N/A**

Size of Parcel: **42,879** sq. ft. **0.98** ac. Property Deed: **BOOK 880, PAGE 332 BOOK4917, PAGE 381**

Existing Use of Property: **MULTI-TENANT COMMERCIAL BUILDING**

SITE PLAN INFORMATION

Describe Proposed Use: **BANK WITH DRIVE-UP ATM**

Area of Parcel to be Developed: **42,879 SF** sq. ft.

If Multi-family Residential: Number of Units _____ & Buildings Proposed _____

If lodging: Number of Units _____ & number of Buildings _____

Number of Parking Spaces: Existing **45 SPACES** Proposed **20 SPACES**

Highway Access (check where applicable): **X** City Street ____ State Highway

Number of Employees Total: **8-12 EMPLOYEES** In Maximum Shift: **4-6 EMPLOYEES**

Disposition of Parcel:

Building Footprint _____ sq. ft.

Total Building Area _____ sq. ft.

Paved Area _____ sq. ft.

Building Setbacks:

Front Yard _____ ft.

Rear Yard _____ ft.

Side Yard: Right____ ft. Left_____ ft.

City Water? X Yes ___ No How far is city water from the property? _____

City Sewer? X Yes ___ No How far is city sewer from the property? _____

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 □ 30' Buffer □ Increase by _____ units

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

_____

_____

_____

BUILDING INFORMATION

Type of Building to be Built: **FREESTANDING BANK W/DRIVE THRU ATM**

Height of Building: **26'-10"** Finished Floor Elevation: **REFER TO GRADING PLAN**

Number of Seats (where applicable) **N/A**

Estimated value of construction: **PRIVATE** Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: **REFER TO ENCLOSED DOCUMENT**

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

REFER TO ENCLOSED DOCUMENT

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) **COLLIERS ENGINEERING & DESIGN**

Address **41 CHURCH ROAD, BRUNSWICK, ME 04011** Telephone #: **(207) 481-7080**

Professional License #: _____ E-mail address: _____

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) **STONEFIELD ENGINEERING & DESIGN**

Address **120 WASHINGTON STREET, SUITE 201, SALEM, MA 01970** Telephone #: **(617) 203-2076**

Professional License #: **16530** E-mail address: **JKLINE@STONEFIELDENG.COM**

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) **CORE STATES GROUP**

Address **220 BURLINGTON MALL RD, BURLINGTON, MD 01803** Telephone #: **(617) 203-2076**

Professional License #: _____ E-mail address: **JSANCHEZ@CORE-STAES.COM**

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) **JENNIFER DINOVO / DESIGN WORKS**

Address **125 WASON ROAD HUDON, NH 03051** Telephone #: **603-864-8646**

Professional License #: **085** E-mail address: **JENNIFER@4DESIGNWORKS.COM**

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

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: Samantha Burgner Date: 04/02/2024

Signature of Applicant (*if different from owner*): _____ Date: 04/02/2024

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: Samantha Burgner Date: 04/02/2024

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

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

Signature of Property Owner: Samantha Burgner Date: 04/02/2024

Signature of Applicant (*if different from owner*): _____ Date: 04/02/2024

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: Samantha Burgner Date: 04/02/2024

Signature of Applicant (*if different from owner*): _____ Date: 04/02/2024

City of Dover, New Hampshire
SITE PLAN REVIEW SUBMISSION CHECKLIST

[Revision Date: June 4, 2019]

This site plan review checklist, as required by Chapter 153-6-B(2), should be completed by the applicant. It is intended to assist the applicant in the planning process of preparing a Site Plan Review application for Planning Board action. The size of the project will determine the types of information required for review, therefore, a **pre-application conference** with the Planning Department to determine the list of items that must be completed is strongly encouraged.

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 site plan review requirements. Please refer to the Site Plan Review Regulations for full details.

APPLICANT: Core States Group File Number: SITE-2023-0011

PROJECT TITLE: Chase Dover

PROPERTY LOCATION: 1-3 Webb Place, Dover NH Tax Map: 38 Lot: 15A & 15B

	Where/How Provided	Reviewed
1. Completed and signed Application form	✓	
2. Plan Review Fees are provided	✓	
3. Electronic copy of the engineered/surveyed plan layout	✓	
4. Electronic copy of supplementary materials and application	✓	
5. Traffic Impact Assessment and Analysis (Standard or Advanced)	✓	
6. Waiver requests to the Site Plan Review Regulations, with written justification		
7. Conditional Use Permit applications	✓	
8. A colored rendering of the streetscap that will be created along the existing public right-of-way		
9. A colored architectural plan showing all sides of buildings	✓ Color Elevations	
10. Folded copies of site plan w/scale of not less than 1"=50' or 1"=100' for larger site plans, for TRC. Plans shall contain the following items as appropriate:	✓	
Location map at appropriate scale	✓ Site Plan Set-Cover	
Proposed Project name and title and Planning File #	Site Plan Set-Cover	
Date, north arrow and scale	✓ Site Plan Set-Cover	
Names of all abutting property owners	✓ Site Plan Set-Cover	
Name and address of owners and/or applicants	✓ Site Plan Set-Cover	
Signature & stamp of NH licensed land surveyor and/or engineer	✓ Alta Survey	
Zoning District boundaries, including any special or overlay districts	✓ Site Plan Set-Cover	
Location of Conservation District areas	✓ Site Plan Set-Cover	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	✓ Site Plan Set-Site	
Location and widths of existing & proposed easements & right of ways	✓ Alta Survey	
Location and width of existing and proposed access/egress ways	✓ Site Plan Set-Site & Existing	

CITY OF DOVER, NEW HAMPSHIRE
PLANNING APPLICATION OWNER AUTHORIZATION

OWNER AUTHORIZATION

I/We hereby submit this application to the City of Dover / 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.

Property Owner Name: Dover Retail Management LLC - Samantha Burgner

Signature(s) of Property Owner(s): Samantha Burgner Date: 04/02/2024

Signature of Applicant: Date: 04/02/2024
if different from owner

AUTHORIZATION TO ENTER SUBJECT PROPERTY

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..

Property Owner Name: Dover Retail Management LLC - Samantha Burgner

Signature(s) of Property Owner(s): Samantha Burgner Date: 2023-07-06

Signature of Applicant: Date: 04/02/2024
if different from owner

IF SIGN PERMIT, SIGN PERMIT APPLICATION INFORMATION

If the sign permit applicant is not the property owner, this form must be completed and included as part of application submission.

I have read this application and state that, to the best of my knowledge, the information provided is true and that the proposed sign(s) will comply with all applicable regulations in Section 170-32 of the Zoning Ordinance of the City of Dover and shall conform to the submitted materials and designs. Furthermore, after 90 days, any application still waiting information will be denied.

Address of Sign Location: _____

Sign Permit Application Type:
(check one)

- ☐ Permanent Sign
- ☐ Temporary Sign
- ☐ Community Sign

	Explain How Provided	Reviewed
Depict pedestrian walkways and accessible access	✓ Site Plan Set-Site	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	✓ Site Plan Set-Site	
Existing and proposed topographic information at two foot intervals	Site Plan Set-Grading & Drainage	
Existing and proposed buildings and structure locations	✓ Site Plan Set- Existing & Site	
Minimum building setbacks or build to lines on all lots	✓ Site Plan Set-Site	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	✓ Site Plan Set- Utility	
Existing and proposed water lines and fire hydrants, including materials and capacity needed	✓ Site Plan Set- Utility & Cover	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	✓ Site Plan Set- Utility & Grading	
Existing and proposed stormwater lines and facilities	✓ Site Plan Set- Utility	
Lighting plan depicting all existing and proposed exterior light fixtures and a lighting level analysis for parking lots	✓ Site Plan Set- Lighting	
Location of Flood Hazard Zone	✓ Project Maps	
Location of all bodies of water and watercourses	✓ Project Maps	
Location of wetlands and buffers	✓ Project Maps	
Neighborhood plan with aerial underlay showing how project relates to abutting uses within the plan set	✓ Site Plan Set-Cover	
Existing natural features and/or significant vegetation on property	✓ Site Plan Set- Existing	
Depict existing contours up to 100 ft. beyond project limits	✓ Site Plan Set- Existing	
Landscape plan depicting existing and proposed landscaping, prepared by a licensed Professional Landscape Architect	✓ Site Plan Set- Landscaping	
Location of parking layout delineating spaces and arrangement; note addressing maximum required spaces	✓ Site Plan Set- Site	
Location, material and size of existing and proposed pavement area	✓ Site Plan Set- Existing & Site	
Location of proposed fire lanes	✓ Site Plan Set- Site	
Specify finished floor elevations of buildings	✓ Color Elevations	
Location of solid waste disposal facilities (dumpster, pad and screening, etc.), including required screening	✓	
Depict all service, storage, loading bays and utility areas	✓ Site Plan Set- Site & Utility Sheet	
All applicable Dover Common Site Plan notes	Site Plan Set- Site	
11. Additional Information if appropriate		
Stormwater Management Plan depicting the existing & proposed storm drainage system and engineered drainage analysis	Grading & Stormwater Sheet	
Stormwater Management System Operation and Maintenance Plan		
Letter to Serve from Public and Private Utilities		
Erosion and Sedimentation Control Plan	✓ Soil Erosion and sediment Control Sheet	
Landscape Operation and Maintenance Plan		
Proposed restrictive covenants or homeowners association documents		
Dates and permit numbers of all required state and federal permits		
If wetland buffer, indicate placards locations, as applicable		
Depict test boring locations, groundwater elevations and soil profiles and/or soils types call-outs		
Location of proposed drive-in facilities		
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required		

REVIEWED BY: _____ DATE_____ TRC DATE_____

SITE-2023-0011 **1-3 WEBB PLACE**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
38016-000000	920 CENTRAL AV	P P D ORAZIO LLC		143 RIVER RD	WEST NEWBURY	MA	10985
39003-A00000	18 20 WEEKS LN	SOURMAIDIS CHARLES &	SOURMAIDIS MARIA	PO BOX 351	ADAMSVILLE	RI	02801
D0001-000000	40 42 SMITH WELL RD	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
D0002-A00000	11 17 WEBB PL	CENTERCO DOVER LLC	C/O ANDREW SILBERFEIN	222 WEST HILLS RD	NEW CANAAN	CT	06840
D0002-A00001	31 WEBB PL	LORD SHIVA LLC		31 WEBB PL	DOVER	NH	03820
D0002-A00LSE	WEBB PL	CENTERCO DOVER LLC	C/O ANDREW SILBERFEIN	222 WEST HILLS RD	NEW CANAAN	CT	06840
38015-A00000	1 3 WEBB PL	DOVER RETAIL MANAGEMENT LLC		30200 TELEGRAPH RD STE 205	BINGHAM FARMS	MI	48025
38015-B00000	WEBB PL	DOVER RETAIL MANAGEMENT LLC		30200 TELEGRAPH RD SUITE 205	BINGHAM FARMS	MI	48025
		STONEFIELD ENGINEERING & DESI	JOSHUA KLINE	120 WASHINGTON STREET, SUITE	SALEM	MA	01970
		COLLIERS ENGINEERING & DESIGN		41 CHURCH ROAD	BRUNSWICK	ME	04011
		CORE STATES GROUP		220 BURLINGTON MALL ROAD	BURLINGTON	MA	01803
		DESIGN WORKS	JENNIFER DINOVO	125 WASON ROAD	HUDSON	NH	03051

STONEFIELD

March 14, 2024

Project Narrative
Site Review Application (SITE-2023-0011)
Condition Use Permit (CUP)
Proposed Chase Bank with Drive-Up ATM
Map: 38, Lots 15A & 15B
1-3 Webb Place
City of Dover, Strafford, New Hampshire

On behalf the Applicant, Stonefield Engineering and Design, has prepared the following Project Narrative to outline the proposed project and provide support for the application. The subject property is located at the northwesterly quadrant of the intersection of Central Avenue (NH Route 9) and Webb Place in the City of Dover, Strafford County, New Hampshire. The subject property is designated as Map 38, Lots 15A and 15B as depicted on the City of Dover Tax Map. The site has approximately 160 feet of frontage along Central Avenue and approximately 390 feet of frontage along Webb Place. The existing site contains a multi-level building operating with various office and personal service uses with existing access via one (1) full-movement driveway on Webb Place. The Applicant has filed a Site Plan Review Application and requires a Condition Use Permit (CUP) for Section 153-14(D)(5) Off-Street Parking & Loading.

The proposed project consists of demolishing the existing structure and razing the site for a proposed 3,300 SF Chase Bank with drive-thru ATM and 20 parking spaces (with 5 additional land-banked parking spaces). The access consists of the existing full-movement driveway on Webb Place being maintained and improved upon and one (1) additional right-ingress only driveway on Webb Place along the southerly property extent.

The application consists of a Conditional Use Permit (CUP) for Section 153-14(D)(5) Off-Street Parking & Loading to allow the project to exceed the maximum parking requirement (12 required and 20 spaces proposed). The proposed Chase Bank is a financial institution providing traditional modern banking services as well as financial planning and advisement services. Parking for Chase's employees and customers is essential for its operation and to allow the business to operate safely. Safety and convenience is essential for Chase and providing adequate and available parking on-site is a key for their success. There is no available off-street parking within the vicinity of the project and it is essential for Chase's customers to have adequate and safe parking on-site. A Parking Operations Memorandum has been submitted providing justification for the proposed Conditional Use Permit and parking sought with the application. The project complies with the conditional use requirements by providing additional EV Charging Spaces including an accessible EV Charging space and eight (8) porous asphalt parking spaces. There will be no detrimental effects on the surrounding properties as a result of the approval. The project will reduce impervious surfaces by almost 10,000 SF and the proposed building is almost half the size of the existing building.

In conclusion the granting of the Site Plan Review Application, Condition Use Permit (CUP) and associated design waivers(s) will not have any detrimental impact on the surrounding properties, community, and/or City of Dover. The proposed redevelopment project provides a great opportunity to redevelop a compromised site located at a highly visible and desirable intersection within the City.

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – SITE-2023-0011

Application Type:	Site Review
Applicant(s):	Stonefield Engineering & Design
Owner(s):	Dover Retail Management, LLC & R W Realty Inc.
Location:	1-3 Webb Place (Map 38, Lots 15-A and 15-B)
Date:	March 28, 2024

INTENT: Proposal is for demolition of current building and constructing a 3,300-sf bank with a drive through ATM, (20) twenty parking spaces. One (1) related CUP application would also appear before the PB (COND-2023-0054). *[This item was previously heard by the Planning Technical Review Committee on August 31, 2023, November 2, 2023, and March 7, 2024]*

UNITS PROPOSED: N/A- One Bank proposed

AGENDA ITEM #: 3

ACREAGE: Total = 0.98± ac. / 42,879± sq. ft.
Parcel A = 26,376± sq. ft.
Parcel B = 16,503± sq. ft.

ZONING DISTRICT: C

EXISTING LAND USE: Multi-tenant Comm. Bldg

PROPOSED LAND USE: Commercial (Bank)

SURROUNDING LAND USE: Commercial, Residential, City of Dover land

ZBA ACTION:
- Z94-17, Variance granted for signage
- Z99-05A, Appeal of Admin. Det. for signage

PERMITS REQUIRED:
- CUP for §153-14.(D)(5), Off-Street Parking & Loading (proposed parking exceeds maximum)

WAIVERS REQUESTED:
- §153-14.(E)(2)(b), Parking area lighting, Uniformity Ratio
- §153-14.(E)(2)(b), Parking area lighting, Minimum Illumination Level

ATTENDANCE:
Donna Benton, Planning
Paul Crouser, Zoning
Marn Speidel, Police
Jim Maxfield, Fire/Inspection Services
Ken Mavrogeorge, Engineering
James Burdin, Business Development

Others:
Josh Kline, Stonefield Engineering & Design
Giovanni Cesar, Stonefield Engineering & Design
Erin Bassegio, Planning
Abigail Gilbert, Business Development

PLAN REVIEW:
Planning:
- *Reminder: Impact fees, Water & Sewer investment fees*
- *Lot Merger for Parcels A and B*
- *To permit multiple site access points, include a note for the 400-foot, all-season sight distance. Reference §157-50C(1)*
  - Please note from the referenced section: The provisions of this section apply to the construction, reconstruction, alteration, surfacing or resurfacing of any driveway which intersects with the right-of-way of any City-owned, City-maintained way and/or other private way.
- *Revise plans:*
  - *Reduce lighting and meet lighting standards. Current plan is too bright and extends beyond property boundary. Thank you for explanation of ATM security lighting. Please submit written permission from abutting property for lighting that extends beyond property boundary.*
  - For the parking CUP, indicate the additional chargers as well as pervious area to ensure the criteria have been met
  - *Remove signage as that's an administrative decision (directional signs OK to stay on plan).* Including on zoning note and box on elevations.
  - Revise "Brook Rd" on elevations

Engineering:
- Sheet C-4:
  - Please identify location of ADA sign for EV charging station. Recommend it indicate to drivers to use that space last.
- Sheet C-6:
  - The water service for the existing building is only a 1-inch line. Is that sufficient to serve the building?

Police:
- Previous comments addressed. No new comments.

DRAFT

Application Type:	Site Review
Applicant(s):	Stonefield Engineering & Design
Owner(s):	Dover Retail Management, LLC & R W Realty Inc.
Location:	1-3 Webb Place (Map 38, Lots 15-A and 15-B)
Date:	March 28, 2024

Fire/Inspection Services:

- *Sheet E-3 T-1 template turning to right is not part of a compliant access road with a 12' wide lane. Revise as required*
- *Clarify Electrical Service location- also see floor plan*
- Update floor plan to reflect changes
- *Discuss EV charging detail be placed within plan set*
- *Provide Use Last EV charging sign on plan set and provide sign detail on detail sheet*

Business Development:

- Prior comments have been addressed. No new comments.

Planning Board:

- None.

Next Steps: Revise plans per comments above. Submit to Planning Board.

Adjournment:
P. Crouser moved to adjourn at 11:58 a.m. Seconded by: J. Maxfield. Vote: U/A.

DRAFT

STONEFIELD

April 2, 2024

City of Dover Planning Board
Attn.: Jean Glidden
City of Dover
Planning & Community Development
288 Central Avenue
Dover, NH 03820

RE: Planning Board Submission
Site Review Application (SITE-2023-0011)
Proposed Chase Bank with Drive-Thru ATM
Map: 38, Lots 15A & 15B
1-3 Webb Place
City of Dover, Strafford County, New Hampshire

Dear Chairperson Cruikshank and Board Members:

Our office is submitting documents updated based on feedback received from the Technical Review Committee (TRC) to supplement/supersede the previous full submittals provided. We are looking forward to presenting this application to the Board at the next available meeting date. This application provides an opportunity to significantly enhance a depreciating property along a highly visible intersection within the City. This submission letter also includes itemized responses to the meeting minutes obtained from the City of Dover Technical Review Committee Review Letter (TRC) dated March 28, 2024

Please find the following items enclosed:

ITEM DESCRIPTION	DATED	COPIES	PREPARED BY
Site Plan Review Checklist	04-02-2024	7	--
Site Plan Review Application	04-02-2024	7	--
Conditional Use Permit Application	04-02-2024	7	--
Property Owner Authorization	04-02-2024	7	--
Site Plans (24" x 36")	04-02-2024	3	Stonefield Engineering & Design
Site Plan (11" x 17")	04-02-2024	7	Stonefield Engineering & Design
Waiver Justification Memorandum	04-02-2024	7	Stonefield Engineering & Design

Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Regards,

Joshua H. Kline, PE
Stonefield Engineering and Design, LLC

Giovanni Cesar
Stonefield Engineering and Design, LLC

Via FedEx and Email

The following is an itemized response to the comments contained within the City of Dover Technical Review Committee Review Letter dated March 28, 2024. For the sake of brevity, any comments that are statements of fact or have been previously addressed are not included in the response below:

Planning:

1. *Reminder: Impact fees, Water & Sewer investment fees*

   Noted as a condition of approval.

2. *Lot Merger for Parcels A and B*

   Noted as a condition of approval.

3. *To permit multiple site access points, include a note for the 400-foot, all-season sight distance. Reference §157-50C(1)*

   - *Please note from the referenced section: The provisions of this section apply to the construction, reconstruction, alteration, surfacing or resurfacing of any driveway which intersects with the right-of-way of any City-owned, City-maintained way and/or other private way.*

     The Waiver Justification Memorandum has been updated to include reference to the above section.

4. *Revise plans:*

   - *Reduce lighting and meet lighting standards. Current plan is too bright and extends beyond property boundary. Thank you for explanation of ATM security lighting. Please submit written permission from abutting property for lighting that extends beyond property boundary.*

     The Applicant will agree to engage with the abutting property owner to discuss the light trespass and provide documentation to the City. It should be noted that the neighboring property has a series of area lights along the property line that spillover onto the Applicants property and the minimal spillage proposed as part of the application will have no adverse impact on the adjacent commercial property.

     Alternatively, the Applicant would propose a solid fence to prevent spillage if the Board feels that this would be the preferred solution to eliminate spillage on-site.

   - *For the parking CUP, indicate the additional chargers as well as pervious area to ensure the criteria have been met*

     The Site Plan (Sheet C-4) has been revised to include a Conditional Use Permit Requirement table and confirm that the additional charges and pervious pavement requirements are met.

   - *Remove signage as that's an administrative decision (directional signs OK to stay on plan). Including on zoning note and box on elevations.*

     The Site Plan (Sheet C-4) has been revised to remove reference to signage. The colored elevations have been revised to remove the placeholder boxes.

   - *Revise "Brook Rd" on elevations*

The colored elevations have been revised to note Indian Brook Road.

Engineering:

Sheet C-4:

1. *Please identify location of ADA sign for EV charging station. Recommend it indicate to drivers to use that space last.*

   The Site Plan (Sheet C-4) has been revised to propose the location of the ADA sign for the EV charging station on the central bollard at the top of the parking space.

Sheet C-6:

1. *The water service for the existing building is only a 1-inch line. Is that sufficient to serve the building?*

   During the 03/28/2024 TRC meeting, discussions with Ken Mavrogeorge confirmed that the 1-inch domestic water line is sufficient.

Fire/Inspection Services:

1. *Sheet E-3 T-1 template turning to right is not part of a compliant access road with a 12' wide lane. Revise as required*

   During the 03/28/2024 TRC meeting, discussions with Jim Maxfield took place to discuss the compliance of the turning movement and template provided and it was agreed upon that further revisions were not required.

2. *Clarify Electrical Service location- also see floor plan*

   The Utility Plan (Sheet C-6) was revised to propose an updated electric meter location and associated conduit run. An updated architectural floor plan has been included in the resubmission package to provide more information pertaining to the electric equipment proposed.

3. *Update floor plan to reflect changes*

   An updated architectural floor plan has been included in the resubmission package to provide more information pertaining to the electric equipment proposed.

4. *Discuss EV charging detail be placed within plan set*

   The Construction Details (Sheet C-16) has been revised to provide an EV charging detail.

5. *Provide Use Last EV charging sign on plan set and provide sign detail on detail sheet*

   The Construction Details (Sheet C-16) has been revised to provide a 'Use Last' accessible EV parking sign detail.

STONEFIELD

April 2, 2024

Waiver Request Summary
Site Review Application (SITE-2023-0011)
Condition Use Permit (CUP)
Proposed Chase Bank with Drive-Up ATM
Map: 38, Lots 15A & 15B
1-3 Webb Place
City of Dover, Strafford, New Hampshire

On behalf the Applicant, Stonefield Engineering and Design, has prepared the following Waiver Justification Summary in accordance with Chapter 153, Section 21 of the 'Site Review Regulations' to outline the waivers associated with the application and provide support for the granting of the waivers.

Please see below for a summary of the waivers associated with the application and associated justification. The granting of the associated waivers complies with City of Dover Site Review Regulations and the granting of the requested waivers would not create any detrimental effects to the surrounding properties, the community, and/or the City. It should be noted the Applicant has worked with the Technical Review Committee as well as the design team professionals to minimize waivers associated with the application (previous submission included five waivers for reference).

1. ***Section 153-14(E)(2)(b) Parking Area Lighting – Uniformity Ratio shall not be greater than 6:1***
   The Applicant is seeking a waiver to permit a uniformity ration of 11.2:1 whereas 6:1 is the requirement. The waiver is being requested by having to maintain security light-level standards within 50-feet of the drive-up ATM and ATM vestibule, and accessible path in order to ensure compliance with Chase's security standards and industry requirements to ensure safety on-site. The intent of the uniformity ratio is to minimize the hot spot effect on standard parking lot applications, however as this is a banking use it is critical to provide areas of enhanced lighting for safety and security purposes.

   Strict conformance with this standard creates an unnecessary hardship for the Applicant and would be counterintuitive to the intent of the requirement as it would result in an unnecessarily bright parking lot. The proposed lighting design meets the intent of the requirement overall and will not have an adverse impact on the neighboring properties and/or the community. It should also be noted the project is surrounded by commercial uses and no impact to residents would result in the granting of the waiver.

2. ***Section 153-14(E)(2)(b) Parking Area Lighting – Minimum Illumination Level***
   The Applicant is seeking a waiver to permit a minimum illumination level of 1.0 FC within the darkest spot of parking spaces whereas 0.3 FC to 0.5 FC is required. The waiver is being requested by having to maintain security light-level standards for the drive-up ATM and ATM Vestibule, and the accessible path in order to ensure compliance with Chase's security standards and industry requirements to ensure safety on-site. The intent of the requirement is to set a minimum illumination for various uses

parking lots, however as noted above given this is a banking use it is critical to provide adequate lighting for security and safety purposes.

Strict conformance with this standard creates an unnecessary hardship for the Applicant and would be counterintuitive to the intent of the requirement as it would result in the Applicant forcing a parking space to be inadequately lit and would further intensify the relief associated with the uniformity ratio. The proposed lighting design meets the intent by having parking areas on-site not unnecessarily lit and will not have an adverse impact on the neighboring properties and/or the community.

3. ***Section 157-50(C)(1) Driveways – All-Season Sight Distance***

The Applicant has included this waiver request from Chapter 157 'Land Subdivision Regulations' in order to ensure a thorough application has been presented to the Planning Board. In accordance with Section 157-50(D) the Community Services Director has the ability to waive strict compliance with this section of the regulations. The Application proposes to reutilize the existing driveway location on-site and proposes a new 'right-in only' driveway along Webb Place. The driveways comply with all applicable requirements of Chapter 153 'Site Review Regulations' including driveway separation standards.

This subject property is a unique parcel consisting of a curved frontage along Webb Place anchored by a signalized intersection with Central Avenue at one end and a stop-controlled intersection with Webb Place and the existing shopping center, and Webb Place being a dead-end roadway. The project does not have direct access from Central Avenue.

The goal of the driveway design was to look to provide safe vehicular access for customers, for the public using the surrounding roadways, and to enhance emergency vehicle access while introducing improvements to better serve the area. The application proposes to keep the existing driveway furthest from the existing signalized intersection which is ideally positioned to help facilitate the egress from the site and proposes a second / new 'right-in only' driveway along Webb Place which it is seeking a waiver to allow. The 'right-in only' driveway is helpful to pull customers into the site to assist with customers exiting the site and utilizing Webb Place, and allows for better access/circulation of the City Fire apparatus. As the new driveway is restricted to 'right-in only' it does not introduce any additional unsafe movements on Webb Place.

Given the unique lot geometry, proximity to a major signalized intersection, uniqueness of the surrounding roadway network, and that the Applicant is only seeking a 'right-in only' driveway the granting of this waiver would still properly carry out the spirit and intent of the requirement. The proposal to reutilize the existing driveway location and provide an additional right-in only driveway will not have an adverse impact on the neighboring properties and/or the community.

Lighting Design Support Summary:

In support of the lighting waivers highlighted above please refer to the enclosed table which outlines the minimum illumination standards provided by Illuminating Engineering Society of North America (IESNA) resources in comparison to the Chase Banks Physical Security Illumination Standards along with the proposed light levels. This is an important reference to highlight the design intent of the lighting and to showcase the standards we are seeking a waiver from do align with industry standards and state laws for financial institutions and ATMs.

It also includes a summary of ATM lighting standards from states across the country who regulate Automated Teller Machine (ATM) and Financial Institution (Bank) security lighting to ensure proper security lighting and public safety is met on-site. It can be seen the Chase's Physical Security Illumination Standards and the proposed lighting associated with the project align with Illuminating Engineering Society of North America (IESNA) recommendations as well as security lighting standards across the country.

Additionally based on the Illuminating Engineering Society of North America (IESNA) 'Lighting for Parking Facilities' it is recommended for all parking lots for any activity level (not for security purposes) have maintained minimum illuminance of 2 FC with a uniformity ratio of 15:1. The proposed light levels being requested seem higher when isolated on paper as the pedestrian areas, parking lots, and driveway illumination levels are increased by the necessary security lighting requirements. The proposed lighting on-site is consistent with industry standards and state regulations across the country and is necessary to ensure proper safety across the site.

In conclusion the granting of the associated design waivers(s) will not have any detrimental impact on the surrounding properties, the community, and/or the City of Dover. The proposed redevelopment project provides a great opportunity to redevelop a compromised site located at a highly visible and desirable intersection within the City.

Table 1: Summary of ATM Lighting Standards

Security Zone (From ATM or Vestibule Entrance)	5 FT RADIUS	30 FT RADIUS	50 FT RADIUS	60 FT RADIUS	Pedestrian Path and Parking Ares
	Min. Illuminance (FC) Measured Height	*Min. Illuminance (FC) Measured Height*	*Min. Illuminance (FC) Measured Height*	*Min. Illuminance (FC) Measured Height*	*Min. Illuminance (FC) Measured Height*
The Lighting Handbook (IESNA 10th Edition)	20 FC (ATM) 4 FC (Door) At 3 FT	--	--	--	4 FC At 3 FT
Guide For Security Lighting for People, Property, and Critical Infrastructure (IESNA Latest)	10 FC At 5 FT	--	--	3 FC At Grade	3 FC (Parking) 2 FC (Pedestrian) At 3 FT
Chase Security Standards	10 FC At 3 FT	--	2 FC At 3 FT	--	2 FC At 3 FT
Regulated States (*) • *New York* • *California* • *District of Columbia* • *Florida* • *Georgia* • *Illinois* • *Louisiana* • *Maryland* • *Nevada,* • *New Jersey* • *New York* • *Oregon* • *Texas* • *Washington* • *Alabama* • *Connecticut* • *Kansas* • *Kentucky* • *Massachusetts* • *Montana* • *Missouri* • *Rhode Island* • *Virginia*	10 FC At 3 FT	2 FC At 3 FT	2 FC At 3 FT	2 FC (Parking) At 3 FT	--

(*) Laws or regulation may vary state to state, the following table is a compilation of most common standards. For reference New York State takes measurements at 5-feet (more conservative).

STONEFIELD

June 16, 2023
Revised: March 14, 2024

City of Dover
Planning Board
City Hall
288 Central Avenue
Dover, NH 03820

RE: Traffic & Parking Assessment Report
Proposed Chase Bank with Drive-Up ATM
1-3 Webb Place
Map 38, Lots 15A & 15B
City of Dover, Strafford County, New Hampshire
SE&D Job No.: BOS-220137

Dear Board Members:

Stonefield Engineering and Design, LLC ("Stonefield") has prepared this analysis to examine the potential traffic and parking impacts of the proposed bank with drive-up ATM on the adjacent roadway network. The subject property is located at the northwesterly quadrant of the intersection of Central Avenue (NH Route 9) and Webb Place in the City of Dover, Strafford County, New Hampshire. The subject property is designated as Map 38, Lots 15A and 15B as depicted on the City of Dover Tax Map. The site has approximately 160 feet of frontage along Central Avenue and approximately 390 feet of frontage along Webb Place. The existing site contains a one (1)-story building operating with various office and personal service uses. The existing access is provided via one (1) full-movement driveway on Webb Place.

Under the proposed development program, the existing structure would be razed and an approximate 3,330-square-foot Chase bank with drive-up ATM would be constructed on the subject property. The existing full-movement driveway on Webb Place would be maintained and improved upon redevelopment, and one (1) additional right-ingress only driveway is proposed on Webb Place along the southerly property extent.

Existing Conditions

The subject property is located at the northwesterly quadrant of the intersection of Central Avenue (NH Route 9) and Webb Place in the City of Dover, Strafford County, New Hampshire. The subject property is designated as Map 38, Lots 15A and 15B as depicted on the City of Dover Tax Map. The site has approximately 160 feet of frontage along Central Avenue and approximately 390 feet of frontage along Webb Place. Land uses in the area are primarily commercial and residential.

Central Avenue (NH Route 9) is classified as a minor arterial roadway and is under the jurisdiction of the City of Dover. The roadway generally provides two (2) lanes in each direction of travel, intermittently divided by concrete medians or two (2)-way left turn lanes, has an Average Annual Daily Traffic (AADT) of approximately 22,429 vehicles (Source: NHDOT), and has a posted speed limit of 30 mph. Along the site frontage, curb and sidewalk are provided along both sides of the roadway, shoulders are provided along both sides of the roadway, and on-street parking is not permitted along either side of the roadway. Central Avenue provides mobility throughout the City of Dover and connection to major thoroughfares such as NH Route 108 for primarily commercial and residential uses along its length.

Webb Place is a local roadway under the jurisdiction of the City of Dover. Along the site frontage, the roadway provides one (1) lane of travel in each direction and does not have a posted speed limit. Along the site frontage, curbs are provided intermittently along both sides of the roadway, sidewalk is provided intermittently along the southerly side of the roadway, shoulders are not provided along either side of the roadway, and on-street parking is not permitted along either side of the roadway. Webb Place provides connection to the Central Avenue roadway network for the various commercial, residential, and office uses along its length.

Central Avenue and Webb Place intersect to form a signalized four (4)-leg intersection. The northbound approach of Central Avenue provides one (1) exclusive left-turn lane, three (3) exclusive through lanes, and one (1) exclusive right turn lane, and the southbound approach of Central Avenue provides one (1) excusive left-turn lane, two (2) exclusive through lanes, and one (1) exclusive right-turn lane. The eastbound approach of Webb Place provides one (1) exclusive left-turn lane and one (1) shared through/right-turn lane. The westbound approach of the intersection, which is designated as Weeks Lane, provides one (1) exclusive left-turn lane and one (1) shared left-turn/through/right-turn lane. Crosswalks, pedestrian ramps, and pedestrian signals with pushbuttons are provided across all legs of the intersection.

The COAST Bus system provides several bus routes that offer public transportation opportunities throughout the City of Dover, including the Route 12 service line for which a bus stop is located approximately one (1) quarter mile from the subject site at the intersection of New Rochester Road (NH Route 108) and Willand Pond Road. The Route 12 line is a regional service that provides connections throughout the City of Dover and the neighboring cities of Somersworth and Rochester. Additional routes run proximate to the site, including the Route 1 and Route 33 service lines; however, bus stops for these lines are not provided within one (1) quarter mile radius of the subject site. Please note that given the characteristics of the proposed development, it is anticipated that the majority of site-generated trips will be comprised of vehicle trips. As such, the analysis contained herein conservatively assumes all vehicle trip generation to and from the site would be vehicular.

Trip Generation

Trip generation projections for the proposed development were prepared utilizing ITE's Trip Generation Manual, 11th Edition. Trip generation rates associated with Land Use 912 "Drive-in Bank" were cited for the 3,330-square-foot bank with drive-up ATM. **Table 1** provides the typical weekday morning peak hour, weekday evening peak hour, Saturday midday peak hour, and weekday daily trip generation volumes associated with the proposed development.

TABLE 1 – PROPOSED TRIP GENERATION

Land Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour			Weekday Daily		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
3,330 SF Drive-in Bank *ITE Land Use 912*	19	14	33	35	35	70	45	43	88	167	167	334

It is important to note that the subject site is developed with a one (1)-story building containing various office and personal service uses which presently generate traffic to and from the site. Therefore, it is reasonable to consider the net trip generation impacts associated with the property based on the existing and proposed uses. Accordingly, trip generation estimates for the existing approximately 6,444-square-foot building were prepared utilizing ITE data for Land Use 710 "General Office Building." **Table 2** shows the net vehicular trip generation of the existing development and proposed development for the typical weekday and during the weekday morning, weekday evening, and Saturday midday peak hours.

TABLE 2 – NET TRIP GENERATION

Land Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour			Weekday Daily		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Existing 6,444 SF General Office Building *ITE Land Use 710*	14	2	16	3	14	17	2	1	3	53	54	107
Proposed 3,330 SF Drive-in Bank *ITE Land Use 912*	19	14	33	35	35	70	45	43	88	167	167	334
NET TOTAL	**5**	**12**	**17**	**32**	**21**	**53**	**43**	**42**	**85**	**114**	**113**	**227**

As shown in **Table 2**, the proposed redevelopment is expected to result in a marginal increase in site-generated trips throughout the typical weekday and during the study peak hours. Please note that net trip generation credits were not applied herein to provide a conservative analysis.

As stated within Chapter 10 of ITE's Trip Generation Handbook, 3rd Edition, there are instances when the total number of trips generated by a site is different from the amount of new traffic added to the street system by the generator. Drive-in banks are specifically located on or adjacent to busy streets to attract motorists already on the roadway. Therefore, the proposed bank development would be expected to attract a portion of its trips from the traffic passing the site on the way from an origin to an ultimate destination. These trips do not add new traffic to the adjacent roadway system and are referred to as "pass-by" trips.

Based upon the published ITE data for Land Use 912 "Drive-in Bank" 29%, 35%, and 38% of the site-generated traffic during the weekday morning, weekday evening, and Saturday midday peak hours, respectively, is comprised of pass-by traffic. **Table 3** shows the additional site generated traffic for the proposed development in terms of new and pass-by traffic.

TABLE 3 – PROPOSED TRIP GENERATION – NEW & PASS-BY TRIPS

	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
"New" Trips	15	10	25	23	23	46	29	27	56
"Pass-By" Trips	4	4	8	12	12	24	16	16	32
TOTAL	**19**	**14**	**33**	**35**	**35**	**70**	**45**	**43**	**88**

As shown in **Table 3,** the proposed development is expected to generate 33, 70, and 88 total trips during the weekday morning, weekday evening, and Saturday midday peak hours, respectively, inclusive of pass-by trips. Based on Transportation Impact Analysis for Site Development published by ITE, a trip increase of less than 100 vehicle trips would likely not change the level of service of the adjacent roadway system or appreciably increase the volume-to-capacity ratio of an intersection approach. Further, based on a review of the existing traffic volumes along Central Avenue proximate to the subject site, the proposed development would result in an approximate 1.5-2% increase in traffic volumes during typical weekday peak hours, which is a marginal increase that is not anticipated to be perceptible to motorists traversing the roadway network. As such, the proposed development is not anticipated to significantly impact the operations of the adjacent roadway network.

