



EXCAVATION APPLICATION
City of Rochester, New Hampshire

**This application is submitted to the Rochester Planning Board as provided in the Site Plan Regulations. Note that a special exception must be obtained prior to the Planning Board's consideration of this application.*

Date: 8/10/18 [office use only. Check # _____ Amount \$ _____ Date paid _____]

Property information

Tax map #: 216; Lot #'s: 12; Zoning district: GRD

Property address/location: 4 Little Falls Bridge Road

Size of site: 1.91 acres; overlay zoning district(s)? N/A

Property owner

Name (include name of individual): Ralph Torr/Pauline Torr Rev. Trust of 2000

Mailing address: 283 Chestnut Hill Road Rochester, NH 03867

Telephone #: _____ email: _____

Applicant (if different from property owner)

Name (include name of individual): Waterstone Rochester Ground Tenant, LLC (Doug Richardson)

Mailing address: 322 Reservoir Street Needham, MA 02494

Telephone #: (781) 559-3301 email: drichardson@waterstonepg.com

Contractor

Name (include name of individual): TBD

Mailing address: _____

Telephone #: _____ email: _____

Engineer/designer

Name (include name of individual): Tighe & Bond, Inc. (Kenneth A. Mavrogeorge)

Mailing address: 177 Corporate Drive Portsmouth, NH 03801

Telephone #: 603-433-8818 Fax #: 603-433-8898

Email: kamavrogeorge@tighebond.com Professional license #: 13326

Description of activity

Has the site been excavated before? No

acres/square feet to be disturbed? 1.85 acres

What type of material is being taken? Loam and processed stone generated from bedrock

that is encountered.

What volume/weight of material is being taken? All material is anticipated to remain on site and used to provide a level pad for a potential future development that would be submitted under a different application.

Is any blasting, crushing, processing, or other activity planned on site? Blasting, crushing and processing is anticipated.

Provide any other pertinent information about the proposed excavation: Material that is excavated is anticipated to stay on site.

Describe existing conditions/use (vacant land?): The lot currently has a single building and a gravel driveway both of which will be removed prior to the excavation.

Proposed dates for excavation. From: September 2018 To: December 2018

Submission of application

This application must be signed by the property owner, applicant (if different from property owner), and/or the agent.

I/we) hereby submit this Excavation application to the City of Rochester Planning Board pursuant to the City of Rochester Excavation Regulations 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/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property owner: _____

Date: 8-10-18

Signature of applicant: James P. Dawley, Jr., Coo

Date: _____

Signature of agent: Kathleen [Signature] (Tighe & Bond, Inc.)

Date: 8/10/18

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, excavation phase, and reclamation phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: _____

Date: _____

Note. It is recommended that the applicant review the City of Rochester Zoning Ordinance and Site Plan Regulations and NH RSA 155-E Local Regulation Excavations for pertinent standards and procedures regarding excavations.

Proposed Excavation Area
4 Little Falls Bridge Road – Rochester, NH

August 10, 2018

Narrative:

The proposed project at 4 Little Falls Bridge Road (Tax Map 216 Lot 12) is located at the intersection of Little Falls Bridge Road and Route 11 (Farmington Road) in Rochester, NH and consists of the demolition of an existing residential building and garage on a plot of land approximately 1.9 acres in size. A portion of the lot was cleared of trees in July of 2017.

This project proposed to clear the remaining trees on the lot for a total of approximately 80,150 square feet of cleared area. The clearing of the trees will be required prior to the excavation of the lot as shown on the plans provided with this application. While the property is located just south of the property at 105 Farmington Road, which the Applicant currently owns, the two properties will not be connected by the work proposed in this application.

Once erosion control measures have been installed, tree clearing and grubbing of stumps would occur prior to the commencing of the proposed excavation. Truck traffic is anticipated to enter and exit the site at the eastern corner of the property along Little Falls Bridge Road via a gravel driveway that will be constructed. The driveway will be located directly across from the neighboring gas station's exit and extend from Little Falls Bridge Road towards the middle of the property.

The Applicant is not proposing to construct any utilities with this work but is proposing to manage stormwater runoff by constructing three sedimentation basins with drainage structures, piping and rip rap aprons. The guidelines for the sizing of these sedimentation basins is based on NHDES recommendations for temporary sediment traps which is referenced in the enclosed plan set.

It is expected that the material that is excavated and processed will remain on site for future use.

The work is proposed to take place in the last quarter of 2018.

