CITY OF DOVER

PLANNING TECHNICAL REVIEW COMMITTEE –AGENDA

REVISED

Meeting Type: Regular Meeting
Meeting Location: Council Conference Room – City Hall, Dover NH
Meeting Date: **Thursday, July 9, 2020**
Meeting Time: **10:30 AM**

1. 10:30 AM - 11:15 AM: Site Review for Downtown Dover Storage LLC Assessor's Map 4, Lot 5, zoned CBD-General, and located at 14 Broadway. (Proposal is to demolish an existing building and create a commercial parking lot with 50 parking spaces. A related CUP application will also appear before the Planning Board). (P20-40)

2. 11:15 AM – 11:45 PM: A second TRC for Site Review for Summit Land Development, Assessor's Map K, Lot 19, zoned IT and RCM, located at Pointe Place. (Proposal is to construct one (1) mixed-use building, one (1) residential apartment building, and seven (7) townhouse buildings totaling 114 residential units and 5,000 sq. ft. commercial space. A related CUP application will also appear before the Planning Board). (P20-32)

3. 11:45 AM – 12:00 PM: Site Review for the Stabile Companies (owner Lofts at Pointe Place COA and Varney Brook Lands LLC), Assessor's Map K, Lot 19-7, zoned IT and RCM, located at Pointe Place. (Proposal is to construct 2,950 square feet of paving for 9 additional parking spaces). (P20-36)

City of Dover, New Hampshire
SITE REVIEW APPLICATION

[Revision Date: June 4, 2019]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Down Town Dover Storage LLC Telephone # 603-817-3870

Address of Applicant: 42 Dover Point rd # L Dover, NH 03820

E-Mail Address: Nick@NewSpaceRE.com

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

Address of Property Owner: _____

PROPERTY INFORMATION

Address of Property: 14 Broadway Dover NH

Assessor's Map # 04005 Lot(s) # 0

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

Size of Parcel: _____ sq. ft. .45 ac. Property Deed: Book 4719 Page: 970

Existing Use of Property: Industrial / Vacant

SITE PLAN INFORMATION

Describe Proposed Use: Commercial parking lot

Area of Parcel to be Developed: .45 sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: N/A

Number of Parking Spaces: Existing 0 Proposed 50

Highway Access (check where applicable): x City Street ____ State Highway

Number of Employees Total: 0 In Maximum Shift: 0

Disposition of Parcel:

Building Footprint 0 sq. ft.

Total Building Area 19,602 sq. ft.

Paved Area _____ sq. ft.

Building Setbacks:

Front Yard 0 ft.

Rear Yard 0 ft.

Side Yard: Right 0 ft. Left 0 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? _____

BUILDING INFORMATION

Type of Building to be Built: N/A

Height of Building: N/A Finished Floor Elevation: N/A

Number of Seats (where applicable) N/A

Estimated value of construction: _____ Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: _____

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

SURVEYOR INFORMATION

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

Address 1 Harrison St Newburyport, MA 01950 Telephone #: _____

Professional License #: _____ E-mail address: _____

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) TEC, Inc - Christopher Raymond

Address 146 Dascomb rd Andover, MA 01801 Telephone #: _____

Professional License #: 16305 E-mail address: craymond@theengineering corp.com

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) _____

Address _____Telephone #: _____

Professional License #: _____ E-mail address: _____

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) _____

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: _____ Date: 6/18/2020

Signature of Applicant (*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: 6/18/2020

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

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

Signature of Property Owner: _____ Date: 6/18/2020

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

CERTIFICATION OF FEES

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

Signature of Property Owner: _____ Date: 6/18/2020

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

PLANNING BOARD FEE SCHEDULE

(Revised February 10, 2020)

Below are the fees associated with plan review. Please complete the information below and provide payment with your application submittal. **Plan review fees shall be paid prior to technical review committee (TRC) being scheduled.** For plans not requiring TRC review, **fees are due 21 days prior** to the Planning Board meeting. Staff will coordinate abutter/notice fees, which will be invoiced and must be paid 28 hours before the Planning Board meeting for an application to be heard. Fees shall be paid by cash or check made payable to "City of Dover."

A. Plan Review Fees

1. Application fee for the following (SELECT ALL THAT APPLY):

☐ SUBDIVISION $150.00 x # _____ new lots created= $_____

☐ LOT LINE ADJUSTMENT $100.00 X # of lots involved= $_____

☐ TRANSFER OF DEVELOPMENT RIGHTS Application fee $150.00= $_____

☐ SITE REVIEW – RESIDENTIAL $100.00 x # _____ per dwelling unit= $_____

☐ SITE REVIEW – NON-RESIDENTIAL (not to exceed $10,000)

- New construction $.15 sq. ft. x # _____ sq. ft.= $_____
- Additions (new floor space) $.10 per sq. ft. x # _____sq. ft.= $_____

☐ MOTEL/HOTEL $35.00 x # ___ per lodging unit= $_____

☐ CHANGE OF USE (not to exceed $5,000)

- Existing floor spaces $.10 per sq. ft. x # _____ sq. ft. = $_____

☒ CONDITIONAL USE PERMIT $150.00 x # __1__ per application= $_____

☐ GRAVEL PIT/ EXCAVATIONS

- Application fee $50.00= $_____
- Permit fee $75.00= $_____

☐ EXTENSIONS OF/AMENDMENTS TO/WAIVERS FOR AN APPROVED PLAN
$50.00 x # _____ per hour of review (3 hour minimum)= $_____

☐ REQUEST FOR REZONING Application fee $150.00= $_____

☐ DRIVEWAY WAIVER Application fee $100.00= $_____

SUB TOTAL= $_____

AND

2. IMPERVIOUS PAVED AREA (for new development or additions to existing parking lots (not to exceed $10,000) $.07 sq. ft. x # _____= $_____

TOTAL PLAN REVIEW FEE= $_____

B. Abutter Notification/Mailing Labels - this office will create and print the abutter list and provide labels in triplicate for each abutter. The applicant/owner will need to review the list and provide to this office the engineer, architect, licensed land surveyor (LLS), licensed landscape architect (LLA) and/or soil scientist whose professional seal appears on the plan with names and addresses for notices.

☐ Applicant & Owner, engineer, architect, LLS, LLA and/or soil scientist

- Certified letters fee # _____ of x $8.00= $_____

☐ Certified letters fee: # of abutters _____ X $8.00= $_____

☐ First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00= $_____

☐ Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00= $_____

SUB TOTAL= $_____

C. Foster's newspaper public notice fee **$ 100.00**

TOTAL NOTICE FEE= $_____

The above amount must be paid 28 hours prior to the Planning Board meeting, to be heard.

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: Downtown Dover Storage File Number: _____

PROJECT TITLE: _____

PROPERTY LOCATION: 14 Broadway Tax Map: 4005 Lot: 6

	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 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		
Location of Conservation District areas		
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		
Location and width of existing and proposed access/egress ways		

	Explain How Provided	Reviewed
Depict pedestrian walkways and accessible access		
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		
Location of all bodies of water and watercourses		
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		
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_____

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: August 16, 2016]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Downtown Dover Storage, LLC Telephone # 603-817-3876

Address of Applicant: 42 Dover point rd #L Dover, NH 03820

E-Mail Address: Nick@NewSpaceRE.com

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

Address of Property Owner: _____

PROPERTY INFORMATION

Assessor's Map # 0406005 Lot(s) # 0

Address of Property: 14 Broadway Dover NH 03820

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

Existing Use of Property: Industrial

CONDITIONAL USE PERMIT INFORMATION

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

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

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

commercial parking lot

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: TEC, INC- Christopher Raymond

Address 146 Dascomb rd Andover MA 01810 Telephone #: 603-601-8154 ext. 1005

Professional License #: 16305 E-mail address: CRaymond@theengineeringcorp.com

SIGNATURES

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

Signature of Property Owner: _____ Date: 6/18/2020

Signature of Applicant (*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: 6/18/2020

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. The applicant must obtain the abutter information from the records of the Tax Assessor's Office (not more than five days prior to filing) in order to process the site review application.

ABUTTER is defined as the owner of record of a parcel of land located in New Hampshire and that adjoins or is directly within two hundred (200) feet (including land across the street or waterway) of the proposed site under consideration by the Planning Board. For a condominium or other collective form of ownership, abutter means the officers of the collective or association. *(See additional requirement below)*

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS
04005	6	Downtown Dover Storage	42 Dover point rd # L Dover NH

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer:

NAME	COMPANY	MAILING ADDRESS
SEE Jason Ellis	Hancock Associates	1 Harrison St, Newburyport MA 01950
Chris Raymond	TEC, Inc	146 Decomb rd Andover, MA 01801

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

Abutters:

TAX MAP	LOT #	OWNER (S) OF RECORD	MAILING ADDRESS

Change of Use:
14 Broadway Dover NH 03820.

This vacant property has served as a metal plating shop for the past several decades. It was recently purchased after production within that space ceased operations in the fall of 2019.

The building at 14 Broadway poses a variety of unique challenges to new ownership. The first is that the location sees its longest continuous border abut the very prominent railroad tracks in downtown Dover. Additionally, the property has a very shielded look at both Broadway and Central Avenue, with a nominal amount of frontage on Broadway. Because of these factors, this location makes any retail business appeal close to non-existent. Maintaining the building or its footprint would also present certain parking issues when considering the appropriate occupant for commercial use, retail use or any combination of the two.

We understand that the town of Dover is currently in a time of tremendous growth. In consideration of the needs of Dover residents, we believe we've found the best use of this property. This strategic utilization will allow its difficult positioning to see its highest and best usage. In addition, the property development will provide significant benefit to Dover's residents and will result in a much-improved piece of downtown real estate.

The proposed use would be a privately metered parking lot. This project would call for the demolition of the existing building, an appropriately graded lot with a paved finish, necessary lighting and easy access off of the current entrance on Broadway.

This 45-55 space lot would have a combination of overnight monthly permitted parking, day time metered parking and no vehicle storage. It would ease pressure on the current parking shortage in downtown Dover and have an extremely limited impact on abutting properties. In addition to the practical benefits, the development would further allow for a now dilapidated and weathered building to be removed from the town's landscape. This strategy would subsequently provide a facelift to that location, performing a nice balance of need, practical usage and aesthetic improvements.

We are excited about the prospect of being able to provide a very important service and we look forward to working with the City of Dover throughout this process.

See below for the responses to the Conditional Use Standards:

Conditional use approval for relief from the standards herein may be granted by the PLANNING BOARD (RSA 674:21 II) after proper public notice and public hearing provided that the proposed project complies with the following standards:

That both public and private BUILDINGs and landscaping shall contribute to the physical definition of RIGHTs OF WAY as CIVIC SPACEs.

Landscaping will be done professionally to help define rights of way as civic spaces.

That development shall adequately accommodate automobiles, while respecting the pedestrian and the spatial form of public areas.

Property will be converted into a “commercial parking lot” with 45-55 parking spaces. Pedestrian and spatial form of public areas will be respected.

That the design of STREETs and BUILDINGs shall reinforce safe environments, but not at the expense of accessibility.

The parking lot will have a secured entrance. Safe environments will be reinforced without impacting accessibility.

That architecture and landscape design shall grow from local climate, topography, history, and BUILDING practice.

Landscape design will fall in line with local history, climate and topography.

That BUILDINGs shall provide their inhabitants with a clear sense of geography and climate through energy efficient methods.

There will be no inhabitants or on-site employees for the intended use.

That CIVIC BUILDINGs and public gathering places shall be provided as locations that reinforce community identity and activity.

Not applicable.

That CIVIC BUILDINGs shall be distinctive and appropriate to a role more important than the other BUILDINGs that constitute the fabric of the city.

Not applicable.

That the preservation and renewal of historic BUILDINGs shall be facilitated.

The existing building is currently very weathered and will be demolished.

That the harmonious and orderly evolution of urban areas shall be advanced by the proposed BUILDING and/or use.
Downtown Dover has become growingly congested and the need for parking is increasing. The proposed use as a commercial parking lot aligns perfectly for the growing needs of the town. We know parking is essential for the harmonious and orderly evolution of urban areas and believe those efforts will be advanced by the proposed use.

Conditional use approval for relief from the use standards herein may be granted by the PLANNING BOARD (RSA 674:21 II) after proper public notice and public hearing provided that the proposed project complies with the following standards:

The requested use shall be compatible with abutting uses and the surrounding NEIGHBORHOOD.

The requested use of a commercial parking lot will be compatible with all abutting uses, the surrounding neighborhood and we believe it will enhance all neighboring property.

The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.

The proposed use will help reduce traffic congestion as we will be providing parking to alleviate the downtown congestion.

The requested use will not result in objectionable noise or odor which would constitute a NUISANCE.

This will not have noise or odor from the proposed use.

Chapter 149-14L (8) (b) Design Standards

B. Building Siting and Design The general character of the ETP District is intended to be a campus or park-like 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, façade treatment, and signage. The architectural character of each building shall be of contemporary design and style.

The design should integrate the SITE REVIEW REGULATIONS P 149-56 building's form, TEXTURES and colors with the landscape and topographical character of each site. Specific requirements are as follows:

All exterior building walls and structures shall be constructed with attractive, durable materials such as TEXTURED concrete, MANSONRY, stone, brick, CLAPBOARD, finishing wood, stucco or glass.All construction will be done with only attractive, durable materials.

(2) Buildings with exterior walls made of metal or corrugated steel shall not be permitted. Not Applicable

(3) Building roofs shall be uncluttered and when flat roofs are visible from public roads, pitched roofs or PARAPETS are required. Not applicable.

(4) Rooftop and ground-mounted mechanical units and ventilating fans are to either be integrated into the design of the building or screened from view. Not applicable.

(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. Not applicable.

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. This will be professionally landscaped and screened from the public.
(2) A majority of the parking spaces shall be located to the side or rear of the buildings. Not applicable.
(3) All sites shall be designed so as to promote safe pedestrian access, not only within the development, but to adjacent properties and public streets.

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 park-like setting. Maintenance of existing vegetation should be incorporated in the landscaping plan when appropriate.
(2) Existing trees of significant size or special character should be preserved wherever possible.
DOVER CODE P 149-57
(3) All trees should be planted in a permeable area of no less than a three (3) foot wide radius from the base of the tree.
(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 are preferred. Islands should be planted with either grass or evergreen shrubs and include trees.
(5) Landscaping should be maintained to present a healthy appearance and dead materials should be replaced.

Exterior Lighting

Exterior lighting shall be low profile. High-intensity directional lighting shall be prohibited. Lighting shall be designed and oriented so as to avoid glare onto adjacent property or streets.

TEC
The Engineering Corp

169 Ocean Boulevard/PO Box 249
Hampton, NH 03842
603.601.8154
TheEngineeringCorp.com
Create | Design | Innovate

Nick Couturier
Downtown Dover Storage, LLC
14 Broadway
Dover, NH 03820

June 18, 2020

RECEIVED
Planning Office
JUN 19 2020
Dover, New Hampshire

Ref. N0946.01

Re: Commercial Parking Lot - 14 Broadway; Dover, NH
Traffic Impact Assessment

Dear Mr. Couturier:

TEC, Inc. (TEC) has been retained by Downtown Dover Storage to prepare a Traffic Impact Assessment (TIA) for the proposed change in use of the property located at #14 Broadway in Dover, New Hampshire. The site is currently comprised of a one-story ±10,417 square foot (SF) warehouse building with access provided along the north side of Broadway via an unpaved driveway. The current plans for the subject parcel are to create a ±50 space commercial parking lot. This TIA has been prepared as a "Standard Analysis" in accordance with Chapter 149-13-A(20) of the Dover Site Review Regulations and Chapter 155-9-I of the Dover Land Subdivision Regulations, which outline the potential impacts to the existing traffic conditions and safety in the vicinity of the project.

The proposed change in use is anticipated to result in an increase in overall traffic to/from the site and the adjacent Broadway corridor. The following letter summarizes the evaluation of traffic impact resulting from the proposed development.

Existing Conditions

The project site is located at #14 Broadway (Assessor's Map 4, Lot 14) which forms an L-shaped parcel around the adjacent #6 Broadway property and its parking. The north side of the parcel directly abuts the Boston & Maine Railroad Right of Way (ROW). The existing ±10,417 SF building footprint directly abuts the property line on both the north and south sides. The building front door faces east into the parcel's unpaved parking area and driveway, which accesses Broadway just east of the #6 Broadway parking field. The existing driveway is approximately 16-feet wide. The building structure was previously utilized as a warehousing use.

Broadway, the adjacent roadway, is a two-lane, north-south minor arterial roadway maintained by the City of Dover. The roadway provides regional connection between Main Street (Route 9) to the south and Rollins Road to the north. In the vicinity of the project site, Broadway is approximately 45 feet wide with 7 foot on-street parking stalls aligning portions of the north curbline. Directional flow along Broadway is separated by a double-yellow centerline. The posted speed limit along the corridor is 30 miles per hour (mph) adjacent to the proposed project. Sidewalks are provided along both sides of Broadway; however, no bicycle accommodations are provided. Land uses along Broadway generally include retail, commercial and residential uses.

Driveway Sight Distance Measurements

TEC measured the available sight distances at the existing site driveway along Broadway. The available sight lines were compared to minimum requirements established by the American Association of State Highway and Transportation Officials (AASHTO).

Sight distance represents the length of roadway that is visible to a driver traveling within the roadway. Two types of sight distance are typically evaluated for driveways and intersections: stopping sight distance (SSD) and intersection sight distance (ISD). SSD is the minimum distance required for a driver traveling along a roadway to perceive an object in the roadway and stop safely in advance of the object when traveling on a wet pavement surface. SSD is measured from an eye height of 3.5-feet to an object height of 2-feet above the ground, which is equivalent to a driver viewing the taillight of a vehicle ahead. SSD is measured along the centerline of the travel lane approaching the driveway or intersection.

ISD represents the length of the roadway visible to a driver waiting to exit a driveway or minor street. Minimum ISD requirements are based on the distance required for a driver to exit a minor street onto a major street without requiring an approaching vehicle to reduce its speed from the design speed to less than 70 percent of the design speed. ISD is measured from an eye height of 3.5-feet to an object height of 3.5-feet and is measured from a distance 14.5-feet beyond the edge of the travel-way of the major roadway to represent a driver waiting to exit a driveway or minor roadway.

SSD is typically considered the critical sight distance, as it represents the minimum distance required for safe stopping, while ISD represents an acceptable speed reduction for approaching vehicles. The ISD, however, must be at least equal to the minimum required SSD in order to prevent a driver from entering the roadway when an approaching vehicle is too close to safely stop. The guidance provided by AASHTO states:

> *"If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, this may require a major-road vehicle to stop or slow to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road."*

Table 1 provide a summary of the available ISD at the intersection.

Table 1 – Existing Intersection Sight Distance Measurements

Approach / Direction	Posted Speed	AASHTO Recommended Minimum	Measured Stopping Sight Distance
Site Driveway at Broadway:			
East of Driveway	30 MPH	200 FT	110 FT (190 FT [a])
West of Driveway	30 MPH	200 FT	120 FT (280 FT [b])

[a] ISD if parking space in front of site and Papa Jay's Pizzeria were removed
[b] ISD if the adjacent private parking lot was removed

As shown in Table 1, the ISD along the existing site driveway / Broadway do not meet the AASHTO minimum recommendations based on the posted speed limit along Broadway.

To the east, the sight line is obstructed by existing on-street parking stalls along the north side of Broadway. This condition is currently present at the parcel's existing driveway and curb-cut. If the on-street parking stall directly abutting the subject parcel and the adjacent space at the Papa Jay's Pizzeria front door were removed, the sight line is extended to 190 feet. An additional on-street parking stall removal will further extend the sight line greater than AASHTO minimum recommendations. Should no vehicles be parked in these aforementioned spaces, the sight line from the #14 Broadway driveway would exceed AASHTO minimum recommendations.

To the west, the sight line is obstructed by existing off-street parking stalls on the #6 Broadway property. This condition is currently present at the parcel's existing driveway and curb-cut. Should no vehicles be parked in these aforementioned spaces, the sight line from the #14 Broadway driveway would exceed AASHTO minimum recommendations.

Site Generated Traffic

The proposed change in use is to demolish the existing building on site and create a ±50 space commercial parking lot. The potential site generated traffic for the current land use is based on industry standard trip rates published in the Institute of Transportation (ITE) publication, *Trip Generation, 10th Edition* for Land Use Code (LUC) 150 – Warehousing. Currently, there is no published method to calculate the site generated traffic for a commercial parking lot. Parking lots within a commercial area are not considered an individual traffic generator, attracting new traffic to a roadway system. Instead, parking lots capture entering and exiting trips from the existing vehicular traffic on the roadways surrounding the facility. In addition, a new parking lot may attract drivers that are currently parking on-street and who may see the lot a safer environment to leave their vehicle.

The most similar land use within the ITE publication, *Trip Generation, 10th Edition* for a parking lot is LUC 090 – Park-and-Ride Lot with Bus or Light Rail Service. This is not strictly equivalent, as a Park-and-Ride facility is an individual traffic generator, drawing new trips to the roadway system. However, with a public transportation hub within 0.25 miles of the property, the proposed commercial lot may exhibit similar peak hour characteristics to a Park-and-Ride facility. Under a "worst-case" scenario, should an adjacent office building or major employment center in close proximity to the site find this parking lot location preferable to their current situation, the lot may see a maximum of 50 vehicles entering during the morning and 50 vehicles exiting in the evening, using the entire capacity of the lot for the day. Again, once beyond the driveway, the traffic will disperse to their regular travel routes on the adjacent roadway system.

Table 2 - Trip Generation Summary

Time Period	Warehouse (LUC 150)	Park-and-Ride Lot with Bus or Light Rail Service (LUC 090)	Maximum Usage Scenario
Weekday Daily			
IN	9	70	
OUT	9	71	
TOTAL	18	141	
Weekday Morning			
IN	1	17	50
OUT	1	4	0
TOTAL	2	21	50
Weekday Evening			
IN	1	5	0
OUT	1	17	50
TOTAL	2	22	50

Table 2 indicates that the traffic volumes experienced at the driveway of the proposed ±50 space commercial parking lot under are approximately 140 vehicles during a typical weekday with 21 vehicles during the weekday morning peak hour and 22 vehicles during the weekday evening peak hour. The proposed ±50 space commercial parking lot does not generate 1,000 average daily trips or 100 peak hour trips therefore does not apply for an "Advanced" analysis. Site generated trip calculations are attached.

Public Transportation

The proposed parking facility is located approximately 0.25 miles from the Dover Transportation Center which serves as the hub for multiple Cooperative Alliance for Seacoast Transportation (COAST) bus routes and AMTRAK Downeaster rail service. Public transportation data is summarized below:

- COAST Route 1 [Dover / Somersworth / Berwick] – Service is provided from the Dover Transportation Center to Sullivan Street in Berwick with several designated stops within Dover, Somersworth, and Berwick, ME. The bus operates northbound from 5:19 AM to 7:05 PM over 13 daily runs at approximately 45 to 80-minute headways. The bus operates southbound from 5:51 AM to 7:52 PM over 13 daily runs at approximately 55 to 80-minute headways. Saturday services operates northbound from 6:30 AM to 6:45 PM over eight (8) daily runs at approximately 90 to 120-minute headways. The bus operates Saturday southbound from 7:12 AM to 7:34 PM over eight (8) daily runs at approximately 90 to 120-minute headways.
- COAST Route 2 [Rochester / Somersworth / Dover / Newington / Portsmouth] – Service is provided from Market Square in Portsmouth to Highland Street in Rochester; including the Dover Transportation Center. The bus operates northbound from 5:49 AM to 10:24 PM over 20 daily runs at approximately 40 to 80-minute headways. The bus operates southbound from 5:25 AM to 9:09 PM over 20 daily runs at approximately 30 to 90-minute

headways. Saturday services operates northbound from 6:44 AM to 11:07 PM over nine (9) daily runs at approximately 90 to 180-minute headways. The bus operates Saturday southbound from 7:12 AM to 7:34 PM over nine (9) daily runs at approximately 80 to 210-minute headways.

- COAST Route 3 [UNH Wildcat Service] – Service is provided from UNH to Shaw's in Dover; including the Dover Transportation Center. The bus operates outbound from 6:40 AM to 8:06 PM over eight (8) daily runs at approximately 60 to 150-minute headways. The bus operates inbound from 7:11 AM to 8:34 PM over eight (8) daily runs at approximately 60 to 150-minute headways. Saturday and Sunday services operates outbound over three (3) runs at 9:05 AM, 2:05 PM, and 6:35 PM. Saturday and Sunday services operates inbound over three (3) runs at 9:36 AM, 2:36 PM, and 7:06 PM.
- COAST Route 33 [Dover Downtown / County Complex] – Service is provided Monday through Friday from the Dover Transportation Center to the Stafford County Courthouse in Dover. The bus operates inbound from 6:57 AM to 5:29 PM over nine (9) daily runs at approximately 70-minute headways. The bus operates outbound from 6:25 AM to 5:06 PM over nine (9) daily runs at approximately 70-minute headways.
- COAST Route 101 [Dover - Kittery] – Service is provided Monday through Friday from Government Street in Kittery, ME to the Lilac Garden Apartments in Dover; including along Main Street near Broadway. The bus operates twice each weekday leaving the Lilac Garden Apartments in Dover at 5:51 AM and 4:12 PM.
- AMTRAK Downeaster – Service is provided between Boston's North Station and Brunswick, ME with five (5) northbound and southbound trips on a typical weekday and five (5) weekend trips. The Downeaster makes stops in Dover at the Dover Transportation Center in the southbound direction at 6:17 AM, 9:16 AM, 12:57 PM, 3:17 PM, and 7:13 PM and in the northbound direction at 10:35 AM, 2:35 PM, 6:30 PM, 7:51 PM, and 11:59 PM. On weekend days, the Downeaster makes stops in Dover at the Dover Transportation Center in the southbound direction at 7:17 AM, 9:17 AM, 2:07 PM, 4:17 PM, and 7:57 PM and in the northbound direction at 11:25 AM, 2:30 PM, 6:20 PM, 8:30 PM, and 11:59 PM.

There is currently no direct public transportation service along Broadway or adjacent to the site. Bus stops for Routes 3, 33, and 101 are provided along Main Street 900 feet to the south of Broadway and Routes 2, 3, 33, and 101 along Main Street / 6Th Street 800 feet to the north of Broadway. Based on the type of use, it is not expected that any significant site generated traffic would travel to/from the site via public transportation.

Summary

The anticipated traffic generated by the proposed parking lot can be safely and efficiently accommodated within the study area. The overall change in use of the site will have a negligible impact to traffic operations and safety.

Please do not hesitate to contact me directly if you have any questions concerning our evaluation at 978-794-1792.Thank you for your consideration.

Sincerely,

N:\N0946\N0946.01\Docs\Memos & Trans\N0946.01_Dover_Traffic Analysis Memo.docx

TEC, Inc.
*"**T**he **E**ngineering **C**orporation"*



Samuel W. Gregorio, PE, PTOE, RSP_1
Senior Design Engineer / Project Manager - Transportation Planning & ITS

Attachment A – Trip Generation Calculations

: DUHKRXVLQJ

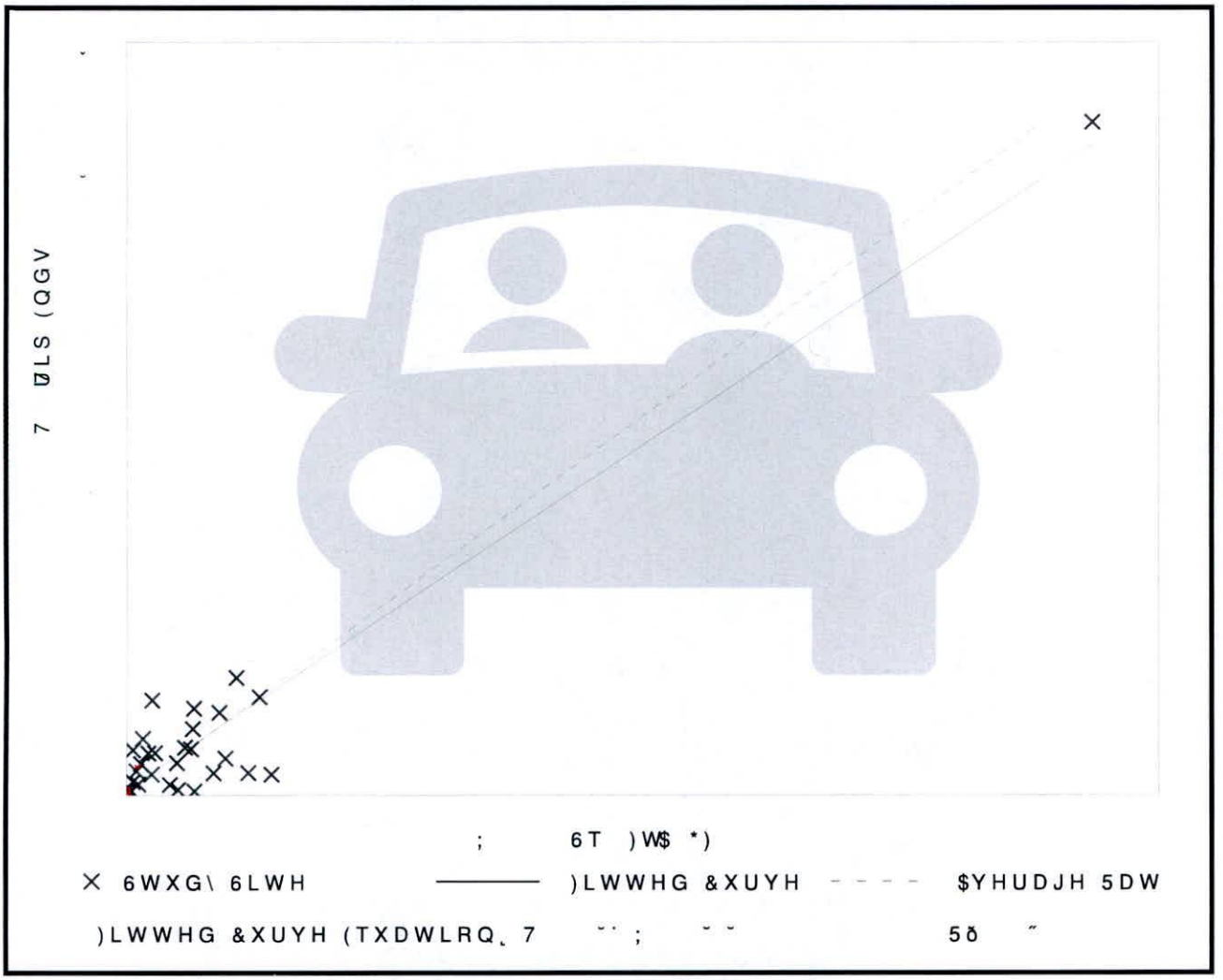
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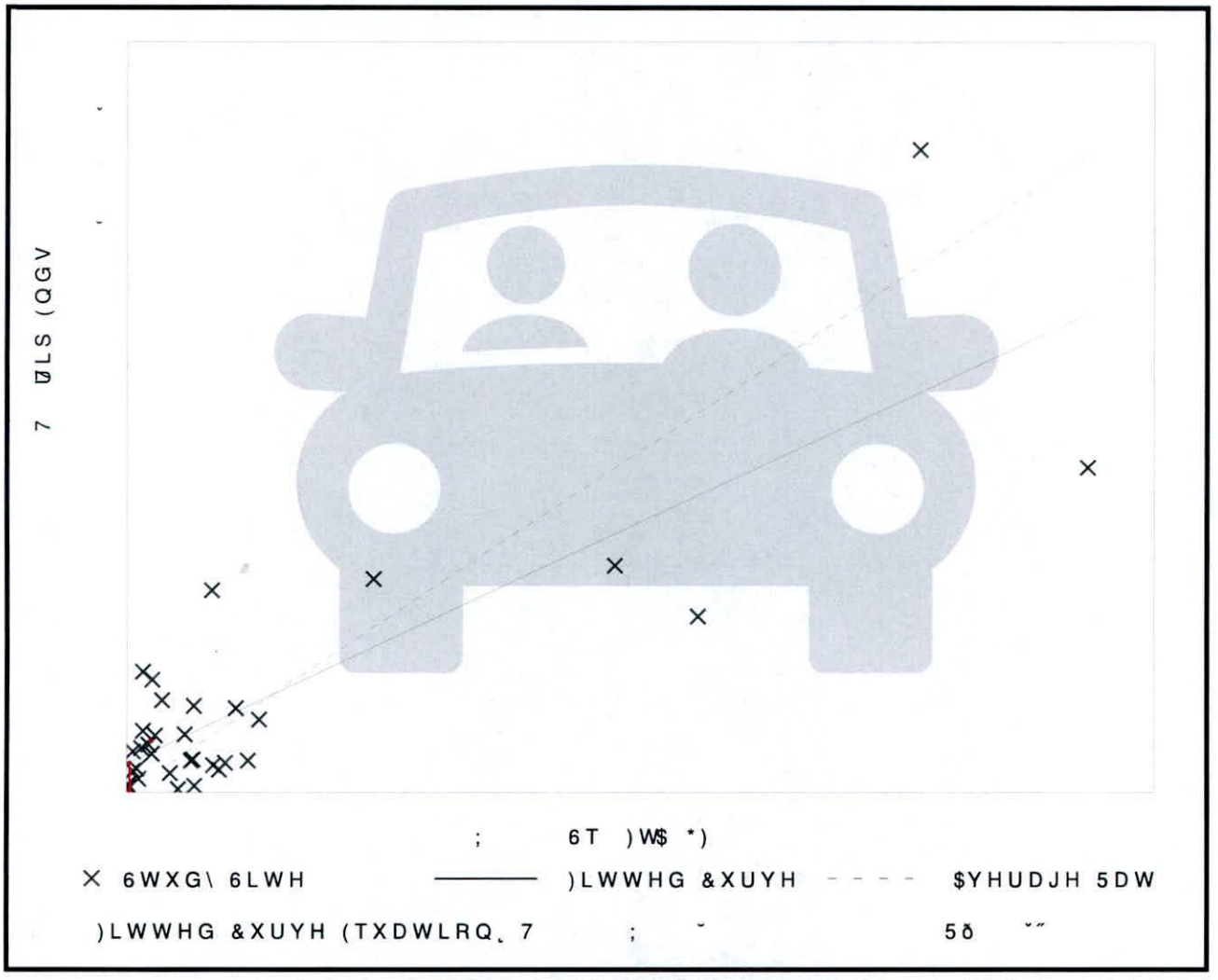
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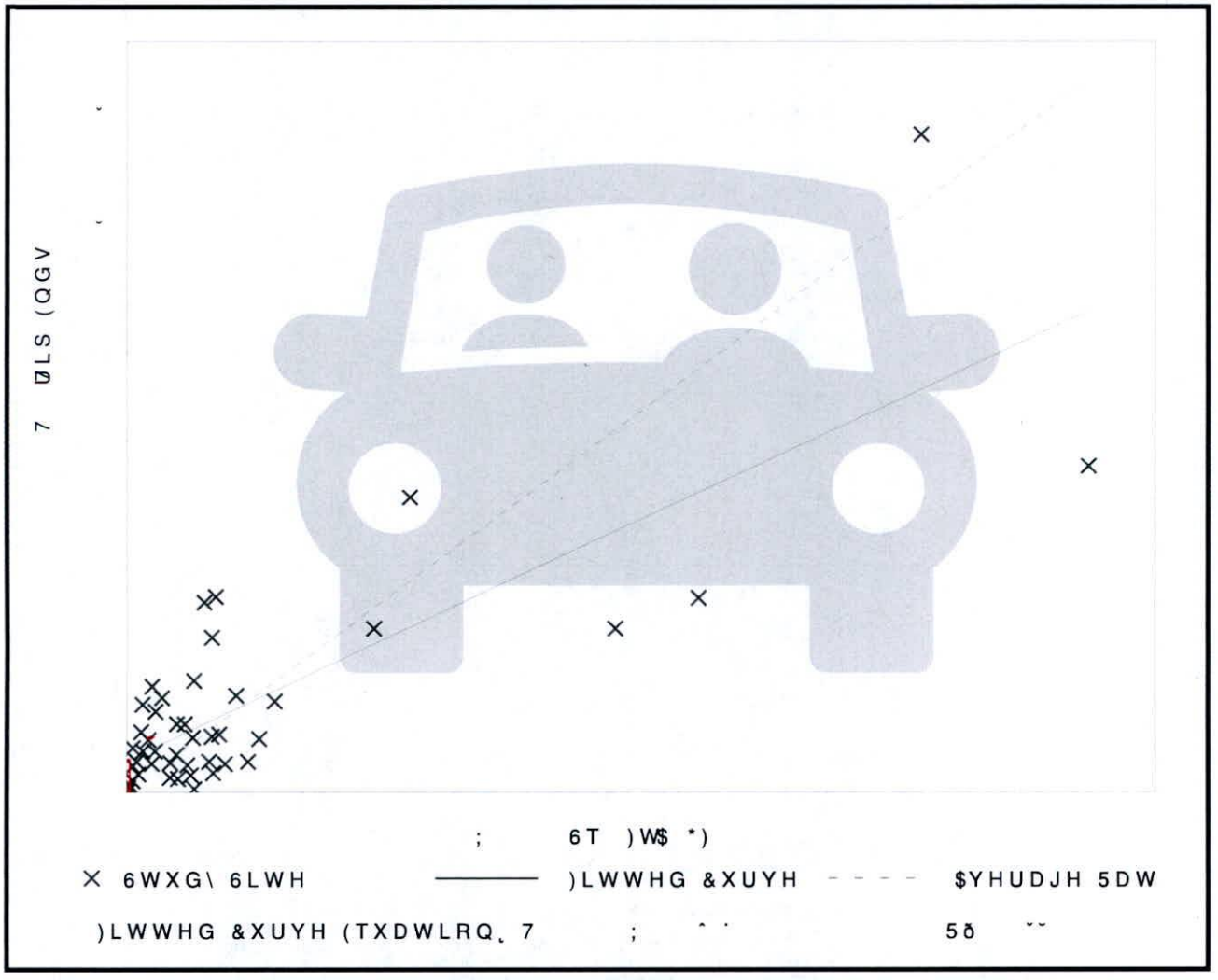
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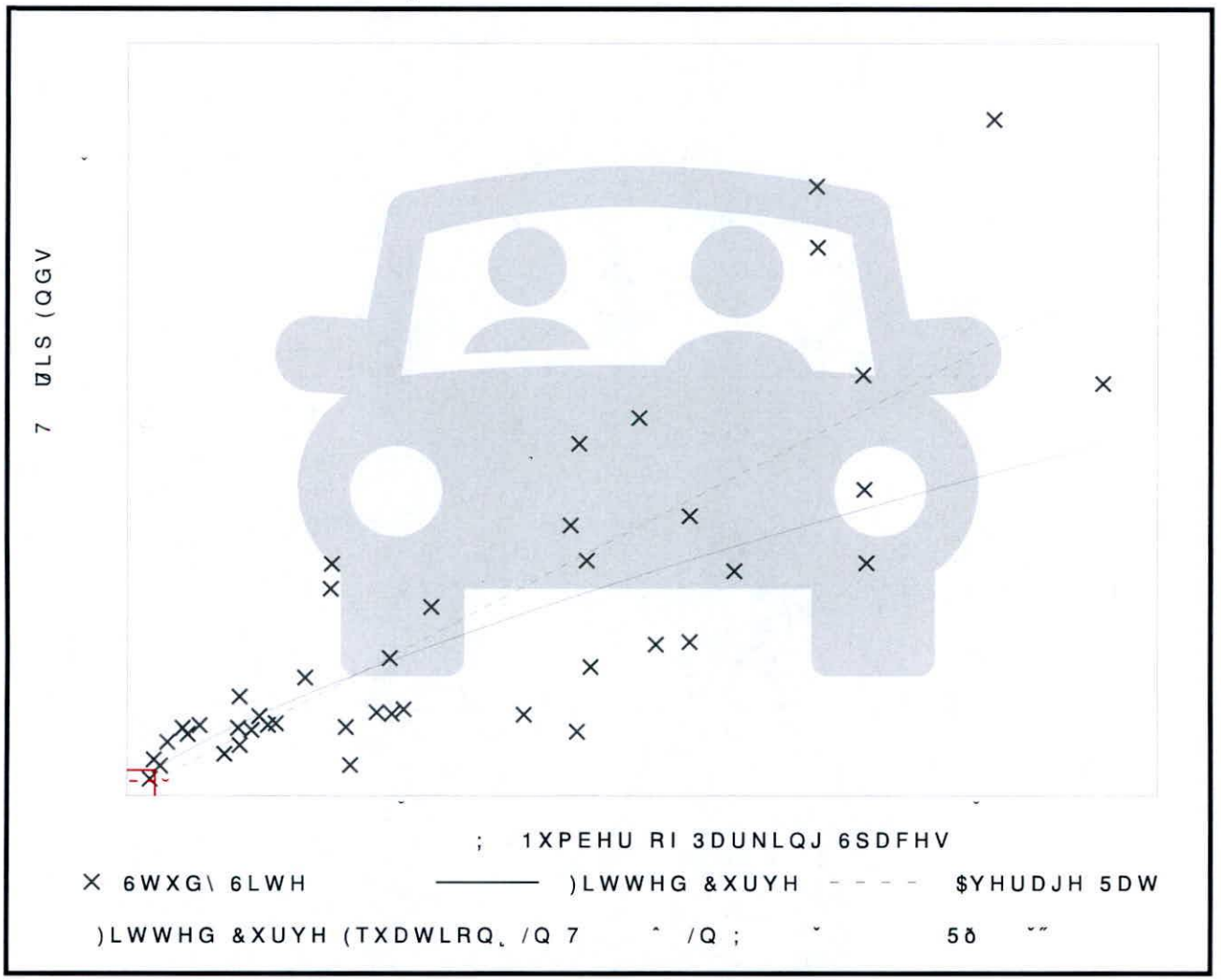
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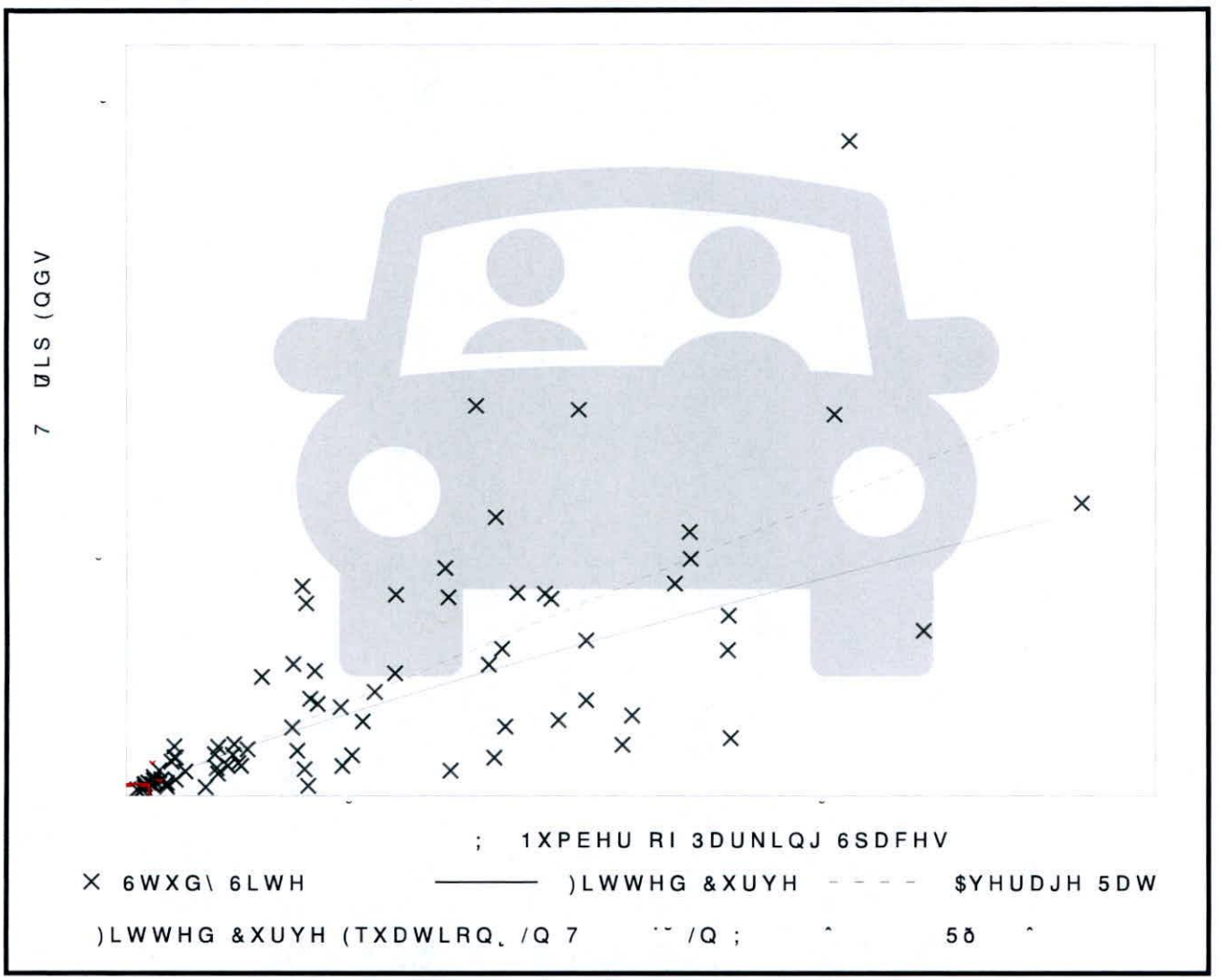
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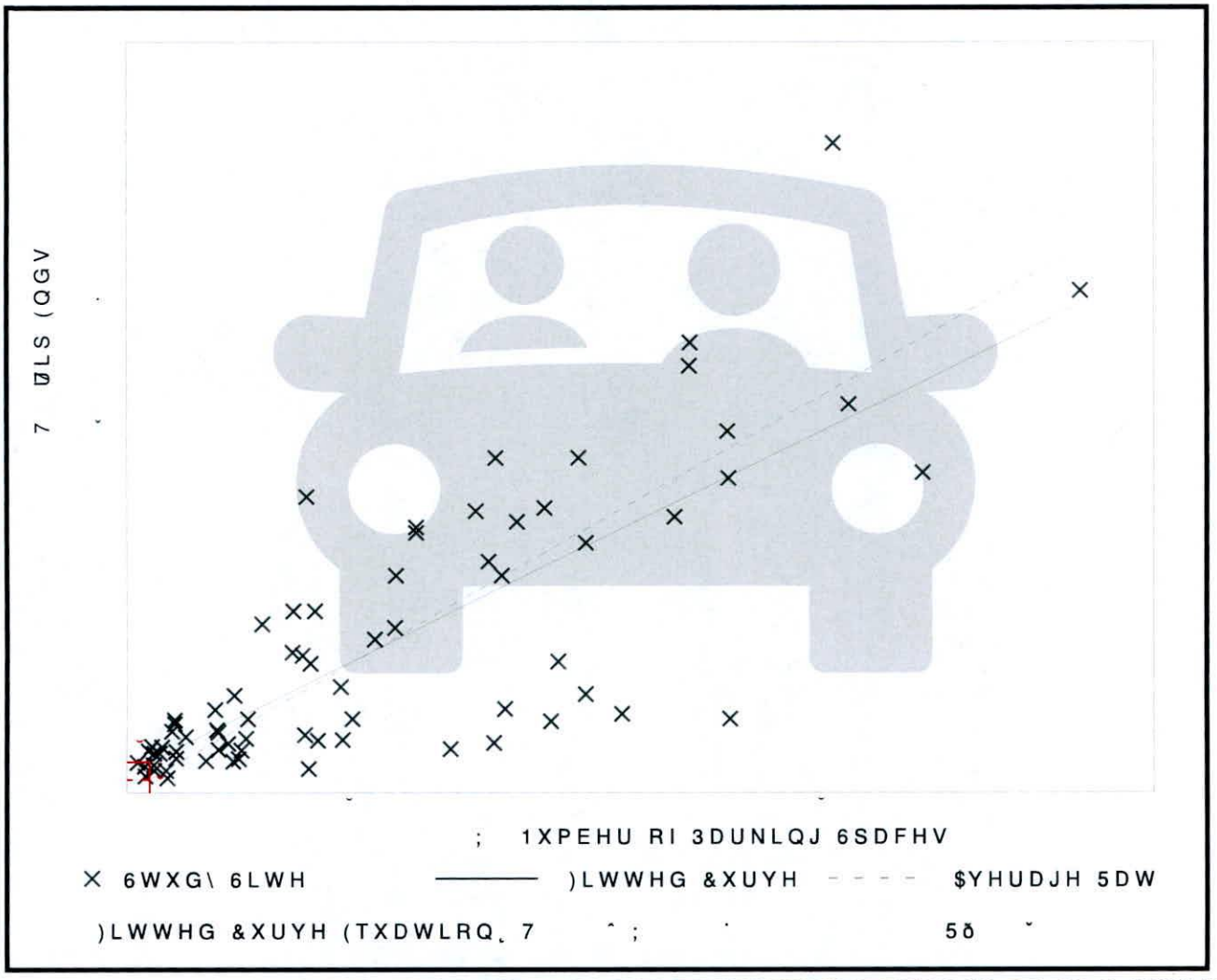
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TEC
The Engineering Corp

169 Ocean Boulevard/PO Box 249
Hampton, NH 03842
603.601.8154
TheEngineeringCorp.com
Create | Design | Innovate

RECEIVED
Planning Office
JUN 19 2020
Dover, New Hampshire

MEMORANDUM

TO: Mr. Christopher Parker, Assistant City Manager
Director of Planning and Strategic Initiatives
City of Dover Planning Department
288 Central Ave
Dover, NH 03820

DATE: 6/19/2020

FROM: Chris Raymond, P.E.