Based on a review of existing traffic patterns along the adjacent roadway network and the access management plan for the development, vehicle trips are anticipated to access the site under the following distributions:

- Approximately 18% destined to/from north via New Rochester Road
- Approximately 24% destined to/from south via Central Avenue
- Approximately 26% destined to/from east via High Street
- Approximately 32% destined to/from west via Indian Brook Road

Given that the site-generated trips are expected to be distributed along several high-traffic-volume thoroughfares, the proposed development is not anticipated to have a significant adverse impact on the operations of the adjacent roadway network.

Site Circulation/Parking Supply

A review was conducted of the proposed Chase Bank with a drive-up ATM using the Site Plan prepared by Stonefield, dated March 14, 2024. In completing this review, particular attention was focused on the site access, circulation, and parking supply.

Vehicular access to the site will be provided via one (1) existing full-movement driveway and one (1) new right-ingress only driveway along Webb Place. The bank building will be situated on the central portion of the property with a drive-up ATM located along the northerly building facade. Counterclockwise vehicular circulation through the drive-up ATM will be facilitated via a 12-foot-wide drive-through lane and a 12-foot-wide bypass lane. The drive-through lane will provide storage space for three (3) vehicles without impacting on-site circulation, which is sufficient to support the anticipated demand. Off-street parking will be provided along the westerly and southerly building frontages. Two (2)-way vehicular circulation will be facilitated on site via 24-foot-wide drive aisles.

Regarding sight lines, the City of Dover Land Subdivision Regulations state that an all-season sight distance of 400 feet in each direction should be accommodated at each driveway. It is important to note that the existing driveway along Webb Place will be maintained and therefore will continue to operate adequately. As the proposed new driveway will operate with right-ingress only access, intersection sight lines are not applicable since there will be no conflicting movements with through traffic along Webb Place. It is important to note that as the proposed development is located adjacent to the signalized intersection of Central Avenue and Webb Place, motorists exiting the site to return to Central Avenue and connecting thoroughfares would complete their turning movements under a protected signal phase, thereby improving safety of access.

Regarding parking requirements, the City of Dover Site Review Regulations require a maximum of one (1) parking space per 275 square feet of gross leasable area for retail/service uses. For the proposed 3,330-square-foot development, this equates to a maximum of 12 spaces. The proposed development would provide 20 spaces, inclusive of two (2) ADA-accessible parking spaces. It is important to note that the maximum parking requirements cited within the Site Review Regulations are intended to serve as a guide for the Director of Planning and Community Development, who will determine the appropriate minimum and maximum parking requirements based on the characteristics and needs of each development.

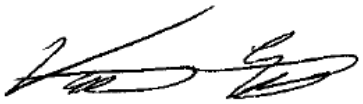
The parking supply was evaluated with respect to data published within the ITE's Parking Generation, 5th Edition, for Land Use 912 "Drive-in Bank." The 85th percentile parking demand rate during the peak weekday period for Land Use 912 "Drive-in Bank" is 6.0 vehicles per 1,000 square feet of gross floor area. For the 3,330-square-foot bank development, this equates to 20 vehicles. As such, the maximum requirement of 12 spaces is not expected to be adequate to support the proposed development, and the proposed parking supply of 20 spaces is appropriate for the development and would be sufficient to support the anticipated parking demand of the site.

Conclusions

This report was prepared to examine the potential traffic impact of the proposed bank with drive-up ATM. The analysis findings, which have been based on industry standard guidelines, indicate that the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. The site driveways and on-site layout have been designed to provide for effective access to and from the subject property, and the parking supply would be sufficient to support this project.

Please do not hesitate to contact our office if there are any questions.

Best regards,



Joshua H. Kline, PE
Stonefield Engineering and Design, LLC

Victoria E. Epstein
Stonefield Engineering and Design, LLC

EVERSOURCE ENERGY

February 14, 2024

1700 Lafayette Road
Portsmouth, NH 03801

Trevor S Emmons
603-332-7515
Trevor.emmons@eversource.com

Joshua Kline
Stonefield Engineering & Design
120 Washington Street
Salem, MA 01970

Dear Joshua Kline:

I am responding to your request to confirm the availability of electric service for the proposed 1-3 Webb Place project being constructed for/by J.P. Morgan Chase.

The proposed project consists of a 1-story building with 3,330 s/f of retail/office space at the ground level and parking below grade. The proposed development will be constructed along Webb Place & Central Avenue.

The developer will be responsible for the installation of all underground facilities and infrastructure required to service the new building. The service will be as shown on attached marked up Utility Plan C-6. The proposed building service will be fed from P. 7/2X to a new pad-mounted transformer as depicted on utility plan C-6. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed underground/overhead facilities listed above.

This letter serves as confirmation that Eversource has sufficient capacity in the area to provide service to this proposed development. The cost of extending service to the aforementioned location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

The attached drawing titled "Utility Plan" dated 12/28/2023, shows transformer locations to service your proposed project.

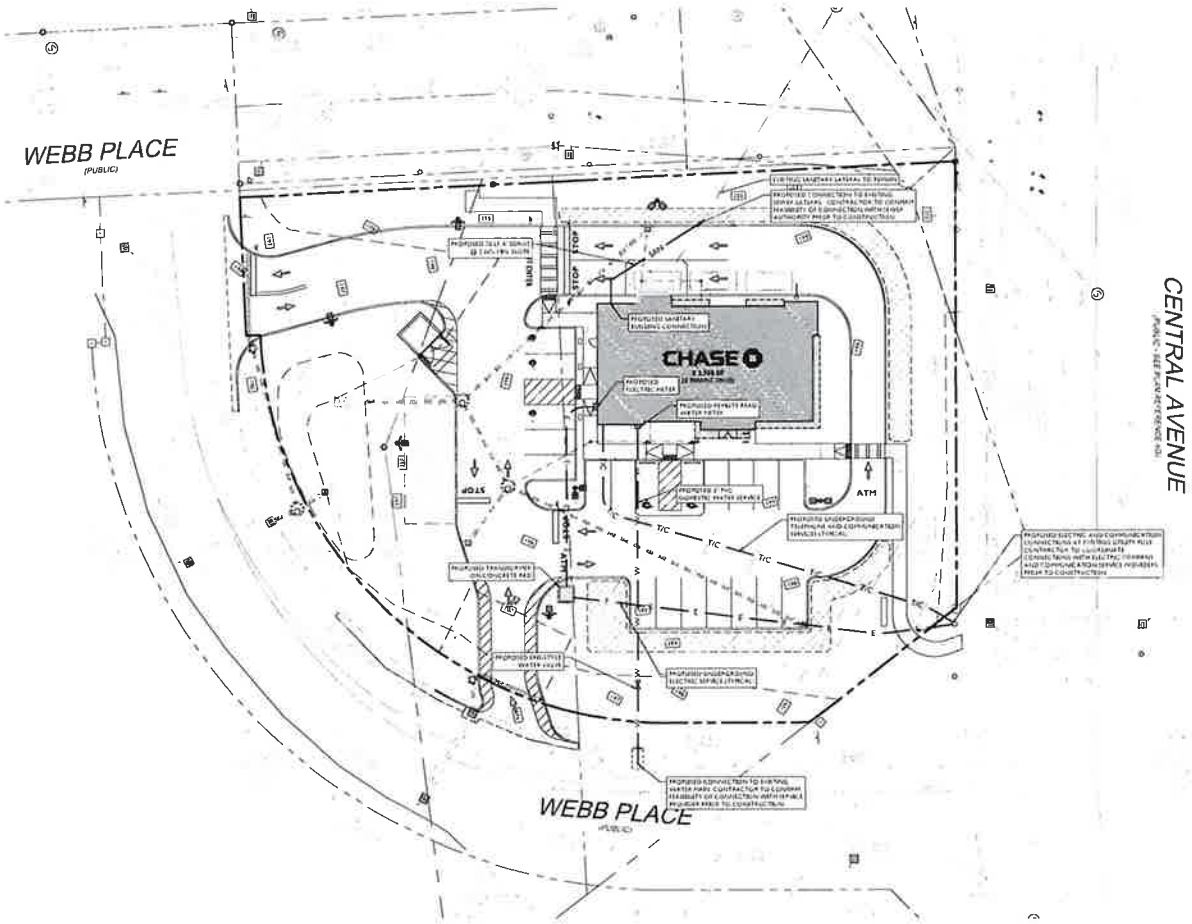
Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2).

If you require additional information or I can be of further assistance please do not hesitate to contact me at our Rochester Office, 603-332-7515

Respectfully.

Trevor Emmons
Eastern Regional Engineer, Eversource

cc: Michael J. Busby, PE, Eastern Regional Engineering and Design Manager, Eversource
Thomas Boulter, Eastern Region Operations Manager, Eversource
Nickolai Kosko, Field Supervisor, Electric Design, Eversource



SYMBOL	DESCRIPTION
	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E/T/C	PROPOSED ELECTRIC/CABLE/DATA CONDUITS
T/C	PROPOSED DATA CONDUITS
E	PROPOSED ELECTRIC CONDUITS
OH	PROPOSED OVERHEAD WIRES
G	PROPOSED GAS LINE
	PROPOSED VALVE
	PROPOSED SANITARY MANHOLE / CLEANOUT

THE CONTRACTOR SHALL START CONSTRUCTION OF ALL GRAVITY SANITARY AND STORMWATER INFRASTRUCTURE AT THE DOWNSTREAM CONNECTION POINT (I.E. LOWEST INVERT) AND WORK UPWARDS!!!

PRIOR TO THE START OF CONSTRUCTION (RECOMMENDED 30 DAYS PRIOR) THE CONTRACTOR SHALL PERFORM EXPLORATORY TEST PITS AT LOCATIONS OF UTILITY / DRAINAGE CROSSINGS OR CONNECTIONS WITH EXISTING UTILITY OR STORMWATER INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ANY NECESSARY ROAD OPENING PERMITS TO PERFORM AND EXCAVATORY WORK. SHOULD A CONFLICT BE DISCOVERED WITH THE INFORMATION CONTAINED WITHIN THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN LLC IN WRITING

DRAINAGE AND UTILITY NOTES

1. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY (DIG SAFE) FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
2. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGES TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
4. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES IF THE SEPARATION CANNOT BE PROVIDED A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN LLC.
5. ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES IF THE SEPARATION CANNOT BE PROVIDED A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN LLC.
6. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN LLC IN WRITING.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE CONVENING AUTHORITY.
8. CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UPGRADIENT.
9. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
10. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
3	12/08/2025	JW	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2025	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/15/2025	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 28, LOTS 116 & 118
0 WEBB PLACE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220131

TITLE:

UTILITY PLAN

DRAWING

C-6

STONEFIELD

September 29, 2023
Revised: March 14, 2024

City of Dover
Planning Board
City Hall
288 Central Avenue
Dover, NH 03820

RE: Chase Bank Parking Operations Memorandum
1-3 Webb Place
Map 38, Lots 15A & 15B
City of Dover, Strafford County, New Hampshire
SE&D Job No.: BOS-220137

Dear Board Members:

Stonefield Engineering and Design ("Stonefield") has prepared this assessment in connection with the proposed 3,330-square-foot Chase bank with drive-up ATM to identify typical parking supplies for Chase banks. The City of Dover requires a maximum of one (1) parking space per 275 square feet of gross leasable area for retail/service uses. For the proposed 3,330-square-foot Chase bank, this equates to a maximum of 12 required parking spaces. The site would provide 20 total parking spaces, inclusive of two (2) ADA-accessible parking spaces, and therefore the development exceeds the maximum parking requirement. However, it is important to note that in accordance with Chapter 153, Article XIV "Site Design and Development Criteria" of the City of Dover Planning Board Regulations, a Conditional Use Permit (CUP) may be granted by the Planning Board for an increase in number of parking spaces provided that the project complies with the various outlined standards. As such, the analysis contained herein provides justification for a CUP for the requested increase in parking spaces based on these regulations.

ITE Parking Generation Manual, 5th Edition

The proposed parking supply was evaluated with respect to data published within the ITE's Parking Generation, 5th Edition, for Land Use 912 "Drive-in Bank." The 85th percentile parking demand rate during the peak weekday period for Land Use 912 "Drive-in Bank" is 6.0 vehicles per 1,000 square feet of gross floor area. For the 3,330-square-foot bank development, this equates to 20 vehicles. As such, the maximum requirement of 12 spaces is not expected to adequately support the proposed development, whereas the proposed parking supply of 20 spaces is more appropriate and would be sufficient to support the anticipated parking demand of the development.

Parking Utilization at Study Chase Bank Locations

In order to project the parking demand of the proposed Chase bank, parking utilization counts and observations were performed at an existing approximately 4,750-square-foot Chase bank located in Orangeburg, New York and operating with 45 off-street parking spaces. The study location was selected as it operates along roadways with comparable Average Annual Daily Traffic (AADT) to that along Central Avenue and operates in a region with a similar population as the City of Dover. It should be noted that the study location had drive-through lanes for ATM services similar to the proposed Chase bank.

The parking utilization counts were conducted at the study location on Friday, September 6, 2019, from 10:00 a.m. to 1:00 p.m. and 2:00 p.m. to 6:00 p.m. which is when the existing bank is experiencing peak traffic

conditions. The parking utilization data was collected in 15-minute intervals and analyzed to identify the peak parking utilization during the study period.

Based on a review of the parking utilization data, the critical existing peak parking demand at the Orangeburg location occurred during the evening peak time period at 3:30 p.m. with a total of 34 parked vehicles. The capacity and utilization observed at each study location during the critical peak period is summarized in **Table 1**.

TABLE 1 – OBSERVED EXISTING PEAK PARKING UTILIZATION

	Parking Supply	Peak Parking Demand	Peak Utilization	Reserve Capacity
Chase Orangeburg Weekday Evening Peak Period (3:30 p.m.)	45	34	76%	11

The peak parking utilization observed at the 4,750-square-foot Orangeburg location yields a parking demand rate of 7.16 vehicles per 1,000 square feet of gross floor area. This rate was used to project the parking demand of the proposed 3330-square-foot Chase bank, which was then compared to the parking rate published by ITE and the City of Dover parking requirement equivalents. These projections are summarized in **Table 2**.

TABLE 2 – PARKING DEMAND COMPARISON

	Parking Demand Rate (Per 1,000 SF of GFA)	Projected Peak Parking Demand for Proposed Dover Chase Bank
Observed Peak Parking Demand at Orangeburg Chase Bank Location	7.16	24
Peak Parking Demand ITE Land Use 912 "Drive-in Bank"	6.00	20
City of Dover Maximum Parking Requirement	**3.60**	**12**

As shown in **Table 2**, the proposed 3,330-square-foot Chase bank would be expected to generate a peak parking demand of approximately 24 vehicles. As such, the peak observed parking demand at the study locations is generally greater than the proposed parking supply of 20 spaces and both the peak observed parking demand and the parking rate associated with the proposed parking supply presented in **Table 2** are significantly greater than the parking rate as per the City of Dover's maximum parking requirement. Therefore, the parking utilization data supports the need to provide a CUP for an increase in parking supply that exceeds the maximum as outlined in the City of Dover Zoning Ordinance.

Parking Supply for Typical Chase Bank Locations

To examine the subject application with respect to the proposed parking supply, various Chase bank locations that Stonefield has consulted on were reviewed. Based on the review, the proposed parking supply is typical in comparison to other Chase bank locations in the general New England region. **Table 3** provides a summary of the location, size, and parking supply of several Chase bank developments in New England and upstate New York which are currently approved, under construction, or completed and fully operational.

TABLE 3 – CHASE BANK PARKING SUPPLIES

Chase Bank Address	Municipality / State	Adjacent Roadway AADT	Municipal Population	Building Size (SF)	Parking Supply	Parking Supply Rate (Per 1,000 SF)
520 Main Street (U.S. Route 1)	Saco / ME	24,180	20,872	4,048	35	8.65
20 Park Avenue	Clifton Park / NY	20,643	38,112	4,104	31	7.55
190 Buckland Road	Windsor / CT	18,500	26,783	3,470	27	7.78
1151 Silas Deane Highway	Wethersfield / CT	20,100	27,298	3,470	26	7.49
333 NY-303	Orangeburg / NY	19,730	48,141	4,750	45	9.47
Average of Existing Chase Bank Locations				**3,968**	**33**	**8.19**
Proposed Chase Bank		**22,429**	**33,416**	**3,330**	**20**	**6.01**

As shown in **Table 3**, the review of Chase bank locations in regions with comparable population and average daily traffic patterns within New England and upstate New York shows that Chase bank locations typically provide a minimum supply of 25 parking spaces, with as many as 45 parking spaces provided. An average parking supply of 33 spaces was calculated for the reviewed Chase Bank locations of comparable size, which equates to an average parking supply rate of 8.19 spaces per 1,000 square feet of gross floor area. Applying this rate to the proposed 3,330-square-foot development yields a parking supply of 27 spaces. Therefore, the proposed parking supply of 20 parking spaces for the subject application is lower than the parking supply typically provided for similar existing operations.

On-Street & Neighboring Parking Capabilities

It is important to note that on-street parking is not permitted along Central Avenue or Webb Place within proximity of the subject site. Therefore, a combination of on- and off-street parking is not an adequate option to support the proposed development. The proposed parking supply of 20 spaces would be a reduction from the 45 spaces currently provided for the existing commercial building on site, which will be closed and razed under the proposed condition. It should also be noted that the proposed parking supply would be constructed without impacting the neighboring properties. Further, by containing vehicles generated by the bank use entirely on the subject property, potential vehicle and parking conflicts that may arise through shared parking arrangements with adjacent developments would be avoided. As such, the proposed increase in parking spaces would not have a detrimental effect on surrounding properties.

Additional Parking Design & Construction

It is important to note that in accordance with the aforementioned City of Dover requirements for a CUP, the eight (8) parking spaces proposed in excess of the 12-space requirement will be constructed with pervious materials, and the design of the pervious pavement area will adhere to the standards outlined in the New Hampshire Stormwater Manual. As such, the proposed design satisfies the City of Dover's CUP requirement pertaining to the design and construction of additional parking storage areas.

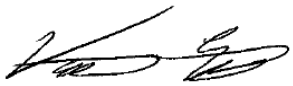
Electric Vehicle Requirements

In accordance with the aforementioned City of Dover requirements for a CUP, the proposed development will provide three (3) parking spaces with Electric Vehicle Supply Equipment (EVSE), which meets the requirement that 2.0% of the total number of new parking spaces provide Electric Vehicle Charging Readiness for non-residential projects, or the equivalent of one (1) space, plus two (2) additional EVSE spaces required for applications requesting a CUP for an increase in parking spaces. The EVSE parking spaces will be constructed in compliance with the standards outlined in the City of Dover Planning Board Regulations, thereby satisfying the criteria outlined pertaining to EVSE for a CUP for an increase in parking supply.

Conclusion

This report was prepared to evaluate the parking supply of the proposed Chase bank with drive-up ATM and provide justification that a CUP for an increase in parking supply should be granted for the proposed application. Based on industry data and typical Chase bank operations, the proposed parking supply of 20 parking spaces is generally below the range typically provided for Chase banks of comparable size and would be necessary to support the parking demand of their customer base. The parking utilization data support the need to provide a parking supply that exceeds the maximum as outlined in the City of Dover Zoning Ordinance, and the parking supply provided is generally consistent with the anticipated peak demand.

Best regards,



Joshua H. Kline, PE
Stonefield Engineering and Design

Victoria E. Epstein
Stonefield Engineering and Design

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LAND USE AND ZONING

TAX MAP 38, LOTS 15A & 15B

COMMERCIAL DISTRICT (C) - SECONDARY GROUNDWATER PROTECTION DISTRICT

PROPOSED USE

BANK WITH DRIVE-THRU ATM — PERMITTED USE

ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	20,000 SF	42,879 SF (0.98 AC)	42,879 SF (0.98 AC)
MAXIMUM BUILDING COVERAGE	50%	15.0% (6,445 SF)	7.8% (3,330 SF)
MINIMUM FRONTAGE	125 FT	552.3 FT	552.3 FT
MINIMUM FRONT YARD SETBACK	30 FT	28.2 FT (EN)	50.0 FT
MINIMUM ABUT A STREET SETBACK	30 FT	24.0 FT (EN)	99.5 FT
MINIMUM SIDE YARD SETBACK	12 FT	N/A	N/A
MINIMUM REAR YARD SETBACK	15 FT	65.0 FT	39.4 FT
MINIMUM ACCESSORY SETBACK	10 FT	N/A	48.5 FT
MINIMUM PRINCIPAL BUILDING HEIGHT	40 FT	< 40 FT	26.8 FT
MINIMUM PARKING SETBACK	25 FT	3.8 FT (EN)	26.4 FT
MAXIMUM LOT COVERAGE	N/S	74.7% (32,020 SF)	52.5% (22,508 SF)

(EN) EXISTING NON-CONFORMITY

OFF-STREET PARKING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 153-14.D.(1)	MAXIMUM NUMBER OF PARKING SPACES: RETAIL/SERVICE USE: 1 SPACE PER 275 SF OF GLA (3,330 SF x (1 / 275)) = 12 SPACES	20 SPACES *
§ 153-14.D.(2)	MINIMUM NUMBER OF BICYCLE RACKS: 5% OF MAXIMUM PARKING SPACES PER TABLE (20 SPACES X 0.05) = 1 BIKE RACK	2 BIKE RACKS
§ 153-14.D.(3) & § 153-14.D.(5)	MINIMUM NUMBER OF ELECTRIC VEHICLE CHARGING SPACES: 2% OF NEW PARKING SPACES (20 SPACES X 0.02) = 1 EV CHARGING SPACES	1 EV SPACE
§ 153-14.D.(6).(a)	PARKING AREA DIMENSIONAL REQUIREMENTS: MINIMUM STALL WIDTH: 9 FT MINIMUM STALL LENGTH: 18 FT MINIMUM AISLE WIDTH: 22 FT	9 FT 18 FT 24 FT
§ 153-14.D.(6).(b)	MINIMUM WIDTH OF ACCESS AISLES: 24 FT	24 FT
§ 153-14.H.(1)	NUMBER OF DRIVEWAYS PER LOT: 1 DRIVEWAY PER 125 FT OF ROAD FRONTAGE: (552.3 FT / 125 FT) = 4 DRIVEWAYS MINIMUM DRIVEWAY SPACING FROM PUBLIC STREET INTERSECTIONS: (IN A 35 MPH POSTED SPEED LIMIT): 155 FT MINIMUM SPACING BETWEEN DRIVEWAYS: (IN A 35 MPH POSTED SPEED LIMIT): 155 FT	2 DRIVEWAYS 161 FT 173 FT

(*) A CONDITIONAL USE PERMIT IS REQUESTED FOR THE INCREASE IN PARKING SPACES, PER 153-14.D.(5).

CONDITIONAL USE PERMIT REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 153-14.D.(4)	THE ADDITIONAL VEHICLE STORAGE AREA FOR PARKING REQUESTED SHALL USE PERVIOUS MATERIALS: 8 PERVIOUS SPACES REQUIRED	8 PERVIOUS SPACES
§ 153-14.D.(5)	MINIMUM NUMBER OF ELECTRIC VEHICLE CHARGING SPACES: 2 FOR LOTS WHERE A CONDITIONAL USE PERMIT IS REQUESTED	2 EV SPACES

SNOW STORAGE CALCULATION

- PROPOSED PARKING LOT AREA = 16,912 SF
- REQUIRED SNOW STORAGE AREA = (16,912 SF x 0.10) = 1,691 SF
- PROPOSED SNOW STORAGE AREA = 2,107 SF

EXCESS SNOW TO BE REMOVED FROM SITE IF ON-SITE STORAGE AREAS ARE FILLED.

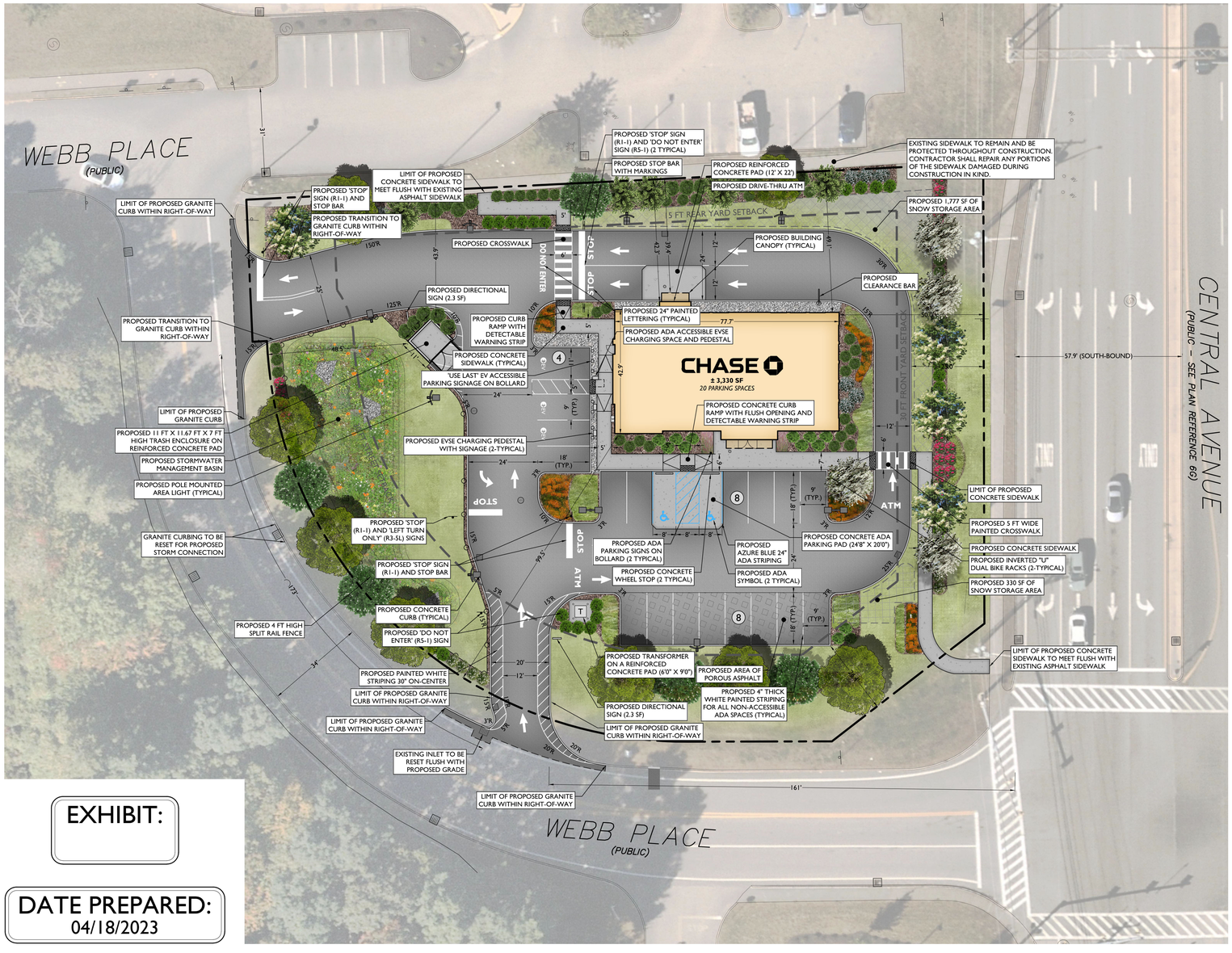


EXHIBIT:

DATE PREPARED:
04/18/2023

CITY OF DOVER NOTES

1. THE INTENT OF THIS PLAN IS TO CONSTRUCT A PROPOSED FREESTANDING BANK ON THE SUBJECT PROPERTY IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
2. OWNERS OF RECORD ARE:
   DOVER RETAIL MANAGEMENT LLC
   30200 TELEGRAPH ROAD
   BINGHAM FARMS, MICHIGAN 48025

   AUTHORIZED SIGNATURE
3. THE PARCELS ARE SHOWN AS LOTS NO. 15A & 15B, MAP 38 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.
4. THE SUBJECT PARCELS CONTAIN 0.98 ACRES OR 42,879 SQ. FT. AREA OF LAND.
5. TITLE REFERENCES FOR THE PROJECT PARCELS IS THE STRAFFORD COUNTY REGISTRY OF DEEDS, BOOK NO. 880, PAGE NO. 332; BOOK NO. 4917, PAGE NO. 381; BOOK NO. 3413, PAGE NO. 90; AND BOOK NO. 3413, PAGE NO. 94.
6. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY COLLIERS ENGINEERING DATED 12/23/2022.

A. PLAN TITLED "RW REALTY INC. PLAN OF LOTS A & B PLAZA DRIVE, DOVER, NEW HAMPSHIRE", DATED APRIL 1981, DRAWN BY G. L. DAVIS & ASSOCIATES, RECORDED IN THE S.C.R.D. PLAN NUMBER 178-8.
B. PLAN TITLED "SUBDIVISION LOT LINE RELOCATION PLAN FOR SOUTHWEST EQUITIES CORP", DATED JULY 2, 2001, DRAWN BY MILLETTE, SPRAGUE & COLWELL, INC. RECORDED IN THE S.C.R.D. PLAN NUMBER 67-11.
C. PLAN TITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE, LLC. & RW REALTY INC., DOVER, NEW HAMPSHIRE", DATED JUNE 14, 2006, DRAWN BY TRITECH CORP., RECORDED IN S.C.R.D. PLAN NUMBER 87-11.
D. PLAN TITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE LLC. AND RW REALTY INC., DOVER, NEW HAMPSHIRE", DATED JUNE 14, 2006, DRAWN BY TRITECH CORP., RECORDED IN THE S.C.R.D. PLAN NUMBER 87-12.
E. PLAN TITLED "SUBDIVISION PLAN, PRIME CIRCLE, LLC., DOVER, NEW HAMPSHIRE", DATED FEBRUARY 3, 2006, DRAWN BY TRITECH CORP., RECORDED IN THE S.C.R.D. PLAN NUMBER 87-13.
F. PLAN TITLED "ALTA-NSPS LAND TITLE SURVEY, PRIME CIRCLE, LLC., 11-17 WEBB PLACE, DOVER, NEW HAMPSHIRE, DATED MAY 3, 2017, DRAWN BY TRITECH CORP., RECORDED AT THE S.C.R.D. PLAN NUMBER 113-76.
G. PLAN TITLED "PLANS OF PROPOSED FEDERAL AID URBAN SYSTEM PROJECT AND FEDERAL AID PRIMARY PROJECT STP-X-027-1(34), N.H. PROJECT NO. 10023-E", DATED SEPTEMBER 14, 1994, DRAWN BY CARON ENGINEERING INC. ON RECORD WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
H. PLAN TITLED SUBDIVISION/LOT LINE RELOCATION PLAN FOR SOUTHWEST EQUITIES CORP", DATED JULY 10, 2001, DRAWN BY MILLETTE, SPRAGUE & COLEWELL, INC. RECORDED IN THE S.C.R.D. PLAN NUMBER 67-12.

7. REFER TO SURVEY REFERENCED ABOVE FOR APPLICABLE RIGHT-OF-WAY, CONSERVATION, SLOPE, CONSTRUCTION, POWER LINE, CROSS TRAVEL, OR OTHER EASEMENTS.
8. REFER TO THE TABLE OF LAND USE & ZONING HEREON FOR CURRENT ZONING DIMENSIONAL AND DENSITY REQUIREMENTS.
9. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY COLLIERS ENGINEERING & DESIGN DATED 09/28/2023 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.
10. SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA (COMMUNITY PANEL NUMBER 33017C0310E, EFFECTIVE DATE: SEPTEMBER 30, 2015).
11. AS-BUILT PLANS OF THE PROPOSED IMPROVEMENTS 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. 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 PLAN COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
12. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
13. THE SUBJECT PARCE IS SERVED BY MUNICIPAL WATER AND SEWER.
14. 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.
15. 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.
16. 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 ANY EARTH DISTURBING ACTIVITY OCCURS.
17. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
18. 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.
19. 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.
20. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM, SATURDAY AND SUNDAY 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 PLANNING DIRECTOR.
21. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
22. THE PROPOSED USE FOR THE SITE IS A BANK WITH A DRIVE-THRU ATM.
23. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
24. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
25. 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
26. 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.
27. 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.
28. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 153-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
29. TOPOGRAPHIC SURVEY PERFORMED BY COLLIERS ENGINEERING & DESIGN IN DECEMBER OF 2022 & SEPTEMBER OF 2023.
30. ELEVATIONS ARE BASED ON U.S.G.S. NVD 1988 DATUM.
31. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 45, ARTICLE I, SECTION 45-2 OF THE CODE OF THE CITY OF DOVER.
32. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
33. FIRE DEPARTMENT CONNECTION(S) SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13. ACCESS TO THE FDC SHALL MAINTAIN A CLEAR AND UNOBSTRUCTED PATH AT ALL TIMES.
34. 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.

SYMBOL	DESCRIPTION
	PROPERTY LINE
	SETBACK LINE
	SAWCUT LINE
	PROPOSED CURB
	PROPOSED FLUSH OPENING
	PROPOSED SIGNS / BOLLARDS
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED AREA LIGHT
	PROPOSED RETAINING WALL
	PROPOSED BUILDING DOORS
	PROPOSED FENCE
	PROPOSED POROUS ASPHALT
	PROPOSED SNOW STORAGE AREA

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
1	04/18/2024	MU	SITE PLAN RENDERING EXHIBIT REVISIONS
1	01/04/2024	MU	SITE PLAN RENDERING EXHIBIT

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE PLAN RENDERING EXHIBIT

CHASE
PROPOSED BANK WITH DRIVE-THRU ATM
TAX MAP 38 LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE:
SITE PLAN RENDERING EXHIBIT

DRAWING:
E-4

Z:\BOS\PROJECTS\2022\BOS-220137 CONSTANTS - 13 WEBB PLACE, DOVER, NH\CAD\EXHIBITS\RENDERING\2024-04-18_SITE_PLAN_RENDERING_EXHIBIT.DWG

SITE IMPROVEMENT PLAN

FOR

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B

1 - 3 WEBB PLACE

CITY OF DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE

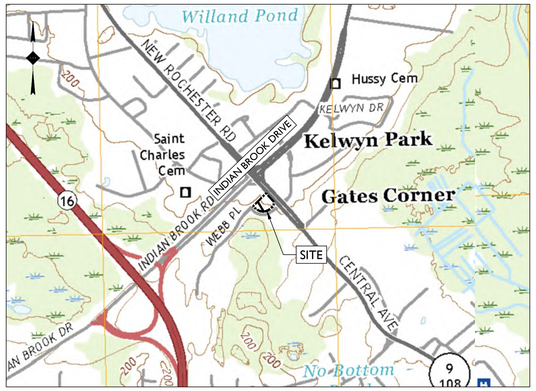
APPLICANT

CORE STATES GROUP
201 S. MAPLE AVENUE, AMBLER, PA 19002
C/O STONEFIELD ENGINEERING & DESIGN
120 WASHINGTON STREET, SUITE 201
SALEM, MA 01970
(617) 203-2076
JKLINE@STONEFIELDENG.COM

OWNER

DOVER RETAIL MANAGEMENT LLC
30200 TELEGRAPH ROAD
BINGHAM FARMS, MICHIGAN, 48025

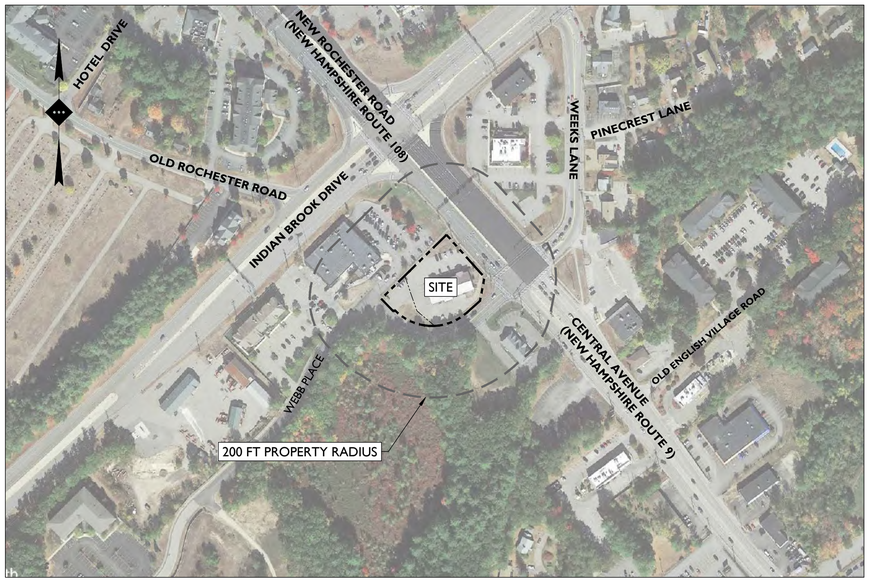
811 Know what's **below** **Call** before you dig.