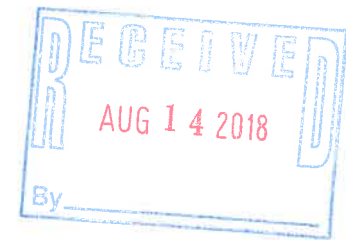
List of Submitted Plans

- "4 Little Falls Bridge Road Proposed Excavation Area Plans", last revised July 9, 2018;

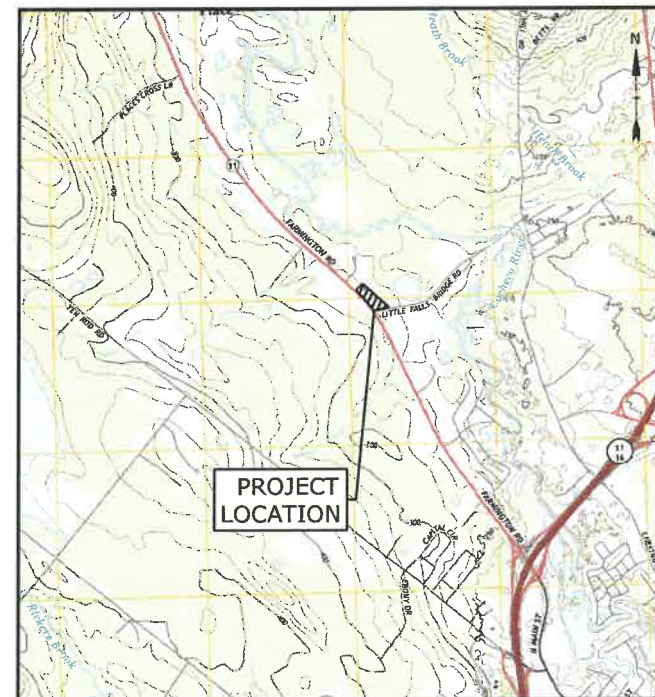
Waiver Request

Site Plan Review Regulation Article II Section 5.7.a: This requirement requires a sketch of existing natural features including trees/vegetation. The Applicant respectfully requests a waiver from this regulation as the survey provided in the submitted plan set was completed in July 2017 just prior to tree clearing activities occurring onsite. Since the prior clearing was approved by the City, and the proposed project would clear the remaining trees to the extents shown, the applicant requests the an update survey not be required by the Board.

4 LITTLE FALLS BRIDGE ROAD ROCHESTER, NEW HAMPSHIRE PROPOSED EXCAVATION AREA SITE PLANS JULY 9, 2018



LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	07/09/2018
1 OF 1	EXISTING CONDITIONS	07/21/2017
C-101	EXISTING CONDITIONS AND DEMOLITION PLAN	07/09/2018
C-102	EXCAVATION, GRADING, DRAINAGE AND EROSION CONTROL PLAN	07/09/2018
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	07/09/2018



LOCATION MAP
SCALE: 1" = 2,000'

PREPARED BY:
Tighe & Bond
www.tighebond.com



BRAD MEZQUITA, P.E.



KEN A. MAVROGEORGE P.E.

OWNERS/APPLICANT:
Waterstone Retail Development, Inc.
322 Reservoir Street
Needham, MA 02494

PERMIT	STATUS	PERMIT NO.	DATE
ROCHESTER SITE PLAN REVIEW	PENDING	-	-

FINAL APPROVAL BY ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

FOR MORE INFORMATION ABOUT THESE SITE PLANS CONTACT
THE CITY OF ROCHESTER PLANNING DEPARTMENT (603) 335-1338.

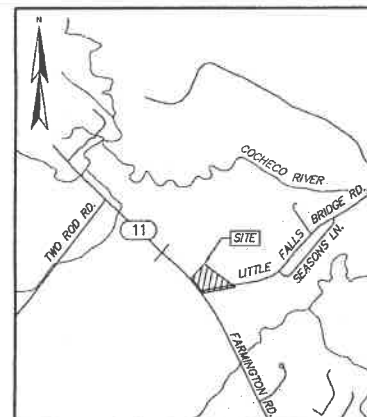
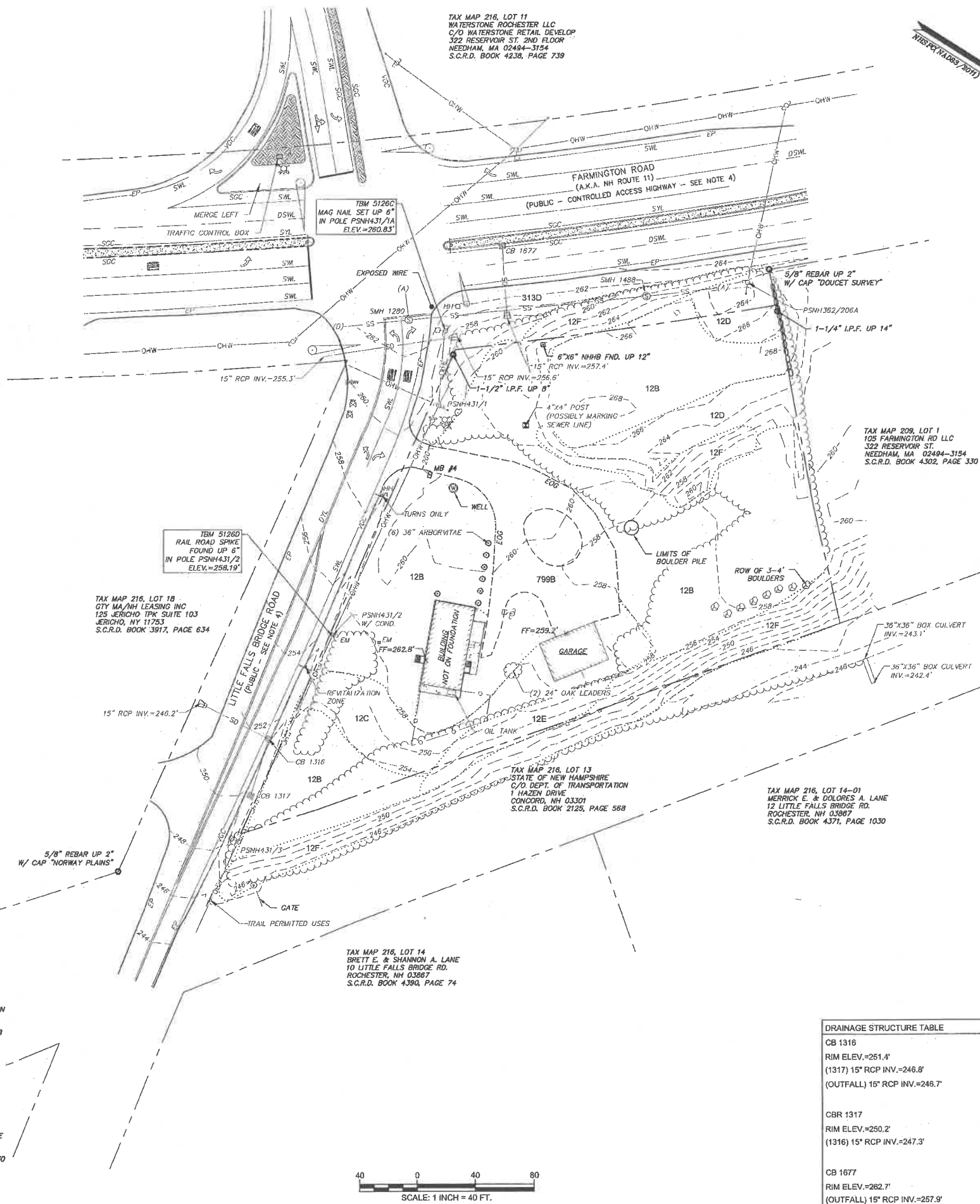
- CONSTRUCTION NOTES:**
1. THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A REQUIRED DIMENSION IS NOT PROVIDED ON THE PLANS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOUT CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.
 3. TIGHE & BOND, ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE & BOND.



