THE CROSSING AT VILLAGE CENTER RESIDENTIAL DEVELOPMENT

RECORD OWNERS:

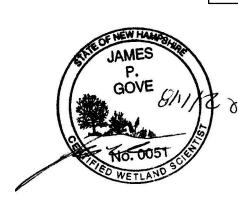
TAX MAP 238 LOT 36 WALDRON HALEY REV LIV TRUST 14 SHAKESPEARE RD. NASHUA, NH 03062

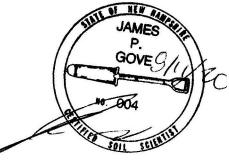
APPLICANT:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD N. HAMPTON, N.H. 03862

APPROVAL BLOCK

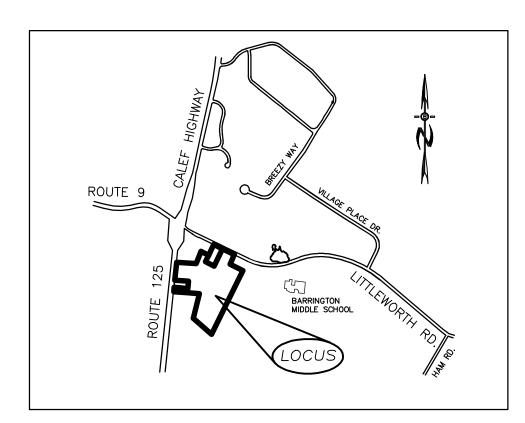
	APPROVED	TOWN	OF	BARRINGTON	PLANNING	BOARD
-						
-						
-						
-	CHAIRPERSO	V			DATE	





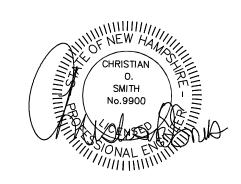
WETLAND/SOIL CONSULTANT:

GOVE ENVIRONMENTAL SERVICES INC. 8 CONTINENTAL DRIVE, BLDG 2 UNIT H EXETER, NH 03833 1-603-778-0644



LOCATION	MAP
1"=2000'	

REVISED PER PB COMMENTS	11-24-20
REVISIONS:	DATE:



REQUIRED PERMITS

NHDES SUBDIVISION APPROVAL NUMBER: SA 2020 NHDES ALTERATION OF TERRIAN NUMBER: NPDES APPROVAL NUMBER: NHDOT DRIVEWAY PERMIT

CIVIL ENGINEERS:

BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, NEW HAMPSHIRE PHN. 603-583-4860, FAX. 603-583-4863

LAND SURVEYORS:

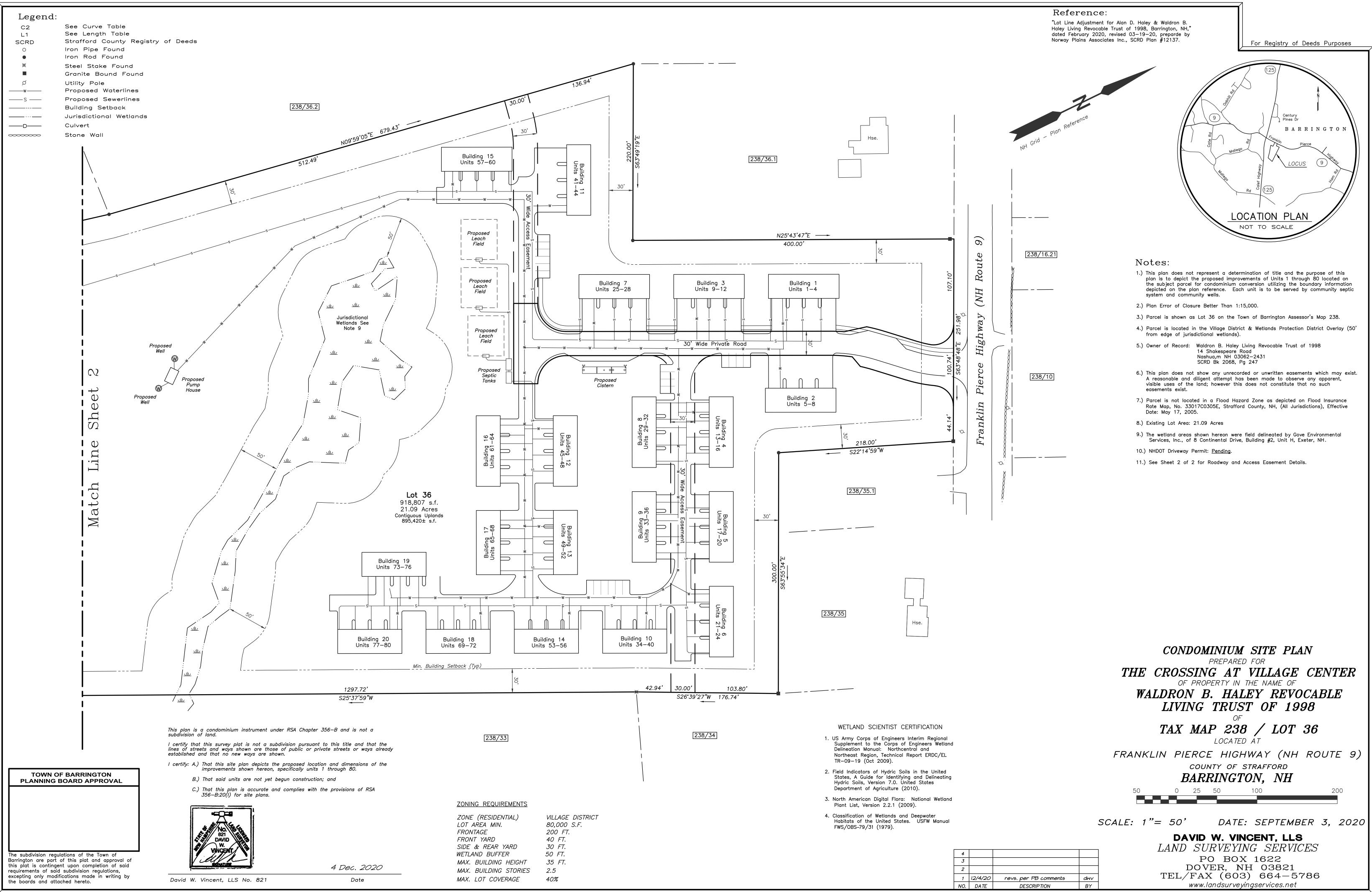
DAVID W. VINCENT, LLS LAND SURVEYING SERVICES PO BOX 1622 DOVER, NH 03821 1-603-664-5786

