

# MIXED USE BUILDING "RIDGE MARKETPLACE"

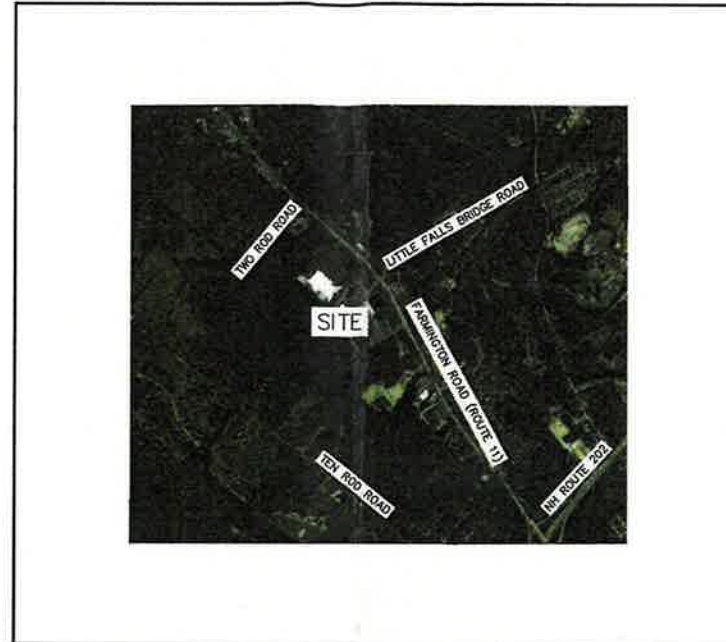
## TAX MAP 216, LOT 11 120 MARKETPLACE BLVD, ROCHESTER, NH

PERMIT	APPROVAL #
NHDES Act	Act-0825 and Act-0825A
NHDES WASTEWATER CONNECTION	D2014-0901
NHDOT DRIVEWAY	06-389-608

FOR MORE INFORMATION ABOUT THIS SITE PLAN CONTACT:  
WAYNE MORRILL  
PHONE: (603) 772-4746  
EMAIL: WMORRILL@JONESANDBEACH.COM

### SHEET INDEX

CS	COVER SHEET
C1	EXISTING CONDITIONS PLAN
C2	SITE PLAN
C3	GRADING AND DRAINAGE PLAN
C4	UTILITY PLAN
L1	LANDSCAPE AND LIGHTING PLAN
D1-D3	DETAIL SHEETS
E1	EROSION AND SEDIMENT CONTROL DETAILS

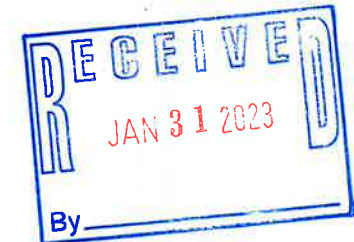


LOCUS MAP  
SCALE 1" = 2000'

### PERMITS

TYPE OF PERMIT	STATUS	TYPE OF PERMIT	STATUS
USEPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT, NOTICE OF INTENT (NOI), AND NOTICE OF TERMINATION (NOT) TO BE FILED IN ACCORDANCE WITH FEDERAL AND LOCAL REGULATIONS PRIOR TO AND FOLLOWING CONSTRUCTION: EPA STORMWATER NOTICE PROCESSING CENTER MAIL CODE 4203M, US EPA 1200 PENNSYLVANIA AVENUE, NW WASHINGTON, DC 20460 RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, INC.		ROCHESTER SITE PLAN APPROVAL: CITY OF ROCHESTER PLANNING BOARD 31 WAKEFIELD STREET ROCHESTER, NEW HAMPSHIRE 03867 (603) 335-7500 RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, INC.	SUBMITTED: 03/21/22 PERMIT NO. 216-11-GRD-22 DATED: 05/18/22

\*THIS PLAN SET IS FOR THE PAD SITE ON PHASE I ADJACENT TO STARBUCKS. SITE PLAN APPROVAL FROM THE CITY OF ROCHESTER WAS FOR A ±15,000 SF RETAIL IN THIS LOCATION OF THE RIDGE MARKETPLACE.



**APPLICANT / DEVELOPER**  
WATERSTONE PROPERTIES GROUP  
117 KENDRICK STREET, SUITE 325  
NEEDHAM, MA 02494  
(781) 559-3301 x131  
CONTACT: SCOTT HALEY

**CIVIL ENGINEER / SURVEYOR**  
JONES & BEACH ENGINEERS, INC.  
85 PORTSMOUTH AVENUE  
PO BOX 219  
STRATHAM, NH 03885  
(603) 772-4746  
CONTACT: WAYNE MORRILL  
EMAIL: WMORRILL@JONESANDBEACH.COM

**OWNER OF RECORD**  
WATERSTONE ROCHESTER, LLC  
% WATERSTONE RETAIL DEVELOPEMNT  
117 KENDRICK ST. STE 325  
NEEDHAM, MA 02494-2724  
(781) 559-3301  
CONTACT: SCOTT HALEY

**WATER AND SEWER**  
ROCHESTER PUBLIC WORKS DEPT.  
45 OLD DOVER ROAD  
ROCHESTER, NH 03867  
(603) 332-4096

**ELECTRIC**  
EVERSOURCE  
740 N COMMERCIAL ST  
PO BOX 330  
MANCHESTER, NH 03105-0330  
(800) 662-7764

**TELEPHONE**  
CONSOLIDATED COMMUNICATIONS  
100 TRI CITY ROAD  
SOMERWORTH, NH 03878  
ATTN: DAVE KESTNER  
(603) 743-1114

**CABLE TV**  
COMCAST COMMUNICATION  
CORPORATION 334-B CALEF HIGHWAY  
EPPING, NH 03042-2325  
(603) 679-5695

**PROJECT PARCEL**  
CITY OF ROCHESTER  
TAX MAP 216, LOT 11

**APPLICANT/OWNER**  
WATERSTONE ROCHESTER, LLC  
% WATERSTONE RETAIL DEVELOPMENT  
117 KENDRICK ST. STE 325  
NEEDHAM, MA 02494-2724  
BK 4238, PG 739

**TOTAL LOT AREA**  
3,183,365± SQ. FT.  
73.08± ACRES

**APPROVED - ROCHESTER, NH  
PLANNING BOARD**

*[Signature]*  
Senior Planner  
Conditions Approval: 5/16/22  
Final Approval: 1/30/23

DATE:

Design: BWG Draft: GDR Date: 11/15/2021  
Checked: WGM Scale: AS NOTED Project No.: 21173  
Drawing Name: 21173-PLAN.dwg  
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

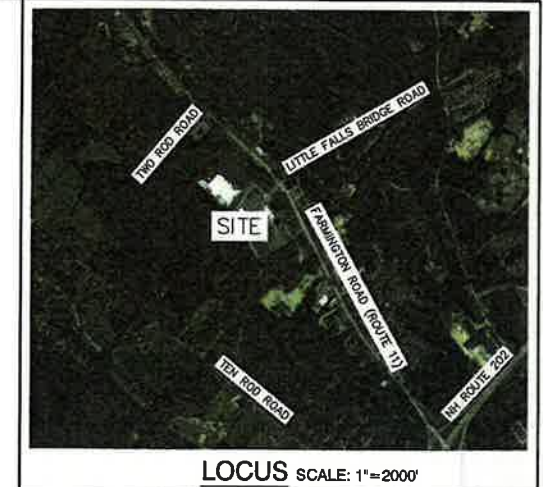
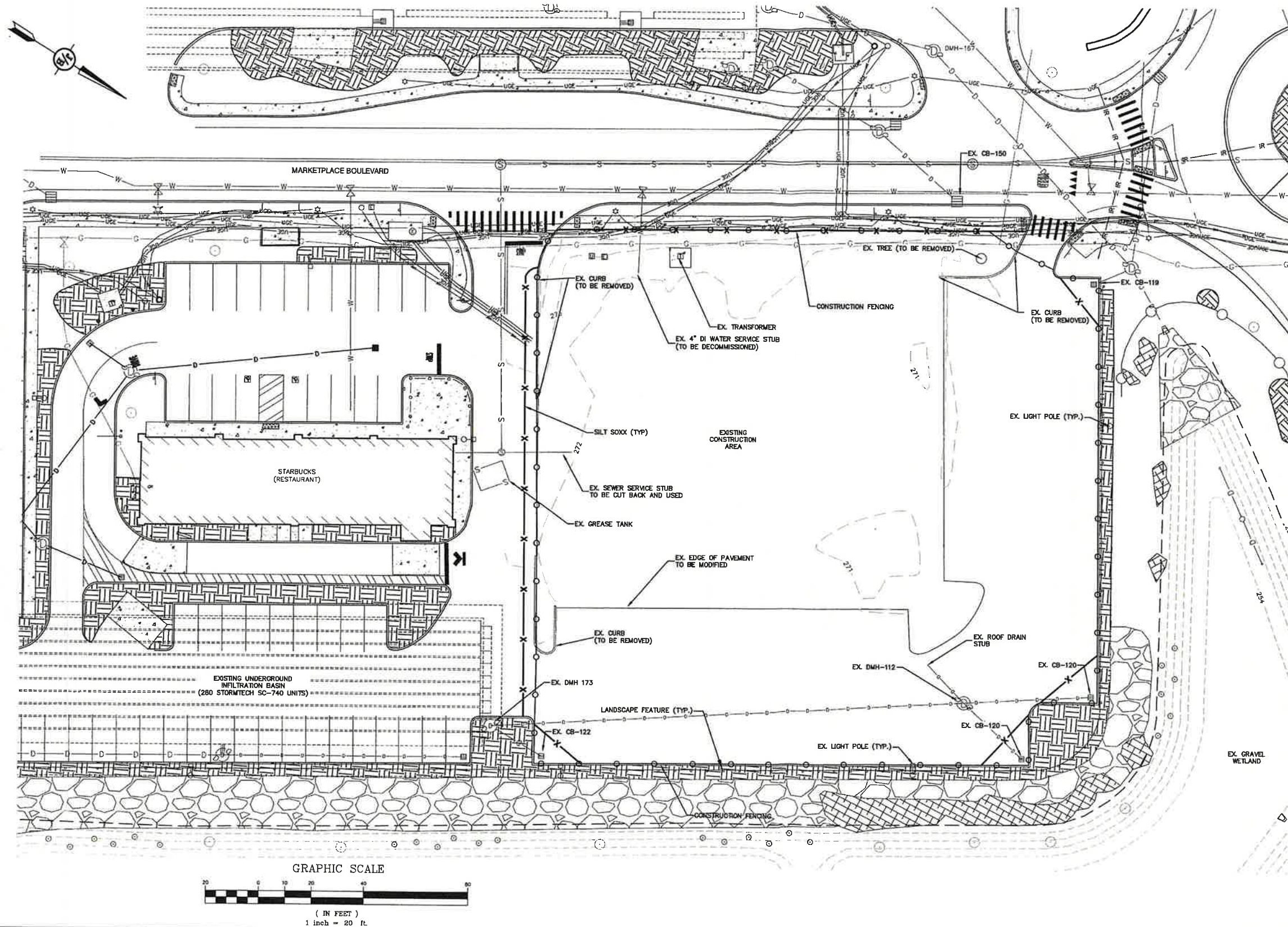
Designed and Produced in NH  
**J/B Jones & Beach Engineers, Inc.**  
Civil Engineering Services  
85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885  
603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **COVER SHEET**  
Project: **RESTAURANT & RETAIL BUILDING  
120 MARKETPLACE BOULEVARD, ROCHESTER, NH**  
Owner of Record: **WATERSTONE ROCHESTER, LLC  
117 KENDRICK ST. STE 325, NEEDHAM, MA**