COMPLETE SET 5 SHEETS

NOTES:

- REFERENCE: TAX MAP 216, LOT 12
- TOTAL PARCEL AREA: 83,411 SQ. FT. OR 1.91 AC.
- OWNER OF RECORD: RALPH W. TORR REV. TRUST OF 2000
PAULINE TORR REV. TRUST OF 2000
283 CHESTNUT HILL ROAD
ROCHESTER, NH 03867
S.C.R.D. BOOK 2239, PAGE 203
- FIELD SURVEY PERFORMED BY S.M.F. & L.P.S. DURING JULY 2017 USING A TRIMBLE S6 TOTAL STATION WITH A TRIMBLE TSC3 DATA COLLECTOR AND A SOKKIA B21 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- VERTICAL DATUM IS BASED ON NAVD88 PER DISK X-4-1933 ELEV.=234.93'.
- PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 2' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY, INC. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- SITE ASSESSED FOR JURISDICTIONAL WETLANDS BY GOVE ENVIRONMENTAL SERVICES, INC DURING JULY 2017 IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1. NONE WERE FOUND.
- SOILS: THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR LAND USE PLANNING. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, IN COMPLIANCE WITH THE NEW HAMPSHIRE JOINT BOARD OF LICENSURE AND CERTIFICATION RULES (STATE STATUTE CHAPTER 310-A:79), AND IS NOT A PRODUCT OF THE USDA, NATURAL RESOURCES CONSERVATION SERVICE. A LETTER REPORT BY GOVE ENVIRONMENTAL ASSOCIATES, INC. DATED _____ ACCOMPANIES THIS MAP AND PROVIDES DETAILED INFORMATION ON THE SOIL MAP UNITS.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVABLE PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING: THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
- ALL ELECTRIC, GAS, TEL, WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION. THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.



- LEGEND
- LOT LINE
 - APPROXIMATE ABUTTERS LOT LINE
 - STONE WALL
 - CHAIN LINK FENCE
 - BOX WIRE FENCE
 - OVERHEAD WIRE
 - SEWER LINE
 - DRAIN LINE
 - MAJOR CONTOUR LINE
 - MINOR CONTOUR LINE
 - CONCRETE
 - LANDSCAPED AREA
 - APPROXIMATE LIMIT OF SOIL TYPE
 - SOIL CLASSIFICATION (SEE NOTE 9)
 - UTILITY POLE
 - UTILITY POLE & GUY WIRE
 - UTILITY POLE W/ LIGHT
 - BOUND FOUND
 - IRON PIPE/ROD FOUND
 - POST
 - FIRE HYDRANT
 - WATER GATE VALVE
 - WATER SHUTOFF VALVE
 - WELL
 - CATCH BASIN (ROUND)
 - CATCH BASIN FLARED END SECTION
 - SEWER MANHOLE
 - HAND HOLE
 - ELECTRIC METER
 - MAILBOX
 - CONIFEROUS SHRUB
 - DECIDUOUS TREE
 - MAST ARM
 - BOULDER
 - TYP. GRAN.
 - CONC.
 - FOUND.
 - BOUND FOUND
 - FINISHED FLOOR
 - FF
 - EP
 - EOG
 - VCC
 - SOC
 - SWL
 - DYL
 - DSWL

