PLANSET FOR
APPLICATION FOR SITE PLAN REVIEW
NEW FACILITY BUILDING
TOWNLINE EQUIPMENT SALES, INC.
1474 NH ROUTE 12A
TAX MAP 258, LOT 7
PLAINFIELD, NEW HAMPSHIRE

MARCH 1, 2021

### FOR REVIEW BY: TOWN OF PLAINFIELD, NH PLANNING BOARD

PREPARED FOR OWNER:
Great Brook Enterprises, LLC
Matt Marrazzo, Owner
P.O. Box 300
Plainfield, NH 03781

Townline Equipment Sales, Inc.
(603) 675-6347
matt@townlineequipment.com

PREPARED BY ENGINEER:
Right Angle Engineering, PLLC
Erin Darrow, P.E., C.P.E.S.C.
152 Main Street
New London, NH 03257
(603) 526-2807 office
(603) 443-7815 mobile
(603) 523-8811 fax
Erin@RightAngle.Engineering

## SURVEYOR: DiBernardo Associates, LLC Joseph DiBernardo, L.L.S. P.O. Box 52 Bellows Falls, VT 05101 (802) 463-3031 joedibo@comcast.net

### WETLANDS SCIENTIST: Beaver Tracks, LLC Boundary Sisson, C.W.S., C.S.S. Fra 408 Randolph Hill Road Randolph, NH 03593 (603) 313-4925 beavertracksllc@yahoo.com fra

## ARCHITECT: Barrett Architecture, P.C. Frank "Jay" Barrett, Jr., A.I.A. 215 Gates-Briggs Building P.O. Box 55 White River Jct., VT 05001 frankjbarrettjr@gmail.com (802) 295-0004

## STRUCTURAL ENGINEER: Tim Schall, P.E. Schaal Engineering, PC PO Box 152 61 Depot Street Wilder, VT 05088-0152 (802) 295-2002 timothy@schaalengineering.com

### Map 258, Lot 7 Lot Location 1474 NH Route 12A Plainfield, NH 6.86 Acres Lot Size 298,821.6 Square Ft VR - Village Zone Residential 30' front yard Setbacks 15' side & rear yard Allowable 40%Impervious Surface Coverage 7.3%**Existing Impervious** (3000 sq. ft.) Coverage Proposed Impervious 17.3%Coverage (7096 sq. ft.) Allowable Building 35 ft. Height Existing & Proposed less than 35 ft Building Height Sales & Service Existing & Proposed Tractors & Use Excavation

Equipment

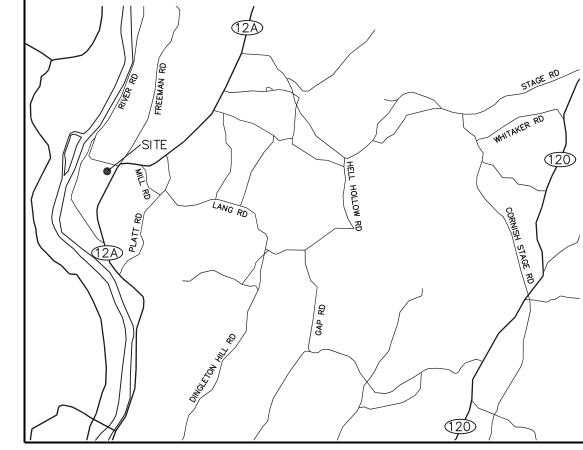
**Lot Information** 

### **PLANSET CONTENTS:**

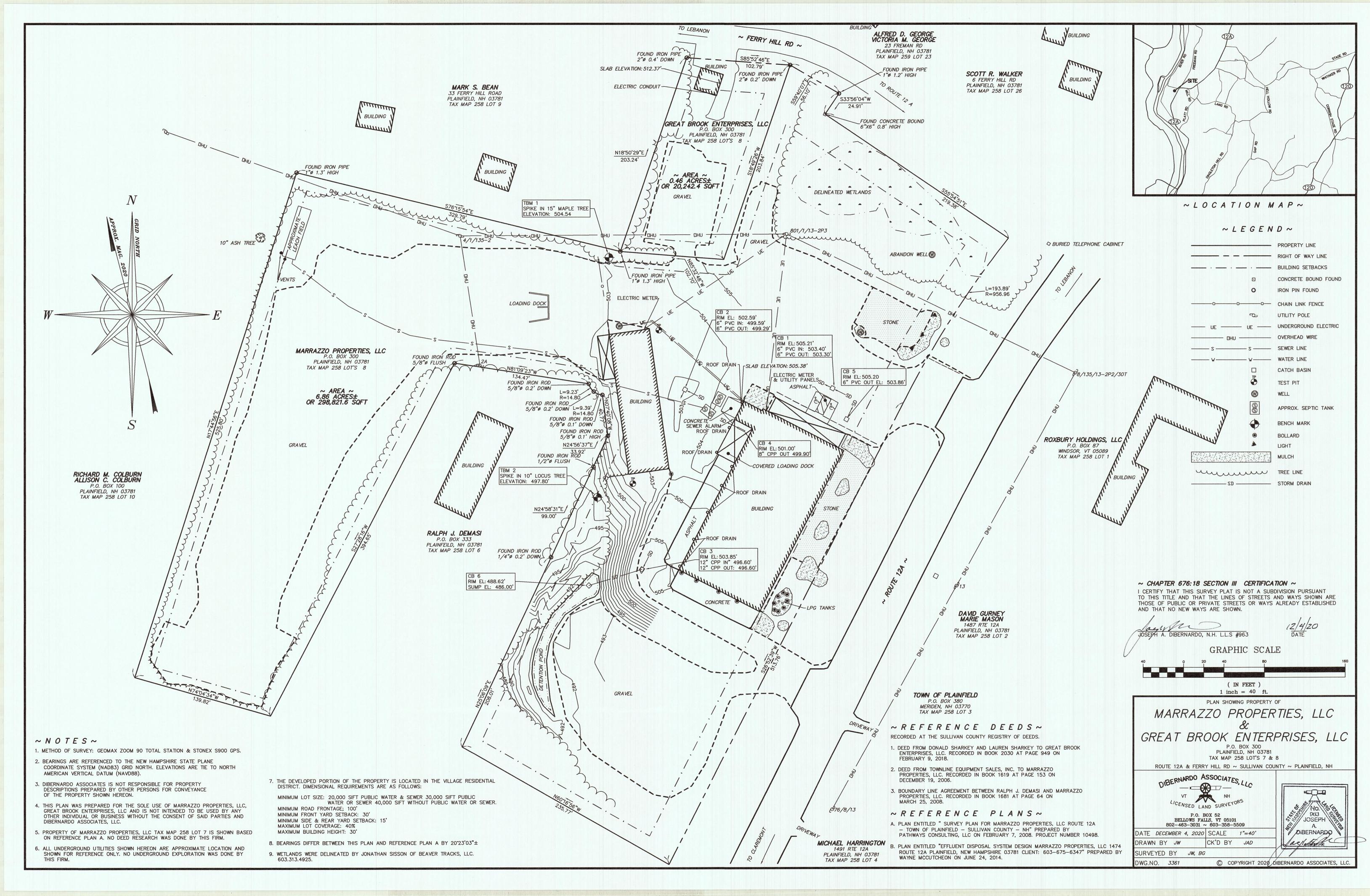
| Sheet 1:     | Cover Sheet                         |
|--------------|-------------------------------------|
| Sheet 2:     | <b>Existing Conditions Survey</b>   |
| Sheet 3:     | Overall Proposed Site Plan          |
| Sheet 4:     | Detailed Proposed Site Plan         |
| Sheet 5:     | General Details                     |
| Sheet 6:     | Drainage Profile                    |
| Sheet 7:     | <b>Construction Details</b>         |
| Sheet 8:     | <b>Erosion Control Details</b>      |
| Sheet 9:     | Proposed Floorplan                  |
| Sheet 10-14: | <b>Proposed Building Elevations</b> |