DRAWING No.  
**CS**  
SHEET 1 OF 10  
JBE PROJECT NO. 21173

RESTAURANT AND RETAIL BUILDING, 120 MARKETPLACE BLVD., ROCHESTER, NH  
JBE # 21173





#### EXISTING CONDITIONS NOTES:

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC. NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).
2. VERTICAL DATUM IS BASED ON NAVD88 PER DISK X-4-1833 ELEV.=234.93'. HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLAN(2800) NAD83(2011) DERIVED FROM STATIC GPS OBSERVATIONS PROCESSED BY THE NATIONAL GEODETIC SURVEY ON-LINE POSITIONING USER SERVICE (OPUS). SAID DATUM IS CONSISTENT WITH THE CITY OF ROCHESTER COORDINATE SYSTEM.
3. WETLAND IMPACTS HAVE BEEN PREVIOUSLY APPROVED UNDER NHDES WETLANDS AND NON-SITE SPECIFIC PERMIT #2009-02074. TOTAL IMPACTS EQUAL TO ±0.86 ACRES.
4. SUBJECT PROPERTY IS NOT LOCATED WITHIN AN AREA HAVING A ZONE SPECIAL FLOOD HAZARD DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 33017C0184D, WITH EFFECTIVE DATE OF MAY 17, 2005.
5. CONTRACTOR TO MOUNT "NO TRESPASSING" SIGNS ON ALL 4 SIDES OF CONSTRUCTION FENCE PERIMETER

#### PLAN REFERENCES:

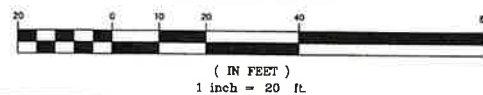
1. THE RIDGE MARKETPLACE CONSTRUCTION DRAWINGS BY TIGHE AND BOND CONSULTING ENGINEERS, REVISED AUGUST 3, 2015.

PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 216, LOT 11

APPLICANT/OWNER  
WATERSTONE ROCHESTER, LLC  
% WATERSTONE RETAIL DEVELOPMENT  
117 KENDRICK ST. STE 325  
NEEDHAM, MA 02494-2724  
BK 4238, PG 739

TOTAL LOT AREA  
3,183,365± SQ. FT.  
73.08± ACRES

GRAPHIC SCALE



F:\CADD\MASTER STANDARD\dwg\JB-LAYOUTS.dwg 3/12/2015 3:27:29 PM EDT

Design: BWG Draft: GDR Date: 11/15/2021  
Checked: WGM Scale: AS NOTED Project No.: 21173  
Drawing Name: 21173-PLAN.dwg  
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

Designed and Produced in NH  
**J/B Jones & Beach Engineers, Inc.**  
Civil Engineering Services  
85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885  
603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

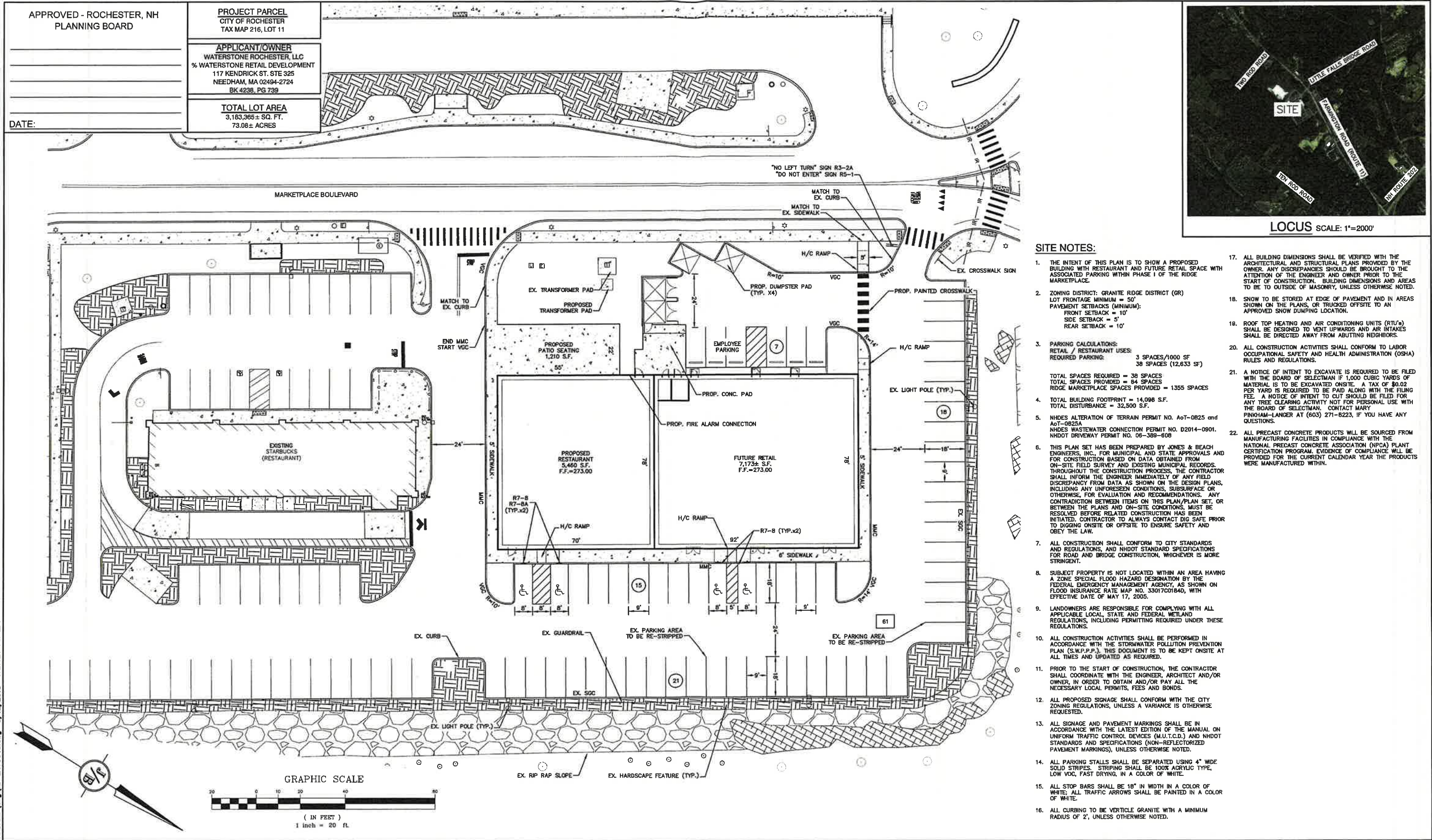
Plan Name: **EXISTING CONDITIONS PLAN**  
Project: **RESTAURANT & RETAIL BUILDING  
120 MARKETPLACE BOULEVARD, ROCHESTER, NH**  
Owner of Record: **WATERSTONE ROCHESTER, LLC  
117 KENDRICK ST. STE 325, NEEDHAM, MA**

DRAWING No.

**C1**

SHEET 2 OF 10  
JBE PROJECT NO. 21173





Design: BWG Draft: GDR Date: 11/16/2021  
Checked: WGM Scale: AS NOTED Project No.: 21173  
Drawing Name: 21173-PLAN.dwg

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV. DATE REVISION BY

3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/26/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