SOURCE: UNITED STATES GEOLOGICAL SURVEY MAP, DOVER EAST QUADRANGLE & DOVER WEST QUADRANGLE, NEW HAMPSHIRE, 7.5 MINUTE SERIES, DATED 2021

LOCATION MAP

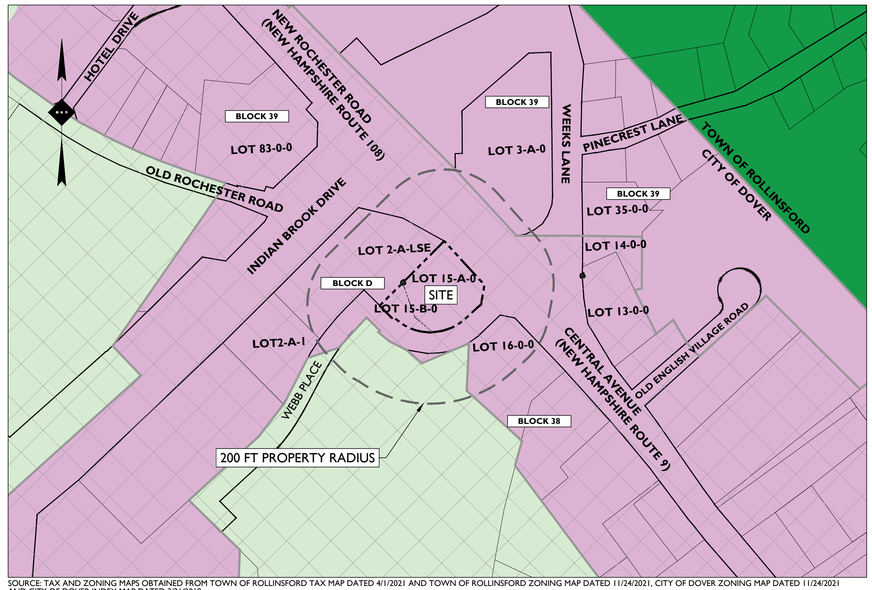
SCALE: 1" = 1000'±



SOURCE: GOOGLE EARTH PRO, DATED 07/22/2022

AERIAL MAP

SCALE: 1" = 200'±



SOURCE: TAX AND ZONING MAPS OBTAINED FROM TOWN OF ROLLINSFORD TAX MAP DATED 4/1/2021 AND TOWN OF ROLLINSFORD ZONING MAP DATED 11/24/2021, CITY OF DOVER ZONING MAP DATED 11/24/2021 AND CITY OF DOVER INDEX MAP DATED 3/21/2018

TAX / ZONING MAP

SCALE: 1" = 200'±

ZONING LEGEND:

DOVER: ZONE C - COMERCIAL; ZONE R-12 MEDIUM-DENSITY RESIDENTIAL; SECONDARY GROUNDWATER PROTECTION DISTRICT

ROLLINSFORD: ZONE U/R - URBAN RESIDENTIAL

WAIVER SUMMARY TABLE

CODE SECTION	REQUIRED	PROPOSED
§ 153-14.E.(2).(B)	MAXIMUM UNIFORMITY RATIO: 6:1	11.2 : 1
§ 153-14.E.(2).(B)	MINIMUM ILLUMINATION IN PARKNG AREA = NO LESS THAN 0.3 FC, NO MORE THAN 0.5 FC	1.0 FC
§ 157-50(C)(1)	400 FT ALL SEASON SIGHT DISTANCE	N/A

CITY DOVER 200' PROPERTY OWNERS LIST

TAX MAP	LOT	OWNER	OWNER'S ADDRESS
D	2-A-LSE	CENTERCO DOVER LLC	11 17 WEBB PLACE, DOVER, NEW HAMPSHIRE, 03820
39	3-A-0	SOURMAIDIS CHARLES & SOURMAIDIS MARIA	18 20 WEEKS LANE, DOVER, NEW HAMPSHIRE, 03820
D0002-A00LSE		CITY OF DOVER	40 42 SMITH WELL ROAD, DOVER, NEW HAMPSHIRE, 03820
D	2-A-1	EMPIRE NORTH PROPERTIES LLC	31 WEBB PLACE, DOVER, NEW HAMPSHIRE, 03820
38	16-0-0	P P D ORAZIO LLC	930 CENTRAL AVENUE, DOVER, NEW HAMPSHIRE, 03820

PLAN REFERENCE MATERIALS:

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
   - ALTA / NSPS LAND TITLE SURVEY PREPARED BY COLLIERS ENGINEERING & DESIGN FOR THE SUBJECT PROPERTY, DATED 09/28/2023
   - ARCHITECTURAL PLANS OBTAINED FROM CORE STATES, DATED 3/13/2024
   - ARIEL OBTAINED FROM GOOGLE EARTH PRO, DATED 07/22/2022
   - TAX AND ZONING MAPS OBTAINED FROM TOWN OF ROLLINSFORD TAX MAP DATED 4/1/2021 AND TOWN OF ROLLINSFORD ZONING MAP DATED 11/24/2021, CITY OF DOVER ZONING MAP DATED 11/24/2021 AND CITY OF DOVER INDEX MAP DATED 3/21/2018, CITY OF SOMERSWORTH ZONING MAP DATED 12/1/2021 AND CITY OF SOMERSWORTH TAX PARCELS MAP DATED 9/1/2022
   - LOCATION MAP OBTAINED FROM UNITED STATES GEOLOGICAL SURVEY MAP, DOVER EAST QUADRANGLE & DOVER WEST QUADRANGLE, NEW HAMPSHIRE, 7.5 MINUTE SERIES, DATED 2021
   - STORMWATER MANAGEMENT AREA EVALUATION, PREPARED BY WHITESTONE ASSOCIATES, DATED 11/8/2024
   - REPORT OF GEOTECHNICAL INVESTIGATION PREPARED BY WHITESTONE ASSOCIATES, DATED 3/21/2023
2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

PLANS PREPARED BY:

STONEFIELD engineering & design

Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com

120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

OWNER APPROVAL

I CONSENT TO THE FILING OF THIS APPLICATION

PROPERTY OWNER — DATE 12/13/23

CITY APPROVAL

APPROVED BY THE CITY OF DOVER, NEW HAMPSHIRE PLANNING BOARD

CHAIRMAN — DATE

SECRETARY OF THE BOARD — DATE

CITY ENGINEER — DATE

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
EXISTING CONDITIONS PLAN	C-2
DEMOLITION PLAN	C-3
SITE PLAN	C-4
GRADING PLAN	C-5
UTILITY PLAN	C-6
LIGHTING PLAN	C-7
SOIL EROSION & SEDIMENT CONTROL PLAN	C-8 & C-9
LANDSCAPING PLAN	C-10 & C-11
CONSTRUCTION DETAILS	C-12 - C-17
TRUCK MOVEMENT EXHIBIT	E-1 - E-3
ALTA / NSPS LAND TITLE SURVEY	SURVEY 1 - SURVEY 2
ARCHITECTURAL PLAN	A-1 - A-6

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GMC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
3	12/28/2023	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

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SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

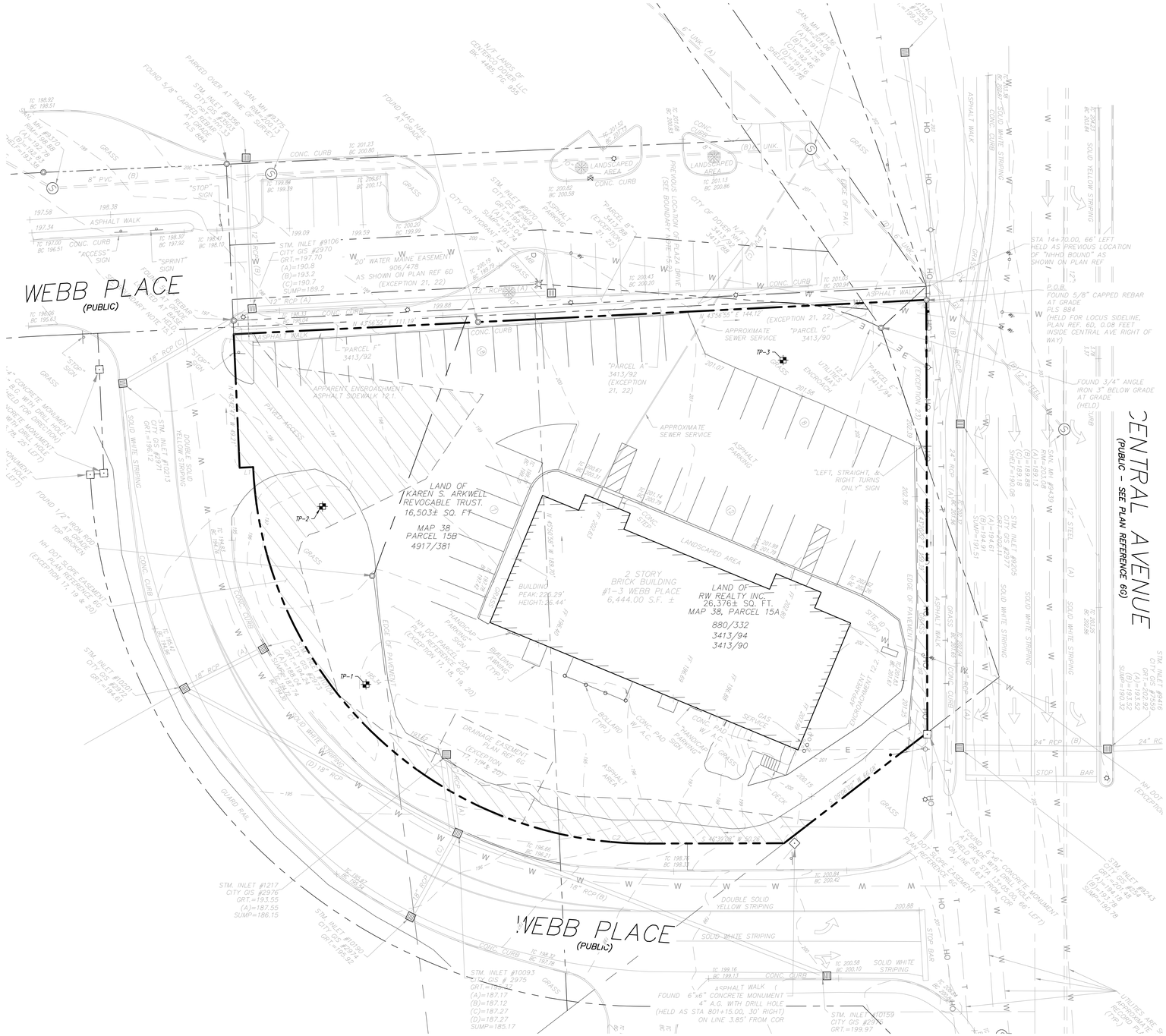
STONEFIELD engineering & design

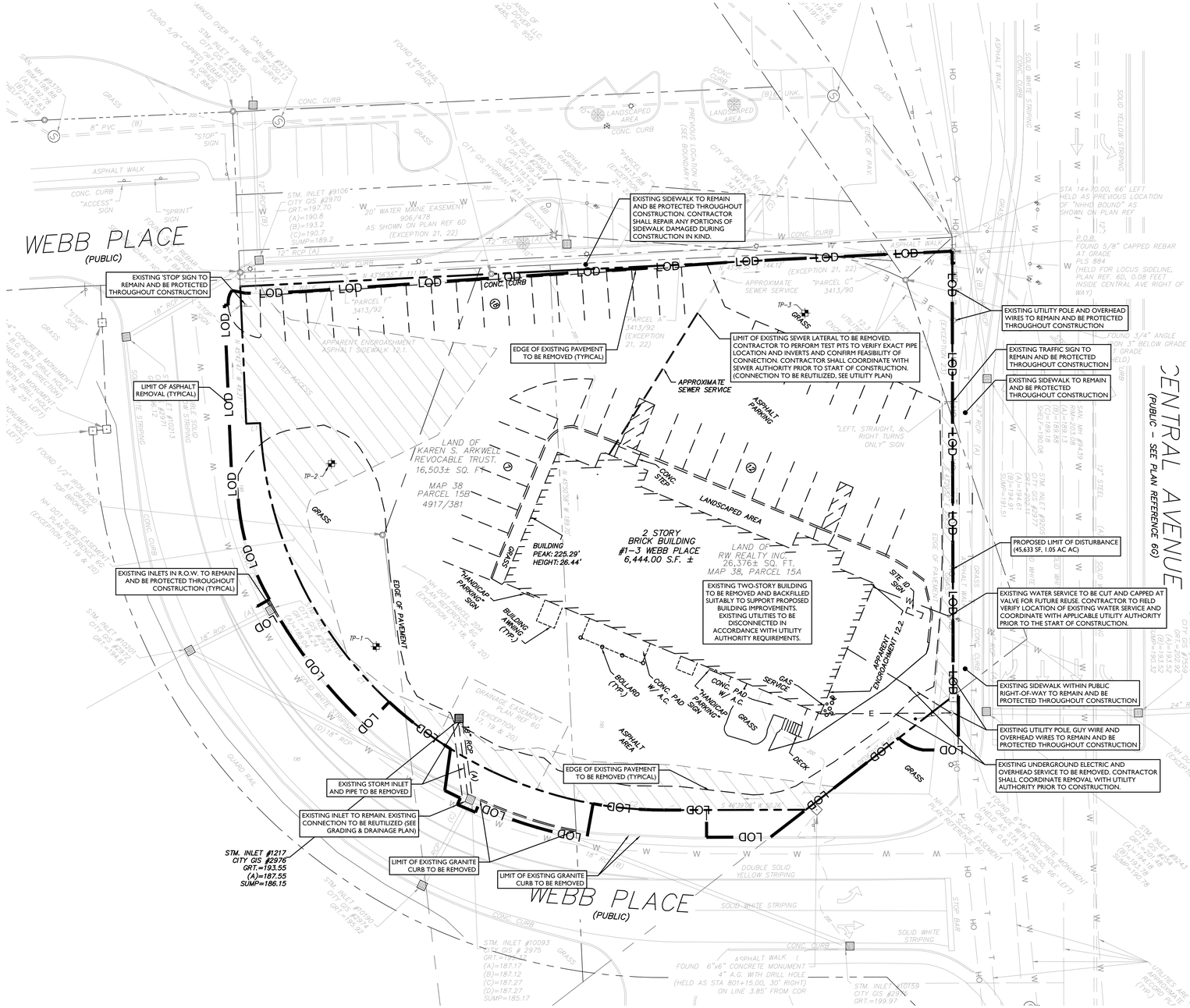
SCALE: AS SHOWN | PROJECT ID: BOS-220137

TITLE: **COVER SHEET**

DRAWING: **C-1**

Z:\BOS\PROJ\2022\220137 CHASE\ATTS - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\TOP-N-COVR.DWG


WEBB PLACE
(PUBLIC)
CENTRAL AVENUE
(PUBLIC – SEE PLAN REFERENCE 6G)
WEBB PLACE
(PUBLIC)
LAND OF
KAREN S. ARKWELL
REVOGABLE TRUST.
16,503± SQ. FT.
MAP 38
PARCEL 15B
4917/381
LAND OF
RW REALTY INC.
26,376± SQ. FT.
MAP 38, PARCEL 15A
880/332
3413/94
3413/90
2 STORY
BRICK BUILDING
#1–3 WEBB PLACE
6,444.00 S.F. ±
"PARCEL F"
3413/92
"PARCEL C"
3413/90
"PARCEL A"
3413/92
(EXCEPTION
21, 22)
"PARCEL E"
3413/94
"PARCEL B"
(EXCEPTION
21, 22)
20' WATER MAINE EASEMENT
906/478
AS SHOWN ON PLAN REF 6D
(EXCEPTION 21, 22)
APPROXIMATE
SEWER SERVICE
APPARENT ENCROACHMENT
ASPHALT SIDEWALK 12.1
DRAINAGE EASEMENT
AS PLAN REF 6G
(EXCEPTION
17, 19 & 20)
N/F LANDS OF
CENTERO PROPERTY, LLC
Bk. 4480, Pg. 935
CITY OF DOVER N/F
"PARCEL B"
3413/88
PREVIOUS LOCATION OF PLAZA DRIVE
(SEE BOUNDARY LINE AGREEMENT)
NH DOT SLOPE EASEMENT
AS PLAN REFERENCE 6G
(EXCEPTION 17, 19 & 20)
NH DOT PARCEL 20A
AS PLAN REFERENCE 6G
(EXCEPTION 17, 19, & 20)
NH DOT
(EXCEPTION
STA. 14+70.00, 66' LEFT
HELD AS "PREVIOUS LOCATION
OF "NHHD BOUND" AS
SHOWN ON PLAN REF.
P.O.B.
FOUND 5/8" CAPPED REBAR
AT GRADE
PLS 884
(HELD FOR LOCUS SIDELINE,
PLAN REF. 6D, 0.08 FEET
INSIDE CENTRAL AVE RIGHT OF
WAY)
FOUND 3/4" ANGLE
IRON 1" BELOW GRADE
AT GRADE
(HELD)
FOUND 1/2" IRON ROD
TOP BROKEN
(HELD)
FOUND 5/8" CAPPED REBAR
AT GRADE
PLS 884
(HELD)
FOUND MAG NAIL
AT GRADE
FOUND 1" IRON PIPE
AT GRADE
(HELD)
FOUND 1" IRON PIPE
AT GRADE
(HELD)
FOUND 5/8" CAPPED REBAR
AT GRADE
PLS 884
(HELD)
FOUND 1/2" IRON ROD
AT GRADE
(HELD)
FOUND 1/2" IRON ROD
AT GRADE
(HELD)
FOUND 1/2" IRON ROD
AT GRADE



SYMBOL	DESCRIPTION
– – — – – –	FEATURE TO BE REMOVED / DEMOLISHED
——— LOD ———	LIMIT OF DISTURBANCE

Know what's **below**
Call before you dig.

ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO BE REMOVED / DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

DEMOLITION NOTES

1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GHC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
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SITE IMPROVEMENT PLAN

CHASE
PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE:

DEMOLITION PLAN

DRAWING:

C-3

Z:\BOSTON\BOS\2022\BOS-220137 (CHASE) DOVER, NH - 1-3 WEBB PLACE, DOVER, NH\CAD\DWG\PDP\PDP-03 DEMO.DWG

LAND USE AND ZONING

TAX MAP 38, LOTS 15A & 15B

COMMERCIAL DISTRICT (C) - SECONDARY GROUNDWATER PROTECTION DISTRICT

PROPOSED USE

BANK WITH DRIVE-THRU ATM — PERMITTED USE

ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	20,000 SF	42,879 SF (0.98 AC)	42,879 SF (0.98 AC)
MAXIMUM BUILDING COVERAGE	50%	15.0% (6,445 SF)	7.8% (3,330 SF)
MINIMUM FRONTAGE	125 FT	552.3 FT	552.3 FT
MINIMUM FRONT YARD SETBACK	30 FT	28.2 FT (EN)	50.0 FT
MINIMUM ABUT A STREET SETBACK	30 FT	24.0 FT (EN)	99.5 FT
MINIMUM SIDE YARD SETBACK	12 FT	N/A	N/A
MINIMUM REAR YARD SETBACK	15 FT	65.0 FT	39.4 FT
MINIMUM ACCESSORY SETBACK	10 FT	N/A	48.5 FT
MINIMUM PRINCIPAL BUILDING HEIGHT	40 FT	< 40 FT	26.8 FT
MINIMUM PARKING SETBACK	25 FT	3.8 FT (EN)	26.4 FT
MAXIMUM LOT COVERAGE	N/S	74.7% (32,020 SF)	52.5% (22,508 SF)

(EN) EXISTING NON-CONFORMITY

OFF-STREET PARKING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 153-14.D.(1)	MAXIMUM NUMBER OF PARKING SPACES: RETAIL/SERVICE USE: 1 SPACE PER 275 SF OF GLA (3,330 SF x (1 / 275)) = 12 SPACES	20 SPACES *
§ 153-14.D.(2)	MINIMUM NUMBER OF BICYCLE RACKS: 5% OF MAXIMUM PARKING SPACES PER TABLE (20 SPACES X 0.05) = 1 BIKE RACK	2 BIKE RACKS
§ 153-14.D.(3) & § 153-14.D.(5)	MINIMUM NUMBER OF ELECTRIC VEHICLE CHARGING SPACES: 2% OF NEW PARKING SPACES (20 SPACES X 0.02) = 1 EV CHARGING SPACES	1 EV SPACE
§ 153-14.D.(6).(a)	PARKING AREA DIMENSIONAL REQUIREMENTS: MINIMUM STALL WIDTH: 9 FT MINIMUM STALL LENGTH: 18 FT MINIMUM AISLE WIDTH: 22 FT	9 FT 18 FT 24 FT
§ 153-14.D.(6).(b)	MINIMUM WIDTH OF ACCESS AISLES: 24 FT	24 FT
§ 153-14.H.(1)	NUMBER OF DRIVEWAYS PER LOT: 1 DRIVEWAY PER 125 FT OF ROAD FRONTAGE: (552.3 FT / 125 FT) = 4 DRIVEWAYS MINIMUM DRIVEWAY SPACING FROM PUBLIC STREET INTERSECTIONS: (IN A 35 MPH POSTED SPEED LIMIT): 155 FT MINIMUM SPACING BETWEEN DRIVEWAYS: (IN A 35 MPH POSTED SPEED LIMIT): 155 FT	2 DRIVEWAYS 161 FT 173 FT

(*) A CONDITIONAL USE PERMIT IS REQUESTED FOR THE INCREASE IN PARKING SPACES, PER 153-14.D.(5).

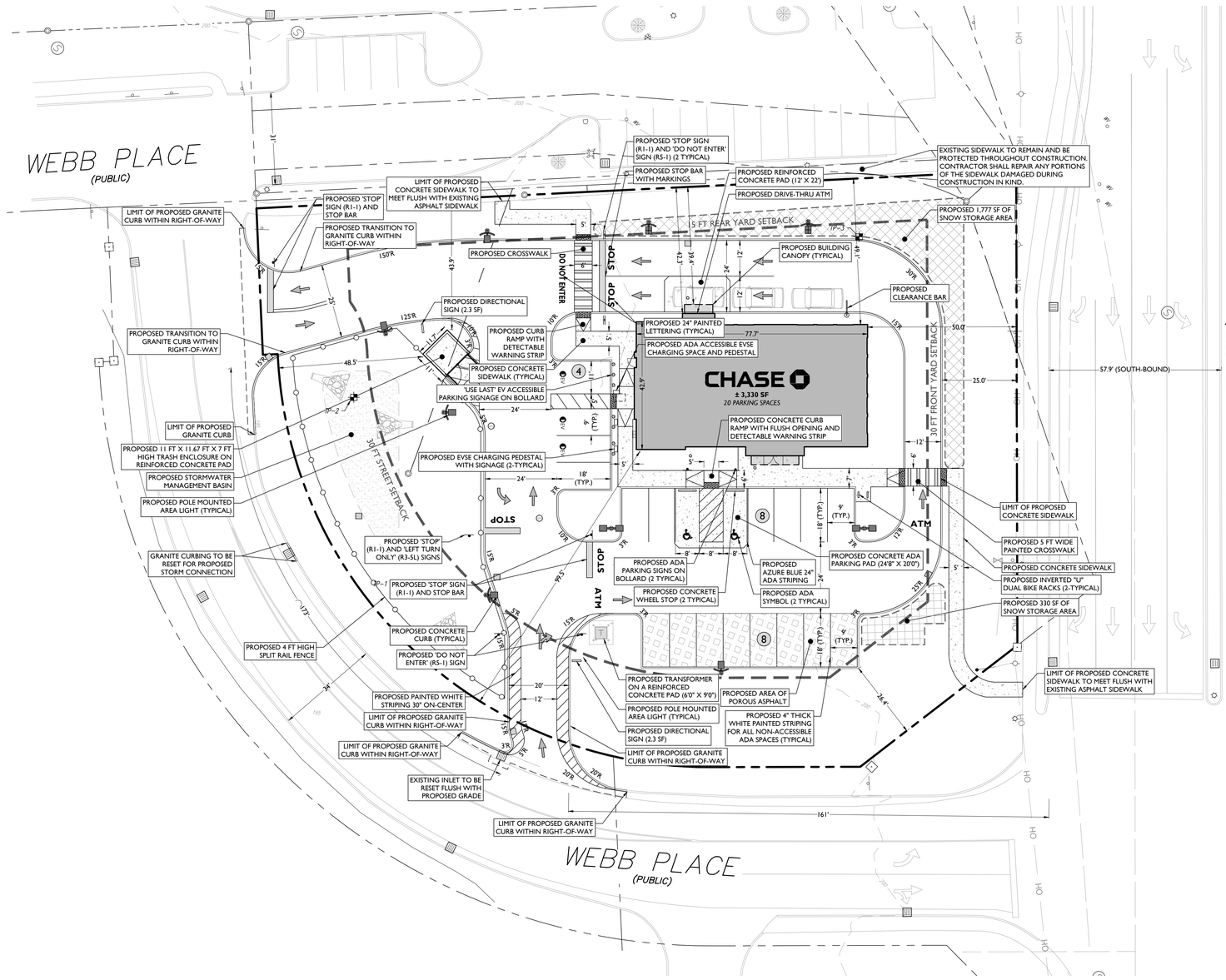
CONDITIONAL USE PERMIT REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 153-14.D.(4)	THE ADDITIONAL VEHICLE STORAGE AREA FOR PARKING REQUESTED SHALL USE PERVIOUS MATERIALS: 8 PERVIOUS SPACES REQUIRED	8 PERVIOUS SPACES
§ 153-14.D.(5)	MINIMUM NUMBER OF ELECTRIC VEHICLE CHARGING SPACES: 2 FOR LOTS WHERE A CONDITIONAL USE PERMIT IS REQUESTED	2 EV SPACES

SNOW STORAGE CALCULATION

- PROPOSED PARKING LOT AREA = 16,912 SF
- REQUIRED SNOW STORAGE AREA = (16,912 SF x 0.10) = 1,691 SF
- PROPOSED SNOW STORAGE AREA = 2,107 SF

EXCESS SNOW TO BE REMOVED FROM SITE IF ON-SITE STORAGE AREAS ARE FILLED.



CITY OF DOVER NOTES

1. THE INTENT OF THIS PLAN IS TO CONSTRUCT A PROPOSED FREESTANDING BANK ON THE SUBJECT PROPERTY IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
2. OWNERS OF RECORD ARE:
   DOVER RETAIL MANAGEMENT LLC
   30200 TELEGRAPH ROAD
   BINGHAM FARMS, MICHIGAN 48025

   AUTHORIZED SIGNATURE
3. THE PARCELS ARE SHOWN AS LOTS NO. 15A & 15B, MAP 38 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.
4. THE SUBJECT PARCELS CONTAIN 0.98 ACRES OR 42,879 SQ. FT. AREA OF LAND.
5. TITLE REFERENCES FOR THE PROJECT PARCELS IS THE STRAFFORD COUNTY REGISTRY OF DEEDS, BOOK NO. 880, PAGE NO. 332; BOOK NO. 4917, PAGE NO. 381; BOOK NO. 3413, PAGE NO. 90; AND BOOK NO. 3413, PAGE NO. 94.
6. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY COLLIERS ENGINEERING DATED 12/23/2022.

A. PLAN TITLED "RW REALTY INC. PLAN OF LOTS A & B PLAZA DRIVE, DOVER, NEW HAMPSHIRE", DATED APRIL 1981, DRAWN BY G. L. DAVIS & ASSOCIATES, RECORDED IN THE S.C.R.D. PLAN NUMBER 17E-8.

B. PLAN TITLED "SUBDIVISION LOT LINE RELOCATION PLAN FOR SOUTHWEST EQUITIES CORP", DATED JULY 2, 2001, DRAWN BY MILLETTE, SPRAGUE & COLWELL, INC. RECORDED IN THE S.C.R.D. PLAN NUMBER 67-11.

C. PLAN TITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE, LLC. & RW REALTY INC., DOVER, NEW HAMPSHIRE", DATED JUNE 14, 2006, DRAWN BY TRITECH CORP., RECORDED IN S.C.R.D. PLAN NUMBER 87-11.

D. PLAN TITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE LLC. AND RW REALTY INC., DOVER, NEW HAMPSHIRE", DATED JUNE 14, 2006, DRAWN BY TRITECH CORP., RECORDED IN THE S.C.R.D. PLAN NUMBER 87-12.

E. PLAN TITLED "SUBDIVISION PLAN, PRIME CIRCLE, LLC., DOVER, NEW HAMPSHIRE", DATED FEBRUARY 3, 2006, DRAWN BY TRITECH CORP., RECORDED IN THE S.C.R.D. PLAN NUMBER 87-13.

F. PLAN TITLED "ALTA-NSPS LAND TITLE SURVEY, PRIME CIRCLE, LLC., 11-17 WEBB PLACE, DOVER, NEW HAMPSHIRE, DATED MAY 3, 2017, DRAWN BY TRITECH CORP., RECORDED AT THE S.C.R.D. PLAN NUMBER 113-76.

G. PLAN TITLED "PLANS OF PROPOSED FEDERAL AID URBAN SYSTEM PROJECT AND FEDERAL AID PRIMARY PROJECT STP-X-027-1(34), N.H. PROJECT NO. 10023-E", DATED SEPTEMBER 14, 1994, DRAWN BY CARON ENGINEERING INC. ON RECORD WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

H. PLAN TITLED SUBDIVISION/LOT LINE RELOCATION PLAN FOR SOUTHWEST EQUITIES CORP", DATED JULY 10, 2001, DRAWN BY MILLETTE, SPRAGUE & COLEWELL, INC. RECORDED IN THE S.C.R.D. PLAN NUMBER 67-12.

7. REFER TO SURVEY REFERENCED ABOVE FOR APPLICABLE RIGHT-OF-WAY, CONSERVATION, SLOPE, CONSTRUCTION, POWER LINE, CROSS TRAVEL, OR OTHER EASEMENTS.
8. REFER TO THE TABLE OF LAND USE & ZONING HEREON FOR CURRENT ZONING DIMENSIONAL AND DENSITY REQUIREMENTS.
9. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY COLLIERS ENGINEERING & DESIGN DATED 09/28/2023 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.
10. SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA (COMMUNITY PANEL NUMBER 33017C0310E, EFFECTIVE DATE: SEPTEMBER 30, 2015).
11. AS-BUILT PLANS OF THE PROPOSED IMPROVEMENTS 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. 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 PLAN COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
12. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
13. THE SUBJECT PARCE IS SERVED BY MUNICIPAL WATER AND SEWER.
14. 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.
15. 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.
16. 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 ANY EARTH DISTURBING ACTIVITY OCCURS.
17. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
18. 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.
19. 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.
20. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM, SATURDAY AND SUNDAY 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 PLANNING DIRECTOR.
21. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
22. THE PROPOSED USE FOR THE SITE IS A BANK WITH A DRIVE-THRU ATM.
23. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
24. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
25. 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
26. 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.
27. 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.
28. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 153-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
29. TOPOGRAPHIC SURVEY PERFORMED BY COLLIERS ENGINEERING & DESIGN IN DECEMBER OF 2022 & SEPTEMBER OF 2023.
30. ELEVATIONS ARE BASED ON U.S.G.S. NVD 1988 DATUM.
31. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 45, ARTICLE I, SECTION 45-2 OF THE CODE OF THE CITY OF DOVER.
32. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
33. FIRE DEPARTMENT CONNECTION(S) SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13. ACCESS TO THE FDC SHALL MAINTAIN A CLEAR AND UNOBSTRUCTED PATH AT ALL TIMES.
34. 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.

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

SYMBOL	DESCRIPTION
	PROPERTY LINE
	SETBACK LINE
	SAWCUT LINE
	PROPOSED CURB
	PROPOSED FLUSH OPENING
	PROPOSED SIGNS / BOLLARDS
	PROPOSED BUILDING
	PROPOSED CONCRETE
	PROPOSED AREA LIGHT
	PROPOSED RETAINING WALL
	PROPOSED BUILDING DOORS
	PROPOSED FENCE
	PROPOSED POROUS ASPHALT
	PROPOSED SNOW STORAGE AREA

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
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SITE IMPROVEMENT PLAN

CHASE
PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE: **SITE PLAN**

DRAWING: **C-4**

Z:\BOSTON\PROJ\2022\BOS-220137 CONSTR\STE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\PDP-MASTER.DWG

DRAINAGE AND UTILITY NOTES

1. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING.
2. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP-GRADIENT.
3. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

1. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
2. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC. AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

STORMWATER INFILTRATION BMP CONSTRUCTION NOTES

1. PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIORETENTION AREA, ETC.) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
2. THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
3. ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT (LESS THAN 8 PSI APPLIED TO THE GROUND SURFACE) IS RECOMMENDED WITHIN THE BASIN LIMITS.
4. THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING LIMITATIONS.
5. DURING THE FINAL GRADING OF AN INFILTRATION BASIN, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAW OR EQUIVALENT GRADING EQUIPMENT. ALL GRADING EQUIPMENT SHALL BE LOCATED OUTSIDE OF THE BASIN BOTTOM WHERE FEASIBLE.
6. FOLLOWING CONSTRUCTION OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED GEOTECHNICAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN INFILTRATION RATES IN ACCORDANCE WITH THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES' STORMWATER HANDBOOK, LATEST EDITION. IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION.
7. THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE IF WITNESS TESTING IS REQUIRED DURING INFILTRATION BASIN EXCAVATION AND/OR SOIL INFILTRATION TESTING.

STORMWATER UNDERGROUND BMP CONSTRUCTION NOTES

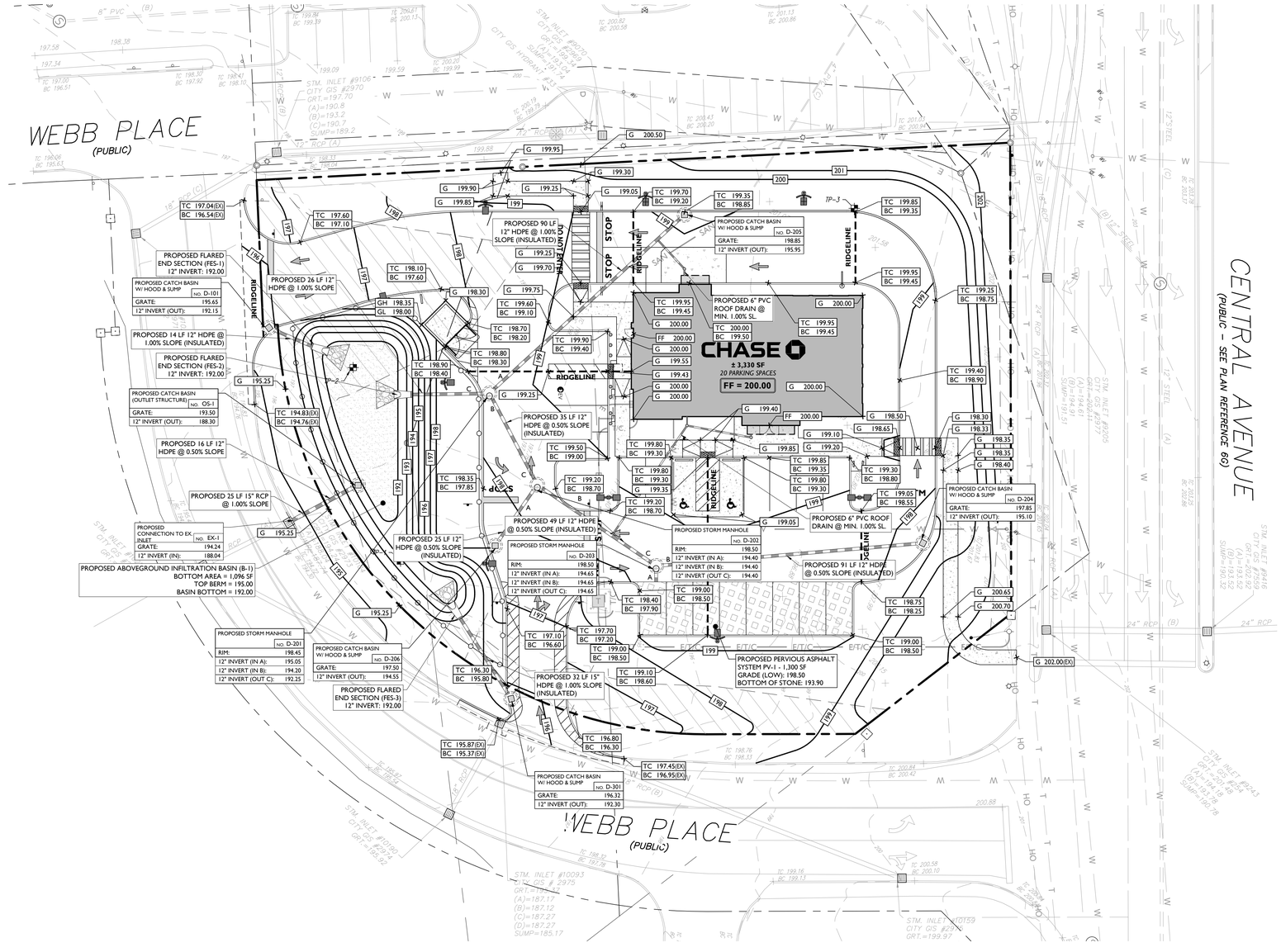
1. THE CONTRACTOR SHALL INSTALL AND BACKFILL THE UNDERGROUND BMP IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
2. UNDERGROUND BASINS SHALL UTILIZE A STONE BACKFILL WITH A MINIMUM VOID RATIO OF 40%.
3. NO CONSTRUCTION LOADING OVER UNDERGROUND BASINS IS PERMITTED UNTIL BACKFILL IS COMPLETE PER THE MANUFACTURER'S SPECIFICATIONS. NO VEHICLES SHALL BE STAGED OR OPERATE FROM A FIXED POSITION OVER THE BASIN.

GRADING NOTES

1. ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
2. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
4. THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
5. MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
   - CURB GUTTER: 0.50%
   - CONCRETE SURFACES: 1.00%
   - ASPHALT SURFACES: 1.00%
5. A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET.
6. FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

ACCESSIBILITY NOTES

1. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
2. THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
3. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
4. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP, AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
6. ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
7. A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
8. THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¼ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¼ INCHES AND ½ INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP ¼ INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
9. THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ½ INCH.
10. ACCESSIBLE IMPROVEMENTS SHALL COMPLY WITH APPLICABLE REGULATIONS INCLUDING ANSI 117.1 AND NH RSA 155-A:5.



20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

SYMBOL	DESCRIPTION
	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
RIDGELINE	PROPOSED GRADING RIDGELINE
	PROPOSED DIRECTION OF DRAINAGE FLOW
G 100.00	PROPOSED GRADE SPOT SHOT
TC 100.50 / BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
DC 100.12 / BC 100.00	PROPOSED DEPRESSED CURB / BOTTOM OF CURB SPOT SHOT
TW 102.00 / BW 100.00	PROPOSED TOP OF WALL / BOTTOM OF WALL SPOT SHOT

STORMWATER CERTIFICATION NOTE

AFTER CONSTRUCTION, THE DESIGN ENGINEER SHALL PROVIDE SIGNED LETTER TO THE CITY ENGINEER CERTIFYING THAT THE STORMWATER SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS.