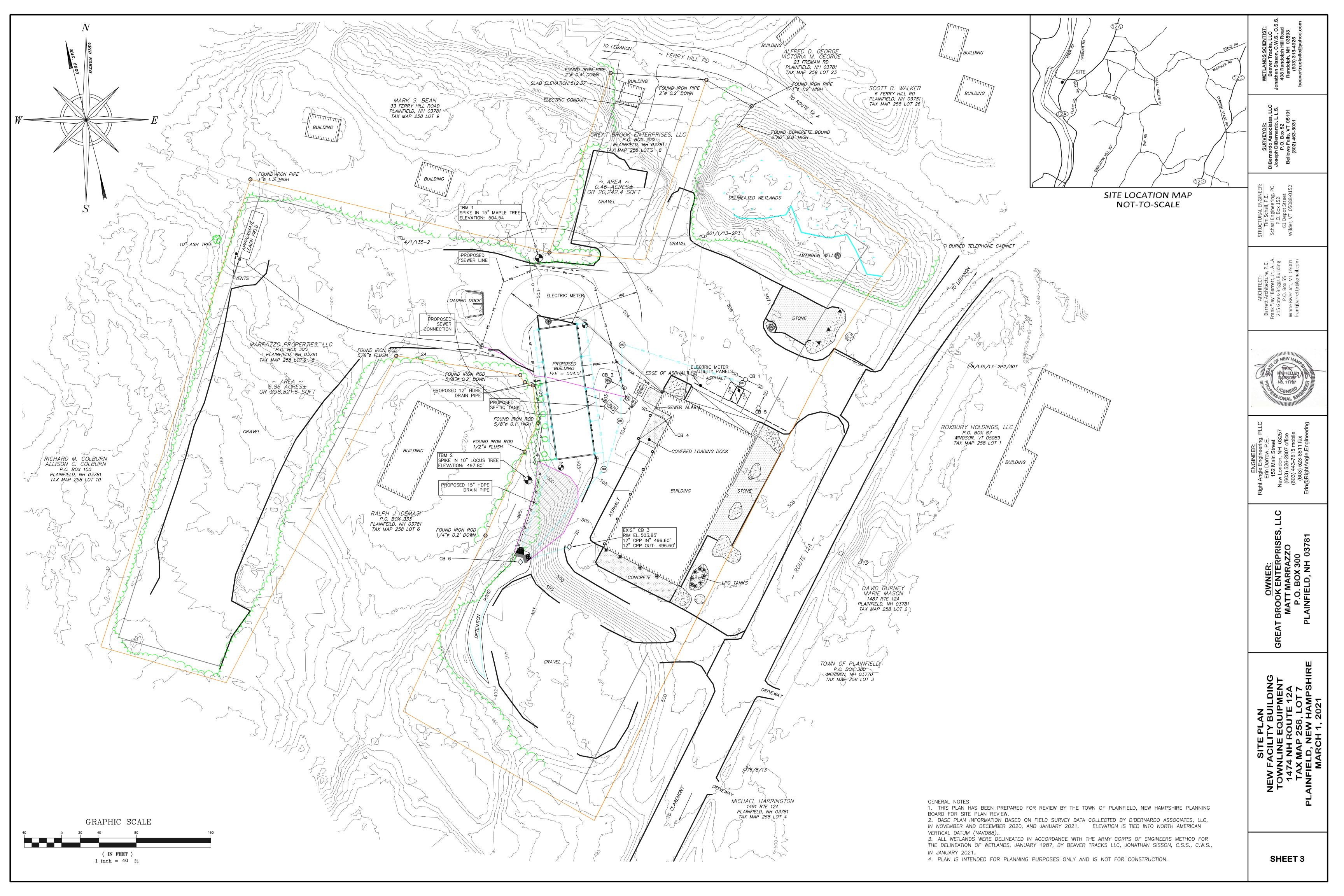
### **Impervious Surface**

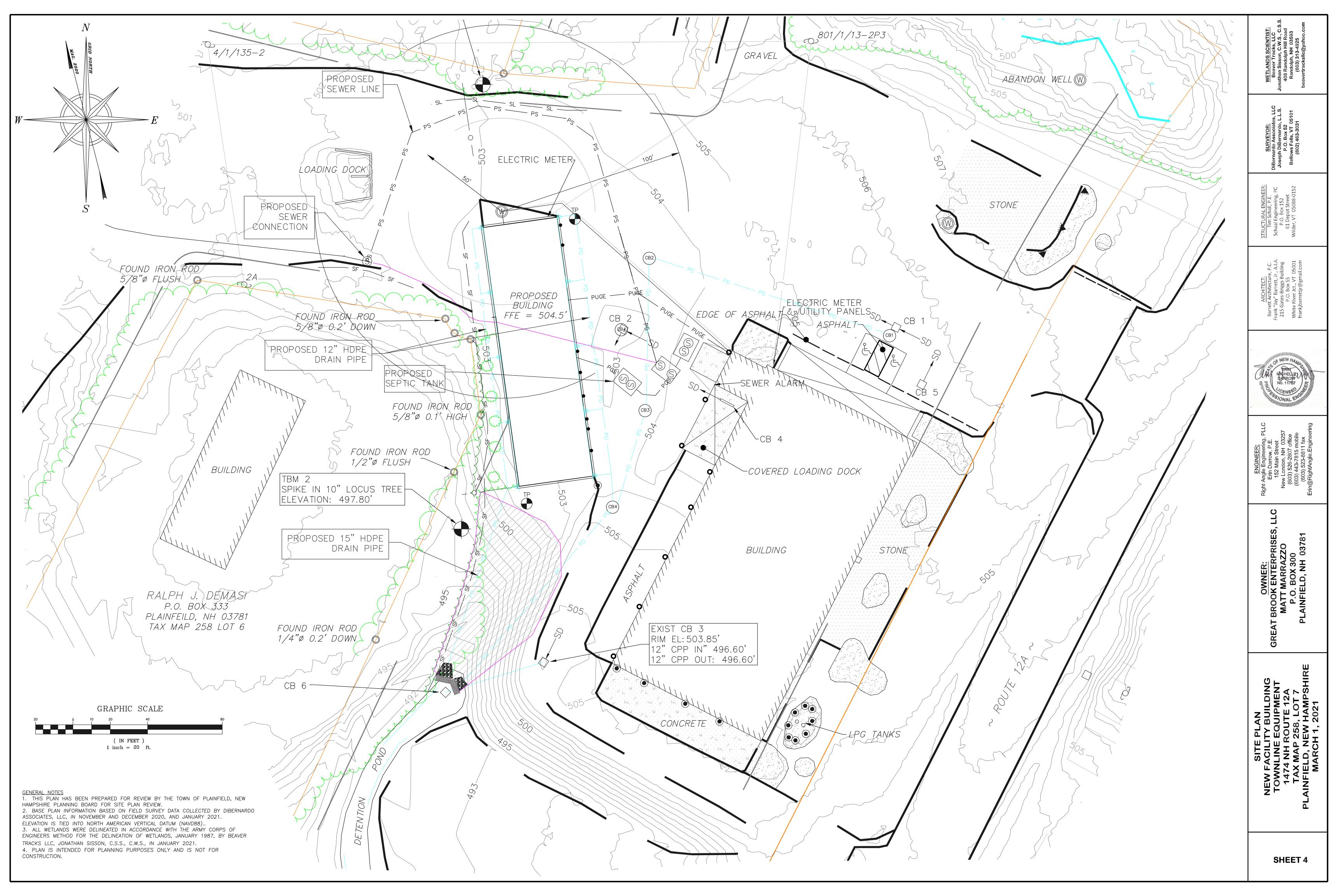
| Description                          | Existing Area (Square Feet)  | Proposed Area<br>(Square Feet) |
|--------------------------------------|------------------------------|--------------------------------|
| Gravel Parking,<br>Storage, Walkways | 89,950 sf                    | 89,950                         |
| Asphalt Parking,<br>Driveway         | 2685 sf                      | 2685 sf                        |
| Concrete Pads                        | 2035 sf                      | 2035 sf                        |
| Building                             | 18,675 + 6180<br>= 24,855 sf | 18,675 + 5600<br>= 24,275 sf   |
| TOTAL                                | 119,525                      | 118,945 sf                     |
| Percent of Lot<br>(41,000 SF)        | 39.99%                       | 39.80%                         |