REV. DATE REVISION BY

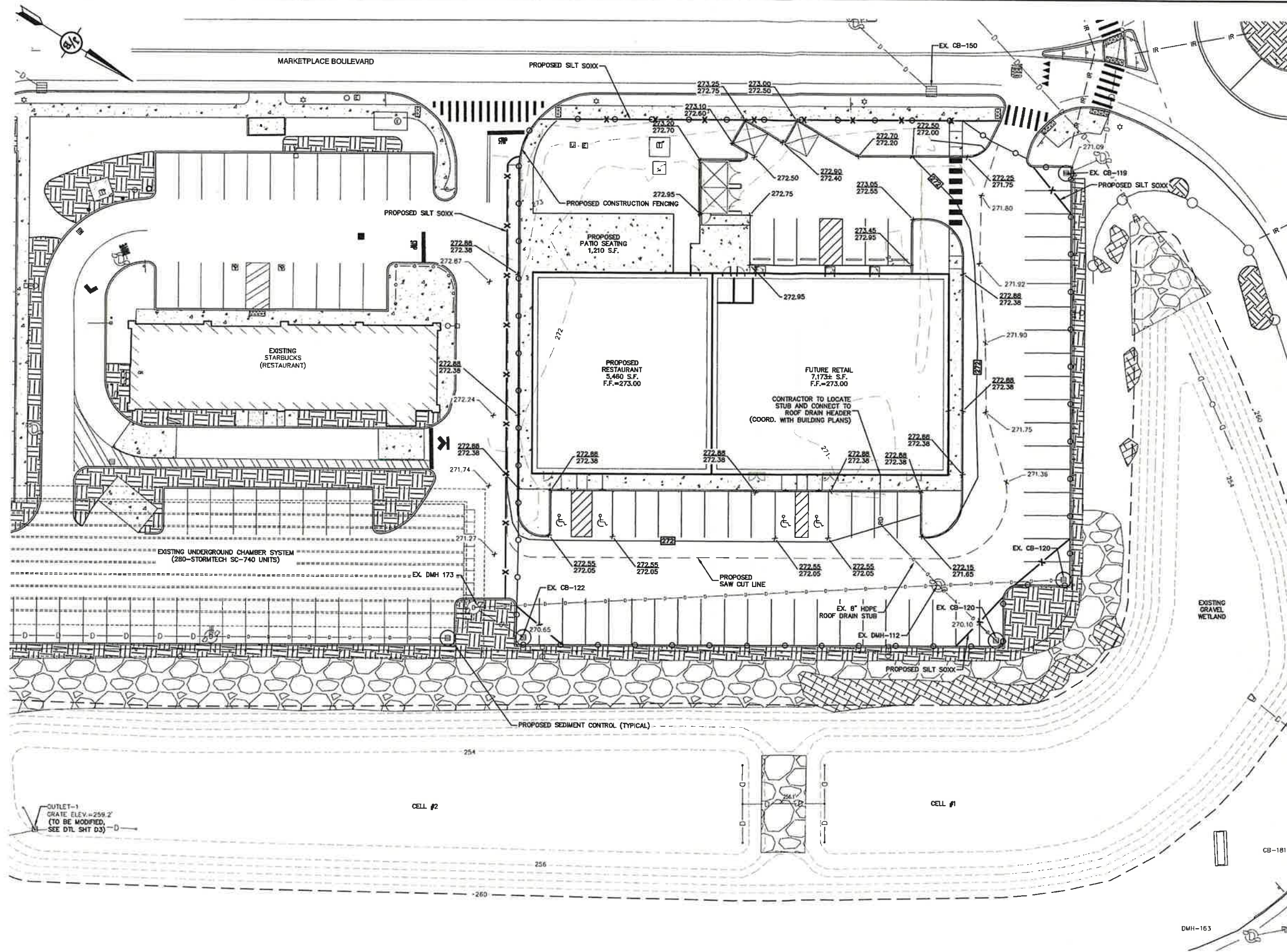
J/B Jones & Beach Engineers, Inc.  
85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885  
Civil Engineering Services  
603-772-4748  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: SITE PLAN  
MAP 216, LOT 11  
Project: RESTAURANT & RETAIL BUILDING  
120 MARKETPLACE BOULEVARD, ROCHESTER, NH  
Owner of Record: WATERSTONE ROCHESTER, LLC  
117 KENDRICK ST. STE 325, NEEDHAM, MA

DRAWING No. C2  
SHEET 3 OF 10  
JBE PROJECT NO. 21173



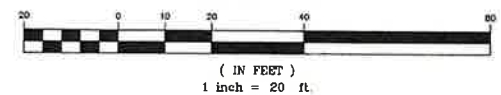
E:\CADD\MASTER STANDARD\dwg\JB-LAYOUTS.dwg 3/12/2015 3:27:29 PM EDT



#### GRADING AND DRAINAGE NOTES:

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
2. VERTICAL DATUM IS BASED ON NAVD88 PER DISK X-4-1933 ELEV.=234.93'. HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLAN(2800) NAD83(2011).
3. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
4. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
5. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
6. ALL ROOF DRAINS FROM BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT THE END. ALL EXTERIOR ROOF DOWNSPOUTS ARE TO BE INSTALLED WITH OVERFLOW DEVICES.
7. PROPOSED RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
8. ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED.
9. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3" DEEP SUMPS WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
10. ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED. SEE SHEET D1-D3 FOR DRAINAGE DETAILS.
11. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
12. IMMEDIATELY APPLY AND COMPACT STONE BASE FOR BUILDING PAD TO  $\pm 1/2"$  PRIOR TO EXCAVATING INTERIOR AND PERIMETER FOOTINGS.
13. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
14. ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
15. STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
16. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
17. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING AND ANYTIME CONSTRUCTION STOPS FOR LONGER THAN 3 DAYS.
18. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
19. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
20. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
21. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
22. SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
23. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
24. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
25. SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
26. CONTRACTOR TO LOCATE ROOF DRAIN (RD) AND TIE PROPOSED STRUCTURES ROOF DRAINS INTO THIS DRAIN LINE.

#### GRAPHIC SCALE



Design: BWG Draft: GDR Date: 11/15/2021  
Checked: WGM Scale: AS NOTED Project No.: 21173  
Drawing Name: 21173-PLAN.dwg

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/26/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

Designed and Produced in NH  
**J/B Jones & Beach Engineers, Inc.**  
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
Civil Engineering Services  
803-772-4746 FAX: 803-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **GRADING AND DRAINAGE PLAN**  
Project: **RESTAURANT & RETAIL BUILDING  
120 MARKETPLACE BOULEVARD, ROCHESTER, NH**  
Owner of Record: **WATERSTONE ROCHESTER, LLC  
117 KENDRICK ST. STE 325, NEEDHAM, MA**

**PROJECT PARCEL**  
CITY OF ROCHESTER  
TAX MAP 216, LOT 11  
**APPLICANT/OWNER**  
WATERSTONE ROCHESTER, LLC  
% WATERSTONE RETAIL DEVELOPMENT  
117 KENDRICK ST. STE 325  
NEEDHAM, MA 02494-2724  
BK 4238, PG 739  
**TOTAL LOT AREA**  
3,183,365 ± SQ. FT.  
73.08 ± ACRES

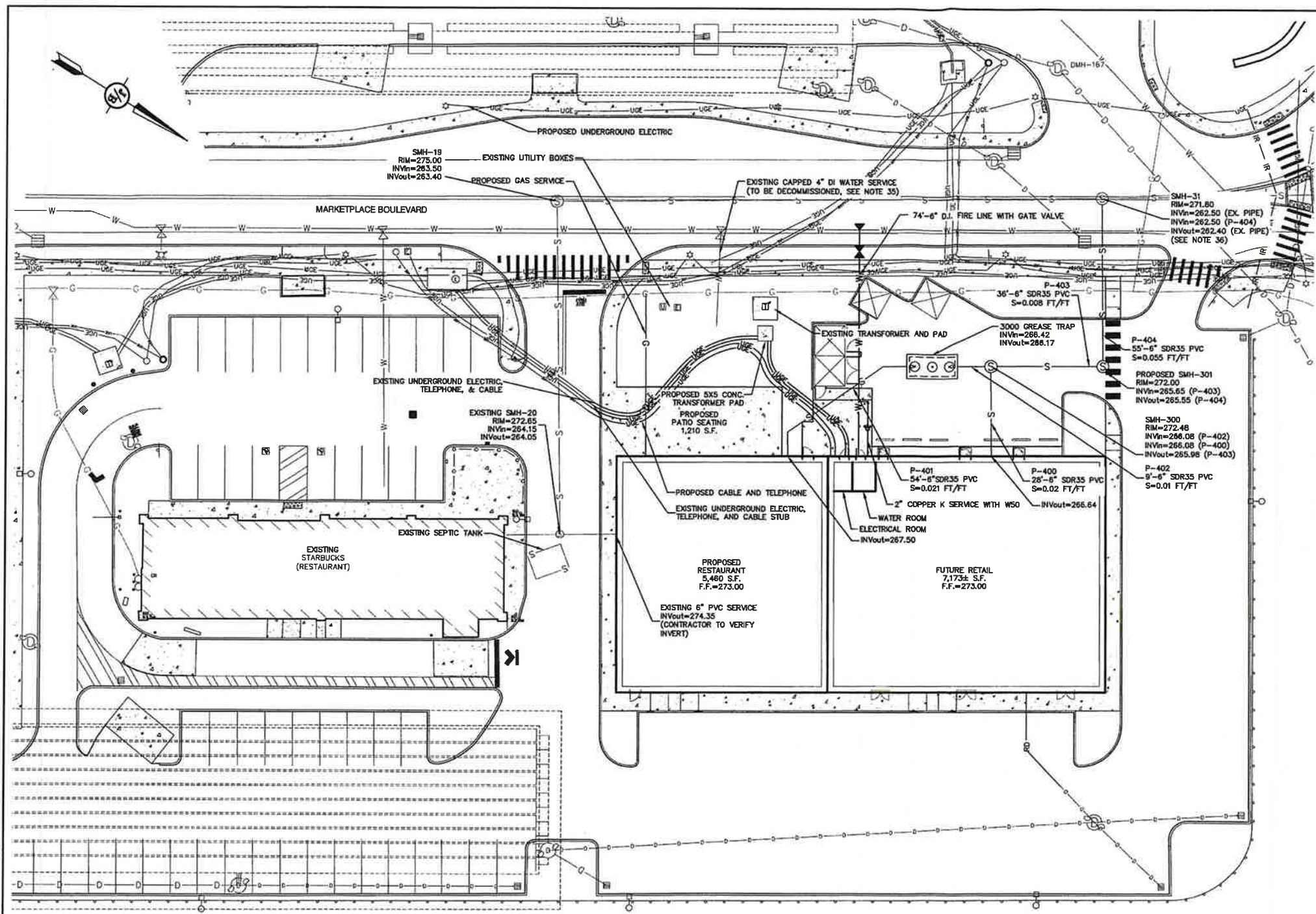
DRAWING No.