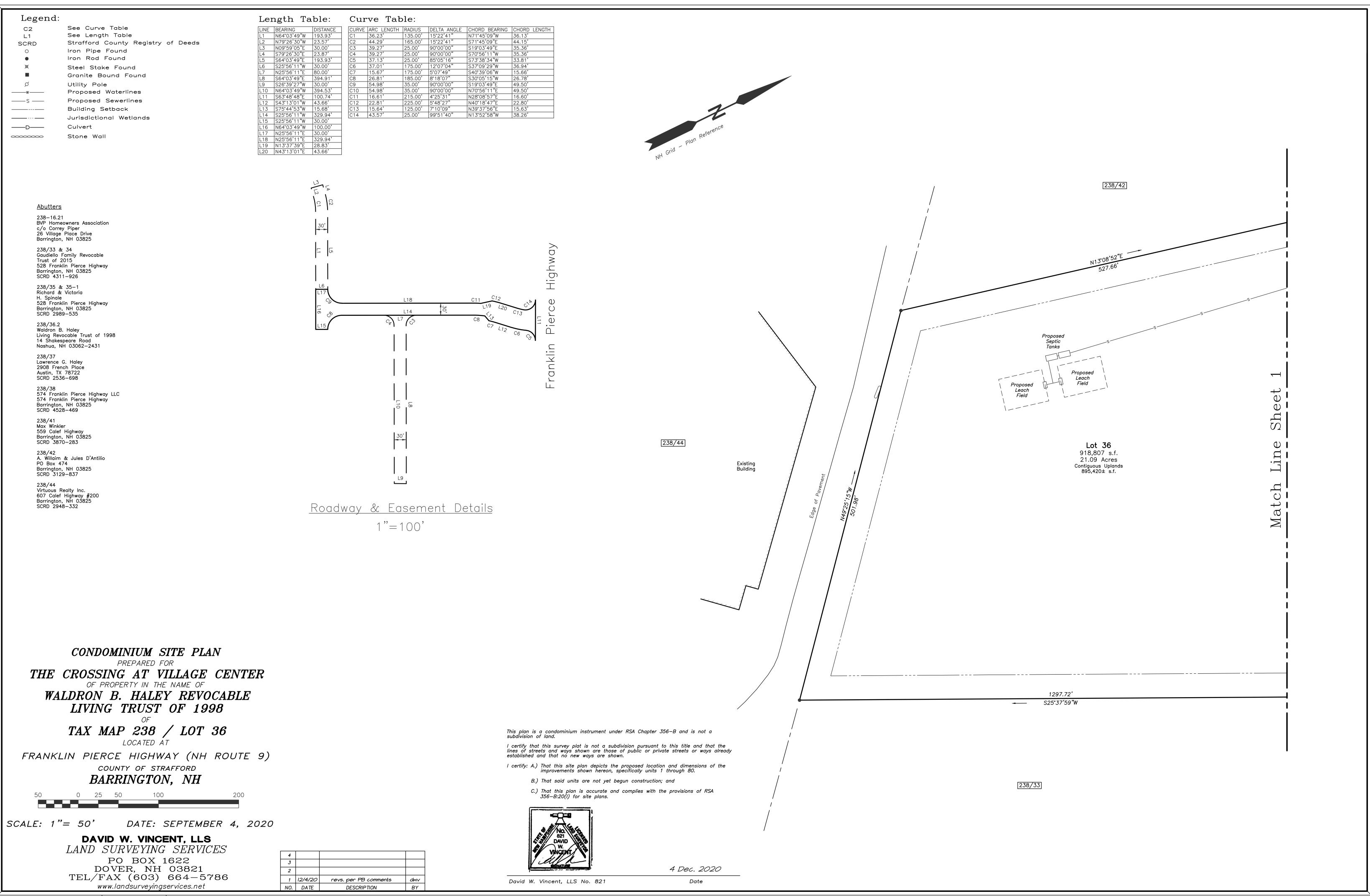
INDEX

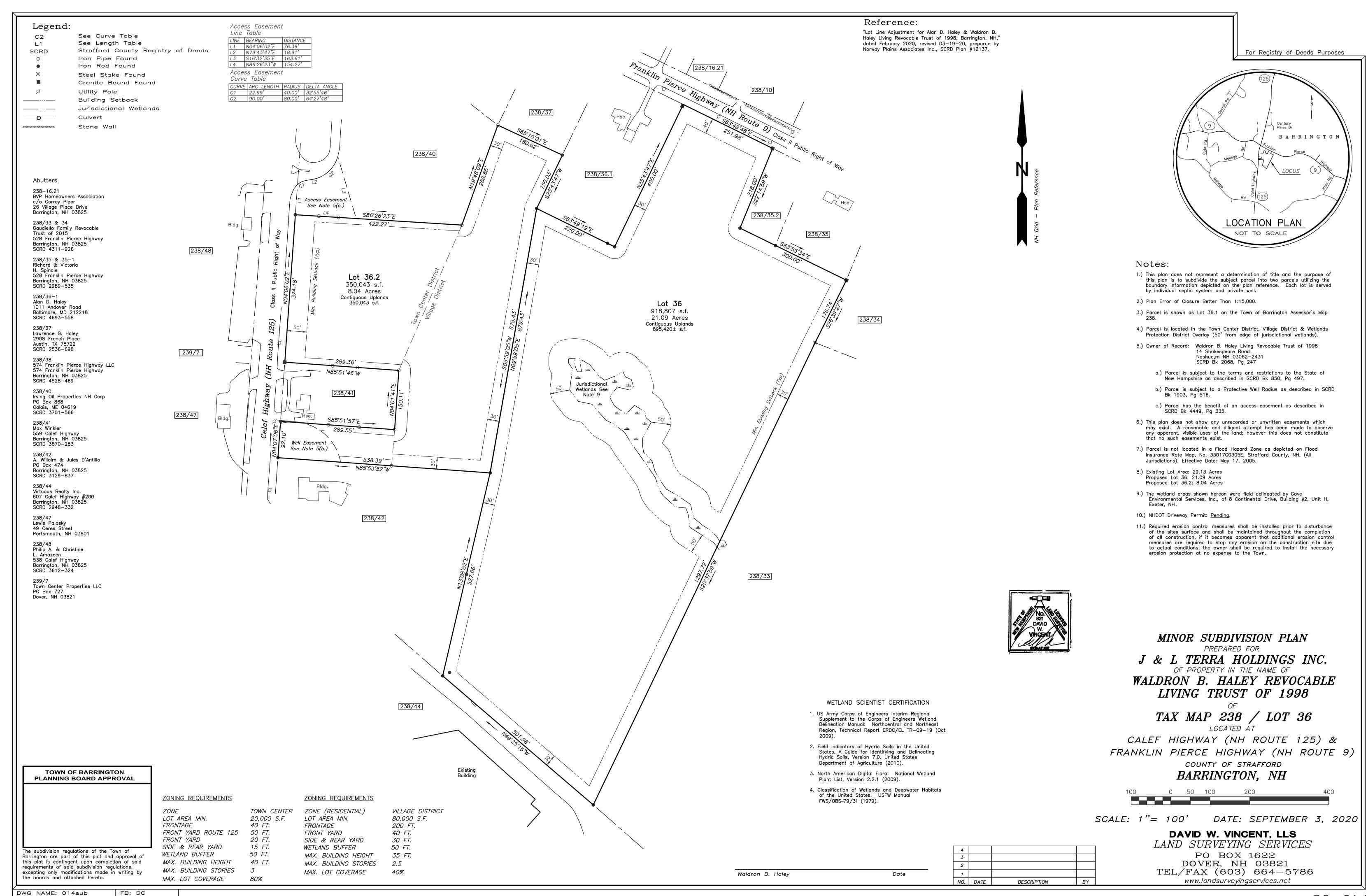
TITLE SHEET	
SUBDIVISION BOUNDARY PLANS	1-3
EXISTING CONDITION PLANS	4
SUBDIVISION SITE PLANS	5-6
LIGHTING PLAN	7
HIGHWAY ACCESS PLAN	8
PLAN & PROFILES	9-1
CONSTRUCTION DETAILS	12
UTILITY DETAILS PLAN	13
CISTERN DETAIL PLAN	14
EROSION & SEDIMENT CONTROL DETAILS	15
LANDSCAPE PLANS (BY OTHERS)	