SITE LOCATION MAP NOT-TO-SCALE









### **GENERAL NOTES**

- THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN ON THE DRAWINGS, UNLESS OTHERWISE NOTED. THE CONTRATOR SHALL PROVIDE AND INSTALL ALL MATERIALS REQUIRED TO
- COMPLETE PLANS 2. CONTRACTOR IS RESPONSIBLE FOR REPORTING CONDITIONS IDENTIFIED ON-SITE THAT IMPACT THE PHASING, IMPLEMENTATION, FINAL CONDITIONS, AND/OR OVERALL CONSTRUCTION OF THIS PROJECT.
- EQUIPMENT STAGING AREAS WITH THE ENGINEER. 4. MOBILIZATION, SHALL INCLUDE THE DESIGN, CONSTRUCTION, MAINTENANCE, REMOVAL, AND RESTORATION OF THE SITE AREA FOR CONSTRUCTION.
- 5. ALL DISTURBED AREAS WITHN PROJECT LIMITS NOT COVERED BY HARD SURFACES, LANDSCAPING, OR STORMWATER TREATMENTSHALL BE FINISHED WITH 4" OF LOAM (NHDOT ITEM 641) AND TURF

3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITES, MATERIALS STORAGE, AND

- ESTABLISHMENT WITH MULCH AND TACKIFIERS (NHDOT ITEM 646.31). 6. SITE SECURITY AND JOB SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- 7. THE CONTRACTOR SHALL PROVIDE SUBMITTALS (GRADATIONS, PROCTORS, PRODUCT DATA, ETC.) AS DIRECTED BY THE ENGINEER FOR ALL MATERIALS TO BE INCORPORATED INTO THE WORK. 8. THE ENGINEER SHALL HAVE FULL ACCESS TO THE SITE WHEN THE WORK IS IN PREPARATION AND
- PROGRESS. THEY MAY OBSERVE THE WORK ON A PERIODIC OR FULL-TIME BASIS 9. THE CONTRACTOR SHALL PROVIDE A DETAILED CONSTRUCTION SCHEDULE TO THE ENGINEER
- PRIOR TO CONSTRUCTION. 10. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR TO ALL DAMAGES CAUSED DURING
- CONSTRUCTION. 11. THE CONTRACTOR IS RESPONSIBLE TO RESTORATION TO ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK TO PRE-CONSTRUCTION CONDITIONS.
- 12. FINAL RESOLUTION TO CONFLICTS WITHIN THE SPECIFICATIONS OR ANY SUBSTITUTIONS SHALL BE DETERMINED BY THE ENGINEER.
- 13. THE CONTRACTOR SHALL NOT DISTURB ANY EXISTING PROPERTY CORNER, MONUMENT, SURVEY MARKER, OR BENCHMARK WITHOUT FIRST MAKING PROVISIONS FOR ITS REPLACEMENT OR RELOCATION. 14. ALL TESTING SHALL BE ORDERED BY THE ENGINEER AND COORDINATED BY THE CONTRACTOR IN ACCORDANCE WITH NHDOT, AASHTO, AND THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS ADVANCE NOTICE PRIOR TO PLACING MATERIALS REQUIRING TESTING.
- 15. CONCRETE AND SOIL TESTING IS TO BE PERFORMED BY THE ENGINEER.
- 16. DETERMINATION OF MAXIMUM DENSITIES FOR SAND AND GRAVELS ARE THE RESPONSIBILITY OF THE CONTRACTOR. PROCTOR TESTS ORDERED BY THE ENGINEER SHALL BE SAMPLED AND PERFORMED BY AN INDEPENDENT TESTING LABORATORY, OBSERVED BY THE ENGINEER.
- 17. BUILDING AND SITE LAYOUT WILL BE COMPLETED BY A LICENSED LAND SURVEYOR. TO BE COORDINATED WITH THE ENGINEER.
- 18. BASE PLAN INFORMATION BASED ON DATA COLLECTED BY DIBERNARDO ASSOCIATES, LLC, JOSEPH DIBERNARDO, LLS, IN DECEMBER 2020.
- 19. LOCATION OF EXISTING UNDERGROUND DRAINAGE UTILITIES ARE UNKNOWN.
- 20. EXACT LOCATION OF EXISTING SEPTIC, SEWER LINE, AND OTHER UNDERGROUND UTILITIES ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
- 21. OUTDOOR LIGHTING SHALL BE REPLACED IN-KIND WITH DARK SKY LIGHTS, AS CERTIFIED BY THE INTERNATIONAL DARK SKY FOUNDATION. THE SAME NUMBER OF OUTDOOR LIGHTS SHALL BE ON THE REPLACEMENT BUILDING, WITH LIGHTS TO BE LOCATED AT EACH EXIT DOOR AND AT THE OVERHEAD DOORS. AS APPLICABLE.
- 22. EXISTING SEPTIC SYSTEM IS APPROVED FOR CONSTRUCTION, OPERATIONAL APPROVAL NUMBER CA2014118683, FOR 40 EMPLOYEES TOTAL
- 23. ALL WORK SHALL COMPLY WITH THE CONDITIONS OF THE NHDES PUBLIC WATER SYSTEM REVIEW FROM THE SMALL SYSTEMS ENGINEERING SECTION OF THE DRINKING WATER AND GROUNDWATER BUREAU.
- ALL WORK SHALL COMPLY WITH THE CONDITIONS OF THE AND THE NHDES SUBSURFACE BUREAU COLLECTION SYSTEM TIE-IN WITH A NEW APPROVAL FOR CONSTRUCTION AND OPERATION. 25. THERE IS NO PROPOSED INCREASE IN THE DESIGN FLOW FOR THE POTABLE WATER AND WASTEWATER AS A RESULT OF THE REPLACEMENT BUILDING.

GEOTECHNICAL TESTING WAS COMPLETED PRIOR TO COMMENCING WORK ON THIS

VERIFICATION OF GEOTECHNICAL SOIL CONDITIONS SHALL BE COMPLETED PRIOR

### CONSTRUCTION SEQUENCE NOTES:

- INSTALL SEDIMENT AND EROSION CONTROL FACILITIES. ALL PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
- 2. ALL SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH NEW HAMPSHRE DEPARTMENT OF ENVIRONMENTAL SERVICES BEST MANAGEMENT PRACTICES. 3. INSPECT SITE REGULARLY TO ENSURE PROPER FUNCTION OF SEDIMENT AND EROSION
- CONTROLS. SITE SHALL BE INSPECTED WEEKLY, AT A MINIMUM, AND ALSO AFTER/DURING SEVERE STORM EVENT(S), AFTER/DURING ANY RAINFALL THAT EXCEEDS \( \frac{1}{2} \) INCH IN 24 HOURS.
- 4. FINAL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED DOWNGRADIENT FROM ALL IMPACTS.
- 5. SITE EXISTING BUILDING.
- INSTALL NEW FOUNDATION.
- CONSTRUCT BUILDING ACCORDING TO ENGINEERED AND ARCHITECTURAL BUILDING DESIGN SPECIFICATIONS.
- INSTALL PERMANENT STORM WATER RUNOFF STRUCTURES.
- INSTALL NEW UNDERGROUND ELECTRIC UTILITIES.
- 10. INSTALL NEW WATER LINE.
- 11. INSTALL NEW SEPTIC TANK CONNECTION AND PRESSURE SEWER LINE.
- 12. RESTORE IMPACTED SITE AREA, INCLUDING INSTALLATION OF LANDSCAPING.
- RE-CONSTRUCT IMPACTED AREAS OF DRIVEWAY AND PARKING AREA.
- REMOVE SEDIMENT AND EROSION CONTROL MEASURES UPON SITE STABILIZATION. 15. CONTRACTOR IS RESPONSIBLE FOR LOCATION OF UTILITIES AND AVOIDING DAMAGE DURING
- CONSTRUCTION. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND SHALL BE VERIFIED. DIGSAFE SHALL BE CONTACTED BY CONTRACTOR PRIOR TO COMMENCING EXCAVATION.