**C3**

SHEET 4 OF 10  
JBE PROJECT NO. 21173



F:\CADD\MASTER STANDARD\dwg\JB-LAYOUTS.dwg 3/12/2015 3:27:20 PM EDT



UTILITY NOTES:

- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS, WATER, AND SEWER).
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE CITY STANDARDS AND REGULATIONS, AND NHDES STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- BUILDING TO BE SERVICED BY UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS. ENGINEER TO BE NOTIFIED.
- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELVE 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. SHELVE SHALL BE CONSTRUCTED TO THE ELEVATION OF THE THROUGH CHANNEL UNDERLAYMENT OF INVERT, AND SHELVE SHALL CONSIST OF BRICK MASONRY.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH DIA. CLEAR OPENING. THE WORD "SEWER" OR "DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
- 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 H20 LOADS.
- CONTRACTOR SHALL PLACE 2" WIDE METAL WIRE IMPREGNATED RED PLASTIC WARNING TAPE OVER ENTIRE LENGTH OF ALL GRAVITY SEWERS, SERVICES, AND FORCE MAINS.
- SANITARY SEWER FLOW CALCULATIONS:  
RETAIL: 5 GPD/100 SF PLUS 10 GPD/EMPLOYEE  
7,173 SF / 100 SF \* 5 GPD = 359 GPD  
5 EMPLOYEES \* 10 GPD = 50 GPD  
RETAIL SUB-TOTAL: 409 GPD  
RESTAURANT: 40 GPD/SEAT PLUS 20 GPD/EMPLOYEE  
173 SEATS \* 40 GPD = 6,920 GPD  
20 EMPLOYEES \* 20 GPD = 400 GPD  
REST. SUB-TOTAL: 7,320 GPD  
TOTAL PROPOSED FLOW = 7,729 GPD  
ESTIMATED ORIG. APPROVAL FLOW = 800 GPD (15,000 SF RETAIL)  
ADDITIONAL FLOW = 6,929 GPD
- ALL SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS.
- PROPOSED RIM ELEVATIONS OF DRAINAGE AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
- ALL WATER MAINS AND SERVICE PIPES SHALL HAVE A MINIMUM 12" VERTICAL AND 24" HORIZONTAL SEPARATION TO MANHOLES, OR CONTRACTOR SHALL INSTALL BOARD INSULATION FOR FREEZING PROTECTION.
- WATER MAINS SHALL BE HYDROSTATICALLY PRESSURE TESTED FOR LEAKAGE PRIOR TO ACCEPTANCE. WATERMAINS SHALL BE TESTED AT 1.5 TIMES THE WORKING PRESSURE OR 150 PSI, WHICHEVER IS GREATER. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 4 OF AWWA STANDARD C 600. WATERMAINS SHALL BE DISINFECTED AFTER THE ACCEPTANCE OF THE PRESSURE AND LEAKAGE TESTS ACCORDING TO AWWA STANDARD C 651.
- ALL WATER AND SANITARY LEADS TO BUILDING(S) SHALL END 5' OUTSIDE
- THE BUILDING LIMITS AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
- IF THE BUILDING IS REQUIRED TO HAVE A SPRINKLER SYSTEM, A PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CONTRACTOR, OWNER, ARCHITECT AND THE LOCAL FIRE DEPARTMENT PRIOR TO THE INSTALLATION.
- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, MECHANICAL JOINTS AND FIRE HYDRANTS.
- DIMENSIONS ARE SHOWN TO CENTERLINE OF PIPE OR FITTING.
- THE CONTRACTOR SHALL HAVE THE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER FIRE PROTECTION SYSTEM PRIOR TO INSTALLATION.
- CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPlicate TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- EXISTING UTILITIES SHALL BE DIGSAFED BEFORE CONSTRUCTION.
- ALL WATER LINES SHOULD HAVE TESTABLE BACKFLOW PREVENTERS AT THE ENTRANCE TO EACH BUILDING.
- ALL GRAVITY SEWER PIPE, MAINHOLES, AND FORCE MAINS SHALL BE TESTED ACCORDING TO NHDES STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWAGE AND WASTEWATER TREATMENT FACILITIES, CHAPTER ENV-WQ 700. ADOPTED ON 10-15-14.
- ENV-WQ 704.06 GRAVITY SEWER PIPE TESTING. GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY USE OF LOW-PRESSURE AIR TESTS CONFORMING WITH ASTM F1417-02(2005) OR UN-BELL PVC PIPE ASSOCIATION UN-B-8. LINES SHALL BE CLEANED AND VISUALLY INSPECTED AND TRUE TO LINE AND GRADE. DEFLECTION TESTS SHALL TAKE PLACE AFTER 30 DAYS FOLLOWING INSTALLATION AND THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5% OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANHOLE WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.
- ENV-WQ 704.17 SEWER MANHOLE TESTING. SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST PRIOR TO BACKFILLING AND PLACEMENT OF SHELVE AND INVERTS.
- SANITARY SEWER LINES SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM AN EXISTING OR PROPOSED WATER LINE. WHEN A SEWER LINE CROSSES UNDER A WATER LINE, THE SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 8 FEET HORIZONTALLY FROM THE WATERMAIN. THE SEWER LINE SHALL ALSO MAINTAIN A VERTICAL SEPARATION OF NOT LESS THAN 18 INCHES.
- SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 8 FEET BELOW GRADE IN ALL ROADWAY LOCATIONS, AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS-COUNTRY LOCATIONS. PROVIDE TWO-INCHES OF R-10 FOAM BOARD INSULATION 2'-FOOT WIDE TO BE INSTALLED 6-INCHES OVER SEWER PIPE IN AREAS WHERE DEPTH IS NOT ACHIEVED. A WAIVER FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER ENGINEERING BUREAU IS REQUIRED PRIOR TO INSTALLING SEWER AT LESS THAN MINIMUM COVER.
- ALL WATER AND SANITARY LEADS TO BUILDING(S) SHALL END AT RIGHT OF WAY AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
- THE CONTRACTOR SHALL MINIMIZE THE DISRUPTIONS TO THE EXISTING SEWER FLOWS AND THOSE INTERRUPTIONS SHALL BE LIMITED TO FOUR (4) HOURS OR LESS AS DESIGNATED BY THE CITY SEWER DEPARTMENT.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- DISINFECTION OF WATER MAINS SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AWWA STANDARD C651, LATEST EDITION. THE BASIC PROCEDURE TO BE FOLLOWED FOR DISINFECTING WATER MAINS IS AS FOLLOWS:  
a. PREVENT CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR.  
b. REMOVE, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAINS.  
c. CHLORINATE ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSH THE CHLORINATED WATER FROM THE MAIN.  
d. PROTECT THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW DUE TO HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.  
e. DETERMINE THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.  
f. MAKE FINAL CONNECTION OF THE APPROVED NEW WATER MAIN TO THE ACTIVE DISTRIBUTION SYSTEM.
- CONTRACTOR TO REMOVE WATER SERVICE BACK TO WATER MAIN PER CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS STANDARDS IF LINE FOUND TO BE LESS THAN A 6" LINE. IF WATER SERVICE LINE FOUND TO BE 6", THEN CONTRACTOR TO COORDINATE WITH ENGINEER ON UTILIZING FOR SERVING THE PROPOSED BUILDING.
- CONTRACTOR TO MODIFY BRICK SHELVE INVERT AT BOTTOM OF SMH-31 TO DIRECT SEWER FLOW.

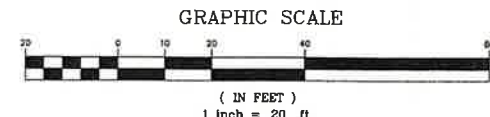
APPROVED - ROCHESTER, NH  
PLANNING BOARD

DATE:

PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 216, LOT 11

APPLICANT/OWNER  
WATERSTONE ROCHESTER, LLC  
% WATERSTONE RETAIL DEVELOPMENT  
117 KENDRICK ST. STE 325  
NEEDHAM, MA 02494-2724  
BK 4238, PG 739

TOTAL LOT AREA  
3,183,365± SQ. FT.  
73.08± ACRES



Design: BWG Draft: GDR Date: 11/15/2021  
Checked: WGM Scale: AS NOTED Project No.: 21173  
Drawing Name: 21173-PLAN.dwg

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR
		ISSUED FOR REVIEW	BY

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885

Civil Engineering Services

603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **UTILITY PLAN**

Project: **RESTAURANT & RETAIL BUILDING  
120 MARKETPLACE BOULEVARD, ROCHESTER, NH**

Owner of Record: **WATERSTONE ROCHESTER, LLC  
117 KENDRICK ST. STE 325, NEEDHAM, MA**

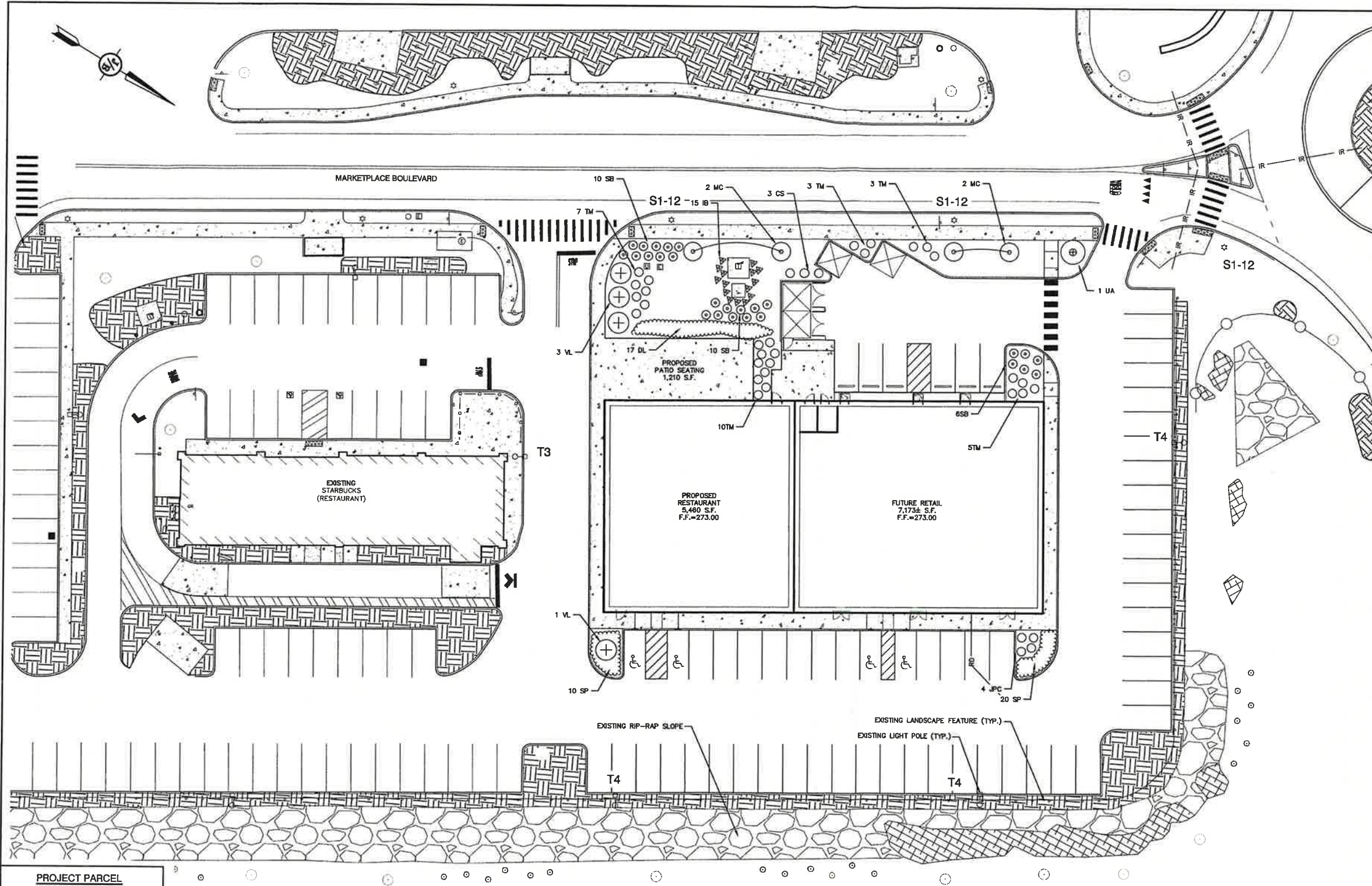
DRAWING No.