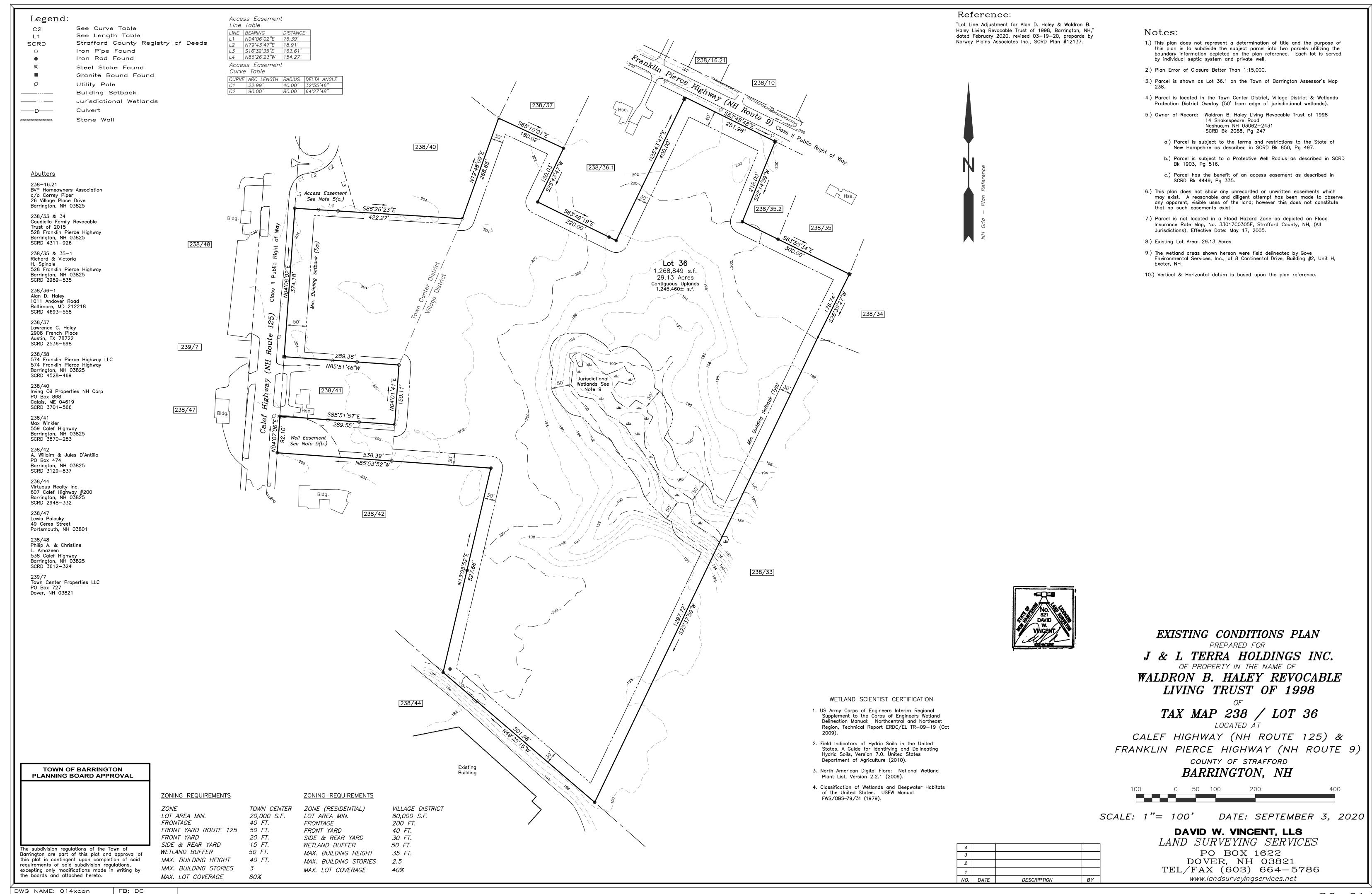
PLAN SET LEGEND

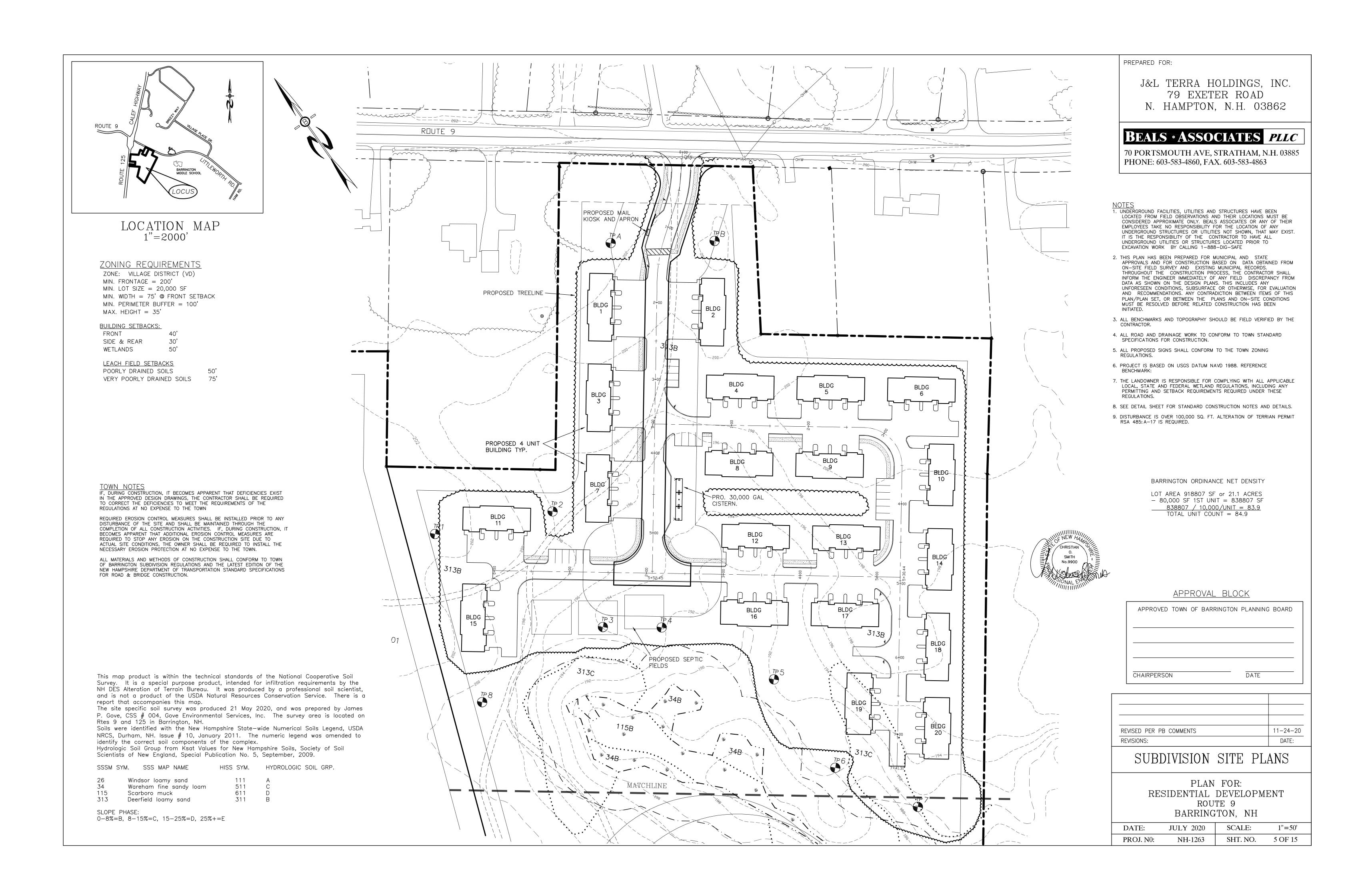
	I LAN OLI		
UTILITY POLE DRAIN MANHOLE SEWER MANHOLE EXISTING LIGHT POLE EXISTING CATCH BASIN PROPOSED CATCH BASIN EXIST. SPOT GRADE PROP. SPOT GRADE DOUBLE POST SIGN	© ① ⑤ ∴ □ ⊞ 96×69 96×69	OVERHEAD ELEC. LINE UNDERGROUND ELEC. LINE DRAINAGE LINE SEWER LINE GAS LINE WATER LINE STONE WALL TREE LINE	——————————————————————————————————————
SINGLE POST SIGN	- o -	ABUT. PROPERTY LINES	
STREET LIGHT TEST PIT	← TP#1A ●	EXIST. PROPERTY LINES BUILDING SETBACK LINES	
4000 SF SEPTIC RESERVE AREA		EXIST. CONTOUR PROP. CONTOUR	100
PROP. WELL W/ 75' PROTECTIVE RAD.		SOIL LINES SILT FENCE OR EROSION CONTROL BERM 30k GAL. FIRE CISTERN	