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GMC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
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2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
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SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 28, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

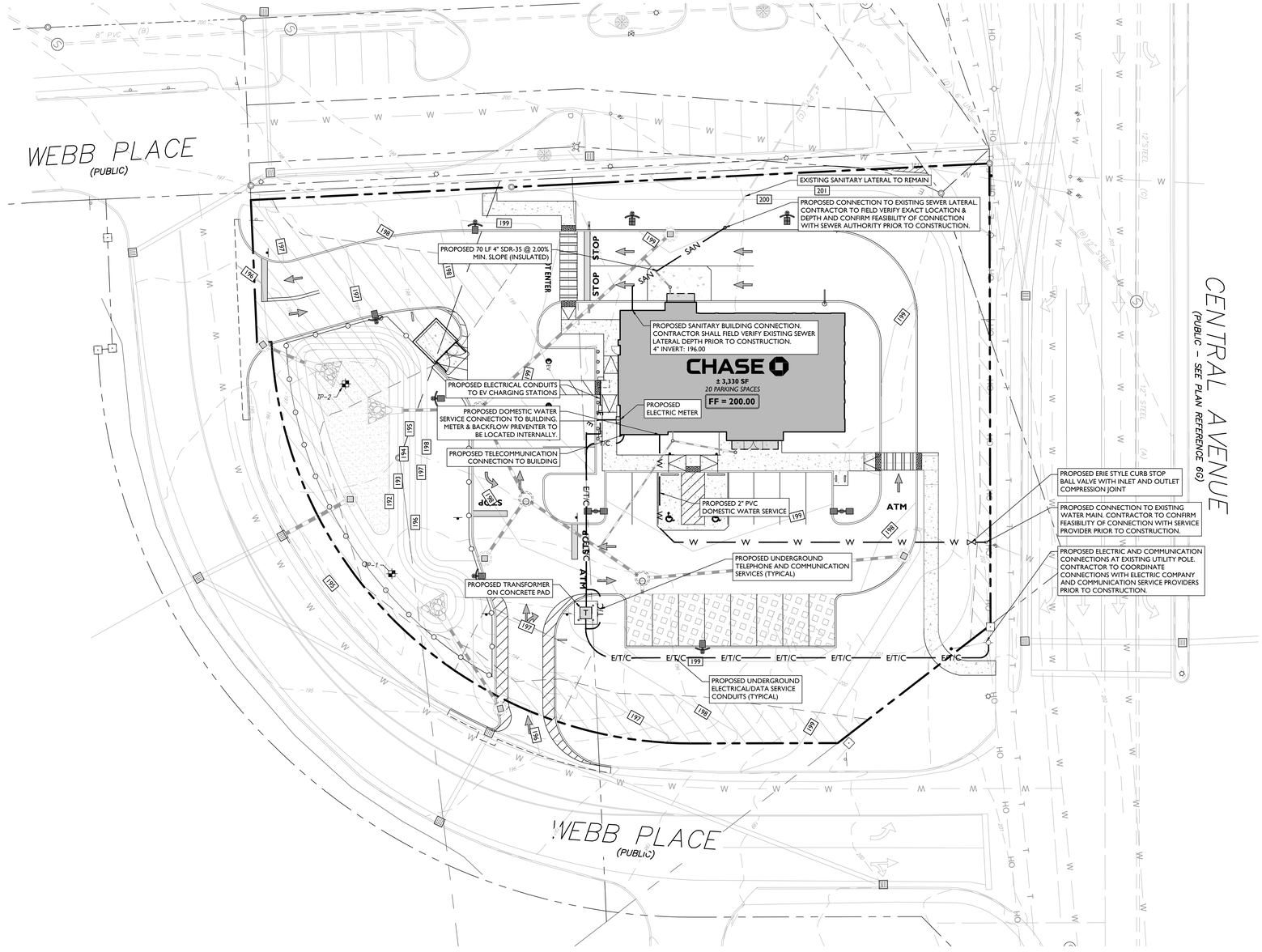
STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE: GRADING & DRAINAGE PLAN

DRAWING: C-5

Z:\BOSTON\BOS\2022\BOS-220137 CONSTR\TEC - 1-3 WEBB PLACE, DOVER, NH\CAD\SD\PLOT\PSP-05-GRAD-STRM.DWG



SYMBOL	DESCRIPTION
	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E/T/C	PROPOSED ELECTRICAL/DATA CONDUITS
T/C	PROPOSED DATA CONDUITS
E	PROPOSED ELECTRIC CONDUITS
OH	PROPOSED OVERHEAD WIRES
G	PROPOSED GAS LINE
	PROPOSED VALVE
S	PROPOSED SANITARY MANHOLE / CLEANOUT
T	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

THE CONTRACTOR SHALL START CONSTRUCTION OF ALL GRAVITY SANITARY AND STORMWATER INFRASTRUCTURE AT THE DOWNSTREAM CONNECTION POINT (E.G. LOWEST INVERT) AND WORK UP-GRADIENT.

PRIOR TO THE START OF CONSTRUCTION (RECOMMENDED 30 DAYS PRIOR) THE CONTRACTOR SHALL PERFORM EXPLORATORY TEST PITS AT LOCATIONS OF UTILITY / DRAINAGE CROSSINGS OR CONNECTIONS WITH EXISTING UTILITY OR STORMWATER INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ANY NECESSARY ROAD OPENING PERMITS TO PERFORM SAID EXPLORATORY WORK. SHOULD A CONFLICT BE DISCOVERED WITH THE INFORMATION CONTAINED WITHIN THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.

DRAINAGE AND UTILITY NOTES

1. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
2. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
4. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
6. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
8. CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADIENT.
9. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
10. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

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NOT APPROVED FOR CONSTRUCTION

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PROPOSED BANK WITH DRIVE-THRU ATM

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LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE:
UTILITY PLAN

DRAWING:
C-6

Z:\BOSTON\BOS\2022\BOS-220137 CHASE\TASTE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOTS\PDF\ALT\1_DRVG

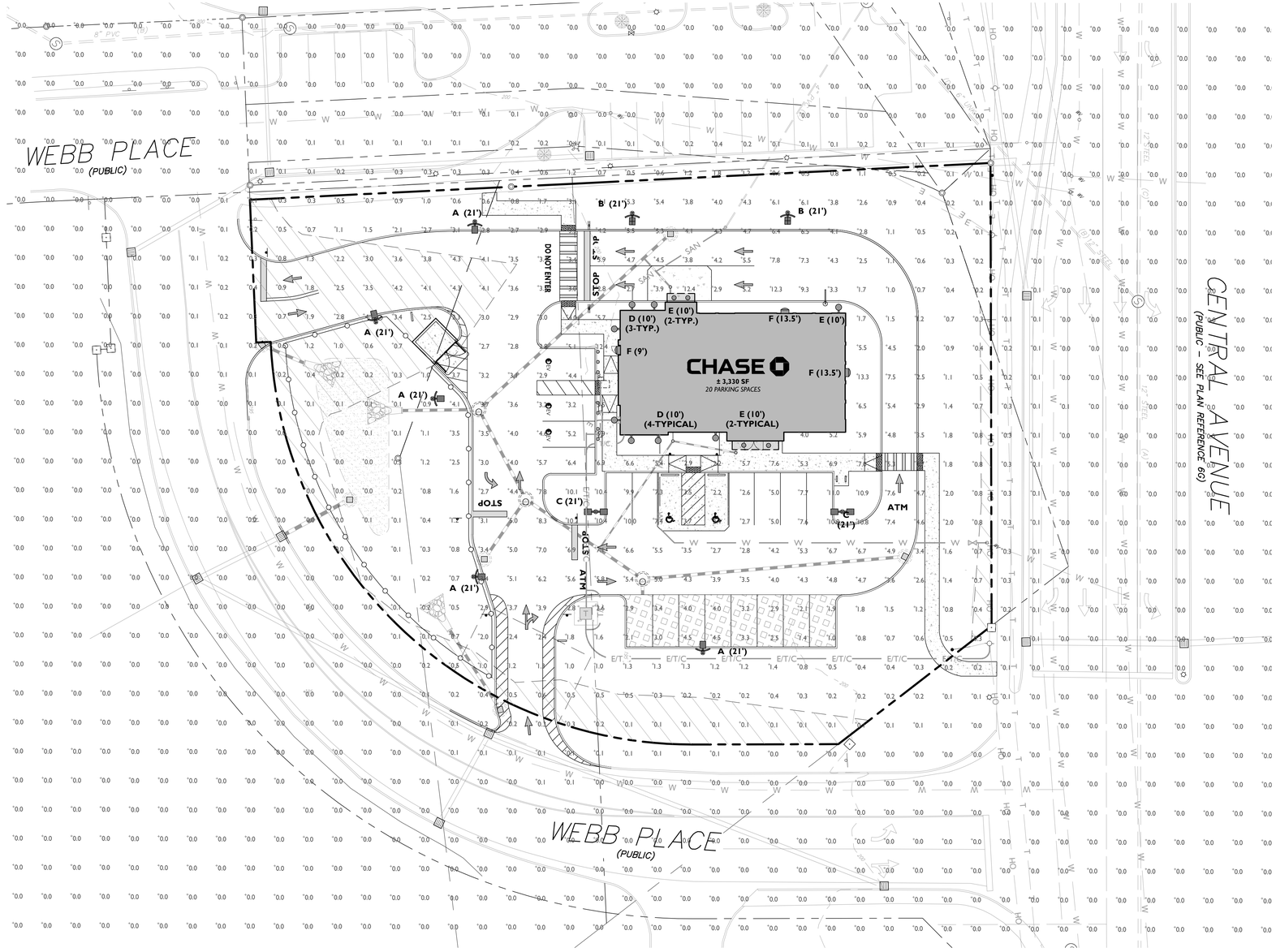
PROPOSED LUMINAIRE SCHEDULE

SYMBOL	LABEL	QUANTITY	LUMINAIRE	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	5	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 55 WATTS, 4K	ASYMMETRIC WIDE (TYPE III)	0.90	GE CURRENT	EACL01_C3AW740_____-ELS-EA C-ABL-BLCK.IES
	B	2	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 95 WATTS, 4K	ASYMMETRIC WIDE (TYPE III)	0.90	GE CURRENT	EACL01_E3AW740_____-ELS-EA C-ABL-BLCK.IES
	C	2	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 122 WATTS, 4K	ASYMMETRIC WIDE (TYPE III)	0.90	GE CURRENT	EACL01_F3AW740_____JES
	D	8	LANTERRA 9004 LED, WALL MOUNTED CYLINDER	DOWNLIGHT	0.90	COOPER LIGHTING	9004-W1-(RW, R1)-LED4080-W-WT-L1-UNV (1).IES
	E	4	BULLET OUTDOOR RECESSED FIXED DOWNLIGHT IP66	CANOPY	0.90	ILLUMINATION	5811-1SAT20L8040W.IES
	F	3	LUMARK XTOR CROSSTOUR MAXX LED WALL PACK	RDC	0.90	EATON	XTOR6B-W.IES

LIGHTING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 153-14.E.(2).(a)	ALL LIGHTING IN PARKING LOTS SHALL BE CUTOFF FIXTURES	COMPLIES
§ 153-14.E.(2).(b)	MAXIMUM MOUNTING HEIGHT = 25 FT	21 FT
§ 153-14.E.(2).(b)	MINIMUM ILLUMINATION IN PARKNG AREA = NO LESS THAN 0.3 FC, NO MORE THAN 0.5 FC	1.0 FC (W)
§ 153-14.E.(2).(b)	MAXIMUM LIGHTING UNIFORMITY RATIO = 6:1	11.2 : 1 (W)

(W) WAIVER



SYMBOL / DESCRIPTION

- PROPOSED CALCULATION AREA
- PROPOSED ISOMETRIC LINE
- A (XX') — PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
- XX — PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
- PROPOSED AREA LIGHT
- PROPOSED BUILDING MOUNTED LIGHT

GENERAL LIGHTING NOTES

1. THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH ARE WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
2. WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
3. UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
   - LIGHT EMITTING DIODES (LED): 0.90
   - HIGH PRESSURE SODIUM: 0.72
   - METAL HALIDE: 0.72
4. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
5. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

ATM LIGHTING NOTES:

1. THE CONTRACTOR SHALL REPLACE LAMP COVERS, RE-LAMP AND RE-BALLAST EXISTING LIGHT FIXTURES AS INDICATED WITHIN THE PLAN SET. THE EXISTING FIXTURE HEIGHT SHALL BE MAINTAINED UNLESS INDICATED OTHERWISE. THE LIGHTING DESIGN IS SUBJECT TO CHANGE IF THE EXISTING LIGHT FIXTURES ARE NOT GREATER THAN OR EQUAL TO THE FOLLOWING WATTAGE:
   - FIXTURE 'X' = MINIMUM X WATTS
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING IF THE EXISTING LIGHT FIXTURES ARE NOT THE MINIMUM WATTAGE SPECIFIED WITHIN THE PLAN SET.
3. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY EXISTING LIGHT POLES IDENTIFIED FOR REUSE WITH A PROPOSED LIGHT FIXTURE(S) SHALL BE IN ACCEPTABLE WORKING CONDITION AND HAVE THE CAPACITY TO SUPPORT THE PROPOSED LIGHT FIXTURE(S). ANY MOUNTING EQUIPMENT REQUIRED TO ATTACH THE PROPOSED LIGHTING FIXTURE TO THE EXISTING LIGHT POLE SHALL BE PROVIDED BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL CONFIRM THAT THE LOCATION OF ANY PROPOSED BUILDING MOUNTED LIGHTING FIXTURE WILL NOT CONFLICT WITH ANY EXISTING OR PROPOSED STRUCTURAL ELEMENT (E.G. CANOPY SUPPORT BEAMS). THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING OF ANY FIXTURE CONFLICT PRIOR TO THE START OF CONSTRUCTION.
5. ALL EXISTING TREE LIMBS WITHIN THE 60 FOOT ATM RADIUS SHOWN IN THE PLAN SET SHALL BE TRIMMED TO A MINIMUM OF 6 FEET ABOVE GRADE. ALL SHRUBS WITHIN THE 60 FOOT ATM RADIUS SHALL BE TRIMMED TO A MINIMUM OF 36 INCHES ABOVE GRADE. ALL BRUSH SHALL BE REMOVED. THE CONTRACTOR SHALL CONSIDER ALL FUTURE GROWTH AND FULL BLOOM WHEN TRIMMING LANDSCAPING. EXISTING TREE LIMBS ADJACENT TO LIGHTING FIXTURES SHALL BE TRIMMED AS REQUIRED TO PREVENT LIGHT INTERFERENCE.
6. PRIOR TO BID, CONTRACTOR SHALL VERIFY EXISTING EXTERIOR LIGHTING CONDITIONS AFTER DUSK AND NOTIFY THE DEVELOPER/OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC. OF DAMAGED OR INOPERABLE LIGHTS. THE CONTRACTOR SHALL REPAIR ALL INOPERABLE LIGHTS UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET.
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20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
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Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
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SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE:

LIGHTING PLAN

DRAWING:

C-7

Z:\BOSTON\BOS\2022\BOS-220137 CHASE\TASTE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOTS\PDF\01 LIGHT.DWG

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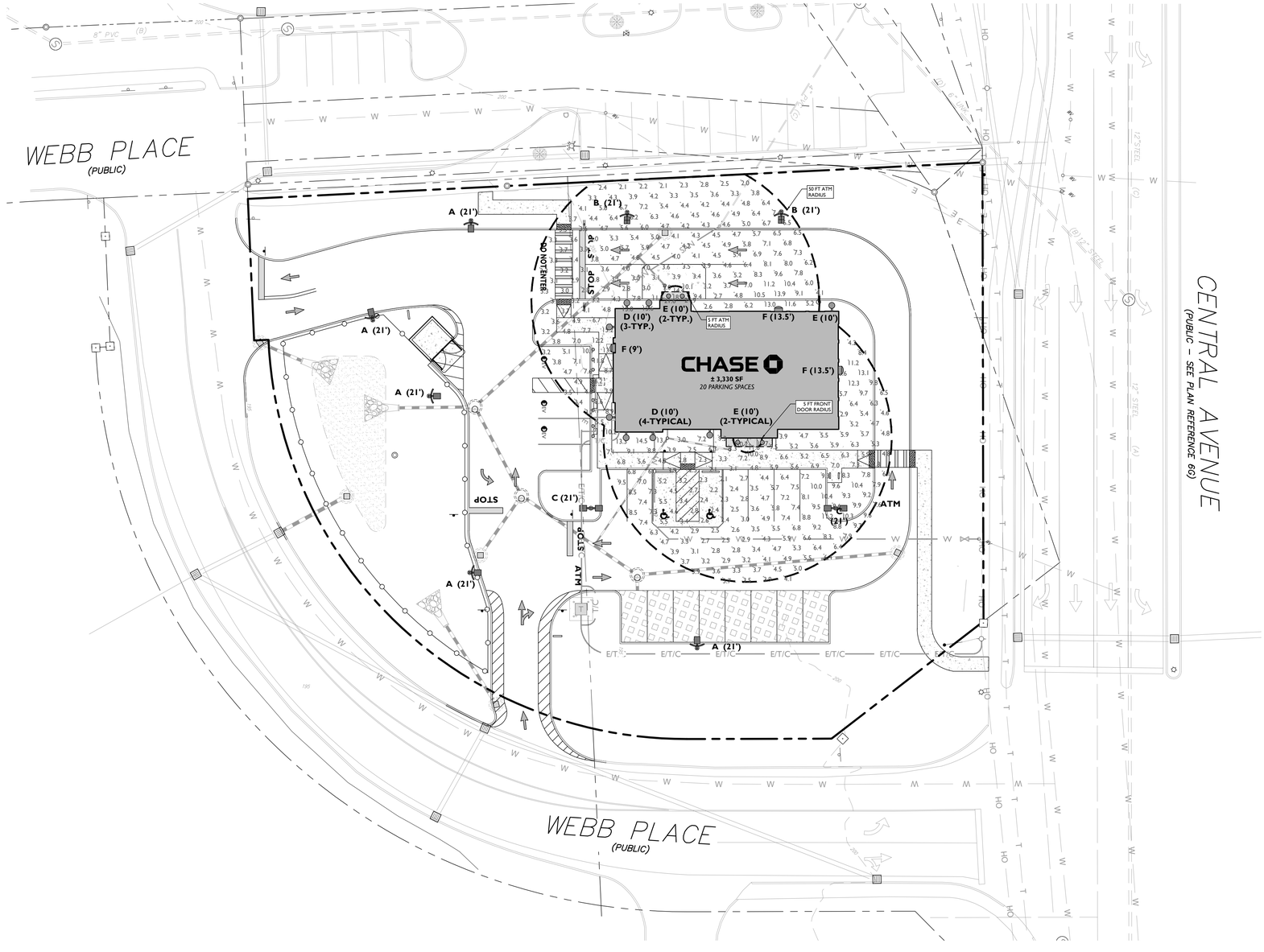
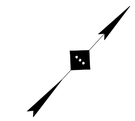
(W) WAIVER

STANDARD CHASE BANK ATM / AHD REQUIREMENTS

REQUIRED	PROPOSED
MINIMUM 10 FOOTCANDLES AT FACE OF DOOR EXTENDING 5 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	10.2 FC
MINIMUM 10 FOOTCANDLES AT FACE OF ATM EXTENDING 5 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	14.4 FC
MINIMUM 2 FOOTCANDLES AT FACE OF FRONT DOOR & ATM EXTENDING 50 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE WITHIN PATH OF ACCESS	2.0 FC





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SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 28, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: BOS-220137

TITLE:

SECURITY LIGHTING PLAN

DRAWING:

C-7.1

Z:\BOSTON\BOS\2022\BOS-220137 CONSTRUCTIE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\MOP-01-LIGHT.DWG

STABILIZATION SPECIFICATIONS:

I.A. TEMPORARY SEEDING AND MULCHING:

TIME OF PLANTING - PLANTING SHOULD PREFERABLY BE DONE BETWEEN APRIL 1 AND JUNE 30, AND SEPTEMBER 1 THROUGH SEPTEMBER 30. IF PLANTING IS DONE IN THE MONTHS OF JULY AND AUGUST, IRRIGATION MAY BE REQUIRED. IF PLANTING IS DONE BETWEEN OCTOBER 1 AND MARCH 31, MULCHING SHOULD BE APPLIED IMMEDIATELY AFTER PLANTING. IF SEEDING IS DONE DURING THE SUMMER MONTHS, IRRIGATION OF SOME SORT WILL PROBABLY BE NECESSARY.
SITE PREPARATION - BEFORE SEEDING, INSTALL NEEDED SURFACE RUNOFF CONTROL MEASURES SUCH AS GRADIENT TERRACES, INTERCEPTOR DIKES/SWALES, LEVEL SPREADERS, AND SEDIMENT BASINS.
SEEDBED PREPARATION - THE SEEDBED SHOULD BE FIRM WITH A FAIRLY FINE SURFACE. PERFORM ALL CULTURAL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE SLOPE.
LIMING AND FERTILIZATION - APPLY UNIFORMLY 2 TONS OF GROUND LIMESTONE PER ACRE (100 LBS. PER 1,000 SQ. FT.) OR ACCORDING TO SOIL TEST. APPLY UNIFORMLY 10-10-10 ANALYSIS FERTILIZER AT THE RATE OF 400 LBS. PER ACRE (14 LBS. PER 1,000 SQ. FT.) OR AS INDICATED BY SOIL TEST. FORTY PERCENT OF THE NITROGEN SHOULD BE IN ORGANIC FORM. WORK IN LIME AND FERTILIZER TO A DEPTH OF 4 INCHES USING ANY SUITABLE EQUIPMENT.
SEEDING - SELECT ADAPTED SPECIES FROM THE ACCOMPANYING TABLE IN THE MA SESC HANDBOOK. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED IN THE TABLE BY BROADCASTING, DRILLING OR HYDRAULIC APPLICATION. COVER SEEDS WITH SUITABLE EQUIPMENT PER MA SESC HANDBOOK.
MULCH - USE AN EFFECTIVE MULCH, SUCH AS CLEAN GRAIN STRAW; TACKED AND/OR TIED DOWN WITH NETTING TO PROTECT SEEDBED AND ENCOURAGE PLANT GROWTH.

I.B. PERMANENT SEEDING AND MULCHING:

SEEDING GRASSES AND LEGUMES

INSTALL NEEDED SURFACE RUNOFF CONTROL MEASURES SUCH AS GRADIENT TERRACES, BERMS, DIKES, LEVEL SPREADERS, WATERWAYS, AND SEDIMENT BASINS PRIOR TO SEEDING OR PLANTING.
SEEDBED PREPARATION - IF INFERTILE OR COARSE-TEXTURED SUBSOIL WILL BE EXPOSED DURING LAND SHAPING, IT IS BEST TO STOCKPILE TOPSOIL AND RESPREAD IT OVER THE FINISHED SLOPE AT A MINIMUM 2- TO 6-INCH DEPTH AND ROLL IT TO PROVIDE A FIRM SEEDBED. IF CONSTRUCTION FILL OPERATIONS HAVE LEFT SOIL EXPOSED WITH A LOOSE, ROUGH, OR IRREGULAR SURFACE, SMOOTH WITH BLADE AND ROLL. LOOSEN THE SOIL TO A DEPTH OF 3-5 INCHES WITH SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT. AREAS NOT TO RECEIVE TOP SOIL SHALL BE TREATED TO FIRM THE SEEDBED AFTER INCORPORATION OF THE LIME AND FERTILIZER SO THAT IT IS DEPRESSED NO MORE THAN ½ - 1 INCH WHEN STEPPED ON WITH A SHOE. AREAS TO RECEIVE TOPSOIL SHALL NOT BE FIRMED UNTIL AFTER TOPSOILING AND LIME AND FERTILIZER IS APPLIED AND INCORPORATED, AT WHICH TIME IT SHALL BE TREATED TO FIRM THE SEEDBED AS DESCRIBED ABOVE. THIS CAN BE DONE BY ROLLING OR CULTIPACKING.
COOL SEASON GRASSES - COOL SEASON GRASSES GROW RAPIDLY IN THE COOL WEATHER OF SPRING AND FALL, AND SET SEED IN JUNE AND JULY. COOL SEASON GRASSES BECOME DORMANT WHEN SUMMER TEMPERATURES PERSIST ABOVE 85 DEGREES AND MOISTURE IS SCARCE.

LIME AND FERTILIZER - APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST AND CURRENT EXTENSION SERVICE RECOMMENDATIONS. IN ABSENCE OF A SOIL TEST, APPLY LIME (A PH OF 5.5 - 6.0 IS DESIRED) AT A RATE OF 2.5 TONS PER ACRE AND 10-20-20 ANALYSIS FERTILIZER AT A RATE OF 500 POUNDS PER ACRE (40 % OF N TO BE IN AN ORGANIC OR SLOW RELEASE FORM). INCORPORATE LIME AND FERTILIZER INTO THE TOP 2-3 INCHES OF SOIL.
SEEDING DATES - SEEDING OPERATIONS SHOULD BE PERFORMED WITHIN ONE OF THE FOLLOWING PERIODS:

- APRIL 1 - MAY 31
- AUGUST 1 - SEPTEMBER 10
- NOVEMBER 1 - DECEMBER 15 AS A DORMANT SEEDING (SEEDING RATES SHALL BE INCREASED BY 50% FOR DORMANT SEEDINGS)

SEEDING METHODS - SEEDING SHOULD BE PERFORMED BY ONE OF THE FOLLOWING METHODS:

- DRILL SEEDINGS (DE-AWNED OR DE-BEARDED SEED SHOULD BE USED UNLESS THE DRILL IS EQUIPPED WITH SPECIAL FEATURES TO ACCEPT AWNED SEED).
- BROADCAST SEEDING WITH SUBSEQUENT ROLLING, CULTIPACKING OR TRACKING THE SEEDING WITH SMALL TRACK CONSTRUCTION EQUIPMENT. TRACKING SHOULD BE ORIENTED UP AND DOWN THE SLOPE.
- HYDROSEEDING WITH SUBSEQUENT TRACKING. IF WOOD FIBER MULCH IS USED, IT SHOULD BE APPLIED AS A SEPARATE OPERATION AFTER SEEDING AND TRACKING TO ASSURE GOOD SEED TO SOIL CONTACT.

MULCH - MULCH THE SEEDINGS WITH STRAW APPLIED AT THE RATE OF ½ TONS PER ACRE.
ANCHOR THE MULCH WITH EROSION CONTROL NETTING OR FABRIC ON SLOPING AREAS.

SEED MIXTURES FOR PERMANENT COVER

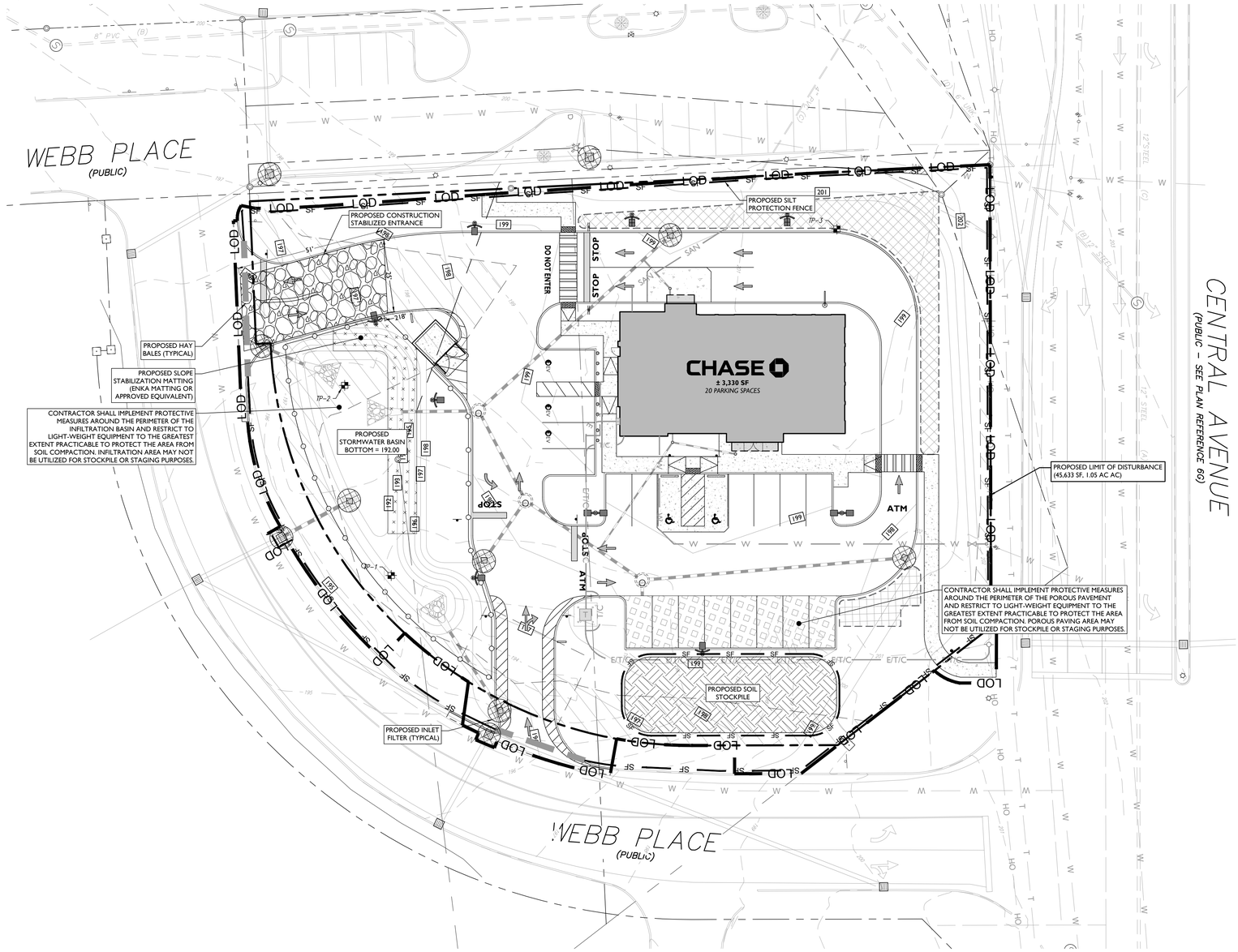
RECOMMENDED MIXTURES FOR PERMANENT SEEDING ARE PROVIDED ON THE TABLE IN THE MA SESC HANDBOOK. SELECT PLANT SPECIES WHICH ARE SUITED TO THE SITE CONDITIONS AND PLANNED USE. SOIL MOISTURE CONDITIONS, OFTEN THE MAJOR LIMITING SITE FACTOR, ARE USUALLY CLASSIFIED AS FOLLOWS:

- DRY - SANDS AND GRAVELS TO SANDY LOAMS. NO EFFECTIVE MOISTURE SUPPLY FROM SEEPAGE OR A HIGH WATER TABLE.
- MOIST - WELL DRAINED TO MODERATELY WELL DRAINED SANDY LOAMS, LOAMS, AND FINER; OR COARSER TEXTURED MATERIAL WITH MODERATE INFLUENCE ON ROOT ZONE FROM SEEPAGE OR A HIGH WATER TABLE.
- WET - ALL TEXTURES WITH A WATER TABLE AT OR VERY NEAR THE SOIL SURFACE, OR WITH ENDURING SEEPAGE. WHEN OTHER FACTORS STRONGLY INFLUENCE SITE CONDITIONS, THE PLANTS SELECTED MUST ALSO BE TOLERANT OF THESE CONDITIONS.

SEQUENCE OF CONSTRUCTION

1. INSTALL CONTROL MEASURES IDENTIFYING LIMITS OF DISTURBANCE AND AREAS INTERNAL TO THE SITE THAT REQUIRE PROTECTION BEFORE START OF LAND DISTURBANCE.
2. INSTALL ALL EROSION, RUNOFF, AND SEDIMENT CONTROLS AND TEMPORARY POLLUTION PREVENTION MEASURES THAT ARE REQUIRED TO BE IN PLACE AND FUNCTIONAL BEFORE ANY EARTHWORK BEGINS. THIS SHALL BE DONE IN ACCORDANCE WITH THE MA SESC HANDBOOK AND/OR THE MA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AS AMENDED). UPON ACCEPTABLE COMPLETION OF SITE PREPARATION AND INSTALLATION OF EROSION, RUNOFF, AND SEDIMENT CONTROLS AND TEMPORARY POLLUTION PREVENTION MEASURES, SITE CONSTRUCTION ACTIVITIES MAY COMMENCE.
3. CONSTRUCTION ACTIVITIES:
   3.1 DEMOLISH EXISTING SITE FEATURES (1 WEEK).
   3.2 ROUGH GRADING AND TEMPORARY SEEDING (2 WEEKS).
   3.3 EXCAVATE AND INSTALL UTILITY IMPROVEMENTS IN ACCORDANCE WITH LOCAL UTILITY AUTHORITY REQUIREMENTS (3 WEEKS).
   3.4 BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (12 WEEKS).
   3.5 CONSTRUCT RIGHT-OF-WAY IMPROVEMENTS (2 WEEKS).
   3.6 LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (1 WEEK).
4. UPON COMMENCEMENT OF SITE CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL INITIATE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED.
5. PERFORM ROUTINE INSPECTIONS AND MAINTENANCE AND/OR MODIFICATION OF EROSION, RUNOFF, AND SEDIMENT CONTROLS AND TEMPORARY POLLUTION PREVENTION MEASURES WHILE EARTHWORK IS ONGOING AS REQUIRED.
6. PERFORM FINAL SITE STABILIZATION OF ANY DISTURBED AREAS AFTER EARTHWORK HAS BEEN COMPLETED.
7. REMOVE OF TEMPORARY EROSION, RUNOFF, AND SEDIMENT CONTROLS AND TEMPORARY POLLUTION PREVENTION MEASURES.

NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO CITY AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY



SYMBOL	DESCRIPTION
	PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
LOD	PROPOSED LIMIT OF DISTURBANCE
SF	PROPOSED SILT FENCE
	PROPOSED HAY BALES
	PROPOSED STOCKPILE & EQUIPMENT STORAGE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED INLET PROTECTION FILTER

CITY OF DOVER - CONSTRUCTION INSPECTION REQUIREMENTS

1. THE COMMUNITY SERVICES DEPARTMENT OR THEIR DESIGNATED AGENT SHALL HAVE ACCESS TO THE SITE TO COMPLETE ROUTINE INSPECTIONS.
2. THE COMMUNITY SERVICES DEPARTMENT SHALL BE NOTIFIED 24-HOURS PRIOR TO INSTALLATION OF A STORMWATER BMP IN ORDER TO SCHEDULE AN INSPECTION. THESE INSPECTIONS SHALL BE COMPLETED DURING NORMAL WORKING HOURS.
3. 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 SHALL BE SUBMITTED TO THE COMMUNITY SERVICES DEPARTMENT.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

DUST CONTROL NOTES

1. VEGETATIVE COVER - FOR DISTURBED AREAS NOT SUBJECT TO TRAFFIC, VEGETATION PROVIDES THE MOST PRACTICAL METHOD OF DUST CONTROL.
2. MULCH (INCLUDING GRAVEL MULCH) - WHEN PROPERLY APPLIED, MULCH OFFERS A FAST, EFFECTIVE MEANS OF CONTROLLING DUST.
3. SPRAY-ON ADHESIVE - LATEX EMULSIONS OR RESIN IN WATER CAN BE SPRAYED ONTO MINERAL SOIL TO PREVENT PARTICLES FROM BLOWING AWAY.
4. CALCIUM CHLORIDE - CALCIUM CHLORIDE MAY NOT BE USED AS THE PROJECT IS LOCATED WITHIN THE SECONDARY GROUNDWATER PROTECTION DISTRICT.
5. SPRINKLING - THE SITE MAY BE SPRINKLED UNTIL THE SURFACE IS WET. SPRINKLING IS ESPECIALLY EFFECTIVE FOR DUST CONTROL ON HAUL ROADS AND OTHER TRAFFIC ROUTES.
6. STONE - USED TO STABILIZE CONSTRUCTION ROADS; CAN ALSO BE EFFECTIVE FOR DUST CONTROL.
7. BARRIERS - A BOARD FENCE, WIND FENCE, SEDIMENT FENCE, OR SIMILAR BARRIER CAN CONTROL AIR CURRENTS AND BLOWING SOIL. ALL OF THESE FENCES ARE NORMALLY CONSTRUCTED OF WOOD AND THEY PREVENT EROSION BY OBSTRUCTING THE WIND NEAR THE GROUND AND PREVENTING THE SOIL FROM BLOWING OFFSITE. A WIND BARRIER GENERALLY PROTECTS SOIL DOWNWARD FOR A DISTANCE OF 10 TIMES THE HEIGHT OF THE BARRIER. PERENNIAL GRASS AND STANDS OF EXISTING TREES MAY ALSO SERVE AS WIND BARRIERS.

CITY OF DOVER - EROSION CONTROL STANDARDS DURING CONSTRUCTION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE PROJECT SITE REMAINS IN COMPLIANCE WITH THE CITY OF DOVER SITE PLAN REVIEW REGULATION EROSION CONTROL STANDARDS THROUGHOUT CONSTRUCTION
2. CONTRACTOR SHALL PERFORM STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED, OR SUPPLEMENTED.
3. CONTRACTOR SHALL INSTALL THE APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO ANY SOIL LAND DISTURBANCE AND MUST BE REVIEWED AND APPROVED BY THE COMMUNITY SERVICES DEPARTMENT.
4. ALL 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 FOURTEEN (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.
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
6. ADDITIONAL TEMPORARY STABILIZATION FOR THE WINTER SEASON CONSISTENT WITH NHDES GUIDELINES SHALL BE IN PLACE FOR DISTURBED AREAS THAT ARE NOT PERMANENTLY STABILIZED BY OCTOBER 1ST, OR AT THE DISCRETION OF THE COMMUNITY SERVICES DEPARTMENT.
7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN THIRTY (30) CALENDAR DAYS UNLESS CONDITIONS DICTATE OTHERWISE.

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GMC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
3	12/28/2023	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

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SITE IMPROVEMENT PLAN

CHASE
PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

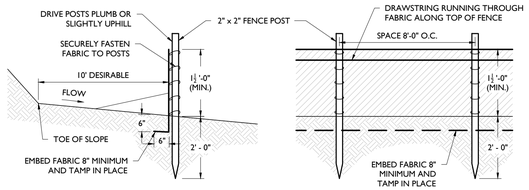
STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE: SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING: C-8

Z:\BOS\DWG\2022\BOS-220137 CHASE\TASTE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\PDF\BOS-SESC.DWG

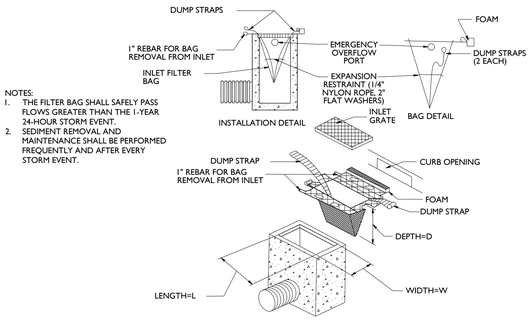


NOTES:
1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.
2. GEOTEXTILE FABRIC TO BE EMBEDDED 8" (MIN.) AND TAMP IN PLACE.
3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.

SILT FENCE DETAIL

NOT TO SCALE

1

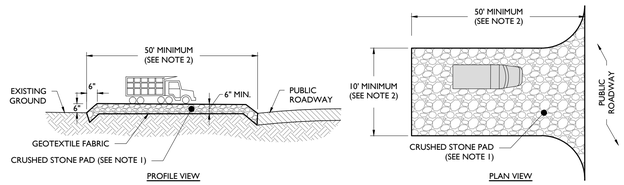


NOTES:
1. THE FILTER BAG SHALL SAFELY PASS FLOWS GREATER THAN THE 1-YEAR 24-HOUR STORM EVENT.
2. SEDIMENT REMOVAL AND MAINTENANCE SHALL BE PERFORMED FREQUENTLY AND AFTER EVERY STORM EVENT.