PROJECT NO.: N0946.01

RE: Proposed Parking Lot – 14 Broadway
Stormwater Memo

Project Description
Downtown Dover Storage, LLC ("Applicant") is proposing to redevelop the parking lot and warehouse located at 14 Broadway, Dover, New Hampshire. The project site is 19,471 square feet (SF) situated between the Boston & Maine Railroad Tracks (northerly), Papa Jay's Pizzeria (easterly), Federal Cigar (southerly), and Dover House of Pizza (westerly).

The Applicant is proposing to redevelop the site by demolishing the existing warehouse and constructing a new parking lot with 49 proposed parking spaces, 2 handicap accessible spaces, and associated landscaping. The property is located within the Central Business District, General Sub District overlay, and the proposed parking lot will require a conditional use permit. The project will first be presented to the Technical Review Committee, then require approval from the City of Dover Planning Board. Due to the size of the Project, no permits related to stormwater management are required.

Existing Conditions
The site is 19,471 SF consisting of impervious area of 10,480 SF which includes a warehouse and bituminous surfaces, and 8,991 SF of pervious area consisting of 6,755 SF of poorly graded, compacted gravel and 2,236 SF of landscape area. Currently, stormwater from the site either pools and poorly infiltrates into the ground or sheet flows into the Broadway closed drainage system. Topography at the site is poor in terms of drainage with a low point near the center of the gravel area. The property is not located within the 100-year floodplain. Based on an NRCS Soil Survey, the site is entirely comprised of well-drained Suffield silt loam (SfC), please see attached NRCS Soil Map & Data.

Proposed Conditions
The Project consists of the construction of a new pervious parking lot with 49 proposed parking spaces, 2 handicap accessible spaces, and associated landscaping. The Project will eliminate all impervious area of the site by utilizing a permeable paver system and will provide additional landscaping surrounding the entire proposed parking lot. The permeable paver system will cover 15,938 SF of the site and will utilize a crushed stone surface, the landscaping area will occupy 3,533 SF. Due to the decrease in impervious area, proposed runoff rates will be reduced compared to the existing conditions (See Table 1).

There are no new untreated discharges proposed at the site. The project proposes the use of the permeable paver system which is 100% impervious, so all stormwater runoff generated on-site will infiltrate or, in larger storm events, an underdrain tied into the closed drainage system of Broadway will provide relief. The additional greenspace that will be provided by the project will beautify the site and will allow for a reduction in peak rates of stormwater runoff leaving the site.

Water Quantity Control

The Project reduces the peak rate of runoff leaving the site as compared to the existing conditions by eliminating all impervious area at the site. The Rational Method was used to show the existing and proposed peak flows for the 2-year, 10-year, 20-year, and 50-year storm events. Rainfall rates were taken from Appendix A of the New Hampshire Stormwater Manual.

Using the rational method: $\mathbf{Q = C_w iA}$

2-Year Storm

C=0.98 (impervious) C=0.39 (pervious pavers) C=0.39 (mulch/landscaping)
$C_{w(exist)}$=0.88 $C_{w(proposed)}$=0.39
i=3.13 in/hr A=19,471 SF

10-Year Storm

C=0.98 (impervious) C=0.39 (pervious pavers) C=0.39 (mulch/landscaping)
$C_{w(exist)}$=0.88 $C_{w(proposed)}$=0.39
i=4.78 in/hr A=19,471 SF

25-Year Storm

C=0.98 (impervious) C=0.39 (pervious pavers) C=0.39 (mulch/landscaping)
$C_{w(exist)}$=0.88 $C_{w(proposed)}$=0.39
i=6.09 in/hr A=19,471 SF

50-Year Storm

C=0.98 (impervious) C=0.39 (pervious pavers) C=0.39 (mulch/landscaping)
$C_{w(exist)}$=0.88 $C_{w(proposed)}$=0.39
i=7.33 in/hr A=19,471 SF

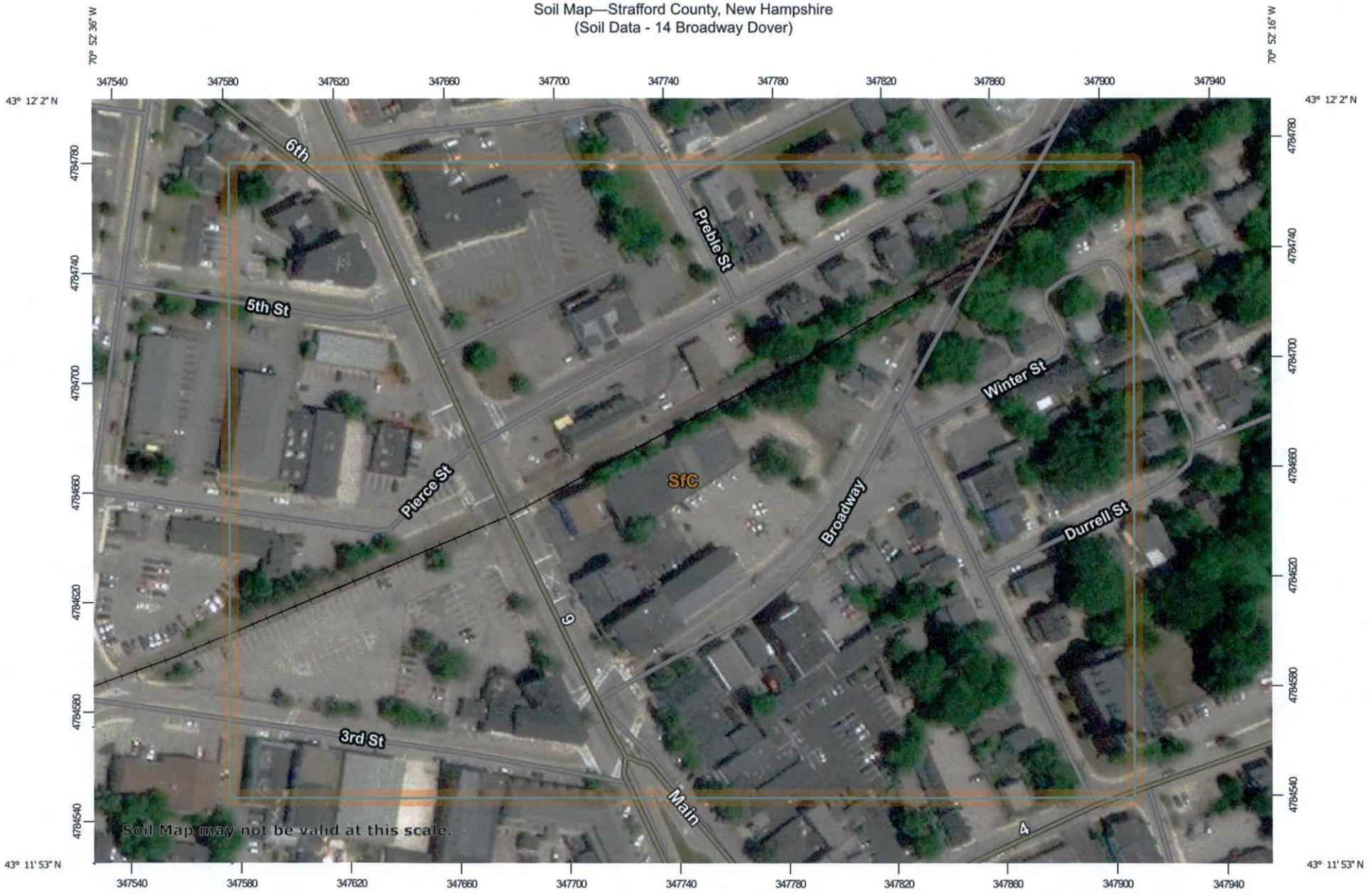
Table 1 (Peak Flow Summary)

2-Yr Storm		10-Yr Storm		25-Yr Storm		50-Yr Storm	
Exist (cfs)	Prop (cfs)	Exist (cfs)	Exist (cfs)	Prop (cfs)	Prop (cfs)	Exist (cfs)	Prop (cfs)
1.24	0.00	2.17	0.03	2.91	0.15	3.61	0.42

Conclusion

This proposed project will improve the site over existing conditions by eliminating all impervious area, reducing peak runoff rates and improving the quality of stormwater that leaves the site. By eliminating impervious area and providing additional landscaping, the project will improve the aesthetics of the site. The Applicant is excited to reinvest in his property, beautify a degraded site, and provide a benefit to the City of Dover.

Soil Map—Strafford County, New Hampshire
(Soil Data - 14 Broadway Dover)



Map Scale: 1:1,960 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Strafford County, New Hampshire
Survey Area Data: Version 19, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Sep 9, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
SfC	Suffield silt loam, 8 to 15 percent slopes	19.0	100.0%
Totals for Area of Interest		**19.0**	**100.0%**

Strafford County, New Hampshire

SfC—Suffield silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9d8v
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Suffield and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Suffield

Typical profile

H1 - 0 to 19 inches: silt loam
H2 - 19 to 28 inches: silt loam
H3 - 28 to 41 inches: silty clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Not named

Percent of map unit: 9 percent
Hydric soil rating: No

Buxton

Percent of map unit: 5 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Strafford County, New Hampshire
Survey Area Data: Version 19, Sep 16, 2019

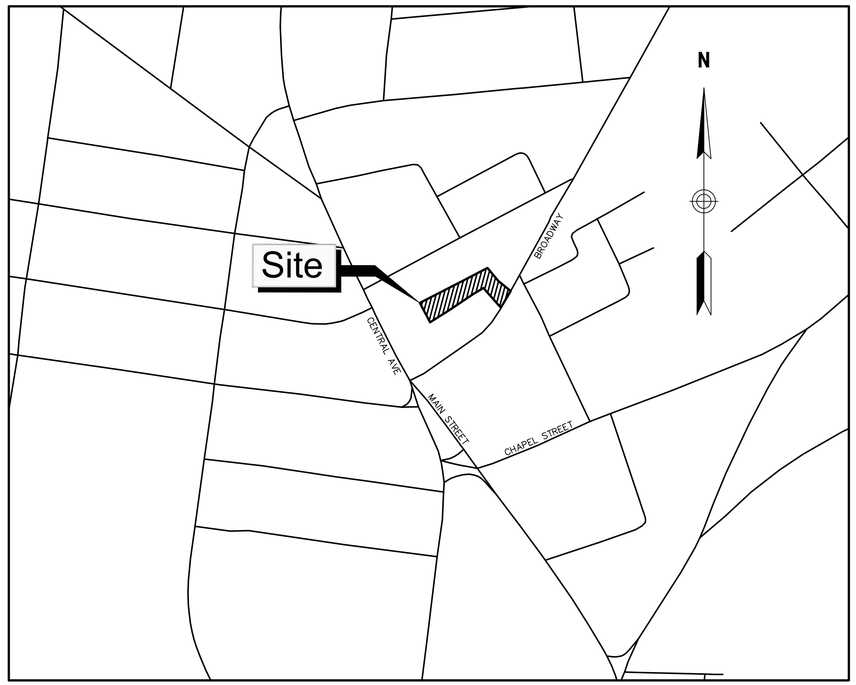
Site Plans

Proposed Parking Lot

14 Broadway, Dover, NH 03820
Assessor's Map 4, Lot 5

Site Plans Index

No.	Drawing Title	Latest Issue
C-1	Title & Index Sheet	June 18, 2020
C-2	Legend & General Notes	June 18, 2020
C-3	Demolition Plan	June 18, 2020
C-4	Layout & Materials Plan	June 18, 2020
C-5	Grading, Drainage & Utilities Plan	June 18, 2020
C-6	Erosion & Sediment Control Plan	June 18, 2020
C-7	Construction Details	June 18, 2020
C-8	Construction Details	June 18, 2020



LOCATION MAP

250 0 250 500

SCALE IN FEET

Reference Plans Index

No.	Drawing Title	Latest Issue
1	Existing Conditions Plan	January 29, 2020

TEC
The Engineering Corp

TEC, Inc.

146 Dascomb Road
Andover, MA 01810
(978) 794-1792

169 Ocean Boulevard
Unit 101, PO Box 249
Hampton, NH 03842
(603) 601-8154

www.TheEngineeringCorp.com

DESIGNED BY	CPR
DRAWN BY	MWP
CHECKED BY	CPR
DATE	6/18/2020
SCALE	As Noted

PREPARED FOR

New Space
Real Estate, LLC
42 Dover Point Road
Dover, NH 03820

REVISIONS

ISSUED FOR

Permitting

PROJECT TITLE

Proposed Parking Lot

PROJECT LOCATION

14 Broadway
Dover, NH 03820

DRAWING TITLE

Title & Index Sheet

PROJECT NO.
N0946

TEC CAD FILE
N0946_COV

DRAWING NO.
C-1

GENERAL NOTES

1. CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND THE LOCAL MUNICIPAL WATER & SEWER DEPT. AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS. A 6-FOOT TEMPORARY CHAINLINK FENCE SHALL BE PROVIDED AROUND ALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL LEAVE NO UNSECURED OPEN EXCAVATIONS.
3. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY THROUGH FRIDAY BETWEEN 7 AM AND 6 PM, SATURDAY AND SUNDAY BETWEEN 9 AM AND 4 PM.
4. HANDICAP ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT/ARCHITECTURAL ACCESS BOARD (AAB), AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
5. WORK WITHIN THE LOCAL RIGHT-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
6. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALK, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
7. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
8. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
9. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
10. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
11. THE PLAN SET FULLY COMPLIES WITH CURRENT CITY OF DOVER ZONING ORDINANCES AND SITE PLAN REVIEW REGULATIONS.
12. THERE SHALL BE NO STORAGE OF HAZARDOUS MATERIALS OR HAZARDOUS WASTE WITHIN THE SUBJECT LOT.

ABBREVIATIONS

GENERAL

AC	ACRES
ADJ	ADJUST
APPROX	APPROXIMATE
BLDG	BUILDING
BO	BY OTHERS
BIT	BITUMINOUS CONCRETE
BTM	BOTTOM
CEM	CEMENT
CLF	CHAIN LINK FENCE
CONC	CONCRETE
DIA	DIAMETER
ELEV	ELEVATION
EN	ENTRANCE/EXIT
ESHWT	ESTIMATED SEASONAL HIGH WATER TABLE
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
EX	EXIT
FDC	FIRE DEPARTMENT CONNECTION
GE	GRANITE EDGING
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
LA	LANDSCAPE AREA
LD	LOADING DOCK
LF	LINEAR FEET
MAX	MAXIMUM
MCC	MONOLITHIC CONCRETE CURB
MIN	MINIMUM
MTD	MOUNTED
NTS	NOT TO SCALE
PROP	PROPOSED
PVMT	PAVEMENT
R	RADIUS
REM	REMOVE
RET	RETAIN
SGE	SLOPED GRANITE EDGING
SW	SIDEWALK
TYP	TYPICAL
VGC	VERTICAL GRANITE CURB
WCR	WHEELCHAIR RAMP

UTILITIES

CB	CATCH BASIN
CIT	CHANGE IN TYPE
CLDI	CEMENT LINED DUCTILE IRON PIPE
COND	CONDUIT
DMH	DRAINAGE MANHOLE
DOM	DOMESTIC WATER SERVICE
ETC	ELECTRIC, TELEPHONE, & CABLE
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HYD	HYDRANT
INV	INVERT ELEVATION
OCS	OUTLET CONTROL STRUCTURE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE (CLASS III)
RD	ROOF DRAIN
SMH	SEWER MANHOLE
TEL	TELEPHONE
TSV	TAPPING SLEEVE AND VALVE
UP	UTILITY POLE
WV	WATER VALVE

GRADING, DRAINAGE AND UTILITY NOTES

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UNDERGROUND UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATION, SIZES, AND ELEVATION OF EXISTING UTILITIES.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT. FAILURE TO PROVIDE OR PERFORM THE ABOVE PRIOR TO PERFORMING ANY WORK SHALL NOT BE GROUNDS FOR EXTRA PAYMENTS TO THE CONTRACTOR.
3. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT, CURBS, AND EARTHWORK SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES, AND JOINTS.
4. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED.
5. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE PAVEMENT FINISH GRADE UNLESS OTHERWISE NOTED.
6. INSTALL ALL UTILITIES (INCLUDING CONCRETE PADS) PER UTILITY COMPANY AND DPW STANDARDS.
7. EXISTING TREES AND SHRUBS OUTSIDE THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON PRIOR APPROVAL OF THE OWNER.
8. UNLESS OTHERWISE INDICATED, ABANDONED EXISTING UTILITY LINES SHALL BE CAPPED AND ABANDONED IN PLACE UNLESS THEY CONFLICT WITH PROPOSED IMPROVEMENTS, WHERE THEY SHALL THEN BE REMOVED. CAP REMAINING PORTIONS WHERE PARTIALLY REMOVED.
9. ALL WATER INFRASTRUCTURE SHALL CONFORM TO MUNICIPAL STANDARDS.
10. INSULATE SANITARY PIPES WHERE INVERT DEPTH IS LESS THAN FIVE (5) FEET BELOW FINISHED GRADE.
11. CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER, AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO ORIGINAL CONDITION (AT NO ADDITIONAL COST TO THE OWNER) BY THE CONTRACTOR.
12. ALL WATER AND SEWER UTILITY WORK SHALL CONFORM TO LOCAL UTILITY DIVISION SPECIFICATIONS, DETAILS, RULES AND REGULATIONS AND HAVE FIVE (5) FEET OF MINIMUM COVER. GAS, ELECTRIC, AND TELEPHONE LOCATIONS AND ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY THE APPROPRIATE UTILITY COMPANIES.
13. FIRE ALARM CONNECTION LOCATIONS AND ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY THE FIRE DEPARTMENT.
14. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL BARRIERS AFTER REVEGETATION OF DISTURBED AREAS AND AFTER APPROVAL BY THE LOCAL APPROVING AUTHORITY.
15. EXCAVATION REQUIRED IN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
16. STOCKPILED TOPSOIL SHALL BE PLACED NEATLY IN AN AREA APPROVED BY THE OWNER/REPRESENTATIVE.
17. THE CONTRACTOR SHALL SCHEDULE THEIR WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PUDDLING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF THE FINISH SUBGRADE AND/OR SURFACE PAVING.
18. THE APPLICANT SHOULD OBTAIN AN EXCAVATION PERMIT FROM THE CITY OF DOVER PRIOR TO THE START OF WORK ON THE SITE.
19. THE APPLICANT SHOULD OBTAIN ANY ADDITIONAL LOCAL UTILITY PERMITTING IF REQUIRED

GENERAL SYMBOLS

EXISTING	PROPOSED	
		CATCH BASIN
		GUTTER INLET
D		DRAIN MANHOLE
S		SEWER MANHOLE
E		ELECTRIC MANHOLE
T		TELEPHONE MANHOLE
WV		WATER GATE
FH		FIRE HYDRANT
GV		GAS GATE
		STREET SIGN
		LIGHT POLE
		WALL MOUNTED LIGHT
		UTILITY POLE
		GUY POLE
		GUY WIRE
W		MONITORING WELL
TP-#		TEST PIT (W/ I.D.)
	EOP	EDGE OF PAVEMENT
VGC	VGC	GRANITE CURB
SGC	GE	GRANITE EDGING
	BB	BITUMINOUS BERM
		GUARD RAIL
		CHAINLINK FENCE
		DRAINAGE LINE
	S	SEWER LINE
		WATER LINE
G	G	GAS LINE
		UNDERGROUND ELECTRIC LINE
		UNDERGROUND TELEPHONE LINE
		ELEC., TELE., CATV, CONDUIT
OHW	OHW	OVERHEAD WIRE
		STONE WALL
		CHAIN LINK FENCE
		STOCKADE FENCE
		TREE LINE
		SHORELINE
		CONCERETE
		ENTRANCE/EXIT DOOR
PC 10 N00° 00' 00"E +57.59	PC 10 N00° 00' 00"E +57.59	BASELINE
N00° 00' 00"E	N00° 00' 00"E	TOWN LAYOUT
N00° 00' 00"E	N00° 00' 00"E	PROPERTY LINE
⊡ GB OR CB	■ BND	HIGHWAY/PROPERTY BOUND (TYPE NOTED)
		IRON PIPE/REBAR
		TREE (SIZE AND TYPE NOTED)

PAVEMENT MARKINGS AND SIGNING SYMBOLS

EXISTING	PROPOSED	
CW	CW	CROSSWALK, 12" WHITE LINE (WIDTH NOTED)
SL	SL	STOP LINE, 12" WHITE LINE 4' BEHIND CW (TYP.)
SL	SWL, SWLL	SOLID WHITE LINE/SOLID WHITE LANE LINE-4"
	BWLL	BROKEN WHITE LANE LINE-4"
	DWLL	DOTTED WHITE LANE LINE-4"
SYL	SYL	SOLID YELLOW LINE-4"
DYL	DYCL	DOUBLE YELLOW CENTER LINE- 2-4" LINES
		ADA-ACCESSIBLE PARKING SPACE

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DESIGNED BY	CPR
DRAWN BY	MWP
CHECKED BY	CPR
DATE	6/18/2020
SCALE	Not to Scale

PREPARED FOR

New Space
Real Estate, LLC
42 Dover Point Road
Dover, NH 03820

REVISIONS

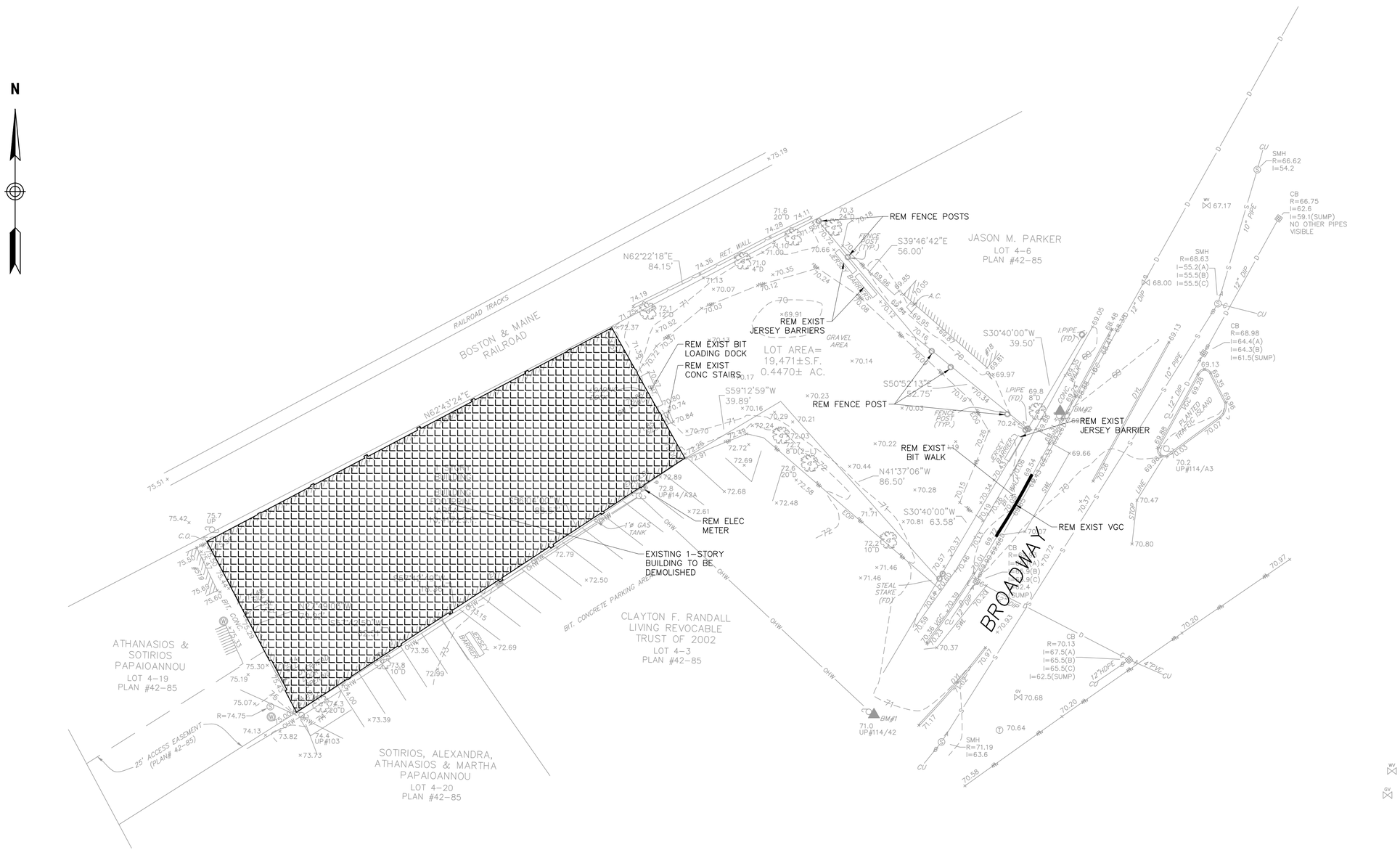
ISSUED FOR
Permitting

PROJECT TITLE
Proposed Parking Lot

PROJECT LOCATION
14 Broadway
Dover, NH 03820

DRAWING TITLE
Legend &
General Notes

PROJECT NO.
N0946
TEC CAD FILE
N0946_LEG
DRAWING NO.
C-2
SHEET 2 OF 8



NOTES:

1. ALL UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF EACH UTILITY PRIOR TO REMOVING OR RELOCATING. CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND THE LOCAL MUNICIPAL WATER & SEWER DEPT. AT LEAST 72 HOURS BEFORE EXCAVATING.
2. THE CONTRACTOR SHALL DISCONNECT ALL UTILITIES FROM THE BUILDING PRIOR TO DEMOLITION.
3. THE CONTRACTOR IS TO REMOVE AND TO DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMITS OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS, AND UNSUITABLE MATERIAL WITHIN THE PROPOSED BUILDING FOOTPRINT, TEN FEET BEYOND AND BENEATH PROPOSED EXTERIOR COLUMNS, AND CONFLICTING WITH ANY PROPOSED SITE WORK, PER DRAWINGS AND SPECIFICATIONS.
4. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE, AND INDIVIDUAL UTILITY COMPANIES' STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
5. THE CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES, AND STATUTES.
6. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED AND APPROVED PRIOR TO DEMOLITION.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS. A 6-FOOT TEMPORARY CHAIN LINK FENCE SHALL BE PROVIDED AROUND ALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL LEAVE NO UNSECURED OPEN EXCAVATIONS.
8. ALL EXISTING DRAINAGE STRUCTURES SHALL REMAIN IN PLACE AND FUNCTIONAL UNTIL THE PROPOSED DRAINAGE SYSTEM IS OPERATIONAL, UNLESS OTHERWISE NOTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 72 HOURS PRIOR TO BEGINNING ANY DEMOLITION.
10. THE LOCATION OF THE EXISTING SEWER SERVICE IS APPROXIMATE. THE EXISTING SERVICE SHALL BE REMOVED IN CONFORMANCE WITH STATE AND LOCAL REGULATIONS.
11. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.

LEGEND

BUILDING TO BE DEMOLISHED

VGC TO BE REMOVED

20 0 20 40
SCALE IN FEET

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DRAWN BY	MWP
CHECKED BY	CPR
DATE	6/18/2020
SCALE	1"=20'

PREPARED FOR

New Space
Real Estate, LLC
42 Dover Point Road
Dover, NH 03820

REVISIONS

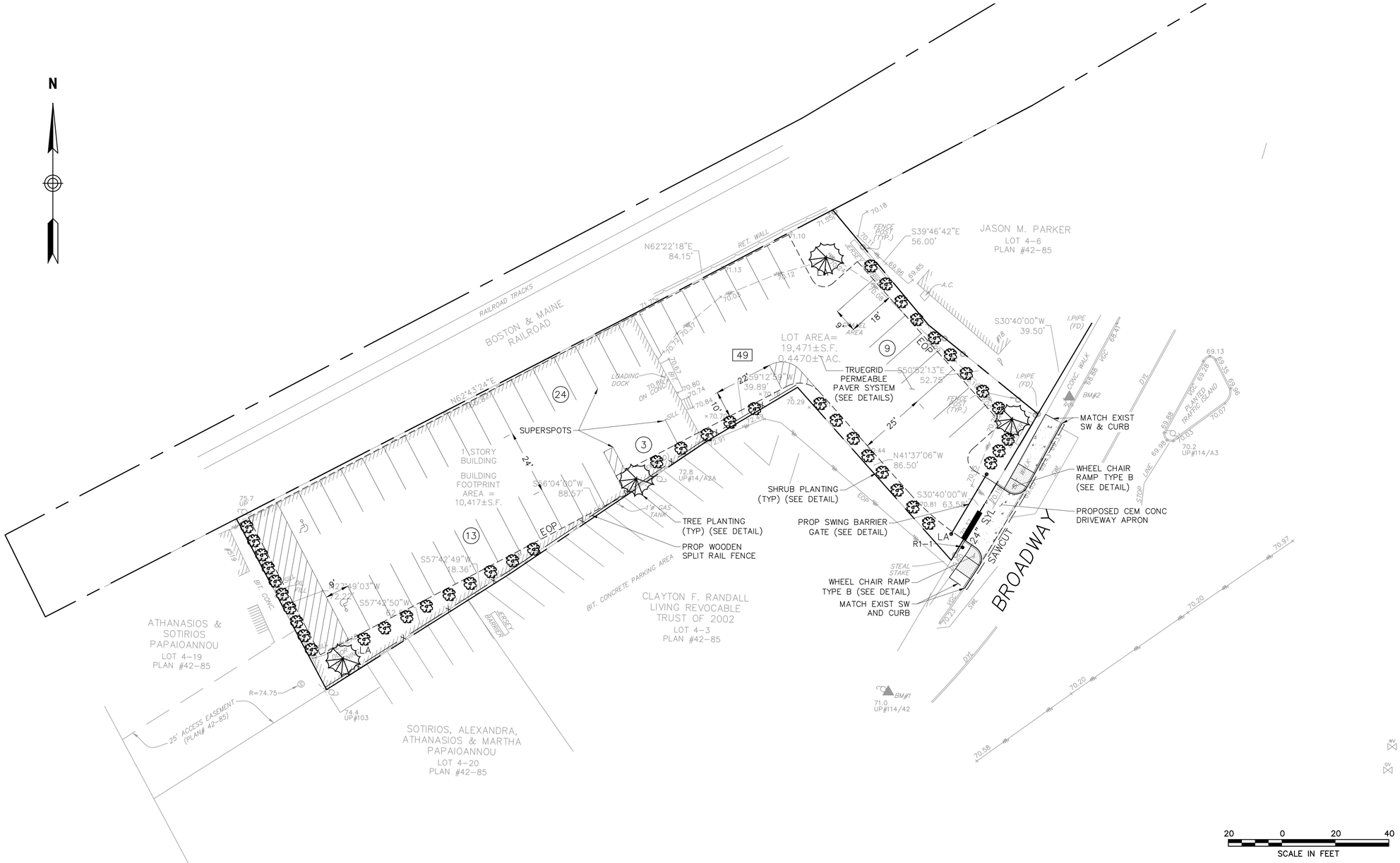
ISSUED FOR
Permitting

PROJECT TITLE
Proposed Parking Lot

PROJECT LOCATION
14 Broadway
Dover, NH 03820

DRAWING TITLE
Demolition
Plan

PROJECT NO.
N0946
TEC CAD FILE
N0946_GEN
DRAWING NO.
C-3
SHEET 3 OF 8



TRAFFIC SIGN SUMMARY

ID NUMBER	SIZE OF SIGN (in)		LEGEND	TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	NUMBER OF POSTS REQUIRED
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ROUTE MARKER		
R1–1	30	30	STOP	SEE MUTCD SIGN STANDARDS			1	1

* HANDICAP PARKING SIGNS SHALL BE IN ACCORDANCE WITH CITY OF DOVER STANDARDS, AND ADA/AAB REGULATIONS

** VAN SIGNS SHALL BE LOCATED AT ALL ADA SPACES. PER ADA ACCESSIBILITY GUIDELINES (AMENDED 2002) ANY SPACE WITH A VAN SIGN IS NOT INTENDED TO BE RESTRICTED ONLY TO VANS

PARKING TABLE

PROVIDED PARKING	49 SPACES	
PARKING REQUIREMENTS	REQUIRED	PROVIDED
HANDICAP ACCESSIBLE SPACES	2	2
ACCESSWAY WIDTH	24 FT	24 FT
STALL WIDTH	9 FT	9 FT
DEPTH OF STALL PERPENDICULAR TO AISLE	18 FT	18 FT
LENGTH OF PARALLEL STALL	22 FT	22 FT

ZONING TABLE

ZONING DISTRICT	CBD GENERAL SUB–DISTRICT	
PROPOSED USE	PARKING LOT	
PROPOSED USE ALLOWABLE BY	CONDITIONAL USE	
DIMENSIONAL REQUIREMENTS	REQUIRED	PROVIDED
LOT SIZE	N/A	19,471 SF
MINIMUM LOT COVERAGE	75%	0%
MINIMUM FRONTAGE BUILD–OUT	70%	N/A
FRONT PRIMARY BUILD TO LINE	*	N/A
FRONT SECONDARY BUILD TO LINE	N/A	N/A
SIDE SETBACK	0 FT (MIN), 24 FT (MAX)	N/A
REAR SETBACK	10 FT (MIN)	N/A

* AVERAGE OF ALL FRONT SETBACKS OF LOTS WITHIN THE SAME ZONE LOCATED ON THE SAME SIDE OF THE STREET, 250 FT IN EACH DIRECTION FROM THE CENTER OF THE FRONT LOT LINE

NOTES:

1. SUB–BASE GRADE AND PREPARATION IS DEPENDENT ON SITE CONDITIONS
2. GEOGRID MESH OR GEOFABRIC MAY BE REQUIRED BETWEEN SUB–GRADE & SUB–BASE FOR CERTAIN SOILS AND SITE SPECIFIC REQUIREMENTS

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CHECKED BY	CPR
DATE	6/18/2020
SCALE	1"=20'

PREPARED FOR

New Space
Real Estate, LLC
42 Dover Point Road
Dover, NH 03820

REVISIONS

ISSUED FOR

Permitting

PROJECT TITLE

Proposed Parking Lot

PROJECT LOCATION

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Dover, NH 03820

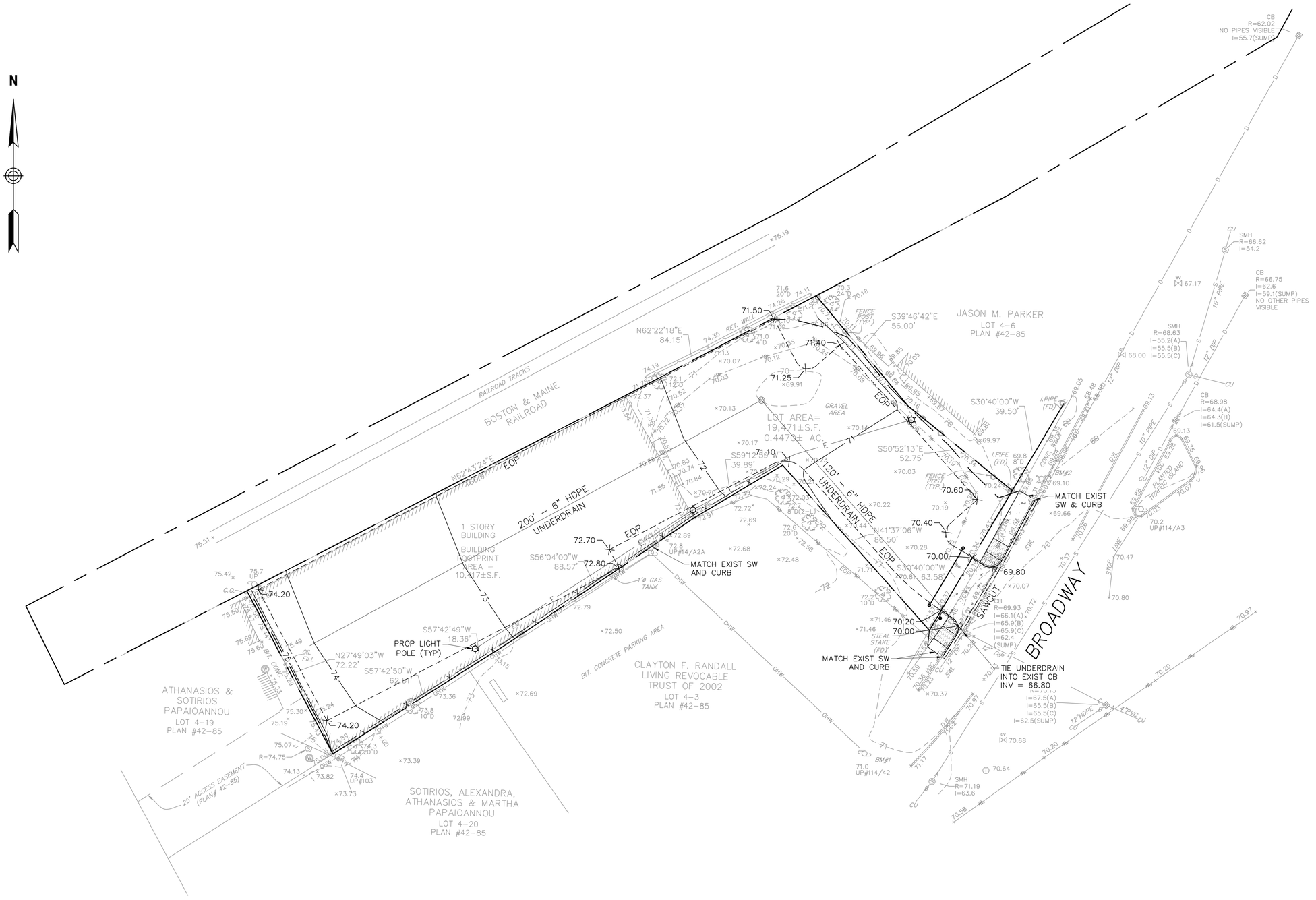
DRAWING TITLE

Layout & Materials Plan

PROJECT NO.
N0946

TEC CAD FILE
N0946_GEN

DRAWING NO.
C-4



LOT COVERAGE TABLE		
EXISTING USE	10,417 SF WAREHOUSE W/ GRAVEL PARKING AREA	
PROPOSED USE	15,945 SF PERMEABLE PARKING AREA W/ LANDSCAPING	
LOT COVERAGE	EXISTING	PROPOSED
IMPERVIOUS AREA	10,480 SF (54%)	0 SF (0%)
PERVIOUS AREA	8991 SF	19,471 SF

NOTES:

1. PARKING LOT TO BE CONSTRUCTED USING PERVIOUS PAVEMENT SYSTEM TO TREAT AND REDUCE STORMWATER RUNOFF.

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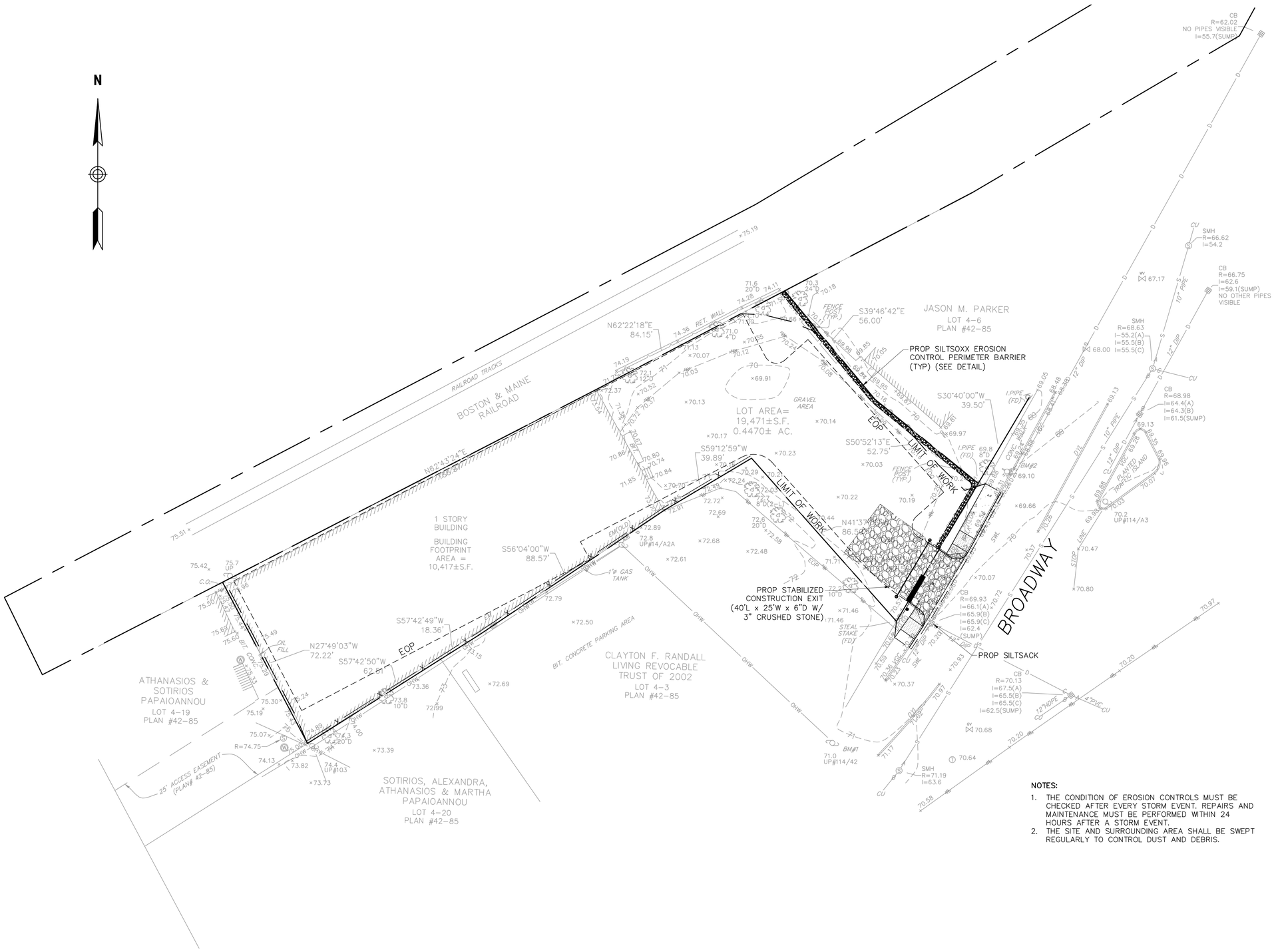
DRAWING TITLE

Grading, Drainage & Utilities Plan

PROJECT NO. N0946

TEC CAD FILE N0946_GEN

DRAWING NO. C-5



NOTES:

1. THE CONDITION OF EROSION CONTROLS MUST BE CHECKED AFTER EVERY STORM EVENT. REPAIRS AND MAINTENANCE MUST BE PERFORMED WITHIN 24 HOURS AFTER A STORM EVENT.
2. THE SITE AND SURROUNDING AREA SHALL BE SWEPT REGULARLY TO CONTROL DUST AND DEBRIS.