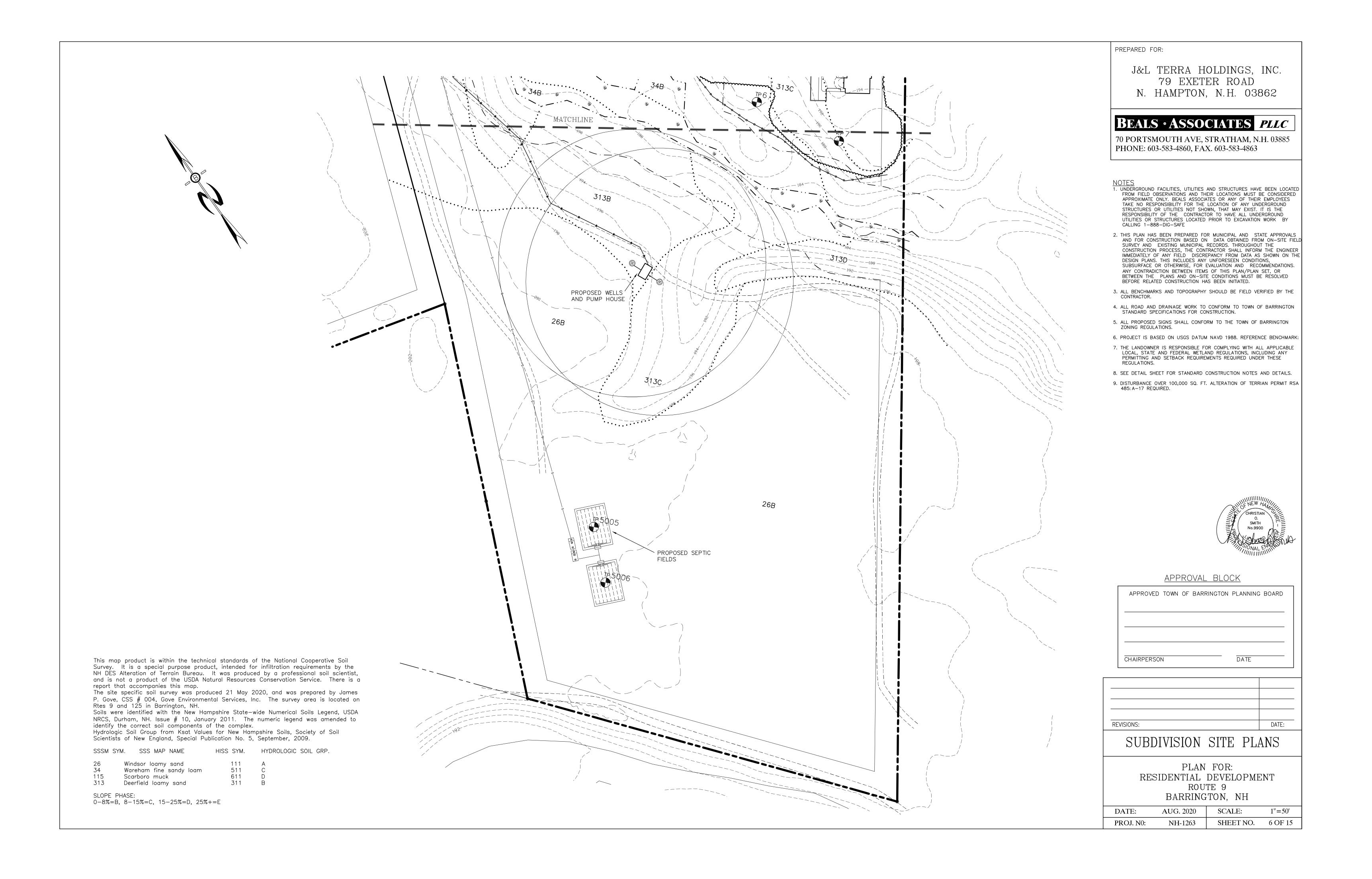


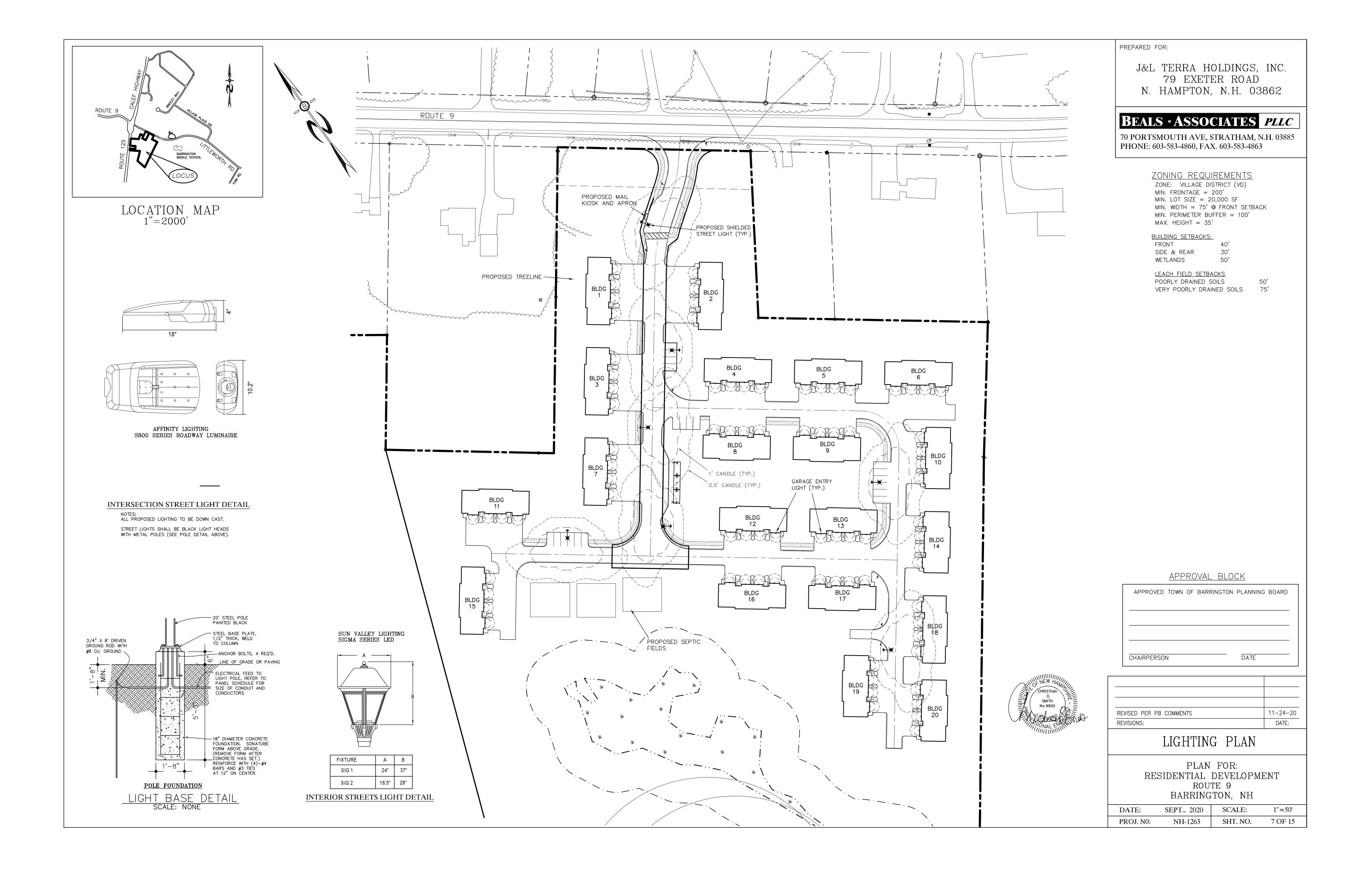


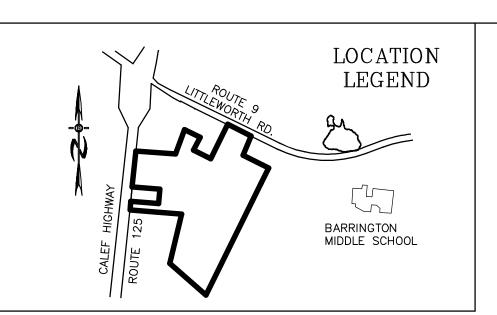












- 1. ALL ELECTRICAL, TELEPHONE, CABLE TELEVISION AND ALARM LINES TO BE UNDERGROUND. THE SIZE AND LOCATION IS TO BE PLACED OUTSIDE OF THE RIGHT—OF—WAY AS PER TOWN OF BRENTWOOD TYP. ROADWAY SECTION ADDENDUM A SUBDIVISION REGULATIONS, WITH REVIEW AND APPROVAL BY THE TOWN OF BRENTWOOD TOWN ENGINEER. LOW PROFILE UTILITY BOX STRUCTURES SHALL BE USED TO THE GREATEST EXTENT.