### **GENERAL UTILITY NOTES:**

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION PROCEDURE. THERE ARE OVERHEAD POWER TRANSMISSION LINES AND OTHER UTILITIES WITH ROADWAY CROSSING AND LINES IN THE IMMEDIATE VICINTY OF THE BRIDGE. THE CONTRACTOR IS ADVISED THAT EXTREME CAUTION WILL BE REQUIRED IN THE OPERATION OF EQUIPMENT, EXPECIALLY CRANES. CONTACT DIG-SAFE AT 1-888-DIG-SAFE.
- 2. ALL UTILITY INSTALLATIONS, INCLUDING THE LOCATION, SIZE, DEPTH, AND SPCIFICATION FOR CONSTRUCTION OF THE PROPOSED UTILITY SERVICES SHALL BE INSTALLED UNDER THE SUPERVISION OF AND COMPLYING WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE, ETC.) DAMAGE TO ANY UTILITY BY THE CONTRACTOR SHALL BE REPORTED TO THE
- UTILITY COMPANY. REPAIR OF THE UTILITY SHALL BE PAID FOR BY THE CONTRACTOR. 4. PROPOSED UNDERGROUND UTILITY LINE LOCATION IS APPROXIMATE. FINAL
- LOCATION SHALL BE DETERMINED IN THE FIELD AND WILL BE IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.

### SEWER SERVICE DETAILS

- 1. SEWER CONNECTION SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS OF THE NHDES NEW CONSTRUCTION APPROVAL FOR NEW COLLECTION SYSTEM TIE-IN.
- 2. POLYETHYLENE PIPE SHALL CONFORM TO AMERICAN WATER WORKS ASSOCIATION (AWWA) C901, STANDARD FOR POLYETYLENE (PE) PRESSURE PIPE AND TUBING 3. ALL PIPE SHALL HAVE A PRESSURE CLASS OF PC 200 WITH AN OUTSIDE DIAMETER RATIO (DR) OF 9 AT 73.4 DEGREES F.
- 4. PE FITTINGS SHALL MEET THE REQUIREMENTS OF AWWA C901 AND BE OF THE SAME (OR HIGHER) PRESSURE RATING AS THE PIPE LINE.
- 5. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE UTILITZING A TOTALLY CONFINED GRIP SEAL AND COUPLING NUT. STAINLESS STEEL TUBE STIFFENER INSERT SHALL BE USED THAT DO NOT EXTEND BEYOND THE CLAMP OR COUPLING NUT.
- 6. DETECTABLE WARNING TAPE SHALL BE PROVIDED, WITH A POLYETHYLENE FILE, ENCASING A METALLIC CORE, MINIMUM 6 INCHES WIDE AND COLOR-CODED GREEN FOR SEWER, BEARING IN BLACK LETTERS THE CONTINOUS LEGEND, "CAUTION - PRESSURE MAIN BURIED BELOW".
- 7. DETECTABLE WARNING TABLE TO BE INSTALLED DIRECTLY ABOVE PIPELINE, A MINIMUM OF 18 INCHES BELOW FINISHED GRADE BUT NO LESS THAN 24 INCHES ABOVE THE CROWN OF THE PIPE.
- 8. A HYDROSTATIC PRESSURE TEST SHALL BE CONDUCTED WITH 50 POUNDS PER SQUARE INCH (PSI) OR 150% OF THE NORMAL WORKING PRESSURE, WHICHEVER IS GREATER, FOR 30 MINUTES. IF THE PRESSURE DOES NOT DROP WITHIN THE 30-MINUTE TEST PERIOD, THE TEST SHALL BE DEEMED SUCCESSFUL.
- 9. ALL WORK SHALL BE IN COMPLIANCE WITH ENV-WQ 704.07.

### DRAINAGE NOTES:

- 1. LOCATIONS OF DISCHARGE FOR ROOF DRAINS OF EXISTING BUILDING ARE UNKNOWN.
- 2. IF IMPACTS TO THIS DRAINLINE OCCUR DURING CONSTRUCTION, THEY SHALL BE TIED-INTO PROPOSED DRAINAGE SYSTEM.
- 3. A CLEAN-OUT SHALL BE INSTALLED AT EACH ROOF DRAIN CONECTION TO PROPOSED DRAIN LINE.