INLET FILTER BAG DETAIL

NOT TO SCALE

2

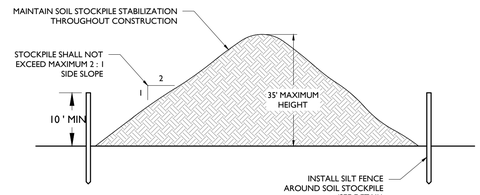


NOTES:
1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 3-INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT PLACED ON A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
2. THE MINIMUM LENGTH OF THE GRAVEL PAD SHALL BE 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH MAY BE USED. THE WIDTH SHALL BE 10' MINIMUM OR THE FULL WIDTH OF THE ACCESS POINT, WHICHEVER IS GREATER.
3. GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE FILL AND THE EARTH SURFACE BELOW THE PAD TO REDUCE THE MIGRATION OF SOIL PARTICLES FROM THE UNDERLYING SOIL INTO THE STONE AND VICE VERSA. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHOULD 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.
6. WASHING: IF THE SITE CONDITIONS ARE SUCH THAT THE MAJORITY OF MUD IS NOT REMOVED FROM THE VEHICLE TIRES BY THE GRAVEL PAD, THEN THE TIRES SHOULD BE WASHED BEFORE THE VEHICLE ENTERS THE ROAD OR STREET. THE WASH AREA SHOULD BE A LEVEL AREA WITH 3-INCH WASHED STONE MINIMUM, OR A COMMERCIAL RACK. WASH WATER SHOULD BE DIRECTED INTO A SEDIMENT TRAP, A VEGETATED FILTER STRIP, OR OTHER APPROVED SEDIMENT TRAPPING DEVICE. SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY WATERCOURSES.
7. A FILTER FABRIC FENCE SHOULD BE INSTALLED DOWN-GRADIENT FROM THE CONSTRUCTION ENTRANCE IN ORDER TO CONTAIN ANY SEDIMENT-LADEN RUNOFF FROM THE ENTRANCE.

STABILIZED CONSTRUCTION ACCESS DETAIL

NOT TO SCALE

3



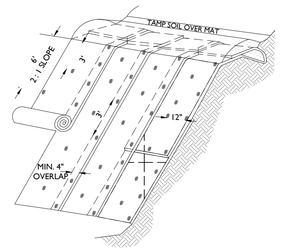
NOTES:
1. LOCATE THE TOPSOIL STOCKPILE SO THAT IT DOES NOT INTERFERE WITH WORK ON THE SITE.
2. SURROUND ALL TOPSOIL STOCKPILES WITH AN INTERCEPTOR DIKE WITH GRAVEL OUTLET AND SILT FENCE.
3. EITHER SEED OR COVER STOCKPILES WITH CLEAR PLASTIC OR OTHER MULCHING MATERIALS WITHIN 7 DAYS OF THE FORMATION OF THE STOCKPILE.

SOIL STOCKPILE DETAIL

NOT TO SCALE

4

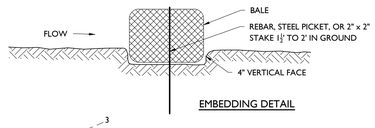
NOTES:
1. **SITE PREPARATION:** THE SITE MUST BE GRADED TO THE DESIGN SPECIFICATIONS (GRADE, GEOMETRY, DENSITY OF SOIL, ETC.) AND THEN DRESSED TO BE FREE OF SOIL CLODS, CLUMPS, ROCKS, OR VEHICLE IMPRINTS OF ANY SIGNIFICANT SIZE THAT WOULD PREVENT ENKAMAT FROM LYING FLUSH TO SURFACE CONTOURS.
2. **ANCHOR TRENCH:** ANCHOR TRENCHES ARE REQUIRED TO SECURELY FASTEN THE ENKAMAT TO THE GROUND SURFACE. THE ENKAMAT IS INSTALLED IN TO THE BOTTOM OF THE TRENCH AND FASTENED WITH PINS SPACED 3 FEET APART. THE ANCHOR TRENCH / INTERMEDIATE CHECK SLOTS ARE THEN BACKFILLED AND COMPACTED IN A MANNER AS TO NOT DAMAGE THE ENKAMAT.
3. **ENKAMAT INSTALLATION:** ROLL THE ENKAMAT DOWN THE SLOPE OR CHANNEL. THE OVERLAP BETWEEN ROLLS IS 3 TO 4 INCHES. THE SPLICE BETWEEN ROLLS IS BETWEEN 2 AND 3 FEET. SHINGLE THE ROLL IN THE DIRECTION OF WATER FLOW. INSTALL PINS DOWN THE CENTER OF EACH MAT (MAT IS 3.25 FEET WIDE) STAGGERING THEM BETWEEN THE OUTSIDE PINS WITH A SPACING INTERVAL OF 3 TO 5 FEET. PINS PATTERNS WILL VARY DEPENDING UPON APPLICATION, SOIL TYPE, SLOPE OR CHANNEL SLOPE, GEOMETRY, ETC. A RULE OF THUMB FOR ESTIMATING THE AMOUNT OF PINS REQUIRED FOR A PROJECT IS:
   1:1 TO 2:1 SLOPES: 3-4 PINS PER SQ. YD.
   3:1 AND LESSER SLOPES: 2-3 PINS PER SQ. YD.
   ALWAYS INSTALL TWO ROWS OF PINS SPACED 1.5 X 1.5 FEET APART AT ALL ROLL SPLICE LOCATIONS.
4. **ANCHORING DEVICES:** TYPICALLY 11-8 GAUGE OF A 6" X 1" X 6" METAL PINS ARE USED. WHEN SURFACE SOIL CONDITIONS ARE LOOSE, USE 8" X 1" X 8" OR 12" X 1.5" X 12" METAL PINS, 8"-18" PINS WITH 1.5" DIAMETER WASHER, OR 12-30" J-SHAPE PINS (BENT REBAR) HAVING A ½" DIAMETER. DRIVE PINS OR PINS FLUSH WITH THE GROUND SURFACE.
5. **SEEDING:** FOR NON-SOIL FILLING APPLICATIONS, BROADCAST SEED OR HYDROSEED OVER THE INSTALLED ENKAMAT. MAKE SURE HYDROMULCH OCCURS AFTER SEEDING TO ENSURE THE SEED REACHES THE TOPSOIL. IF SOIL FILLING, SEED AFTER FILLING IS COMPLETED. YOU MAY ALSO SEED BEFORE AND AFTER SOIL FILLING TO CREATE A BETTER ESTABLISHED ROOT STRUCTURE AND INCREASE VEGETATION STRENGTH.



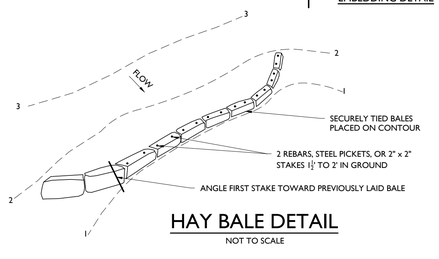
ENKAMAT DETAIL

NOT TO SCALE

5



EMBEDDING DETAIL



HAY BALE DETAIL

NOT TO SCALE

6

ISSUE	DATE	BY	DESCRIPTION
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www.stonefieldeng.com
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Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 30, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: NO SCALE | PROJECT ID: BOS-220137

TITLE: SOIL EROSION & SEDIMENT CONTROL DETAILS

DRAWING: C-9

Z:\BOSTON\BOS\2022\BOS-220137 CONST\ACTIVE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\SDP-08-PLOTSTC.DWG

TREE SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
	NYS	5	NYSSA SYLVATICA	TUPELO	3" - 3.5" CAL	POT	NATIVE, SALT TOLERANT
	ALB	2	QUERCUS ALBA	WHITE OAK	3" - 3.5" CAL	POT	NATIVE, SALT TOLERANT
	QUE	1	QUERCUS RUBRA	RED OAK	3" - 3.5" CAL	B&B	NATIVE, SALT TOLERANT
EVERGREEN TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**REMARKS**
	THU	10	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	5' - 6' HT	B&B	NATIVE, HARDY
	JUN	3	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	5' - 6' HT	B&B	NATIVE
ORNAMENTAL TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**REMARKS**
	AME	4	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY	3" - 3.5" CAL	POT	NATIVE, SALT TOLERANT, DROUGHT TOLERANT
	COR	4	CORNUS FLORIDA	FLOWERING DOGWOOD	3" - 3.5" CAL	POT	NATIVE
	MAG	5	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	3" - 3.5" CAL	B&B	NATIVE, SALT TOLERANT

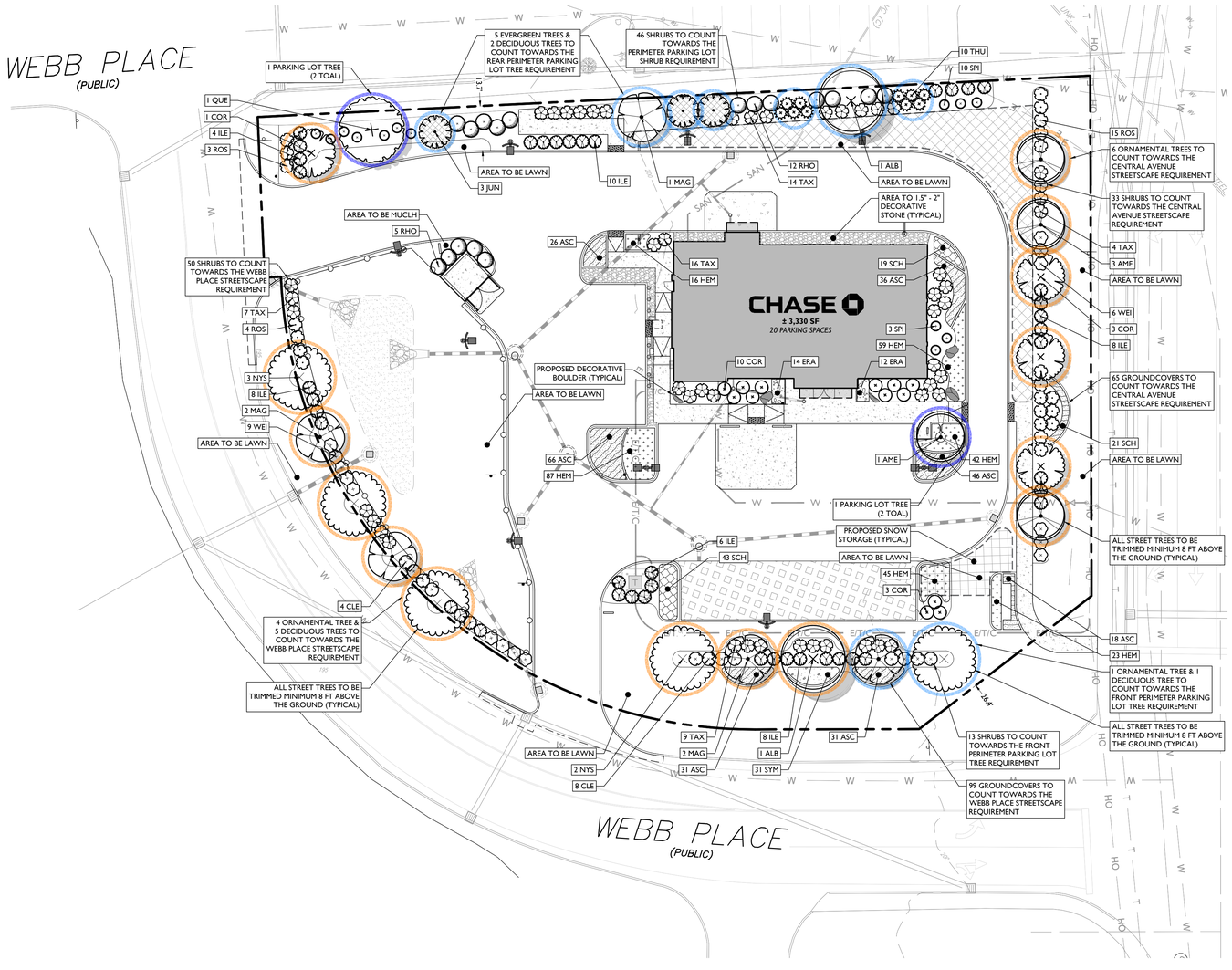
NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

SHRUB & GROUNDCOVER SCHEDULE

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
	WEI	15	WEIGELA FLORIDA 'BRAMWELL'	FINE WINE WEIGELA	18" - 24"	POT	HARDY, TOLERANT OF DOVER CLIMATIC CONDITIONS
	CLE	12	CLETHRA ALNIFOLIA	SUMMERSWEET	24" - 30"	POT	NATIVE, SALT TOLERANT, DROUGHT TOLERANT
	COR	13	CORNUS SERICEA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	24" - 30"	B&B	NATIVE
	ROS	22	ROSA VIRGINIANA	VIRGINIA ROSE	24" - 30"	POT	NATIVE, SALT TOLERANT
	SPI	13	SPIRAEA JAPONICA 'NEON FLASH'	NEON FLASH JAPANESE SPIREA	24" - 30"	POT	HARDY, DROUGHT TOLERANT, TOLERANT OF DOVER CLIMATIC CONDITIONS
EVERGREEN SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**REMARKS**
	ILE	44	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	24" - 30"	POT	NATIVE, SALT TOLERANT, DROUGHT TOLERANT
	RHO	17	RHODODENDRON X 'P.J.M. ELITE'	P.J.M. ELITE RHODODENDRON	24" - 30"	POT	HARDY, TOLERANT OF DOVER CLIMATIC CONDITIONS
	TAX	50	TAXUS CANADENSIS	CANADA YEW	24" - 30"	POT	NATIVE, DROUGHT TOLERANT
PERENNIALS AND GRASSES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SPACING**	**CONTAINER**	**REMARKS**
	ASC	252	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	18" o.c.	1 GAL. POT	NATIVE, SALT TOLERANT, DROUGHT TOLERANT
	HEM	252	HEMEROCALLIS X 'STELLA DE ORO'	STELLA DE ORO DAYLILY	18" o.c.	1 GAL. POT	HARDY, TOLERANT OF DOVER CLIMATIC CONDITIONS
	ERA	26	ERAGROSTIS SPECTABILIS	PURPLE LOVEGRASS	18" o.c.	1 GAL. POT	NATIVE, SALT TOLERANT, DROUGHT TOLERANT
	SCH	83	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	18" o.c.	1 GAL. POT	NATIVE, SALT TOLERANT, DROUGHT TOLERANT
	SYM	31	SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	18" o.c.	1 GAL. POT	NATIVE, DROUGHT TOLERANT

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

ALL STREET TREES TO BE TRIMMED MINIMUM 8 FT ABOVE THE GROUND



LANDSCAPE MAINTENANCE SCHEDULE

MAINTENANCE TASK	WINTER			SPRING				SUMMER				FALL			
	DEC	JAN	FEB	MAR	APR	MAY	FREQ	JUN	JUL	AUG	FREQ	SEP	OCT	NOV	FREQ
SITE INSPECTION				X			ONCE PER SEASON		X		ONCE PER SEASON			X	ONCE PER SEASON
DEBRIS & WEED CONTROL				X	X	X	BI-WEEKLY	X	X	X	BI-WEEKLY	X	X		BI-WEEKLY
IRRIGATION MAINTENANCE					X		ONCE PER SEASON				N/A		X		ONCE PER SEASON
MULCHING					X		ONCE PER SEASON				N/A				N/A
SEASONAL PLANTINGS						X	ONCE PER SEASON	X	X	X	WEEKLY	X	X	X	WEEKLY
MOWING OF TURF				X	X	X	WEEKLY	X	X	X	WEEKLY	X	X	X	WEEKLY
MOWING OF WILDFLOWERS							N/A				N/A			X	ONCE PER SEASON
PRUNING				X	X		MONTHLY				N/A			X	ONCE PER SEASON
FERTILIZER & AMENDMENTS				X	X	X	MONTHLY	X	X	X	BI-WEEKLY	X	X	X	BI-WEEKLY
INSECT & DISEASE CONTROL						X	ONCE PER SEASON	X	X	X	BI-WEEKLY	X	X		N/A
PLANTING RENOVATION				X			ONCE PER SEASON				N/A		X		ONCE PER SEASON
LANDSCAPE STRUCTURES INSPECTION					X		ONCE PER SEASON				N/A				N/A
LIGHTING MAINTENANCE				X			ONCE PER SEASON				N/A		X		ONCE PER SEASON
PAVED SURFACE MAINTENANCE					X		ONCE PER SEASON				N/A				N/A

LANDSCAPING AND BUFFER REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
	LANDSCAPE REQUIREMENTS	
§ 153-14.G.(1)(e)	SCREENING SHALL BE PROVIDED AROUND WASTE DISPOSAL AND ANY OTHER DISRUPTIVE AREAS	PROVIDED
	STREETSCAPE REQUIREMENTS	
§ 153-14.G.(1)(f)	CENTRAL AVENUE: 193 FT	
	1 TREE FOR EVERY 35 LF OF FRONTAGE	
	(193 FT) * (1 TREE / 35 FT FRONTAGE) = 6 TREES	6 TREES
	1 SHRUB FOR EVERY 6 LF OF FRONTAGE	
	(193 FT) * (1 SHRUB / 6 FT FRONTAGE) = 33 SHRUBS	33 SHRUBS
	1 GROUNDCOVER FOR EVERY 3 LF OF FRONTAGE	
	(193 FT) * (1 GROUNDCOVER / 3 FT FRONTAGE) = 65 GROUNDCOVERS	65 GROUNDCOVERS
	WEBB PLACE: 295 FT	
	1 TREE FOR EVERY 35 LF OF FRONTAGE	
	(295 FT) * (1 TREE / 35 FT FRONTAGE) = 9 TREES	9 TREES
	1 SHRUB FOR EVERY 6 LF OF FRONTAGE	
	(295 FT) * (1 SHRUB / 6 FT FRONTAGE) = 50 SHRUBS	50 SHRUBS
	1 GROUNDCOVER FOR EVERY 3 LF OF FRONTAGE	
	(295 FT) * (1 GROUNDCOVER / 3 FT FRONTAGE) = 99 GROUNDCOVERS	99 GROUNDCOVERS
	INTERIOR LANDSCAPING	
§ 153-14.G.(2)(a)	PARKING LOTS WITH 0-20 SPACES: INTERIOR LANDSCAPING NOT REQUIRED	COMPLIES
§ 153-14.G.(2)(c)	MINIMUM LANDSCAPE ISLAND AREA: 250 SF	N/A
	ISLANDS SHALL INCLUDE TREES, SHRUBS, PERENNIALS, AND GROUNDCOVERS	N/A
	PERIMETER LANDSCAPING	
§ 153-14.G.(3)(a)	PARKING LOTS WITH MORE THAN 10 SPACES: 1 TREE FOR EVERY 35 LF OF PERIMETER 1 SHRUB FOR EVERY 5 LF OF PERIMETER	
	REAR BUFFER: 230 FT	
	(230 FT) * (1 TREE / 35 FT FRONTAGE) = 7 TREES	7 TREES
	1 SHRUB FOR EVERY 5 LF OF PERIMETER	
	(230 FT) * (1 SHRUB / 5 FT FRONTAGE) = 46 SHRUBS	46 SHRUBS
	FRONT BUFFER: 64 FT	
	(64 FT) * (1 TREE / 35 FT FRONTAGE) = 2 TREES	2 TREES
	1 SHRUB FOR EVERY 5 LF OF PERIMETER	
	(64 FT) * (1 SHRUB / 5 FT FRONTAGE) = 13 SHRUBS	13 SHRUBS
	PARKING LOT TREES	
§ 153-14.G.(3)(a)	1 TREE FOR EVERY 10 PARKING SPACES	
	(20 SPACES) * (1 TREE / 10 SPACES) = 2 TREES	2 TREES
	BUFFER REQUIREMENTS	
§ 153-17.C.	5 FT LANDSCAPE BUFFER REQUIRED BETWEEN PAVED AREAS AND ANY SIDE/REAR PROPERTY LINE	13.7 FT
	10 FT LANDSCAPE BUFFER REQUIRED BETWEEN PARKING AREAS AND ANY FRONT PROPERTY LINE	26.4 FT

(N/A) NOT APPLICABLE

JENNIFER L DINOVO
085
LICENSED LANDSCAPE ARCHITECT
STATE OF NEW HAMPSHIRE

DESIGN WORKS
LANDSCAPE ARCHITECTURE AND CONSTRUCTION
125 WASON ROAD, HUDSON, NH 03051

SYMBOL **DESCRIPTION**

- PROPOSED PARKING LOT TREES
- PROPOSED PERIMETER PARKING LOT TREES
- PROPOSED STREET TREES

811
Know what's **below**
Call before you dig.

BIOLOGICAL DIVERSITY NOTE:

TO FOSTER BIOLOGICAL DIVERSITY, TREES PLANTED ALONG A GIVEN STREET SHALL USE THE 10-20-30 RULE (NO MORE THAN 10% OF THE TREES SHALL BE OF THE SAME SPECIES, NO MORE THAN 20% SHALL BE OF THE SAME GENUS, NO MORE THAN 30% SHALL BE OF THE SAME FAMILY.

IRRIGATION NOTE:

IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION. DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

LANDSCAPING NOTES

1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
3. THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH .
4. THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
6. THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GHC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
3	12/28/2023	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 28, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE:

LANDSCAPING PLAN

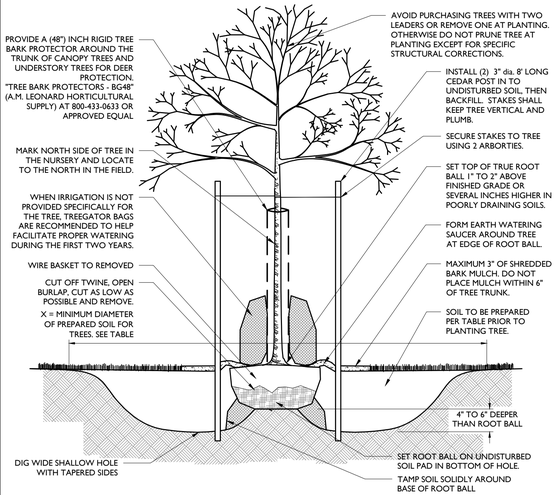
DRAWING:

C-10

Z:\BOS\DWG\BOS2022\BOS-220137 CONSTR\TEC - 1-3 WEBB PLACE, DOVER, NH\CAD\DWG\TOP-10-1 LAND.DWG

NOTES:

1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
3. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILDS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX



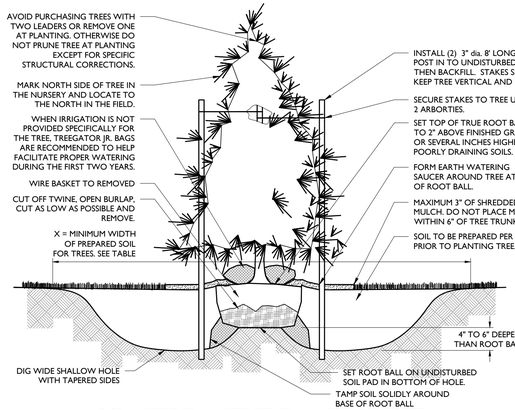
DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

1

NOTES:

1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
3. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX

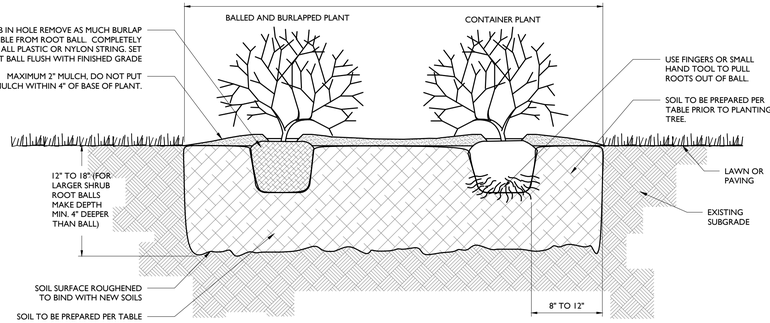


CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

2

PREPARE SOIL IN THE ENTIRE BED USING PROCEDURES OUTLINED IN TABLE (X)



NOTES:

1. FOR THE CONTAINER-GROWN SHRUBS, USE FINGERS OR SMALL HAND TOOL TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE SHRUB ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL

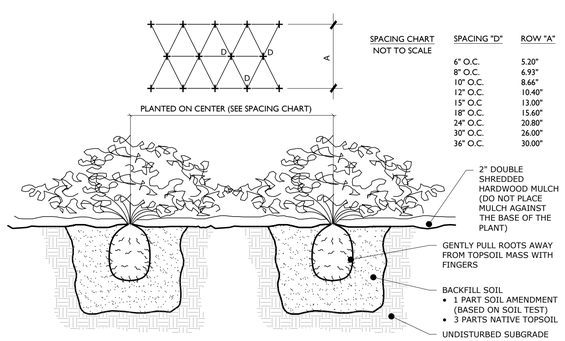
DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

3

NOTES:

1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
2. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILDS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILDS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX
3. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT PER MANUFACTURER'S SPECIFICATIONS



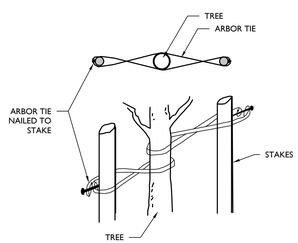
SPACING CHART
NOT TO SCALE

SPACING "D"	ROW "A"
6" O.C.	5.20"
8" O.C.	6.93"
10" O.C.	8.66"
12" O.C.	10.40"
15" O.C.	13.00"
18" O.C.	15.60"
24" O.C.	20.80"
30" O.C.	26.00"
36" O.C.	30.00"

GROUND COVER/PERENNIAL/ANNUAL PLANTING DETAIL

NOT TO SCALE

4



INSTALLATION GUIDELINES:

1. LOOP TIE AROUND TREE AND NAIL TO CEDAR STAKE.
2. REMOVE ALL STAKING AND TIES AT END OF FIRST GROWING SEASON.
3. FOLD ENDS OF ARBORTIE BACK. SECURE TO STAKES WITH 1" GALVANIZED ROOFING NAIL OR USE A KNOT.
4. CONSULT LANDSCAPE ARCHITECT FOR STAKING OF TREES LARGER THAN 6".
5. SOURCES INCLUDE:
   GEMPLERS 1-800-332-6744 or GEMPLERS.COM
   CSP OUTDOORS 1-800-592-6940 or CSPOUTDOORS.COM

ARBORTIE DETAIL

NOT TO SCALE

5

GENERAL LANDSCAPING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY.
2. WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL.
3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL, IF SO REQUESTED.
4. IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY.
5. UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS.) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER, OR GOVERNING MUNICIPAL OFFICIAL.
6. THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.

PROTECTION OF EXISTING VEGETATION NOTES:

1. BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING. FENCING SHALL BE LOCATED AT THE DRIP-LINE OR LIMIT OF DISTURBANCE AS DEPICTED WITHIN THE APPROVED OR FINAL PLAN SET, ESTABLISHING THE TREE PROTECTION ZONE. NO CONSTRUCTION INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE PROTECTION FENCE DETAIL." NO WORK MAY BEGIN UNTIL THIS REQUIREMENT IS FULFILLED. THE FENCING SHALL BE INSPECTED REGULARLY BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
2. IN ORDER TO AVOID DAMAGE TO ROOTS, BARK OR LOWER BRANCHES, NO VEHICLE, EQUIPMENT, DEBRIS, OR OTHER MATERIALS SHALL BE DRIVEN, PARKED OR PLACED WITHIN THE TREE PROTECTION ZONE. ALL ON-SITE CONTRACTORS SHALL USE ANY AND ALL PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, WALKS, PAVEMENTS, UTILITIES, AND ANY OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED UNDER THIS CONTRACT.
3. IN RARE INSTANCES WHERE EXCAVATING, FILL, OR GRADING IS REQUIRED WITHIN THE DRIP-LINE OF TREES TO REMAIN, THE WORK SHALL BE PERFORMED AS FOLLOWS:
   - TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN, THE TREE ROOTS SHALL NOT BE CUT, BUT THE TRENCH SHALL BE TUNNELED UNDER OR AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO THE ROOTS. NO ROOTS, LIMBS, OR WOODS ARE TO HAVE ANY PAINT OR MATERIAL APPLIED TO ANY SURFACE.
   - RAISING GRADES: WHEN THE GRADE AT AN EXISTING TREE IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 6 INCHES (6") IS REQUIRED, CLEAN, WASHED GRAVEL FROM ONE TO TWO INCHES (1" - 2") IN SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES (18") AND FINISH APPROXIMATELY TWO INCHES (2") ABOVE THE FINISH GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNK OF ANY TREE REQUIRING FILL. WHERE FILL EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID TREE WELL SHALL BE CONSTRUCTED. IF APPLICABLE, TREE WELL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE WELL DETAIL."
   - LOWERING GRADES: EXISTING TREES LOCATED IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED, SHALL HAVE RE-GRADING WORK DONE BY HAND TO THE INDICATED ELEVATION, NO GREATER THAN SIX INCHES (6"). ROOTS SHALL BE CUT CLEANLY THREE INCHES (3") BELOW FINISHED GRADE UNDER THE DIRECTION OF A LICENSED ARBORIST. WHERE CUT EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID RETAINING WALL SHALL BE CONSTRUCTED. IF APPLICABLE, THE RETAINING WALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE RETAINING WALL DETAIL."

SOIL PREPARATION AND MULCH NOTES:

1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS.
2. BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIME AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL AMENDMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM.
   - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
3. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL OBTAINED FROM A WELL-DRAINED ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1").
4. TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN LESS THAN 6% ORGANIC MATTER BY WEIGHT.
5. OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE.
6. CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS.
7. UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBED AREA OF THE SITE.
8. LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS THE REQUIRED TOPSOIL) IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN.
9. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER.
11. DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR. GROUND COVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2") TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
12. WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
13. SOIL SHALL BE LOOSENED WITH A BACKHOE OR OTHER LARGE COARSE-TILING EQUIPMENT UNLESS THE SOIL IS FROZEN OR EXCESSIVELY WET. TILING THAT PRODUCES LARGE, COARSE CLUMPS IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER THE AREA IS LOOSENED IT SHALL NOT BE DRIVEN OVER BY ANY VEHICLE.
14. APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
15. ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:

MYCRO® TREE SAVER - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS.

- DIRECTIONS FOR USE: USE 3-OZ PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-OZ PER INCH CALIPER. MIX INTO THE BACKFILL WHEN TRANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8 INCHES, AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8 INCHES INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION.
- MYCOR® TREE SAVER® IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ERICOID MYCORRHIZAE.
- SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9.
- FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON THE INOCULATION PROGRAM. SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION.
- OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.

HEALTHY START MACRO TABS 12-8-8

- FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS.
- TABLETS ARE FORMULATED FOR LONG-TERM RELEASE BY SLOW BIODEGRADATION, AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA, AND A COMPLEMENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE: FOR PLANTING BALLED & BURLAPPED (B&B) TREES AND SHRUBS, MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT 1 TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL EVENLY DISTRIBUTED AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES.

IRRIGATION DURING ESTABLISHMENT

SIZE AT PLANTING	IRRIGATION FOR VITALITY	IRRIGATION FOR SURVIVAL
< 2" CALIPER	DAILY FOR TWO WEEKS, EVERY OTHER DAY FOR TWO MONTHS, WEEKLY UNTIL ESTABLISHED	TWO TO THREE TIMES WEEKLY FOR TWO TO THREE MONTHS
2"-4 CALIPER	DAILY FOR ONE MONTH, EVERY OTHER DAY FOR THREE MONTHS, WEEKLY UNTIL ESTABLISHED	TWO TO THREE TIMES WEEKLY FOR THREE TO FOUR MONTHS
4 >" CALIPER	DAILY FOR SIX WEEKS, EVERY OTHER DAY FOR FIVE MONTHS, WEEKLY UNTIL ESTABLISHED	TWICE WEEKLY FOR FOUR TO FIVE MONTHS

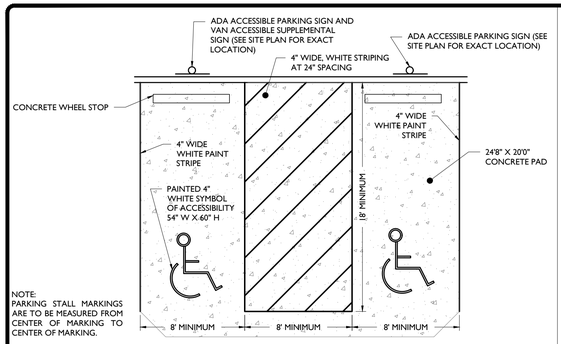
TABLE NOTES:
1. AT EACH IRRIGATION, APPLY TWO TO THREE GALLONS PER INCH TRUNK CALIPER TO THE ROOT BALL SURFACE. APPLY IT IN A MANNER SO ALL WATER SOAKS THE ENTIRE ROOT BALL. DO NOT WATER IF ROOT BALL IS WET/SATURATED ON THE IRRIGATION DAY.

2. WHEN IRRIGATING FOR VITALITY, DELETE DAILY IRRIGATION WHEN PLANTING IN WINTER OR WHEN PLANTING IN COOL CLIMATES. ESTABLISHMENT TAKES THREE TO FOUR MONTHS PER INCH TRUNK CALIPER. NEVER APPLY IRRIGATION IF THE SOIL IS SATURATED.

3. WHEN IRRIGATION FOR SURVIVAL, TREES TAKE MUCH LONGER TO ESTABLISH THAN REGULARLY IRRIGATED TREES. IRRIGATION MAY BE REQUIRED IN THE NORMAL HOT, DRY PORTIONS OF THE FOLLOWING YEAR.

PLANT QUALITY AND HANDLING NOTES:

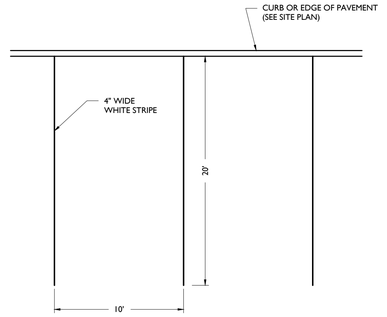
1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLANT LIST SHALL TAKE PRECEDENCE OVER COMMON NAMES.
3. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEAVY, TIGHTLY KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND, HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE.
4. PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REJECTED.
5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE.
6. THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF.
7. ALL PLANTS DESIGNATED BALL AND BURLAP (B&B) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK AND ALL BURLAP IS TO BE REMOVED.
8. PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INJURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT, OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOIST, FRESH, AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
9. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING DETAILS.
10. LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN POSSIBLE. THE ROOT BALL SHALL BE KEPT MOIST AT ALL TIMES AND COVERED WITH MOISTENED MULCH OR ADDED WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED SO AS TO NOT ALLOW THE ROOT BALL TO DRY OUT. PLANTINGS SHALL BE UNTIED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.
11. NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL.
12. PLANTS WITH INJURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY DISEASED OR INJURED PLANTS SHALL BE REMOVED.
13. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO RELOCATE OR ENLARGE PLANTING PITS OR DELETE PLANT MATERIAL FROM THE CONTRACT.
14. IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF EIGHT FEET (8') ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2') ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY.
15. INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:
    PLANTS (MARCH 15 - DECEMBER 15)
    LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER 1 - DECEMBER 1)
16. THE FOLLOWING TREES ARE SUSCEPTI



ACCESSIBLE PARKING STALL MARKINGS

NOT TO SCALE

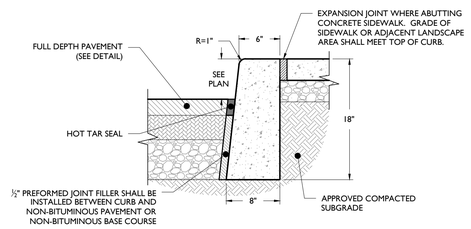
1



PARKING STALL MARKINGS

NOT TO SCALE

2

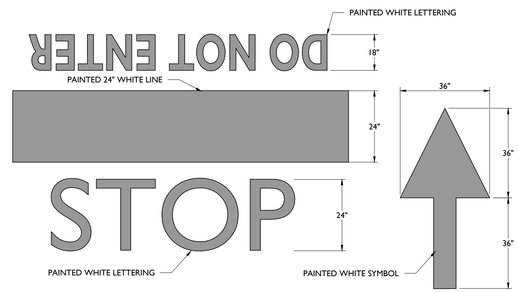


CONCRETE CURB DETAIL

NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ½" FROM SURFACE.
3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.

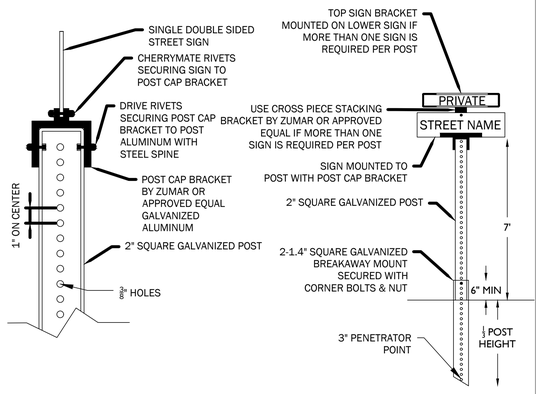
3



STOP BAR & ARROW DETAILS

NOT TO SCALE

4



SIGN POST DETAIL

NOT TO SCALE

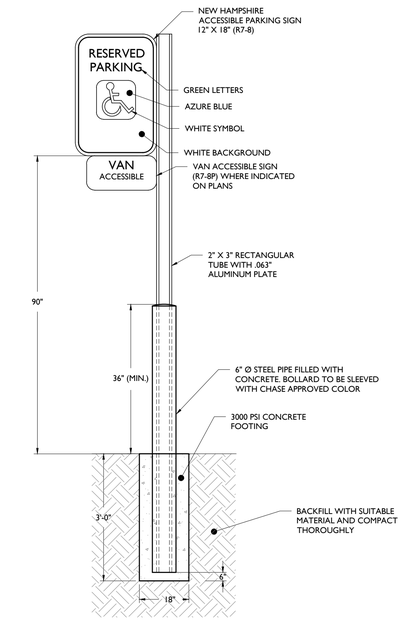
M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)	STOP	RED	WHITE	36"x36"	GROUND
NO LEFT TURN (R3-2)		CIRCLE AND DIAGONAL: RED LEGEND: BLACK	WHITE	24"x24"	GROUND
DO NOT ENTER (R5-1)	DO NOT ENTER	RED	WHITE	30"x30"	GROUND
MANDATORY MOVEMENT LANE CONTROL-LEFT (R3-5L)	ONLY	BLACK	WHITE	30"x36"	GROUND

NOTE:
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.