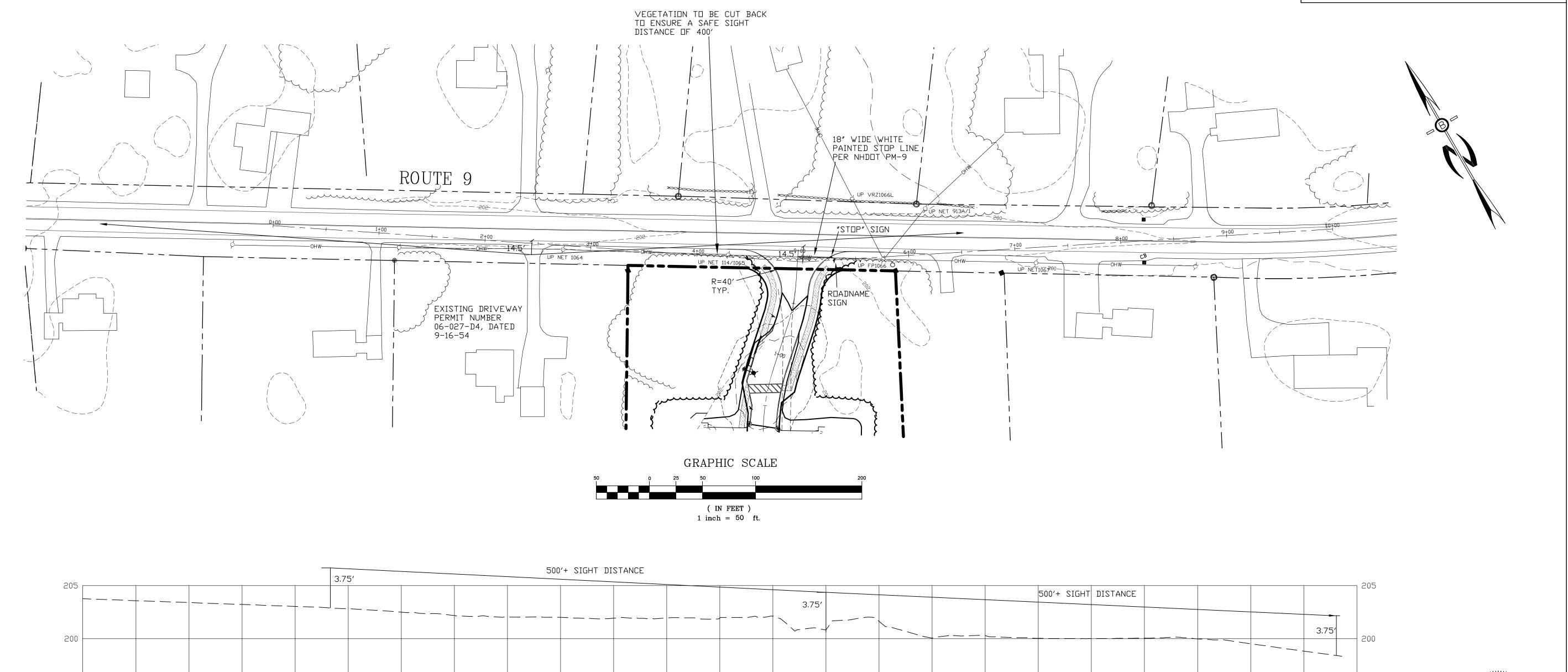
 2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR, ENGINEER TO BE NOTIFIED
- IMMEDIATELY OF ANY DISCREPANCY.
- 3. ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM TO THE TOWN OF BARRINGTON STANDARD SPECIFICATIONS AND TO N.H.D.O.T. STANDARDS AND REGULATIONS.

PREPARED FOR:

- J&L TERRA HOLDINGS, INC. 79 EXETER ROAD
- N. HAMPTON, N.H. 03862

BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



HIGHWAY ACCESS PLAN-H1

PLAN FOR: RESIDENTIAL DEVELOPMENT ROUTE 9 BARRINGTON, NH SCALE 1'' = 50'JULY 2020

DATE: NH-1263 PROJ. N0: SHEET NO. 8 OF 15

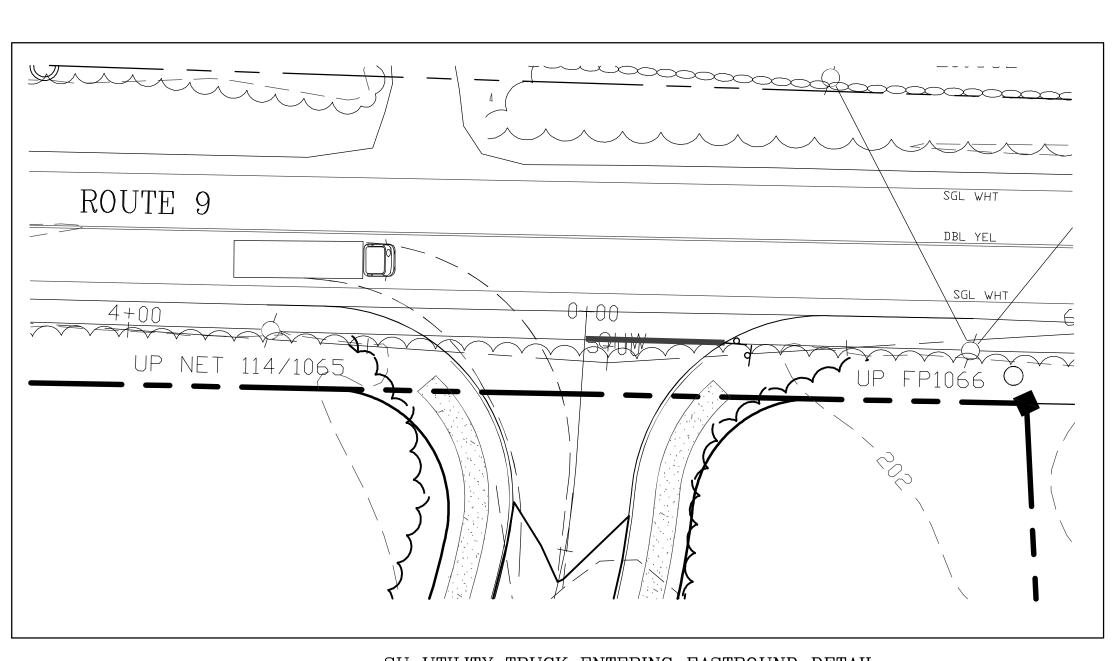
11-24-20

DATE:

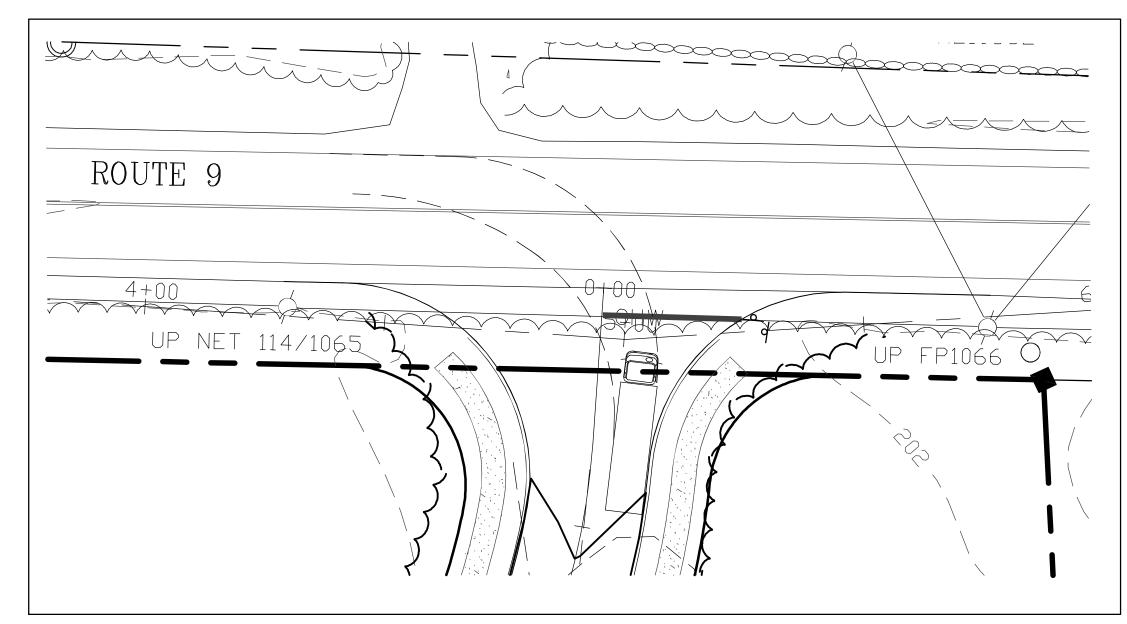
REVISED PER NHDOT COMMENTS

REVISIONS:

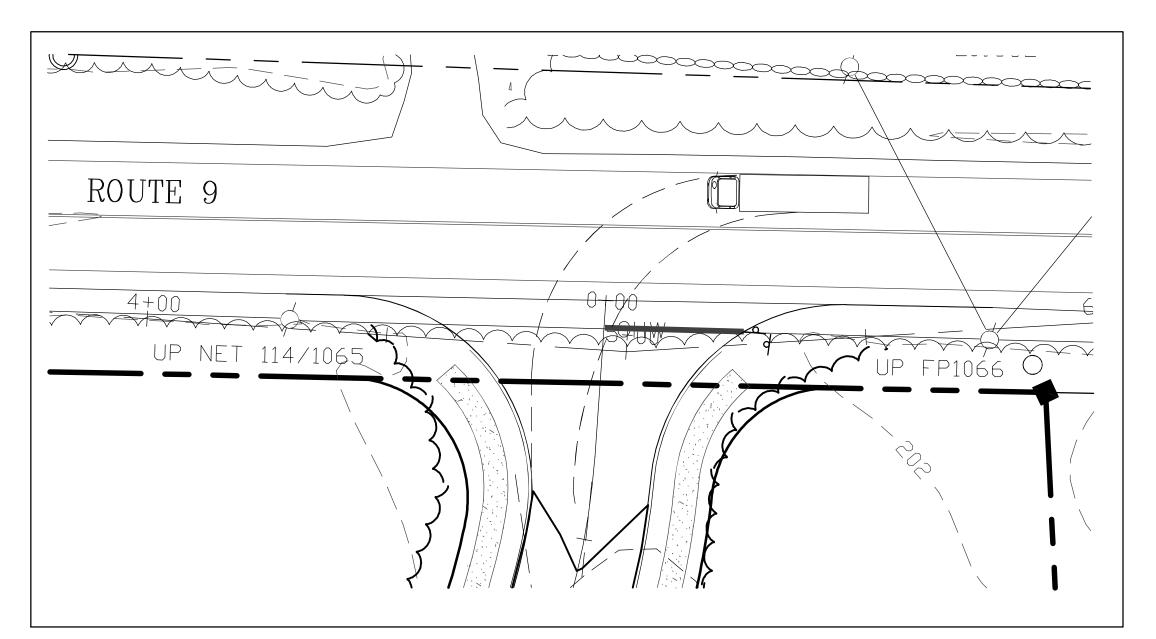
PROFILE SCALES: HORIZONTAL: 1"=50' VERTICAL: 1"=5'