EXISTING CONDITIONS FOR WATERSTONE ROCHESTER, LLC LAND OF RALPH W. TORR REV. TRUST OF 2000 AND THE PAULINE TORR REV. TRUST OF 2000 (TAX MAP 216, LOT 12) 4 LITTLE FALLS BRIDGE ROAD ROCHESTER, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY

DRAWN BY:	W.D.C.	DATE:	JULY 2017
CHECKED BY:	J.A.G.	DRAWING NO.:	5126A
JOB NO.:	5126	SHEET	1 OF 1



Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857 (603) 659-6560
2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4080
10 Storrs Street (Riverview Suite) Kennebunk, ME (207) 502-7005
<http://www.doucetsurvey.com>

Last Save Date: June 7, 2018 1:14 PM By: JPCOLLINS
Plot Date: Monday, July 09, 2018 Plotted By: Kenneth A. Mavropoulos
T&B File Location: Z:\VW5008 Waterstone Retail\002 - 4 Little Falls Bridge Road\Drawings\Figures\AutoCAD\Sheet\W5008-002_EXIST.dwg Layout Tab: C-01

LEGEND	
	LOT LINE
	APPROXIMATE ABUTTERS LOT LINE
	STONE WALL
	CHAIN LINK FENCE
	BOX WIRE FENCE
	OVERHEAD WIRE
	SEWER LINE
	DRAIN LINE
	MAJOR CONTOUR LINE
	MINOR CONTOUR LINE
	TREE LINE
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	LANDSCAPED AREA
	UTILITY POLE
	UTILITY POLE & GUY WIRE
	UTILITY POLE W/ LIGHT
	SIGN
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	SEWER MANHOLE
	HAND HOLE
	ELECTRIC METER
	MAILBOX
	CONIFEROUS SHRUB
	DECIDUOUS TREE
	MAST ARM
	BOULDER
	TO BE REMOVED
	TYPICAL
	GRANITE
	CONCRETE
	FOUNDATION
	BOUND FOUND
	FINISHED FLOOR

	EDGE OF PAVEMENT
	EDGE OF GRAVEL
	VERTICAL GRANITE CURB
	SLOPED GRANITE CURB
	SINGLE WHITE LINE
	DOUBLE YELLOW LINE
	DASHED SINGLE WHITE LINE
	SILT SOCK
	INLET PROTECTION
	PROPOSED RIP RAP
	PROPOSED LIMIT OF WORK
	LIMIT OF CLEARING AND GRUBBING

- DEMOLITION NOTES:**
EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
- ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
 - COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
 - ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
 - SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ADJUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
 - UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY AND CITY OF ROCHESTER STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
 - PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
 - THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES AND PAVEMENT WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, BUILDING SLABS, FOUNDATION, TREES AND LANDSCAPING.
 - REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
 - CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
 - PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS/CURB INLETS WITHIN CONSTRUCTION LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT MAY RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INLET PROTECTION BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE "HIGH FLOW SILT SOCK" BY ACT ENVIRONMENTAL OR EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN EVENT OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED OR SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE BARRIER.
 - THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADEING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
 - SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.

REFERENCE PLANS:

- "EXISTING CONDITIONS FOR WATERSTONE ROCHESTER, LLC" PREPARED BY DOUCET SURVEY, INC., DATED 07/21/17

TAX MAP 216, LOT 18
CITY MA/WH LEASING INC
125 JERICHO TPK SUITE 103
JERICHO, NY 11753
S.C.R.D. BOOK 3917, PAGE 634

TBM 51260
RAIL ROAD SPIKE FOUND UP 6"
IN POLE PSNH431/2 W/ CONO.
ELEV.=258.19'

TBM 51260
MAG NAIL SET UP 6"
IN POLE PSNH431/2
ELEV.=260.93'

FARMINGTON ROAD
(A.K.A. NH ROUTE 11)
(PUBLIC - CONTROLLED ACCESS HIGHWAY - SEE NOTE 4)

TAX MAP 209, LOT 1
105 FARMINGTON RD LLC
322 RESERVOIR ST.
NEEDHAM, MA 02494-3154
S.C.R.D. BOOK 4302, PAGE 330

TAX MAP 216, LOT 14-01
MERRICK E. & DOLORES A. LANE
12 LITTLE FALLS BRIDGE RD.
ROCHESTER, NH 03607
S.C.R.D. BOOK 4371, PAGE 1030

TAX MAP 216, LOT 14
BRETT E. & SHANNON A. LANE
10 LITTLE FALLS BRIDGE RD.
ROCHESTER, NH 03607
S.C.R.D. BOOK 4390, PAGE 74