SIGN DATA TABLE

NOT TO SCALE

5

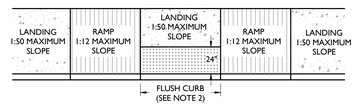


ACCESSIBLE PARKING SIGN DETAIL

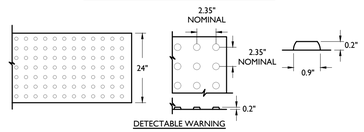
NOT TO SCALE

NOTES:
1. ALL EXPOSED PAINTED SURFACES SHALL BE COATED WITH MATTHEWS #282-2085P VOC GLOSS CLEAR, WITH MINIMUM 2 MILS DRY FILM THICKNESS (DFT) PER MATTHEWS APPLICATIONS SPECIFICATIONS.
2. EMBEDDED PORTION OF POST SHALL BE PRIMED AND PAINTED FOR CORROSION PROTECTION

6



TRANSITION RAMP WITH DETECTABLE WARNING



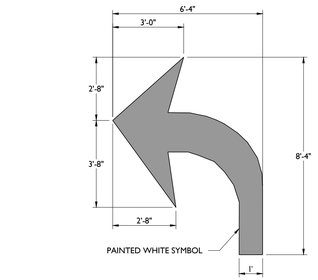
DETECTABLE WARNING

TRANSITION RAMP DETAIL

NOT TO SCALE

NOTES:
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%
2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
3. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
4. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE.
5. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE.
6. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL

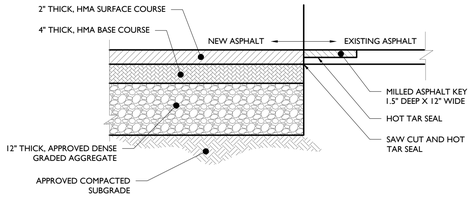
11



TURN ARROW DETAIL

NOT TO SCALE

7

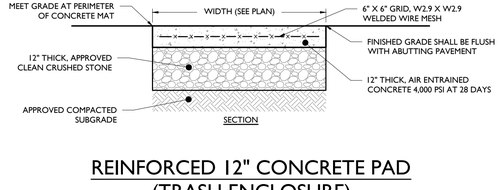


FULL DEPTH ASPHALT PAVEMENT DETAIL

NOT TO SCALE

NOTE:
HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

8



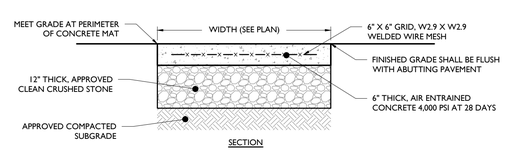
SECTION

REINFORCED 12" CONCRETE PAD (TRASH ENCLOSURE)

NOT TO SCALE

NOTES:
1. ½" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ¼" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
2. 1" DEEP BY ¼" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
3. CONCRETE SHALL RECEIVE BROOM FINISH.
4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.

9



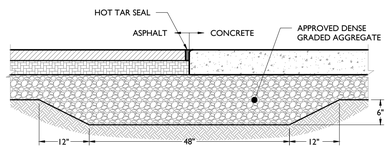
SECTION

6" CONCRETE (ATM AND ADA PARKING SPACE)

NOT TO SCALE

NOTES:
1. ½" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ½" FROM THE SURFACE.
2. 1" DEEP BY ½" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
3. CONCRETE SHALL RECEIVE BROOM FINISH.
4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.

10



CONCRETE TO ASPHALT TRANSITION DETAIL

NOT TO SCALE

12

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GHC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
3	12/28/2023	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 28, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

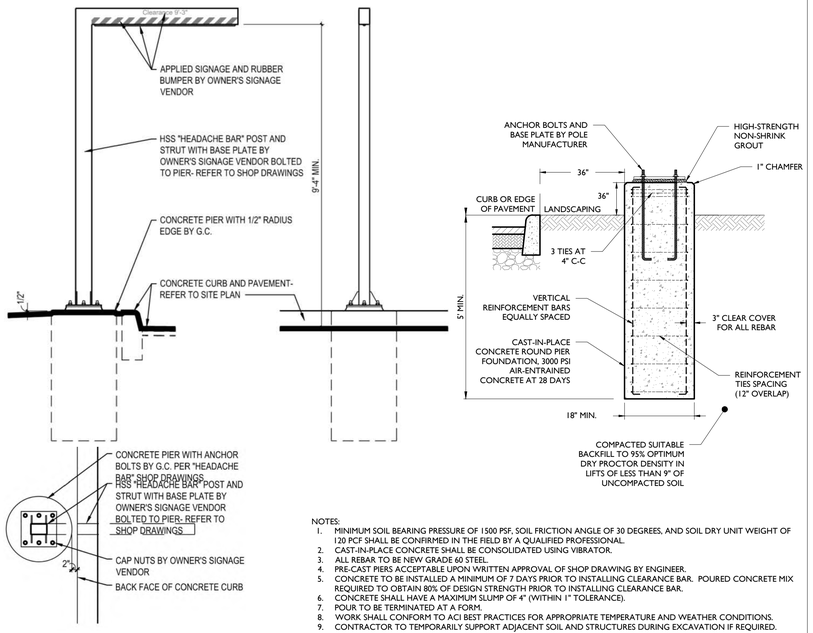
STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: BOS-220137

TITLE: CONSTRUCTION DETAILS

DRAWING: C-12

Z:\BOS\TOWN\BOS\220137 CONST\ATTE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\SDP-12DETL.DWG

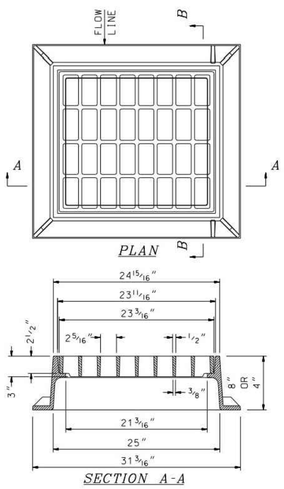


NOTES:
1. MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
2. CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
3. ALL REBAR TO BE NEW GRADE 60 STEEL.
4. PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
5. CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING CLEARANCE BAR. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING CLEARANCE BAR.
6. CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
7. POUR TO BE TERMINATED AT A FORM.
8. WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS.
9. CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.

CLEARANCE BAR DETAIL

NOT TO SCALE

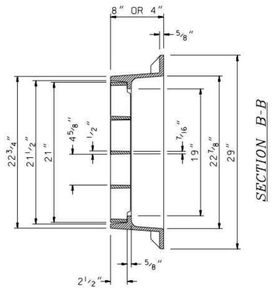
1



TYPE 'B' INLET GRATE & FRAME DETAIL

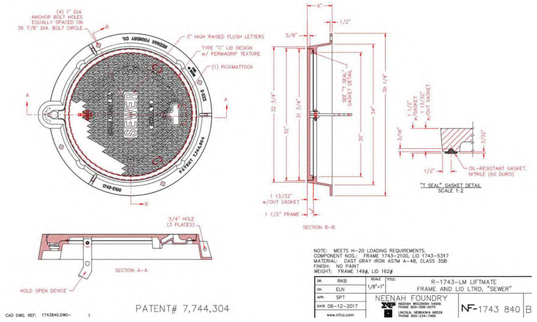
NOT TO SCALE

2



GENERAL NOTES

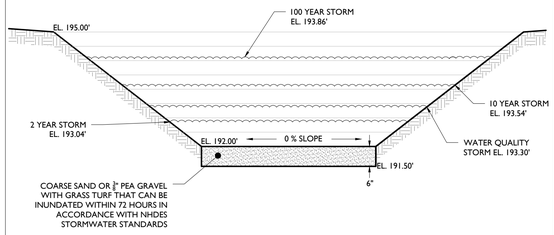
1. ALL DIMENSIONS ARE NOMINAL.
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW. WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. FRAME AVAILABLE IN 4" OR 8" HEIGHTS.
4. FREE OPEN AREA = 2.55 S.F.
5. USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.



MANHOLE COVER & FRAME DETAIL

NOT TO SCALE

3

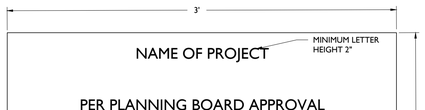


INFILTRATION BASIN DETAIL

NOT TO SCALE

NOTES:
BASIN CONSTRUCTION MUST NOT COMPACT SOILS BELOW BASIN BOTTOM.

4

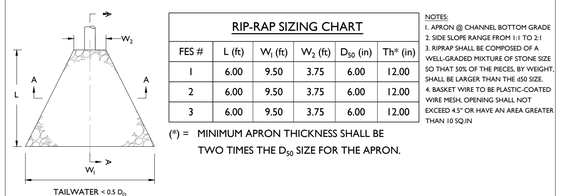


NOTES:
1. SIGN SHALL HAVE BLACK LETTERS ON A WHITE BACKGROUND
2. SIGN SHALL BE WEATHER RESISTANT AND SECURED TO THE GROUND
3. HOURS ON THE SIGN SHALL COMPLY WITH ALL PLANNING BOARD CONDITIONS OF APPROVAL.

CONSTRUCTION SIGN DETAIL

NOT TO SCALE

5



RIP-RAP SIZING CHART					
FES #	L (ft)	W_1 (ft)	W_2 (ft)	D_{50} (in)	Th[@] (in)
1	6.00	9.50	3.75	6.00	12.00
2	6.00	9.50	3.75	6.00	12.00
3	6.00	9.50	3.75	6.00	12.00

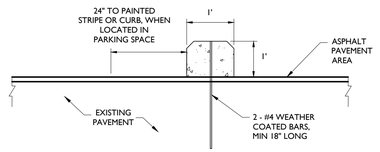
(@) = MINIMUM APRON THICKNESS SHALL BE TWO TIMES THE D_{50} SIZE FOR THE APRON.

NOTES:
1. APRON @ CHANNEL BOTTOM GRADE
2. SIDE SLOPE RANGE FROM 1:1 TO 2:1
3. RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES, BY WEIGHT, SHALL BE LARGER THAN THE d50 SIZE.
4. BASKET WIRE TO BE PLASTIC-COATED WIRE MESH, OPENING SHALL NOT EXCEED 4.5" OR HAVE AN AREA GREATER THAN 10 SQ.IN

RIP-RAP PAD

NOT TO SCALE

7

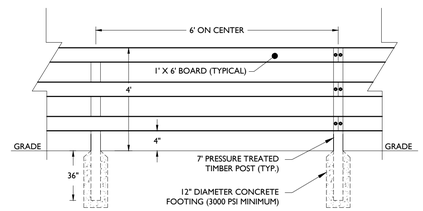


CONCRETE WHEEL STOP DETAIL

NOT TO SCALE

NOTES:
1. ON CONCRETE PAVEMENT, SECURE WHEEL STOP WITH EPOXY BONDING AGENT.
2. WHEEL STOP SHALL BE 6' LONG.
3. WHEEL STOP SHALL BE PREFABRICATED CONCRETE.
4. WHEEL STOP MINIMUM FROST DEPTH SHALL BE 4 FT BELOW GRADE.

9

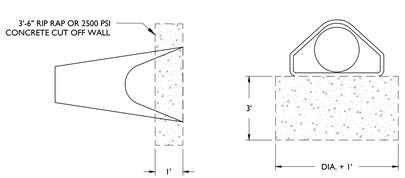


WOODEN POST & THREE RAIL FENCE DETAIL

NOT TO SCALE

NOTE:
1. ALL WOOD TO BE PRESSURE TREATED

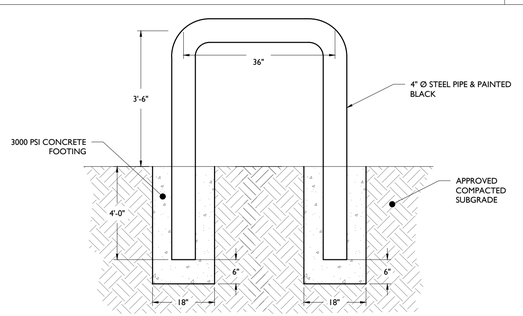
10



FLARED END SECTION (FES-1, FES-2 & FES-3) DETAIL

NOT TO SCALE

6

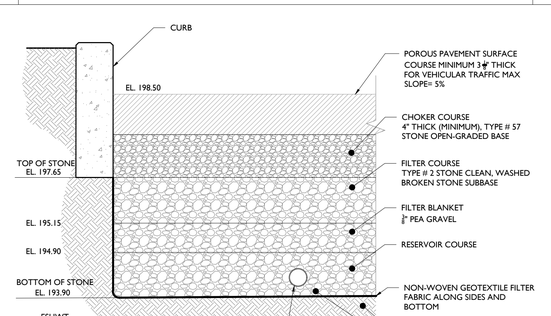


U-BOLLARD BICYCLE RACK DETAIL

NOT TO SCALE

8

NOTES:
1. PERMEABLE PAVEMENT MUST BE IN ACCORDANCE WITH NJ STORMWATER BEST MANAGEMENT PRACTICES MANUAL, CHAPTER 9.6
2. FILTER FABRIC IS REQUIRED ALONG THE SIDES AND BOTTOM OF THE SYSTEM TO PREVENT MITIGATION OF FINES FROM THE SURROUNDING SOIL.
3. THE STORAGE BED IN THIS TYPE OF SYSTEM CONSISTS OF AN AGGREGATE LAYER AND AN UNDERDRAIN, WHICH IS A NETWORK OF PIPES THAT COLLECT RUNOFF AND TRANSPORT IT TO THE OUTFLOW SECTION OF THE SYSTEM.
   3.1. THE AGGREGATE LAYER MUST HAVE SUFFICIENT DEPTH TO PROVIDE AT LEAST 3 INCHES OF AGGREGATE ABOVE AND BELOW THE PIPE NETWORK. IT MUST CONSIST OF CLEAN, WASHED, OPEN-GRADED AASHTO NO. 2 BROKEN STONE.
   3.2. WITHIN THE AGGREGATE LAYER, THE NETWORK OF PIPES MUST BE ABLE TO WITHSTAND THE DESIGN LOADS.
   3.3. THE MANIFOLD OR OTHER MECHANISMS USED TO COLLECT FLOW FROM THE PERMEABLE PAVEMENT SYSTEM MUST BE NON-PERFORATED.
   3.4. ALL JOINTS MUST BE SECURE AND WATERTIGHT.
   3.5. THE CAPACITY OF THE UNDERDRAIN MUST BE SUFFICIENT TO ALLOW THE SYSTEM TO DRAIN WITHIN 72 HOURS.
4. THE SEASONAL HIGH WATER TABLE (SHWT) OR BEDROCK MUST BE AT LEAST 1 FOOT BELOW THE BOTTOM OF THE STORAGE BED. *(DESIGNER NOTE: IF UNDERDRAINED, 2 FT IF INFILTRATION)*
5. AT LEAST ONE INSPECTION PORT, WITH A REMOVABLE CAP, MUST BE PROVIDED AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE PERFORATED SECTION OF THE NETWORK OF PIPES AND BE FLUSH WITH THE SURFACE OF THE SURFACE LAYER AND EACH LOCATION DENOTED IN THE MAINTENANCE PLAN. EACH INSPECTION PORT MUST BE PLACED AT LEAST 3 FEET FROM ANY EDGE. THE SIZE OF THE INSPECTION PORT MUST BE LARGE ENOUGH TO ALLOW FOR MAINTENANCE ACTIVITIES. ADDITIONALLY, EACH INSPECTION PORT MUST EXTEND DOWN TO THE UNDERDRAIN PIPE NETWORK.
6. CONCRETE PAVERS MUST CONFORM TO ASTM C936 AND HAVE A MINIMUM THICKNESS OF 3.125 INCHES WHEN SUBJECT TO VEHICULAR TRAFFIC.
7. PAVER UNITS MUST BE INSTALLED OVER A BEDDING COURSE CONSISTING OF CLEAN, WASHED OPEN-GRADED AASHTO NO. 8 BROKEN STONE.
8. THE MINIMUM CHOKER COURSE THICKNESS IS 4 INCHES.
9. STORAGE BED AGGREGATE MUST BE CLEAN, WASHED AND OPEN-GRADED AASHTO NO. 2 BROKEN STONE.
10. POST-CONSTRUCTION TESTING OF THE PERMEABLE PAVEMENT SURFACE COURSE IS REQUIRED AND MUST CONFORM TO THE METHODS OF ASTM C1781; STANDARD TEST METHOD FOR SURFACE INFILTRATION RATE OF PERMEABLE PAVEMENT SYSTEMS.
11. PERMEABLE PAVEMENT MAY ACCEPT ADDITIONAL INFLOW FROM A MAXIMUM AREA OF 3 TIMES THE AREA OF THE PERMEABLE PAVEMENT SYSTEM.
12. SEASONAL HIGH GROUNDWATER TABLE NOT ENCOUNTERED.



POROUS PAVEMENT DETAIL (PV-1)

NOT TO SCALE

11

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GMC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
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2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

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www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE
PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 30, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

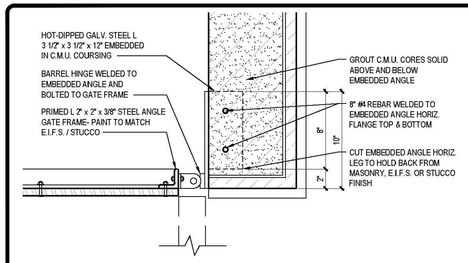
STONEFIELD engineering & design

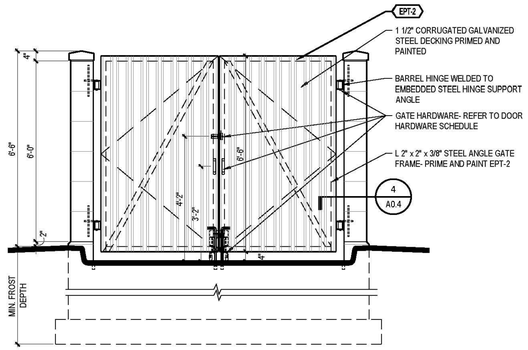
SCALE: AS SHOWN | PROJECT ID: BOS-220137

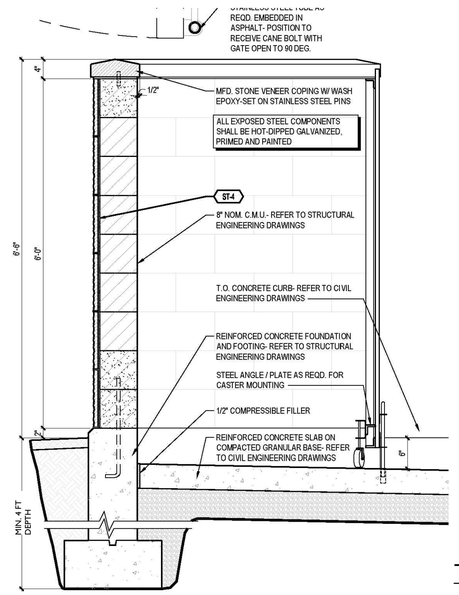
TITLE: CONSTRUCTION DETAILS

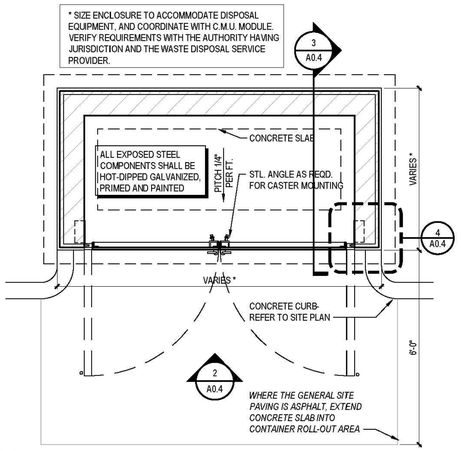
DRAWING: C-13

Z:\BOS\TOWN\BOS\220137 CHASE\FATE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\SHP 11.DETL.DWG





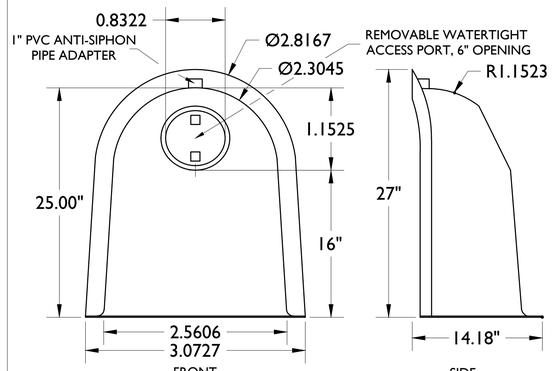


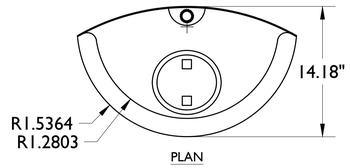


TRASH ENCLOSURE DETAIL

NOT TO SCALE

1





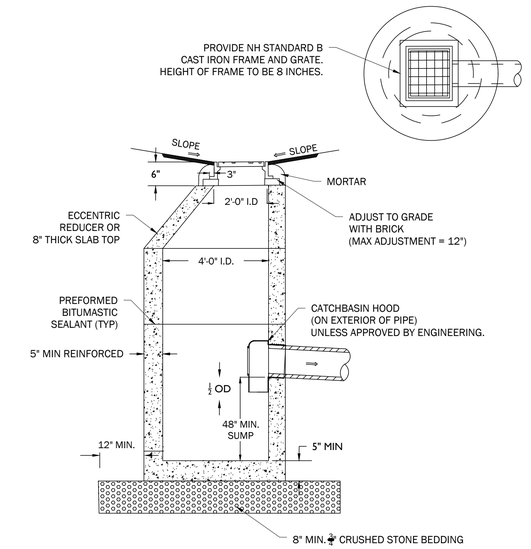
DESIGNED TO FIT
48"-60" DIAM.
STRUCTURES

RECOMMENDED SUMP DEPTH 2.5 TO
3X OUTLET PIPE I.D.

BMP 18R OIL SEPARATOR HOOD DETAIL

NOT TO SCALE

2



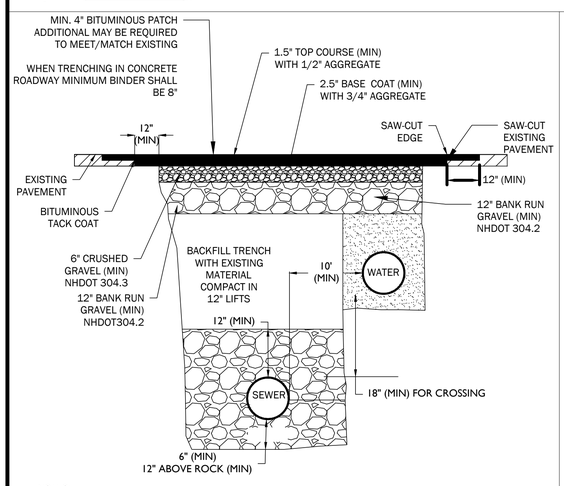
NOTES:

1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.

CATCH BASIN DETAIL

NOT TO SCALE

3



NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.

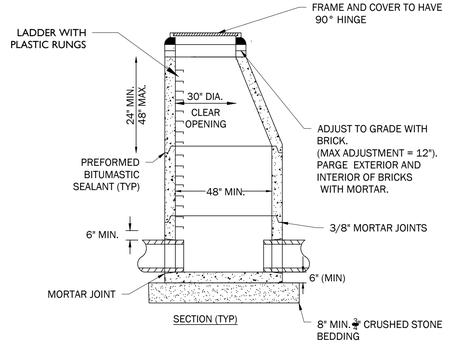
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES

3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

TYPICAL TRENCH DETAIL

NOT TO SCALE

4



SECTION (TYP)

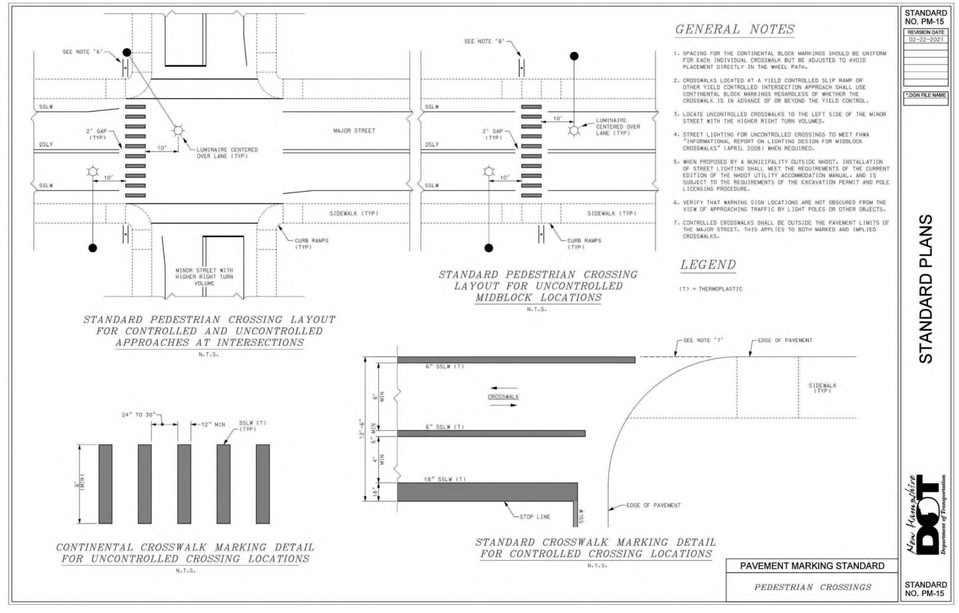
NOTES:

1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

DRAIN MANHOLE DETAIL

NOT TO SCALE

5



NHDOT CROSSWALK DETAIL

NOT TO SCALE

6

Z:\BOS\TDN\BOS\220137 CONST\ATTE - I-3 WEBB PLACE, DOVER, NH\CAD\PLOT\SDP-12.DWG,PLOT.DWG

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GMC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
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SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH
DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
I-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

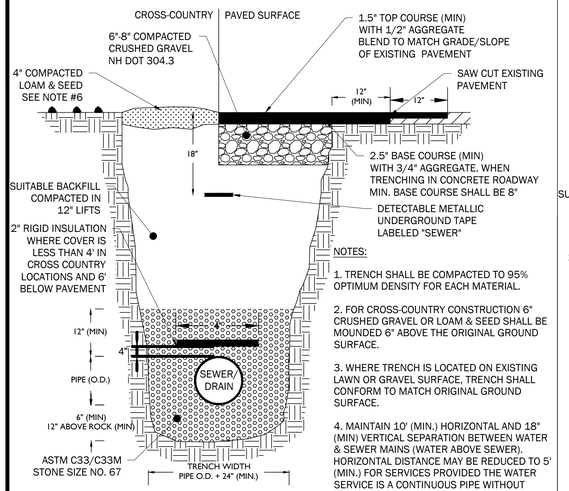
JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: BOS-220137

TITLE:
CONSTRUCTION
DETAILS

DRAWING:
C-14



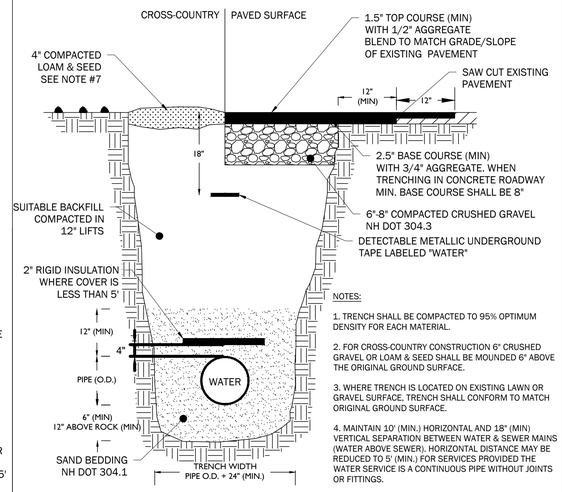
NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT AND ROCKS OVER 6" IN LARGEST DIMENSION
6. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

SEWER TRENCH DETAIL

NOT TO SCALE

1



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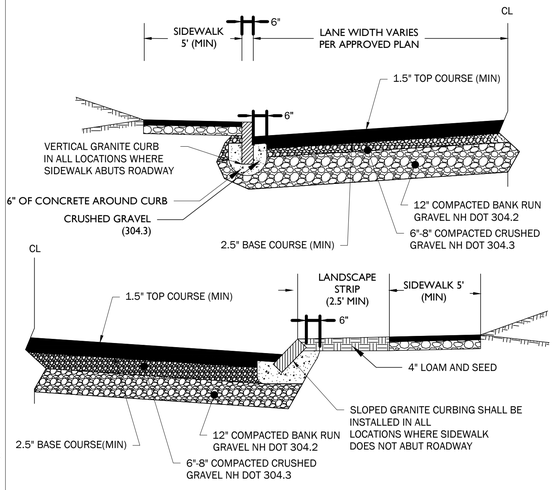
6. PROVIDE MINIMUM 5' OF COVER. ENGINEERING APPROVAL REQUIRED FOR LESS THAN 5' OF COVER.
7. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

WATER TRENCH DETAIL

NOT TO SCALE

2



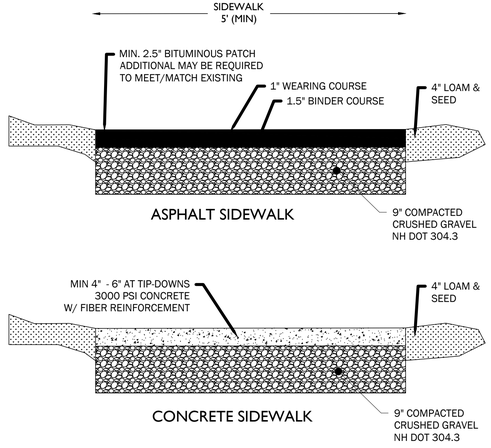
NOTES:

1. THIS DETAIL IS FOR GENERAL REVIEW PURPOSES ONLY, FINAL DESIGN SHALL BE BASED ON SPECIFIC SITE CONDITIONS AND APPROVED PLANS.
2. SIDEWALK LOCATION AND MATERIAL SHALL BE AS APPROVED BY THE CITY OF DOVER.

ROADWAY CROSS SECTION DETAIL

NOT TO SCALE

3



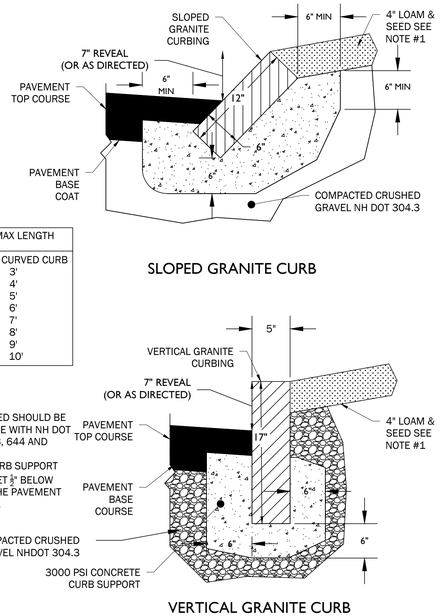
NOTES:

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

ASPHALT AND CONCRETE SIDEWALK DETAIL

NOT TO SCALE

4



RADIUS	MAX LENGTH
< 21'	USE CURVED CURB
12'	3'
22' - 28'	4'
29' - 35'	5'
36' - 42'	6'
43' - 49'	7'
50' - 56'	8'
57' - 60'	9'
OVER 60'	10'

SLOPED GRANITE CURB

VERTICAL GRANITE CURB

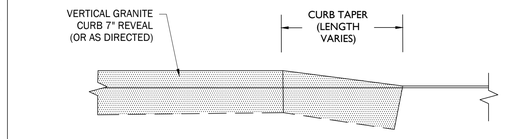
NOTES:

1. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.
2. CONCRETE CURB SUPPORT SHOULD BE SET ¾" BELOW THE TOP OF THE PAVEMENT BASE COURSE.

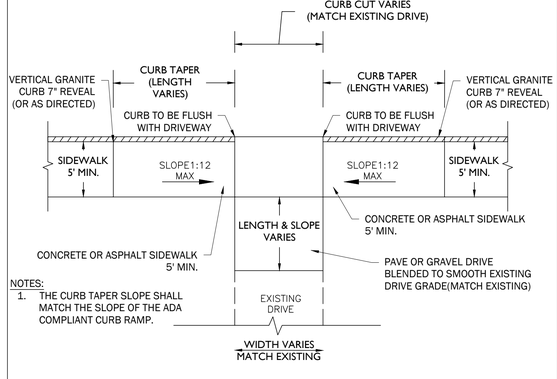
GRANITE CURB DETAIL

NOT TO SCALE

5



GRANITE CURB TRANSITION AT TIP DOWN



NOTES:

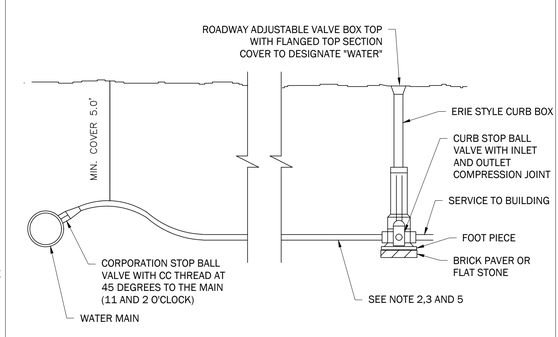
1. THE CURB TAPER SLOPE SHALL MATCH THE SLOPE OF THE ADA COMPLIANT CURB RAMP.

DRIVEWAY PLAN WITH SIDEWALK TIP DOWNS

SIDEWALK TIP DOWN AT DRIVEWAY DETAIL

NOT TO SCALE

6



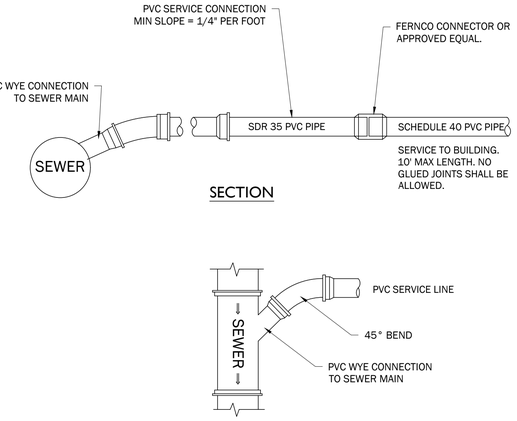
NOTES:

1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP, INCLUDING TEE AND OTHER CONNECTIONS.
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE (BLUE OR BLACK) CTS SDR 9 PLASTIC POLYETHYLENE RATED FOR 250 psi.
4. CAM-LOCK REQUIRED FOR CTS OR IPS, MJ ADAPTER REQUIRED FOR HDPE
5. ¾"- COPPER, CTS
   1"- COPPER, CTS
   2"- CTS, HDPE, IPS

WATER SERVICE CONNECTION DETAIL

NOT TO SCALE

7



NOTES:

1. TRENCHING AND BEDDING REQUIREMENTS PER CITY SEWER TRENCH DETAIL (D-3).
2. SERVICE LATERAL DIAMETER VARIES PER APPLICATION. REVIEW SIZE WITH CITY ENGINEER PRIOR TO INSTALLATION.
3. SDR 35 SHALL NOT EXTEND INTO THE BUILDING

SEWER SERVICE CONNECTION DETAIL

NOT TO SCALE

8

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GHC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
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SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
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JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

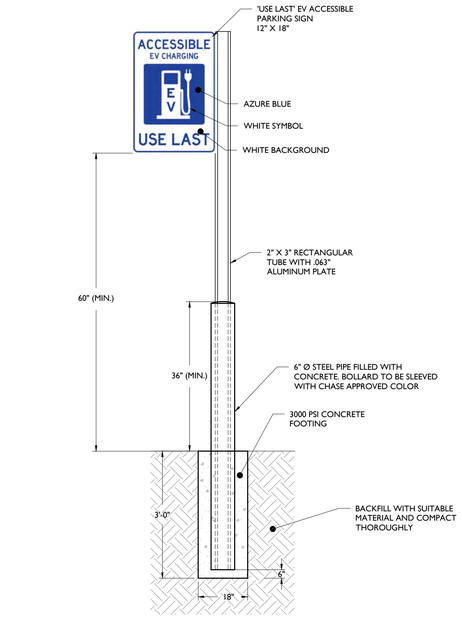
STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: BOS-220137

TITLE: CONSTRUCTION DETAILS

DRAWING: C-15

Z:\BOS\DWG\2022\BOS-220137 CONSTATES - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOTS\PDF\1-3 DETS.DWG



NOTES:
1. ALL EXPOSED PAINTED SURFACES SHALL BE COATED WITH MATTHEWS #282-20BSP VOC GLOSS CLEAR, WITH MINIMUM 2 MILS DRY FILM THICKNESS (DFT) PER MATTHEWS APPLICATIONS SPECIFICATIONS.
2. EMBEDDED PORTION OF POST SHALL BE PRIMED AND PAINTED FOR CORROSION PROTECTION

'USE LAST' ACCESSIBLE EV PARKING SIGN DETAIL

NOT TO SCALE

1

EverCharge

Level 2 EVSE

EV002
208 - 240 Vac / 80A Maxx

Key Features
- RFID Card Reader
- Wireless Mesh Network
- Optional 4g Connectivity
- SAE J1772 EV Connector
- ISO 15118 Capable
- Integrated Management System
- Integrated Over-Current Disconnect
- Integrated SmartPower Load Management
- Designed for Installation
- Top and Bottom Entry Wiring
- Aluminum Construction
- Pedestal Mount Available
- Robust NEMA 3R Ingress Protection
- Indoor or Outdoor Installation
- Made in USA

Application
- Fleet
- Commercial
- Multi-Tenant & Mixed-Use

		EV002-48 E800-1000	EV002-80 E800-1001
Power Input	Input Rating	208V or 240V AC single-phase	
	Connections and wiring	L1, L2, and ground, hardwired	
	Standby Power	1.61 watts	
	Metering	CTEP certified revenue-grade meter within 1% accuracy	
Power Output	Output Rating	Maximum output: 48A	Maximum output: 80A
Protection	Internal Residual Current Detection	20 mA CCID per UL 2231	
	Integrated Over Current Safety Disconnect	60A overcurrent protection 10KA interrupting rating	100A overcurrent protection 10KA interrupting rating
	Plug-Out Protection	Power output is terminated upon detection of plug-out	
	Electrical Protection	Over-current, short circuit, over-voltage, under-voltage, ground fault, surge protection, over temperature	

EVERCHARGE EV CHARGER DETAIL

NOT TO SCALE

2

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GHC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
3	12/28/2023	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

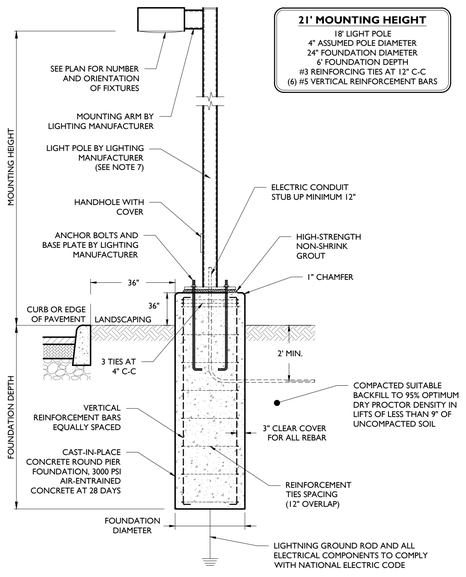
STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: BOS-220137

TITLE:
CONSTRUCTION DETAILS

DRAWING:
C-16

Z:\BOS\TOWN\BOS\2022\BOS-220137 CHASE\FATTE - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOT\SHP 1 DETL.DWG



LIGHT POLE INSTALLATION DETAIL

NOT TO SCALE

NOTES:
1. MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
2. CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
3. ALL REBAR TO BE NEW GRADE 60 STEEL.
4. PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
5. CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE.
6. CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
7. POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 33FT ABOVE GROUND FOR THE AREA BASED ON ANSI/ASCE 7-93.
8. POUR TO BE TERMINATED AT A FORM.
9. WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS.
10. CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.