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SCALE	1"=20'

PREPARED FOR

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Real Estate, LLC
42 Dover Point Road
Dover, NH 03820

REVISIONS

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PROJECT TITLE

Proposed Parking Lot

PROJECT LOCATION

14 Broadway
Dover, NH 03820

DRAWING TITLE

Erosion & Sediment Control Plan

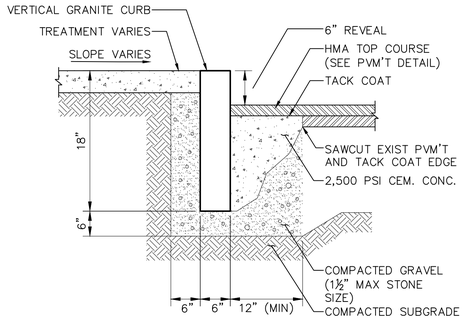
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TEC CAD FILE N0946_GEN

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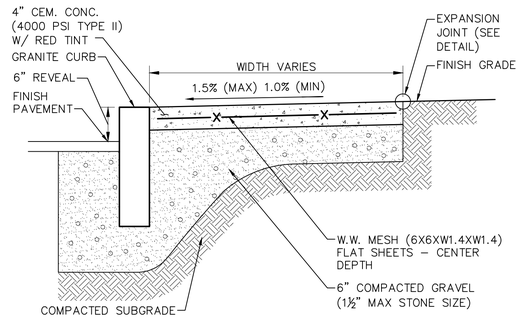
C-6

SHEET 6 OF 8



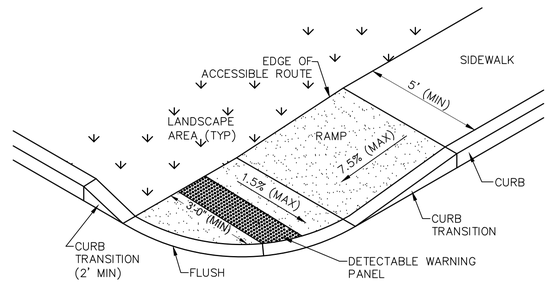
VERTICAL GRANITE CURB IN EXISTING PAVEMENT

N.T.S.



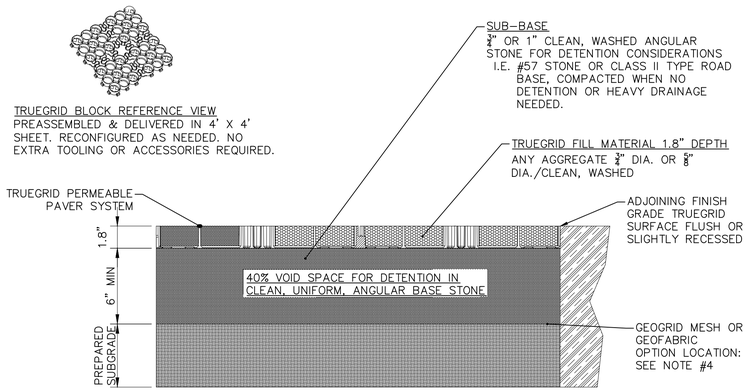
CONCRETE SIDEWALK

N.T.S.



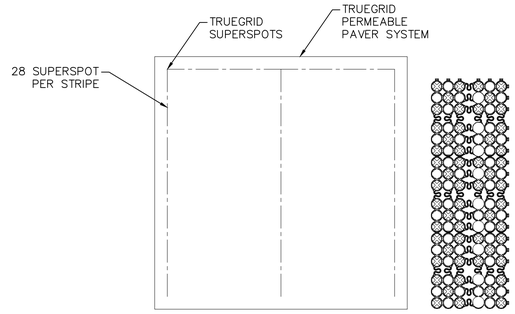
WHEELCHAIR RAMP TYPE B

N.T.S.



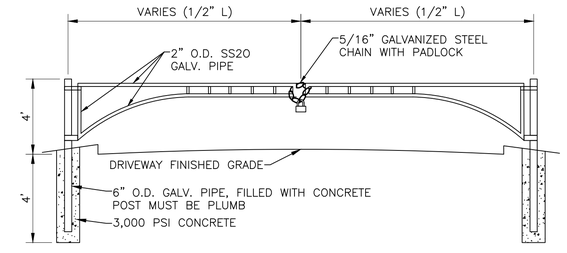
GRAVEL FILL MEDIUM LOAD TRUEGRID PRO PLUS

N.T.S.



PRO PLUS SUPERSPOT DETAIL (90 DEGREE)

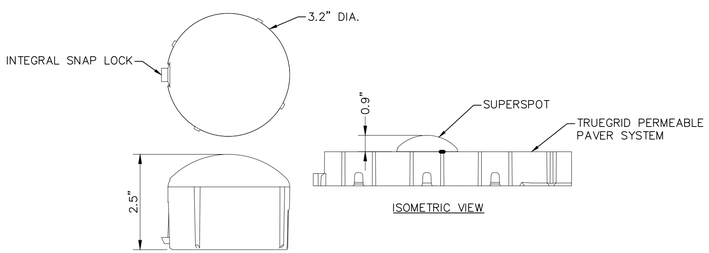
N.T.S.



NOTE:
1. ALL RAILS AND HARDWARE TO BE BLACK VINYL COATED GALVANIZED STEEL.

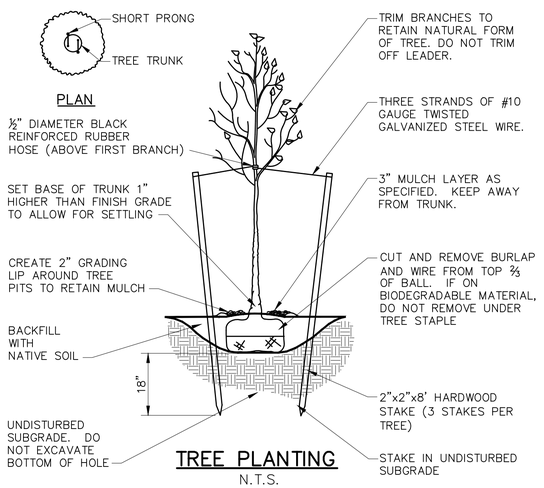
BARRIER GATE

N.T.S.



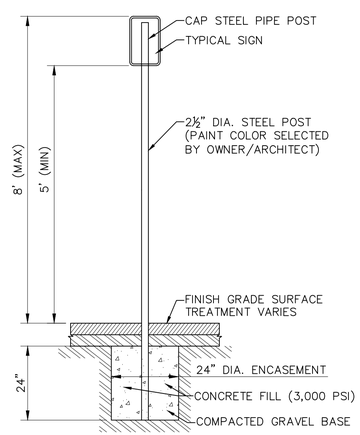
SUPERSPOT PARKING DELINEATORS

N.T.S.



TREE PLANTING

N.T.S.



SIGN POST

N.T.S.

TEC
The Engineering Corp
TEC, Inc.
146 Dascomb Road
Andover, MA 01810
(978) 794-1792
169 Ocean Boulevard
Unit 101, PO Box 249
Hampton, NH 03842
(603) 601-8154
www.TheEngineeringCorp.com

DESIGNED BY	CPR
DRAWN BY	MWP
CHECKED BY	CPR
DATE	6/18/2020
SCALE	Not to Scale

PREPARED FOR

New Space
Real Estate, LLC
42 Dover Point Road
Dover, NH 03820

REVISIONS

ISSUED FOR
Permitting

PROJECT TITLE
Proposed Parking Lot

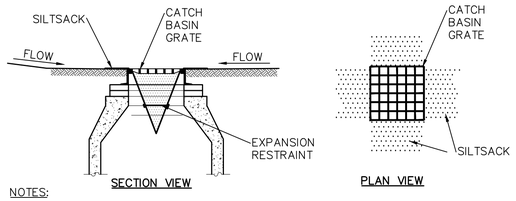
PROJECT LOCATION
14 Broadway
Dover, NH 03820

DRAWING TITLE
Construction Details

PROJECT NO.
N0946

TEC CAD FILE
N0946_DET

DRAWING NO.
C-7

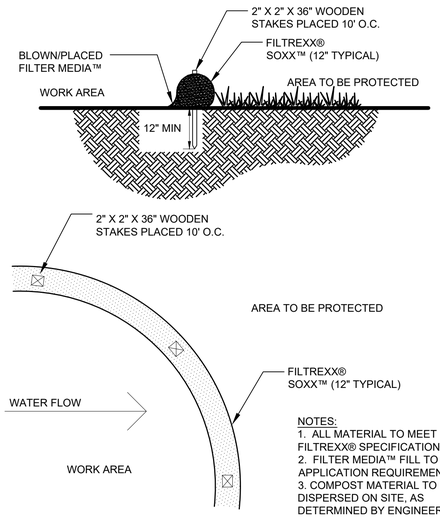


NOTES:

1. INSTALL SILTSACK IN EXISTING CATCH BASINS BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL BINDER COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

INLET PROTECTION – SILT SACK IN CATCH BASIN

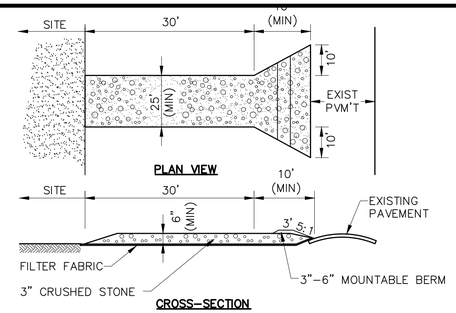
N.T.S.



NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

SILTSOXX PERIMETER EROSION BARRIER DETAIL

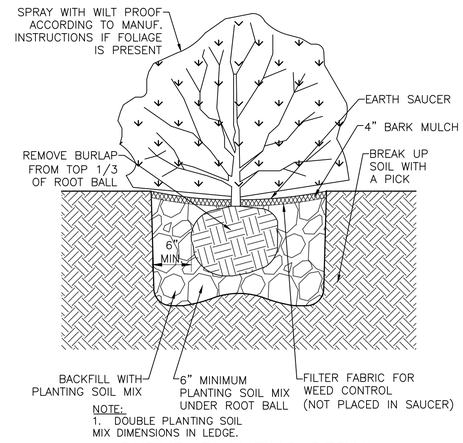
N.T.S.



1. ENTRANCE WIDTH SHALL BE A TWENTY–FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR 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. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

STABILIZED CONSTRUCTION EXIT

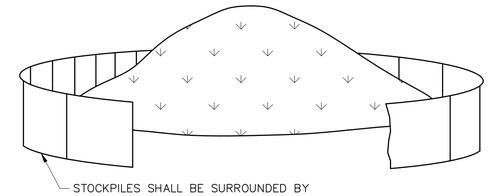
N.T.S.



NOTE:
1. DOUBLE PLANTING SOIL MIX DIMENSIONS IN LEDGE.

SHRUB PLANTING DETAIL

N.T.S.



SOIL STOCKPILE

N.T.S.

TEC, Inc.
146 Dascomb Road
Andover, MA 01810
(978) 794-1792
169 Ocean Boulevard
Unit 101, PO Box 249
Hampton, NH 03842
(603) 601-8154
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PROJECT LOCATION

14 Broadway
Dover, NH 03820

DRAWING TITLE

Construction Details

PROJECT NO.
N0946

TEC CAD FILE
N0946_DET

DRAWING NO.

C-8

ALTUS ENGINEERING, INC.

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

July 2, 2020

Christopher G. Parker AICP
Assistant City Manager
Director of Planning and Strategic Initiatives.
City of Dover Planning Department
288 Central Ave
Dover, New Hampshire 03820

Re: Site Review Application Response to TRC Comments
Pointe West - Phase 5
Tax Map K, Lot 19
City File #P20-32/ Altus File P-5057

Dear Mr. Parker:

On behalf of Pointe West LLC and Summit Land Development, Altus Engineering, Inc. (Altus) is pleased to re-submit the Site Review Plans for the "Pointe West" mixed-use development site, located on Tax Map K, Lot 19. This project will construct two mixed-use buildings and seven townhomes in the northwest portion of the Pointe Place development, which will complete the Pointe Place Master Plan Development. This phase proposes to construct 15,000 square feet of additional commercial space along with 114 residential units.

On June 4, 2020 we met with the Technical Review Committee (TRC) to discuss the project. The TRC comments and Altus' responses are listed below:

Planning Comments:

- **Impact fees will be assessed ($461,288)**
  - *Agreed*
- **TDR Fee Townhouse: $40,260 | Multi-unit $112,576**
  - *Agreed*
- **W/S investment fees are applicable**
  - *Agreed*
- **Project may trigger traffic control at Dover Point (currently triggered by 4th building on Pointe Place or Vehicular Refueling)**
  - *Agreed – The applicant will work with the City regarding this requirement.*
- **Stamp and signature of PE, LLS, and architect needed on each plan submission**
  - *Agreed*
- **Provide landscape O&M plan**
  - *The Landscape O&M Plan has been provided.*
- **4 parking spaces near buildings A and G seem tricky to get in and out of**
  - *The four stalls are for visitor parking. The radius has been widening to provide addition space for turn in and backing out of stalls.*

- **Revise plans:**
  - **o Update zoning to indicate new Innovative Technology district**
    - *ETP Zone has been updated to IT zone*
  - **o Add project file number to title block (P20-32) on all sheets**
    - *City Project File Number has been added to the Cover and the Altus Title block.*
  - **o Complete Conditions of Approval note on GN-1**
    - *Conditions of Approval will be added upon approval by the Planning Board*
  - **o Add first four phases to reference list on GN-1**
    - *The first four phases of the Pointe Place Master development have been added to the GN-1 sheet with City File numbers.*
  - **o Update the note that Building 7 will need an architectural compliance hearing before BP.**
    - *Note added. See Note 5 on Site Plan, Sheet C-2*
  - **o Add a note that all of the parking shall be available to all components of the Phase & if areas are conveyed to separate owners, cross access and parking easements will be provided.**
    - *Note added to Site Plan. See Note 7, sheet C-2. Note also includes possible exclusions if Lot is subdivided.*
  - **o Add a name for the private road being created**
    - *The proposed private road has been named "North Pointe Lane".*
  - **O Update the C-1 sheet to include the Residential/non-residential ratios, including all development that has occurred between Middle and Dover Point Roads.**
    - *The residential /non-residential ratios have been added to sheet C-1. The proposed project will be incompliance with the zoning requirements upon completion. Any changes that do not meet the 55% non-commercial ratio will require a variance from the ZBA.*
  - **O C-1: show new lots 19-7 and 19-5**
    - *The property line and for Lots K-19-5 and K-19-7 has been added to C-1 and C-2.*
  - **o C-2:**
    - **Add a note that the whole 60 X 198 parking lot is available for the athletic field use and overflow parking**
    - *Notes has been added.*
    - **Note 5 and 6 trash and recycling receptacles**
    - *No trash and recycling receptacles are proposed for the proposed site. Note has been removed.*
    - **Note 7 doesn't make sense**
    - *Notes has been removed.*
    - **Remove the gate on the drive connection between the townhouse and multi**
    - *The gate has been removed from the drive connection.*
  - **o R-2: What is new for roundabout?**
    - *There is no new roundabout design. Roundabout plans were referenced for approved signage and striping. Signage has been added to plans and reference not added in lieu of including sheets.*
  - **o Add a trash and recycling detail to the details sheets**
    - *No trash and receptacles are proposed within the project limits.*
  - **o Update to 3.5 – 4" caliper trees on Landscape plan**
    - *Tree caliper dimensions have been updated*
  - **o Landscape plan includes a few trees on top of water main/easement**
    - *Trees have been moved away from the waterline*

o Continue fence along Applevale lots. Add fencing and/or landscaping along berm on boundary with Sierra Hill Drive homes and Artisan Way townhouses.

- *A 6 ft solid stockade fence has been added to the property line adjacent to Applevale Drive. The berm along the Sierra Drive property line will be maintained at 6-8 ft in elevation creating a separation in the lots. No fence is proposed along this location.*

o **Townhouse renderings state they are for Stabile and located in Dover, MA**

- *Address has been revised to Dover, NH.*

o Update any references to Chapter 149 to 153 of the City Code.

- *References to Chapter 149 have been changed to Chapter 153.*

o Add full language of common site plan notes 39 and 40

- *Full note language has been added.*

Fire/Inspections Comments:

 Provide a street name for the private dr.

- *Private Drive has been renamed to North Pointe Lane.*

 Indicate any advertising and/or way finding signage

- *No additional advertising or wayfinding signage proposed for this application. Any advertising signage in the future will require a sign application.*

 Indicate if this is a phased project and on one or more parcels. If the potential is for more than one parcel indicate proposed property boundary.

- *There is a potential that the lot will be subdivided in the future, pending private agreement, but not Subdivision application is submitted at this time. A "Preliminary Subdivision Plan" has been provided to illustrate a potential three lot subdivision of the 8.5 acres lot, meeting the requirements of a 2 lot minimum size.*

 Provide additional hydrant at intersection of bldg. 7 and townhouses.

- *A hydrant has been added at the driveway intersection to building #7.*

 Suppression water supplies to have separate bldg. shut off than domestic.

- *Water suppression lines have a separate 6" gate valve.*

 Indicate water supplies to each structure.

- *Water suppression lines have a separate 6" gate valve.*

 Indicate FDC on all applicable structures

- *FDC location has been shown on buildings #6 and #7.*

 Discuss relocating FDC to Bldg 7.

- *FDC location has been shown on buildings #7. Building will need an architectural compliance review when the building is designed and mechanical rooms are identified.*

 Suppression water supplies to have separate bldg. shut off than domestic.

- *Fire Suppression lines have a separate 6" gate valve for shutoff.*

 Indicate more info regarding the size and area of bldg. 7 ground level parking.

- *Building#7 design will be submitted for architectural review and include the ground level layout at that time.*

 Plan sheet C-4 note 15 revise IBC to 2015 edition and ordinance revision to Chapter 81, Article IV, section 81-27

- *Note 15 has been updated to identify section 81-27.*

 Plan sheet C-4 note 20 add "approved" to backflow preventers

- *Note 20 has been updated.*

 Plan sheet C-4 note 22 revise to indicate RSA 155-A and all applicable accessibility regulations
- *Note 22 has been updated.*

 Confirm 3 pad mount transformers supply the 7 townhouse style structures
- *Altus met Eversource on site to review the electrical layout. Eversource is will provide the final layout of the electrical and transformers.*

 Provide the number of units per townhouse structure
- *Notes are shown indicating five of the buildings are 4 units, and two of the buildings are 5 units.*

 Architectural plans for townhouse structure(s) appears to indicate 5 units per structure. Plan does not appear to coincide with site plan impervious configuration (i.e. driveway, decks/patios)
- *Note 22 has been updated.*

 Clarify interior/ exterior meter locations for electricity, gas and domestic water.
- *Notes added that all metering will be internal to buildings*

 Clarify/ coordinate Architectural Sheet A- 3.1 with site plan entrances and walkways.
- *Site plan has been updated to reflect architectural plans.*

 Indicate how accessible routes to bldg. 6 are maintained to 60% of building entrances when vehicles are parked
- *Three ADA stalls are provided with flush curbing at each location. The walkway around the building has also been widened to 6 ft to account for vehicle overhang.*

 Truck turning template does not appear to be Dover's T-1, revise for site navigation.
- *We have requested the T1 Fire truck dimensions and revised the Turning template.*

Police Department Comments:

 Reconfigure the proposed intersection northeast of Mixed Use Building 6. Thru movement should be straight alongside building and the side road should come off at a "T", to clarify the right-of-way. Review for truck turning template.
- *The driveway and parking layout has been revised to "T" intersection and parking has been moved to provide 22' for vehicles backing out to avoid going into the opposite lane.*

Engineering Comments:

 The intersection and parking off the spur rd is not functional or safe. This needs to be reconfigured.
- *The driveway and parking layout has been revised to "T" intersection and parking has been moved to provide 22' for vehicles backing out to avoid going into the opposite lane.*

 The drainage around the town houses needs to be adjusted to function better
- *The drainage has been revised to move the catch basins out of the yards and to the street. Two additional catch basins have been added.*

 A road box needs to be placed on the water services boxes in the pavement.
- *The drainage has been revised to move the catch basins out of the yards and to the street. Two additional catch basins have been added.*

 Add water gates outside the buildings on the fire lines
- *6" gate valves have been added to all fire lines.*

 Show individual water and sewer to each unit (would it be beneficial to have one sewer service to each building?)

- *Individual water connections have been added to the plans. A single 4" sewer connection for each building is proposed and shown on the plans,*

 Specify tapping sleeve and gate for new mains

- *Tapping sleeve note added for all service connections to water main and to detail, D-8.*

 Show electrical to each unit or building

- *Electrical has been shown to each building. Locations are pending Eversource layout.*

 There is a conflict between the elect & CB by the roundabout

- *Eversource has indicted they may deactivate the line in conflict. In which case, no relocation will be required. A note is added to verify the location in field prior to installation of the catch basin and to coordinate with Eversource.*

 Raingarden 10 and 11- check the elev of the pipes out and show the elev of the pipes into the pond

- *All pipe elevations in ponds have been labeled. The outlet at RG 11 was revised based on revised contour data. The outlet is at elevation 47.0.*

 Add a hydrant by building 7

- *A hydrant was added at the driveway near building #7.*

 Why two UGE by the round about

- *The lines shown are from the existing conditions survey.*

 Make sure there are no lights or trees over the W/S lines

- *The proposed trees have been removed from over the water line. Some existing trees that were planted for the Mixed-Use buildings are identified to remain.*

 Should there be DWP on the island at the roundabout?

- *The roundabout plans are referenced.*

 Add a note about public access easement to ballfields.

- *Notes about maintaining the public access to the ballfield has been added.*

Economic Development Comments:

 Renderings are dark. Are these accurate color renderings?

- *Color are accurate but color printing is dependent on printers and software.*

 Grey renderings, if color accurate, are very dull/bland looking.

- *Noted. First floor grey is a CMU veneer. Upper lever greys depict EIFS cladding system.*

Planning Board Comments:

 Bld. 6 color rendering & material

- *Architectural Plan Elevations, Sheet A3., depicts materials to be used.*

 L1 Screening between townhouses & Sierra Drive

- *The existing berm will remain 6-8 ft in elevation to provide separation between properties. A note has been added to the plan.*

 C4 Add Water line &Sewer Easements

- *The sewer and water easements will only be needed if the lot is subdivided. The water and sewer easements have been added to the Preliminary Lot Layout Plan.*

As discussed, these plans are being submitted electronically for discussion at the July 9, 2020 TRC Meeting.

We respectfully request to be placed on the agenda for the July 28th Planning Board Meeting. Please call if you have any questions or require additional information.

Please call if you have any questions or require additional information.

Sincerely,

ALTUS ENGINEERING, INC.

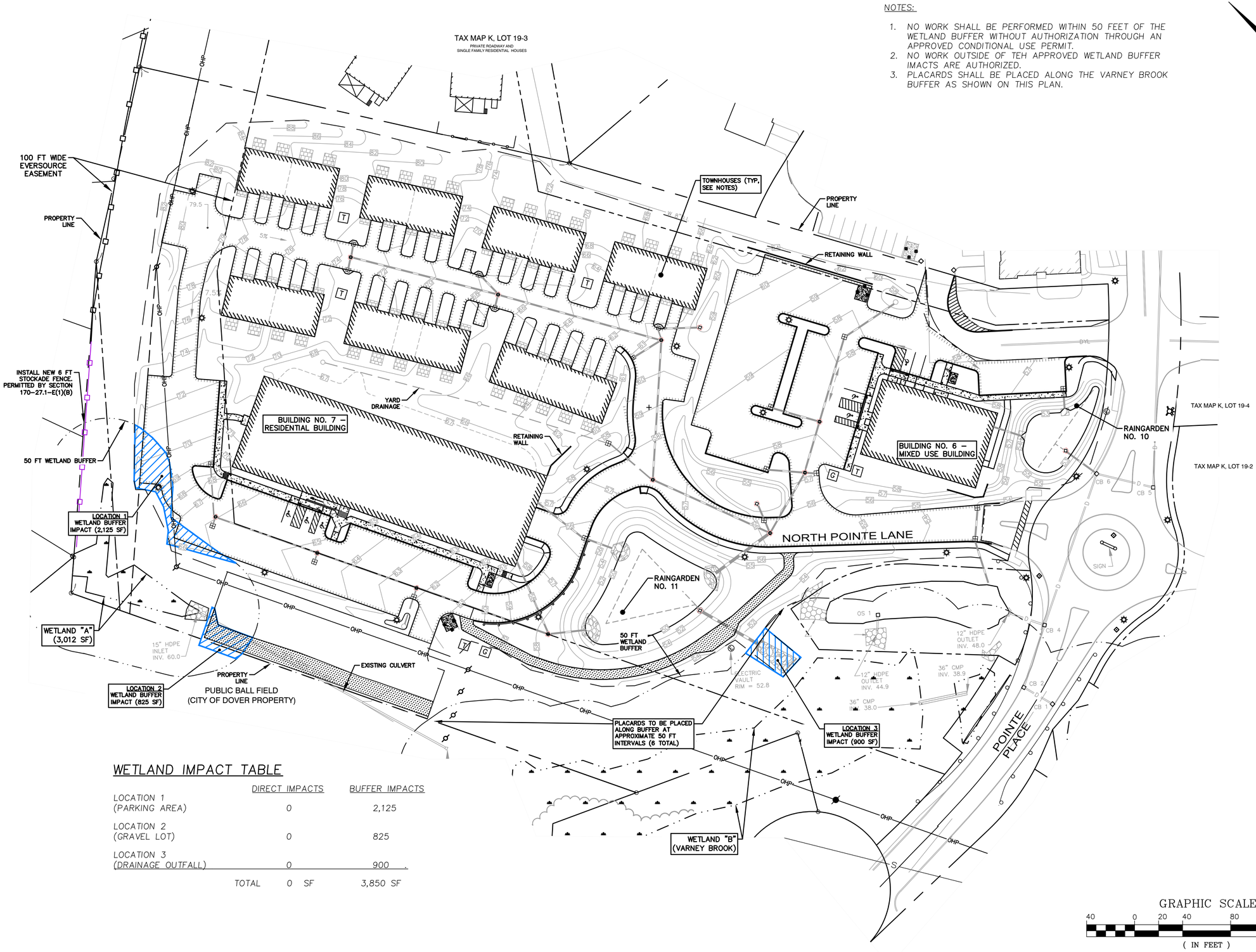
Cory Belden, P.E.

Electronic Plans
copy: Chad Kageleiry, Summit Land Development

wde/5057_P5 City ltr 7-2-20

NOTES:

1. NO WORK SHALL BE PERFORMED WITHIN 50 FEET OF THE WETLAND BUFFER WITHOUT AUTHORIZATION THROUGH AN APPROVED CONDITIONAL USE PERMIT.
2. NO WORK OUTSIDE OF TEH APPROVED WETLAND BUFFER IMACTS ARE AUTHORIZED.
3. PLACARDS SHALL BE PLACED ALONG THE VARNEY BROOK BUFFER AS SHOWN ON THIS PLAN.



WETLAND IMPACT TABLE

	DIRECT IMPACTS	BUFFER IMPACTS
LOCATION 1 (PARKING AREA)	0	2,125
LOCATION 2 (GRAVEL LOT)	0	825
LOCATION 3 (DRAINAGE OUTFALL)	0	900
TOTAL	0 SF	3,850 SF

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

P5057

ENGINEER:

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	TRC COMMENTS	CDB	06/30/20
1	TRC COMMENTS	CDB	06/30/20

DRAWN BY:
APPROVED BY:
DRAWING FILE:

SCALE:
22"x34" 1" = 40'
11"x17" 1" = 80'

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

TAX MAP K, LOT 19
DOVER, NH

TITLE:
CONDITIONAL USE PERMIT PLAN (WETLAND BUFFER)

SHEET NUMBER:
CUP-1

SITE PLAN REVIEW
CITY OF DOVER DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
FILE NO. P20-32

POINTE PLACE - PHASE 5

RESIDENTIAL & COMMERCIAL MIXED USE DEVELOPMENT PLANS

Tax Map K, Lot 19

DOVER, NEW HAMPSHIRE

ISSUED FOR PLANNING BOARD APPROVAL

Plan Issue Date:
JUNE 30, 2020

Owner:

Pointe West, LLC
P.O. Box 728
Dover, NH 03821

Applicant:

Summit Land Development
340 Central Avenue #202
Dover, NH 03820

Civil Engineer:

ALTUS ENGINEERING, INC.
133 COURT STREET
PORTSMOUTH, NH 03801
(603) 433-2335

Architect:

TW DESIGNS LLC
P.O. BOX 69 STRAFFORD, NH 03884
P: 603.664.2181 | F: 603.664.9508

Surveyor:

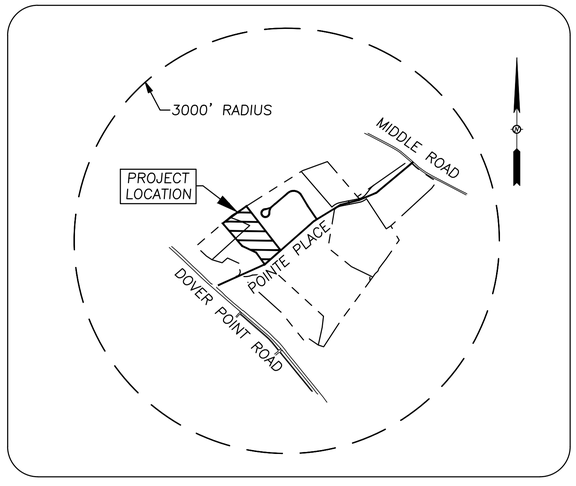
McEneaney Survey Associates
24 Chestnut Street
Dover, NH 03820
PHONE: (603) 742-0911

Landscape Architect:

WOODBURN & COMPANY
Landscape Architecture, LLC
103 Kent Place
Newmarket, NH 03857
Tel 603.659.5949
Fax: 603.659.5939

Wetland Scientist:

Highland Soil Services
75 Prospect Street
Somersworth, NH 03878
(603) 692-4457



LOCUS MAP
Scale: 1" = 1000'±

Permit Summary

Conditional Use Permit (Wetlands Overlay District)
NHDES Alteration of Terrain Permit
NHDES Sewer Connection Permit
Building Permits – Building Permits to be obtained from the City of Dover
US-EPA Storm Water Pollution Prevention Plan (SWPPP) – Filed by Contractor

Sheet Index Title	*Sheet No.:*	*Rev.*	*Date*
Existing Conditions Plan (by McEneaney Survey)	1 of 1	0	03/30/20
Site Specific Soils Plan	S-1	0	04/30/20
General Notes	GN-1	2	05/07/20
Neighborhood Site Plan	N-1	1	05/07/20
Overall Site Plan	C-1	3	05/07/20
Site Plan	C-2	2	05/07/20
Grading and Drainage Plan	C-3	3	05/07/20
Utility Plan	C-4	3	05/07/20
Erosion and Sediment Control Plan	C-5	1	05/07/20
Fire Truck Turning Movement (Autoturn)	C-6	2	06/30/20
Sewer Profiles	C-7	1	06/30/20
Conceptual Lot Layout	C-8	0	06/30/20
Sitework Details	D-1	2	06/30/20
Sitework Details	D-2	1	06/30/20
Sitework Details	D-3	1	06/30/20
Sitework Details	D-4	2	06/30/20
Sitework Details	D-5	1	06/30/20
Sitework Details	D-6	1	06/30/20
Sitework Details	D-7	1	06/30/20
Sitework Details	D-8	1	06/30/20
Sewer Details	D-9	2	06/30/20
Site Lighting Plan (by Visible Light, Inc.)	1 of 1	0	04/15/20
Landscape Plan (by Woodburn & Company)	L-1	1	06/24/20
Architectural Plans			
Townhouse Plans (by JAD Design Group)	7 SHTS	0	
Building #6 (by TW Designs) Architectural Rendering, Floor Plans, & Exterior Elevations	3 SHTS	0	
Building #7 –Residential Apartment Building (Waiver Request Submitted)			

P4390

REFERENCE PLANS:

1.) LOT LINE ADJUSTMENT PLAN PREPARED FOR VARNEY BROOK LANDS, LLC AND THE CITY OF DOVER, NH, TAX MAP K, LOT Nos. 18A–10 & 19, APPLEVALE DRIVE & POINTE PLACE, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE; SCALE: 1" = 80'; DATED: OCT. 17, 2016; BY: McENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 113–001.

STRUCTURE SCHEDULE

CB 1
RIM = 53.12
INV. OUT 12" HDPE = 49.1 CB 2
SUMP = 45.4

CB 2
RIM = 53.07
INV. IN 12" HDPE = 49.0 CB 1
INV. OUT 12" HDPE = 49.0 CB 4
SUMP = 45.0

CB 4
RIM = 53.59
INV. IN 12" HDPE = 48.4 CB 2
INV. IN 12" HDPE = 48.4 CB 6
INV. OUT 12" HDPE = 48.4 SWM 1
SUMP = 45.8

CB 5
RIM = 54.06
INV. IN 12" HDPE = 49.9 CB 8
INV. OUT 18" HDPE = 49.9 CB 6
SUMP = 46.4

CB 6
RIM = 54.24
INV. IN 12" HDPE = 49.7 CB 5
INV. IN 8" HDPE = 49.7 RD
INV. OUT 12" HDPE = 49.7 CB 4
SUMP = 46.5

OS 1
RIM = 48.30
INV. IN 6" HDPE = 45.0 UD
INV. OUT 12" HDPE = 44.9 OUTLET
SUMP = 44.5

SMH 11
RIM = 57.45
INV. IN 8" PVC = 49.70 STUB
INV. OUT 8" PVC = 49.65 SMH 10

No.	Bearing	Distance
L1	S42°18'37"W	2.92'
L2	N15°13'48"W	15.92'
L3	S07°03'06"E	20.00'
L4	N88°32'37"W	16.06'

No.	Central Angle	Radius	Arc Length	Chord Length	Chord Bearing
C1	51°04'15"	65.00	57.94	56.04	N15°13'45"W
C2	09°20'16"	570.00	92.90	92.79	S46°58'45"W
C3	41°53'38"	125.00	91.40	89.38	S72°35'42"W
C4	59°22'21"	65.00	67.36	64.38	S63°51'21"W
C5	38°31'50"	125.00	84.06	82.49	S53°26'05"W
C6	08°10'42"	580.00	82.79	82.72	S78°51'33"W
C7	08°30'28"	600.00	89.09	89.01	S87°12'09"W

LEGEND

DYL – DOUBLE YELLOW LINE
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
ø – DIAMETER
UP – UTILITY POLE
– GUY WIRE
SGC – SLOPED GRANITE CURB
VGC – VERTICAL GRANITE CURB
CMP – CORRUGATED METAL PIPE
EMH – ELECTRIC MANHOLE
CB – CATCH BASIN
DMH – DRAIN MANHOLE
SMH – SEWER MANHOLE
– CONTOUR LINE (2 FOOT INTERVAL)
– WATER GATE VALVE
– FIRE HYDRANT
– GAS VALVE
– EDGE OF WETLAND
– WETLAND
– CONIFEROUS TREE (1–3"ø, UNLESS NOTED)
– DECIDUOUS TREE (1–3"ø, UNLESS NOTED)
– POLE MOUNTED LIGHT
W – WATER LINE
S – SEWER LINE
D – DRAIN LINE
G – GAS LINE
UGE – UNDERGROUND ELECTRIC LINE
– PULLBOX

NOTES:

1.) OWNER OF RECORD:
POINTE WEST, LLC
340 CENTRAL AVENUE SUITE 202
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOL. 4639, PAGE 310

2.) K / 19 – DENOTES TAX MAP AND PARCEL NUMBER

3.) THE INTENT OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS OF THE SUBJECT PARCEL AS OF THE DATE OF THE SURVEY.

5.) ZONING DISTRICT: ETP (EXECUTIVE TECHNOLOGY PARK)

6.) THE SUBJECT PARCELS ARE LOCATED OUTSIDE THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145, PANEL 0340, SUFFIX D; MAP NUMBERS 33017C0340D, EFFECTIVE DATE: MAY 17, 2005.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED NOVEMBER 11, 2013. VERTICAL DATUM IS NGVD29 BASED ON BENCHMARK FOUND ON THORNWOOD COMMONS PROJECT. CONTOUR INTERVAL IS 2 FEET.

K / 19–3
STABILE HOMES AT POINTE PLACE, LLC
c/o STABILE PROPERTY MANAGEMENT
20 COTTON ROAD, SUITE 200
NASHUA, NH 03063
4352 / 422

K/17B
WILLIAM J. TROTTER
35 APPLEVALE DRIVE
DOVER, NH 03820
4325 / 502

K/17I
ROSE M. MCKENZIE
33A APPLEVALE DRIVE
DOVER, NH 03820
813 / 094

K/17H-1

K/17H

K/17A

K / 17H–1
JOHN W. ADAMS, III
LORI BETH ADAMS
31 APPLEVALE DRIVE
DOVER, NH 03820
1243 / 465

K / 17H
HA OUTHIT
MAY OUTHIT
29 APPLEVALE DRIVE
DOVER, NH 03820
4142 / 546

K / 17A
IDA M. GIBBONS
WILLIAM S. GIBBONS
27 APPLEVALE DRIVE
DOVER, NH 03820
826 / 327

K/18A–10
CITY OF DOVER
288 CENTRAL AVENUE
DOVER, NH 03820

K / 19–7
LOFT'S AT POINTE PLACE CONDOMINIUM ASSOC.
C/O IN DEMAND REALTY, LLC
P.O. BOX 9
SOMERSWORTH, NH 03878–0009
4479 / 56

K / 19–5
POINTE PLACE DEVELOPMENT, LLC
340 CENTRAL AVENUE SUITE 202
DOVER, NH 03820
4458 / 750

K / 19
PARCEL AREA
370,367 S.F.
8.50 Ac.