DRAINAGE STRUCTURE TABLE

CB 1316
RIM ELEV.=251.4'
(1317) 15" RCP INV.=246.8'
(OUTFALL) 15" RCP INV.=246.7'
CB 1317
RIM ELEV.=250.2'
(1316) 15" RCP INV.=247.3'
CB 1677
RIM ELEV.=262.7'
(OUTFALL) 15" RCP INV.=257.9'

SANITARY SEWER STRUCTURE TABLE

SMH 1280
RIM ELEV.=262.6'
(1488) 8" PVC INV.=254.3'
(A) 8" PVC INV.=254.3'
(B) 8" PVC INV.=254.2'
SMH 1488
RIM ELEV.=262.6'
(A) 8" PVC INV.=255.2'
(1280) 8" PVC INV.=255.1'

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PAULINE TORR REV. TRUST OF 2000
283 CHESTNUT HILL ROAD
ROCHESTER, NH 03607
S.C.R.D. BOOK 2239, PAGE 203
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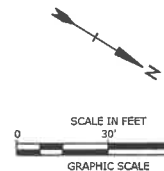
Tighe & Bond
Engineers | Environmental Specialists



**Proposed
Excavation
Area**

Waterstone
Retail
Development,
Inc.

4 Little Falls Bridge Rd.
Rochester, NH



PROJECT NO:	W5008-002
DATE:	July 9, 2018
FILE:	W5008-002_EXIST.DWG
DRAWN BY:	JPC
CHECKED:	KAM
APPROVED:	BLM

**EXISTING CONDITIONS AND
DEMOLITION PLAN**

SCALE: AS SHOWN

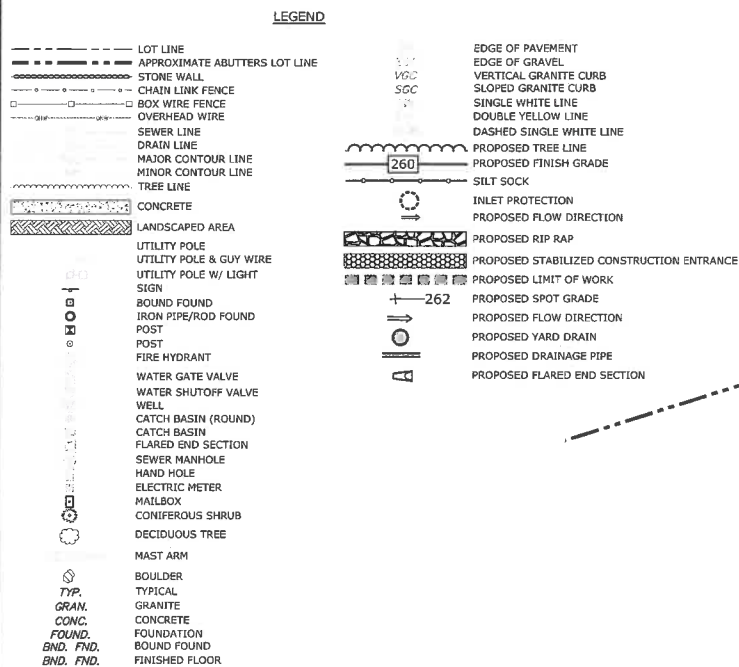
C-101

- GENERAL NOTES:**
1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
 2. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE CITY OF ROCHESTER AND THE NHDOT.
 3. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES.
 4. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES, CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES AND COMPLY WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
 6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR AND COMPLY WITH ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
 7. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ADJUTERS WITH THE UTILITY COMPANY AND AFFECTED ADJUTER.
 8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
 9. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
 10. SEE EXISTING CONDITIONS PLAN FOR BENCH MARK INFORMATION.

- GRADING AND DRAINAGE NOTES:**
1. COMPACTION REQUIREMENTS:
BELOW LOAM AND SEED AREAS 90%
* ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
 2. CONTRACTOR SHALL PROVIDE A FINISH SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS.
 3. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
 4. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND CITY ROCHESTER, NH DEPARTMENT OF PUBLIC WORKS AND CONSTRUCTION SPECIFICATIONS, LATEST REVISIONS.
 5. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
 6. THE LIMITS OF EXCAVATION SHALL BE MARKED IN THE FIELD PRIOR TO SCHEDULING A PRE-CONSTRUCTION MEETING.
 7. THE EXISTING BUILDING STRUCTURES ON THE PROPERTY SHALL BE REMOVED PRIOR TO THE START OF THE EXCAVATION ACTIVITIES. ALL DEMOLITION OF EXISTING BUILDINGS SHALL BE COORDINATED WITH THE PROPERTY OWNER AND THE DISPOSAL OF THE BUILDING MATERIALS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES.
 8. REFER TO SHEET C-501 FOR SEQUENCE OF MAJOR ACTIVITIES

- EROSION CONTROL NOTES:**
1. INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK.
 2. SEE GENERAL EROSION CONTROL NOTES ON "EROSION CONTROL NOTES & DETAILS SHEET".
 3. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
 4. INSPECT INLET PROTECTION AND PERIMETER EROSION CONTROL MEASURES DAILY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
 5. ALL DISTURBED AREAS SHALL RECEIVE 4" LOAM, SEED AND FERTILIZER OR 3" PERMANENT MULCH AND SEED.
 6. CONSTRUCT EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3:1.
 7. PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS REQUIRED BY STATE AND LOCAL PERMITS AND APPROVALS.
 8. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS.
 9. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
 10. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED BY SILT FENCE AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE LOCATED AS FAR AS POSSIBLE FROM THE DELINEATED EDGE OF WETLANDS.
 11. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT.
 12. RECLAMATION SHALL BE IN ACCORDANCE WITH NRCS PUBLICATION PM-NH-21, "VEGETATING NEW HAMPSHIRE SAND AND GRAVEL PITTS."