**C4**

SHEET 5 OF 10  
JBE PROJECT NO. 21173



F:\CADD\MASTER STANDARD\dwg\LB-LAYOUTS.dwg 3/12/2015 3:27:29 PM EDT



#### LANDSCAPE NOTES:

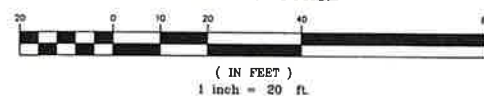
1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED THE LANDSCAPE DESIGNER.
5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE DESIGNER. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL.
6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING FOR CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASSES AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE DESIGNER.
9. ALL WORK AND PLANTS SHALL BE DONE, INSTALLED AND DETAILED IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE DESIGNER IN WRITING OR OTHERWISE FORFEIT HIS CLAIM.
12. FINAL ACCEPTANCE BY THE LANDSCAPE DESIGNER WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
13. BY THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAS DIED, LOST NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR IMPROPER CARE, OR THAT IS, IN THE OPINION OF THE LANDSCAPE DESIGNER, IN UNHEALTHY OR UNSIGHTLY CONDITION.
14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION, EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS SPECIFIED.
15. ALL TREES AND SHRUBS SHALL BE PLANTED IN MULCH BEDS WITH EDGE STRIPS TO SEPARATE TURF GRASS AREAS.
16. THE CONTRACTOR SHALL REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC. FROM ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE. GRASS SEED OR PINE BARK MULCH SHALL BE APPLIED AS DEPICTED ON PLANS.
17. FINISHED GRADES IN LANDSCAPED ISLANDS SHALL BE INSTALLED SO THAT THEY ARE 1" HIGHER THAN THE TOP OF THE SURROUNDING CURB.
18. ALL LANDSCAPING SHALL MEET THE CITY STANDARDS AND REGULATIONS.
19. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE DRIPLINE OF THE TREE. THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
20. ALL MULCH AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED PINE BARK MULCH OVER A 10 ML WEED MAT EQUAL TO 'WEEDBLOCK' BY EASY GARDENER OR DEWITT WEED BARRIER.
21. ALL LANDSCAPED AREAS SHALL HAVE SELECT MATERIALS REMOVED TO A DEPTH OF AT LEAST 6" BELOW FINISH GRADE. THE RESULTING VOID IS TO BE FILLED WITH A MINIMUM OF 8" HIGH-QUALITY SCREENED LOAM AMENDED WITH 3" OF AGED ORGANIC COMPOST.
22. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO CIVIL/SITE DRAWINGS FOR OTHER SITE CONSTRUCTION INFORMATION.
23. IRRIGATION PIPING SYSTEM SHALL BE REVIEWED AND APPROVED BY OWNER AND ENGINEER PRIOR TO INSTALLATION.
24. ADDITIONAL PLANTING AND SEEDING MAY BE REQUIRED AS PART OF THE ON-SITE WETLANDS RESTORATION AND MITIGATION PACKAGE PREPARED BY WEST ENVIRONMENTAL CONTRACTOR SHALL COORDINATE WITH PROJECT ENGINEER AND WETLAND CONSULTANT TO ENSURE THAT THESE ADDITIONAL REQUIREMENTS ARE PROPERLY ADDRESSED.
25. LANDSCAPING DEPLETED ON PLAN IS A RELOCATION OF PLANTS FROM ORIGINAL "RIDGE MARKETPLACE" DEVELOPMENT FROM AREA OF THE EXISTING PAD SITE.

PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 216, LOT 11

APPLICANT/OWNER  
WATERSTONE ROCHESTER, LLC  
% WATERSTONE RETAIL DEVELOPMENT  
117 KENDRICK ST. STE 325  
NEEDHAM, MA 02494-2724  
BK 4238, PG 739

TOTAL LOT AREA  
3,183,365 ± SQ. FT.  
73.08 ± ACRES

#### GRAPHIC SCALE



Existing Luminaire Schedule Pad Site				
Symbol	Qty	Label	Arrangement	Description
D-O	1	S3	SINGLE	GLEON-RE-03-LED-E1-SL3/ 30' AFG
O-O	3	S4	SINGLE	GLEON-RE-06-LED-E1-SM0/ 30' AFG
☆	3	S1-12	SINGLE	SIG2-II-64VLE0-NK-S25/ 12' POLE

Planting Schedule				
CODE	Qty	BOTANICAL NAME	COMMON NAME	SIZE
UA	1	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	3-3 1/2" CALIPER
MC	4	MALUS CENTURION	CENTURION CRABAPPLE	1/2-3" CALIPER
VL	4	VIBURNUM LENTAGO	NANNY BERRY VIBURNUM	6-7' HT
CS	3	CORNUS SERICEA 'ALLENMAN'S COMPACT'	ALLENMAN'S RED STEM DOGWOOD	15
IB	15	ILEX MESSEYANAE 'BLUE PRINCESS'	BLUE PRINCESS BLUE HOLLY	18-24"
DL	17	HUSKERRIA 'STELLA DORO'	STELLA DORO DAYLILY	42
TM	29	TAXUS MEDIA 'TAMMONTI'	TAUNTON YEW	45
SB	26	SPIREA BURHALDA 'GOLDFLAME'	GOLDFLAME SPIREA	43
SP	30	SEDUM PURPUREUM 'VERA JAMESON'	VERA JAMESON SEDUM	12
JPC	4	JUNIPERUS PFITZERIANA 'CONFECTA'	CONFECTA PFITZER JUNIPER	15

Design: BWG Draft: GDR Date: 11/15/2021  
Checked: WGM Scale: AS NOTED Project No.: 21173  
Drawing Name: 21173-PLAN.dwg

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885

Civil Engineering Services

603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **LANDSCAPE AND LIGHTING PLAN**

Project: **RESTAURANT & RETAIL BUILDING  
120 MARKETPLACE BOULEVARD, ROCHESTER, NH**

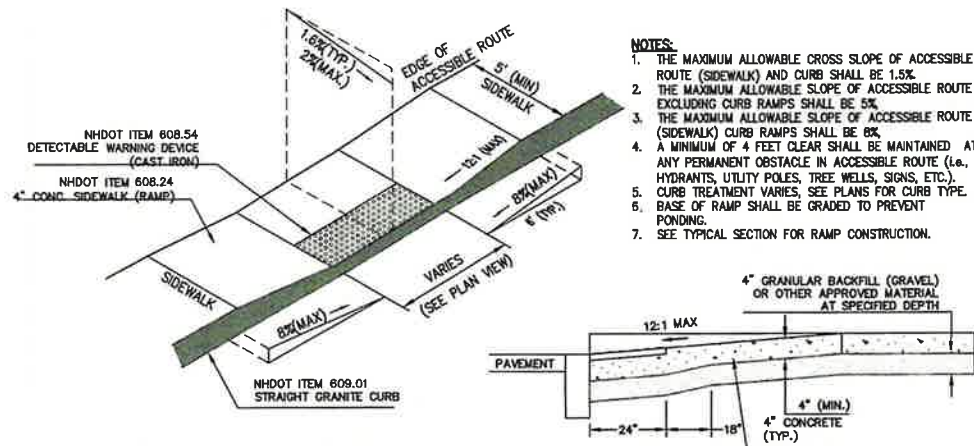
Owner of Record: **WATERSTONE ROCHESTER, LLC  
117 KENDRICK ST. STE 325, NEEDHAM, MA**

DRAWING No.