K / 19C
MACS CONVENIENCE STORES LLC
935 EAST TALLMADGE AVENUE
AKRON, OH 44310
4114 / 608

30' WIDE UTILITY EASEMENT
14,801 S.F. / 0.34 Ac.
S.C.R.D. 4407 / 571

25' WIDE ACCESS EASEMENT
4,602 S.F. / 0.11 Ac.
S.C.R.D. PLAN 117–59

100' WIDE EVERSOURCE ENERGY (PSNH) EASEMENT
SCRD 630/303 & 4336 / 359

SWM 1 DRAINAGE EASEMENT
12,879 S.F.
REF. PLAN 1

S32°21'20"E 366.91'
N57°38'40"E 166.23'
N49°20'20"E 236.47'
S25°33'27"E 499.42'
N65°20'04"W 143.40'
N30°43'16"E 67.89'
S28°42'13"E 373.65'
S47°41'18"E 90.00'

EXISTING BUILDING UNIT 18
EXISTING BUILDING UNIT 19
EXISTING BUILDING
EXISTING 5 STORY BUILDING
PICKET FENCE
EARTHEN BERM
4"ø PVC DRAIN FROM ABUTTER
W 8"D.I.
ASPHALT PARKING AND DRIVE
BLOCK PATIO
SEWER STUB INV. = 50.4
ASPHALT ROAD
ELECTRICAL PULL BOX
ELECTRICAL MANHOLE / RIM = 55.3
IRRIGATION PULL BOX
LANDSCAPED AREA
GRAVEL PARKING AREA
GRAVEL DRIVE
CONCRETE PAVERS (TYP)
SIGN
SMH 11
8"ø PINE
30"ø BLACK OAK TREE
TREELINE
CONSTRUCTION DEBRIS PILE
50.0' WETLAND BUFFER
15" HDPE INLET INV. 60.0
15"ø HDPE CULVERT
15" HDPE OUTLET INV. 56.6
ELECTRIC VAULT RIM = 52.8
RIPRAP (TYP)
OS 1
12" HDPE OUTLET INV. 48.0
12" HDPE OUTLET INV. 44.9
36" CMP INV. 38.9
36" CMP INV. 38.0
CB 1
CB 2
CB 4
CB 5
CB 6
POINTE PLACE
ASPHALT SIDEWALK
GRID NORTH GPS OBS 11/11/2013

WETLANDS DELINEATED BY MICHAEL MARIANO, NH C.W.S. #183; NH C.S.S. #76 OF HIGHLAND SOIL SERVICES.

"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."

NO.	DATE	DESCRIPTION	BY	CHK
		REVISIONS		

20–2041	EXIST. COND.	19–11	7–8
PROJECT NO	TYPE	FIELDBOOK & PAGES	

EXISTING CONDITIONS PLAN
PREPARED FOR
POINTE WEST, LLC
TAX MAP K, LOT No. 19
POINTE PLACE
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

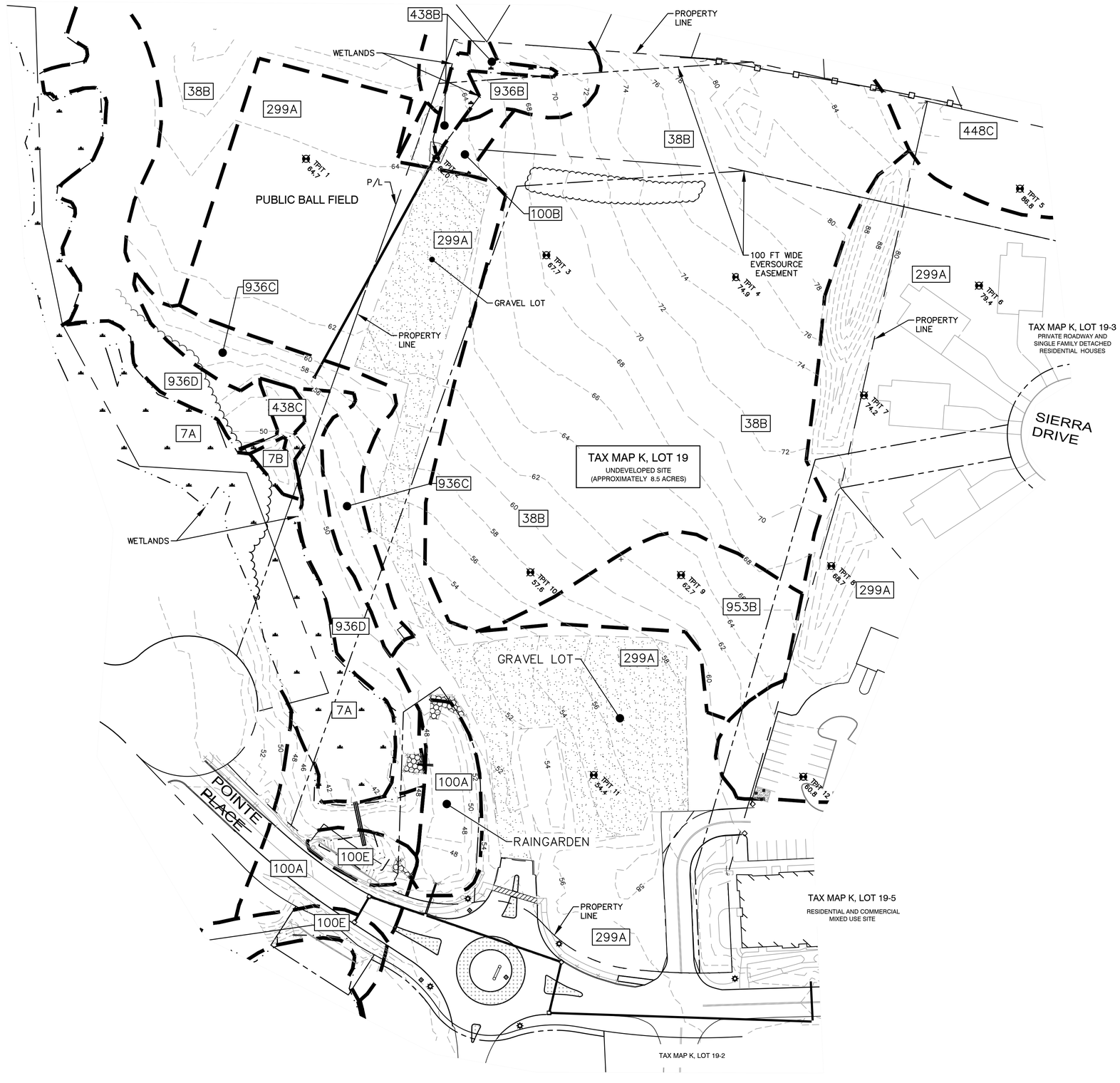
DRAWN BY: KJF	FILE: MSA\2041\2020TOPO REV1
SCALE: 1" = 40'	DATE: MARCH 30, 2020

40 20 0 20 40 80 120 160

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

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

SURVEYING – PLANNING – CONSULTING



NOTES:

WETLANDS WERE DELINEATED IN 2013 AND REVIEWED/AMENDED IN MARCH 2020 BY MICHAEL MARIANO, NH CERTIFIED WETLAND SCIENTIST #183 IN ACCORDANCE WITH THE 1987 U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0.

HYDRIC SOILS WERE IDENTIFIED BY FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4, MAY 2017.

STATE OF NEW HAMPSHIRE
MICHAEL MARIANO
No. 183
CERTIFIED WETLAND SCIENTIST

STATE OF NEW HAMPSHIRE
MICHAEL MARIANO
No. 76
CERTIFIED SOIL SCIENTIST

LEGEND

- PROPERTY LINE
- WETLAND/SOILS BOUNDARY
- 60 EXISTING CONTOUR
- GRAVEL
- EXISTING PAVEMENT/CURB
- EXISTING TREELINE
- 26 SOIL SYMBOL
- SOIL BOUNDARY

SOLS CLASSIFICATION

SYMBOL	DESCRIPTION
7	FLUVALENTS
26	WINDSOR
33	SCITICO
100	UDORTHENTS, WET SUBSTRATUM
299	UDORTHENTS, SMOOTHED
438	SWANTON
936	SWANTON
953	BOXFORD

SLOPE PHASES

SYMBOL	PHASE
A	0–3%
B	3–8%
C	8–15%
D	15–25%
E	25–50%
F	50%+

PER PLAN REFERENCES

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

P5057

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

ISSUED FOR: DESIGN DEVELOPMENT

ISSUE DATE: APRIL 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	04/30/20

DRAWN BY:
APPROVED BY:
DRAWING FILE:

SCALE:
22"x34" 1" = 50'
11"x17" 1" = 100'

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
TAX MAP K, LOT 19
DOVER, NH

TITLE:
SITE SPECIFIC SOILS PLAN

SHEET NUMBER:
S-1

ZONING SUMMARY

TAX MAP K, LOT 19

A. ZONING DISTRICT: RESIDENTIAL COMMERCIAL MIXED USE (RCM) OVERLAY
BY APPROVED CONDITIONAL USE PERMIT
INNOVATIVE TECHNOLOGY (IT) DISTRICT

OVERLAY DISTRICTS
RESIDENTIAL COMMERCIAL MIXED USE OVERLAY DISTRICT
WETLANDS OVERLAY DISTRICT

DIMENSIONAL REQUIREMENTS: (RCM) (DOVER CODE 153-14.2 AND 170.28.2 RCM OVERLAY DISTRICT)	REQUIRED:	PROVIDED
B. MINIMUM LOT SIZE	N/A	8.50 ACRES
C. MINIMUM LOT FRONTAGE	40 FT	559.6 FT
D. MINIMUM SETBACKS		
MIXED-USE BUILDINGS		
STRUCTURE TO EXTERNAL LOT LINE OR ROW	50 FT	101.5 FT
RESIDENTIAL/ MULTI-FAMILY BUILDING		
STRUCTURE AND PARKING TO EXTERNAL LOT LINE	50 FT	50 FT
STRUCTURE AND PARKING TO EXTERNAL ROW	100 FT	130+ FT
FRONT YARD	20 FT	22 FT
DISTANCE BETWEEN BUILDINGS	24 FT	25 FT
E. OPEN SPACE (BASED ON ORIGINAL LOT)	20%	57%
F. STRUCTURE HEIGHT:		
MIXED-USE BUILDING	55 FT	< 55 FT * SEE WAIVER REQUEST 1

WAIVERS

1. A WAIVER REQUEST FROM SECTION 153-14(L) – ARCHITECTURAL DESIGN STANDARDS HAS BEEN SUBMITTED TO PROVIDE THE ARCHITECTURAL DETAILS FOR BUILDING NO. 7 PRIOR TO ISSUANCE OF BUILDING PERMIT FOR THAT BUILDING.

PROPOSED BUILDINGS

BUILDING NO. 1- MIXED USE
FIRST FLOOR AREA = 6,500 SF
COMMERCIAL = 5,000 SF (GLA)
RESIDENTIAL = APARTMENT UNITS
1 BEDROOM APARTMENTS 6 UNITS
2 BEDROOM APARTMENTS 18 UNITS
TOTAL = 24 UNITS

BUILDING NO. 2 – RESIDENTIAL
FIRST FLOOR AREA = 17,500 SF
FIRST FLOOR PARKING GARAGE (50 PARKING STALLS)
RESIDENTIAL = APARTMENT UNITS
1 BEDROOM APARTMENTS 15 UNITS
2 BEDROOM APARTMENTS 45 UNITS
TOTAL = 60 UNITS

TOWNHOUSES
A. 4 UNIT BUILDING FIRST FLOOR AREA = 2,880 SF
5 BUILDINGS X 4 UNITS = 20 UNITS

B. 5 UNIT BUILDING FIRST FLOOR AREA = 3,600 SF
2 BUILDINGS X 5 UNITS = 10 UNITS
TOTAL = 30 UNITS

SUMMARY
PROPOSED RESIDENTIAL = 114 TOTAL UNITS
COMMERCIAL SPACE = 5,000 S.F. (GLA)

PARKING REQUIREMENTS

PER DOVER CODE SECTION 170.28.F(3) RCM OVERLAY DISTRICT

2 SPACES PER UNIT X 114 UNITS = 228 SPACES
5% INCREASE FOR VISITOR PARKING = 12 SPACES

1 SPACE PER 300 SF COMMERCIAL (5,000 SF) = 16 SPACES

MAXIMUM ALLOWABLE PARKING SPACES ON SITE = 256 SPACES

TOTAL PROVIDED = 256 SPACES

BICYCLE PARKING	REQUIRED	PROVIDED
5% OF TOTAL PARKING STALLS PROVIDED	13	14

CONDITIONS OF APPROVAL:

THE CONDITIONS OF APPROVAL FROM THE PLANNING BOARD DECISION LETTER WILL BE NOTED BELOW ON THE FINAL APPROVAL PLANS:

GENERAL SITE NOTES:

1. THE INTENT OF THIS PLAN SUBMITTAL IS TO PROVIDE THE NECESSARY INFORMATION FOR THE DESIGN AND REVIEW OF A MIXED-USE (COMMERCIAL AND RESIDENTIAL) DEVELOPMENT SITE ON ASSESSOR'S PARCEL K/19 FOR CITY AND STATE PERMIT APPLICATIONS. THIS PLAN SET PROVIDES DETAILED INFORMATION FOR THE GENERAL LAYOUT, GRADING, AND UTILITY LOCATIONS. ADDITIONAL DETAILED ENGINEERING DESIGN WILL BE REQUIRED TO IMPLEMENT CONSTRUCTION.
2. OWNER OF RECORD: POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

AUTHORIZED SIGNATURE

3. THE PROJECT PARCEL IS SHOWN AS LOT NO. 19, MAP K OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.
4. THE PROJECT PARCEL CONTAINS 8.50 ACRES OR 370,367 SQUARE FEET AREA OF LAND.
5. TITLE REFERENCE FOR THE PROJECT PARCEL IS THE STRAFFORD COUNTY REGISTRY OF DEEDS, BOOK NO. 3854, PAGE NO. 986.
6. PROJECT PLAN REFERENCES:

LOT LINE ADJUSTMENT PLAN PREPARED FOR VARNEY BROOK LANDS, LLC AND THE CITY OF DOVER, NH, TAX MAP K, LOT Nos. 18A-10 & 19, APPLEVALE DRIVE & POINTE PLACE, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE; SCALE: 1" = 80'; DATED: OCT. 17, 2016; BY: McENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R. D. PLAN 113-001.

7. THE SUBJECT PROPERTY IS ENCUMBERED BY THE FOLLOWING EASEMENTS: WATER, DRAINAGE, ACCESS AND UTILITY.
8. ZONING DIMENSIONAL AND DENSITY REQUIREMENTS ARE SHOWN IN TABLE LOCATED IN THE LEFT ON THIS SHEET:
9. VARIANCE OR SPECIAL EXCEPTIONS - NO VARIANCES OR SPECIAL EXEMPTIONS HAVE BEEN GRANTED BY THE ZONING BOARD OF ADJUSTMENT FOR THE PROPOSED DEVELOPMENT

CONDITIONAL USE PERMIT - A WETLANDS CONDITIONAL USE PERMIT HAS BEEN REQUESTED FOR WORK WITHIN THE FIFTY (50) FOOT BUFFER TO THE WETALNDS.

10. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES , INC.

AS REFERENCED IN THE ATTACHED "EXISTING CONDITIONS PLAN", DATED MARCH 30, 2020.

11. SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA.
12. WETLANDS WERE DELINEATED BY HIGHLAND SOIL SERVICES (MICHEAL A. MARIANO), CERTIFIED WETLANDS SCIENTIST, CERTIFICATION NUMBER 076, IN ACCORDANCE WITH CHAPTER 170-27.1 OF THE ZONING ORDINANCE AND SURVEYED BY MCENEANEY SURVEY INC. ADDITIONALLY, A SITE SPECIFIC SOILS REPORT WAS PREPARED IN ACCORDANCE WITH THE SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT, VERSION 4.0 BY THE SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND AND STANDARDS ESTABLISHED BY THE NATIONAL COOPERATIVE SOIL SURVEY. THE SOIL SURVEY IS ALSO MEETS THE STANDARDS FOR AN ORDER 1 SOIL SURVEY AS DEFINED IN THE NH STATE-WIDE NUMERICAL SOIL LEGEND. THE SOIL SURVEY WAS ORIGINALLY PREPARED BY MICHAEL MARIANO, NH CERTIFIED SOIL SCIENTIST #076, AND DATED JANUARY 12, 2014 AND WAS UPDATED FOR THIS PROJECT IN APRIL 2020.
13. 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.
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 "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. SHEET D-1 PROVIDES EROSION CONTROL NOTES AND REQUIREMENTS.

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.

18. 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.
19. NO TREATMENT SWALES ARE PROPOSED FOR THIS PROJECT.
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. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASSISTANT CITY MANAGER. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO:

MONDAY-FRIDAY 7 AM-6 PM,
SATURDAY 9 AM-4 PM.
SUNDAY - NO WORK ALLOWED WITHOUT APPROVAL FROM CITY

23. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
24. THE PROPOSED USE FOR THE SITE IS MIXED-USE COMMERCIAL AND RESIDENTIAL. APPROXIMAETLY 8,800 GLA OF COMMERCIAL SPACE AND 119 RESIDENTIAL UNITS WILL BE PROVIDED IN THREE BUILDINGS.
25. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:

NHDES ALTERATION OF TERRAIN PERMIT	*(APPLICATION PENDING)*
NHDES SEWER CONNECTION PERMIT	*(APPLICATION PENDING)*
EPA NPDES CONSTRUCTION GENERAL PERMIT	*(TO BE PROVIDED 2 WEEKS PRIOR TO CONSTRUCTION)*

26. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
27. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES AND SHALL BE STAMPED BY A STRUCTURAL ENGINEER.
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://www.unh.edu/unhsc/ptapp
30. THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVED STORMWATER MANAGEMENT PLAN. THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.
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. PARKING CALCULATIONS ARE PROVIDED TO THE LEFT ON THIS SHEET.
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 ASSOCIATES, INC. IN MARCH/APRIL OF 2020.
35. VERTICAL DATUM IS NGVD29 BASED ON BENCHMARKS FOUND ON THORNWOOD COMMONS PROJECT.

BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED NOVEMBER 11, 2013.

36. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
37. APPROVED BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
38. THE *PROPOSED* STRUCTURES SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 109- 30 OF THE CODE OF THE CITY OF DOVER AND THE 2015 STATE BUILDING 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. 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.
42. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON BOTH THE STREET SIDE AND PARKING LOT SIDES OF THE BUILDING PER REQUEST BY DOVER FIRE DEPARTMENT.
43. 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.

GRADING AND EARTHWORK NOTES:

1. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, MULCH, AND APPROPRIATE SOIL STABILIZATION TECHNIQUES.
2. CONTRACTOR SHALL CONTROL DUST BY SPRAYING WATER, SWEEPING PAVED SURFACES AND VEGETATION AND/OR MULCHING STOCKPILES.
3. DISPOSE OF STUMPS AND UNSUITABLE MATERIALS OFF-SITE IN ACCORDANCE WITH NHDES REQUIREMENTS.
4. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING ON-SITE STRUCTURES, BITUMINOUS CONCRETE, DEBRIS, STUMPS, AND CONSTRUCTION WASTE PRODUCTS WHICH ARE NOT AUTHORIZED TO BE USED AS PART OF CONSTRUCTION.
5. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED 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. VOIDS BETWEEN STONES AND CLUMPS OF MATERIAL SHALL BE FILLED WITH FINE MATERIALS.
6. USE ON-SITE ROCK ONLY WHERE SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT. DISPOSE OF EXCESS BOULDERS BY BLASTING, CRUSHING, BURYING, IN APPROVED LOCATIONS ONLY, OR OFF-SITE DISPOSAL.
7. WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ACCEPTED. ABRUPT RIDGES AT TOPS AND BOTTOM WILL NOT BE ACCEPTED.
8. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS
9. MAXIMUM SLOPE IN DISTURBED AREAS SHALL BE NO STEEPER THAN 3:1 (H: V), UNLESS OTHERWISE NOTED. WHERE SLOPES IN DISTURBED AREAS ARE STEEPER THAN 3:1, CONTRACTOR SHALL PROVIDE CURLEX II EROSION CONTROL BLANKET FROM AMERICAN EXCELSIOR COMPANY (800) 777-7645 OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL ADJUST UTILITY ELEMENTS (CLEANOUTS, UTILITY MANHOLES, CATCH BASINS, INLETS, ETC.) MEANT TO BE FLUSH WITH GRADE THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT. WITHIN PAVED AREA FLUSH WITH GRADE SHALL MEAN 1/8" TO 1/4" BELOW ADJACENT PAVEMENT.
11. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS.
12. ALL UNSUITABLE MATERIALS AND SURPLUS MATERIALS WHICH CAN NOT BE APPROPRIATELY WASTED ON SITE SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
13. THE GRADING ON THIS PLAN SHOWS THE GENERAL INTENT AND DIRECTION OF THE STORMWATER FLOW. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY FIELD CONDITIONS THAT WILL IMPACT THE GRADING DESIGN SHOWN ON THIS PLAN FOR RESOLUTION.
14. SAWCUT AND REMOVE EXISTING PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT OR CURB LINE IN ALL AREAS WHERE NEW PAVEMENT OR CURBING ABUTS EXISTING PAVEMENT.
15. 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.
16. 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 OPERATION. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST
17. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF DOVER REGULATIONS AND NHDOT STANDARDS, AS APPLICABLE.
18. FINAL LOCATIONS, WIDTH & DETAILS FOR STAIRS, RETAINING WALL SHALL BE DETERMINED IN FIELD. MODIFICATIONS SHALL NOT OCCUR WITHOUT CITY INSPECTION DEPARTMENT'S APPROVAL. ALL DESIGNS FOR RETAINING WALLS AND STAIRS GREATER THAN 4' IN HEIGHT SHALL BE STAMPED BY A LICENSED STRUCTURAL ENGINEER. FINAL PLANT SELECTIONS IN PLANTERS MAY BE MODIFIED IN FIELD WITH PRIOR APPROVAL FROM INSPECTION DEPARTMENT.

GENERAL CONSTRUCTION NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. THE LANDOWNER AND CONTRACTOR ARE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE, AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACKS REQUIREMENTS REQUIRED UNDER THESE REGULATIONS. SEE PROJECT MANUAL APPENDICES FOR COPY OF PERMITS.
2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AND NOTIFY CITY OF DOVER AND OWNER'S AUTHORIZED REPRESENTATIVE AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
3. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EXISTING UTILITIES INCLUDING SEWER, ELECTRICAL LINES, COMMUNICATION LINES, AND WATER MAIN PRIOR TO COMMENCING CONSTRUCTION. PRESERVE AND PROTECT UTILITY LINES TO BE RETAINED. ANY DISCREPANCIES BETWEEN FIELD AND PLAN SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE ENGINEER, SURVEYOR, OR OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR DAMAGE TO EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES AT NO EXTRA COST TO THE OWNER.
4. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN DOVER, NEW HAMPSHIRE AND N.H.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST ADDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
5. ALL STORM DRAIN PIPING SHALL BE CORRUGATED POLYETHYLENE PIPE (CPE), SMOOTH INTERIOR WALL (N-12), UNLESS OTHERWISE NOTED.
6. UPON COMPLETION OF CONSTRUCTION, THE DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
7. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINE WITH RS-1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
8. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO ADA REQUIREMENTS AND "MANUAL ON UNIFORM TRAFFIC DEVICES" AND "STANDARD ALPHABETS OF HIGHWAY SIGNS AND PAVEMENT MARKINGS" LATEST EDITIONS.
9. CONTRACTOR SHALL MAINTAIN RECORD INFORMATION AND PROVIDE RECORD DRAWINGS OR AS-BUILTS TO DOVER'S DEPARTMENT OF PUBLIC WORKS. COORDINATE SUBMITTAL REQUIREMENTS WITH DPW.
10. SEE ARCHITECTURAL DRAWINGS BY OTHERS FOR ALL WORK INCLUDING GRADING WITHIN 5' OF BUILDING FOUNDATION. FINAL LOCATIONS OF WALKS TO MATCH LOCATIONS OF DOORWAYS.

P5057

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

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ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	02/20/20
1	TRC SUBMITTAL	CDB	05/07/20
2	TRC COMMENTS	CDB	06/30/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE:
NO SCALE

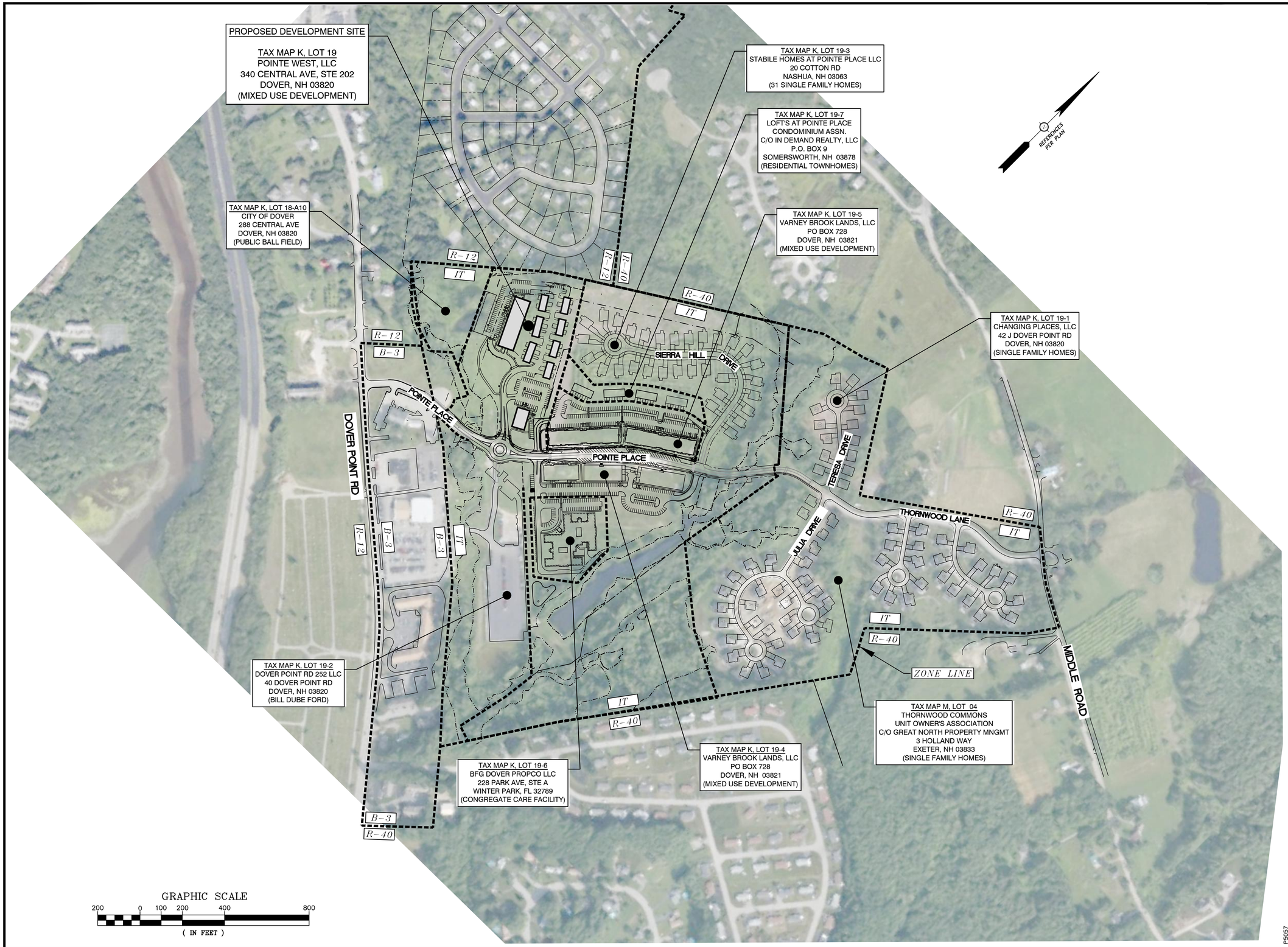
OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-1



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DRAWN BY: CDB
APPROVED BY: EDW
DRAWING FILE: 5057-NEIGHBORHOOD-PLAN

SCALE: 24"x36" 1" = 200'
12"x18" 1" = 400'

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POINTE WEST, LLC
P.O. BOX 728
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APPLICANT:
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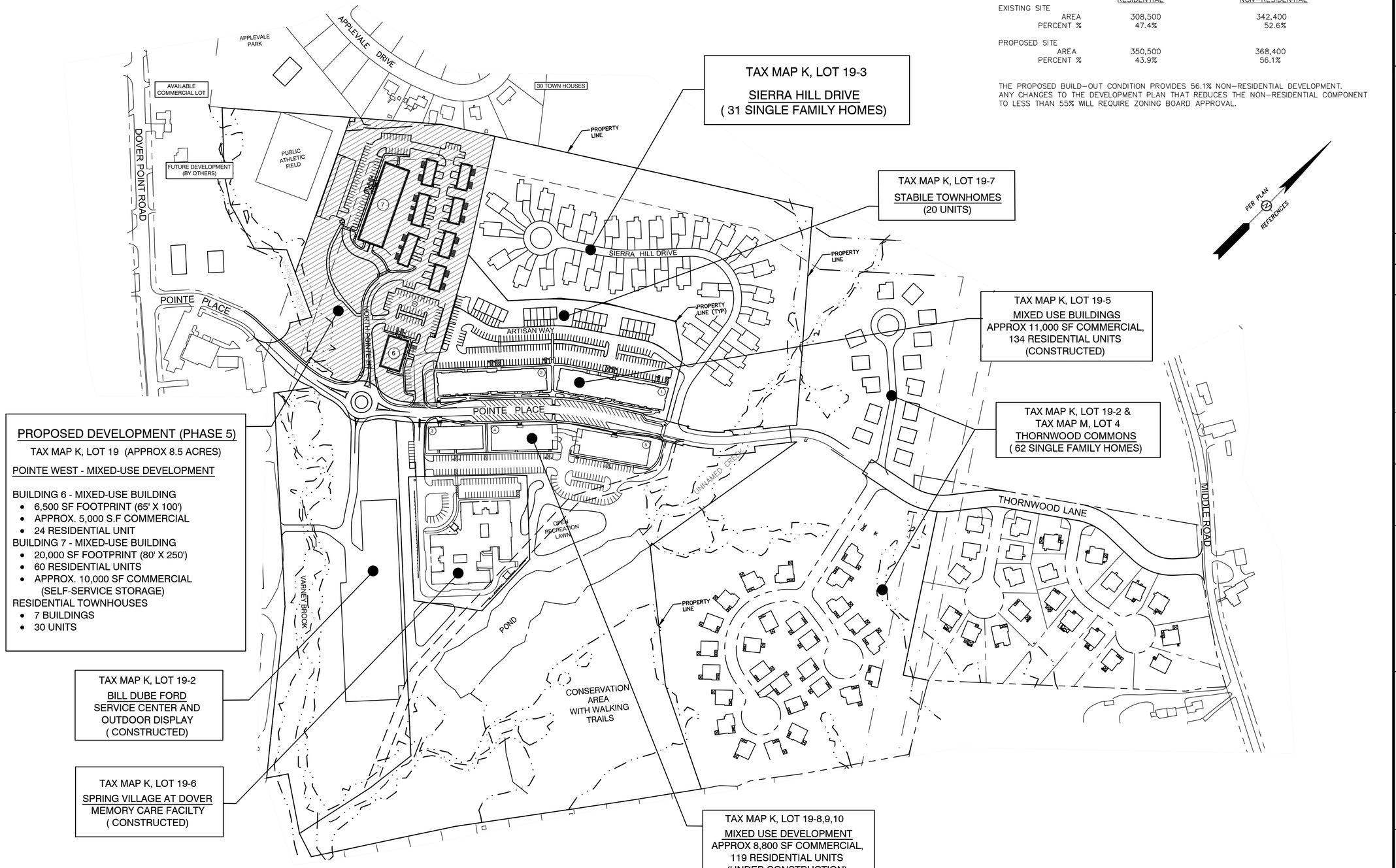
PROJECT:
POINTE WEST
RESIDENTIAL AND
COMMERCIAL
MIXED USE DEVELOPMENT

TAX MAP K, LOT 19
DOVER, NH

TITLE:
NEIGHBORHOOD SITE PLAN

SHEET NUMBER:
N-1

P5057



PROPOSED DEVELOPMENT (PHASE 5)

TAX MAP K, LOT 19 (APPROX 8.5 ACRES)

POINTE WEST - MIXED-USE DEVELOPMENT

BUILDING 6 - MIXED-USE BUILDING
- 6,500 SF FOOTPRINT (65' X 100')
- APPROX. 5,000 S.F COMMERCIAL
- 24 RESIDENTIAL UNIT

BUILDING 7 - MIXED-USE BUILDING
- 20,000 SF FOOTPRINT (80' X 250')
- 60 RESIDENTIAL UNITS
- APPROX. 10,000 SF COMMERCIAL (SELF-SERVICE STORAGE)

RESIDENTIAL TOWNHOUSES
- 7 BUILDINGS
- 30 UNITS

TAX MAP K, LOT 19-2
BILL DUBE FORD
SERVICE CENTER AND OUTDOOR DISPLAY
(CONSTRUCTED)

TAX MAP K, LOT 19-6
SPRING VILLAGE AT DOVER
MEMORY CARE FACILTY
(CONSTRUCTED)

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)

P5057

SITE DEVELOPMENT RATIO:

THE AREAS AND PERCENTAGES BELOW ILLUSTRATE THE MASTER PLAN DEVELOPMENT SITE FOR RESIDENTIAL AND NON-RESIDENTIAL RATIOS BASED ON APPROXIMATE SQUARE FOOTAGE.

	RESIDENTIAL	NON-RESIDENTIAL
EXISTING SITE		
AREA	308,500	342,400
PERCENT %	47.4%	52.6%
PROPOSED SITE		
AREA	350,500	368,400
PERCENT %	43.9%	56.1%

THE PROPOSED BUILD-OUT CONDITION PROVIDES 56.1% NON-RESIDENTIAL DEVELOPMENT. ANY CHANGES TO THE DEVELOPMENT PLAN THAT REDUCES THE NON-RESIDENTIAL COMPONENT TO LESS THAN 55% WILL REQUIRE ZONING BOARD APPROVAL.

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APPROVED BY:
DRAWING FILE:

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11"x17" 1" = 50'

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P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20-32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C-1

WAIVERS

1. A WAIVER REQUEST FROM SECTION 149-14(L) – ARCHITECTURAL DESIGN STANDARDS HAS BEEN SUBMITTED TO PROVIDE THE ARCHITECTURAL DETAILS FOR BUILDING NO. 7 PRIOR TO ISSUANCE OF BUILDING PERMIT FOR THAT BUILDING.

ZONING SUMMARY

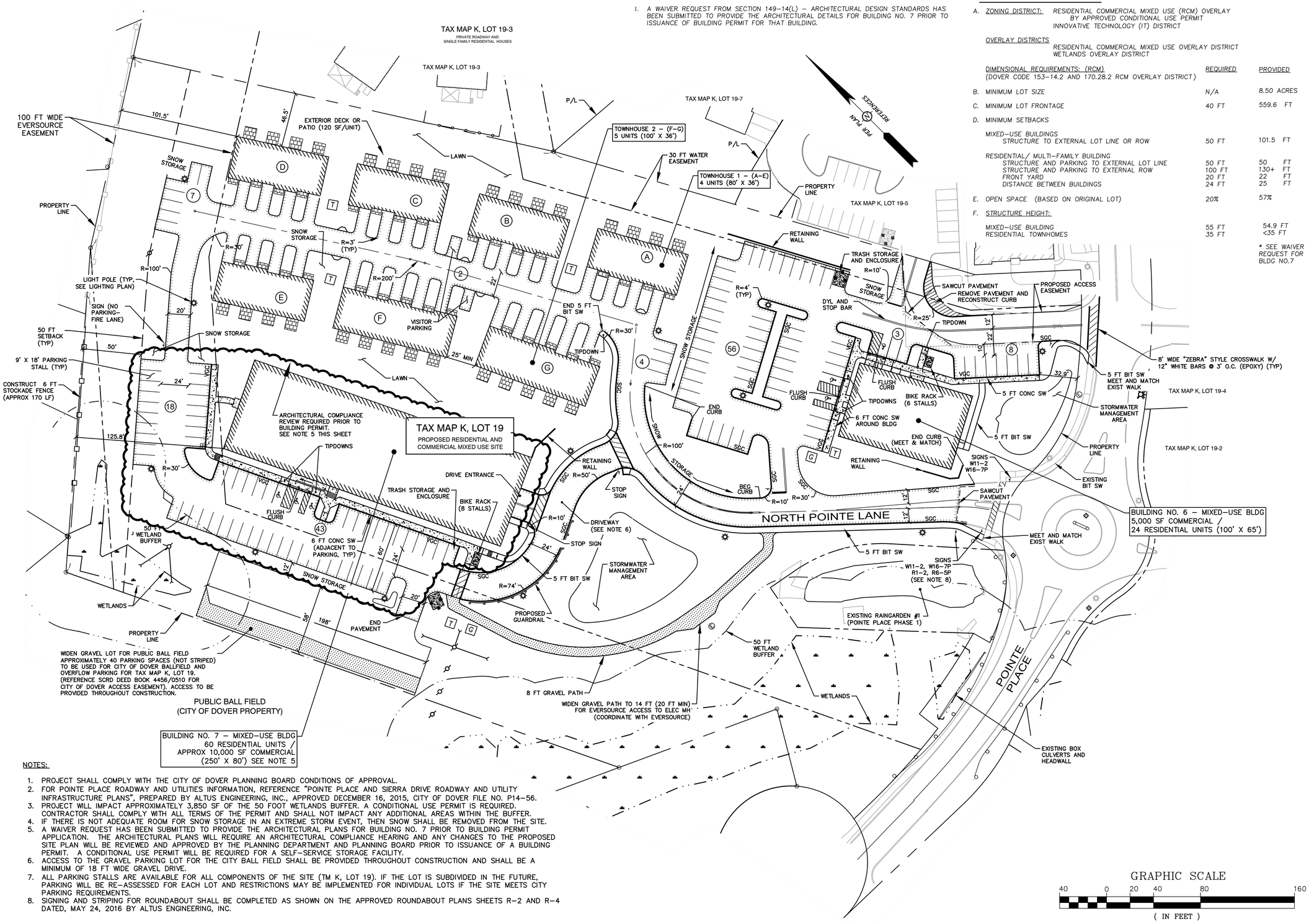
TAX MAP K, LOT 19

A. ZONING DISTRICT: RESIDENTIAL COMMERCIAL MIXED USE (RCM) OVERLAY BY APPROVED CONDITIONAL USE PERMIT INNOVATIVE TECHNOLOGY (IT) DISTRICT

OVERLAY DISTRICTS
RESIDENTIAL COMMERCIAL MIXED USE OVERLAY DISTRICT
WETLANDS OVERLAY DISTRICT

DIMENSIONAL REQUIREMENTS: (RCM) (DOVER CODE 153-14.2 AND 170.28.2 RCM OVERLAY DISTRICT)	REQUIRED	PROVIDED
B. MINIMUM LOT SIZE	N/A	8.50 ACRES
C. MINIMUM LOT FRONTAGE	40 FT	559.6 FT
D. MINIMUM SETBACKS		
MIXED-USE BUILDINGS		
STRUCTURE TO EXTERNAL LOT LINE OR ROW	50 FT	101.5 FT
RESIDENTIAL/ MULTI-FAMILY BUILDING		
STRUCTURE AND PARKING TO EXTERNAL LOT LINE	50 FT	50 FT
STRUCTURE AND PARKING TO EXTERNAL ROW	100 FT	130+ FT
FRONT YARD	20 FT	22 FT
DISTANCE BETWEEN BUILDINGS	24 FT	25 FT
E. OPEN SPACE (BASED ON ORIGINAL LOT)	20%	57%
F. STRUCTURE HEIGHT:		
MIXED-USE BUILDING	55 FT	54.9 FT
RESIDENTIAL TOWNHOMES	35 FT	<35 FT

* SEE WAIVER REQUEST FOR BLDG NO.7



NOTES:

1. PROJECT SHALL COMPLY WITH THE CITY OF DOVER PLANNING BOARD CONDITIONS OF APPROVAL.
2. FOR POINTE PLACE ROADWAY AND UTILITIES INFORMATION, REFERENCE "POINTE PLACE AND SIERRA DRIVE ROADWAY AND UTILITY INFRASTRUCTURE PLANS", PREPARED BY ALTUS ENGINEERING, INC., APPROVED DECEMBER 16, 2015, CITY OF DOVER FILE NO. P14–56.
3. PROJECT WILL IMPACT APPROXIMATELY 3,850 SF OF THE 50 FOOT WETLANDS BUFFER. A CONDITIONAL USE PERMIT IS REQUIRED. CONTRACTOR SHALL COMPLY WITH ALL TERMS OF THE PERMIT AND SHALL NOT IMPACT ANY ADDITIONAL AREAS WITHIN THE BUFFER.
4. IF THERE IS NOT ADEQUATE ROOM FOR SNOW STORAGE IN AN EXTREME STORM EVENT, THEN SNOW SHALL BE REMOVED FROM THE SITE.
5. A WAIVER REQUEST HAS BEEN SUBMITTED TO PROVIDE THE ARCHITECTURAL PLANS FOR BUILDING NO. 7 PRIOR TO BUILDING PERMIT APPLICATION. THE ARCHITECTURAL PLANS WILL REQUIRE AN ARCHITECTURAL COMPLIANCE HEARING AND ANY CHANGES TO THE PROPOSED SITE PLAN WILL BE REVIEWED AND APPROVED BY THE PLANNING DEPARTMENT AND PLANNING BOARD PRIOR TO ISSUANCE OF A BUILDING PERMIT. A CONDITIONAL USE PERMIT WILL BE REQUIRED FOR A SELF–SERVICE STORAGE FACILITY.
6. ACCESS TO THE GRAVEL PARKING LOT FOR THE CITY BALL FIELD SHALL BE PROVIDED THROUGHOUT CONSTRUCTION AND SHALL BE A MINIMUM OF 18 FT WIDE GRAVEL DRIVE.
7. ALL PARKING STALLS ARE AVAILABLE FOR ALL COMPONENTS OF THE SITE (TM K, LOT 19). IF THE LOT IS SUBDIVIDED IN THE FUTURE, PARKING WILL BE RE–ASSESSED FOR EACH LOT AND RESTRICTIONS MAY BE IMPLEMENTED FOR INDIVIDUAL LOTS IF THE SITE MEETS CITY PARKING REQUIREMENTS.
8. SIGNING AND STRIPING FOR ROUNDABOUT SHALL BE COMPLETED AS SHOWN ON THE APPROVED ROUNDABOUT PLANS SHEETS R–2 AND R–4 DATED, MAY 24, 2016 BY ALTUS ENGINEERING, INC.