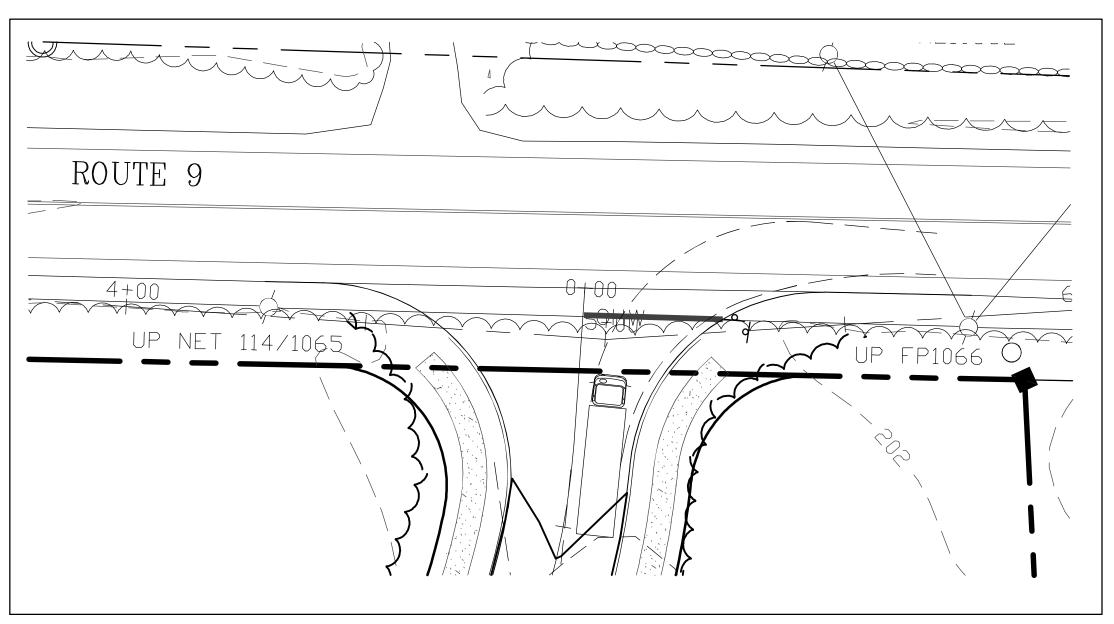
SU UTILITY TRUCK ENTERING EASTBOUND DETAIL SCALE: 1"=20'



SU UTILITY TRUCK EXITING WESTBOUND DETAIL SCALE: 1"=20'



SU UTILITY TRUCK ENTERING WESTBOUND DETAIL SCALE: 1"=20'



SU UTILITY TRUCK EXITING EASTBOUND DETAIL SCALE: 1"=20'

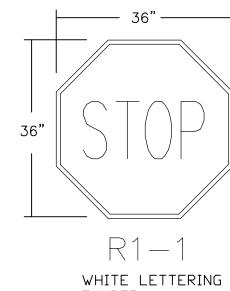
PREPARED FOR:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD

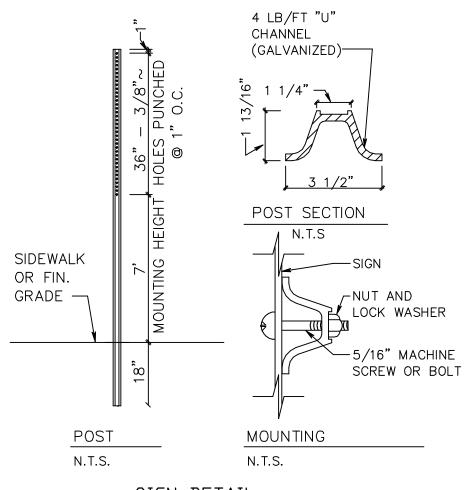
N. HAMPTON, N.H. 03862

BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



WHITE LETTERING ON RED

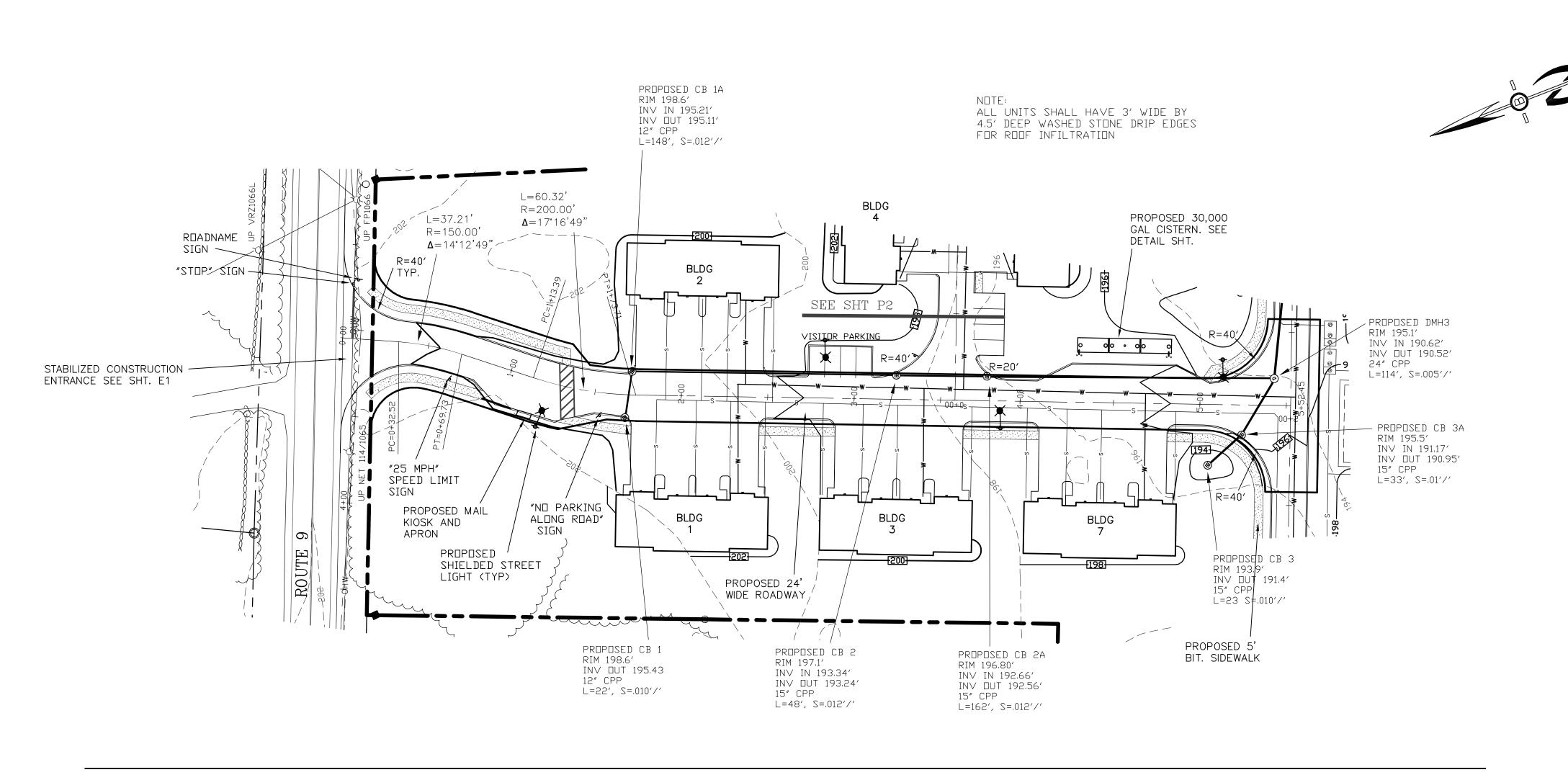


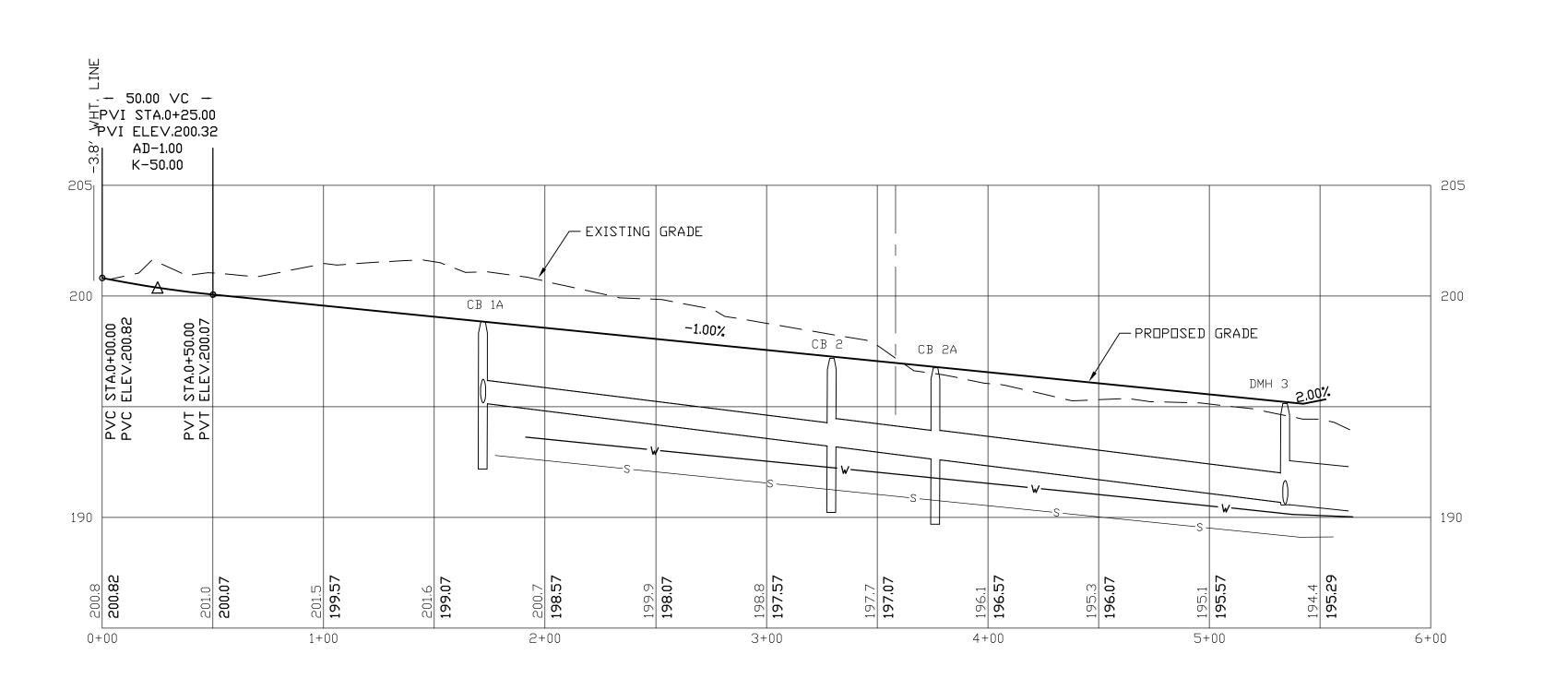
SIGN DETAIL

DATE:

HIGHWAY ACCESS PLAN-H2

DATE:	DEC. 2020	SCALE:	1''=20'
PROJ. N0:	NH-1263	SHEET NO.	8A OF 15



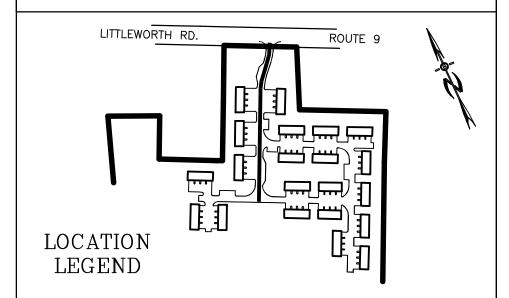


PREPARED FOR:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD N. HAMPTON, N.H. 03862

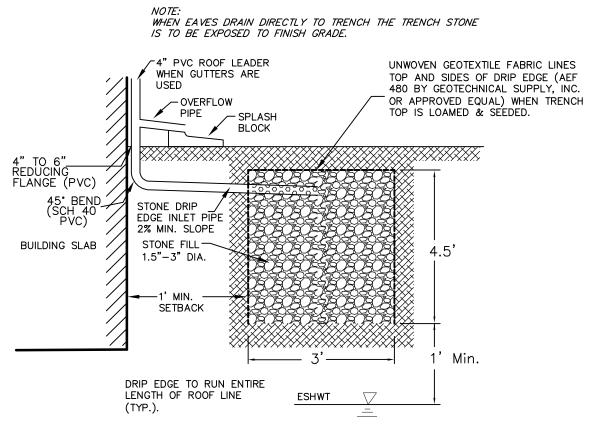
BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



NOTE

- 1. ALL ELECTRICAL, TELEPHONE, CABLE TELEVISION AND ALARM LINES TO BE UNDERGROUND. THE SIZE AND LOCATION IS TO BE DETERMINED BY APPROPRIATE UTILITY COMPANY.
- 2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR, ENGINEER TO BE NOTIFIED IMMEDIATELY OF ANY
- 3. ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM TO THE TOWN STANDARD SPECIFICATIONS AND TO N.H.D.O.T. STANDARDS AND
- REGULATIONS. 4. ALL DRAINAGE STRUCTURE AND SWALES WILL BE BUILT AND STABILIZED
- PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
 5. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.



STONE DRIP EDGE SECTION

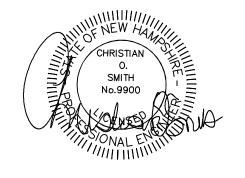
PROFILE SCALES:
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