**L1**

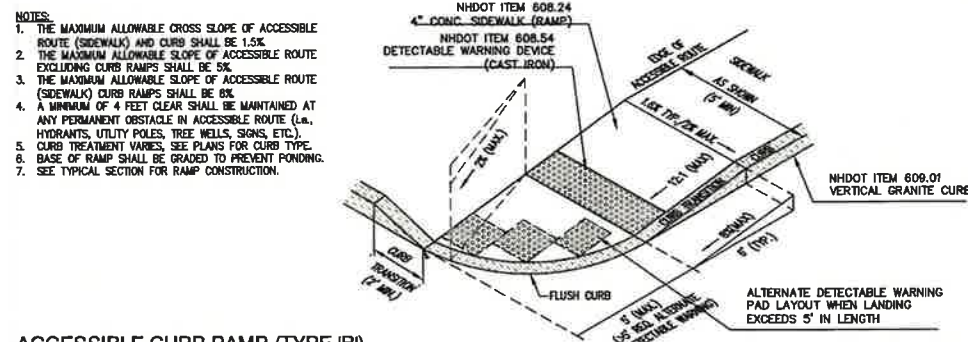
SHEET 6 OF 10  
JBE PROJECT NO. 21173





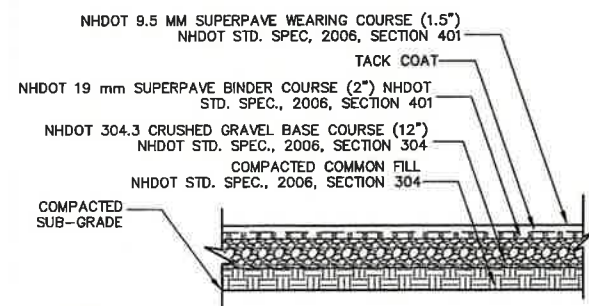
ACCESSIBLE CURB RAMP (TYPE 'A')

NOT TO SCALE



ACCESSIBLE CURB RAMP (TYPE 'B')

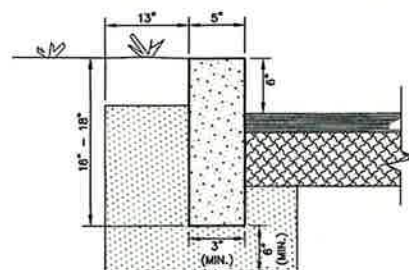
NOT TO SCALE



- NOTES:
1. PAVEMENT SUBGRADES SHOULD BE PROOF ROLLED IN ORDER TO DENSIFY THE SUBGRADES USING A MINIMUM OF 4 PASSES WITH A 10-TON VIBRATORY DRUM COMPACTOR. THE GRAVEL BORROW SUBGRADE COURSE AND CRUSHED GRAVEL BASE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM-D698).
  2. PAVEMENT SECTION SUBJECT TO CHANGE BASED ON GEOTECHNICAL INVESTIGATION.

STANDARD DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE



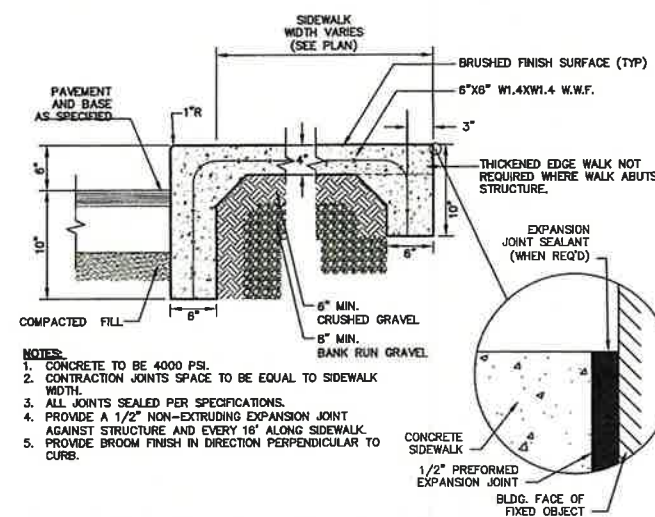
NOTES:

1. EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
2. JOINTS BETWEEN STONES SHALL BE MORTARED.

VERTICAL GRANITE CURB (VGC)

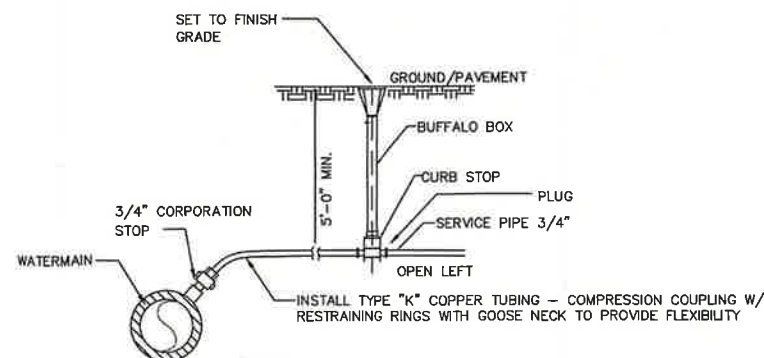
NOT TO SCALE

TRAFFIC CONTROL SCHEDULE						
SIGN NUMBER	SIGN	SIZE OF SIGN WIDTH HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	REMARKS
R1-1	STOP	30" 30"	WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-2	NO LEFT TURN	24" 24"	RED ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-2A	NO LEFT TURN	24" 30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R6-1	ONE WAY	36" 12"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R6-2	ONE WAY	18" 24"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-8	HANDICAP	12" 24"	BLUE & GREEN ON WHITE	CHANNEL	5'-0"	REFLECTORIZED SIGN
R7-8A	VAN ACCESSIBLE	12" 6"	BLUE & GREEN ON WHITE	CHANNEL	5'-0"	REFLECTORIZED SIGN
31-466	RIGHT TURN ONLY	24" 30"	BLACK ON WHITE	CHANNEL	8'-6"	REFLECTORIZED SIGN
R5-1	STOP	30" 30"	RED / SILVER	CHANNEL	7'-0"	REFLECTORIZED SIGN



MONOLITHIC CONCRETE SIDEWALK (MCS)

NOT TO SCALE

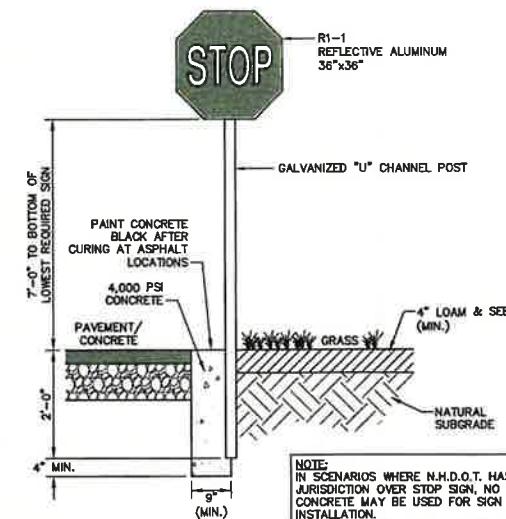


NOTES:

1. THE END OF THE INSTALLED WATER SERVICE TO BE MARKED BY A 2X4.
2. ALL WORK TO BE IN ACCORDANCE WITH THE LOCAL WATER COMPANY INSTALLATION PROCEDURES AND SPECIFICATIONS.

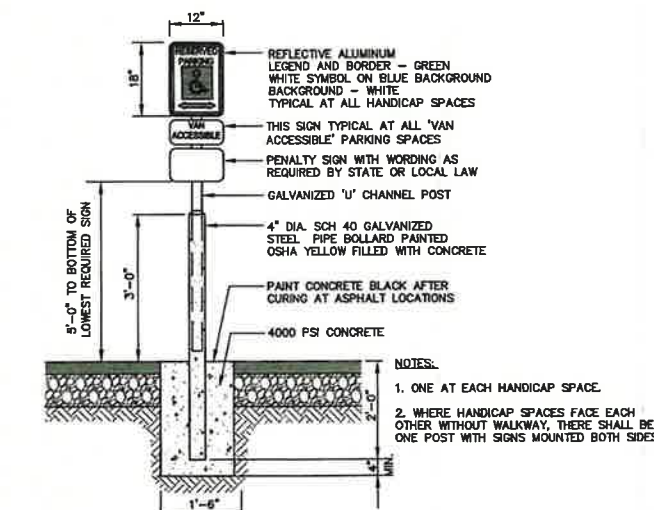
TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE



STOP SIGN (R1-1)

NOT TO SCALE



HANDICAP PARKING SIGN (R7-8)

NOT TO SCALE

PAINTING STRIPING LEGEND

- SSWL/4\"/>

F:\CADD MASTER STANDARD\dwg\JB-LAYOUTS.dwg 3/12/2015 3:27:29 PM EDT

Design: BWG	Draft: GDR	Date: 11/15/2021
Checked: WGM	Scale: AS NOTED	Project No.: 21173
Drawing Name: 21173-PLAN.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	RESTAURANT & RETAIL BUILDING 120 MARKETPLACE BOULEVARD, ROCHESTER, NH
Owner of Record:	WATERSTONE ROCHESTER, LLC 117 KENDRICK ST. STE 325, NEEDHAM, MA

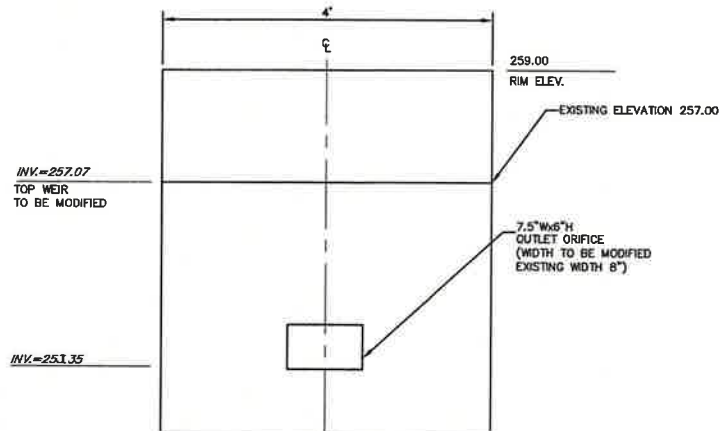
DRAWING No.	D1
SHEET 7 OF 10	JBE PROJECT NO. 21173





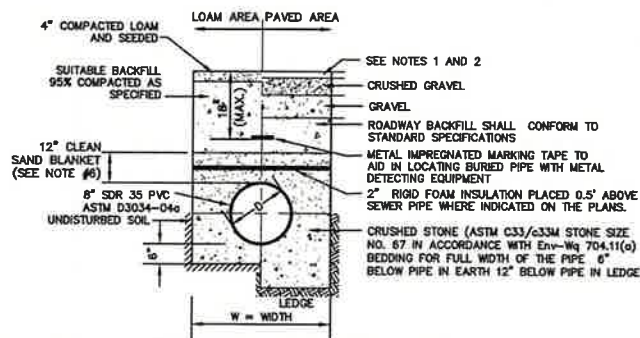


F:\CADD\MASTER STANDARD\dwg\B-LAYOUTS.dwg 3/12/2015 3:27:20 PM EDT



OUTLET #1 WEIR (GRAVEL WETLAND)