SHEET 5

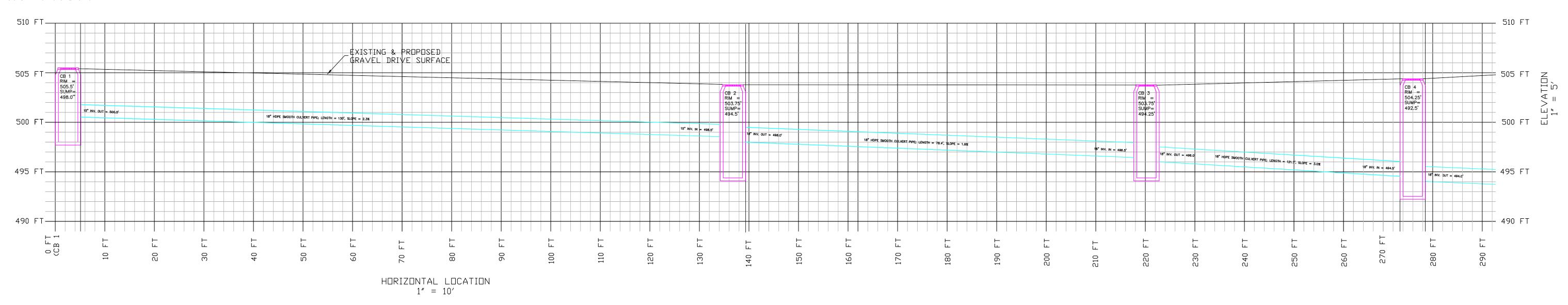
P.C. A.I.A ding

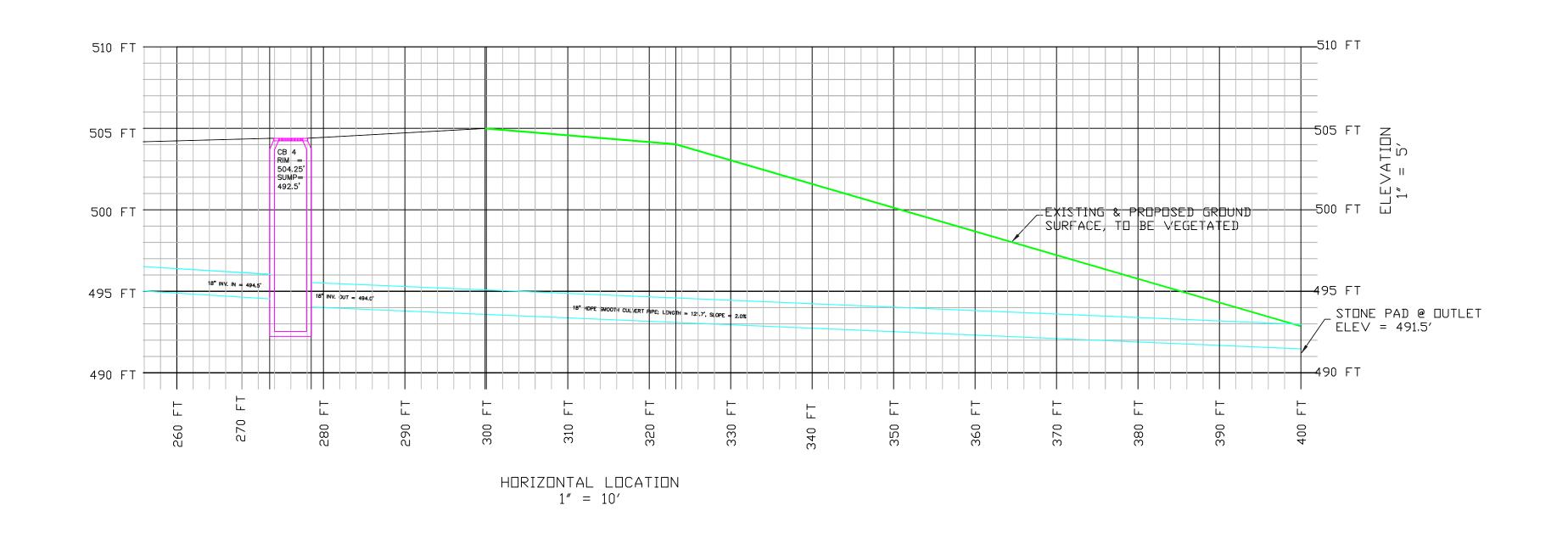
T: ture, tt, Jr., 5s Buil (55 .VT (

Barr rank 215

χ Σ

### PROPOSED DRAINAGE LINE PROFILE





### EXISTING CATCHBASIN SCHEDULE

| CATCHBASIN<br>NUMBER | RIM ELEV. | SUMP<br>ELEV. | INV. IN<br>ELEV. | INV. IN<br>PIPE TYPE<br>& SIZE | INV. OUT<br>ELEV. | INV. OUT<br>PIPE TYPE<br>& SIZE |
|----------------------|-----------|---------------|------------------|--------------------------------|-------------------|---------------------------------|
| 1                    | 505.21    | unknown       | 503.40           | 6" PVC                         | 503.30'           | 6" PVC                          |
| 2                    | 502.59'   | unknown       | 499.59           | 6" PVC                         | 499.29'           | 6" PVC                          |
| 3                    | 503.85'   | unknown       | 496.60'          | 12" CPP                        | 496.60'           | 12" CPP                         |
| 4                    | 501.00'   | unknown       | n/a              | n/a                            | 499.90'           | 8" CPP                          |
| 5                    | 505.20'   | unknown       | n/a              | n/a                            | 505.20'           | 6" PVC                          |
| 6                    | 488.62'   | 486.00'       | unknown          | unknown                        | unknown           | unknown                         |

### PROPOSED CATCHBASIN SCHEDULE

| CATCHBASIN<br>NUMBER | RIM ELEV.       | SUMP<br>ELEV. | INV. IN<br>ELEV. | INV. IN<br>PIPE TYPE<br>& SIZE | INV. OUT<br>ELEV. | INV. OUT<br>PIPE TYPE<br>& SIZE |
|----------------------|-----------------|---------------|------------------|--------------------------------|-------------------|---------------------------------|
| 1                    | 505.5'          | 498.0'        | n/a              | n/a                            | 500.5             | 15" HDPE                        |
| 2                    | <i>503.75</i> ' | 494.5'        | 498.5'           | 15" HDPE                       | 498.0'            | 18" HDPE                        |
| 3                    | <i>503.75</i> ' | 494.25        | 496.5'           | 18" HDPE                       | 496.0'            | 18" HDPE                        |
| 4                    | 504.25'         | 492.5'        | 494.5'           | 18" HDPE                       | 494.0'            | 18" HDPE                        |
|                      |                 |               |                  |                                |                   |                                 |
|                      |                 |               |                  |                                |                   |                                 |

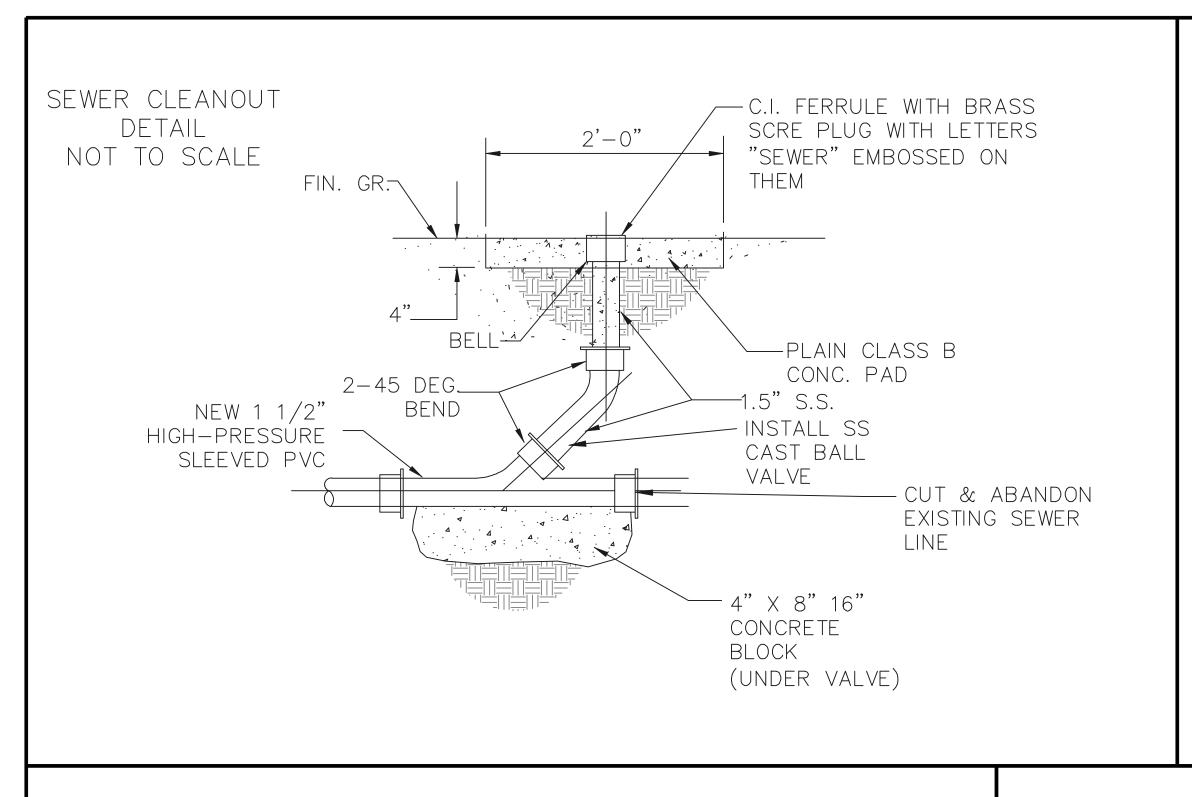
<u>GENERAL NOTES</u> 1. THIS PLAN HAS BEEN PREPARED FOR REVIEW BY THE TOWN OF PLAINFIELD, NEW HAMPSHIRE PLANNING BOARD FOR SITE PLAN REVIEW.

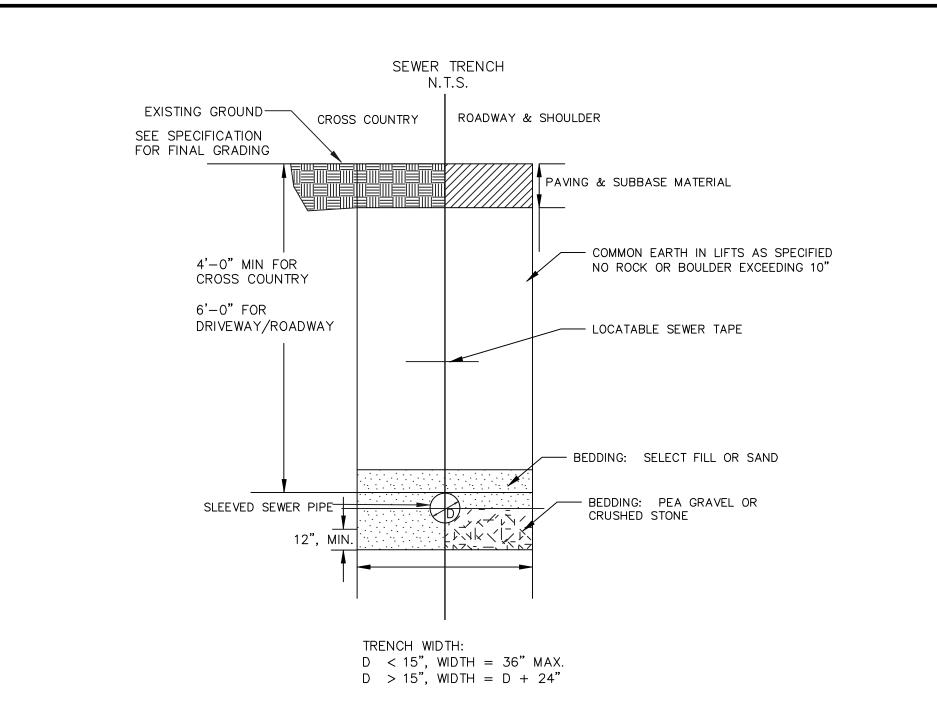
2. BASE PLAN INFORMATION BASED ON FIELD SURVEY DATA COLLECTED BY DIBERNARDO ASSOCIATES, LLC, IN NOVEMBER AND DECEMBER 2020, AND JANUARY 2021. ELEVATION IS TIED INTO NORTH AMERICAN

3. ALL WETLANDS WERE DELINEATED IN ACCORDANCE WITH THE ARMY CORPS OF ENGINEERS METHOD FOR THE DELINEATION OF WETLANDS, JANUARY 1987, BY BEAVER TRACKS LLC, JONATHAN SISSON, C.S.S., C.W.S., IN JANUARY 2021.