P5057

ENGINEER:
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2	TRC COMMENTS	CDB	06/30/20

DRAWN BY:
APPROVED BY:
DRAWING FILE:

SCALE:
22"x34" 1" = 40'
11"x17" 1" = 80'

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

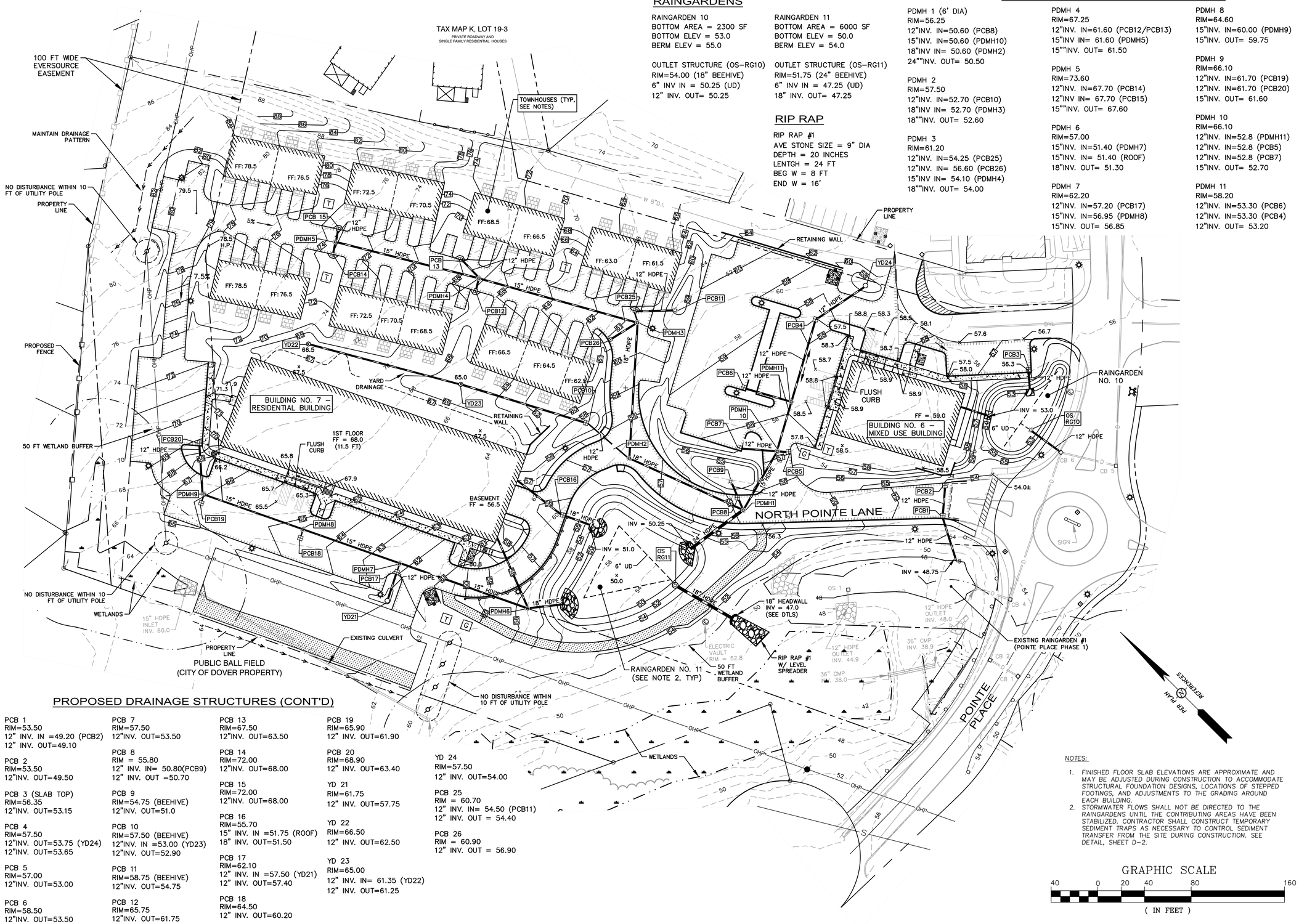
PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20-32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
SITE PLAN

SHEET NUMBER:
C-2



RAINGARDENS

RAINGARDEN 10
BOTTOM AREA = 2300 SF
BOTTOM ELEV = 53.0
BERM ELEV = 55.0

OUTLET STRUCTURE (OS–RG10)
RIM=54.00 (18" BEEHIVE)
6" INV IN = 50.25 (UD)
12" INV. OUT= 50.25

RAINGARDEN 11
BOTTOM AREA = 6000 SF
BOTTOM ELEV = 50.0
BERM ELEV = 54.0

OUTLET STRUCTURE (OS–RG11)
RIM=51.75 (24" BEEHIVE)
6" INV IN = 47.25 (UD)
18" INV. OUT= 47.25

RIP RAP

RIP RAP #1
AVE STONE SIZE = 9" DIA
DEPTH = 20 INCHES
LENTGH = 24 FT
BEG W = 8 FT
END W = 16'

PROPOSED DRAINAGE STRUCTURES

PDMH 1 (6' DIA)
RIM=56.25
12"INV. IN=50.60 (PCB8)
15"INV. IN=50.60 (PDMH10)
18"INV IN= 50.60 (PDMH2)
24""INV. OUT= 50.50

PDMH 2
RIM=57.50
12"INV. IN=52.70 (PCB10)
18"INV IN= 52.70 (PDMH3)
18""INV. OUT= 52.60

PDMH 3
RIM=61.20
12"INV. IN=54.25 (PCB25)
12"INV. IN= 56.60 (PCB26)
15"INV IN= 54.10 (PDMH4)
18""INV. OUT= 54.00

PDMH 4
RIM=67.25
12"INV. IN=61.60 (PCB12/PCB13)
15"INV IN= 61.60 (PDMH5)
15""INV. OUT= 61.50

PDMH 5
RIM=73.60
12"INV. IN=67.70 (PCB14)
12"INV IN= 67.70 (PCB15)
15""INV. OUT= 67.60

PDMH 6
RIM=57.00
15"INV. IN=51.40 (PDMH7)
15"INV. IN= 51.40 (ROOF)
18"INV. OUT= 51.30

PDMH 7
RIM=62.20
12"INV. IN=57.20 (PCB17)
15"INV. IN=56.95 (PDMH8)
15"INV. OUT= 56.85

PDMH 8
RIM=64.60
15"INV. IN=60.00 (PDMH9)
15"INV. OUT= 59.75

PDMH 9
RIM=66.10
12"INV. IN=61.70 (PCB19)
12"INV. IN=61.70 (PCB20)
15"INV. OUT= 61.60

PDMH 10
RIM=66.10
12"INV. IN=52.8 (PDMH11)
12"INV. IN=52.8 (PCB5)
12"INV. IN=52.8 (PCB7)
15"INV. OUT= 52.70

PDMH 11
RIM=58.20
12"INV. IN=53.30 (PCB6)
12"INV. IN=53.30 (PCB4)
12"INV. OUT= 53.20

PROPOSED DRAINAGE STRUCTURES (CONT'D)

PCB 1
RIM=53.50
12" INV. IN =49.20 (PCB2)
12" INV. OUT=49.10

PCB 2
RIM=53.50
12"INV. OUT=49.50

PCB 3 (SLAB TOP)
RIM=56.35
12"INV. OUT=53.15

PCB 4
RIM=57.50
12"INV. OUT=53.75 (YD24)
12"INV. OUT=53.65

PCB 5
RIM=57.00
12"INV. OUT=53.00

PCB 6
RIM=58.50
12"INV. OUT=53.50

PCB 7
RIM=57.50
12"INV. OUT=53.50

PCB 8
RIM = 55.80
12" INV. IN= 50.80(PCB9)
12" INV. OUT =50.70

PCB 9
RIM=54.75 (BEEHIVE)
12"INV. OUT=51.0

PCB 10
RIM=57.50 (BEEHIVE)
12"INV. IN =53.00 (YD23)
12"INV. OUT=52.90

PCB 11
RIM=58.75 (BEEHIVE)
12"INV. OUT=54.75

PCB 12
RIM=65.75
12"INV. OUT=61.75

PCB 13
RIM=67.50
12"INV. OUT=63.50

PCB 14
RIM=72.00
12"INV. OUT=68.00

PCB 15
RIM=72.00
12"INV. OUT=68.00

PCB 16
RIM=55.70
15" INV. IN =51.75 (ROOF)
18" INV. OUT=51.50

PCB 17
RIM=62.10
12" INV. IN =57.50 (YD21)
12" INV. OUT=57.40

PCB 18
RIM=64.50
12" INV. OUT=60.20

PCB 19
RIM=65.90
12" INV. OUT=61.90

PCB 20
RIM=68.90
12" INV. OUT=63.40

YD 21
RIM=61.75
12" INV. OUT=57.75

YD 22
RIM=66.50
12" INV. OUT=62.50

YD 23
RIM=65.00
12" INV. IN= 61.35 (YD22)
12" INV. OUT=61.25

YD 24
RIM=57.50
12" INV. OUT=54.00

PCB 25
RIM = 60.70
12" INV. IN= 54.50 (PCB11)
12" INV. OUT = 54.40

PCB 26
RIM = 60.90
12" INV. OUT = 56.90

NOTES:

1. FINISHED FLOOR SLAB ELEVATIONS ARE APPROXIMATE AND MAY BE ADJUSTED DURING CONSTRUCTION TO ACCOMMODATE STRUCTURAL FOUNDATION DESIGNS, LOCATIONS OF STEPPED FOOTINGS, AND ADJUSTMENTS TO THE GRADING AROUND EACH BUILDING.
2. STORMWATER FLOWS SHALL NOT BE DIRECTED TO THE RAINGARDENS UNTIL THE CONTRIBUTING AREAS HAVE BEEN STABILIZED. CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT TRAPS AS NECESSARY TO CONTROL SEDIMENT TRANSFER FROM THE SITE DURING CONSTRUCTION. SEE DETAIL, SHEET D–2.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

P5057

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22"x34" 1" = 40'
11"x17" 1" = 80'

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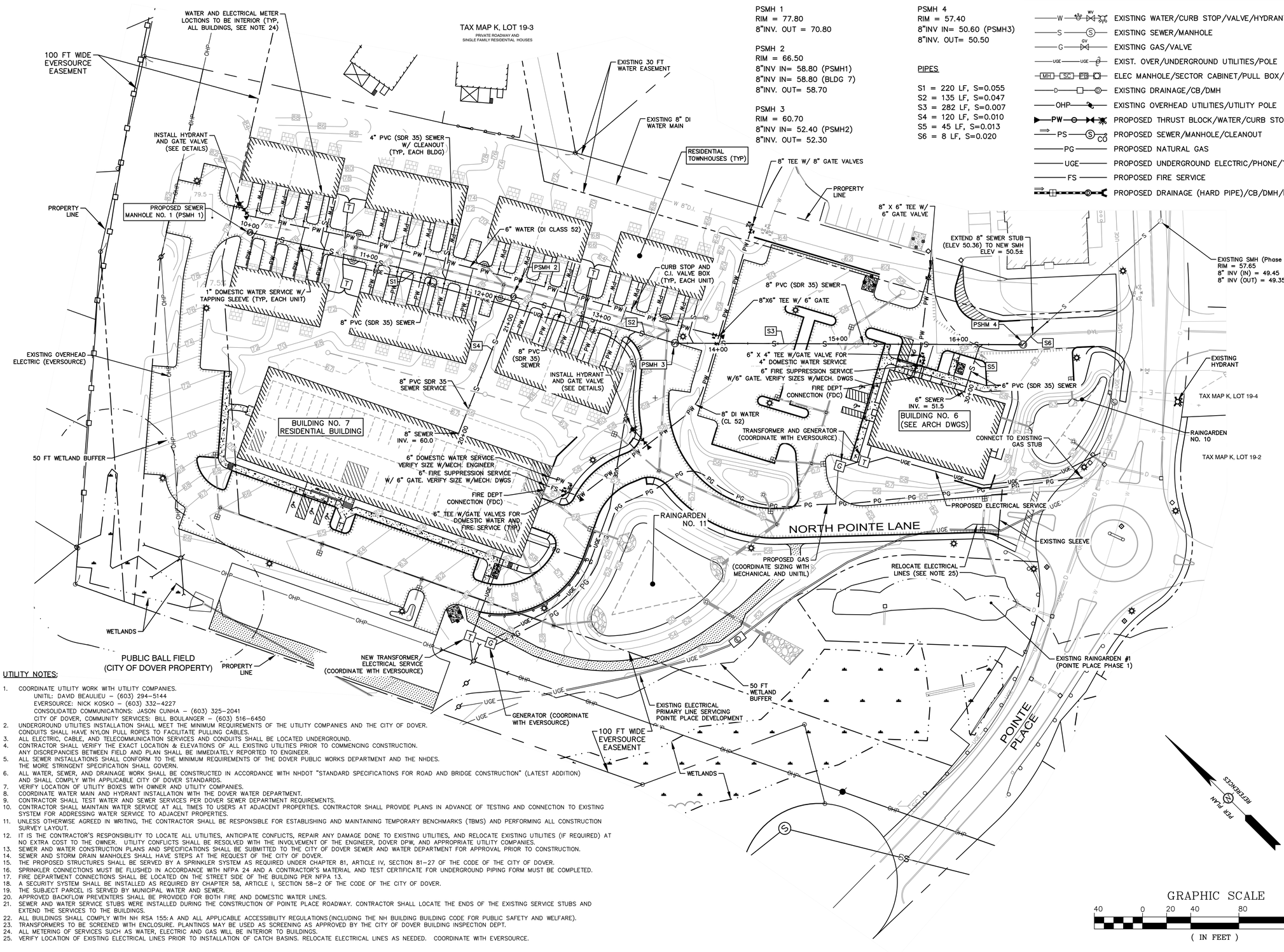
PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20–32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
GRADING AND DRAINAGE PLAN

SHEET NUMBER:
C-3



PROPOSED SEWER STRUCTURES

PSMH 1
RIM = 77.80
8"INV. OUT = 70.80

PSMH 2
RIM = 66.50
8"INV IN= 58.80 (PSMH1)
8"INV IN= 58.80 (BLDG 7)
8"INV. OUT= 58.70

PSMH 3
RIM = 60.70
8"INV IN= 52.40 (PSMH2)
8"INV. OUT= 52.30

PSMH 4
RIM = 57.40
8"INV IN= 50.60 (PSMH3)
8"INV. OUT= 50.50

PIPES

S1 = 220 LF, S=0.055
S2 = 135 LF, S=0.047
S3 = 282 LF, S=0.007
S4 = 120 LF, S=0.010
S5 = 45 LF, S=0.013
S6 = 8 LF, S=0.020

LEGEND

- EXISTING WATER/CURB STOP/VALVE/HYDRANT
- EXISTING SEWER/MANHOLE
- EXISTING GAS/VALVE
- EXIST. OVER/UNDERGROUND UTILITIES/POLE
- ELEC MANHOLE/SECTOR CABINET/PULL BOX/TRANSFORMER
- EXISTING DRAINAGE/CB/DMH
- EXISTING OVERHEAD UTILITIES/UTILITY POLE
- PROPOSED THRUST BLOCK/WATER/CURB STOP/VALVE/HYDRANT
- PROPOSED SEWER/MANHOLE/CLEANOUT
- PROPOSED NATURAL GAS
- PROPOSED UNDERGROUND ELECTRIC/PHONE/TV
- PROPOSED FIRE SERVICE
- PROPOSED DRAINAGE (HARD PIPE)/CB/DMH/HEADWALL

UTILITY NOTES:

1. COORDINATE UTILITY WORK WITH UTILITY COMPANIES.
   UNITIL: DAVID BEAULIEU – (603) 294–5144
   EVERSOURCE: NICK KOSKO – (603) 332–4227
   CONSOLIDATED COMMUNICATIONS: JASON CUNHA – (603) 325–2041
   CITY OF DOVER, COMMUNITY SERVICES: BILL BOULANGER – (603) 516–6450
2. UNDERGROUND UTILITIES INSTALLATION SHALL MEET THE MINIMUM REQUIREMENTS OF THE UTILITY COMPANIES AND THE CITY OF DOVER. CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
3. ALL ELECTRIC, CABLE, AND TELECOMMUNICATION SERVICES AND CONDUITS SHALL BE LOCATED UNDERGROUND.
4. CONTRACTOR SHALL VERIFY THE EXACT LOCATION & ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. ANY DISCREPANCIES BETWEEN FIELD AND PLAN SHALL BE IMMEDIATELY REPORTED TO ENGINEER.
5. ALL SEWER INSTALLATIONS SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE DOVER PUBLIC WORKS DEPARTMENT AND THE NHDES. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
6. ALL WATER, SEWER, AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST ADDITION) AND SHALL COMPLY WITH APPLICABLE CITY OF DOVER STANDARDS.
7. VERIFY LOCATION OF UTILITY BOXES WITH OWNER AND UTILITY COMPANIES.
8. COORDINATE WATER MAIN AND HYDRANT INSTALLATION WITH THE DOVER WATER DEPARTMENT.
9. CONTRACTOR SHALL TEST WATER AND SEWER SERVICES PER DOVER SEWER DEPARTMENT REQUIREMENTS.
10. CONTRACTOR SHALL MAINTAIN WATER SERVICE AT ALL TIMES TO USERS AT ADJACENT PROPERTIES. CONTRACTOR SHALL PROVIDE PLANS IN ADVANCE OF TESTING AND CONNECTION TO EXISTING SYSTEM FOR ADDRESSING WATER SERVICE TO ADJACENT PROPERTIES.
11. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR ANY DAMAGE DONE TO EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES (IF REQUIRED) AT NO EXTRA COST TO THE OWNER. UTILITY CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, DOVER DPW, AND APPROPRIATE UTILITY COMPANIES.
13. SEWER AND WATER CONSTRUCTION PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE CITY OF DOVER SEWER AND WATER DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION.
14. SEWER AND STORM DRAIN MANHOLES SHALL HAVE STEPS AT THE REQUEST OF THE CITY OF DOVER.
15. THE PROPOSED STRUCTURES SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 81, ARTICLE IV, SECTION 81–27 OF THE CODE OF THE CITY OF DOVER.
16. 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.
17. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
18. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58–2 OF THE CODE OF THE CITY OF DOVER.
19. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
20. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
21. SEWER AND WATER SERVICE STUBS WERE INSTALLED DURING THE CONSTRUCTION OF POINTE PLACE ROADWAY. CONTRACTOR SHALL LOCATE THE ENDS OF THE EXISTING SERVICE STUBS AND EXTEND THE SERVICES TO THE BUILDINGS.
22. ALL BUILDINGS SHALL COMPLY WITH NH RSA 155:A AND ALL APPLICABLE ACCESSIBILITY REGULATIONS (INCLUDING THE NH BUILDING BUILDING CODE FOR PUBLIC SAFETY AND WELFARE).
23. TRANSFORMERS TO BE SCREENED WITH ENCLOSURE. PLANTINGS MAY BE USED AS SCREENING AS APPROVED BY THE CITY OF DOVER BUILDING INSPECTION DEPT.
24. ALL METERING OF SERVICES SUCH AS WATER, ELECTRIC AND GAS WILL BE INTERIOR TO BUILDINGS.
25. VERIFY LOCATION OF EXISTING ELECTRICAL LINES PRIOR TO INSTALLATION OF CATCH BASINS. RELOCATE ELECTRICAL LINES AS NEEDED. COORDINATE WITH EVERSOURCE.

P5057

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
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2	NHDES SEWER SUBMITTAL	CDB	05/27/20
3	TRC COMMENTS	CDB	06/30/20

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APPROVED BY:
DRAWING FILE:

SCALE:
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11"x17" 1" = 80'

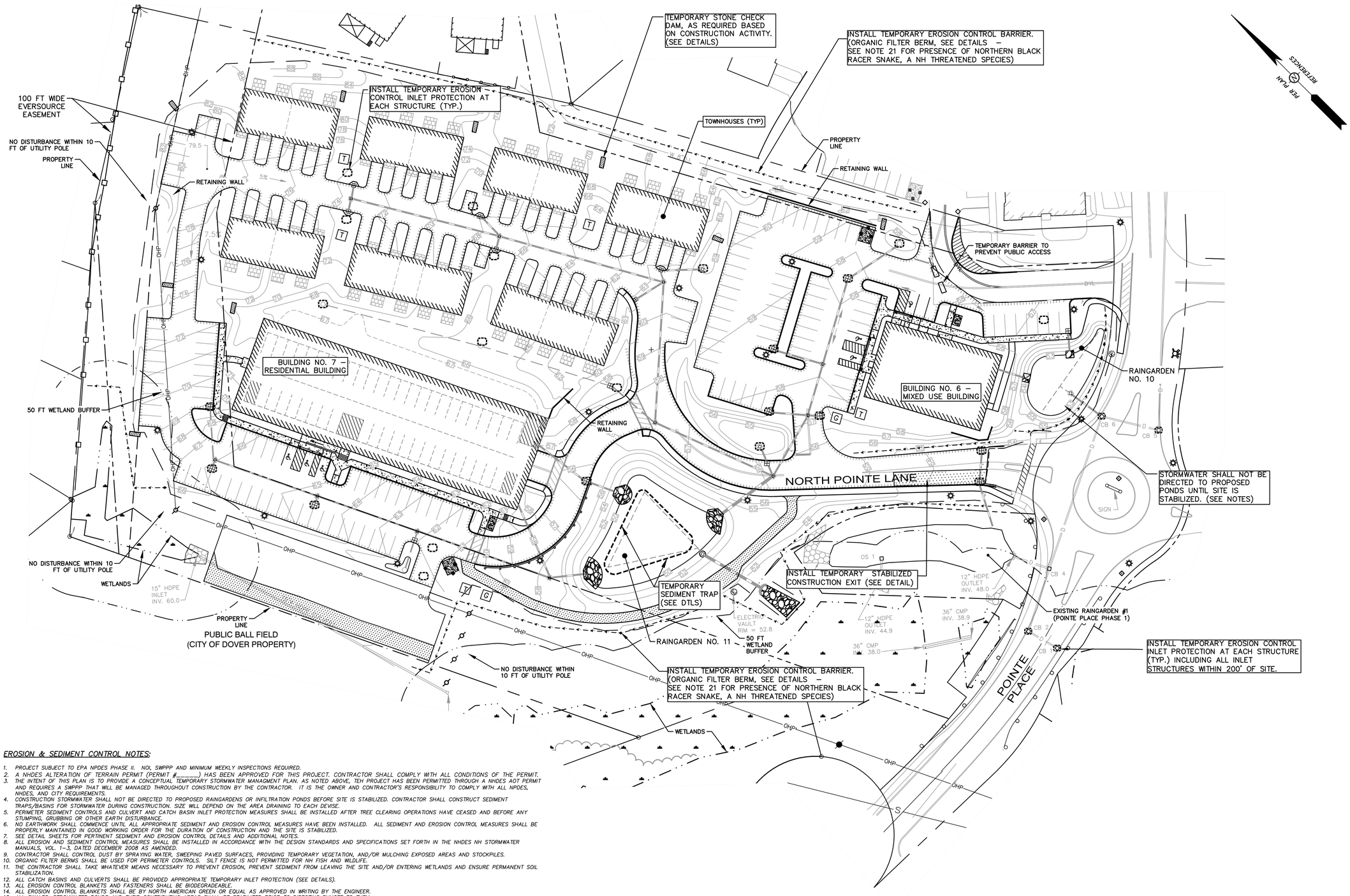
OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

TITLE:
UTILITIES PLAN

SHEET NUMBER:
C-4



EROSION & SEDIMENT CONTROL NOTES:

1. *PROJECT SUBJECT TO EPA NPDES PHASE II. NOI, SWPPP AND MINIMUM WEEKLY INSPECTIONS REQUIRED.*
2. *A NHDES ALTERATION OF TERRAIN PERMIT (PERMIT #_____) HAS BEEN APPROVED FOR THIS PROJECT. CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE PERMIT.*
3. *THE INTENT OF THIS PLAN IS TO PROVIDE A CONCEPTUAL TEMPORARY STORMWATER MANAGMENT PLAN. AS NOTED ABOVE, TEH PROJECT HAS BEEN PERMITTED THROUGH A NHDES AOT PERMIT AND REQUIRES A SWPPP THAT WILL BE MANAGED THROUGHOUT CONSTRUCTION BY THE CONTRACTOR. IT IS THE OWNER AND CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL NPDES, NHDES, AND CITY REQUIREMENTS.*
4. *CONSTRUCTION STORMWATER SHALL NOT BE DIRECTED TO PROPOSED RAINGARDENS OR INFILTRATION PONDS BEFORE SITE IS STABILIZED. CONTRACTOR SHALL CONSTRUCT SEDIMENT TRAPS/BASINS FOR STORMWATER DURING CONSTRUCTION. SIZE WILL DEPEND ON THE AREA DRAINING TO EACH DEVISE.*
5. *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.*
6. *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.*
7. *SEE DETAIL SHEETS FOR PERTINENT SEDIMENT AND EROSION CONTROL DETAILS AND ADDITIONAL NOTES.*
8. *ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH IN THE NHDES NH STORMWATER MANUALS, VOL. 1–3, DATED DECEMBER 2008 AS AMENDED.*
9. *CONTRACTOR SHALL CONTROL DUST BY SPRAYING WATER, SWEEPING PAVED SURFACES, PROVIDING TEMPORARY VEGETATION, AND/OR MULCHING EXPOSED AREAS AND STOCKPILES.*
10. *ORGANIC FILTER BERMS SHALL BE USED FOR PERIMETER CONTROLS. SILT FENCE IS NOT PERMITTED FOR NH FISH AND WILDLIFE.*
11. *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.*
12. *ALL CATCH BASINS AND CULVERTS SHALL BE PROVIDED APPROPRIATE TEMPORARY INLET PROTECTION (SEE DETAILS).*
13. *ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIODEGRADEABLE.*
14. *ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.*
15. *ALL SWALES, STROMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.*
16. *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.*
17. *UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.*
18. *UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.*
19. *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.*
20. *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 AND THE EXCAVATION AND PLACEMENT OF EARTH MATERIALS.*

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

P5057

ENGINEER:

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
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APPROVED BY: _____
DRAWING FILE: _____

SCALE:
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11"x17" 1" = 80'

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

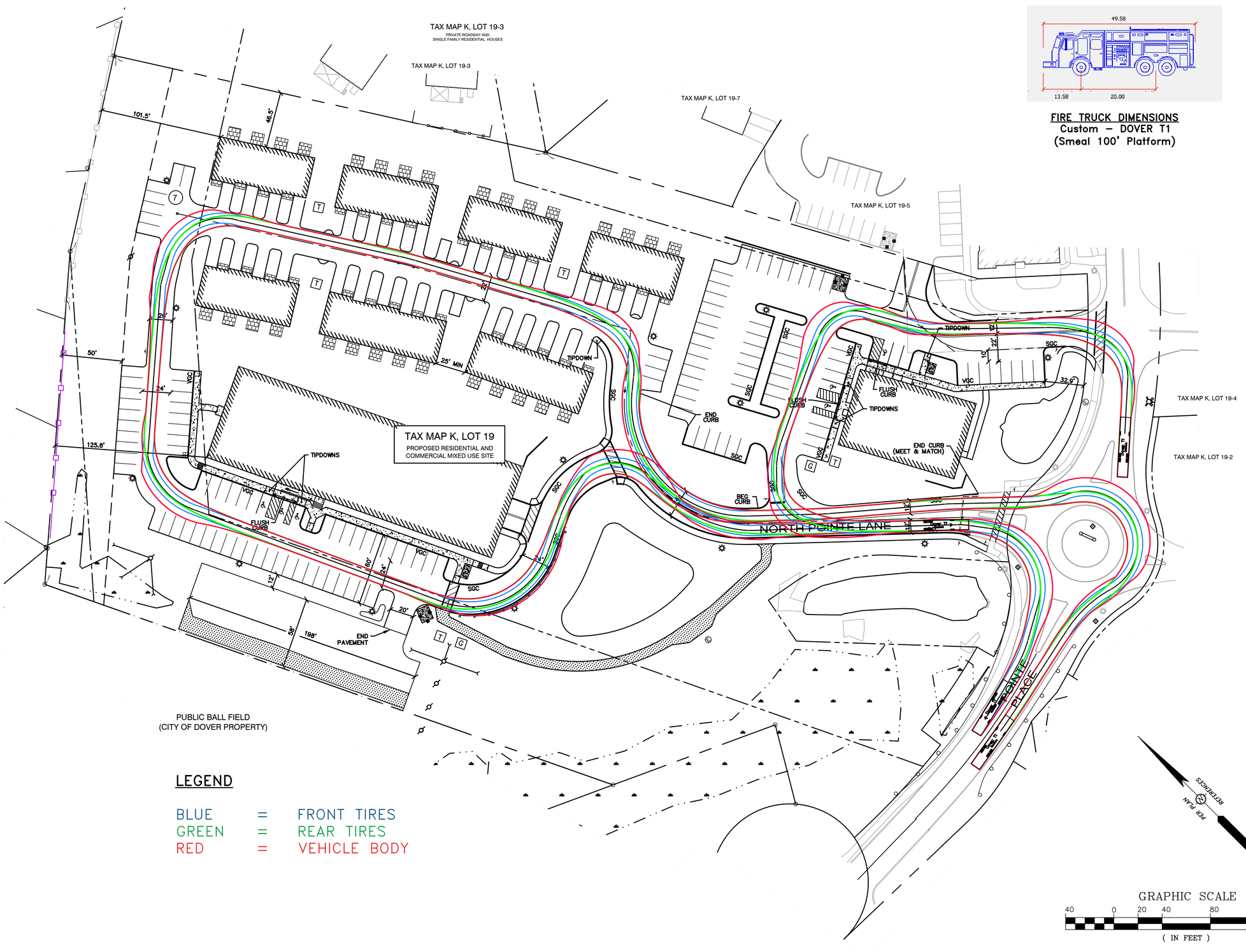
PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20–32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER:
C-5



FIRE TRUCK DIMENSIONS
Custom – DOVER T1
(Smeal 100' Platform)

LEGEND

BLUE = FRONT TIRES
GREEN = REAR TIRES
RED = VEHICLE BODY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

P5057

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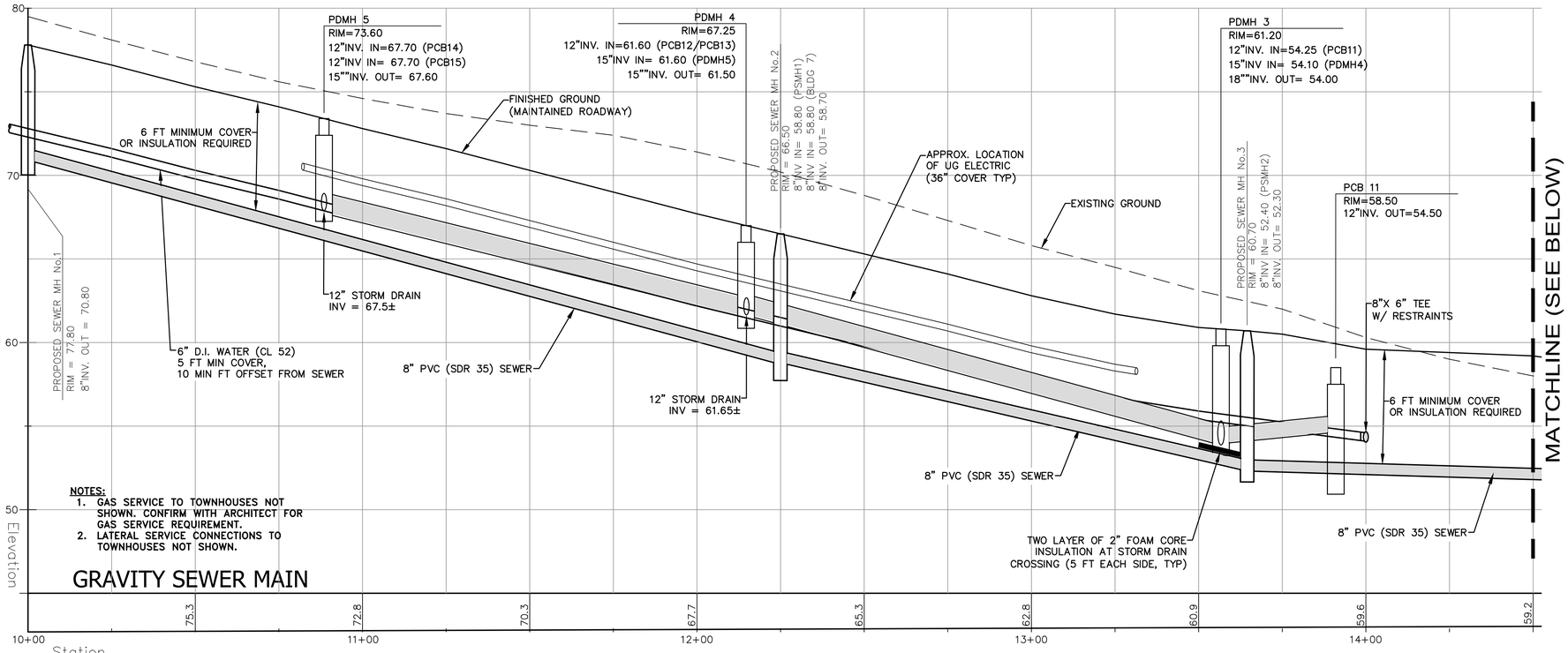
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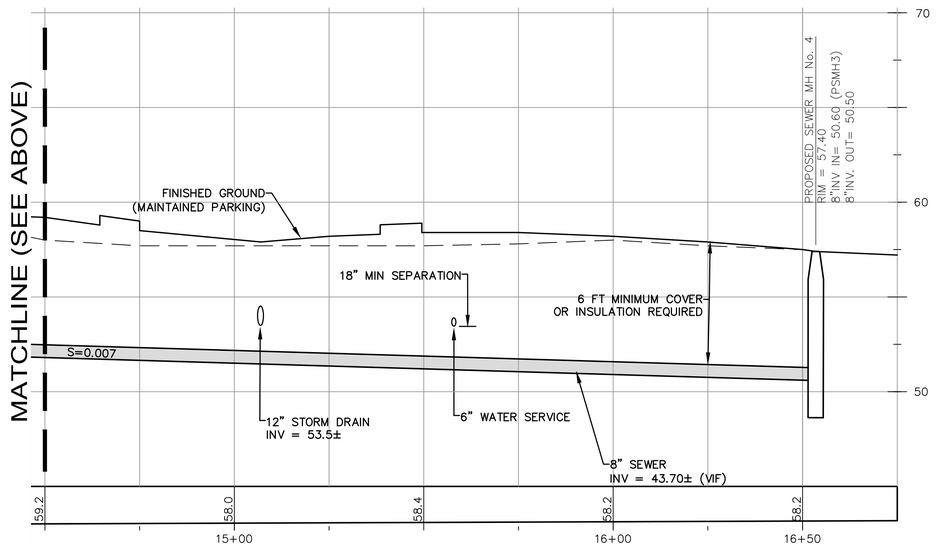
TAX MAP K, LOT 19
DOVER, NH

TITLE:
FIRE TRUCK TURNING MOVEMENT (AUROTURN)

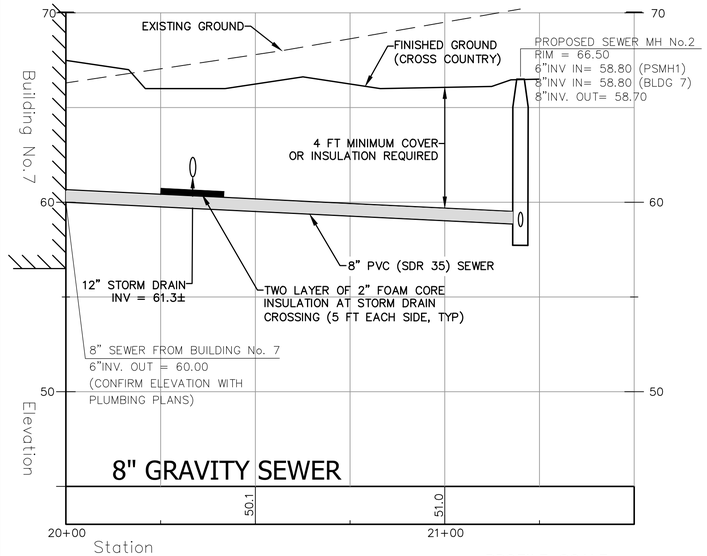
SHEET NUMBER:
C-6

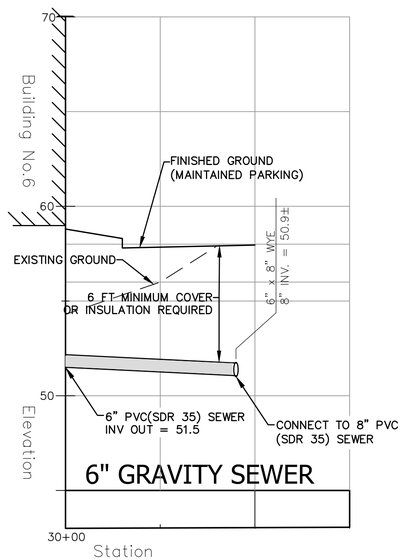


PROFILE SCALE:
1" = 20' HORIZONTAL
1" = 4' VERTICAL (5X)



PROFILE SCALE:
1" = 20' HORIZONTAL
1" = 4' VERTICAL (5X)





PROFILE SCALE:
1" = 20' HORIZONTAL
1" = 4' VERTICAL (5X)

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CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE -

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DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20-32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
SEWER PROFILES

SHEET NUMBER:
C-7

P5057

ZONING SUMMARY

TAX MAP K, LOT 19

A. ZONING DISTRICT: RESIDENTIAL COMMERCIAL MIXED USE (RCM) OVERLAY BY APPROVED CONDITIONAL USE PERMIT
INNOVATIVE TECHNOLOGY (IT) DISTRICT

OVERLAY DISTRICTS
RESIDENTIAL COMMERCIAL MIXED USE OVERLAY DISTRICT
WETLANDS OVERLAY DISTRICT

LOT SUMMARY

TAX MAP K, LOT 19 (8.5 ACRES)

LOT	AREA (SF)	AREA (ACRES)
A	120,260 SF	2.76 AC
B	99,790 SF	2.29 AC
C	150,300 SF	3.45 AC

TAX MAP K, LOT 19-3
PRIVATE ROADWAY AND SINGLE FAMILY RESIDENTIAL HOUSES

100 FT WIDE EVERSOURCE EASEMENT

30 FT WIDE WATER LINE EASEMENT

TOWNHOUSE 2 – (F–G) 5 UNITS (100' X 36')

SEWER EASEMENT TO LOT C (20 FT WIDE')

TOWNHOUSE 1 – (A–E) 4 UNITS (80' X 36')

PROPERTY LINE

SEWER EASEMENT TO LOTS B AND C (20 FT WIDE')

PROPERTY LINE

LOT B
(2.29 ACRES)

WATER EASEMENT TO LOTS B AND C (20 FT WIDE')

50 FT SETBACK (TYP)

LOT A
(2.76 ACRES)

LOT C
(3.45 ACRES)

TAX MAP K, LOT 19-4

WATER EASEMENT TO LOT C (20 FT WIDE')

PROPERTY LINE

TAX MAP K, LOT 19-2

NORTH POINTE LANE

BUILDING NO. 6 – MIXED USE
5,000 SF COMMERCIAL / 24 RESIDENTIAL UNITS (100' X 65')

SEE ROUNDABOUT PLANS R–2 AND R–4 FOR REQUIRED SIGNAGE

50 FT WETLAND BUFFER

WETLANDS

BUILDING NO. 7 – RESIDENTIAL–COMMERCIAL MIXED–USE BUILDING 60 UNITS (250' X 80')

50 FT WETLAND BUFFER

WETLANDS

POINTE PLACE

PUBLIC BALL FIELD
(CITY OF DOVER PROPERTY)

NOTES:

1. THE PRELIMINARY LOT LAYOUT IS INTENDED TO SHOW THE THAT THE PARCEL CAN BE SUBDIVIDED IN THE FUTURE AND COMPLY WITH ZONING REGULATIONS FOR THREE LOTS OF TWO ACRES MINIMUM IN SIZE. A SEPARATE SUBDIVISION APPLICATION SHALL BE SUBMITTED FOR APPROVAL BY THE PLANNING.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)

P5057

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DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20–32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
PRELIMINARY LOT LAYOUT PLAN

SHEET NUMBER:
C-8

SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION

POINTE PLACE (PHASE 5) RESIDENTIAL AND COMMERCIAL MIXED USE DEVELOPMENT
DOVER POINT ROAD/MIDDLE ROAD/POINTE PLACE
DOVER, NEW HAMPSHIRE

LONGITUDE: 070° 51' 20" W
LATITUDE: 043° 10' 40" N
TAX MAP K-1 LOT 19

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

DESCRIPTION

The project consists of two new mixed-use commercial/residential buildings and seven new townhouses, consisting of 114 residential units and approximately 15,000 square feet of commercial space. The site will provide associated site improvements including parking, walkways, lighting, utilities, stormwater management and landscaping improvements. The project is located on an 8.5 acre lot identified as Assessor's parcel Tax Map K, Lot 19 in the City of Dover, NH.

DISTURBED AREA

The total area to be disturbed for the site development improvements is approximately ±270,000 SF (±6.2 acres).

NAME OF RECEIVING WATER

The majority of the site will drain to a stormwater collection system and through raingardens. The treated stormwater will outfall to Varney Brook.

NPDES CONSTRUCTION GENERAL PERMIT

Contractor shall prepare a Stormwater Pollution Prevention Plan (SWPPP) is accordance with federal storm water permit requirements (see "Developing Your Stormwater Pollution Prevention Plan", EPA 833-R-060-4). The SWPPP must be prepared in a format acceptable to the Owner and three (3) copies provided to the Municipality at least fourteen (14) days prior to initiating construction. Contractor is responsible for all cost associated with preparation and implementation of SWPPP including any temporary erosion control measures (whether indicated or not on these drawings) as required for the contractor's sequence of activities.

The Contractor and Owner shall each file a Notice of Intent (NOI) with the U.S.E.P.A. under the NPDES Construction General Permit. (U.S.E.P.A., 1200 Pennsylvania Avenue NW, Washington, DC 20460) All work shall be in accordance with NPDES General Permit: NHG07000, including NOI requirements, effluent limitations, standards and management for construction. The Contractor shall be responsible for obtaining a USEPA Construction Dewatering Permit, if required.

SEQUENCE OF MAJOR ACTIVITIES

1. Prepare SWPPP and file NPDES Notice of Intent (NOI), 14 days prior to any construction activities (Required).
2. Hold a pre-construction meeting with City & stake holders, as required.
3. Install temporary erosion control measures including organic filter berms, stabilized construction exits, inlet sediment filters, and temporary sediment traps as noted on the plan. All temporary erosion control measures shall be maintained in good working condition for the duration of the project.
4. DO NOT construct or direct construction flows to proposed raingardens until proposed grades are established and site is stabilized.
5. Prepare building areas per geotechnical engineering recommendations,
6. Rough grade site including placement of borrow materials.
7. Construct utility services.
8. Construct drainage structures, culverts, and swales.
9. Construct building foundations, driveways and parking area base course paving & curbing.
10. Construct final grading, loam (6" min) and seed all disturbed areas not paved or otherwise stabilized.
11. Complete building construction.
12. When site is fully stabilized, complete construction of raingardens.
13. Install top course paving, pavement markings and signs,
14. When all construction activity is complete and as each phase is stabilized, remove all temporary erosion control measures and any sediment that has been trapped by these devices.
15. File a Notice of Termination (N.O.T.) with U.S.E.P.A. (Required)

CONSTRUCTION SEQUENCE / EROSION CONTROL

- THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
- TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC) MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
- PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE (BEFORE ROUGH GRADING THE SITE).
- ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 55,000 SQUARE FEET AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - ** BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
  - ** A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED.
  - ** A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED.
  - ** OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

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, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through hay bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown on the drawings.

Stabilize all ditches, swales, & level spreaders prior to directing flow to them.

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 0.5 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 silt fence or other barriers when it has reached one-third the height of the fence or bale, 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 shrub plantings.
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. TEMPORARY GRASS COVER

1. Seedbed Preparation –
   Apply fertilizer at the rate of 600 pounds per acre of 10–10–10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.

10. Seeding –
    a. Utilize annual rye grass at a rate of 40 lbs/acre.
    b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
    c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

3. Maintenance –
   Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

D. FILTERS

1. Silt Fence
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property	Test	Requirements
Filtering Efficiency	VTM-51	75% minimum
Tensile Strength at 20% Maximum Elongation*	VTM-52	Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min)
Flow Rate	VTM-51	0.3 gal/sf/min (min)

   * Requirements reduced by 50 percent after six (6) months of installation.

   Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizer to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120° F.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

   b. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer and driven securely into the ground (minimum of 16 inches).
   c. A trench shall be excavated approximately six (6) inches wide and eight (8) inches deep along the line of posts and upslope from the barrier.
   d. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.
   e. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
   f.
   g. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.
   h. The trench shall be backfilled and the soil compacted over the filter fabric.
   i. Silt fences shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized.

2. Sequence of Installation –
   Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.

3. Maintenance –
   a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be replaced with a temporary stone check dam.
   b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
   c. Sediment deposits must be removed when deposits reach approximately one-third (1/3) the height of the barrier.
   d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.
   e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control structure.

E. PERMANENT SEEDING –

1. Bedding – stones larger than 1", 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 fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

   Agricultural Limestone @ 100 lbs. per 1,000 s.f.
   10–20–20 fertilizer @ 12 lbs. per 1,000 s.f.