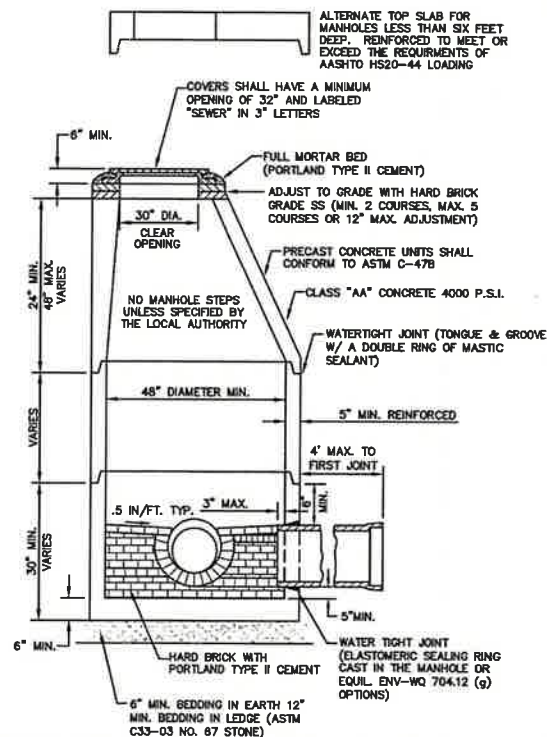
NOT TO SCALE



- NOTES:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO PAVEMENT DETAILS.
  2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.
  3. TRENCH BACKFILL SHALL CONFORM WITH ENV. WQ 704.11(h) AND BE FREE OF DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE OR ROCKS OVER SIX INCHES.
  4. W= MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12" INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, WIDTH SHALL BE NO MORE THAN 36"; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, WIDTH SHALL BE 24 INCHES PLUS PIPE O.D. WIDTH SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
  5. RIGID FOAM INSULATION TO BE PROVIDED WHERE COVER IN THE ROADWAY IS LESS THAN 6" AND CROSS COUNTRY IS LESS THAN 4", PURSUANT TO DES WAIVER BEING ISSUED.
  6. PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES A 1/2" SIEVE AND A MAXIMUM OF 15% PASSES A #200 SIEVE IN ACCORDANCE WITH ENV-WQ 704.11(b).
  7. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL AND CERTIFIED BY THE MANUFACTURER AS CONFORMING TO THE ASTM D3212 STANDARD IN EFFECT WHEN THE JOINT SEALS WERE MANUFACTURED, AND SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE PER ENV-WQ 704.05 (a).

SEWER TRENCH

NOT TO SCALE

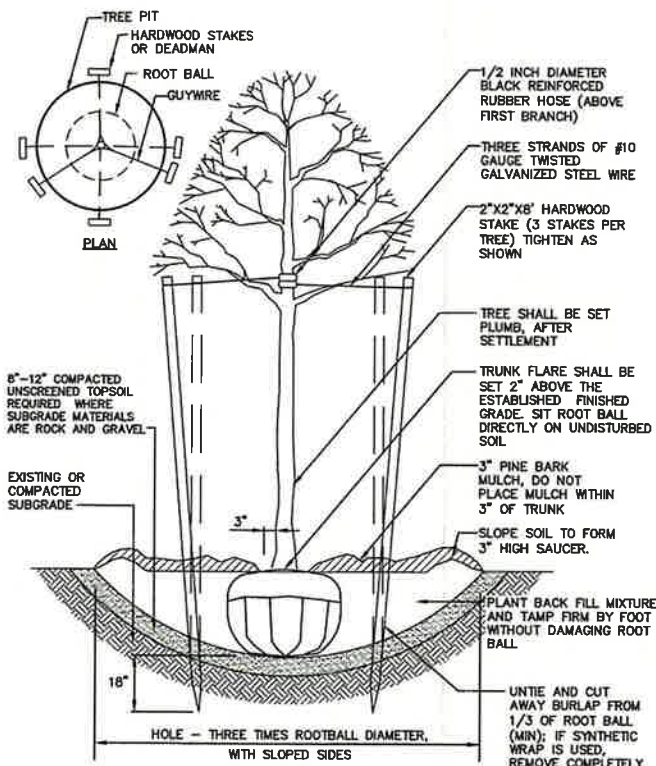


NOTES:

1. PER NHDES ENV-WQ 704.13(C), MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:
  - a. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION.
  - b. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE PER TABLE 704-4:
    - (1) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
    - (2) 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PART HYDRATED LIME;
  - c. CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C150/C150M STANDARD IN EFFECT AT THE TIME THE CEMENT WAS MANUFACTURED.
  - d. HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED.
  - e. SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM C33 STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES.
  - f. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT:  
[HTTP://WWW.NH.GOV/DOY/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM](http://www.nh.gov/dot/org/projectdevelopment/highwaydesign/specifications/index.htm)
2. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL IN ACCORDANCE WITH ENV-WQ 704.12 (K).
3. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH ENV-WQ 704.17 (a) THROUGH (e).
4. SEWER MANHOLE COVERS SHALL CONFORM TO ASTM A48/48M WITH A CASTING EQUAL TO CLASS 30 IN ACCORDANCE WITH ENV-WQ 704.13 (a) (8).
5. ALL PRECAST SECTIONS SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING IN ACCORDANCE WITH ENV-WQ 704.12 (J).
6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL PER ENV-WQ 704.12(I).
7. BRICK MASONRY SHALL CONFORM TO ASTM C32 (ENV-WQ 704.12(a)(9))

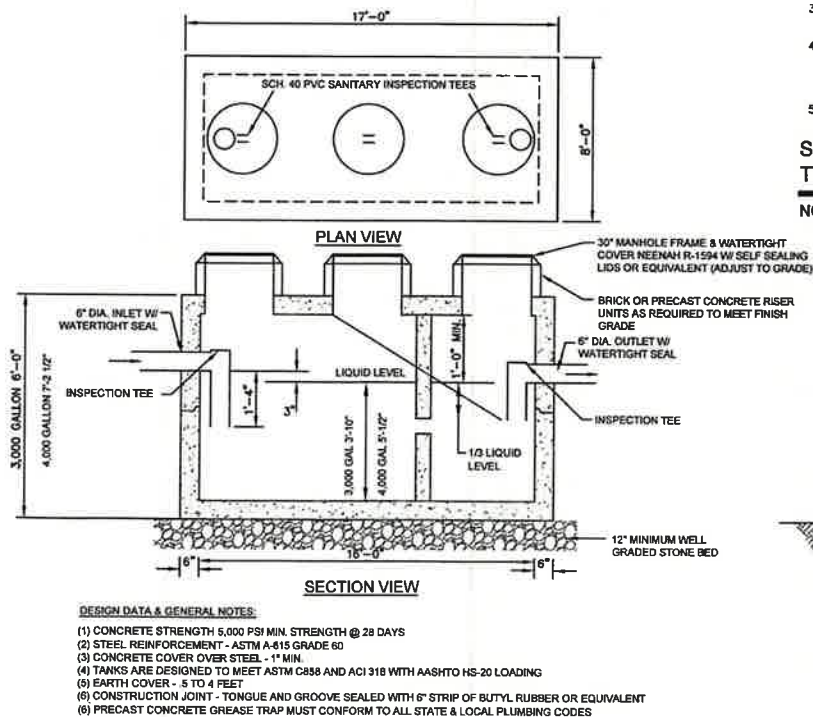
SEWER MANHOLE

NOT TO SCALE



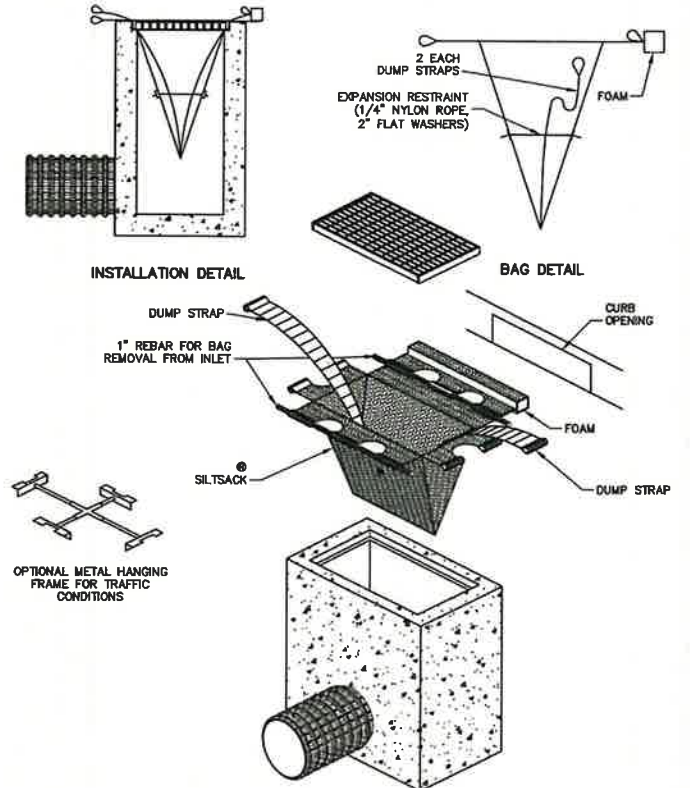
TREE PLANTING (FOR TREES UNDER 4" CALIPER)

NOT TO SCALE



GREASE TRAP (3,000 & 4,000 GAL.)

NOT TO SCALE

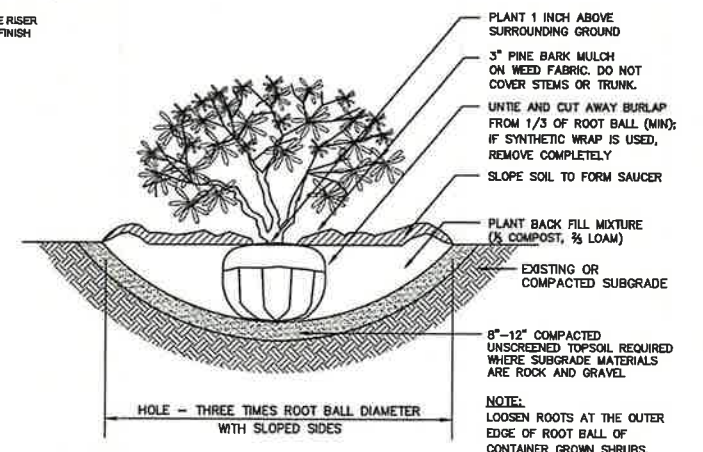


NOTES:

1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
3. TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
4. TO EMPTY SILTSACK, PLACE UNIT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL LIFT SILTSACK FROM THE BOTTOM AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF SUNLIGHT UNTIL NEXT USE.