4. PLAN IS INTENDED FOR PLANNING PURPOSES ONLY AND IS NOT FOR CONSTRUCTION.

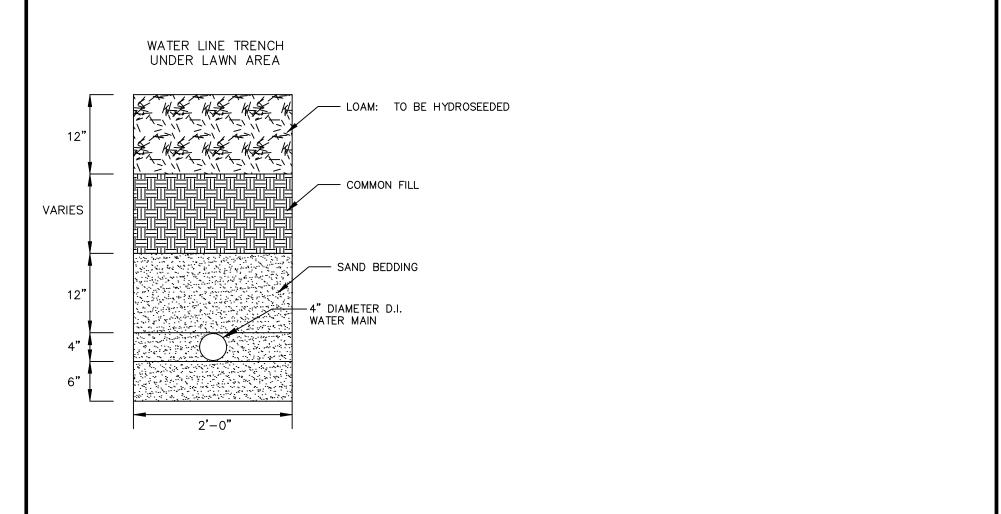
SHEET 6

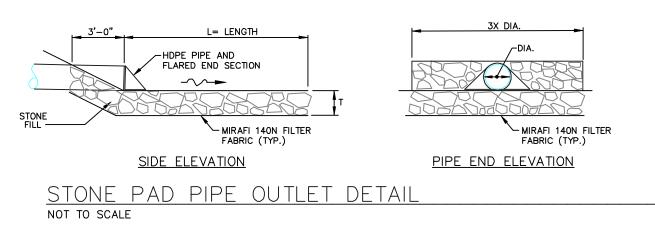




## STORM DRAIN DETAIL NOT-TO-SCALE ±4' FINISHED DRIVEWAY GRADE: 6' CRUSHED GRAVEL 12' BANK RUN GRAVEL, MIN. 2' BLUEBDARD /HERE PIPE IS LESS THAN 4'-6' BELDW GRADE HDPE STORM DRAIN PIPE, HS-25 LDAD CAPACITY 24' CLASS AB FILL, COMPACTED TO 95% MOD. PROCTOR

# POTRICAL C DEMETER DOTRICAL DEMETER DOTRICAL OF DEMETER DOTRICAL SO DEMETER DOTRICAL SO DEMETER DOTRICAL SO DEMETER DOTRICAL SO PAGE PRODUCT 40 PAGE RESEARCH 40 PAG OBSERVATION WILL CLEANAUT CAP SET FINISHED GRAD PVC COLIFIES WATER TIGHT CAP





NOTE: CLASS A. B AND C STONE FILL SHALL CONSIST OF HARD, BLASTED ANGULAR ROCK REASONABLY WELL GRADED FROM SMALLEST TO MAXIMUM SIZE STONE SO AS TO FORM A COMPACT MASS WHEN IN PLACE.

CONSTRUCTION SPECIFICATIONS

OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.

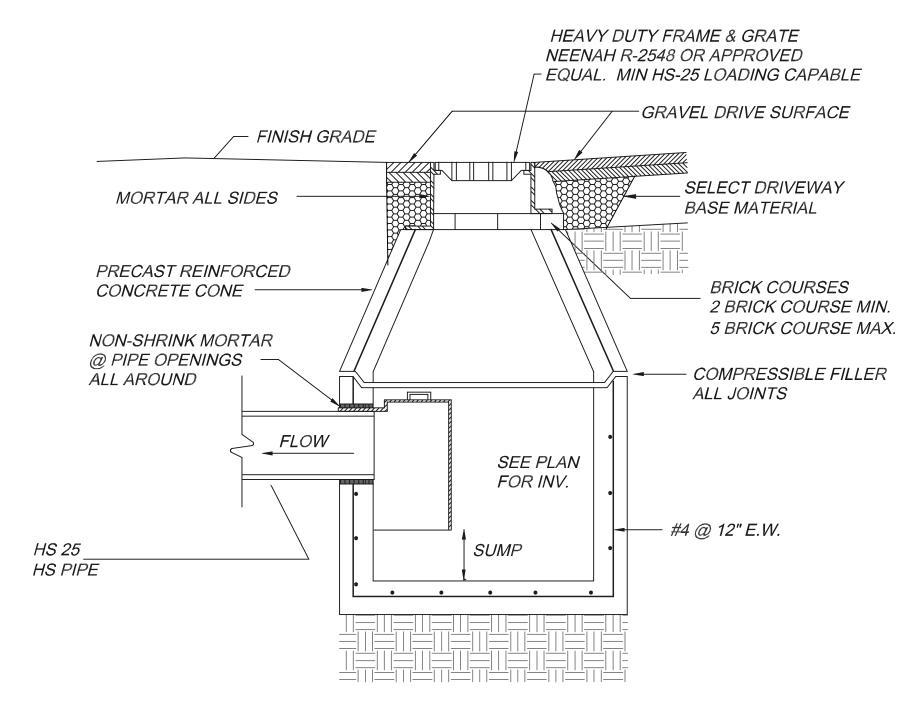
ROOF DRAIN DETAIL

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND STONE FILL SHALL BE PREPARED THE THE LINES AND GRADES SHOWN ON THE PLANS.

2. THE ROCK USED FOR THE STONE FILL SHALL CONFORM TO NHDOT CLASS C, OR 6" RIP RAP.

3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK STONE FILL. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TOW PIECES

4 STONE FOR THE STONE FILL MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.



NOTE: ALL CATCH BASINS SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

### TYP. PRECAST CONCRETE CATCH BASIN DETAIL

NOT TO SCALE

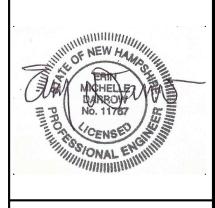
1. ALL CATCHBASINS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. 12" OF 3/4" CLEAN STONE SHALL BE PLACED UNDER CATCHBAS

2. 12" OF 3/4" CLEAN STONE SHALL BE PLACED UNDER CATCHBASINS.
SHOULD UNSUITABLE MATERIAL BE ENCOUNTERED, THEN STABILIZATION FABRIC AND ADDITION STONE MAY BE NEEDED.