EVOLVE

EACL® Series

LED Area Light/Compact Low Wattage

CUSTOMER NAME
PROJECT NAME
DATE ____ TYPE ____
CATALOG NUMBER

Ordering Information

EACL 01 ____ 7 ____

PROD. ID	GEN	VOLTAGE	OPTIC CODE	DISTRIBUTION	CRI (MIN)	CCT	DIMMING[3]	CONTROLS	MOUNTING ARM	COLOR	OPTIONS
E = Evolve	01	0 - 120-277V	4x=3000 lm	AF = Asymmetric Forward	7 = 70	30 = 3000K[1]	N = Dimming thru life of receptacle	1 = None	C1 = Integral Slip-fitter for 2-3/8" - 2-7/8" (1656) OD - 2.579 in. OD[2]	GRAY = Gray	F = Fusing
AC = Compact Area Light		H = 347-480V	8x=5000 lm	AW = Asymmetric Wide		40 = 4000K	D = External Dimming 1&2=0V, cable	A = ANSI 7 pin PE receptacle (no control)	D1 = Universal mounting arms, fitted for mating on square pole mounting[2]	BLCK = Black	H1 = Motion Sensor w/ LightGrid
L = Low Voltage		1 = 120V	Cx=7500 lm	AVA = Asymmetric Varma/Auto		50 = 5000K	X = No External Dimming Leads	D = ANSI 7 pin PE receptacle with shorting cap provided	K1 = Knuckle Slipfitter for 1.9 in - 2.3in. OD Tenon[4]	DKBZ = Dark Bronze	H2 = Motion Sensor Elantrex®
		2 = 208V	Dx=10000 lm					E = ANSI C136.41 7-pin with Non-Dimming PE Control[5]	S1 = Knuckle Slipfitter for 2.3in. - 3.0in OD Tenon[4]	WHTE = White	H4 = Motion Sensor (Wattstopper)
		3 = 240V	Dx=10000 lm						V1 = Knuckle Wall Mount [4]		J = cUL/Canada
		4 = 277V	Ex=25000 lm								L = Tool-Less Entry
		5 = 480V	Fx=50000 lm								R= Enhanced Surge Protection (10kV/5kA)
		D = 347V	Hx=20000 lm								U = DALI dimming[6]
											V = 3-Position Terminal Block
											Y = Coastal Finish[7]
											XXX = Special Options

[1] Not Available with Fusing, Must Choose a Discrete Voltage with "F" Option Code
[2] Note Standard Dimming is 0-10V
[3] PE Control only available for 120-277V, 347V or 480V Discrete Voltage.
[4] Supplied with 3ft leads
[5] Supplied with 10/3 ft Cable
[6] Restricted Aiming Angle of 0-45°

[7] Compatible with LightGrid™ Wireless Control Nodes, Not Compatible with Motion Sensor Control
[8] H2 Sensor is not available in High Voltage (347V, 480V or 347-480V)
[9] Recommended for installations within 750 feet from coast. Lead time varies, check with factory.
[10] Select 3000K CCT for IDA approved fixtures.

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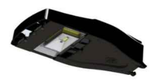
Page 2 of 10
(Rev 01/17/24)
OLP2107_R11

AREA LIGHT FIXTURE 'A' & 'B' & 'C' SPECIFICATION

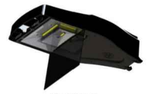
NOT TO SCALE

EACL SERIES SHIELDED FIXTURE EXAMPLES*



Front Shield

Left/Right Side Shield



Back Shield

TYPE IV SHIELDING

Shield Orientation	Cutoff Distance	Shield Order Logic
Front	1.5	ELS-EACL-RF3-BLCK
	2	ELS-EACL-RF4-BLCK
Side	1	ELS-EACL-RS2-BLCK
Back	Long	ELS-EACL-RBL-BLCK

TYPE III SHIELDING

Shield Orientation	Cutoff Distance	Shield Order Logic
Front	1.5	ELS-EACL-RF3-BLCK
Side	1	ELS-EACL-RS2-BLCK
Back	Long	ELS-EACL-RBL-BLCK

TYPE II SHIELDING

Shield Orientation	Cutoff Distance	Shield Order Logic
Side	1	ELS-EACL-RS2-BLCK
Back	Long	ELS-EACL-RBL-BLCK

*All shields listed on this page are "BLACK" in color.

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Page 3 of 3
(Rev 04/26/23)
OLP2207-Evolve-EACL-Series-Area-Light-Shielding_R01

AREA LIGHT FIXTURE 'A' & 'B' & 'C' SHIELDING SPECIFICATION

NOT TO SCALE

DESCRIPTION

Lanterra 9004-W1 (Up or Down) and 9004-W2 (Up and Down) are 4.25" O.D., line voltage cylinder fixtures with dimmable LED. The luminiare comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 4 inch j-box. The luminaire also comes with various field replaceable optics. It also comes with various lens, louvers and colors or dichroic filters, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP66 rating.

SPECIFICATION FEATURES

Material
Housing, hood and mounting stem are precision-machined from corrosion resistant billet stock 6061-T6 aluminum.

Finish
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.

Hood
Hood is removable and accepts up to two internal accessories at once (lenses, louvers and filters) to achieve multiple lighting effects. Weep holes prevents water and mineral stains from collecting on the lens, even in the straight up position. The flush lens design reduces fixture height, minimizes debris collection and prevents water and mineral stains from collecting on the lens.

Gasket
Housing and hood are sealed with a high temperature silicone O-ring gasket to prevent water intrusion.

Lens
Tempered glass lens, factory sealed with high temperature silicone O-ring to prevent water intrusion and breakage due to thermal stock.

Hardware
Stainless steel hardware is standard to provide maximum corrosion resistance.

Electrical
Long life LED system coupled with electronic driver (120-277V/50-60Hz) is compatible with TRIAC (Trailing Edge), ELV (Forward phase) and 0-10V dimming to deliver optical performance. Light can be dimmed from 100-1% while maintaining constant CCT. It will operate in -30°C to 50°C unless noted otherwise. The driver incorporates surge protection. LEDs are available in 2700K, 3000K, 3500K at 80CRI and 97CRI, 4000K at 80CRI and 97CRI, 5000K at 80CRI and industry leading high output with 87% lumen maintenance at 60,000hrs.

Compliance
Components are UL recognized and luminaires are cULus listed for 50°C ambient environments unless noted otherwise, wet location listed, and ROHS compliant. IP66 Rated. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

Warranty
Lumiere warrants the Lanterra series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.

Lumiere

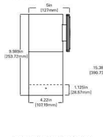
Catalog #		Type	
Project			
Comments		Date	
Prepared by			

Lanterra 9004

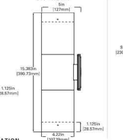
LED
INTERIOR / EXTERIOR
CYLINDER FLOOD LIGHT
CERTIFICATION DATA
cULus - 1598
Wet Location Listed - IP66
LM79/LM80 Compliant
ROHS Compliant
10W LED, L70/102,000 @ 25° Celcius
20W LED, L70/102,000 @ 25° Celcius
30W LED, L70/102,000 @ 25° Celcius

DIMENSIONS

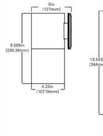
9004-W1-RW



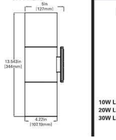
9004-W2-RW



9004-W1-FL



9004-W2-FL



ORDERING INFORMATION

SERIES	DIRECTION	HOOD	LED CCT & CRI	FIELD REPLACEABLE OPTIC 1	FIELD REPLACEABLE OPTIC 2	FINISH	LIGHT LEVEL	VOLTAGE	MOUNTING	OPTIONS
9004	W1 Up or Down W2 Up and Down	RW Standard Recessed Lens with no wasp holes - Indoor RF Recessed Lens with no wasp holes - Indoor FL Flush lens hood	**Standard CRI** LED 2700 - 2700K, 90 CRI LED 3000 - 3000K, 90 CRI LED 3500 - 3500K, 90 CRI LED 4000 - 4000K, 90 CRI **Premium CRI** LED 2700 - 2700K, 97 CRI LED 3000 - 3000K, 97 CRI LED 3500 - 3500K, 97 CRI LED 4000 - 4000K, 97 CRI	S Spot M Medium F Flood **WF White Flood**	S Spot M Medium F Flood **WF White Flood**	**Standard Paint Finish** BK Black BZ Bronze GY Grey (Silver) **WT White**	L1 Light Level 1 (1000) L2 Light Level 2 (2000) L3 Light Level 3 (3000)	120V - 120-277V HIGH 347-480V	Surface Mount / Wall, Ceiling, Ground Round Surface Mount- mounts directly to junction box Thermal Limitations (unless otherwise noted IMC): 9004-W1-xxx-12-xxx-RSM-IMC 9004-W1-xxx-L2-xxx-RSM-IMC 9004-W2-xxx-L2-xxx-RSM-IMC Remote Driver Housing WRM* Remote Driver Housing - Round Wall Plate Thermal Limitations (unless otherwise noted IMC): 9004-W1-xxx-12-xxx-WRM-IMC 9004-W2-xxx-12-xxx-WRM-IMC WSM* Remote Driver Housing - Square Wall Plate Thermal Limitations (unless otherwise noted IMC): 9004-W1-xxx-12-xxx-WSM-IMC 9004-W2-xxx-12-xxx-WSM-IMC Integral Driver Mount WIS** Wall Integral Driver Plate Thermal Limitations (unless otherwise noted IMC): 9004-W1-xxx-12-xxx-WIS-SMC 9004-W2-xxx-12-xxx-WIS-SMC	SVP20* Standalone integral sensor

Notes: 1. Only available for double hood option (W2).
2. 9004-W1 not available in L3.
3. 9004-W2 not available in L2, L3.
4. Only available for Single head, Up or down (W1) with RSM only.
5. WIS (cutting) type wiring feed.
6. Remote Driver distance up to 80', For 62-300W remote distance up to 15'

Specifications and dimensions subject to change without notice.

COOPER Lighting Solutions

TD510029EN
11-28-18

AREA LIGHT FIXTURE 'D' SPECIFICATIONS

NOT TO SCALE

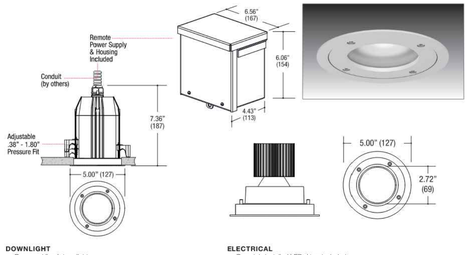
BULLET

OUTDOOR RECESSED FIXED DOWNLIGHT

WET LOCATION - IP66 **LED**

ILLUMINATION

PROJECT	TYPE	CATALOG NUMBER



DOWNLIGHT
- Recessed fixed downlight
- Die-cast aluminum trim
- Powder coat finish

HOUSING
- Extruded aluminum central housing
- Powder coat finish
- Dust and water jet tight sealed
- **Ceiling Cut-Out - Ø4.65"**

LED SOURCE
- Field-changeable optic
- 20W / 1670lm, 80CRI / 3000K

ELECTRICAL
- Remotely installed LED driver included
- Separated primary wiring compartment with power supply
- Double-cable entry for through wiring
- Superpure aluminum reflector
- Dimmable

MOUNTING
- Swing out pressure fit mounting clips
- Adjustable up to 1.80" max. ceiling thickness

LABELS
- Suitable for wet location
- IP66 rated

5 YEAR WARRANTY Limited

ORDERING INFO

SERIES	WATTAGE	CRI / COLOR	BEAM	DRIVER	VOLTAGE	FINISH	OPTIONS
5811-1SA-T **BULLET Recessed** Die-Cast Aluminum Trim Fixed Downlight Trimmed Fixture	20L 20W LED 1670 lm nom.	8027 80CRI / 2700K 8030 80CRI / 3000K 8035 80CRI / 3500K 8040 80CRI / 4000K 9027 90CRI / 2700K 9030 90CRI / 3000K 9727 97CRI / 2700K 9730 97CRI / 3000K	N Narrow 25° M Medium 45° W Wide 56°	DM Dimming Multiple Forward/Reverse Phase (@ 120V only) 0-10V Wires Present (@ 120-277V only) D3 Lutron Hi-Lume® Forward Phase 2 wire 1% (120V only) DE Lutron Hi-Lume® EcoSystem® 1% w/Soft On, Fade-to-Black, 1% (120-277V only)	1 120V U 120-277V	SS Silver	EM Remotely Mounted Emergency LED Inverter (Field wiring required)

Ordering Example: **5811-1SA-T-20L-8030-M-DM-U-SS**

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We reserve the right to change or withdraw specifications without prior notice.

HEADQUARTERS
9200 Deering Avenue
Chatsworth CA 91311

Telephone: 818-885-1335
Toll Free: 855-885-1335
Fax: 818-576-1335

www.lfillumination.com
rev: 120419

AREA LIGHT FIXTURE 'E' SPECIFICATIONS

NOT TO SCALE

Lumark

Lumark

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

DESCRIPTION

The patented Lumark Crosstour™ MAXX LED wall pack series of luminaries provides low-profile architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, stainless steel hardware along with a sealed and gasketed optical compartment make Crosstour impervious to contaminants. The Crosstour MAXX wall luminaire is ideal for wall/ surface, inverted mount for facade/canopy illumination, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Matching housing styles incorporate both a full cutoff and reflective lens design. Full cutoff and refractive lens models are available in 58W, 81W and 102W. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes four 1/2" NPT threaded conduit entry points. The back box is secured by four lag bolts (supplied by others). External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Not recommended for car wash applications.

Optical
Silicone sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full cutoff models integrate an impact-resistant molded refractive prism optical lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a molded lens assembly designed for maximum forward throw. Solid state LED Crosstour MAXX luminaries are thermally optimized with eight lumen packages in cool 5000K, neutral 4000K, or warm 3000K LED color temperature (CCT).

Electrical
LED driver is mounted to the die-cast aluminum housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 58W, 81W and 102W models operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C [122°F] models available in 58W and 81W models only. Crosstour MAXX luminaires maintain greater than 85% of initial light output after 72,000 hours of operation. Four half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz, 480V 60Hz, or 347V 60Hz electrical operation. 480V is compatible for use with 480V Wye systems only.

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch (available in 58W and 81W models only), an AC-ON indicator light and a premium extended rated sealed maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Area and Site Pole Mounting
Optional extruded aluminum 6-1/2" arm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional tenon adapter fits 2-3/8" or 3-1/2" O.D. Tenon.

Finish
Crosstour MAXX is protected with a super TGIC carbon bronze or summit white polyester powder coat paint. Super TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty
Five-year warranty.

XTOR
CROSSTOUR MAXX LED

APPLICATIONS:
WALL / SURFACE
INVERTED
SITE LIGHTING

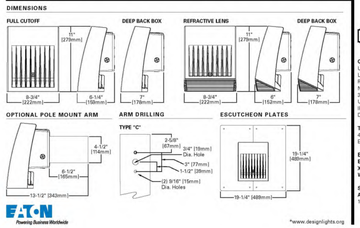
CERTIFICATION DATA
UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
NOM Compliant Models
3G Vibration Tested
UL924 Listed (CSP Models)
IP66 Rated
DesignLights Consortium® Qualified*

TECHNICAL DATA
40°C Ambient Temperature
External Supply Wiring 90°C Minimum

EPA
Effective Projected Area (Sq. Ft.):
XTOR6B, XTOR8B, XTOR12B=0.54
With Pole Mount Arm:0.98

SHIPPING DATA:
Approximate Net Weight:
13.15 lbs. (5.4-6.8 kgs.)

DIMENSIONS



*www.designlights.org

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AREA LIGHT FIXTURE 'F' SPECIFICATIONS

NOT TO SCALE

XTOR CROSSTOUR MAXX LED

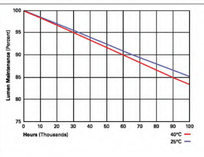
POWER AND LUMENS BY FIXTURE MODEL

58W Series					
LED Information	**XTOR6B**	**XTOR6BRL**	**XTOR6B-W**	**XTOR6BRL-W**	**XTOR6B-Y**	**XTOR6BRL-Y**
Delivered Lumens	6,139	6,225	6,038	6,133	5,611	5,826
B.U.G. Rating	B1-U0-G1	B2-U4-G3	B1-U0-G1	B2-U4-G3	B1-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	58W	58W	58W	58W	58W	58W
81W Series						
LED Information	**XTOR8B**	**XTOR8BRL**	**XTOR8B-W**	**XTOR8BRL-W**	**XTOR8B-Y**	**XTOR8BRL-Y**
Delivered Lumens	8,502	8,635	8,373	8,504	7,748	8,079
B.U.G. Rating	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	81W	81W	81W	81W	81W	81W
102W Series						
LED Information	**XTOR12B**	**XTOR12BRL**	**XTOR12B-W**	**XTOR12BRL-W**	**XTOR12B-Y**	**XTOR12BRL-Y**
Delivered Lumens	12,728	13,458	12,539	13,258	11,861	12,585
B.U.G. Rating	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	102W	102W	102W	102W	102W	102W

EGRESS Information	XTOR6B, XTOR8B and XTOR12B Full Cutoff CSP Egress LED	XTOR6BRL, XTOR8BRL and XTOR12BRL Refractive Lens CSP Egress LED
Delivered Lumens	509	468
B.U.G. Rating	N.A.	N.A.
CCT (Kelvin)	4000K	4000K
CRI (Color Rendering Index)	65	65
Power Consumption (Watts)	1.8W	1.8W

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)	Theoretical L70 (Hours)
XTOR6B Model		
25°C	> 90%	246,000
40°C	> 88%	212,000
50°C	> 88%	201,000
XTOR8B Model		
25°C	> 89%	218,000
40°C	> 87%	195,000
50°C	> 86%	181,000
XTOR12B Model		
25°C	> 89%	222,000
40°C	> 87%	198,000



CURRENT DRAW

Voltage	Model Series				
	XTOR6B	XTOR8B	XTOR12B	XTOR6B-CSP (Fixture/Battery)	XTOR8B-CSP (Fixture/Battery)
120V	0.51	0.71	0.94	0.60/0.25	0.82/0.25
208V	0.35	0.39	0.52	--	--
240V	0.25	0.35	0.45	--	--
277V	0.22	0.31	0.39	0.36/0.21	0.50/0.21
347V	0.19	0.25	0.33		--
480V	0.14	0.18	0.24		--

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD514005EN
September 17, 2018 3:03 PM

ISSUE	DATE	BY	DESCRIPTION
5	04/02/2024	GHC	PER TECHNICAL REVIEW COMMITTEE COMMENTS
4	03/14/2024	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
3	12/28/2023	JV	PER TECHNICAL REVIEW COMMITTEE COMMENTS
2	9/15/2023	JJR	PER TECHNICAL REVIEW COMMITTEE COMMENTS
1	7/31/2023	JJR	ISSUED FOR REVIEW

NOT APPROVED FOR CONSTRUCTION

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Phone 617.203.2076

SITE IMPROVEMENT PLAN

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

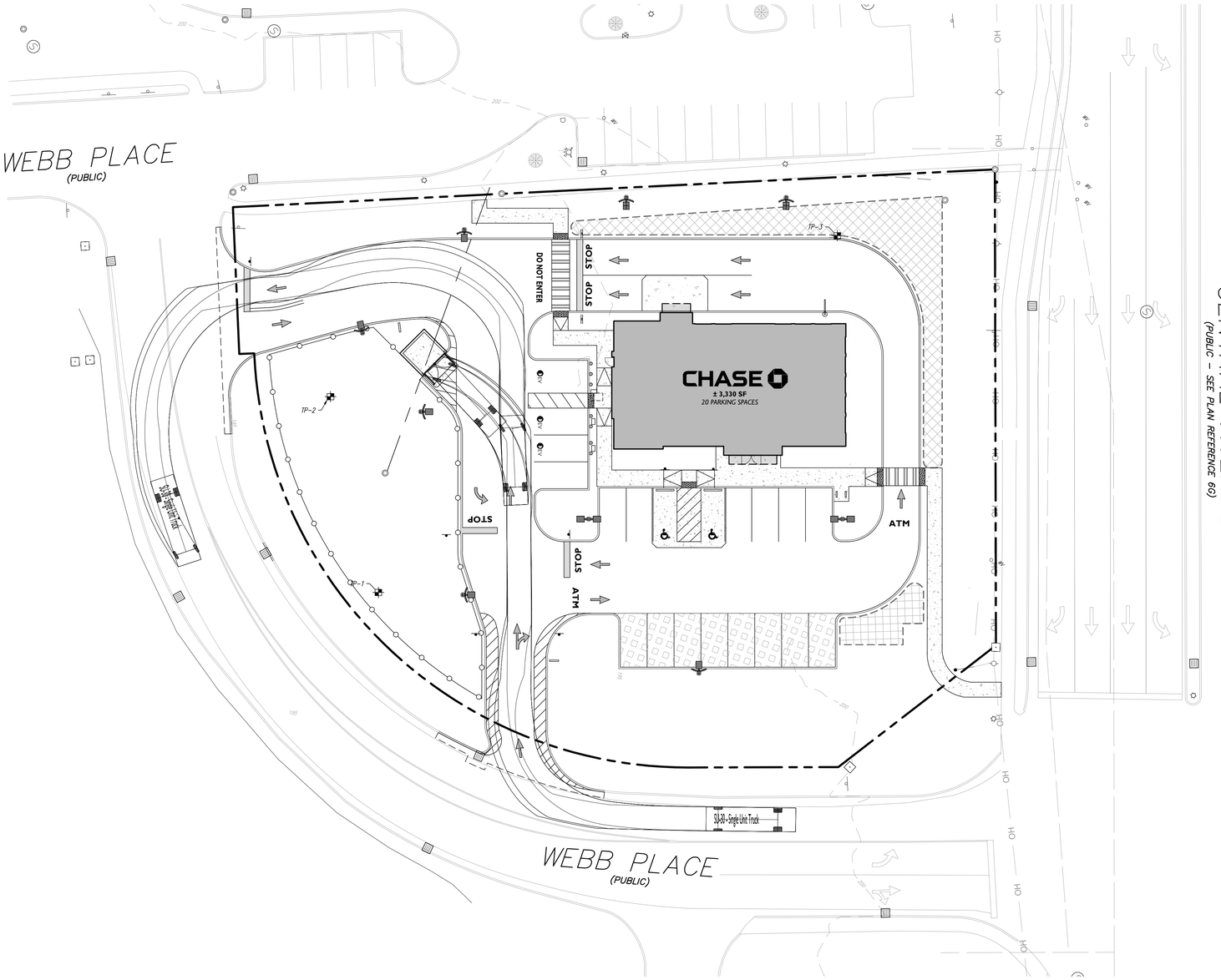
STONEFIELD engineering & design

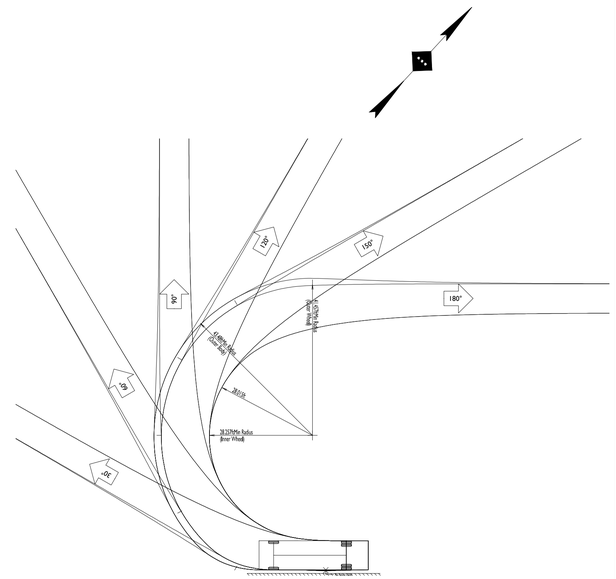
SCALE: AS SHOWN | PROJECT ID: BOS-220137

TITLE:
CONSTRUCTION DETAILS

DRAWING:
C-17

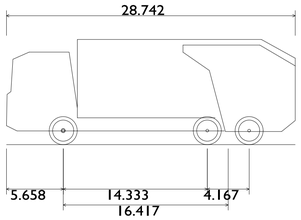
Z:\BOS\Civil\2022\220137 CONSTATES - 1-3 WEBB PLACE, DOVER, NH\CAD\PLOTS\PDF\ 3.2 DETL.DWG





SU-30 - Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°



Mack TerraPro Low Entry 6x4 LEU 613

Overall Length	28.742ft
Overall Width	8.000ft
Overall Body Height	10.481ft
Min Body Ground Clearance	1.311ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	34.000ft

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
2	03/14/2024	JV	ISSUED FOR REVIEW
1	12/28/2023	JV	ISSUED FOR REVIEW

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Phone 617.203.2076

SITE PLAN SET

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

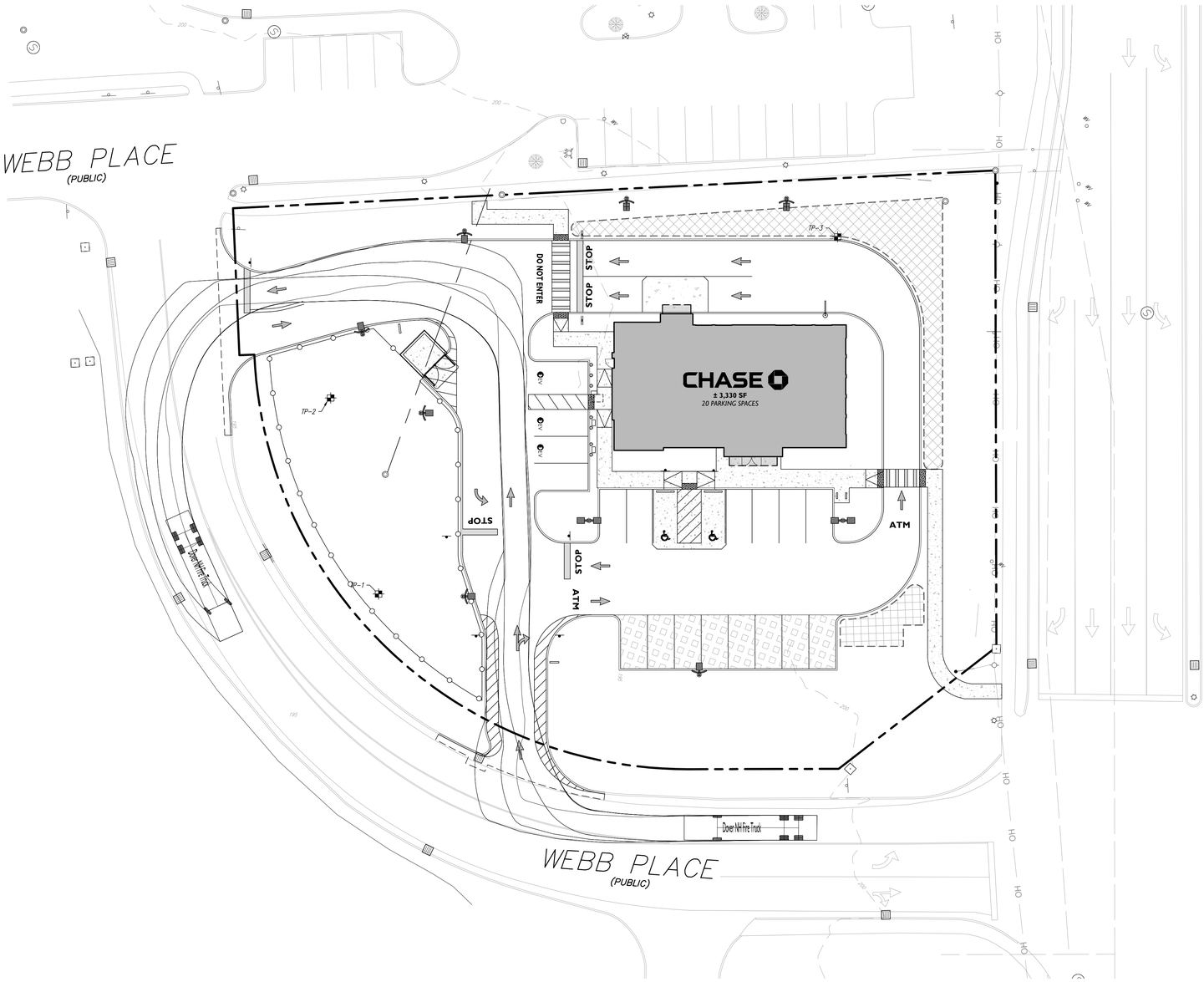
STONEFIELD engineering & design

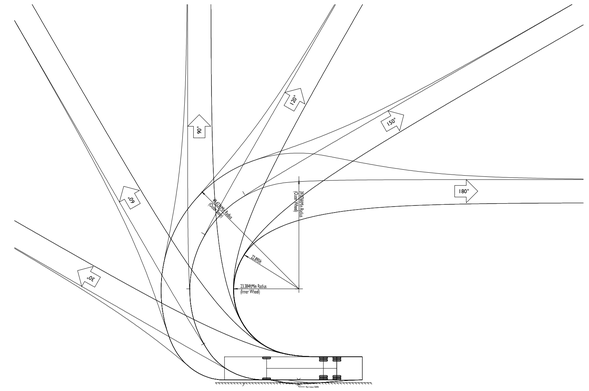
SCALE: 1" = 20' | PROJECT ID: BOS-220137

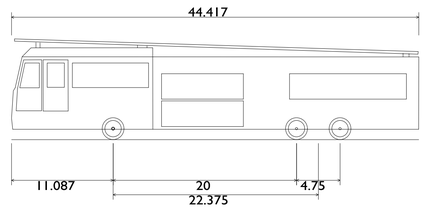
TITLE:
TRUCK MOVEMENT EXHIBIT (SU-30)

DRAWING:
E-1

Z:\BOSTON\BOS\220137 CONSTATES - 1-3 WEBB PLACE, DOVER, NH\CAD\DGN\BIT\TRUCK TURN EXHIBIT\231431-6_TRUCK MOVEMENT EXHIBIT.DWG







Dover NH Fire Truck	
Overall Length	44.417ft
Overall Width	8.333ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.130ft
Track Width	6.833ft
Lock-to-lock time	6.00s
Max Wheel Angle	44.00°

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
2	03/14/2024	JV	ISSUED FOR REVIEW
1	12/28/2023	JV	ISSUED FOR REVIEW

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SITE PLAN SET

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

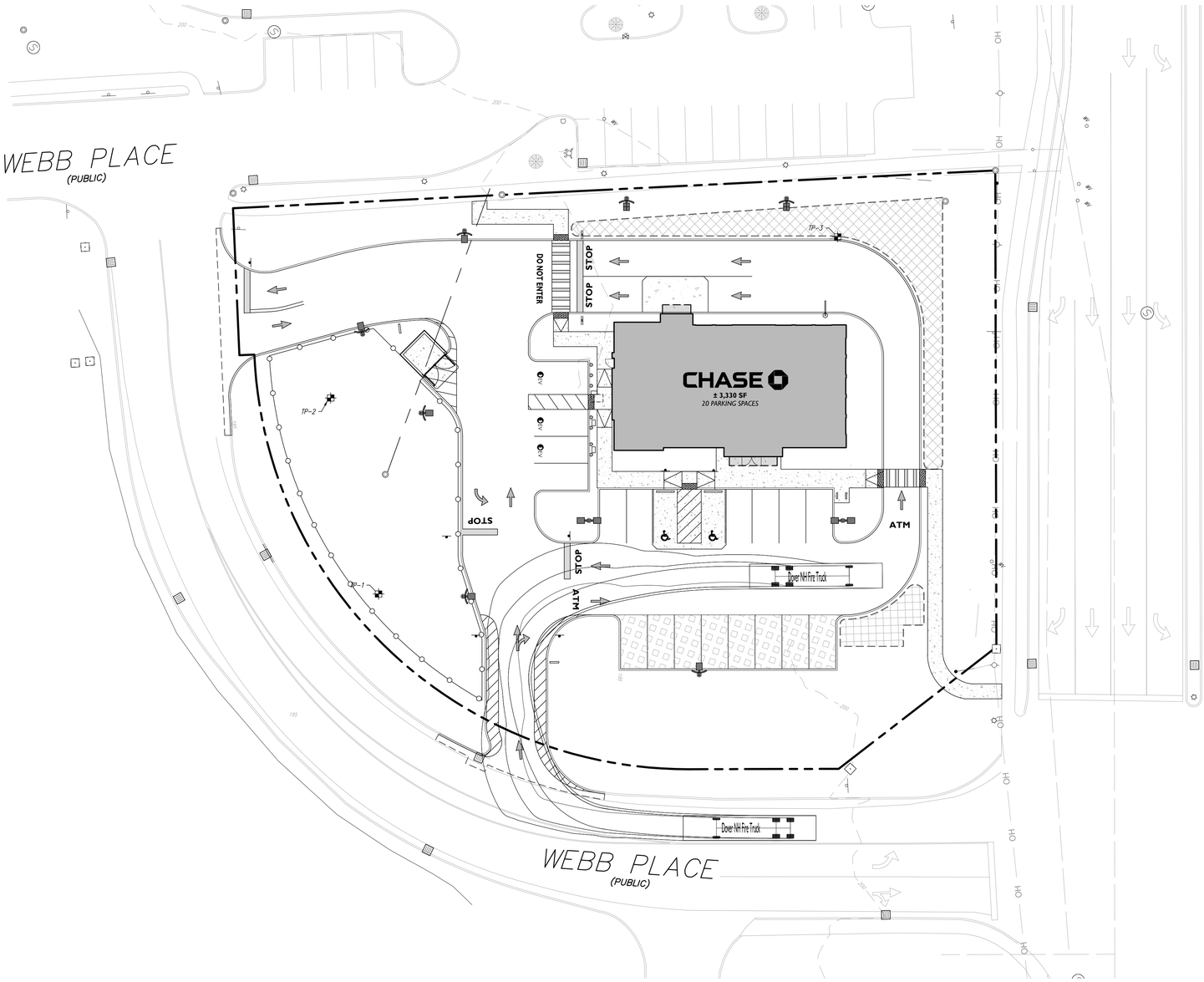
TITLE:

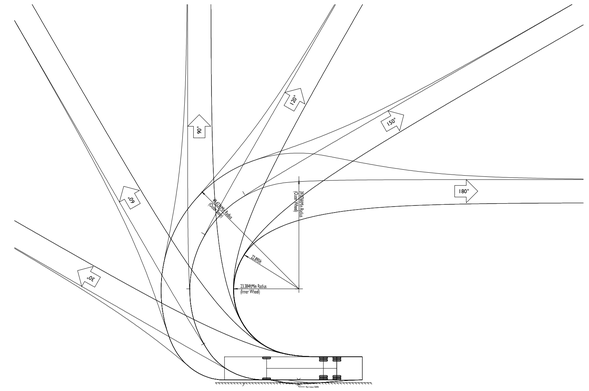
FIRE TRUCK MOVEMENT EXHIBIT

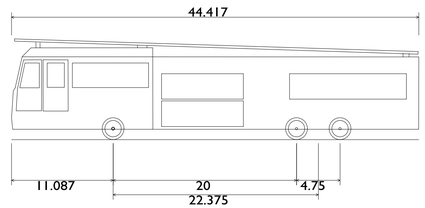
DRAWING:

E-2

Z:\BOS\DWG\2022\BOS-220137 CONSTA TES - 1-3 WEBB PLACE, DOVER, NH\CAD\SHEET\TRUCK TURN EXHIBIT\220413-01-6_TRUCK MOVEMENT EXHIBIT.DWG







Dover NH Fire Truck	
Overall Length	44.417ft
Overall Width	8.333ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.130ft
Track Width	6.833ft
Lock-to-lock time	6.00s
Max Wheel Angle	44.00°

20' 0' 20' 40'
GRAPHIC SCALE IN FEET
1" = 20'

ISSUE	DATE	BY	DESCRIPTION
2	03/14/2024	JV	ISSUED FOR REVIEW
1	12/28/2023	JV	ISSUED FOR REVIEW

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SITE PLAN SET

CHASE

PROPOSED BANK WITH DRIVE-THRU ATM

TAX MAP 38, LOTS 15A & 15B
1-3 WEBB PLACE
CITY OF DOVER
STRAFFORD COUNTY, NEW HAMPSHIRE

JOSHUA H. KLINE, P.E.
NEW HAMPSHIRE LICENSE No. 16530
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 20' | PROJECT ID: BOS-220137

TITLE:

FIRE TRUCK MOVEMENT EXHIBIT

DRAWING:

E-3

Z:\BOS\PROJECTS\2022\BOS-220137 CHASE\TASTES - 1-3 WEBB PLACE, DOVER, NH\CAD\SHEETS\TRUCK TURN EXHIBIT\220413-01-E_TRUCK MOVEMENT EXHIBIT.DWG

PARCEL CURVE SEGMENTS			
SEGMENT	LENGTH	DELTA	RADIUS
C3	221.78	087°37'59"	145.00

CENTRAL AVENUE
(PUBLIC - SEE PLAN REFERENCE 6A)

WEBB PLACE
(PUBLIC - SEE PLAN REF. 6G)

WEBB PLACE
(PUBLIC - SEE PLAN REF. 6G)

OLD ROCHESTER ROAD
(DISCONTINUED)
3374/177

N/F LANDS OF CENTERCO DOVER LLC.
BK. 4485, PG. 955

N/F CITY OF DOVER NH
3413/92
3413/88

PREVIOUS LOCATION OF PLAZA DRIVE
(SEE BOUNDARY NOTE 15.2)
60.0' (SEE PLAN REF 6A)

"PARCEL B"
3413/88
(EXCEPTION 7)

"PARCEL C" 3413/90
SEE ALSO 1870/668
(EXCEPTION 11, 13)
SEE BOUNDARY NOTE 16.3

"PARCEL E"
3413/94
(EXCEPTION 12)

"PARCEL A"
3413/92
(EXCEPTION 7)

"PARCEL F"
3413/92
(EXCEPTION 7)

12.3' UTILITIES MAY ENCROACH
(EXCEPTION 8)

APPROXIMATE SEWER SERVICE

APPARENT ENCROACHMENT ASPHALT SIDEWALK 12.1'.