3. Seed Mixture (recommended):

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:

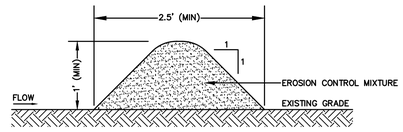
Type	Min. Purity (%)	Min. Germination (%)	Kg./Hectare (Lbs/Acre)
Creeping Red Fescue (b)	96	85	45 (40)
Perennial Rye Grass (a)	98	90	35 (30)
Redtop	95	80	5 (5)
Alsike Clover	97	90	5 (5)
		Total	90 (80)

   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.

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

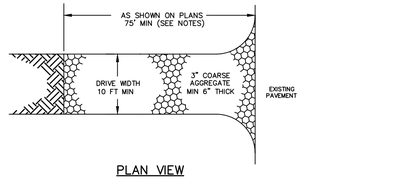
1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch 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 October 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.



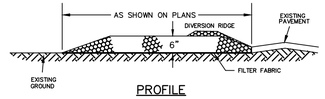
NOTES

1. ORGANIC FILTER BERMS TO 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.

ORGANIC FILTER BERM NOT TO SCALE



PLAN VIEW



PROFILE

CONSTRUCTION SPECIFICATIONS

1. REFERENCE NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3 (LATEST EDITION), SECTION 4.2 "TEMPORARY CONSTRUCTION EXIT" REQUIREMENTS AND BMP DETAIL.
2. STONE SIZE – 3" COARSE AGGREGATE
3. THICKNESS – SIX (6) INCHES (MINIMUM).
4. LENGTH – 75 FOOT MINIMUM, OR 50 FOOT ALLOWED WHEN DIVERSION RIDGE IS PROVIDED.
5. WIDTH – 1/2 OF DRIVEWAY (10 FOOT MINIMUM).
6. FILTER FABRIC – MIRAFI 600X OR APPROVED EQUAL.
7. 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.
8. 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.
9. 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.

STABILIZED CONSTRUCTION EXIT NOT TO SCALE

NOTE:
ALL FACILITIES SHOULD BE INSPECTED ON AN ANNUAL BASIS AT A MINIMUM. IN ADDITION, ALL FACILITIES SHOULD BE INSPECTED AFTER A SIGNIFICANT PRECIPITATION EVENT TO ENSURE THE FACILITY IS DRAINING APPROPRIATELY AND TO IDENTIFY ANY DAMAGE THAT OCCURRED AS A RESULT OF THE INCREASED RUNOFF. FOR THE PURPOSE OF THIS STORMWATER MANAGEMENT PROGRAM, A SIGNIFICANT RAINFALL EVENT IS CONSIDERED AN EVENT OF THREE (3) INCHES IN A 24-HOUR PERIOD OR 0.5 INCHES IN A ONE-HOUR PERIOD. IT IS ANTICIPATED THAT A SHORT, INTENSE EVENT IS LIKELY TO HAVE A HIGHER POTENTIAL OF EROSION FOR THIS SITE THAN A LONGER, HIGH VOLUME EVENT.

P5057

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	NHDES SUBMISSION	CDB	05/27/20
2	TRC COMMENTS	CDB	06/30/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE:
NO SCALE

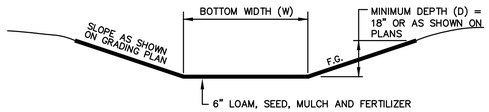
OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

TITLE:
EROSION CONTROL DETAILS

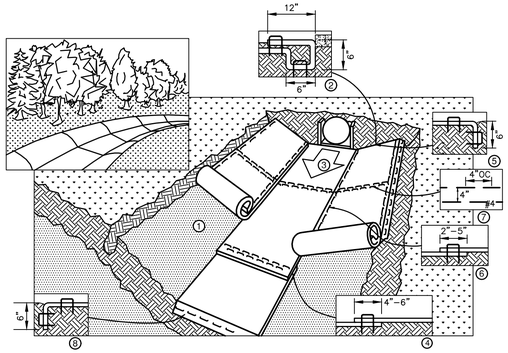
SHEET NUMBER:
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NOTES

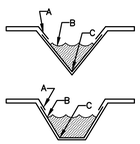
1. THE FOUNDATION AREA OF THE SWALE SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA AND BE FREE OF IRREGULARITIES.
3. EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED SWALE.
4. VEGETATION SHALL BE ESTABLISHED IN THE SWALE OR AN EROSION CONTROL MATTING INSTALLED PRIOR TO DIRECTING STORMWATER TO IT.
5. MAINTENANCE OF THE VEGETATION IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, EROSION, AND FAILURE OF THE SWALE. MOWING SHALL BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHALL NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE SWALE.
6. THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER ANY STORM GREATER THAN 0.5" OF RAINFALL IN 24 HOURS TO DETERMINE ITS CONDITION. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

VEGETATED SWALE NOT TO SCALE



NOTES

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL 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 CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. 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. PLACE CONSECUTIVE BLANKETS 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 BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED. TO INSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
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 BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



CRITICAL POINTS:

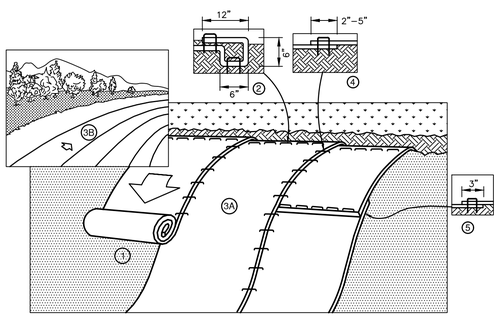
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTES:

* 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 BLANKETS.

EROSION CONTROL BLANKET - SWALE NOT TO SCALE

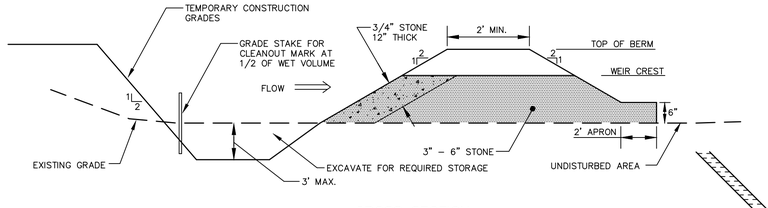


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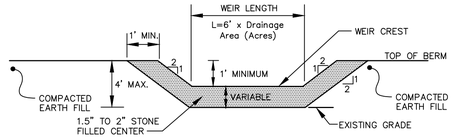
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET 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.

NOTE: EROSION CONTROL BLANKET SHALL BE MADE OF STRAW, JUTE, OR COCONUT FIBER AND SHALL NOT CONTAIN WELDED PLASTIC OR BIO-DEGRADABLE PLASTIC NETTING.

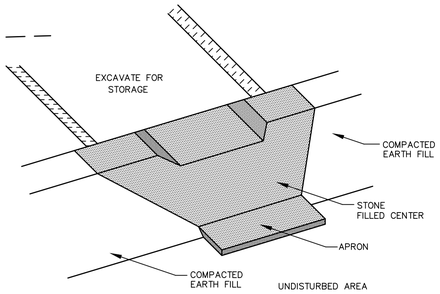
EROSION CONTROL BLANKET - SLOPE NOT TO SCALE



CROSS SECTION

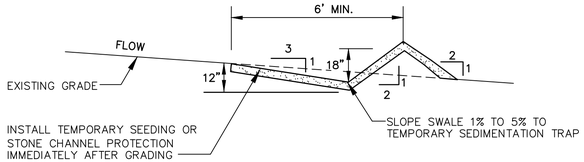


PROFILE



ISOMETRIC VIEW

SWALE SHALL BE FREE OF IRREGULARITIES WHICH MAY CAUSE PONDING. COMPACT FILLS AS NECESSARY TO STABILIZE MATERIAL.

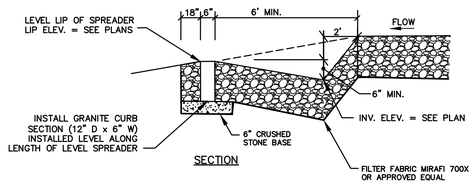


TEMPORARY DIVERSION SWALE NOT TO SCALE

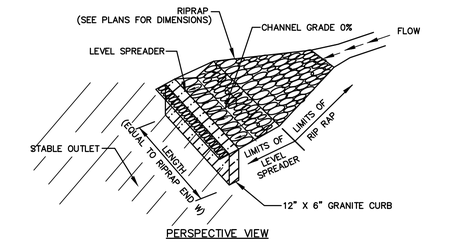
MAINTENANCE

1. SEDIMENT SHALL BE REMOVED AND THE TRAP SHALL BE RESTORED TO ITS ORIGINAL CAPACITY WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN STORAGE VOLUME. SEDIMENT REMOVED SHALL BE DISPOSED OF SO THAT IT DOES NOT CAUSE A SEDIMENT PROBLEM AT ANOTHER LOCATION.
2. THE STRUCTURE SHALL BE CHECKED BI-WEEKLY AND AFTER EVERY MAJOR STORM TO INSURE THAT IT IS WORKING PROPERLY AND IS NOT DAMAGED. DAMAGE TO THE STRUCTURE SHALL BE REPAIRED IMMEDIATELY.
3. 3/4" STONE SHALL BE CHECKED DURING INSPECTION AND REPLACED WHEN THE OPENINGS IN THE STONE HAVE BECOME CLOGGED.
4. WHEN THE DRAINAGE AREA FLOWING INTO THE BASIN HAS BEEN FULLY STABILIZED, THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA VEGETATED USING LOAM AND SEED WITH MULCH (OR SOD IF NECESSARY) WITHIN 72 HOURS OF THE REMOVAL OF THE BASIN.

TEMPORARY SEDIMENT TRAP (TST) OUTLET NOT TO SCALE



SECTION

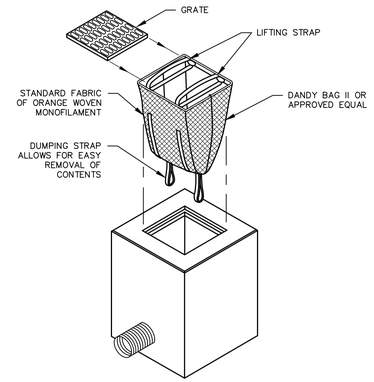


PERSPECTIVE VIEW

NOTES

1. LEVEL SPREADERS SHALL BE CONSTRUCTED PER CITY OF DOVER STANDARD DETAILS AND SPECIFICATIONS.
2. FOR STAPLE REQUIREMENTS SEE MANUFACTURER'S STANDARDS & SPECIFICATIONS FOR PROTECTIVE MATERIALS.
3. AREAS BELOW LEVEL SPREADERS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

LEVEL SPREADER 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.

STORM DRAIN INLET PROTECTION NOT TO SCALE

ENGINEER:

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	TRC COMMENTS	CDB	06/30/20

DRAWN BY:
APPROVED BY:
DRAWING FILE:

SCALE:
NO SCALE

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

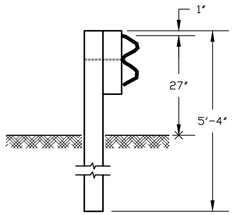
APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

TITLE:
DETAILS

SHEET NUMBER:
D-2

P5057

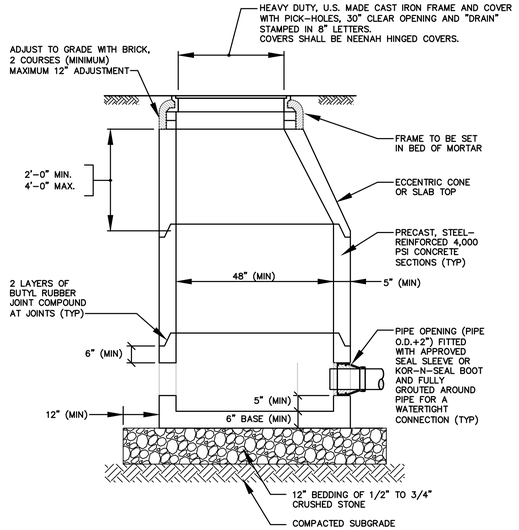


AASHTO DESIGNATION	G4(2W)
MAINE STANDARD DETAIL	HD-6
POST SPACING	6'-3"
DEFLECTION DISTANCE *	3'
POST TYPE	6" x 8" TREATED WOOD POST
BEAM TYPE	"W" SECTION, 12 GA., "CORTEN" STEEL
OFFSET BRACKETS	6" x 6" x 14" TREATED BLOCK

* CLEAR DISTANCE FROM THE BACK OF THE POST TO THE ROADSIDE OBJECTS. DECREASING THE POST SPACING TO 3.5 FEET WILL DECREASE THE DEFLECTION DISTANCE BY ONE FOOT.

"W" BEAM GUARDRAIL DETAIL (WOOD POSTS)

NOT TO SCALE

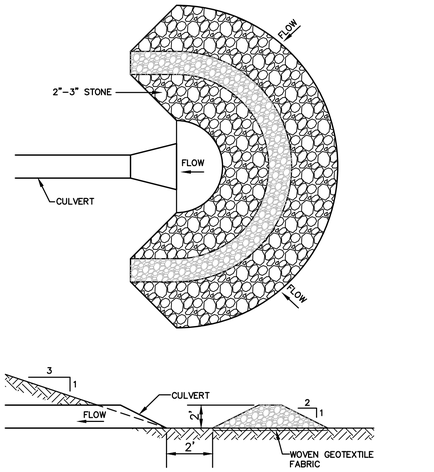


NOTES

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. CITY OF DOVER INSTALLS STEPS IN DRAIN MANHOLES.

DRAIN MANHOLE DETAIL

NOT TO SCALE

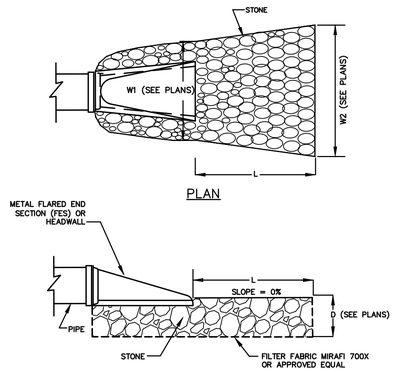


NOTES:

1. TEMPORARY CULVERT INLET PROTECTION CHECK DAMS SHALL BE CONSTRUCTED OF 2-3" CLEAN WASHED STONE OVER WOVEN GEOTEXTILE FABRIC.
2. INLET PROTECTION MEASURES SHALL BE INSTALLED AT THE OPENINGS OF ALL EXISTING AND PROPOSED CULVERTS WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER..
3. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURE WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND DISPOSED OF PROPERLY.
4. STRUCTURES SHALL BE REMOVED WHEN DIRECTED BY THE ENGINEER AND THE SITE IS STABILIZED WITH VEGETATION AND THE CHANNEL SHALL BE SMOOTHED AND REVEGETATED.

TEMPORARY CULVERT INLET PROTECTION CHECK DAM

NOT TO SCALE



SECTION

MAINTENANCE

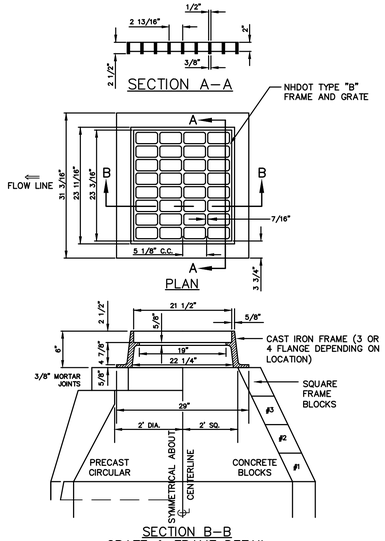
THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD 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

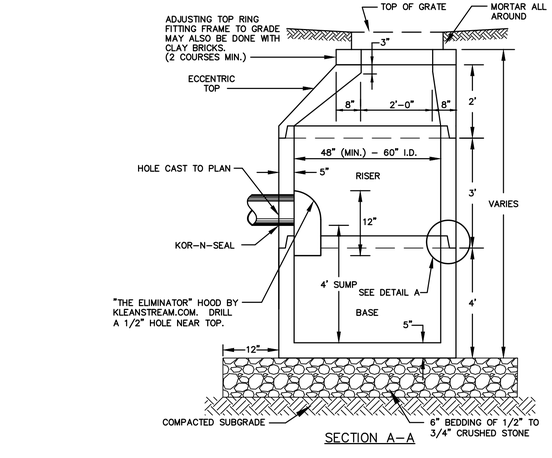
NOT TO SCALE

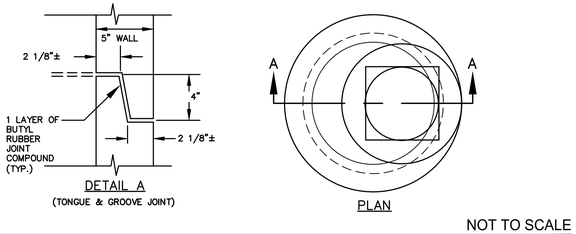


NOTES

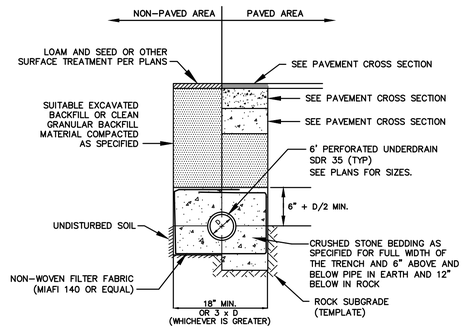
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. 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





NOT TO SCALE



BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

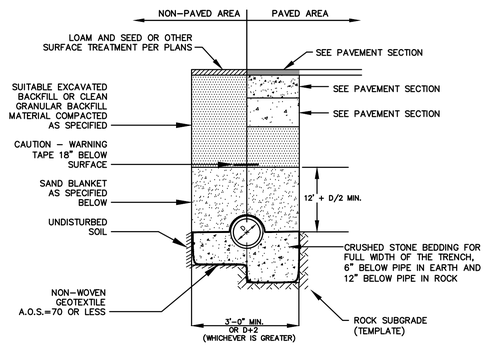
SAND BLANKET/BARRIER	
SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 - 100
200	0 - 15

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

UNDERDRAIN TRENCH SECTION

NOT TO SCALE



BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET/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

STORM DRAIN UTILITY TRENCH SECTION

NOT TO SCALE

P5057

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

STATE OF NEW HAMPSHIRE - CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER -

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD APPROVAL

ISSUE DATE: JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	TRC COMMENTS	CDB	06/30/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE: NO SCALE

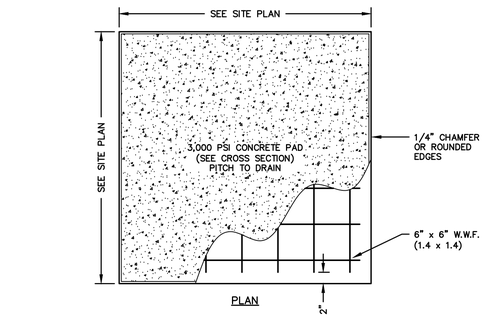
OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

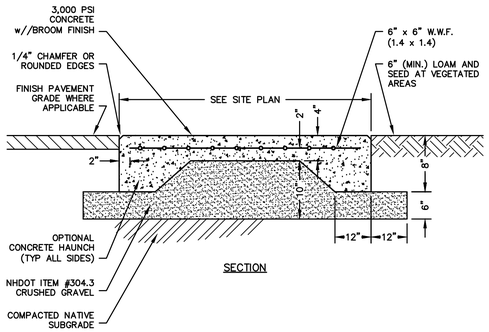
APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE - PHASE 5
RESIDENTIAL AND COMMERCIAL MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

TITLE: *DETAILS*

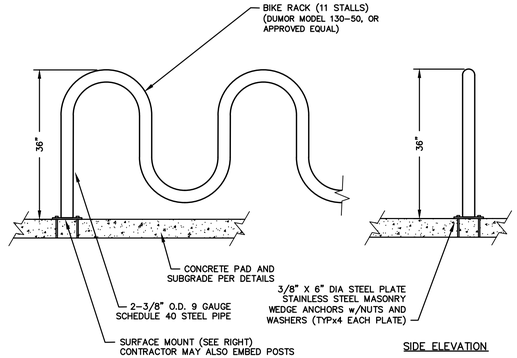
SHEET NUMBER: D-3





BIKE RACK / BENCH PAD

NOT TO SCALE

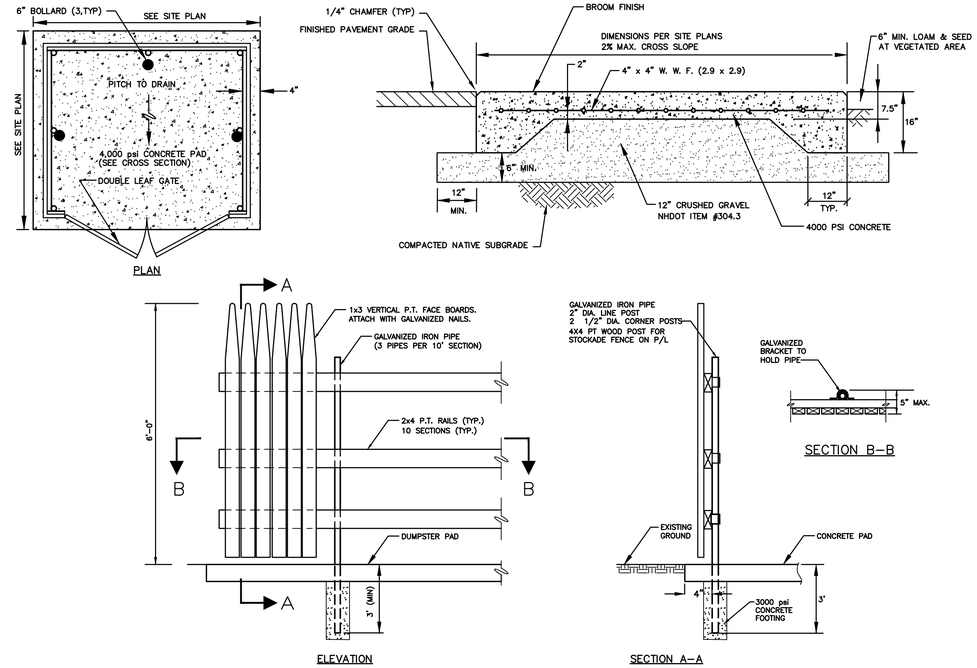


NOTES

1. ALL STEEL PIPE SHALL MEET ASTM A53.
2. ALL STEEL PLATES SHALL MEET ASTM A36.
3. RACK(S) SHALL BE INSTALLED IN THE QUANTITY AND ORIENTATION SHOWN ON THE PLANS.
4. RACK(S) TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
5. RACK FINISH TO BE AT THE OWNER'S DISCRETION. OPTIONS INCLUDE BUT MAY NOT BE LIMITED TO GALVANIZED, POWDER COATED OR STAINLESS STEEL.
6. BOLTS MAY BE EMBEDDED IN CONCRETE DURING POUR OR DRILLED INTO PAD AT CONTRACTOR'S DISCRETION.
7. SEE CONCRETE BIKE RACK PAD DETAIL.
8. CONTRACTOR MAY SUBSTITUTE AN IN-GROUND MOUNTED RACK AFTER REVIEW AND APPROVAL BY THE ENGINEER.

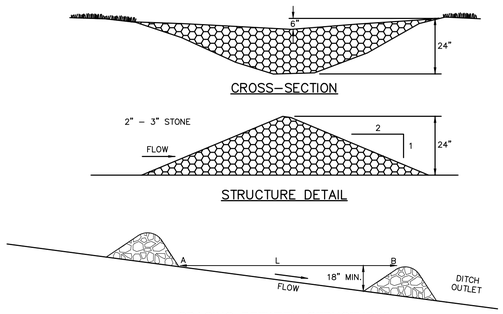
BIKE RACK

NOT TO SCALE



STOCKADE FENCE AND ENCLOSURE DETAIL (TRANSFORMER AND DUMPSTERS)

NOT TO SCALE



1. L = DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION
2. CHECK DAM SHALL BE CONSTRUCTED OF 2" TO 3" STONE WITH COMPLETE COVERAGE OF DITCH OR SWALE TO INSURE THAT THE CENTER OF THE STRUCTURE IS LOWER THAN THE EDGES.

MAINTENANCE

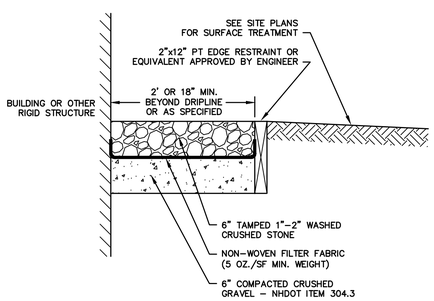
TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED, AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

CONSTRUCTION SPECIFICATIONS

1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
3. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE VEGETATIVE BMP.
4. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

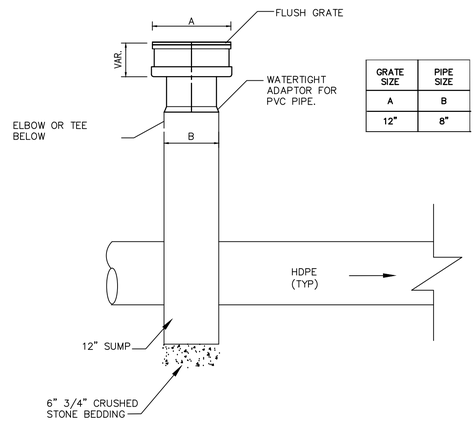
STONE CHECK DAM

NOT TO SCALE



STONE DRIP EDGE

NOT TO SCALE



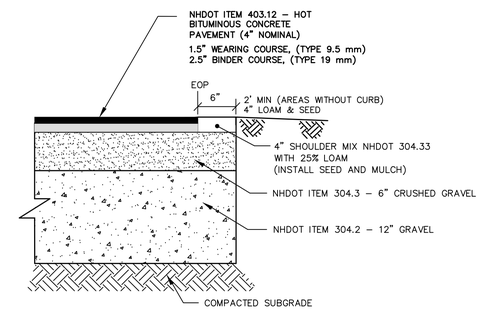
GRATE SIZE	PIPE SIZE
A	B
12"	8"

YARD DRAIN NOTES:

1. INLINE DRAIN TO BE PVC DIAMETER AS SPECIFIED AND AS MANUFACTURED BY ADS 1-800-821-6710 OR APPROVED EQUAL.
2. THE CONTRACTOR SHALL INSTALL THE INLINE DRAIN AS PER THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.

YARD DRAIN AND GRATE

NOT TO SCALE



NOTES:

1. INSTALL TACK COAT TO BINDER COURSE PAVEMENT PRIOR TO INSTALLING WEARING COURSE.
2. REMOVE LEDGE WITHIN 30" OF SURFACE.
3. ALL LOAM, CLAY, MUCK, ORGANIC AND/OR YIELDING MATERIAL SHALL BE REMOVED TO A DEPTH OF NO LESS THAN 22" BELOW FINISH GRADE. INSTALL COMPACTED SAND OR GRAVEL BORROW TO SUBGRADE, AS NECESSARY.
4. SUBGRADE SHALL BE FREE OF VOIDS THAT ALLOW MOVEMENT/SETTLEMENT OF MATERIALS.
5. SUBGRADE SHALL BE PROOF ROLLED WITH A FULLY LOADED DUMP TRUCK PRIOR TO PLACEMENT OF GRAVEL. PROOF ROLLING TO BE VIEWED AND APPROVED BY ENGINEER.

STANDARD PAVEMENT CROSS SECTION

NOT TO SCALE

(VERIFY WITH GEOTECHNICAL RECOMMENDATIONS)

P5057

ENGINEER:

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com



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0	INITIAL SUBMISSION	CDB	05/07/20
1	NHDES SUBMISSION	CDB	05/27/20
2	TRC COMMENTS	CDB	06/30/20

DRAWN BY:
APPROVED BY:
DRAWING FILE:

SCALE:
NO SCALE

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

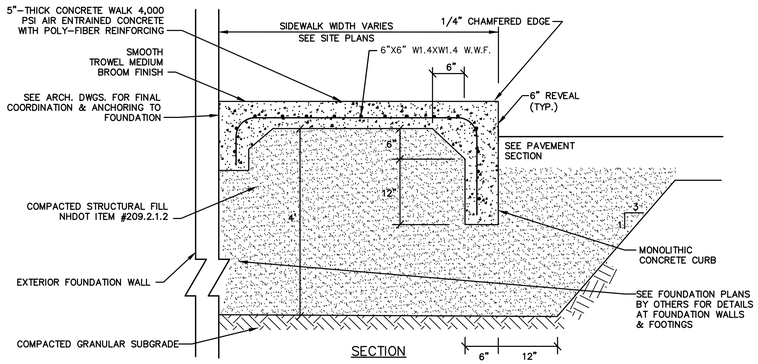
PROJECT:
POINTE PLACE - PHASE 5
RESIDENTIAL AND
COMMERCIAL
MIXED USE DEVELOPMENT

CITY FILE NO. P20-32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
DETAILS

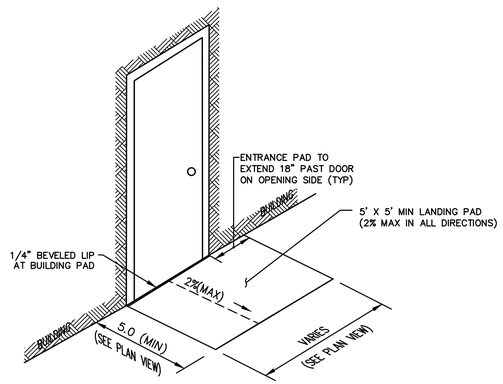
SHEET NUMBER:
D-4



SECTION

CONCRETE SLAB (SIDEWALKS) DETAILS @ BLDG. ENTRANCE

NOT TO SCALE



ADA ACCESSIBLE ENTRANCE PAD

NOT TO SCALE

NOTES APPLICABLE TO ALL CURB RAMPS:

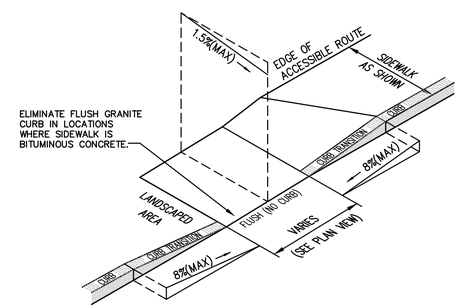
1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 1.5%.
2. THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) CURB RAMP SHALL BE 8.3% FOR A MAXIMUM 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 TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
7. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT (ADA) 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 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 TEH RAMPS WHEN THERE IS A CHANGE IN DIRECTION.

CURB RAMP NOTES

NOT TO SCALE

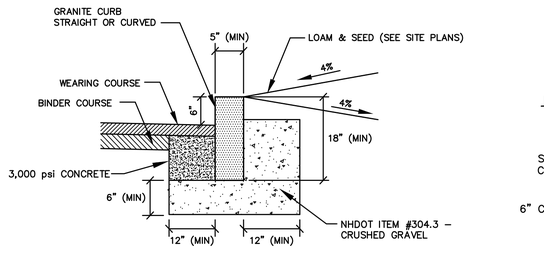
CURB RAMP (TYPE 'A')

NOT TO SCALE



CURB RAMP (TYPE 'I')

NOT TO SCALE



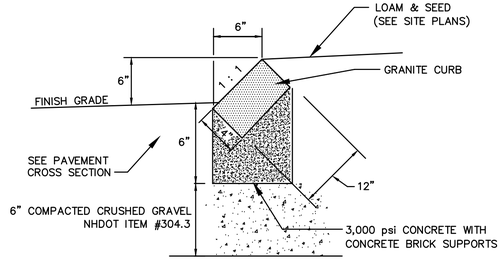
VERTICAL GRANITE CURB

NOT TO SCALE

NOTES

1. SEE PLANS FOR CURB LOCATION.
2. SEE PLANS FOR PAVEMENT CROSS SECTION.
3. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
4. MINIMUM LENGTH OF CURB STONES = 4'.
5. MAXIMUM LENGTH OF CURB STONES = 10'.
6. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES – SEE CHART.
7. CURB ENDS TO ROUNDED AND BATTERED FACES TO BE CUT WHEN CALLED FOR ON THE PLANS.
8. CURB SHALL BE INSTALLED PRIOR TO PLACEMENT OF TOP PAVEMENT COURSE.
9. JOINTS BETWEEN CURB STONES SHALL BE MORTARED.

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'



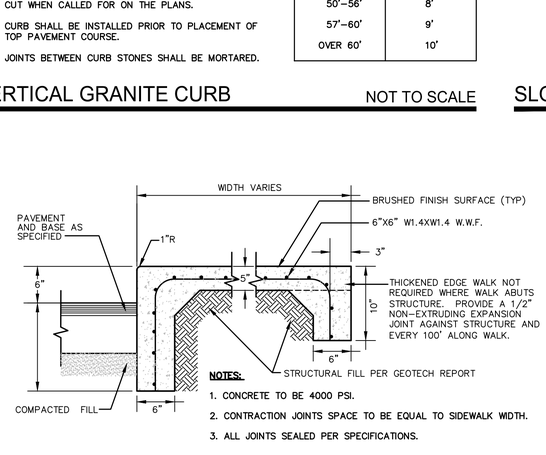
SLOPED GRANITE CURB

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'

NOT TO SCALE

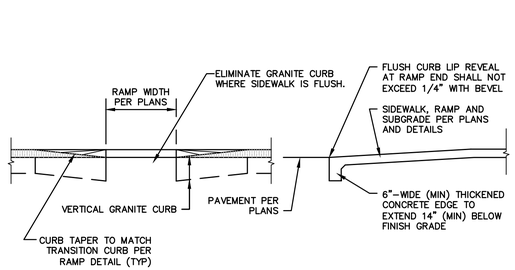


NOTES:

1. CONCRETE TO BE 4000 PSI.
2. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
3. ALL JOINTS SEALED PER SPECIFICATIONS.

MONOLITHIC CONCRETE CURB

NOT TO SCALE



FLUSH CURB AT RAMP DETAIL

NOT TO SCALE

ENGINEER:
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CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

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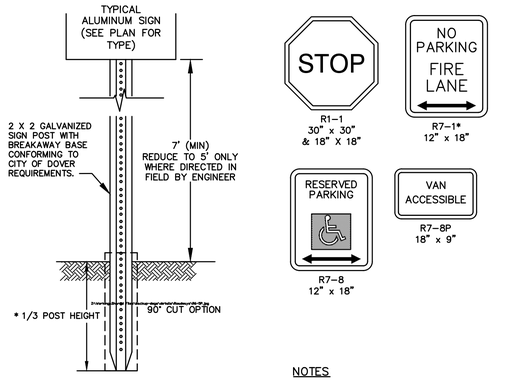
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DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

TITLE:
DETAILS

SHEET NUMBER:
D-5

P5057



NOTES

1. ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. ALL SIGN POSTS SHALL BE 2 X 2 GALVANIZED WITH BREAKAWAY BASE.

LENGTH: AS REQUIRED

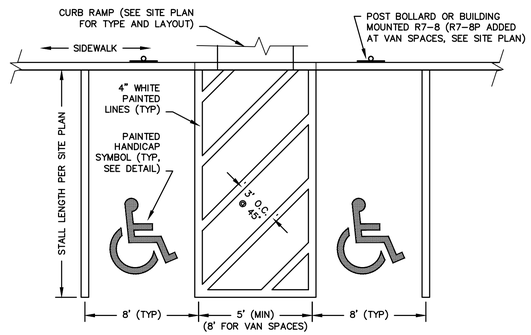
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)

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)

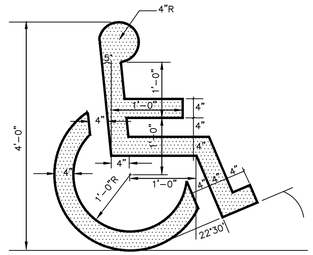
SIGN DETAILS

NOT TO SCALE



HANDICAP PARKING STALL LAYOUT

NOT TO SCALE

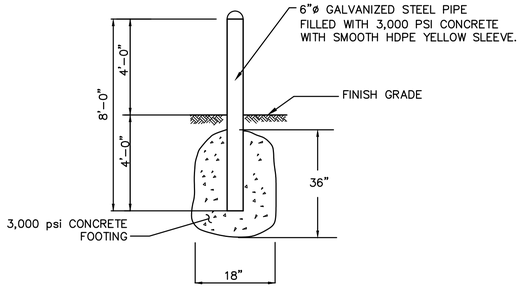


NOTES

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

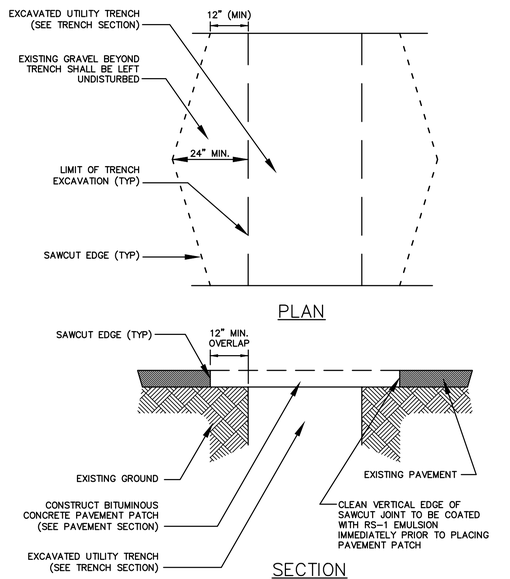
PAINTED HANDICAP SYMBOL

NOT TO SCALE



BOLLARD

NOT TO SCALE

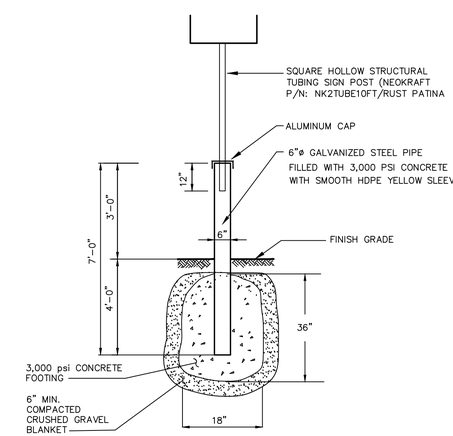


NOTES

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.

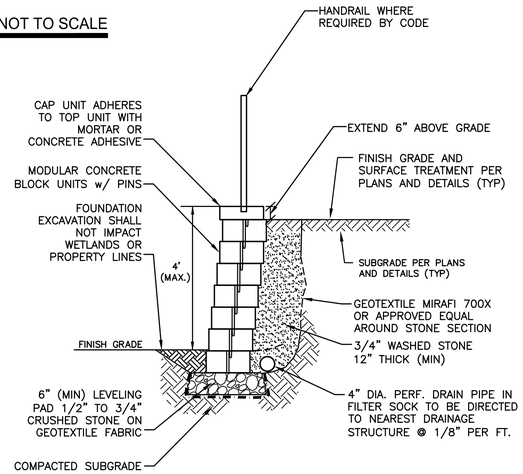
TYPICAL TRENCH PATCH

NOT TO SCALE



SIGN BOLLARD DETAIL

NOT TO SCALE

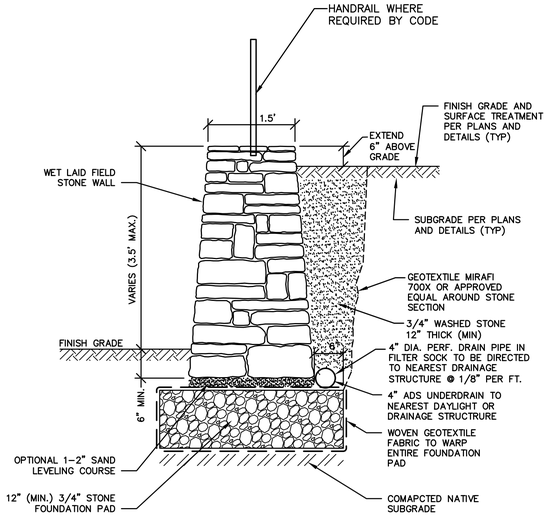


NOTES:

1. TYPICAL MODULAR BLOCK SHALL BE PRECAST CONCRETE MEASURING APPROXIMATELY 16"x12"x6". OTHER BLOCK SIZES MAY BE APPROVED BY THE ENGINEER UPON REQUEST. CAP UNITS SHALL BE PER THE STANDARDS OF THE SELECTED MANUFACTURER.
2. BLOCK MANUFACTURER SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. WALL SHALL BE INSTALLED PER THE REQUIREMENTS OF THE MANUFACTURER.
4. WALL HEIGHT SHALL NOT EXCEED 4' WITHOUT DESIGN DRAWINGS STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER.
5. LOCKING PINS MAY OR MAY NOT BE REQUIRED BASED ON THE WALL MANUFACTURER APPROVED BY THE ENGINEER.
6. WALL SHALL BE EMBEDDED BELOW EXISTING GRADE THE DEPTH OF AT LEAST ONE BLOCK UNLESS OTHERWISE SPECIFIED BY THE WALL MANUFACTURER.
7. WALL BATTER SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS.
8. BLOCK FINISH SHALL BE AT THE DISCRETION OF THE OWNER.
9. MODULAR BLOCK RETAINING WALL SHALL BE VERSA-LOK RETAINING WALL SYSTEMS (OR APPROVED EQUAL).

MODULAR BLOCK RETAINING WALL

NOT TO SCALE



NOTES:

1. FIELD STONE FINISH PER OWNER.
2. FIELD STONE WALL TO BE WET LAID, MORTAR SPECIFICATIONS AT CONTRACTOR'S DISCRETION. MORTAR SHALL NOT BE VISIBLE FROM EXTERIOR OF WALL EXCEPT AT WALL CAP.
3. WALL HEIGHT SHALL NOT EXCEED 4' WITHOUT DESIGN DRAWINGS STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER.
4. WALL SHALL BE EMBEDDED BELOW EXISTING GRADE THE DEPTH OF AT LEAST SIX INCHES.
5. 1"-2" SAND LEVELING COURSE MAY BE USED BETWEEN FOUNDATION PAD AND AND BOTTOM OF WALL AT CONTRACTOR'S DISCRETION.
6. WALL BATTER SHALL BE 1:12 (MIN).
7. WOVEN GEOTEXTILE FABRIC SHALL WRAP AROUND ENTIRE 3/4" STONE FOUNDATION PAD.