SURVEYOR:
P.E.
DiBernardo Associates, LLC
Joseph DiBernardo, L.L.S.
F.O. Box 52
P.O. Box 52
P.O. Box 52
Read
R88-0152
(802) 463-3031
Beavertra

Tim Schall, P.E.
Schaal Engineering, P.C.
P.O. Box 152
61 Depot Street
Wilder, VT 05088-0152

ARCHITECT:
Barrett Architecture, P.C.
Frank "Jay" Barrett, Jr., A.I.A
215 Gates-Briggs Building
P.O. Box 55
White River Jct., VT 05001
frankjbarrettjr@gmail.com

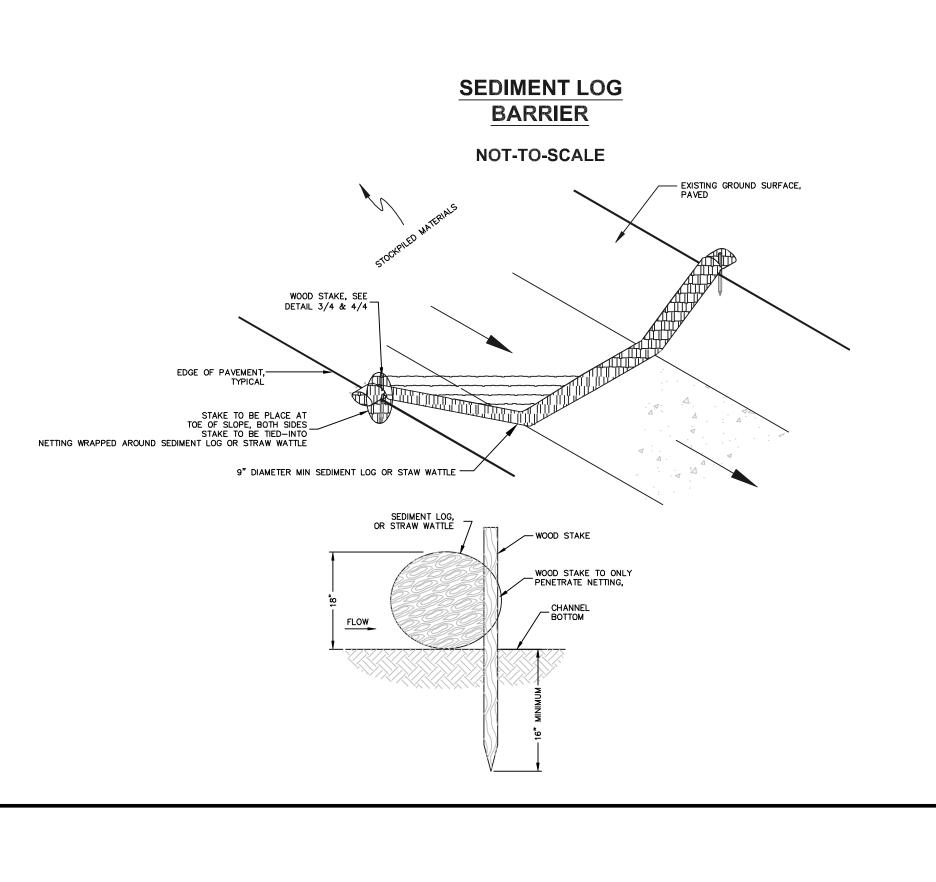


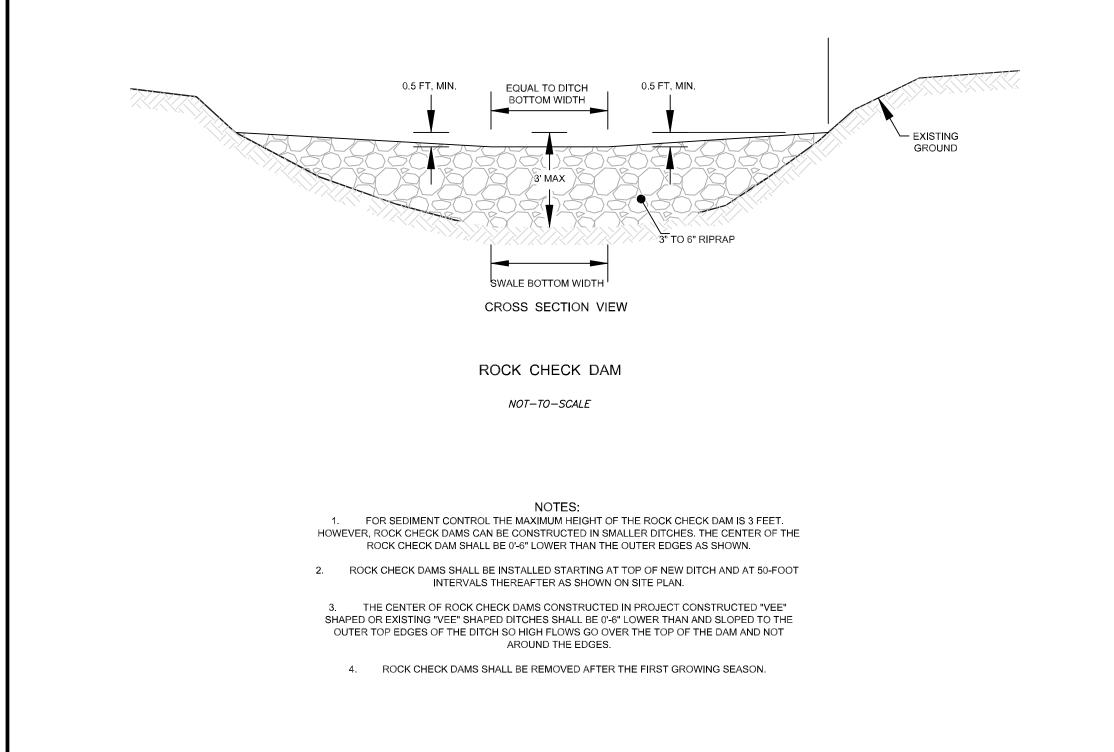
ght Angle Engineering, PLLC Erin Darrow, P.E. 152 Main Street New London, NH 03257 (603) 526-2807 office (603) 443-7815 mobile (603) 523-8811 fax

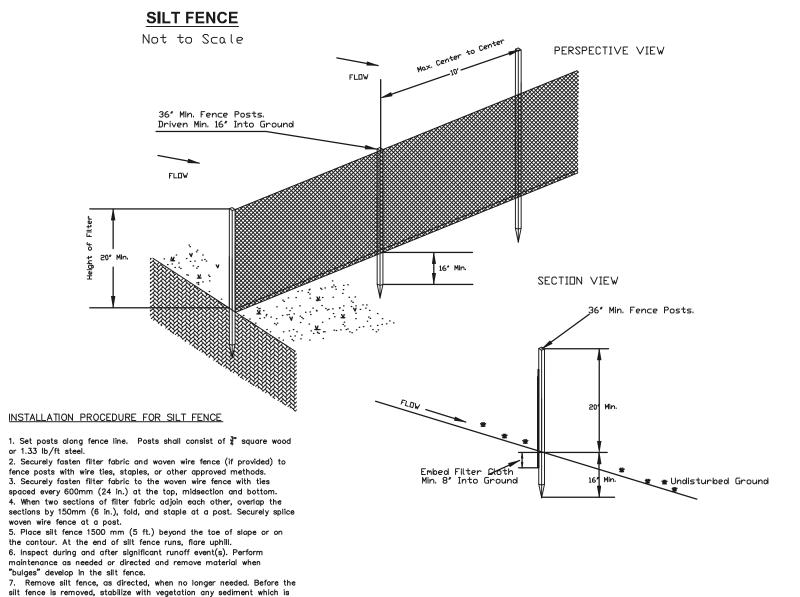
COWNER:
REAT BROOK ENTERPRISES, L
MATT MARRAZZO
P.O. BOX 300

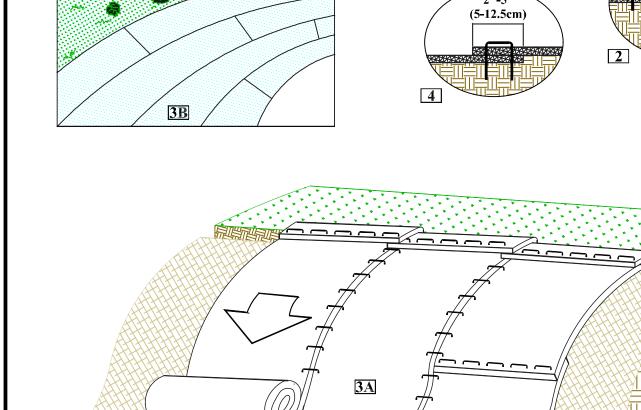
IEW FACILITY BUILDING FOWNLINE EQUIPMENT 1474 NH ROUTE 12A TAX MAP 258, LOT 7 INFIELD, NEW HAMPSHIRE