- SPECIAL NOTES:**
1. CONTRACTOR SHALL NOT STOCKPILE MATERIAL WITHIN 50 FEET OF THE DETENTION BASIN.
 2. MATERIAL STOCKPILES SHALL NOT BE SITUATED IN AREAS THAT IMPEDE THE FLOW OF STORMWATER FROM REACHING THE DETENTION BASIN.
 3. STORMWATER DETENTION BASIN SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO COMMENCING EXCAVATION ACTIVITIES (SEE SHEET C-501 FOR SEQUENCE OF MAJOR ACTIVITIES).
 4. INFILTRATION RATE BASED ON PUBLISHED KSAT VALUES FOR NH BY SSSNIE IN SEPT. 2009.
 5. SITE SPECIFIC SOIL SURVEY CONDUCTED BY GOVE ENVIRONMENTAL SERVICES ON JULY 23, 2017.



TAX MAP 216, LOT 18
GTY MA/NH LEASING INC
125 JERICHO TPK SUITE 103
JERICHO, NY 11753
S.C.R.D. BOOK 3917, PAGE 634

TAX MAP 216, LOT 14
BRETT E. & SHANNON A. LANE
10 LITTLE FALLS BRIDGE RD.
ROCHESTER, NH 03867
S.C.R.D. BOOK 4390, PAGE 74

TAX MAP 216, LOT 13
STATE OF NEW HAMPSHIRE
C/O DEPT. OF TRANSPORTATION
1 HAZEN DRIVE
CONCORD, NH 03301
S.C.R.D. BOOK 2125, PAGE 568

TAX MAP 216, LOT 14-01
MERRICK E. & DOLORES A. LANE
12 LITTLE FALLS BRIDGE RD.
ROCHESTER, NH 03867
S.C.R.D. BOOK 4371, PAGE 1030

DRAINAGE STRUCTURE TABLE

CB 1316
RIM ELEV.=251.4'
(1317) 15" RCP INV.=248.8'
(OUTFALL) 15" RCP INV.=246.7'

CBR 1317
RIM ELEV.=250.2'
(1316) 15" RCP INV.=247.3'

CB 1677
RIM ELEV.=262.7'
(OUTFALL) 15" RCP INV.=257.9'

SANITARY SEWER STRUCTURE TABLE

SMH 1280
RIM ELEV.=262.6'
(1488) 8" PVC INV.=254.3'
(A) 8" PVC INV.=254.3'
(B) 8" PVC INV.=254.2'

SMH 1488
RIM ELEV.=262.6'
(A) 8" PVC INV.=255.2'
(1280) 8" PVC INV.=255.1'

SEDIMENTATION BASIN SIZING

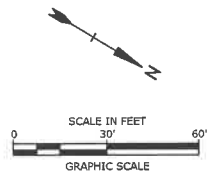
BASIN #	CONTRIBUTING AREAS	REQUIRED BASIN VOLUME	VOLUME PROVIDED	INFILTRATION RATE
		(PER NHDES GUIDELINES ON SHEET C-501)		(SEE SPECIAL NOTE 4)
1	22,785 SF (0.52 AC)	1872 CF	2697 CF	3 IN/HR
2	14,415 SF (0.33 AC)	1191 CF	4176 CF	3 IN/HR
3	15,262 (0.35 AC)	1261 CF	2032 CF	3 IN/HR



**Proposed
Excavation
Area**

Waterstone
Retail
Development,
Inc.

4 Little Falls Bridge Rd.
Rochester, NH



PROJECT NO: W5008-002
DATE: July 9, 2018
FILE: W5008-002_GRADE.DWG
DRAWN BY: JPC
CHECKED: KAM
APPROVED: BLM

EXCAVATION, GRADING,
DRAINAGE AND EROSION
CONTROL PLAN

SCALE: AS SHOWN

C-102

GENERAL PROJECT INFORMATION
PROJECT OWNER: WATERSTONE RETAIL DEVELOPMENT, INC.
322 RESERVOIR STREET
NEEDHAM, MA 02464
PROJECT NAME: PROPOSED EXCAVATION AREA
PROJECT ADDRESS: 4 LITTLE FALLS BRIDGE ROAD
ROCHESTER, NH 03839
PROJECT MAP / LOT: MAP 216 / LOT 012
PROJECT LATITUDE: 43°-20'-05.12"N
PROJECT LONGITUDE: 71°-00'-29.90"W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE DEMOLITION OF APPROXIMATELY A 2100 SF BUILDING A 1100 SF GARAGE ON A 1.9 ACRE LOT, THE CLEARING, GRUBBING, AND EXCAVATION OF THE SITE. THE WORK IS ANTICIPATED TO START IN MONTH SUMMER 2018, AND BE COMPLETED BY WINTER 2018/2019.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 1.9 ACRES.