APPARENT ENCROACHMENT 12.2'

LAND OF
DOVER RETAIL MANAGEMENT
42,879± SQ. FT.
MAP 38, PARCEL 15A & B
5122/646

2 STORY
BRICK BUILDING
#1-3 WEBB PLACE
6,444.00 S.F. ±

N/F LANDS OF
STATE OF NH
1768/504

N/F
LANDS OF
PPD ORAZIO LLC.
MAP 38
PARCEL 16
BK 3064, PG 81

NH DOT TAKING
PARCEL 20 1768/500
(EXCEPTION 10)

NH DOT TAKING
PARCEL 20A & 20A-1
1768/504(EXCEPTION 10)

NH DOT TAKING
PARCEL 20-1 & 20-2
1768/500
(EXCEPTION 10)

NH DOT SLOPE EASEMENT
PLAN REFERENCE 6G
(EXCEPTION 9)

NH DOT SLOPE EASEMENT
PLAN REFERENCE 6G
(EXCEPTION 9 & 10)

NH DOT PARCEL 20A
PLAN REFERENCE 6G

DRAINAGE EASEMENT
PLAN REF. 6G
(EXCEPTION 10)

(EXCEPTION 10)

20' WATER MAIN EASEMENT
AS SHOWN ON PLAN REF 6D
(EXCEPTION 8)

P.O.B
FOUND 5/8" CAPPED REBAR
AT GRADE
PLS 884
(HELD FOR LOCUS SIDELINE,
PLAN REF. 6D, 0.08 FEET
INSIDE CENTRAL AVE RIGHT OF WAY)

STA 14+70.00, 66' LEFT
HELD AS PREVIOUS LOCATION
OF "NHHD BOUND" AS SHOWN ON PLAN REF

FOUND 3/4" ANGLE IRON
3" BELOW GRADE
(HELD)

FOUND 5/8" CAPPED REBAR
AT GRADE

FOUND 5/8" CAPPED REBAR
AT GRADE
PLS 884

FOUND 5/8" REBAR
AT GRADE
LOCATED AT BASE
HELD,
SEE BOUNDARY NOTE 15.1

FOUND 1/2" IRON ROD
AT GRADE
TOP BROKEN

FOUND MAG NAIL
AT GRADE

FOUND 4"x4" CONCRETE MONUMENT
1" B.G. WITH DRILL HOLE
(HELD FOR DIRECTION)

FOUND 6"x6" CONCRETE MONUMENT
AT GRADE WITH DRILL HOLE
(HELD AS STA 804+36.78, 25' LEFT)

FOUND 6"x6" CONCRETE MONUMENT
AT GRADE WITH DRILL HOLE
(HELD AS STA 804+36.78, 30' LEFT)

FOUND 6"x6" CONCRETE MONUMENT
AT GRADE WITH DRILL HOLE
(HELD AS STA 13+05.00, 66' LEFT)
ON LINE 0.63' FROM COR

FOUND 4"x4" CONCRETE MONUMENT
AT GRADE WITH DRILL HOLE

FOUND 6"x6" CONCRETE MONUMENT
4" A.G. WITH DRILL HOLE
(HELD AS STA 801+15.00, 30' RIGHT)
ON LINE 3.85' FROM COR

FOUND 6"x6" CONCRETE MONUMENT
3" A.G. WITH DRILL HOLE

UTILITIES ARE SHOWN AS
APPROXIMATE FROM
RECORD PLANS
(TYP.)

STM. INLET #1140
GRT.=199.20

TEL. MH
RIM: 200.23

SAN. MH #1136
RIM=201.06
(A)=191.26
(B)=191.26
(C)=192.46
(D)=191.16
SHELF=191.76

STM. INLET #9070
GRT.=199.34
(A)=193.04
SUMP=191.74

STM. INLET #9106
GRT.=197.70
(A)=193.8
(B)=193.2
SUMP=189.2

STM. INLET #10013
GRT.=196.12

STM. INLET #10104
GRT.=194.24
(A)=188.04
SUMP=187.74

STM. INLET #10093
GRT.=195.37
(A)=187.17
(B)=187.12
(C)=187.27
(D)=187.27
SUMP=185.17

STM. INLET #10190
GRT.=195.92

STM. INLET #10201
GRT.=194.61

STM. INLET #1217
GRT.=193.55
(A)=187.55
SUMP=186.15

STM. INLET #9439
RIM=203.09
(A)=193.19
(B)=193.89
(C)=193.89
SHELF=190.08

STM. INLET #9025
GRT.=202.1
(A)=194.91
(B)=194.91
SUMP=191.51

STM. INLET #9416
GRT.=202.92
(A)=194.52
(B)=194.52
SUMP=190.42

STM. INLET #9243
GRT.=201.48
(A)=194.18
(B)=193.78
SUMP=190.78

STM. INLET #10159
GRT.=199.97

STM. INLET #0118
GRT.=201.13

SAN. MH #9375
RIM=200.13
PARKED OVER AT TIME OF SURVEY

STM. INLET #9356
GRT.=200.33

SAN. MH #9370
RIM=198.88
(A)=192.78
(B)=192.83
SHELF=193.38

SAN. MH #10140
RIM=201.53
(A)=192.93
(B)=192.93
SQUIDER PINES PUMP STATION

SAN. MH #10227
RIM=201.30
(A)=196.45
(B)=196.45
SHELF=189.65

SITE ID SIGN

"LEFT, STRAIGHT, & RIGHT TURNS ONLY" SIGN

"HANDICAP PARKING" SIGN

"STOP" SIGN

"ACCESS" SIGN

"SPRINT" SIGN

BOLLARD (TYP.)

BUILDING AWNING (TYP.)

BUILDING PEAK=125.29'
HEIGH=126.44'

GAS SERVICE

DECK

CONC. STEP

CONC. PAD W/ A.C.

LANDSCAPED AREA

ASPHALT PARKING

ASPHALT AREA

PAVED ACCESS

GUARD RAIL

S 43°05'52" E 255.31'

N 43°56'55" E 255.31'

N 51°42'47" W 92.21'

S 44°20'05" W 5.00'

S 43°05'52" E 199.39'

S 46°39'08" W 50.26'

S 01°08'02" W 66.68'

SCALE : 1" = 20'

LEGEND

- TRAVERSE LINE, CENTER LINE OR BASELINE
- RIGHT OF WAY LINE
- PROPERTY LINE
- EDGE OF PAVEMENT
- CURB LINE (FACE / BACK)
- TRAFFIC FLOW
- MAILBOX
- CAPPED REBAR SET
- TELEPHONE MANHOLE
- SANITARY MANHOLE
- MAJOR CONTOUR
- MINOR CONTOUR
- SPOT ELEVATION
- TOP OF CURB ELEV.
- BOTTOM OF CURB ELEV.
- U/G TELEPHONE LINE
- U/G ELECTRIC LINE
- OVERHEAD WIRE
- WATER MAIN
- GAS MAIN
- SAN. SEWER MAIN
- STORM PIPE
- TREE
- ROADWAY SIGNS
- UTILITY POLE
- GUY WIRE
- FIRE HYDRANT
- WATER VALVE
- GAS VALVE
- CONCRETE MONUMENT
- CAPPED REBAR/IRON PIPE
- STORM INLET TYPE 'A'

ABBREVIATIONS

D.C. = DEPRESSED CURB
BC = BOTTOM OF CURB
TC = TOP OF CURB
BOL = BOLLARD
GRT = GRATE
MB = MAILBOX
FF = FINISH FLOOR
U/K = UNKNOWN VALVE
MH = MANHOLE

VICINITY MAP

U.S.G.S. QUANDRANGLE MAP
DOVER, NH - PANEL (2021)
SCALE: 1"=2000'

Central Park
Willand Pond
Kelsyn Park
Gates Corner
SITE

Colliers
Engineering & Design
www.colliersengineering.com

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

DRAFT

ALTA/NSPS
LAND TITLE SURVEY

FOR

STONEFIELD ENGINEERING & DESIGN LLC.

TAX MAP 38
LOTS 15A & 15B
1-3 WEB PLACE
DOVER
STRAFFORD COUNTY
NEW HAMPSHIRE

Colliers Engineering & Design
BRUNSWICK
41 Church Road
Brunswick, ME 04011
Phone: 207.481.7080
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	9/28/23	JRE	SPP

PROJECT NUMBER: 22011300B
DRAWING NAME: 22011300B-WEBB PLACE DOVER NH-LTS

SHEET TITLE: ALTA/NSPS LAND TITLE SURVEY

SHEET NUMBER: 1 of 2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

I:\2022\22011300B-Webb Place Dover NH\LTS-dwg\V-XS SURVEY By: SEAN PIERCE

FOR REGISTRY USE ONLY

GENERAL NOTES:

1. AS OF THE DATE OF THIS SURVEY, THE RECORD OWNER OF THE PARCEL IS :

   DOVER RETAIL MANAGEMENT LLC , BY VIRTUE OF DEED FROM KAREN S. ARKWELL REVOCABLE TRUST OF 2020. DATED JUNE 27, 2023, AND RECORDED IN THE STRAFFORD COUNTY REGISTRY OF DEEDS IN BOOK 5122, PAGE 646.

2. THE PROPERTY IS SHOWN AS LOT 15A&B ON THE CITY OF DOVER, NEW HAMPSHIRE'S TAX MAP 38, AND IS LOCATED IN THE COMMERCIAL (C) DISTRICT.

   LAND USE REGULATIONS ARE AS FOLLOWS:

MINIMUM LOT SIZE:	20,000 SQ. FT.
MINIMUM LOT ROAD FRONTAGE:	125 FT.
MINIMUM FRONT YARD:	30 FT. *
MINIMUM SIDE YARD:	12 FT. *
MINIMUM REAR YARD:	15 FT. *
MAXIMUM LOT COVERAGE:	50%
MAXIMUM BUILDING HEIGHT:	40 FT.

   * SEE ORDINANCE FOR MORE PARTICULAR INFORMATION. SETBACK AND DIMENSIONAL STANDARDS LISTED AND SHOWN HEREON ARE FOR PLANNING PURPOSES ONLY, AND MUST BE VERIFIED WITH THE APPROPRIATE REGULATORY PRIOR TO ANY CONSTRUCTION.

   **A REPORT OF ZONING WAS NOT PROVIDED TO THIS SURVEYOR, THEREFORE NO CERTIFICATION IS MADE TO TABLE A 6A OR 6B.

3. TOTAL AREA OF PARCEL IS APPROXIMATELY 42,879± SQ. FT OR 0.98± ACRES.

   PARCEL A: 26,376± SQ. FT.

   PARCEL B: 16,503± SQ. FT

4. BOUNDARY & TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON ON THE GROUND FIELD SURVEY COMPLETED BY COLLIERS ENGINEERING & DESIGN, INC. IN DECEMBER OF 2022 & SEPTEMBER OF 2023.

5. BOOK AND PAGE REFERENCES SHOWN HEREON ARE IN REFERENCE TO THE STRAFFORD COUNTY REGISTRY OF DEEDS (S.C.R.D.).

6. PLAN REFERENCES:

   A. PLAN TITLED "RW REALTY INC. PLAN OF LOTS A & B PLAZA DRIVE, DOVER, NEW HAMPSHIRE", DATED APRIL 1981, DRAWN BY G. L. DAVIS & ASSOCIATES, RECORDED IN THE S.C.R.D. PLAN NUMBER 17E-8.

   B. PLAN TITLED "SUBDIVISION LOT LINE RELOCATION PLAN FOR SOUTHWEST EQUITIES CORP", DATED JULY 2, 2001, DRAWN BY MILLETTE, SPRAGUE & COLWELL, INC. RECORDED IN THE S.C.R.D. PLAN NUMBER 67-11.

   C. PLAN TITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE, LLC. & RW REALTY INC., DOVER, NEW HAMPSHIRE", DATED JUNE 14, 2006, DRAWN BY TRITECH CORP., RECORDED IN S.C.R.D. PLAN NUMBER 87-11.

   D. PLAN TITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE LLC. AND RW REALTY INC., DOVER, NEW HAMPSHIRE", DATED JUNE 14, 2006, DRAWN BY TRITECH CORP., RECORDED IN THE S.C.R.D. PLAN NUMBER 87-12.

   E. PLAN TITLED "SUBDIVISION PLAN, PRIME CIRCLE, LLC., DOVER, NEW HAMPSHIRE", DATED FEBRUARY 3, 2006, DRAWN BY TRITECH CORP., RECORDED IN THE S.C.R.D. PLAN NUMBER 87-13.

   F. PLAN TITLED "ALTA-NSPS LAND TITLE SURVEY, PRIME CIRCLE, LLC., 11-17 WEBB PLACE, DOVER, NEW HAMPSHIRE, DATED MAY 3, 2017, DRAWN BY TRITECH CORP., RECORDED AT THE S.C.R.D. PLAN NUMBER 113-76.

   G. PLAN TITLED "PLANS OF PROPOSED FEDERAL AID URBAN SYSTEM PROJECT AND FEDERAL AID PRIMARY PROJECT STP-X-027-1(34), N.H. PROJECT NO. 10023-E", DATED SEPTEMBER 14, 1994, DRAWN BY CARON ENGINEERING INC. ON RECORD WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

   H. PLAN TITLED SUBDIVISION/LOT LINE RELOCATION PLAN FOR SOUTHWEST EQUITIES CORP", DATED JULY 10, 2001, DRAWN BY MILLETTE, SPRAGUE & COLEWELL, INC. RECORDED IN THE S.C.R.D. PLAN NUMBER 67-12.

7. BEARINGS SHOWN HEREON ARE IN REFERENCE TO GRID NORTH, NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM. ELEVATIONS DEPICTED HEREON ARE IN REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS.

8. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL SURFACE EVIDENCE LOCATED IN THE FIELD IN CONJUNCTION WITH ANY RECORD INFORMATION AVAILABLE AT THE TIME OF THIS SURVEY (SUE LEVEL C), AND MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.

   A. UTILITY MAPPING WAS NOT PROVIDED TO THIS SURVEYOR PURSUANT TO TABLE A ITEM 11A AND THEREFORE NO CERTIFICATION IS MADE.

   B. ALL UTILITIES (WATER, GAS, ELECTRIC, TELEPHONE SEWER AND STORM DRAINAGE) THAT SURVEYOR WAS ABLE TO SOURCE THROUGH AVAILABLE MAPPING APPEAR TO ENTER THE PREMISES THROUGH ADJOINING PUBLIC STREETS OR THROUGH APPURTENANT OR PUBLIC EASEMENTS WHICH ARE SHOWN ON THE SURVEY.

9. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR DOVER NEW HAMPSHIRE, STRAFFORD COUNTY, COMMUNITY-PANEL NUMBER 33017C0310E, HAVING AN EFFECTIVE DATE OF SEPTEMBER 30, 2015. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE X, AREAS OF MINIMAL FLOOD HAZARD.

10. A WETLAND DELINEATION WAS NOT PERFORMED ON THIS PROJECT SITE.

11. NO EVIDENCE OF RECENT EARTHWORK WAS OBSERVED DURING THE COURSE OF THE SURVEY.

12. EVIDENCE OF ENCROACHMENTS WERE OBSERVED DURING THE COURSE OF THE SURVEY, AS NOTED HEREON.

    12.1. SIDEWALK LIES WITHIN LOCUS PARCEL

    12.2. BUILDING LIES WITHIN SETBACK

    12.3. UTILITIES MAY ENCROACH

13. THE SURVEYED PROPERTY HAS DIRECT ACCESS TO WEBB PLACE, A PUBLIC WAY, AS SHOWN HEREON.

14. NUMBER OF PARKING SPACES:

    14.2. HANDICAP: 2 SPACES (NOT DELINEATED)
    14.3. REGULAR: 45 SPACES

15. THE PROPERTY SHOWN HEREON IS THE SAME AS DESCRIBED IN TITLE COMMITMENT FILE NUMBER 2371-25003 ISSUED BY CHICAGO TITLE INSURANCE COMPANY, WITH A COMMITMENT DATE OF JANUARY 20, 2023 AT 4:30 P.M. THE PARCEL FORMS A MATHEMATICALLY CLOSED FIGURE, WHICH CONSTITUTES ONE CONTIGUOUS PARCEL OF LAND WITHOUT GAPS, GORES OR OVERLAPS.

16. BOUNDARY NOTES

    16.1. IRON HELD AS BEING 2.36 FEET FROM ORIGINAL PROPERTY LINE OF LOCUS PARCEL AS SHOWN ON PLAN REF 6D. AFOREMENTIONED IRON BEING 0.30 FEET OUTSIDE OF WEBB PLACE LIMITS.

    16.2 SEE DEEDS RECORDED IN S.C.R.D. BOOK 1870, PAGE 667 & BOOK 1870, PAGE 668 WHICH DESCRIBE THIS PORTION OF PLAZA DRIVE TO PRIME CIRCLE LLC. NO RECORDS OF ACCEPTANCE AND/OR DISCONTINUANCE/ABANDONMENT WERE FOUND. THIS PORTION OF PLAZA DRIVE MAY BE SUBJECT TO RIGHTS OF OTHERS.

    16.2 ALL SLOPE EASEMENTS HAVE BE SCALED OFF PLAN REFERENCE 6G.

    16.3 POSSIBLE ACCESS RIGHTS OVER PARCEL C EXIST, SEE DEED BOOK 1870, PAGE 668, PARAGRAPH 5.

17. NO EVIDENCE OF THE SITE BEING UTILIZED AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL WAS OBSERVED DURING THE COURSE OF THE SURVEY.

SCHEDULE A: RECORD LEGAL DESCRIPTION:

TRACT 1:

A TRACT OR LAND WITH THE BUILDINGS THEREON, ON THE SOUTHERLY SIDE OF PLAZA DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE BEING LOT B ON TAMPOSI-NASH-LEHOULLIER LOT A AND B GARRISON PLAZA DOVER NEW HAMPSHIRE DATED SEPTEMBER 1970 AND RECORDED AS PLAN 43 POCKET 2, FOLDER 18, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON PIN OR STEEL STAKE ON THE SOUTHERLY SIDE OF PLAZA DRIVE AT THE NORTHEASTERLY CORNER OF THE PARCEL HEREIN CONVEYED WHICH POINT IS ALSO THE NORTHWESTERLY CORNER OF OTHER LAND NOW OR FORMERLY OF R W REALTY, INC.; THENCE RUNNING S 30° 09' W , A DISTANCE OF 257.2 FEET TO A STEEL STAKE AT LAND NOW OR FORMERLY OF LORIMER SENTER; THENCE TURNING AND RUNNING S 24° 48' W, A DISTANCE OF 137 FEET TO AN IRON PIN AT LAND OF THE CITY OF DOVER; THENCE TURNING AND RUNNING N42° 33' W, 137.3 FEET; N 58° 30' W, 199.1 FEET; N 83° 55' W 34.6 FEET TO AN IRON PIN ON THE SOUTHERLY SIDE OF PLAZA DRIVE; THENCE TURNING AND RUNNING IN AN EASTERLY DIRECTION BY PLAZA DRIVE ON A CURVE TO THE RIGHT HAVING A RADIUS OF 600 FEET A DISTANCE OF 85.6 FEET TO AN IRON PIN; THENCE RUNNING N 59° 51' E BY PLAZA DRIVE A DISTANCE OF 178.8 FEET TO THE POINT OF BEGINNING.

EXCEPTING AND RESERVING PARCELS CONVEYED TO THE STATE OF NEW HAMPSHIRE BY DEED DATED SEPTEMBER 19, 1994 AND RECORDED AT BOOK 1768, PAGE 504.

EXCEPTING AND RESERVING PARCEL F CONVEYED TO CITY OF DOVER BY DEED DATED JULY 26, 2006 AND RECORDED AT BOOK 3413, PAGE 92.

TRACT 2:
A TRACT OR LAND WITH THE BUILDINGS THEREON, ON THE SOUTHERLY SIDE OF PLAZA DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE BEING LOT A ON TAMPOSI-NASH-LEHOULLIER LOT A AND B GARRISON PLAZA DOVER NEW HAMPSHIRE DATED SEPTEMBER 1970 AND RECORDED AS PLAN 43 POCKET 2, FOLDER 18.

EXCEPTING AND RESERVING PARCELS CONVEYED TO THE STATE OF NEW HAMPSHIRE BY DEED DATED SEPTEMBER 19, 1994 AND RECORDED AT BOOK 1768, PAGE 500.

EXCEPTING AND RESERVING PARCEL A CONVEYED TO CITY OF DOVER BY DEED DATED JULY 26, 2006 AND RECORDED AT BOOK 3413, PAGE 92.

TRACT 3:

A TRACT OF LAND WITH THE BUILDINGS THEREON, AT OR NEAR CENTRAL AVENUE AND SHOWN AS PARCEL "C" ON A PLAN PREPARED BY TRITECH ENGINEERING CORPORATION ENTITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE, LLC AND RQ REALTY, INC., CENTRAL AVENUE & INDIAN BROOK DRIVE, DOVER, NEW HAMPSHIRE" DATED JUNE 14, 2006 AND RECORDED WITH THE STRAFFORD COUNTY REGISTRY OF DEEDS AS PLAN BOOK 87, PAGE 11 AND 12.

TRACT 4:

A TRACT OF LAND WITH THE BUILDINGS THEREON, AT OR NEAR CENTRAL AVENUE AND SHOWN AS PARCEL "E" ON A PLAN PREPARED BY TRITECH ENGINEERING CORPORATION ENTITLED "BOUNDARY LINE ADJUSTMENT PLAN, PRIME CIRCLE, LLC AND RQ REALTY, INC., CENTRAL AVENUE & INDIAN BROOK DRIVE, DOVER, NEW HAMPSHIRE" DATED JUNE 14, 2006 AND RECORDED WITH THE STRAFFORD COUNTY REGISTRY OF DEEDS AS PLAN BOOK 87, PAGE 11 AND 12.

SCHEDULE B-II EXCEPTIONS:

1. - 6. INTENTIONALLY OMITTED.
7. MATTERS SHOWN ON THE FOLLOWING PLANS: PLAN 87-11,12,13, AND PLAN 43 POCKET 2 FOLDER 18

   SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, ALL PERTINENT FACTS SHOWN HEREON, SHOWN HEREON
8. WATER LINE EASEMENT AND AGREEMENT WITH CITY OF DOVER DATED JUNE 10, 1972 AND RECORDED AT BOOK 906, PAGE 478.

   SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, SHOWN HEREON.
9. SLOPE AND EMBANKMENT RIGHTS RETAINED IN DEED DATED NOVEMBER 1, 1994 AND RECORDED AT BOOK 1776, PAGE 784

   SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, SHOWN HEREON.
10. SLOPE AND EMBANKMENT RIGHTS IN DEED DATED SEPTEMBER 19, 1994 AND RECORDED AT BOOK 1768, PAGE 500 & 504

    SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, SHOWN HEREON.
11. RIGHTS RESERVED IN DEED DATED APRIL 18, 1996 AND RECORDED AT BOOK 1870, PAGE 668.

    SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, RIGHTS RETAINED FOR ACCESS OVER FORMER PLAZA DRIVE, SEE PARCEL C SHOWN HEREON.
12. UTILITY EASEMENT RESERVED IN DEED DATED JULY 26, 2006 AND RECORDED AT BOOK 3413, PAGE 94.

    SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, SHOWN HEREON AS PARCEL E.
13. RIGHTS OF OTHERS IN AND TO PORTIONS OF PLAZA DRIVE CONVEYED BY DEEDS AT BOOK 3413, PAGE 90 AND BOOK 3413, PAGE 94.

    SURVEY FINDINGS: DOES ENCUMBER THE LOCUS PARCEL, SEE PARCEL C FOR THE PORTION OF PLAZA DRIVE SHOWN HEREON.

AS-SURVEYED LEGAL DESCRIPTION:

A CERTAIN PARCEL OF LAND SITUATED ON THE WESTERLY SIDE OF CENTRAL AVENUE, AND THE NORTHERLY SIDE OF WEBB PLACE, SO CALLED, IN THE CITY OF DOVER, COUNTY OF STRAFFORD, AND STATE OF NEW HAMPSHIRE, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING (P.O.B.) AT A POINT ON THE WESTERLY SIDELINE OF CENTRAL AVENUE NEAR A 5/8-INCH CAPPED REBAR MARKED "LLS 884", BEING THE NORTHERLY MOST CORNER OF THE LAND DESCRIBED HEREIN AND THE EASTERLY CORNER OF LAND NOW OR FORMERLY OF CENTERCO DOVER, LLC (DEED REF: 4485, PG. 955);

THENCE BY THE WESTERLY SIDELINE OF CENTRAL AVE, S 43°20'52" E, 159.39 FEET TO A POINT AT THE INTERSECTION WITH THE NORTHERLY SIDELINE OF WEBB PLACE, BEING 0.63 FEET FROM A 6"X6" CONCRETE MONUMENT AT NHDOT STA. 13+05.00, 66 FEET LEFT;

THENCE BY THE NORTHERLY LINE OF WEBB PLACE, S 9°06'02" W, 66.68 FEET TO A POINT BEARING S 46°39'08" W 50.26 FEET FROM A 6"X6" CONCRETE MONUMENT AT NHDOT STA. 801+15.00, 30 FEET RIGHT;

THENCE CONTINUING BY THE NORTHERLY LINE OF WEBB PLACE THE FOLLOWING COURSES:

1. S 46°39'08" W, 50.26 FEET TO A POINT OF CURVATURE;
2. BY A TANGENTIAL CURVE TO THE RIGHT, HAVING A RADIUS OF 145.00 FEET, DELTA ANGLE OF 87°37'59", AND AN ARC LENGTH OF 221.78 FEET TO A POINT;
3. S 44°20'05" W, 5.00 FEET PERPENDICULAR TO THE LAST COURSE, TO A POINT;
4. N 45°42'47" W, 49.21 FEET TO A POINT AND LAND NOW OR FORMERLY OF THE CITY OF DOVER (DEED REF: BK. 3413, PG. 88 & 92), BEARING S 45°42'47" E, 2.64 FEET FROM A 5/8-INCH REBAR AT LAND OF THE SAID CENTERCO DOVER, LLC;

THENCE BY LAND OF THE CITY OF DOVER, N 43°56'55" E, 255.31 FEET TO THE POINT OF BEGINNING.

CONTAINING 42,879 SQUARE FEET, MORE OR LESS.

MEANING AND INTENDING TO DESCRIBE THE PERIMETER OF TWO CONTIGUOUS PARCELS OF LAND, BEING THE SAME DESCRIBED IN A DEED TO R.W. REALTY, INC. FROM RICHARDSON - WEBB INC. DATED JANUARY 15, 1971, AND RECORDED IN THE STRAFFORD COUNTY REGISTRY OF DEED IN BOOK 880, PAGE 332. SHOWN AS LOT 15B ON THE CITY OF DOVER, NEW HAMPSHIRE'S TAX MAP 38., AND BY DEED TO KAREN S. ARKWELL, TRUSTEE OF THE KAREN S. ARKWELL REVOCABLE TRUST OF 2020, FROM KAREN S. ARKWELL DATED APRIL 13, 2021, AND RECORDED IN THE STRAFFORD COUNTY REGISTRY OF DEEDS IN BOOK 4917, PAGE 381. SHOWN AS LOT 15A ON THE CITY OF DOVER, NEW HAMPSHIRE'S TAX MAP 38.

SURVEYORS CERTIFICATION:

TO: TBD
TITLE COMMITMENT ISSUED BY CHICAGO TITLE INSURANCE COMPANY WITH A COMMITMENT DATE AND TIME: JANUARY 30, 2023, 4:30 PM
THIS IS TO STATE THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 7 (A) (B1) (C), 8, 9, 13, 14, 16, 17, 18, 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED BY COLLIERS ENGINEERING & DESIGN IN DECEMBER OF 2022 & SEPTEMBER OF 2023.

SEAN P. PIERCE, NH LS 1032 DATE

Colliers
Engineering & Design
www.colliersengineering.com

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811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

DRAFT

ALTA/NSPS
LAND TITLE SURVEY

FOR

STONEFIELD ENGINEERING & DESIGN LLC.

TAX MAP 38
LOTS 15A & 15B
1-3 WEB PLACE
DOVER
STRAFFORD COUNTY
NEW HAMPSHIRE

Colliers Engineering & Design
BRUNSWICK
41 Church Road
Brunswick, ME 04011
Phone: 207.481.7080
COLLIERS ENGINEERING & DESIGN, INC.
DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	9/28/23	JRE	SPP

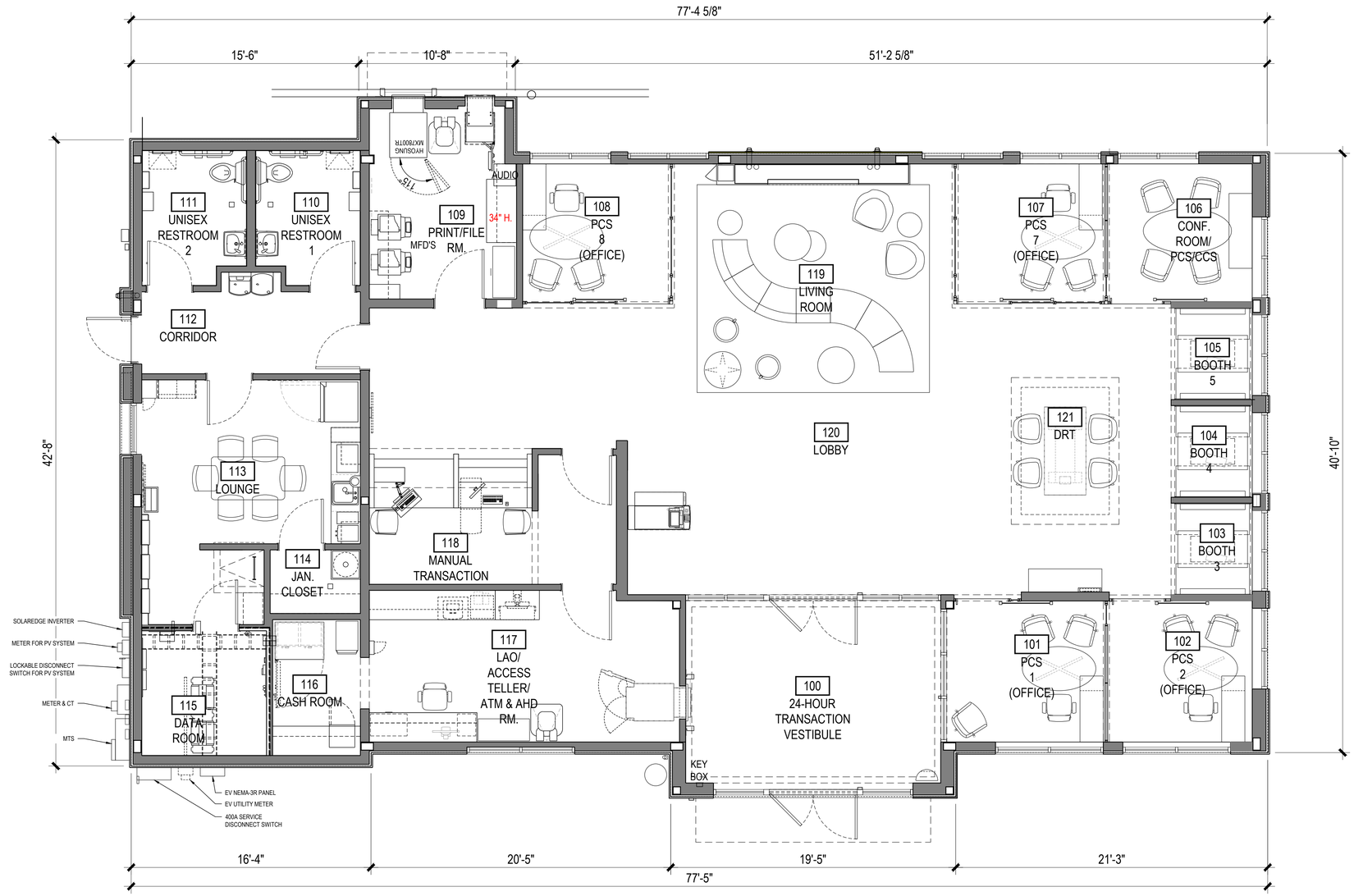
PROJECT NUMBER: 22011300B
DRAWING NAME: 22011300B-WEBB PLACE DOVER NH-LTS

SHEET TITLE: ALTA/NSPS LAND TITLE SURVEY

SHEET NUMBER: 2 of 2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

13008\DWG\22013300B-Webb Place Dover NH LTS.dwg\SURVEY NOTES PG 1 By: SEAN.PIERCE



CHASE

DOVER WEBB PLACE
1 WEBB PLACE,
DOVER, NH 03820

ARCHITECTURAL FLOOR PLAN

APRIL 01, 2024
SCALE: NTS

20 BURLINGTON MALL RD, STE 102
BURLINGTON, MA 01803
CONTACT: Jose A. Sanchez
jsanchez@core-states.com

CORE STATES GROUP

END ELEVATION (NORTH - FACING CENTRAL AVE)

MAIN ENTRY ELEVATION (EAST - FACING WEEKS LN)

STOREFRONT/ CANOPY
APPLICATION: EXTERIOR
COLOR: BLACK ANODIZED

TRIM
APPLICATION: EXTERIOR
COLOR: PAINTED WHITE

CLAP-BOARD SIDING
APPLICATION: EXTERIOR
COLOR: PAINTED SW7064 "PASSIVE"

BRICK
APPLICATION: EXTERIOR
BELDEN BRICK COMPANY
COLOR: "ADMIRAL RED VELOUR"

ROOF
APPLICATION: EXTERIOR - ASPHALT SHINGLES
COLOR: "BLACK"

CHASE

DOVER WEBB PLACE, NH
1 WEBB PLACE,
DOVER, NH 03820

PROPOSED EXTERIOR ELEVATIONS

APRIL 01, 2024

220 BURLINGTON MALL RD
STE 102
BURLINGTON, MD 01803
Contact: Jose Sanchez
jsanchez@core-states.com

CORE STATES GROUP

B.O.H. ELEVATION (SOUTH - FACING WEBB PLACE)

REAR ELEVATION (WEST - FACING INDIAN BROOK ROAD)

CHASE

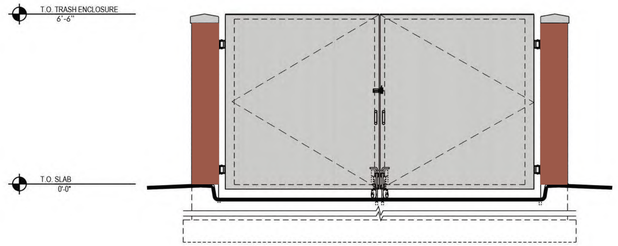
DOVER WEBB PLACE, NH
1 WEBB PLACE,
DOVER, NH 03820

PROPOSED EXTERIOR ELEVATIONS

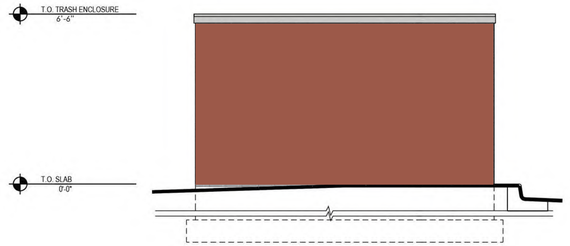
APRIL 01, 2024

220 BURLINGTON MALL RD
STE 102
BURLINGTON, MD 01803
Contact: Jose Sanchez
jsanchez@core-states.com

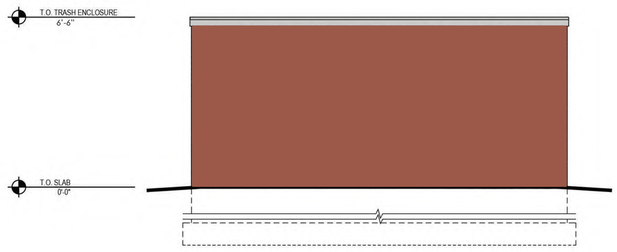
CORE STATES GROUP



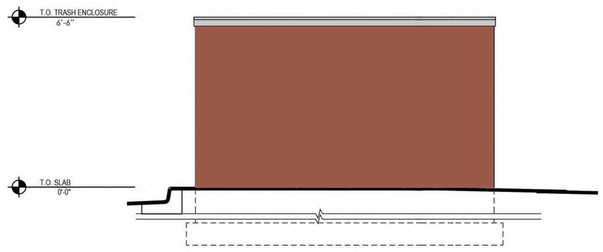
EAST ELEVATION (FRONT)



SOUTH ELEVATION (SIDE)



WEST ELEVATION (REAR)



NORTH ELEVATION (SIDE)

PAINT
APPLICATION: CORRUGATED METAL GATES
COLOR: PAINTED SW7064 "PASSIVE"

BRICK
APPLICATION: EXTERIOR
BELDEN BRICK COMPANY
COLOR: "ADMIRAL RED VELOUR"

CHASE

DOVER WEBB PLACE, NH
1 WEBB PLACE,
DOVER, NH 03820

PROPOSED TRASH ENCLOSURE

APRIL 01, 2024

220 BURLINGTON MALL RD
STE 102
BURLINGTON, MD 01803
Contact: Jose Sanchez
jsanchez@core-states.com

CORE STATES GROUP

CHASE

DOVER WEBB PLACE, NH
1 WEBB PLACE,
DOVER, NH 03820

VIEW FROM WEBB PLACE & CENTRAL AVE. RT 9

MARCH 13th, 2024

220 BURLINGTON MALL RD
STE 102
BURLINGTON, MD 01803
Contact: Jose Sanchez
jsanchez@core-states.com

CORE STATES GROUP

CHASE

DOVER WEBB PLACE, NH
1 WEBB PLACE,
DOVER, NH 03820

VIEW FROM CENTRAL AVE. RT 9

MARCH 13th, 2024

220 BURLINGTON MALL RD
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