SHEET 7









### SLOPE INSTALLATION DETAIL

. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed. 2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs. B. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide 4. The edges of parallel RECPs must be stapled with approximately 2" -5" (5-12.5cm) overlap depending on the RECPs type. 5 Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

### **HAY BALE** ANGLE FIRST STAKE TOWARD PREVIOUSLY 2 RE-BARS, STEEL PICKETS, LAID BALE OR 2"X2" STAKES 2' IN GROUND BOUND BALE PLACED ON THE CONTOUR ANCHORING DETAIL HAY BALE BARRIER INSTALLATION PROCEDURE FOR HAY BALES

1. Place bales 5 feet beyond the toe of slope or on the contour and in a row with ends tightly abutting the adjacent bales, with no gaps, wedge loose bale material between bales. 2. Place bales with bindings horizontal and securely anchor in place by driving two stakes through the bale. 3. During and after runoff event(s) inspect hay bales frequently and repair/replace promptly as needed or as directed. Remove sediment

when accumulation reaches one half the bale height or as directed.

Before bales are removed, stabilize with vegetation any sediment which is permitted to remain in place. When bales are removed, fill trench

4. Remove bales, as directed, when they are no longer needed.

with suitable earth material and stabilize with vegetation.

4" VERTICAL FACE

EMBEDDING DETAIL

Earth Anchor Channel & Shoreline \* The performance of ground anchoring devices is highly dependent on numerous site/project specific variables. It is the sole responsibility of the project engineer and/or contractor to select the appropriate anchor type and length. Anchoring shall be CRITICAL POINTS A. Overlaps and Seams B. Projected Water Line selected to hold the mat in intimate contact with the soil subgrade and resist pullout in accordance with the project's design intent. C. Channel Bottom/Side Slope Vertices Anchor Pattern Guide can vary based on earth anchor and blanket selection. \* If desired, the system can be soil-filled and sodded after TRM installation. Sod should be staples/staked according to plan Drawing Not To Scale

### SLOPE INSTALLATION **EARTH ANCHOR** (EA) DETAIL

Prepare soll before Installing high-performance turf reinforcement mats (HP-TRMs), including any necessary application of lime, fertilizer, Begin at the top of the slope by anchoring the HP-TRMs in a 6" (15) cm) deep x 6" (15cm) wide trench with approximately 12" (30 cm) of HP-TRMs extended beyond the up-slope portion of the trench. Anchor the HP-TRMs with a row of staples and anchors approximately 12" (30 cm) apart in the bottom of the trench Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30 cm) portion of HP-TRMs back over seed and compacted soil. Secure HP-TRMs over compacted soll with a row of staples/stakes spaced approximately 12" (30 cm) apart across the width of the HP-TRMs. 3. Roll the HP-TRMs (A) down or (B) horizontally across the slope.
HP-TRMs will unroll with appropriate side against the soil surface. All HP-TRMs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.

The edges of parallel HP-TRMs must be stapled with approximately 2" -5" (5-12.5cm) overlap depending on the HP-TRM type. 5. Consecutive HP-TRMs spliced (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire HP-TRM width

In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the HP-TRMs.

TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEEDED. THE STOCK PILE WILL NOT BE COMPACTED AND SHALL BE STABILIZED AGAINST

A) BEDDING: REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SÉEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT THREE INCHES TO PREPARE SEED BED AND MIX THE FERTILIZER INTO THE

PER 1,000 S.F.)

### C) SEED MIXTURE: USE ANY OF THE FOLLOWING:

| SPECIES                | PER ACRE | PER 1000 S.F. | DATES                   |
|------------------------|----------|---------------|-------------------------|
| WINTER RYE             | 112 LBS. | 2.6 LBS.      | 8/15 - 10/1 (FALL)      |
| OATS                   | 80 LBS.  | 2.0 LBS.      | 4/1 - 7/1 ; 8/15 - 9/15 |
| RYEGRASS<br>(ANNUAL)   | 40 LBS.  | 1.0 LBS.      | 4/1 - 6/1               |
| RYEGRASS<br>(PERENIAL) | 30 LBS.  | 0.7 LBS.      | 4/1 - 6/1 ; 8/15 - 9/15 |

| TYPE             | RATE PER 1,000 S.F.  | USE AND COMMENTS         |
|------------------|----------------------|--------------------------|
| HAY OR STRAW     | 70 TO 90 LBS.        | MUST BE DRY AND FREE     |
|                  |                      | OF MOLD. MAY BE USED     |
|                  |                      | WITH PLANTINGS.          |
|                  |                      |                          |
| WOOD CHIPS OR    | 160 TO 920 LBS.      | USED MOSTLY WITH TREES   |
| BARK MULCH       |                      | AND SHRUBS PLANTINGS.    |
|                  |                      |                          |
| JUTE AND FIBROUS | AS PER MANUFACTURERS | USED IN SCOPE AREAS.     |
| MATTING          | SPECIFICATIONS       | WATER COURSED AND        |
|                  |                      | OTHER AREAS.             |
|                  |                      |                          |
| CRUSHED STONE    | I .                  | EFFECTIVE IN CONTROLLING |
| ½" TO 1½ DIA.    | ½" THICK             | WIND AND WATER EROSION.  |
|                  |                      |                          |

VEGETATIVE MEASURES

EROSION WITH TEMPORARY SEEDING.

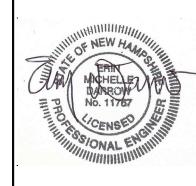
### TEMPORARY SEEDING:

B) FERTILIZER: FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING TILLED INTO THE SOIL. A 10-10-10 MIX OF FERTILIZER SHOULD BE APPLIED AT A RATE OF 300 POUNDS PER ACRE (OR 7 POUNDS

| SPECIES                | PER ACRE | PER 1000 S.F. | DATES                   |
|------------------------|----------|---------------|-------------------------|
| WINTER RYE             | 112 LBS. | 2.6 LBS.      | 8/15 - 10/1 (FALL)      |
| OATS                   | 80 LBS.  | 2.0 LBS.      | 4/1 - 7/1 ; 8/15 - 9/15 |
| RYEGRASS<br>(ANNUAL)   | 40 LBS.  | 1.0 LBS.      | 4/1 - 6/1               |
| RYEGRASS<br>(PERENIAL) | 30 LBS.  | 0.7 LBS.      | 4/1 - 6/1 ; 8/15 - 9/15 |
|                        |          |               |                         |

D) MULCHING: MULCH SHALL BE USED ON HIGHLY ERODABLE SOIL, ON CRITICALLY ERODING AREAS, AND ON AREAS WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT.

| TYPE           | RATE PER 1,000 S.F.  | USE AND COMMENTS         |
|----------------|----------------------|--------------------------|
| Y OR STRAW     | 70 TO 90 LBS.        | MUST BE DRY AND FREE     |
|                |                      | OF MOLD. MAY BE USED     |
|                |                      | WITH PLANTINGS.          |
|                |                      |                          |
| OOD CHIPS OR   | 160 TO 920 LBS.      | USED MOSTLY WITH TREES   |
| RK MULCH       |                      | AND SHRUBS PLANTINGS.    |
|                |                      |                          |
| TE AND FIBROUS | AS PER MANUFACTURERS | USED IN SCOPE AREAS.     |
| ATTING         | SPECIFICATIONS       | WATER COURSED AND        |
|                |                      | OTHER AREAS.             |
|                |                      |                          |
| RUSHED STONE   | SPREAD MORE THAN     | EFFECTIVE IN CONTROLLING |
| 'TO 1½ DIA.    | ½" THICK             | WIND AND WATER EROSION.  |
|                |                      |                          |



SHEET 8

S