SOIL CHARACTERISTICS

BASED ON THE USCS SITE SPECIFIC SOIL SURVEY CONDUCTED BY GOVE ENVIRONMENTAL SERVICES, INC., ON JULY 23, 2017 THE SOILS ON SITE CONSIST OF HINCKLEY, DEERFIELD, AND UDORTHMENTS URBAN LAND SOILS WHICH ARE WELL DRAINED SOILS WITH HYDROLOGIC SOIL GROUP RATING(S) OF A, B, AND D.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO EXISTING CULVERTS BELOW LITTLE FALLS BRIDGE ROAD OR TO CULVERT BELOW THE RAIL TRAIL.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

- CUT AND CLEAR TREES.
- CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
 - NEW CONSTRUCTION
 - DEVELOPMENT OF BORROW PIT AREAS
 - DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE
 - CONTROL OF DUST
 - CONSTRUCTION OF ACCESS AND HAUL ROAD
 - NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS
 - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
- ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPs PRIOR TO DIRECTING RUNOFF TO THEM, CLEAR AND DISPOSE OF DEBRIS.
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
- GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERM, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
- FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

- THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.
- 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.
- LOT DISTURBANCE, OTHER THAN THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE. - THIS NOTE IS APPLICABLE TO SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT.

EROSION CONTROL NOTES:

- ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
- PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
- CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALES, SILT FENCES, MULCH BERMS, SILT SOCKS AND SLOTTED BARRIERS AS SHOWN IN THESE DRAWINGS AS FIRST ORDER OF WORK.
- SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
- INSPECT ALL INLET PROTECTORS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

STABILIZATION:

- AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATIVE GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED;
 - E. IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
- WINTER STABILIZATION PRACTICES:
 - A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY BY STONE OR RIPRAP, MULCH, OR OTHER NON-EROSIVE MATERIAL. MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE. MULCH SHALL BE SECURED WITH ANCHORED NETTING, ELSEWHERE, THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF SPRING MELT EVENTS.
 - B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
 - C. AFTER NOVEMBER 15, 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, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
 - A. TEMPORARY SEEDING;
 - B. MULCHING.
- WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15.

DUST CONTROL:

- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
- DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
- DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ADJACENT AREAS INCLUDING BUT NOT LIMITED TO LITTLE FALLS BRIDGE ROAD OR NH RT. 11.

STOCKPILES:

- LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
- ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
- PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
- PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERM, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF-SITE VEHICLE TRACKING:

- THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

VEGETATION:

- TEMPORARY GRASS COVER:
 - A. 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;
 - SEEDING:
 - UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
 - WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;

- 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;
- MAINTENANCE:
 - TEMPORARY SEEDING 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.).
- VEGETATIVE PRACTICE:
 - FOR PERMANENT MEASURES AND PLANTINGS:
 - LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5;
 - FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER;
 - SOIL CONDITIONS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH;
 - SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED, ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
 - HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
 - THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDDED, AND ALL NOXIOUS WEEDS REMOVED;
 - THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDDED AREAS UNTIL ACCEPTED;
 - A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

SEED MIX	APPLICATION RATE
KEEPING RED FESCUE	50 LBS/ACRE
TALL FESCUE	100 LBS/ACRE
REDDTOP	50 LBS/ACRE

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT, ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
 - DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
 - FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA:

- THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON THE PROJECT:
 - A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
 - B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
 - C. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
 - D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

- FIRE-FIGHTING ACTIVITIES;
- FIRE HYDRANT FLUSHING;
- WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
- WATER USED TO CONTROL DUST;
- POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
- ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
- PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
- UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
- UNCONTAMINATED GROUND WATER OR SPRING WATER;
- FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
- UNCONTAMINATED EXCAVATION DEWATERING;
- LANDSCAPE IRRIGATION.

WASTE DISPOSAL:

- WASTE MATERIAL:
 - A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
 - B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
 - C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
- HAZARDOUS WASTE:
 - A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
 - B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
- SANITARY WASTE:
 - A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

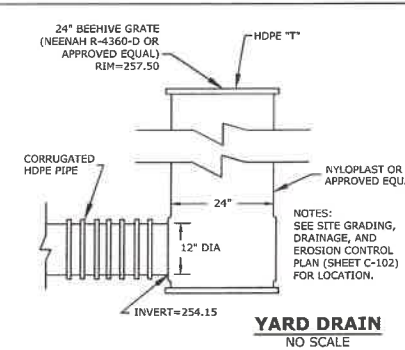
- CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
- THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
 - A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
 - ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
 - ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER CONTAINER, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE;
 - MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
 - THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS; SUBSTANCES SHALL NOT BE STORED IN ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
 - WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
 - B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
 - PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT REUSEABLE;
 - ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
 - SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
 - C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
 - PETROLEUM PRODUCTS:
 - ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
 - PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
 - FERTILIZERS:
 - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
 - ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
 - STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
 - PAINTS:
 - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
 - EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
 - EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
 - D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
 - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
 - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
 - ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
 - THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
 - SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
 - THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
 - E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
 - CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
 - CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
 - IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
 - CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
 - CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
 - CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