STONE RETAINING WALL

NOT TO SCALE

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
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CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

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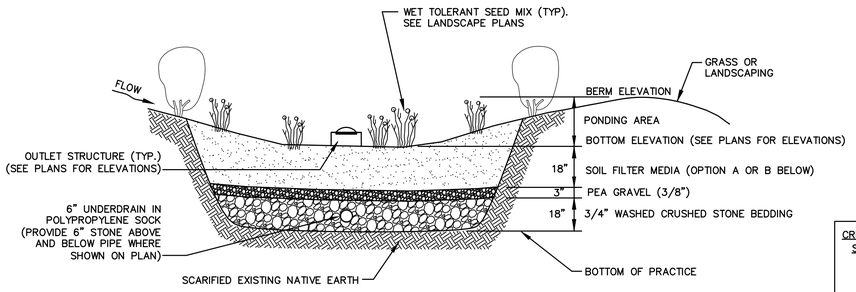
CITY FILE NO. P20-32

TAX MAP K, LOT 19
DOVER, NH

TITLE:
DETAILS

SHEET NUMBER:
D-6

P5057



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 NHDOT STANDARD SPECIFICATIONS

NOTES

1. WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
2. SOIL FILTER MEDIA SHALL BE EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.
3. DO NOT PLACE THE RAIN GARDEN INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
4. DO NOT DISCHARGE SEDIMENT–LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE RAIN GARDEN AREA DURING ANY STAGE OF CONSTRUCTION.
5. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24–HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72–HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

DESIGN REFERENCES

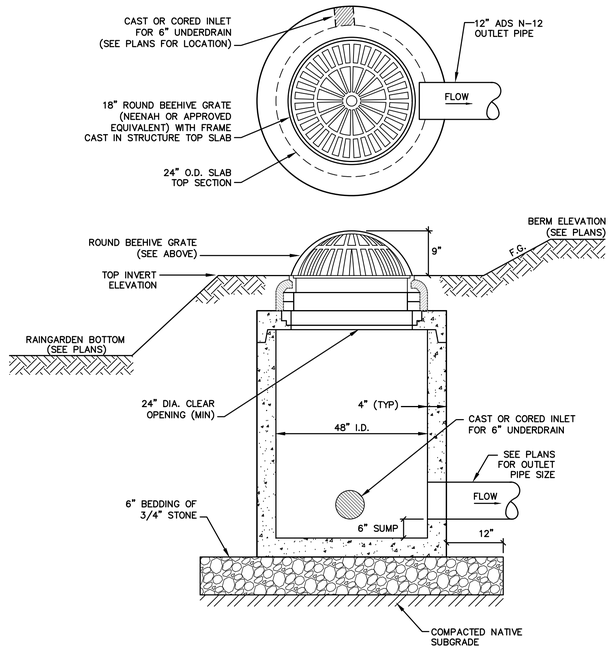
- UNH STORMWATER CENTER
- EPA (1999A)
- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

FILTER MEDIA MIXTURES

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

TYPICAL RAINGARDEN

NOT TO SCALE

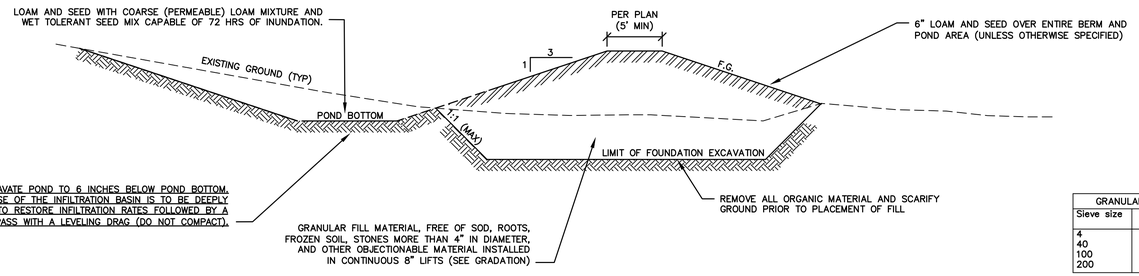


CONSTRUCTION SPECIFICATIONS

1. OUTLET STRUCTURE SHALL BE CONSTRUCTED ONSITE OR PRECAST TO EQUAL DIMENSIONS.
2. ALL JOINTS AND PIPE OPENINGS SHALL BE SEALED WATERTIGHT WITH MORTAR.
3. STRUCTURE IS TO BE BUILT TO WITHSTAND H20 LOADING.
4. SOIL UNDERLYING THE STRUCTURE'S GRAVEL BASE PAD AND THE PAD ITSELF ARE TO BE COMPACTED TO 95% MODIFIED PROCTOR.
5. ALL CONCRETE SHALL BE 4,000 PSI MINIMUM.

OUTLET STRUCTURE DETAIL

NOT TO SCALE



GRANULAR FILL GRADATION

Sieve size	Embankment Material % Passing sieve
4	90–100%
40	50–80%
100	29–43%
200	15–30%

Berm Construction Criteria

1. Foundation Preparation –– The foundation shall be cleared of trees, logs, stumps, roots, brush, boulders, sod, and rubbish. If suitable for reuse, the topsoil and sod shall be stockpiled and spread on the completed embankment and spillways. Foundation surfaces shall be sloped no steeper than 1:1. The foundation area shall be deeply tilled and scarified before placement of fill material. The surface shall have moisture added and/or it shall be compacted if necessary so that the first layer of fill can be bonded to the foundation.

   The cutoff trench and any other required excavations shall be dug to the lines and grades shown on the plans or as staked in the field. If they are suitable, excavated materials shall be used in the permanent fill.

   Existing stream channels in the foundation area shall be sloped no steeper than 1:1 and deepened and widened as necessary to remove all stones, gravel, sand, stumps, roots, and other objectionable material and to accommodate compaction equipment.

   Foundation areas shall be kept free of standing water when fill is being placed on them.

2. Granular Fill Placement –– The material placed in the fill shall be free of sod, roots, frozen soil, stones more than 4 inches in diameter and other objectionable material.

   Selected backfill material shall be placed around structures, pipe conduits, and drainage diaphragm at about the same rate on all sides to prevent damage from unequal loading.

   The placing and spreading of fill material shall be started at the lowest point of the foundation and the fill brought up in horizontal layers of such thickness that the required compaction can be obtained. The fill shall be constructed in 8" continuous horizontal layers except where openings or sectionalized fills are required. In those cases, the slope of the bonding surfaces between the embankment in place and the embankment to be placed shall not be steeper than 3 horizontal to 1 vertical. The bonding surface shall be treated the same as that specified for the foundation so as to insure a good bond with the new fill.

3. Moisture Control –– The moisture content of the fill material shall be adequate for obtaining the required compaction. Material that is too wet shall be dried to meet this requirement, and material that is too dry shall have water added and mixed until the requirement is met.

4. Compaction of berms –– Construction equipment shall be operated over the areas of each layer of fill to insure that the required compaction is obtained. Special equipment shall be used if needed to obtain the required compaction.

   Fill material shall be compacted to not less than 95% of AASHTO T99 Method C compaction method.

   Fill adjacent to structures, pipe conduits, and drainage diaphragm shall be compacted to a density equivalent to that of the surrounding fill by means of hand tamping or manually directed power tamper or plate vibrators. Fill adjacent to concrete structures shall not be compacted until the concrete is strong enough to support the load.

5. Protection –– A protective cover of vegetation shall be established on all exposed surfaces of the embankment, spillway, and borrow area in accordance with the plans. If soil or climatic conditions preclude the use of vegetation and protection is needed, non–vegetative means, such as mulches or gravel, may be used. In some places, temporary vegetation may be used until conditions permit establishment of permanent vegetation.

The distribution and gradation of materials shall be such that no lenses, pockets, streaks, or layers of material differ substantially in texture of gradation from the surrounding material. If it is necessary to use materials of varying texture and gradation, the more impervious material shall be placed in the center and upstream parts of the fill. If zoned fills of substantially differing materials are specified, the zones shall be placed according to the lines and grades shown on the drawings. The complete work shall conform to the lines, grades, and elevations shown on the drawings or as staked in the field.

Maintenance

Maintenance is necessary if detention/retention basins are to continue to function as originally designed. A local government, a designated group such as a homeowners' association, or an individual must be assigned responsibility for maintaining the structures and the basin area. A maintenance plan should be developed that outlines the maintenance operations and a schedule for carrying out the procedures.

The following should be considered in formulating a maintenance plan:

1. Embankment –– The embankment should be inspected annually to determine if rodent burrows, wet areas, or erosion of the fill is taking place.
2. Vegetation –– The vegetated areas of the structure should be protected from damage by fire, grazing, traffic, and dense weed growth. Lime and fertilizer should be applied as necessary as determined by soil tests. Trees and shrubs should be kept off the embankment and emergency spillway areas.
3. Sediment –– Sediment should be continually checked in the basin. When sediment accumulations reach the predetermined design elevation, then the sediment should be removed and properly disposed of.
4. Safety Inspections –– All permanent impoundments should be inspected by a qualified professional engineer on a periodic basis. If there is potential for significant damage or loss of life downstream, then the inspection should be carried out annually.

BERM DETAIL

NOT TO SCALE

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433–2335 www.ALTUS–ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	TRC COMMENTS	CDB	06/30/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE:
NO SCALE

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

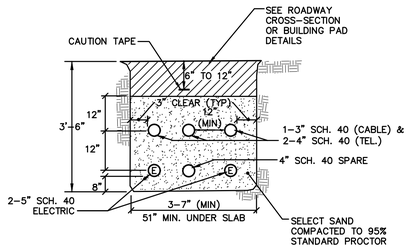
APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND
COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20–32
TAX MAP K, LOT 19
DOVER, NH

TITLE:
DETAILS

SHEET NUMBER:
D-7

P5057



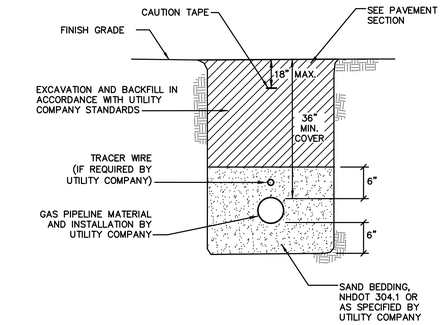
SAND BLANKET/BARRIER

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



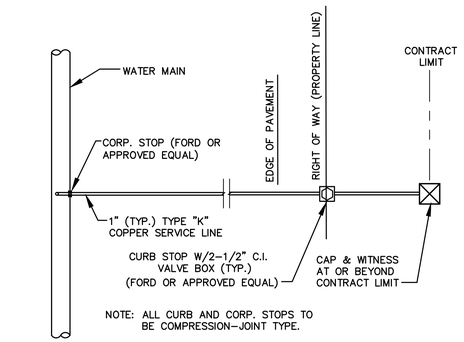
SAND BLANKET/BARRIER

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

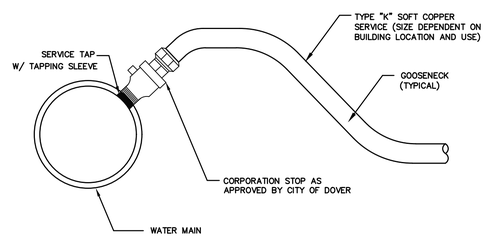
NOTES

1. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY AND PROVIDE ALL EXCAVATION, COMPACTION AND BACKFILL FOR PIPE INSTALLATION WITHIN THE PROJECT SITE.
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.

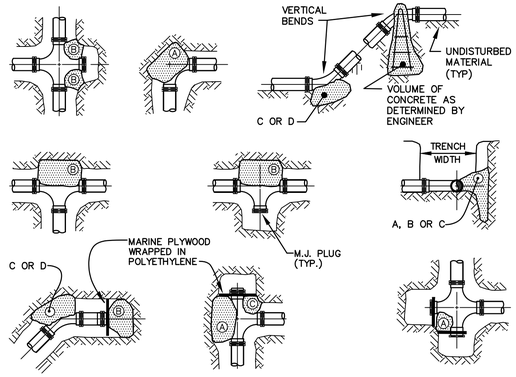
GAS TRENCH NOT TO SCALE



NOTE: ALL MATERIALS AND SPECIFICATIONS SHALL CONFORM TO CITY OF DOVER WATER DEPARTMENT STANDARDS AND REQUIREMENTS. VERIFY PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.



WATER SERVICE CONNECTION NOT TO SCALE

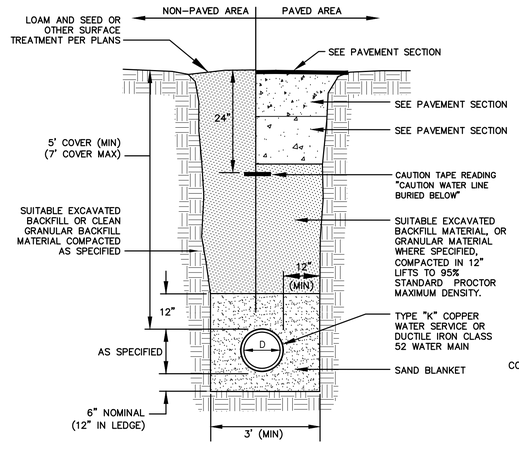


TEST PRESSURE = 150 psi	SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL					
	REACTION TYPE	PIPE SIZE				
		4"	6"	8"	10"	12"
	A 90°	0.89	2.19	3.82	11.14	17.24
	B 180°	0.65	1.55	2.78	8.38	12.00
	C 45°	0.48	1.19	2.12	6.02	9.32
	D 22–1/2°	0.25	0.60	1.06	3.08	4.74
	E 11–1/4°	0.13	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



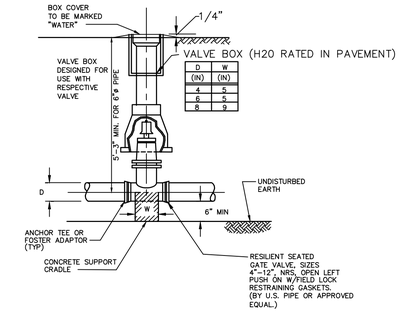
SAND BLANKET/BARRIER

SIEVE SIZE	% FINER BY WEIGHT
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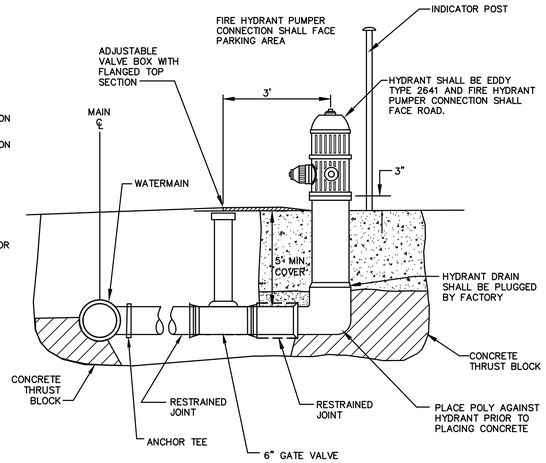
NOTES

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. WATER MAINS SHALL BE POLY WRAPPED.

WATER MAIN TRENCH NOT TO SCALE



WATER VALVE DETAIL 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

P5057

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433–2335 www.ALTUS–ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD APPROVAL

ISSUE DATE: JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	TRC COMMENTS	CDB	06/30/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE: NO SCALE

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20–32
TAX MAP K, LOT 19
DOVER, NH

TITLE: *DETAILS*

SHEET NUMBER: D-8

MANHOLE NOTES:

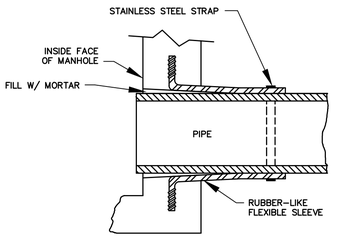
1. IT IS THE INTENTION OF THE NHDES WASTEWATER BUREAU THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY BY THE BUREAU FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT IN ANY APPROVED MANHOLE. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE, A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED.
3. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C4706.
4. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE NHDES REQUIREMENTS. SEE SEWER SPECIFICATIONS – 02500 SEWERS AND 02550 SEWER MANHOLES.
5. INVERTS AND SHELVES MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES, OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
6. FRAMES AND COVERS MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3-INCH LETTERS CAST INTO THE TOP SURFACE.
7. BEDDING SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33.

100%	PASSING 1 INCH SCREEN
90–100%	PASSING 3/4 INCH SCREEN
20–55%	PASSING 3/8 INCH SCREEN
0–10%	PASSING #4 SIEVE
0–5%	PASSING #8 SIEVE

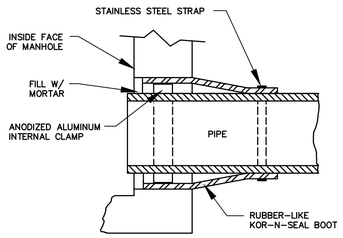
   WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2" TO 1/2" SHALL BE USED.
8. CONCRETE FOR DROP SUPPORT SHALL CONFORM TO THE REQUIREMENT FOR CLASS A (3000 LBS.) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:

   CEMENT 6.0 BAGS PER CUBIC YARD
   WATER 5.75 GALLONS PER BAG CEMENT
   MAXIMUM SIZE OF AGGREGATE 1 INCH
9. FLEXIBLE JOINT A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:

   PVC PIPE – 60"
   RCP & CI PIPE – ALL SIZES – 48"
   AC & VC PIPE – UP THROUGH 12" DIAMETER – 18"
   AC & VC PIPE – LARGER THAN 12" DIAMETER – 36"
10. SHALLOW MANHOLE IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.



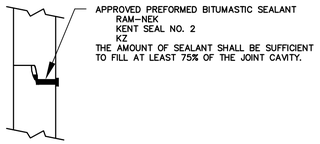
LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR EQUAL)



KOR-N-SEAL JOINT SLEEVE
(OR EQUAL)

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

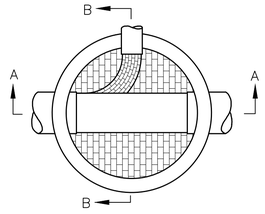
DETAIL-A



BITUMASTIC

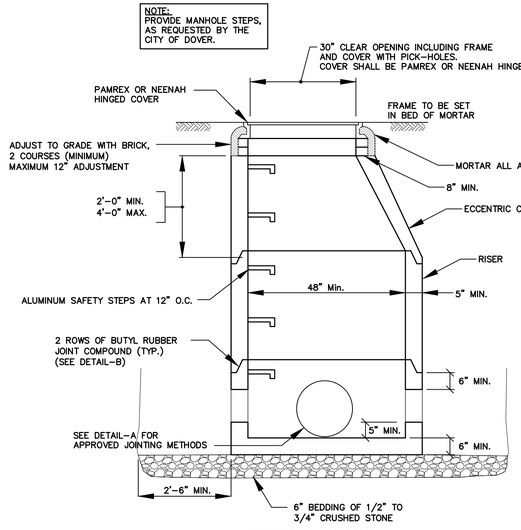
NOTE: ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

DETAIL-B
(APPROVED MANHOLE SECTION JOINTING METHODS)

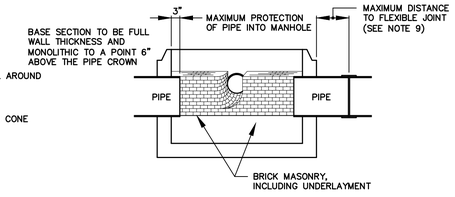


PLAN

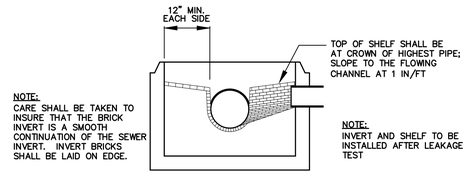
NOTE:
PROVIDE MANHOLE STEPS, AS REQUESTED BY THE CITY OF DOVER.



TYPICAL SECTION

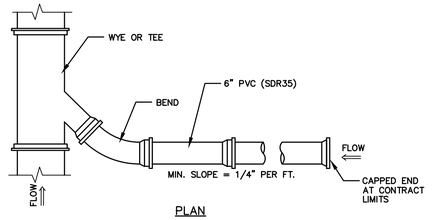


SECTION A-A

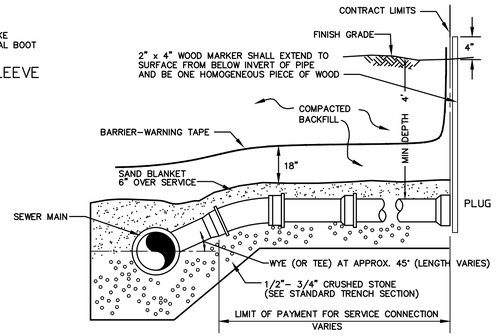


SECTION B-B

SEWER MANHOLE DETAILS NOT TO SCALE



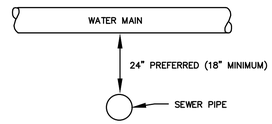
PLAN



NOTE: SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.

ELEVATION

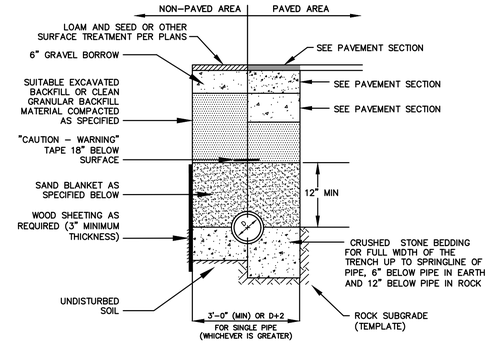
TYPICAL SERVICE CONNECTION NOT TO SCALE



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



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

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, 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 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS 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 DOVER'S STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE REQUIREMENTS.

SEWER TRENCH NOT TO SCALE

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JUNE 30, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	05/07/20
1	NHDES SEWER SUBMITTAL	CDB	05/07/20
2	TRC COMMENTS	CDB	06/30/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE:
NO SCALE

OWNER:
POINTE WEST, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE – PHASE 5
RESIDENTIAL AND COMMERCIAL
MIXED USE DEVELOPMENT
CITY FILE NO. P20-32
TAX MAP K, LOT 19
DOVER, NH

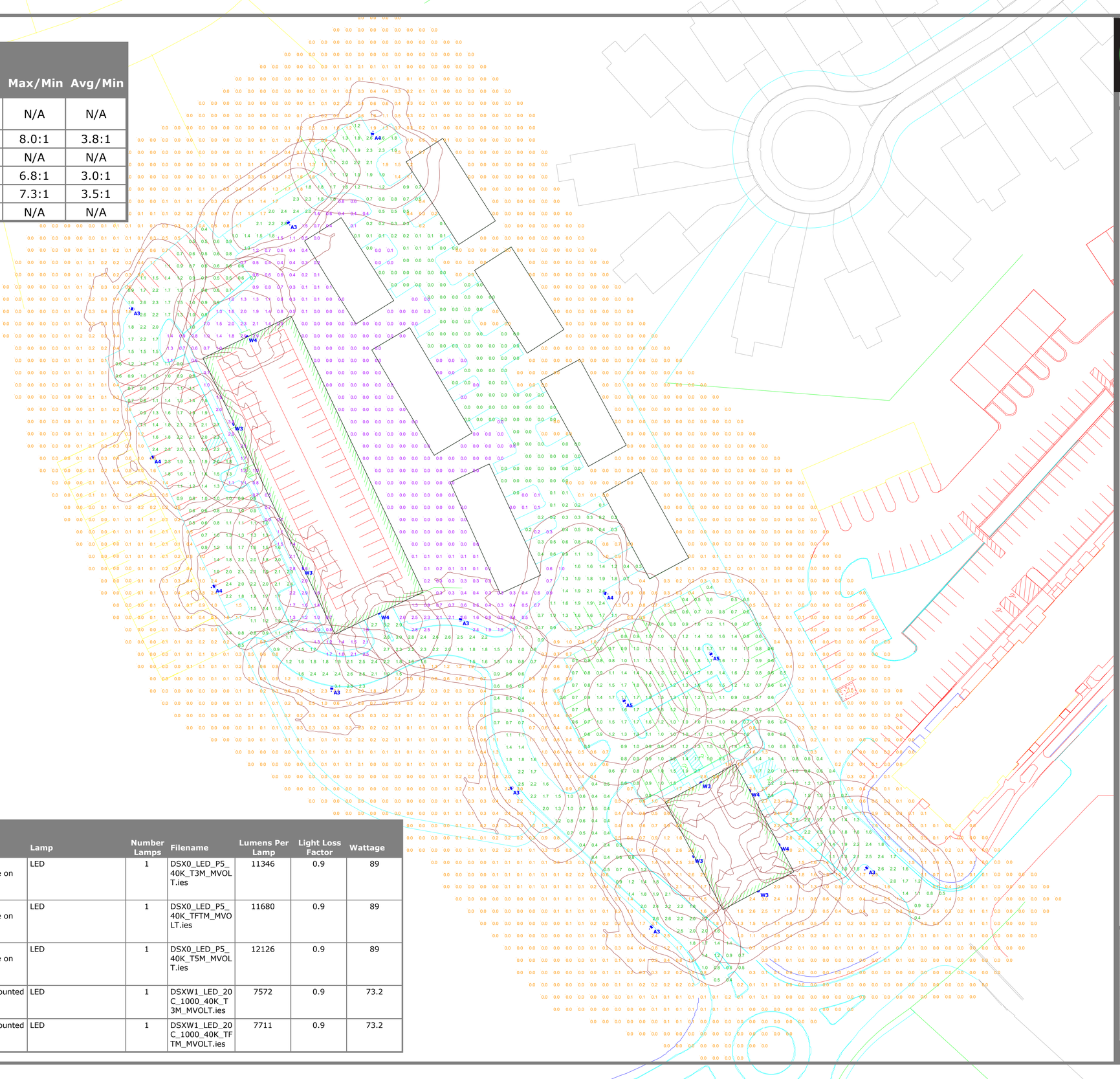
TITLE:
SEWER DETAILS

SHEET NUMBER:
D-9

P5057

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Between Townhouses & Residential Building	+	0.5 fc	3.6 fc	0.0 fc	N/A	N/A
Driveway	+	1.5 fc	3.2 fc	0.4 fc	8.0:1	3.8:1
Outside of Parking Lots	+	0.2 fc	3.1 fc	0.0 fc	N/A	N/A
Parking Lot (near mixed use building)	+	1.2 fc	2.7 fc	0.4 fc	6.8:1	3.0:1
Residential Parking Lot	+	1.4 fc	2.9 fc	0.4 fc	7.3:1	3.5:1
Townhouse Parking Lot	+	0.6 fc	2.8 fc	0.0 fc	N/A	N/A



Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A3	7	Lithonia Lighting	DSX0 LED P5 40K T3M MVOLT SPA DDBXD with SSS 20 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 22ft (20ft pole on 2ft base)	LED	1	DSX0_LED_P5_40K_T3M_MVOLT.ies	11346	0.9	89
	A4	4	Lithonia Lighting	DSX0 LED P5 40K TFTM MVOLT SPA DDBXD with SSS 20 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 22ft (20ft pole on 2ft base)	LED	1	DSX0_LED_P5_40K_TFTM_MVOLT.ies	11680	0.9	89
	A5	2	Lithonia Lighting	DSX0 LED P5 40K T5M MVOLT SPA DDBXD with SSS 20 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 22ft (20ft pole on 2ft base)	LED	1	DSX0_LED_P5_40K_T5M_MVOLT.ies	12126	0.9	89
	W3	5	Lithonia Lighting	DSXW1 LED 20C 1000 40K T3M MVOLT DDBXD	DSXW1 LED Wall Pack; mounted at 16ft	LED	1	DSXW1_LED_20C_1000_40K_T3M_MVOLT.ies	7572	0.9	73.2
	W4	4	Lithonia Lighting	DSXW1 LED 20C 1000 40K TFTM MVOLT DDBXD	DSXW1 LED Wall Pack; mounted at 16ft	LED	1	DSXW1_LED_20C_1000_40K_TFTM_MVOLT.ies	7711	0.9	73.2

VISUAL

POINTE WEST
Dover, NH
Site Lighting Layout

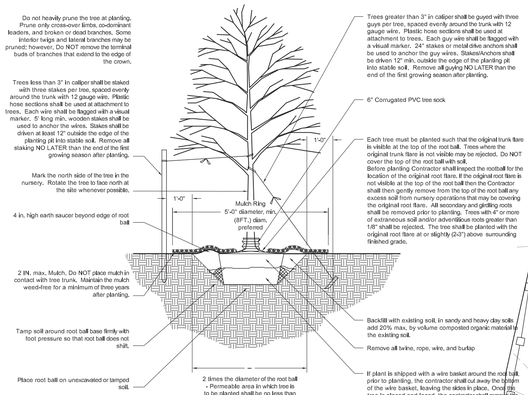
Designer
Heidi G. Connors
Visible Light, Inc.
24 Stickney Terrace
Suite 6
Hampton, NH 03842

Date
4/15/2020

Scale
1"=40'

Drawing No.

Summary



TREE PLANTING DETAIL


Existing evergreens to remain
Existing tree to remain, typ.
Existing tree to be removed
Seed Mix A
UaP
Seed Mix A
Lawn
PsK
Sr
Z
Ck
JW
Ig(8)
Ros(7)
Cal(10)
Day(18)
Hyl(7)
SyP(19)
Ig(5)
JcSG(7)
Ig(10)
Hyl(9)
Ig(6)
Pm(13)
VmB(333)
MalP
MalP
VmB(345)
Pm(13)
VmB(335)
MalP
Sp(13)
MalP
VmB(425)
SyP(8)
VmB(385)
MalP
MalP
VmB(372)
Sp(13)
SyB(11)
Qp
Bn(3)
PoG
SyP(8)
Ls
Day(40)
Cal(24)
Day(42)
ThS(3)
ClH(25)
Ls
Ls
Gb
JcSG(8)
ClH(12)
Gb
JcSG(8)
Day(42)
Cal(25)
Day(40)
SyP(11)
Ls
Qp
Pm(19)
Mal
Mal
Mal
Mag
Qp
Ar(3)
Gb
HyI(3)
Ig(8)
RhA
RhA
Ig(8)
Mag
HyI(9)
Bn
Bn
TaxE(5)
RhA
Day(12)
RhA
TaxE(5)
HyI(3)
Hs
Sp(6)
Sp(5)
VmB(230)
Hs(3)
Ig(17)
UaP(2)
HyI(7)
JW(5)
HyI(6)
UaP
UaP(3)
Ig(30)
Iv(14) & IvM (2)
Cle(70)
Dp(214)
Ig(20)
Ar
Day(54)
Cal(10)
Cal(13)
Ig(5)
JW
Ig(5)
JW
JW
Ig(8)
Pm(13)
VmB(333)
MalP
Cal(10)
Day(18)
HyI(9)
Ig(5)
Sp(13)
MalP
VmB(425)
SyP(8)
VmB(385)
MalP
MalP
VmB(372)
Sp(13)
SyB(11)
Qp
Bn(3)
Lawn
Lawn
Lawn



JAD DESIGN GROUP INC.	The Stabile Companies	Pointe Place	A 1.0
	Amherst, NH	Dover, NH	



JAD DESIGN GROUP INC.	The Stabile Companies	Pointe Place	A 1.0
	Amherst, NH	Dover, NH	

Font Elevation

CONTRACTOR TO VERIFY ALL DIMENSIONS AND STRUCTURAL MEMBERS PRIOR TO STARTING CONSTRUCTION. ALL BUILDING IS TO MEET OR EXCEED ALL STATE AND LOCAL BUILDING CODES.

JAD DESIGN GROUP INC.
P.O. BOX 728 AMHERST, NH 03031
PHONE: (603) 554-1199
www.jadhomes.com

Job : 2650
Ref :
Date: 9/20/17
Rev :

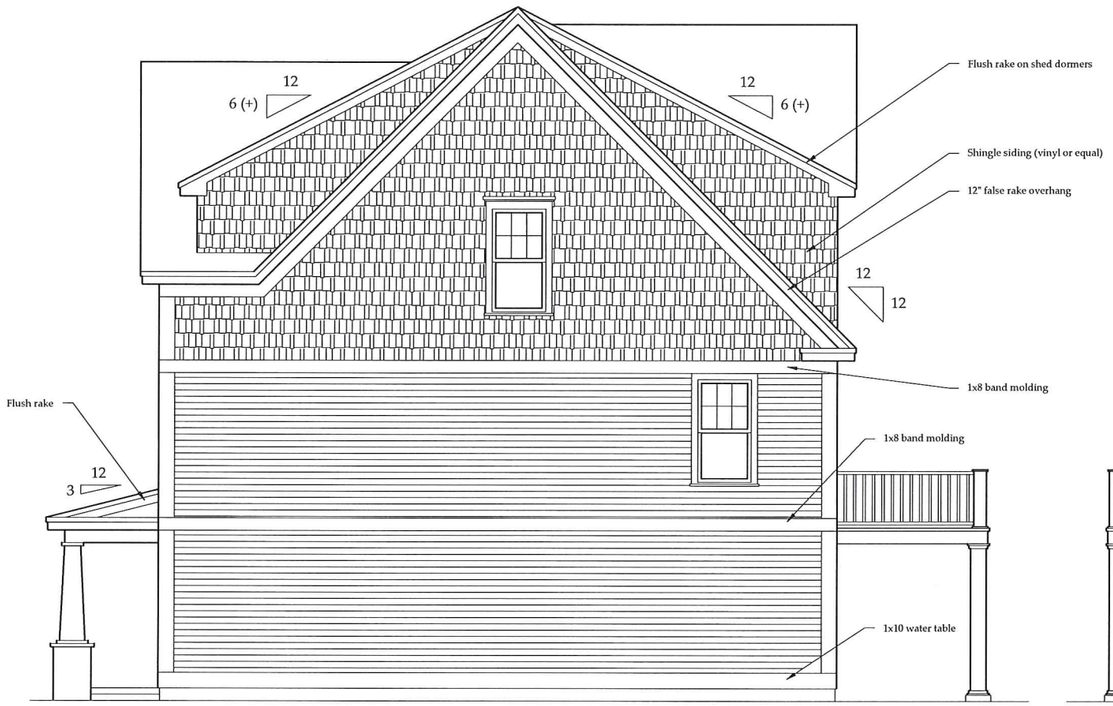
The Stabile Companies
Pointe Place

Pointe Place Townhouse
Dover, NH

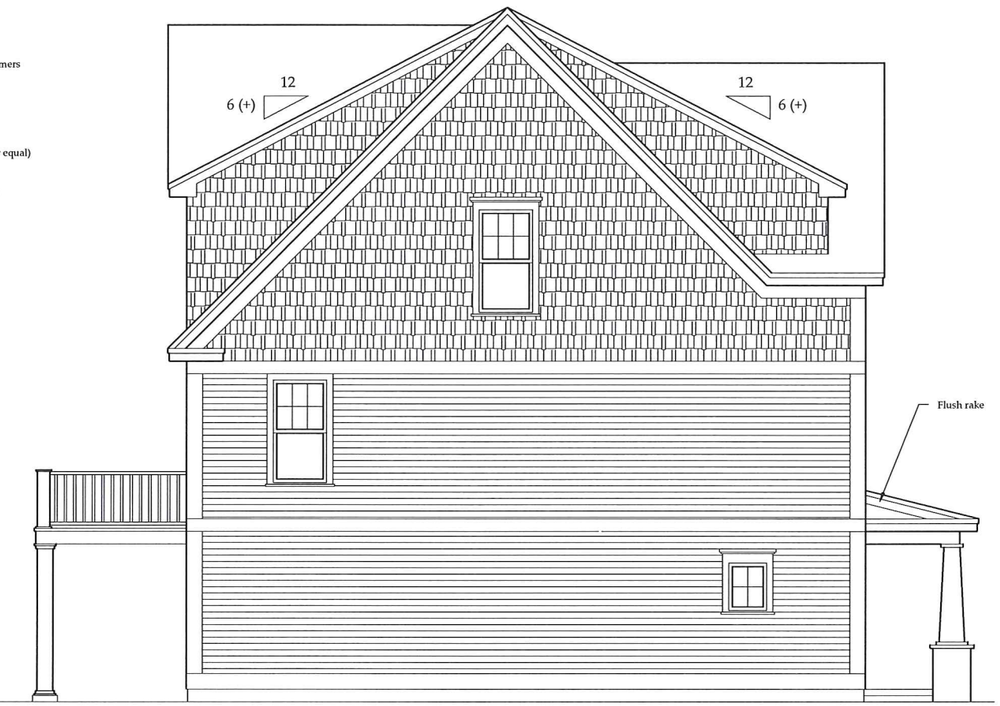
Elevations
Scale : 1/8" = 1'-0"

SHEET
A-2.1

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JAD DESIGN GROUP INC.



Right Side Elevation



Left Side Elevation

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JAD DESIGN GROUP INC.
P.O. BOX 728 AMHERST, NH 03031
PHONE: (603) 554-1199
www.jadhomes.com

Job : 2650
Ref :
Date: 9/20/17
Rev :

The Stabile Companies
Pointe Place

Pointe Place Townhouse
Dover, NH

Exterior Elevations
Scale : 1/8" = 1'-0"

SHEET
A-2.2

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Rear Elevation

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JAD DESIGN GROUP INC.
P.O. BOX 728 AMHERST, NH 03031
PHONE: (603) 554-1199
www.jadhomes.com

Job : 2650
Ref :
Date: 9/20/17
Rev :

The Stabile Companies
Pointe Place

Pointe Place Townhouse
Dover, NH

Exterior Elevations
Scale : 1/8" = 1'-0"

SHEET
A-2.3

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Unit - 1
410 sf

Unit - 2
372 sf

Unit - 3
410 sf

Unit - 4
372 sf

Unit - 5
410 sf

Lower Level Plan
8'0" pour

CONTRACTOR TO VERIFY ALL DIMENSIONS AND STRUCTURAL MEMBERS PRIOR TO STARTING CONSTRUCTION. BUILDING IS TO MEET OR EXCEED ALL STATE AND LOCAL BUILDING CODES.

JAD DESIGN GROUP INC.
P.O. BOX 728 AMHERST, NH 03031
PHONE: (603) 554-1199
www.jadhomes.com

Job : 2650
Ref :
Dover, NH
Rev :

The Stabile Companies
Pointe Place

Pointe Place Townhouse

Lower Level Plan
Scale : 1/8" = 1'-0"

SHEET
A-3.1

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JAD DESIGN GROUP INC.



Unit - 1
720 sf

Unit - 2
680 sf

Unit - 3
680 sf

Unit - 4
640 sf

Unit - 5
680 sf

Main Floor Plan
9'0" ceiling height

CONTRACTOR TO VERIFY ALL DIMENSIONS AND STRUCTURAL MEMBERS PRIOR TO STARTING CONSTRUCTION. BUILDING IS TO BE CONSTRUCTED TO ALL STATE AND LOCAL BUILDING CODES.

JAD DESIGN GROUP INC.
P.O. BOX 728 AMHERST, NH 03031
PHONE: (603) 554-1199
www.jadhomes.com

Job : 2650
Ref :
Rev :
Dover, NH

The Stabile Companies
Pointe Place

Pointe Place Townhouse

Main Level Floor Plan
Scale : 1/8" = 1'-0"

SHEET
A-4.1

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T|W DESIGNS LLC
P.O. BOX 69 STRAFFORD, NH 03884
P: 603.664.2181 | F: 603.664.9508

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WHITCHER BUILDERS



PROPOSED EXTERIOR 3-D RENDERING

No.	Description	Date

Revision Schedule

Project Info:

Pointe Place Bld.# 6

Pointe Place
Dover, NH

Sheet Status:

Latest Release:
Issued For: Progress Print
Org. Issue Date: N.F.C.

JOB NO: 20008
DRAFTED: MLN
CHECKED: JMT

SCALE:

Sheet Title:

Exterior 3-D Rendering

Sheet Number:

3-D

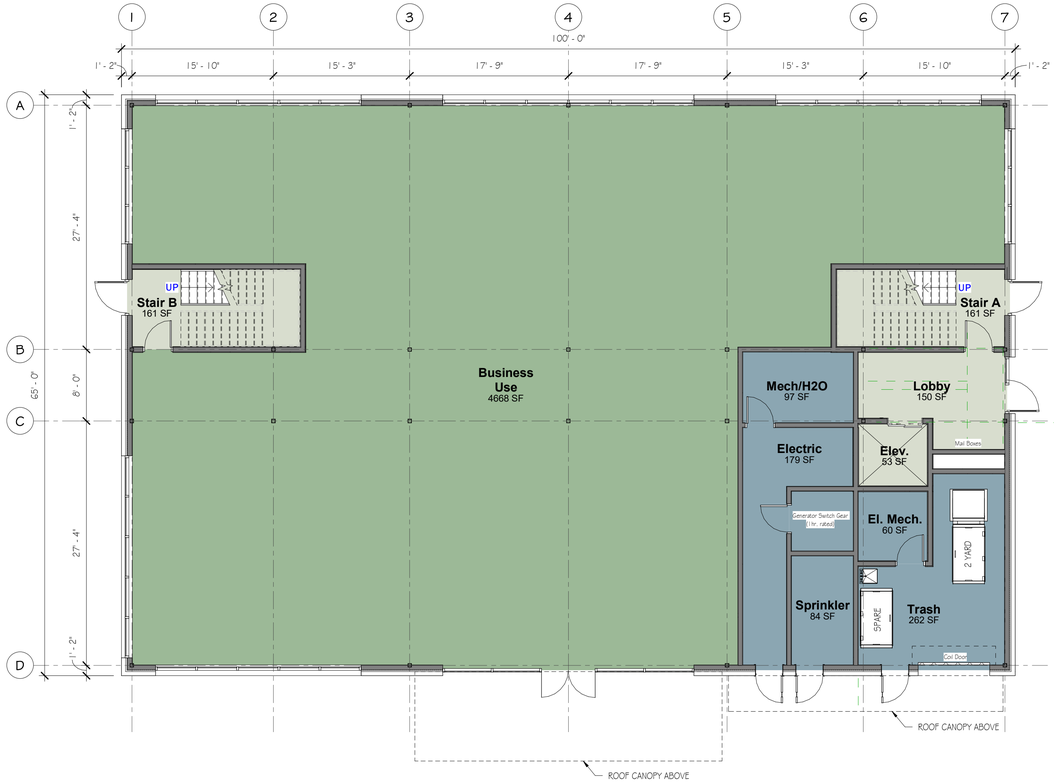
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P.O. BOX 69 STRAFFORD, NH 03884
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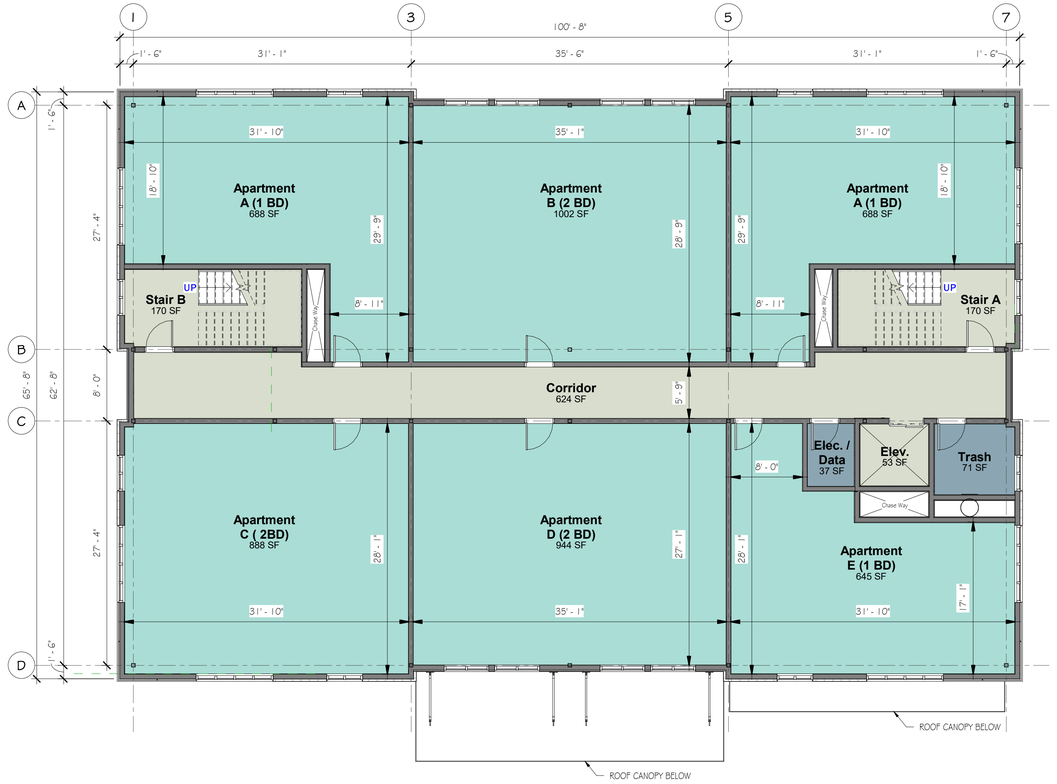
WHITCHER BUILDERS



1 First Floor Plan
1/8" = 1'-0"

Occ. Legend

- Bussiness
- Egress
- Mech



2 Typical Residence Floor Plan
1/8" = 1'-0"

Occ. Legend

- Dwelling Unit
- Egress
- Mech

0' 5' 10' 20' 40'

True

PROJECT NORTH

No. Description Date

Revision Schedule

Project Info:

Pointe Place Bld.# 6

Pointe Place
Dover, NH

Sheet Status:

Latest Release:
Issued For: Progress Print
Org. Issue Date: N.F.C.