SILTSACK INLET SEDIMENT CONTROL DEVICE  
TYPE B - WITH CURB DEFLECTOR

NOT TO SCALE



SHRUB PLANTING

NOT TO SCALE

Design: BWG	Draft: GDR	Date: 11/15/2021
Checked: WGM	Scale: AS NOTED	Project No.: 21173
Drawing Name: 21173-PLAN.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR
		REVISION	

Designed and Produced In NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03865

Civil Engineering Services

603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

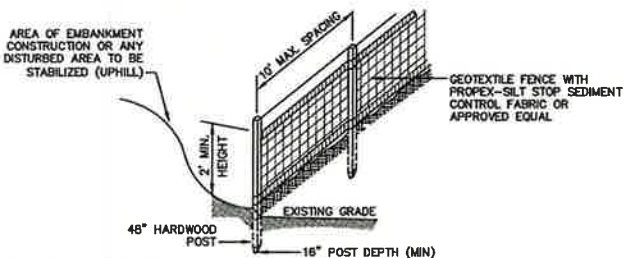
Plan Name:	DETAIL SHEET
Project:	RESTAURANT & RETAIL BUILDING 120 MARKETPLACE BOULEVARD, ROCHESTER, NH
Owner of Record:	WATERSTONE ROCHESTER, LLC 117 KENDRICK ST. STE 325, NEEDHAM, MA

DRAWING No.	D3
SHEET 9 OF 10	JBE PROJECT NO. 21173



# TEMPORARY EROSION CONTROL NOTES

- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
- ALL DISTURBED AREAS (INCLUDING POND AREAS BELOW THE PROPOSED WATERLINE) SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE 'C' AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
- SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5" OR GREATER. ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
- AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- 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 BY SEEDING AND INSTALLING NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER) ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 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.
- AFTER OCTOBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
- 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% VEGETATED GROWTH HAS BEEN ESTABLISHED;
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED; OR
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- FUGITIVE DUST CONTROL IS REQUIRED TO BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000, AND THE PROJECT IS TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
- PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. ALL TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED ON THIS PLAN.
- IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS IN ADDITION TO THOSE CALLED FOR IN THE SWPPP:
  - A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT ("PERMIT").
  - DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY 1/2 INCH OR GREATER RAIN EVENT (I.E. 1/2 INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
  - THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.

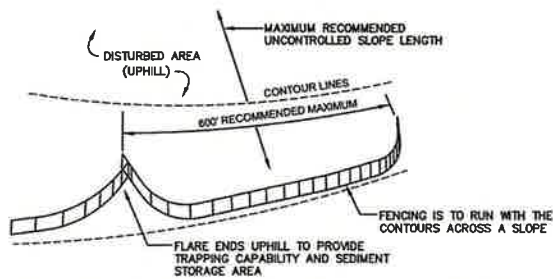


## CONSTRUCTION SPECIFICATIONS:

- WOVEN FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP, MID AND BOTTOM AND EMBEDDED IN THE GROUND A MINIMUM OF 6" AND THEN COVERED WITH SOIL.
- THE FENCE POSTS SHALL BE A MINIMUM OF 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED 6", FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED AND PROPERLY DISPOSED OF WHEN IT IS 6" DEEP OR VISIBLE 'BULGES' DEVELOP IN THE SILT FENCE.
- PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
- SILT FENCE SHALL REMAIN IN PLACE FOR 24 MONTHS.

## SILT FENCE

NOT TO SCALE



- SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND REVEGETATED.

## MAINTENANCE:

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE DONE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED, OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

# SEEDING SPECIFICATIONS

## 1. GRADING AND SHAPING

- SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).
- WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

## 2. SEEDING PREPARATION

- SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND FERTILIZER AND LIME MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

## 3. ESTABLISHING A STAND

- LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. TYPES AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:  
AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ.FT.  
NITROGEN(N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ.FT.  
PHOSPHATE(P2O5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.  
POTASH(K2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.  
(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10.)
- SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
- REFER TO THE 'SEEDING GUIDE' AND 'SEEDING RATES' TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDFOOT, TREFOL, AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT PRIOR TO THEIR INTRODUCTION TO THE SITE.
- WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.

## 4. MULCH

- HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
- MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 80 LBS PER 1000 S.F.

## 5. MAINTENANCE TO ESTABLISH A STAND

- PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
- FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
- IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C D	FAIR POOR POOR FAIR	GOOD GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT EXCELLENT	FAIR FAIR GOOD POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A B C	GOOD GOOD GOOD	GOOD EXCELLENT EXCELLENT	GOOD EXCELLENT EXCELLENT	FAIR FAIR FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C	GOOD GOOD GOOD	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT	FAIR POOR FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E F	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	2/ 2/
GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.					
1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE BELOW.					
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.					

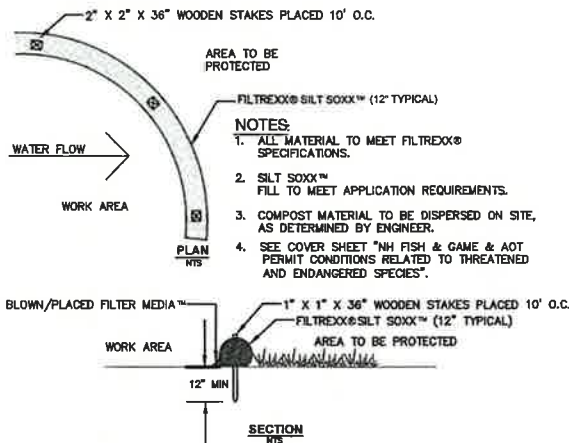
NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT YET COMPLETE.

## SEEDING GUIDE

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREeping RED FESCUE	10	0.25
CROWN VETCH OR FLAT PEA	15	0.35
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
BIRD'S FOOT TREFOL	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREeping RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/2	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

## SEEDING RATES



## FILTREXX® SILT SOXX™

NOT TO SCALE

## CONSTRUCTION SEQUENCE

- CUT AND REMOVE TREES IN CONSTRUCTION AREA AS REQUIRED OR DIRECTED.
- INSTALL SILT SACK CATCH BASINS INSERTS PRIOR TO THE START OF CONSTRUCTION. THESE ARE TO BE MAINTAINED UNTIL THE FINAL PAVEMENT SURFACING AND LANDSCAPING AREAS ARE ESTABLISHED.
- CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. THIS INCLUDES ANY REQUIRED DEMOLITION OF EXISTING STRUCTURES, UTILITIES, ETC.
- STRIP LOAM AND PAVEMENT, OR RECLAIM EXISTING PAVEMENT WITHIN LIMITS OF WORK PER THE RECOMMENDATIONS OF THE PROJECT ENGINEER AND STOCKPILE EXCESS MATERIAL. STABILIZE STOCKPILE AS NECESSARY.
- PERFORM PRELIMINARY SITE GRADING IN ACCORDANCE WITH THE PLANS, INCLUDING THE CONSTRUCTION OF ANY RETAINING WALLS AND SOUND WALLS.
- PREPARE BUILDING PAD(S) TO ENABLE BUILDING CONSTRUCTION TO BEGIN.
- INSTALL THE SEWER AND DRAINAGE SYSTEMS FIRST. THEN ANY OTHER UTILITIES IN ACCORDANCE WITH THE PLAN AND DETAILS. ANY CONFLICTS BETWEEN UTILITIES ARE TO BE RESOLVED WITH THE INVOLVEMENT AND APPROVAL OF THE ENGINEER.
- ALL SWALES AND DRAINAGE STRUCTURES ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE DITCHES, CHECK DAMS, SEDIMENT TRAPS, ETC., TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ADJUTING WATERS AND/OR PROPERTY.
- PERFORM FINAL FINE GRADING, INCLUDING PLACEMENT OF 'SELECT' SUBGRADE MATERIALS.
- PAVE ALL PARKING LOTS AND ROADWAYS WITH INITIAL 'BASE COURSE'.
- PERFORM ALL REMAINING SITE CONSTRUCTION (I.e. BUILDING, CURBING, UTILITY CONNECTIONS, ETC.).
- LOAM AND SEED ALL DISTURBED AREAS AND INSTALL ANY REQUIRED SEDIMENT AND EROSION CONTROL FACILITIES (I.e. RIP RAP, EROSION CONTROL BLANKETS, ETC.).
- FINISH PAVING ALL ROADWAYS AND PARKING AREAS WITH 'FINISH' COURSE.
- 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.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE BEEN 75%-85% ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND RE-VEGETATE ALL DISTURBED AREAS.
- CLEAN SITE AND ALL DRAINAGE STRUCTURES, PIPES AND SUMPS OF ALL SILT AND DEBRIS.
- INSTALL ALL PAINTED PAYEMENT MARKINGS AND SIGNAGE PER THE PLANS AND DETAILS.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
- UPON COMPLETION OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ANY RELEVANT PERMITTING AGENCIES THAT THE CONSTRUCTION HAS BEEN FINISHED IN A SATISFACTORY MANNER.

F:\CADD\MASTER STANDARD\dwg\LB-LAYOUTS.dwg 3/12/2015 3:27:29 PM EDT

Design: BWG	Draft: GDR	Date: 11/15/2021
Checked: WGM	Scale: AS NOTED	Project No.: 21173
Drawing Name: 21173-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	REVISION	BY
3	12/20/22	REVISED PER CONDITIONS OF APPROVAL	EMP
2	04/25/22	REVISED PER TRG COMMENTS	EMP
1	04/11/22	REVISED PER TRG COMMENTS	EMP
0	03/21/22	ISSUED FOR REVIEW	GDR

Designed and Produced In NH

**J/B Jones & Beach Engineers, Inc.**

65 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	EROSION AND SEDIMENT CONTROL DETAILS
Project:	RESTAURANT & RETAIL BUILDING 120 MARKETPLACE BOULEVARD, ROCHESTER, NH
Owner of Record:	WATERSTONE ROCHESTER, LLC 117 KENDRICK ST. STE 325, NEEDHAM, MA

DRAWING No.	E1
SHEET 10 OF 10	JBE PROJECT NO. 21173