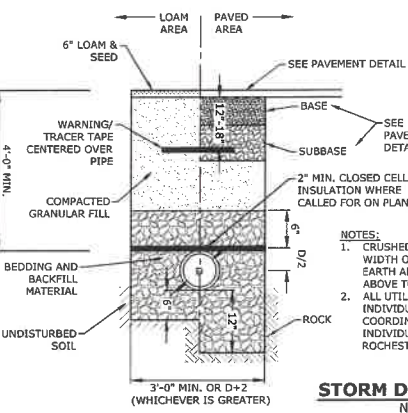
THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ON-SITE AT ALL TIMES.

THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:

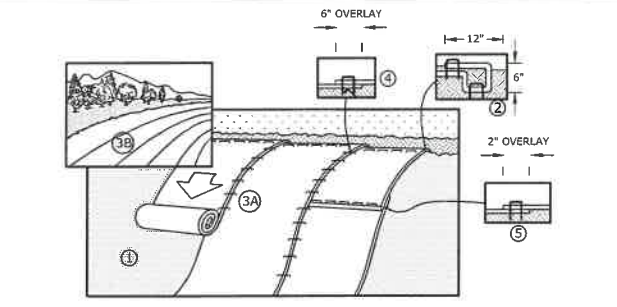
- OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE ENGINEER (CONTRACTOR) AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
- AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
- A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;
- IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.



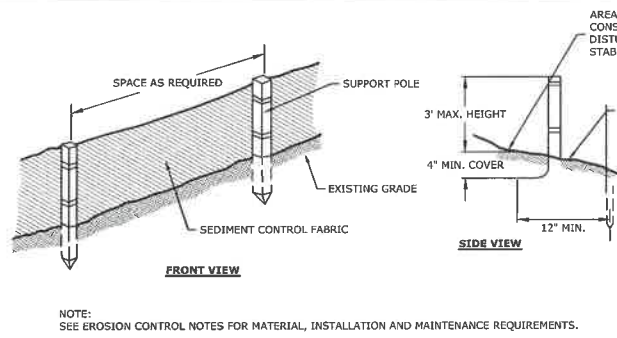
YARD DRAIN
NO SCALE



STORM DRAIN TRENCH
NO SCALE

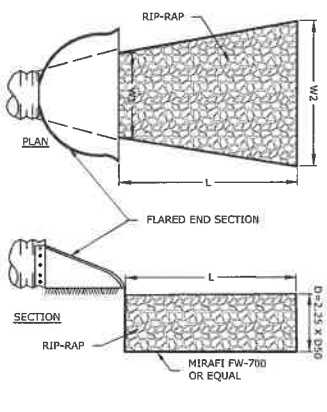


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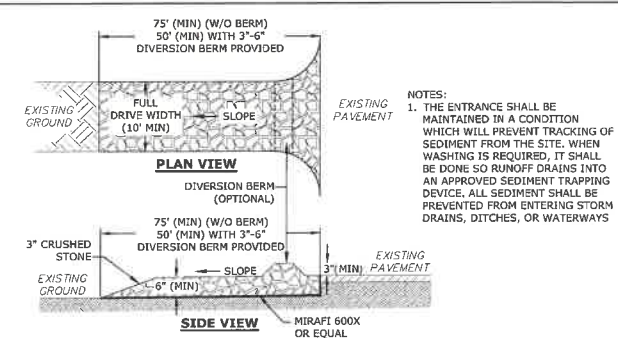


SILT FENCE
NO SCALE

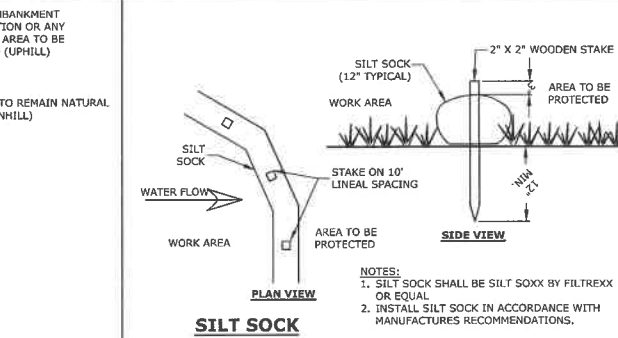
SEDIMENT TRAP
NO SCALE



RIP-RAP APRON DETAIL
NO SCALE



STABILIZED CONSTRUCTION EXIT
NO SCALE



SILT SOCK
NO SCALE

Tighe & Bond
Engineers | Environmental Specialists



**Proposed
Excavation
Area**

**Waterstone
Retail
Development,
Inc.**

**4 Little Falls Bridge Rd.
Rochester, NH**

PROJECT NO: W5008-002
DATE: July 9, 2018
FILE: W5008-002_DETAILS.DWG
DRAWN BY: JPC
CHECKED: KAM
APPROVED: BLM

**EROSION CONTROL NOTES AND
DETAILS SHEET**

SCALE: AS SHOWN

C-501