JOB NO: 20008
DRAFTED: JMT
CHECKED: JMT
SCALE: 1/8" = 1'-0"

Sheet Title:

Plan & Elevation

Sheet Number:

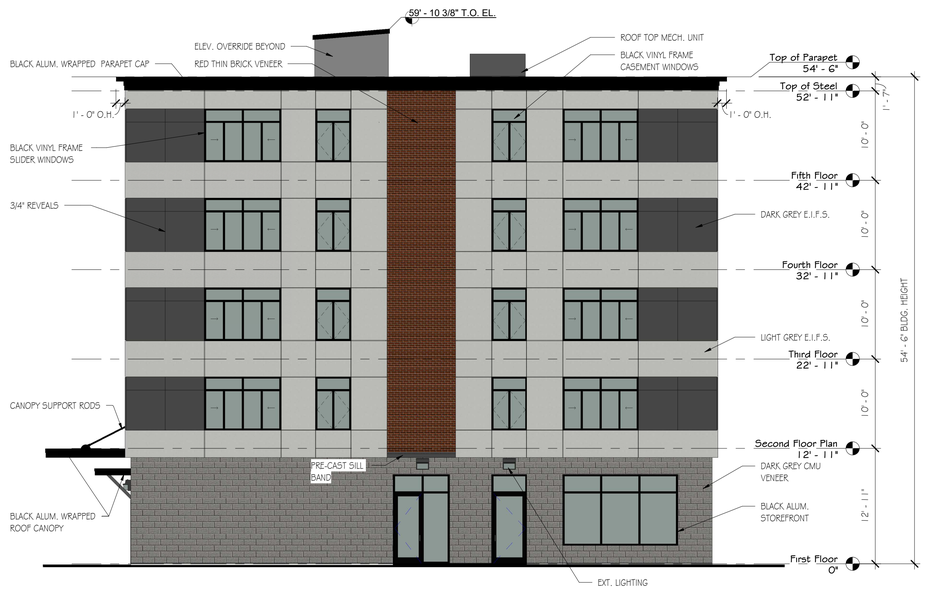
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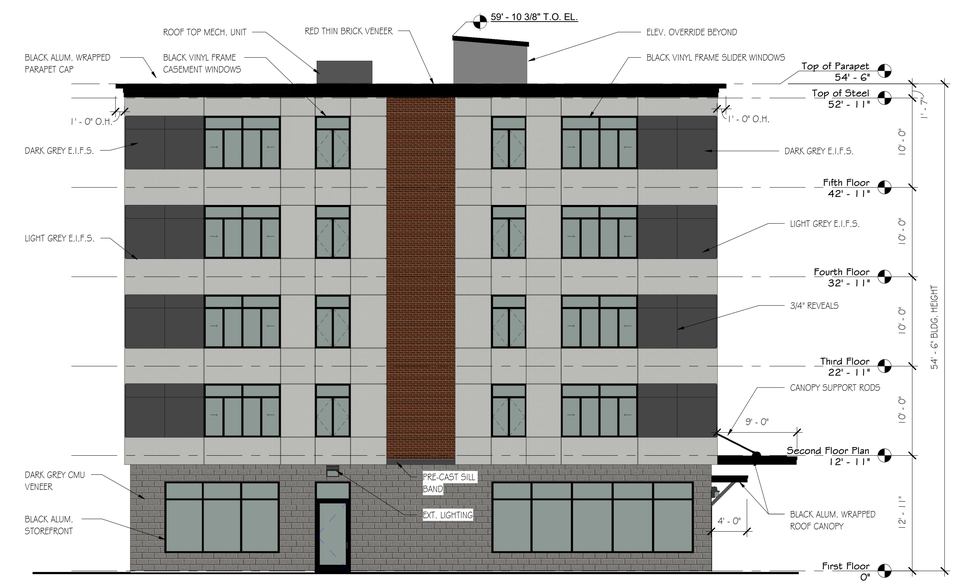
1 FRONT EXTERIOR ELEVATION
1/8" = 1'-0"



2 RIGHT SIDE EXTERIOR ELEVATION
1/8" = 1'-0"



3 REAR SIDE EXTERIOR ELEVATION
1/8" = 1'-0"



4 LEFT SIDE EXTERIOR ELEVATION
1/8" = 1'-0"

0' 5' 10' 20' 40'

TW DESIGNS LLC
P.O. BOX 69 STRAFFORD, NH 03884
P: 603.664.2181 | F: 603.664.9508

DESIGN | BUILD Architectural Document Set -
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WHITCHER BUILDERS

No. Description Date

Revision Schedule

Project Info:

Pointe Place Bld.# 6

Pointe Place
Dover, NH

Sheet Status:

Latest Release:
Issued For: Progress Print
Org. Issue Date: N.F.C.

JOB NO: 20008
DRAFTED: MLN
CHECKED: JMT
SCALE: 1/8" = 1'-0"

Sheet Title:

Exterior Elevations

Sheet Number:

A3.1

Printed on: 5/19/2020

T:\3 Projects\20008-Pointe Place 6\20008-C_Lower.rvt

City of Dover, New Hampshire
SITE REVIEW APPLICATION

[Revision Date: June 4, 2019]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: The Stabile Companies Telephone # 603-889-0318

Address of Applicant: 20 Cotton Rd, Nashua NH, 03063

E-Mail Address: Eric Jackson ejackson@stabilecompanies.com

Name of Property Owner (*if different from applicant*): Lofts at Pointe Place Condominium Assn. Telephone #

Address of Property Owner: P.O. Box 9, Somersworth, NH 03878

PROPERTY INFORMATION

Address of Property: Artisan Way (at Pointe Place)

Assessor's Map # K Lot(s) # 19-7 & 19-5

Zoning District(s) IT Overlay District(s) RCM

Size of Parcel: sq. ft. ac. Property Deed: Book Page:

Existing Use of Property: Residential

SITE PLAN INFORMATION

Describe Proposed Use: No Change - Residential

Area of Parcel to be Developed: 3,500 sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: Ø

Number of Parking Spaces: Existing 40 Proposed 9

Highway Access (check where applicable): X City Street ____ State Highway

Number of Employees Total: N/A In Maximum Shift:

Disposition of Parcel: No new buildings

Building Setbacks:

Building Footprint — sq. ft.

Front Yard — ft.

Total Building Area — sq. ft.

Rear Yard — ft.

Paved Area 2,950 sq. 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? _____

BUILDING INFORMATION

Type of Building to be Built: N/A

Height of Building: — Finished Floor Elevation: —

Number of Seats (where applicable) _____

Estimated value of construction: _____Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: N/A

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

SURVEYOR INFORMATION

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

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

Professional License #: _____ E-mail address: kevin@surveynh.com

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Cory D. Belden, PE Altus Engineering, Inc.

Address 133 Court St, Portsmouth NH 03801 Telephone #: 603-433-2335

Professional License #: 14239 E-mail address: cbelden@altus-eng.com

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) N/A

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) N/A

Address _____Telephone #: _____

Professional License #: _____ E-mail address: _____

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) N/A

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: SBL (See LOA) Date: 7/2/20

Signature of Applicant (*if different from owner*): _____ Date: 7/2/20

Signature of Agent: SBL (Engineer) Date: 7/2/20

AUTHORIZATION TO ENTER SUBJECT PROPERTY

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

Signature of Property Owner: SBL Date: 7/2/20

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: SBL Date: 7/2/20

Signature of Applicant (*if different from owner*): _____ Date: 7/2/20

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: SBL Date: 7/2/20

Signature of Applicant (*if different from owner*): _____ Date: 7/2/20

Varney Brook Lands, LLC
Tax Map K, Lot 19-5

PLANNING BOARD FEE SCHEDULE

(Revised February 10, 2020)

Below are the fees associated with plan review. Please complete the information below and provide payment with your application submittal. Plan review fees shall be paid prior to technical review committee (TRC) being scheduled. For plans not requiring TRC review, fees are due 21 days prior to the Planning Board meeting. Staff will coordinate abutter/notice fees, which will be invoiced and must be paid 28 hours before the Planning Board meeting for an application to be heard. Fees shall be paid by cash or check made payable to "City of Dover."

A. Plan Review Fees

1. Application fee for the following (SELECT ALL THAT APPLY):

- ☐ SUBDIVISION $150.00 x # _____ new lots created= $_____
- ☐ LOT LINE ADJUSTMENT $100.00 X # of lots involved= $_____
- ☐ TRANSFER OF DEVELOPMENT RIGHTS Application fee $150.00= $_____
- ☐ SITE REVIEW – RESIDENTIAL $100.00 x # ____ per dwelling unit= $_____
- ☐ SITE REVIEW – NON-RESIDENTIAL (not to exceed $10,000)
  - o New construction $.15 sq. ft. x # _____ sq. ft.= $_____
  - o Additions (new floor space) $.10 per sq. ft. x # _____sq. ft.= $_____
- ☐ MOTEL/HOTEL $35.00 x # ___ per lodging unit= $_____
- ☐ CHANGE OF USE (not to exceed $5,000)
  - o Existing floor spaces $.10 per sq. ft. x # _____ sq. ft. = $_____
- ☐ CONDITIONAL USE PERMIT $150.00 x # _____ per application= $_____
- ☐ GRAVEL PIT/ EXCAVATIONS
  - o Application fee $50.00= $_____
  - o Permit fee $75.00= $_____
- ☒ EXTENSIONS OF/AMENDMENTS TO/WAIVERS FOR AN APPROVED PLAN
  $50.00 x # 3 per hour of review (3 hour minimum)= $ 150
- ☐ REQUEST FOR REZONING Application fee $150.00= $_____
- ☐ DRIVEWAY WAIVER Application fee $100.00= $_____

SUB TOTAL= $_____

AND

2. IMPERVIOUS PAVED AREA (for new development or additions to existing parking lots (not to exceed $10,000) $.07 sq. ft. x # 2,950 = $ 206.50

TOTAL PLAN REVIEW FEE= $ 356.50

B. Abutter Notification/Mailing Labels - this office will create and print the abutter list and provide labels in triplicate for each abutter. The applicant/owner will need to review the list and provide to this office the engineer, architect, licensed land surveyor (LLS), licensed landscape architect (LLA) and/or soil scientist whose professional seal appears on the plan with names and addresses for notices.

- ☐ Applicant & Owner, engineer, architect, LLS, LLA and/or soil scientist
  - o Certified letters fee # _____ of x $8.00= $ TBD
- ☐ Certified letters fee: # of abutters _____ X $8.00= $_____
- ☐ First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00= $_____
- ☐ Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00= $_____

SUB TOTAL= $_____

C. Fo**ster's newspaper public notice** fee $ 100.00

TOTAL NOTICE FEE= $_____

The above amount must be paid 28 hours prior to the Planning Board meeting, to be heard.

ALTUS
ENGINEERING, INC.

Civil
Site Planning
Environmental
Engineering

133 Court Street
Portsmouth, NH
03801-4413

DRAINAGE MEMO

For Proposed Nine Stall Parking Lot
@ The Lofts at Pointe Place
Condominium Association
Artisan Way, Dover, NH
Tax Map K, Lot 19-7

To: Dave White, City Engineer
Christopher Parker, Planning Director

From: Cory Belden, PE, Altus Engineering, Inc.

Date: July 2, 2020

This drainage memorandum has been prepared to address the revisions to the drainage design from the proposed nine (9) parking lot that is proposed by the Stabile Companies on Tax Map K, Lot 19-5 and 19-7. The parking lot will service the townhomes located on Lot 19-7 and owned by the Lofts at Point Place Condominium Association. An easement will be provided from Lot 19-7 to allow access and parking on the lot. The proposed parking lot will provide approximately 2,950 square feet (sf) of new pavement area which will drain to a new catch basin and tie into the existing drainage system on the property. The flows eventually drain to the large infiltration pond located southeast of the memory care facility and to Varney Brook.

Altus has reviewed the drainage model and revised the model to reflect the proposed parking lot and drainage. The existing HydroCAD model that was prepared for the drainage analysis of the original development was modified to reflect the changes and to compare the results of the additional impervious areas from the proposed parking area. The results were compared at Raingarden #6, where the proposed drainage connects to the existing drainage system, and at the downstream point of analysis (POA) for the model.

The Stormwater Modeling Summary on the following page illustrates that Raingarden #6 has an increase in water elevation ranging from 0.02 to 0.04 ft. Similarly, the peak flow at the downstream pond an increase of 0.09 cfs for a 10 year storm event, increasing to 43.92 from the existing 43.83 cfs. The results from the modelling show that the proposed 2,950 sf parking area will have a negligible impact and the existing drainage system is adequately sized to accommodate the minor increase in flows.

The table below illustrates the revised modeling results.

Stormwater Modeling Summary

	2-Yr Storm (3.16 inch)	10-Yr Storm (4.77 inch)	25-Yr Storm (6.05 inch)	50-Yr Storm (7.21 inch)
Raingarden #6				
Existing Peak Elevation	61.62	61.67	61.71	61.74
Proposed Peak Elevation	61.64	61.70	61.74	61.78
Total Change	**+0.02**	**+0.03**	**+0.03**	**+0.04**

Additional information is available upon request.

Please contact us if there are any additional questions.



ALTUS ENGINERING, INC.

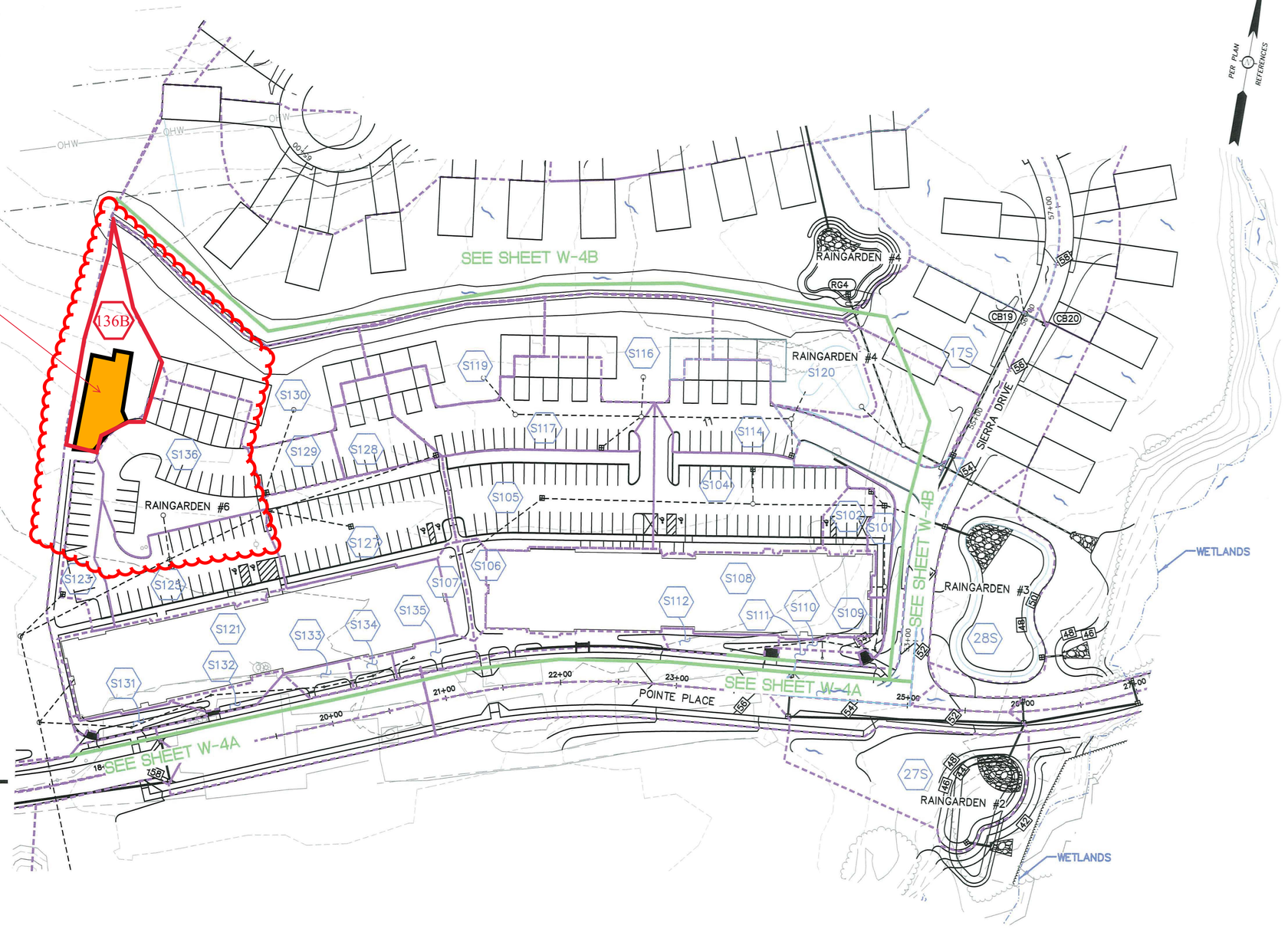
Cory D. Belden, PE

Attachments:

1. Revised Post Development Sub-Watershed Plan, 7/1/20.
2. Revised HydroCAD modeling results, Node 136B, P136B and RG6

Enclosure

PROPOSED 2,950 SF PARKING AREA



LEGEND

- PROPERTY LINE
- WETLANDS
- 60 EXISTING CONTOUR
- 60 PROPOSED CONTOUR
- EXISTING PAVEMENT/CURB
- EXISTING TREELINE
- WATERSHED BOUNDARY
- Tc PATH
- SURFACE FLOW DIRECTION
- 1 1 1 SUBCATCHMENT/POND/REACH
- POA POINT OF ANALYSIS

GRAPHIC SCALE

−50 0 25 50 100 200

(IN FEET)

P4390

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

STATE OF NEW HAMPSHIRE – CORY D. BELDEN No. 14236 – LICENSED PROFESSIONAL ENGINEER

3/7/16

REVISED 7/1/20 CDB

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
ALTERATION OF TERRAIN PERMIT

ISSUE DATE:
MARCH 3, 2016

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	PHASE 2 AOT PERMIT	CDB	03/03/16

DRAWN BY: CDB
APPROVED BY: EDW
DRAWING FILE: 4390-DESIGN.dwg

SCALE:

OWNER:
VARNEY BROOK LANDS, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVE., #202
DOVER, NH 03820

PROJECT:
POINTE PLACE
RESIDENTIAL AND COMMERCIAL MISED USE DEVELOPMENT
DOVER POINT ROAD, MIDDLE ROAD & POINTE PLACE
DOVER, NH

TITLE:
PROPOSED SUB-WATERSHED AREA PLAN

SHEET NUMBER:
W-4C

Time span=1.00-32.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 136B: 136B Runoff Area=5,450 sf 54.13% Impervious Runoff Depth=1.88"
Tc=6.0 min CN=87 Runoff=0.27 cfs 0.020 af

Pond P136B: YD P136B Peak Elev=60.75' Storage=1 cf Inflow=0.27 cfs 0.020 af
12.0" Round Culvert n=0.012 L=100.0' S=0.0265 '/' Outflow=0.27 cfs 0.020 af

Pond RG6: Raingarden 6 Peak Elev=61.64' Storage=700 cf Inflow=0.88 cfs 0.072 af
Outflow=0.85 cfs 0.063 af

Total Runoff Area = 0.125 ac Runoff Volume = 0.020 af Average Runoff Depth = 1.88"
45.87% Pervious = 0.057 ac 54.13% Impervious = 0.068 ac

Time span=1.00-32.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 136B: 136B Runoff Area=5,450 sf 54.13% Impervious Runoff Depth=3.35"
Tc=6.0 min CN=87 Runoff=0.47 cfs 0.035 af

Pond P136B: YD P136B Peak Elev=60.84' Storage=2 cf Inflow=0.47 cfs 0.035 af
12.0" Round Culvert n=0.012 L=100.0' S=0.0265 '/' Outflow=0.47 cfs 0.035 af

Pond RG6: Raingarden 6 Peak Elev=61.70' Storage=747 cf Inflow=1.46 cfs 0.123 af
Outflow=1.43 cfs 0.114 af

Total Runoff Area = 0.125 ac Runoff Volume = 0.035 af Average Runoff Depth = 3.35"
45.87% Pervious = 0.057 ac 54.13% Impervious = 0.068 ac

Time span=1.00-32.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 136B: 136B Runoff Area=5,450 sf 54.13% Impervious Runoff Depth=4.55"
Tc=6.0 min CN=87 Runoff=0.63 cfs 0.047 af

Pond P136B: YD P136B Peak Elev=60.90' Storage=2 cf Inflow=0.63 cfs 0.047 af
12.0" Round Culvert n=0.012 L=100.0' S=0.0265 '/' Outflow=0.63 cfs 0.047 af

Pond RG6: Raingarden 6 Peak Elev=61.74' Storage=779 cf Inflow=1.92 cfs 0.164 af
Outflow=1.88 cfs 0.154 af

Total Runoff Area = 0.125 ac Runoff Volume = 0.047 af Average Runoff Depth = 4.55"
45.87% Pervious = 0.057 ac 54.13% Impervious = 0.068 ac

Time span=1.00-32.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 136B: 136B Runoff Area=5,450 sf 54.13% Impervious Runoff Depth=5.68"
Tc=6.0 min CN=87 Runoff=0.78 cfs 0.059 af

Pond P136B: YD P136B Peak Elev=60.95' Storage=2 cf Inflow=0.78 cfs 0.059 af
12.0" Round Culvert n=0.012 L=100.0' S=0.0265 '/' Outflow=0.78 cfs 0.059 af

Pond RG6: Raingarden 6 Peak Elev=61.78' Storage=807 cf Inflow=2.34 cfs 0.202 af
Outflow=2.30 cfs 0.193 af

Total Runoff Area = 0.125 ac Runoff Volume = 0.059 af Average Runoff Depth = 5.68"
45.87% Pervious = 0.057 ac 54.13% Impervious = 0.068 ac

ZONING

TAX MAP K, LOT 19–7

ZONING DISTRICT: INNOVATIVE TECHNOLOGY (IT) DISTRICT

OVERLAY DISTRICTS: RESIDENTIAL COMMERCIAL MIXED USE OVERLAY DISTRICT
WETLANDS OVERLAY DISTRICT

PARKING REQUIREMENTS

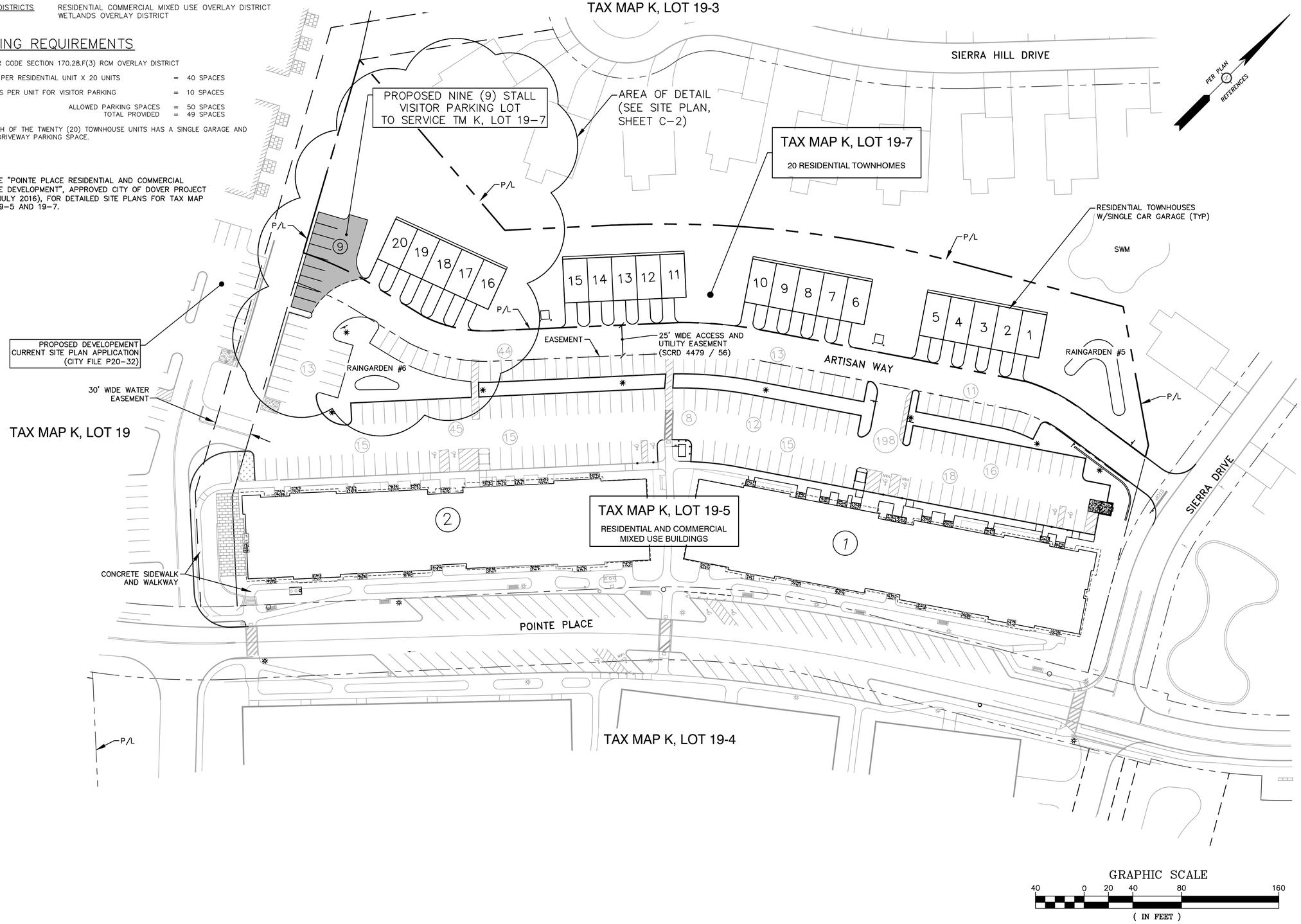
PER DOVER CODE SECTION 170.28.F(3) RCM OVERLAY DISTRICT

2 SPACES PER RESIDENTIAL UNIT X 20 UNITS	=	40 SPACES
0.5 SPACES PER UNIT FOR VISITOR PARKING	=	10 SPACES
ALLOWED PARKING SPACES	=	50 SPACES
TOTAL PROVIDED	=	49 SPACES

NOTE: EACH OF THE TWENTY (20) TOWNHOUSE UNITS HAS A SINGLE GARAGE AND A DRIVEWAY PARKING SPACE.

NOTES:

REFERENCE "POINTE PLACE RESIDENTIAL AND COMMERCIAL MIXED–USE DEVELOPMENT", APPROVED CITY OF DOVER PROJECT P16–05 (JULY 2016), FOR DETAILED SITE PLANS FOR TAX MAP K, LOTS 19–5 AND 19–7.



P4704

ENGINEER:

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
(603) 433–2335 www.ALTUS–ENG.com

CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD APPROVAL

ISSUE DATE: JULY 2, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	07/02/20

DRAWN BY: _____

APPROVED BY: _____

DRAWING FILE: _____

SCALE:

22"x34" 1" = 40'
11"x17" 1" = 80'

OWNER (TAX MAPK LOT 19–7):
LOFT'S AT POINTE PLACE CONDOMINIUM ASSOCIATION C/O IN DEMAND REALTY LLC PO BOX 9 SOMERSWORTH, NH 03878

OWNER (TAX MAP K, LOT 19–5):
VARNEY BROOK LANDS, LLC P.O. BOX 728 DOVER, NH 03821

APPLICANT:
THE STABILE COMPANIES 20 COTTON RD NASHUA, NH 03063

PROJECT:
POINTE PLACE – PHASE 2 TOWNHOMES PARKING LOT EXPANSION PROJECT

TAX MAP K, LOTS 19–5 AND 19–7

DOVER, NH

TITLE:
AMENDED OVERALL SITE PLAN

SHEET NUMBER:
C–1

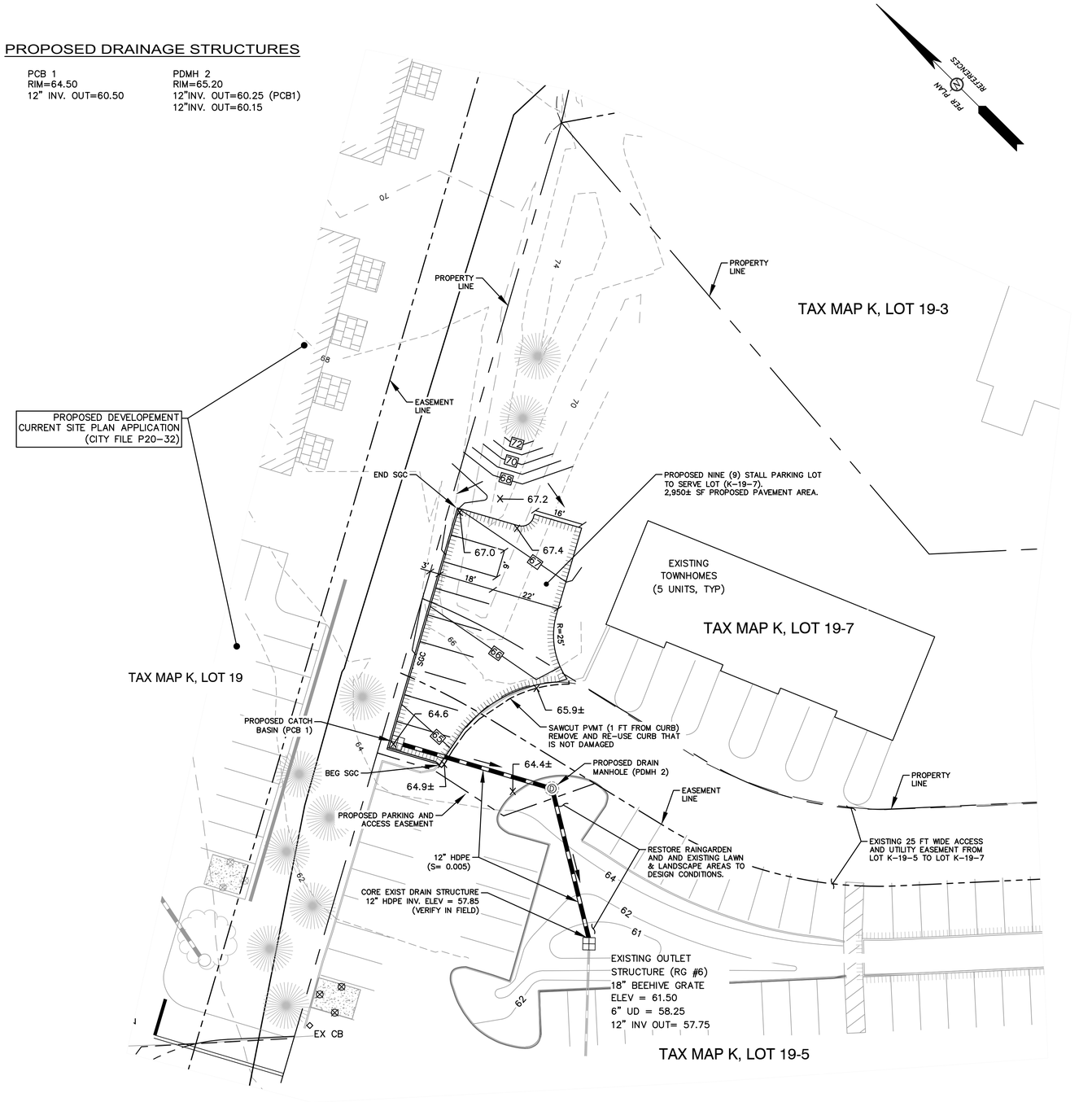
GENERAL NOTES

1. THE PROPOSED PARKING LOT EXPANSION INCLUDES WORK TAX MAP K, LOTS 19–5 AND 19–7. THE TWO LOTS WERE SUBDIVIDED AFTER THE SITE WAS PERMITTED FOR CONSTRUCTION FOR THE "POINTE PLACE RESIDENTIAL AND COMMERCIAL MIXED–USE DEVELOPMENT", APPROVED CITY OF DOVER PROJECT P16–05 (JULY 2016). REFERENCE THE APPROVED PROJECT PLANS FOR ANY DETAILS NOT SHOWN.
2. DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. THE LANDOWNER AND CONTRACTOR ARE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
3. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AND NOTIFY CITY OF DOVER AND OWNER'S AUTHORIZED REPRESENTATIVE AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
4. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EXISTING UTILITIES INCLUDING SEWER, ELECTRICAL LINES, COMMUNICATION LINES, AND WATER MAIN PRIOR TO COMMENCING CONSTRUCTION. PRESERVE AND PROTECT UTILITY LINES TO BE RETAINED. ANY DISCREPANCIES BETWEEN FIELD AND PLAN SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE ENGINEER, SURVEYOR, OR OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR DAMAGE TO EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES AT NO EXTRA COST TO THE OWNER.
5. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, MULCH, AND APPROPRIATE SOIL STABILIZATION TECHNIQUES.
6. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN DOVER, NEW HAMPSHIRE AND N.H.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST ADDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
7. ALL STORM DRAIN PIPING SHALL BE CORRUGATED POLYETHYLENE PIPE, SMOOTH INTERIOR WALL (N–12), UNLESS OTHERWISE NOTED.
8. UPON COMPLETION OF CONSTRUCTION, THE DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
9. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINE WITH RS–1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
10. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC DEVICES" AND "STANDARD ALPHABETS OF HIGHWAY SIGNS AND PAVEMENT MARKINGS" LATEST EDITIONS.
11. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, MULCH, AND APPROPRIATE SOIL STABILIZATION TECHNIQUES.
12. CONTRACTOR SHALL CONTROL DUST BY SPRAYING WATER, SWEEPING PAVED SURFACES AND VEGETATION AND/OR MULCHING STOCKPILES.
13. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED 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. VOIDS BETWEEN STONES AND CLUMPS OF MATERIAL SHALL BE FILLED WITH FINE MATERIALS.
14. WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ACCEPTED. ABRUPT RIDGES AT TOPS AND BOTTOM WILL NOT BE ACCEPTED.
15. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS
16. MAXIMUM SLOPE IN DISTURBED AREAS SHALL BE NO STEEPER THAN 3:1 (H:V), UNLESS OTHERWISE NOTED. WHERE SLOPES IN DISTURBED AREAS ARE STEEPER THAN 3:1, CONTRACTOR SHALL PROVIDE CURLEX II EROSION CONTROL BLANKET FROM AMERICAN EXCELSIOR COMPANY (800) 777–7645 OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
17. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS.
18. ALL UNSUITABLE MATERIALS AND SURPLUS MATERIALS WHICH CAN NOT BE APPROPRIATELY WASTED ON SITE SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
19. THE GRADING ON THIS PLAN SHOWS THE GENERAL INTENT AND DIRECTION OF THE STORMWATER FLOW. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY FIELD CONDITIONS THAT WILL IMPACT THE GRADING DESIGN SHOWN ON THIS PLAN FOR RESOLUTION.
20. SAWCUT AND REMOVE EXISTING PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT OR CURB LINE IN ALL AREAS WHERE NEW PAVEMENT OR CURBING ABUTS EXISTING PAVEMENT.
21. 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.

PROPOSED DRAINAGE STRUCTURES

PCB 1
RIM=64.50
12" INV. OUT=60.50

PDMH 2
RIM=65.20
12"INV. OUT=60.25 (PCB1)
12"INV. OUT=60.15



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

P5057

ENGINEER:

ALTUS ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801
(603) 433–2335 www.ALTUS–ENG.com

CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR:
PLANNING BOARD APPROVAL

ISSUE DATE:
JULY 2, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	07/02/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE:
22"x34" 1" = 20'
11"x17" 1" = 40'

OWNER (TAX MAPK LOT 19–7):
LOFT'S AT POINTE PLACE CONDOMINIUM ASSOCIATION
C/O IN DEMAND REALTY LLC
PO BOX 9
SOMERSWORTH, NH 03878

OWNER (TAX MAP K, LOT 19–5):
VARNEY BROOK LANDS, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
THE STABILE COMPANIES
20 COTTON RD
NASHUA, NH 03063

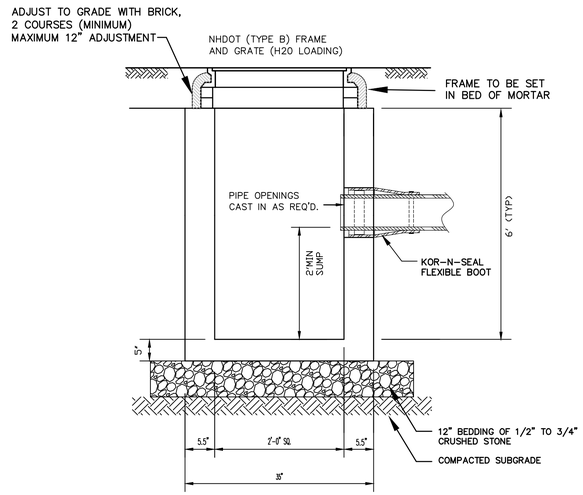
PROJECT:
POINTE PLACE – PHASE 2
TOWNHOMES PARKING LOT EXPANSION PROJECT

TAX MAP K, LOTS 19–5 AND 19–7

DOVER, NH

TITLE:
AMENDED SITE PLAN

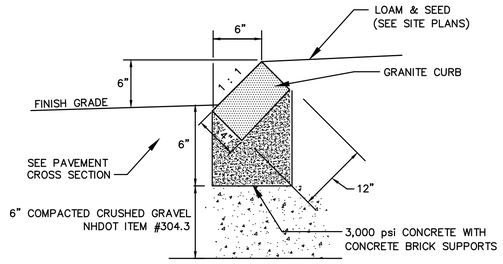
SHEET NUMBER:
C-2



TYPE A (PCB1)

NOTES:
1. FRAME AND GRATES SHALL BE AS NOTED OR APPROVED EQUAL.
2. CONCRETE: 4,000 PSI AFTER 28 DAYS
3. MATERIALS SHALL WITHSTAND H-20 LOADING AT TRAFFIC AREAS

DRAIN STRUCTURE DETAIL NOT TO SCALE

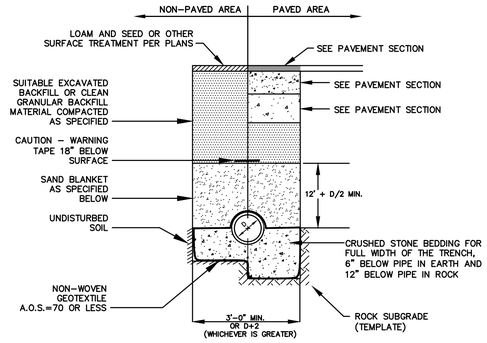


NOTES

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



BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET/BARRIER

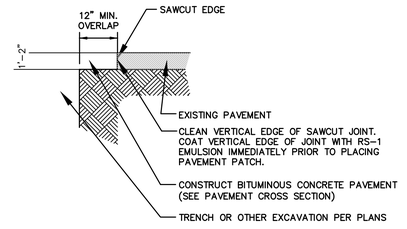
SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

SCREENED GRAVEL OR CRUSHED STONE BEDDING*

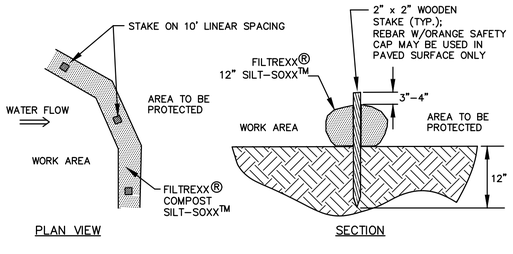
SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	20 – 55
# 4	0 – 10
# 8	0 – 5

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

STORM DRAIN UTILITY TRENCH SECTION NOT TO SCALE

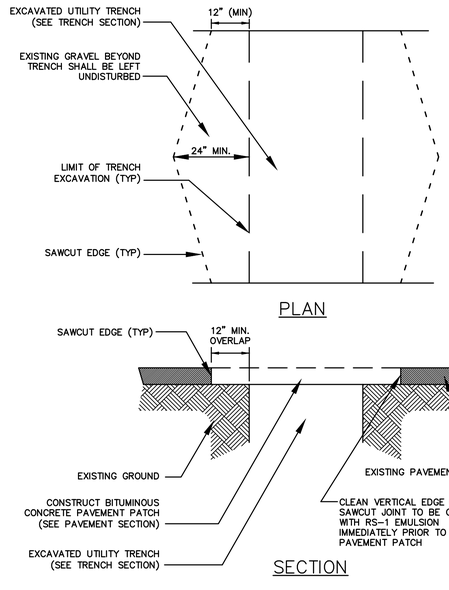


TYPICAL PAVEMENT SAWCUT NOT TO SCALE



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.

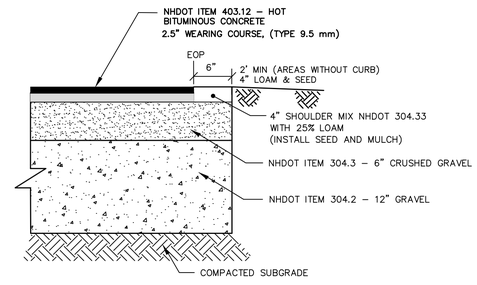
FILTREXX SILTSOXX DETAIL NOT TO SCALE



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



NOTES:
1. INSTALL TACK COAT TO BINDER COURSE PAVEMENT PRIOR TO INSTALLING WEARING COURSE.
2. REMOVE LEDGE WITHIN 30" OF SURFACE.
3. ALL LOAM, CLAY, MUCK, ORGANIC AND/OR YIELDING MATERIAL SHALL BE REMOVED TO A DEPTH OF NO LESS THAN 22" BELOW FINISH GRADE. INSTALL COMPACTED SAND OR GRAVEL BORROW TO SUBGRADE, AS NECESSARY.
4. SUBGRADE SHALL BE FREE OF VOIDS THAT ALLOW MOVEMENT/SETTLEMENT OF MATERIALS.
5. SUBGRADE SHALL BE PROOF ROLLED WITH A FULLY LOADED DUMP TRUCK PRIOR TO PLACEMENT OF GRAVEL. PROOF ROLLING TO BE VIEWED AND APPROVED BY ENGINEER.

STANDARD PAVEMENT CROSS SECTION NOT TO SCALE

(VERIFY WITH GEOTECHNICAL RECOMMENDATIONS)

ENGINEER:
ALTUS ENGINEERING, INC.
133 COURT STREET PORTSMOUTH, NH 03801
(603) 433-2335 www.ALTUS-ENG.com

CORY D. BELDEN No. 14239 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR: PLANNING BOARD APPROVAL

ISSUE DATE: JULY 2, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	CDB	07/02/20

DRAWN BY: _____
APPROVED BY: _____
DRAWING FILE: _____

SCALE: NOT TO SCALE

OWNER (TAX MAPK LOT 19-7):
LOFTS AT POINTE PLACE CONDOMINIUM ASSOCIATION
C/O IN DEMAND REALTY LLC
PO BOX 9
SOMERSWORTH, NH 03878

OWNER (TAX MAP K, LOT 19-5):
VARNEY BROOK LANDS, LLC
P.O. BOX 728
DOVER, NH 03821

APPLICANT:
THE STABILE COMPANIES
20 COTTON RD
NASHUA, NH 03063

PROJECT:
POINTE PLACE – PHASE 2 TOWNHOMES PARKING LOT EXPANSION PROJECT

TAX MAP K, LOTS 19-5 AND 19-7

DOVER, NH

TITLE: *AMENDED DETAILS*

SHEET NUMBER: D-1

P4704