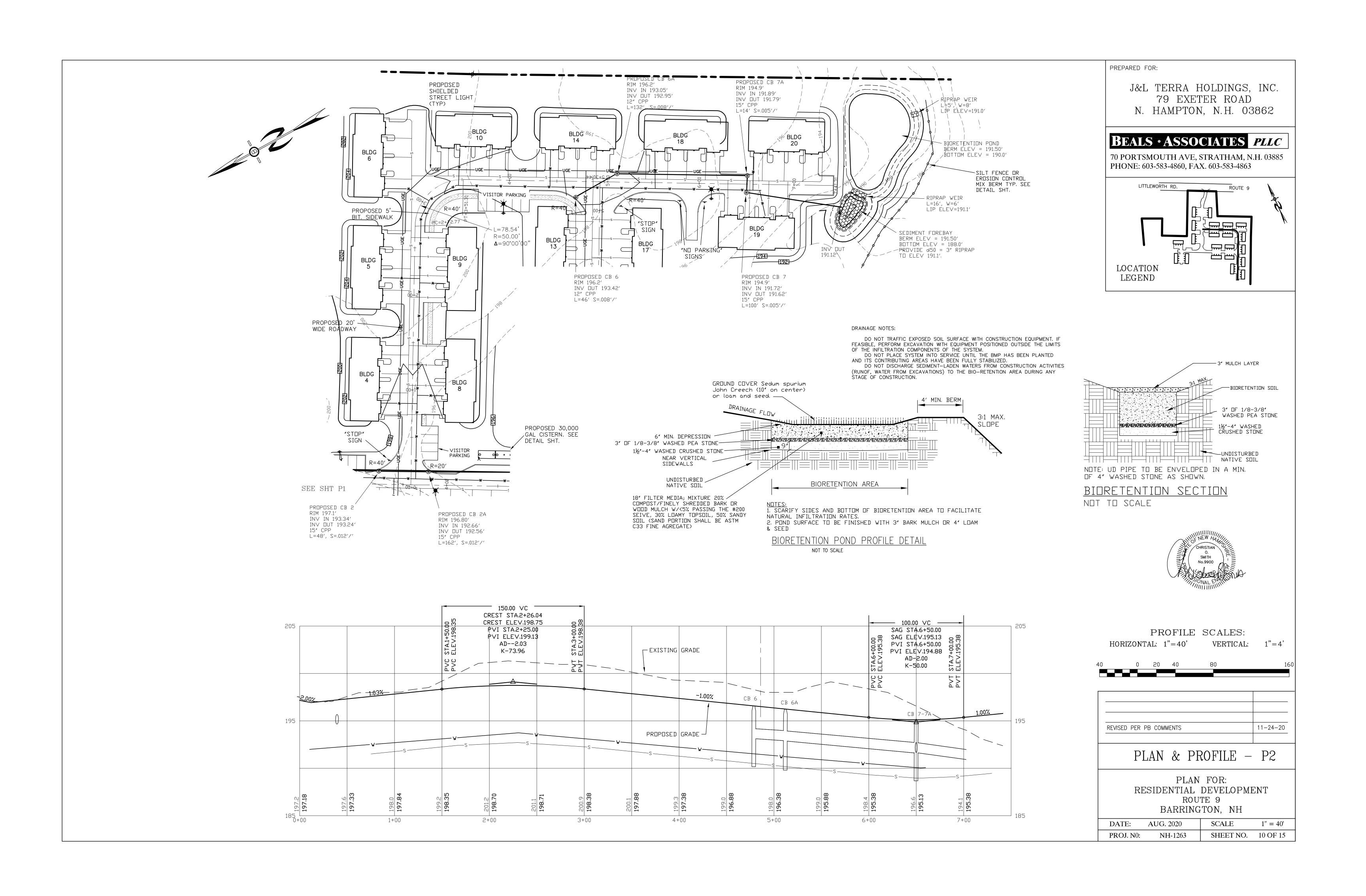


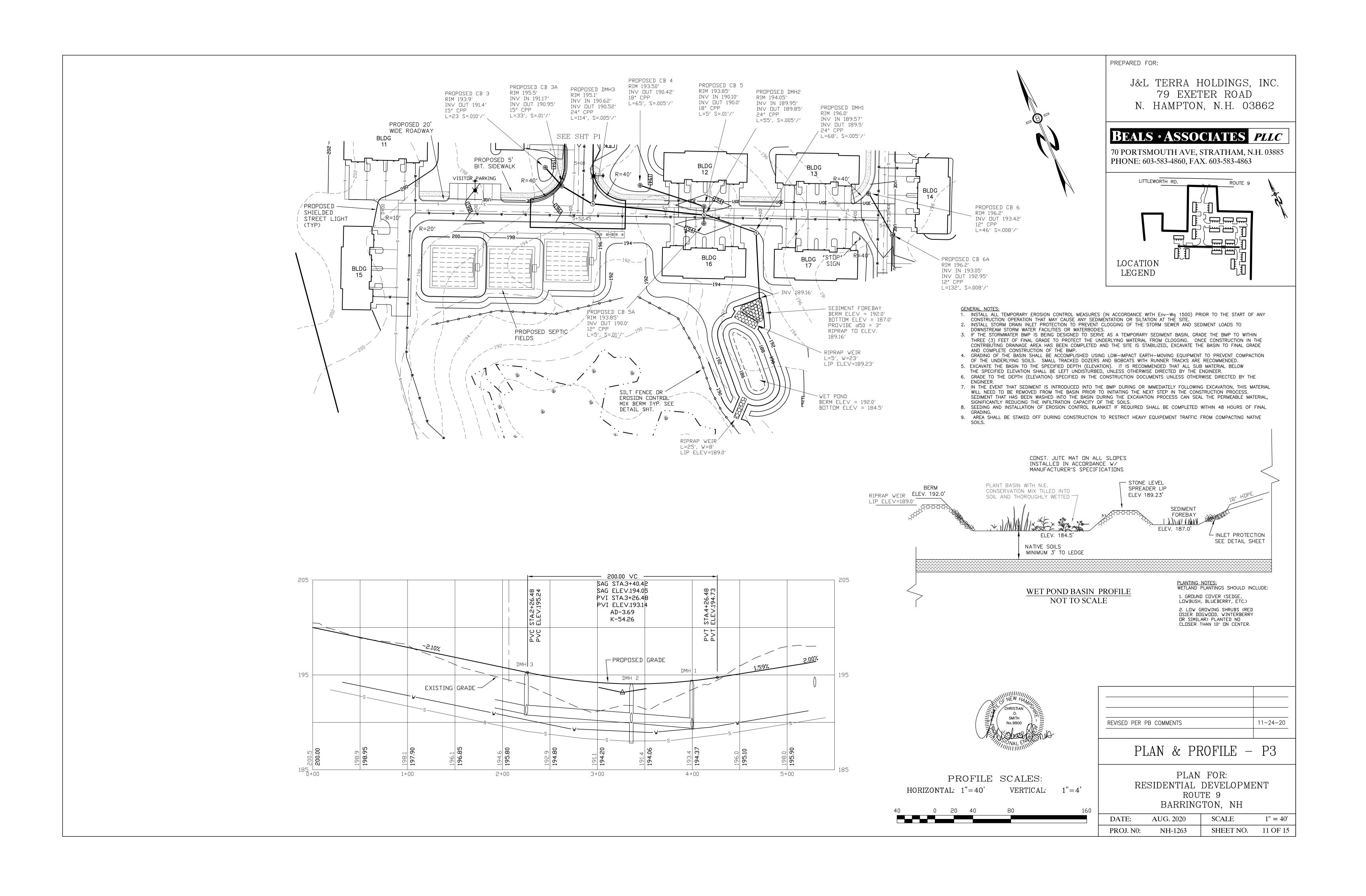
REVISED PER PB COMMENTS 11-24-20

PLAN & PROFILE - P1

DATE:	AUG. 2020	SCALE	1" = 40'
PROJ. N0:	NH-1263	SHEET NO.	9 OF 15

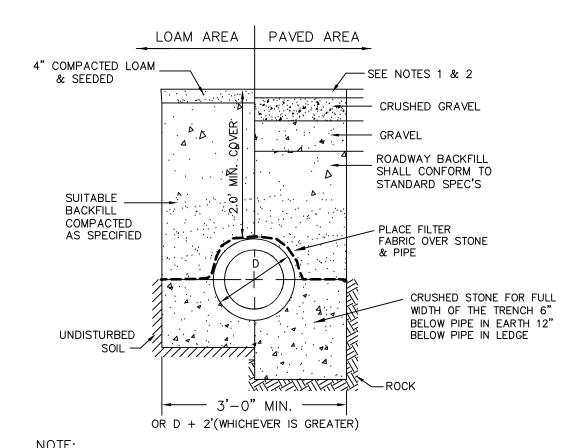






STONE BERM LEVEL SPREADER CROSS SECTION TABLE 4-13-GRADATION OF STONE FOR LEVEL BERM % BY WEIGHT PASSING ISOMETRIC VIEW SEIVE DESIGNATION (INCHES) SQUARE MESH SIEVE 84%-100% 68%-83% 42%-55% LEVEL SPREADER 8%-12%

- 1. CONSTRUCT THE LEVEL SPREADER LIP ON A 0% GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- 2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
- 3. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING EXCELSIOR ENFORCER MATTING BENEATH THE STONE. EACH STRIP SHALL OVERLAP BY AT LEAST SIX INCHES.
- 4. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- 5. MAINTENANCE: THE LEVEL SPREADER SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE LIP HAS BEEN DAMAGED AND THE DESIGN CONDITIONS HAVE NOT CHANGED. ANY DETRIMENTAL SEDIMENT ACCUMULATION SHOULD BE REMOVED. IF STONE REMOVAL HAS TAKEN PLACE ON THE LIP, THEN THE DAMAGE SHOULD BE REPAIRED.



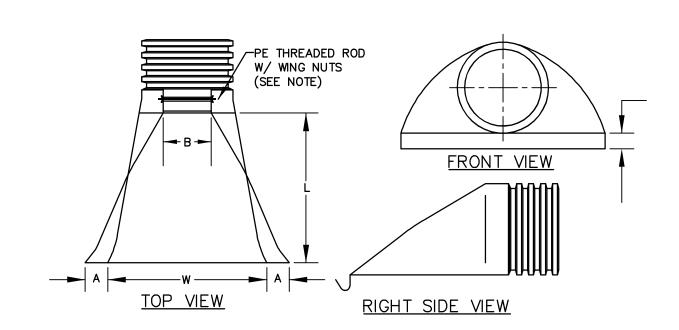
TYPICAL DRAINAGE TRENCH DETAIL

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO

CONFORM TO STREET OPENING REGULATIONS.

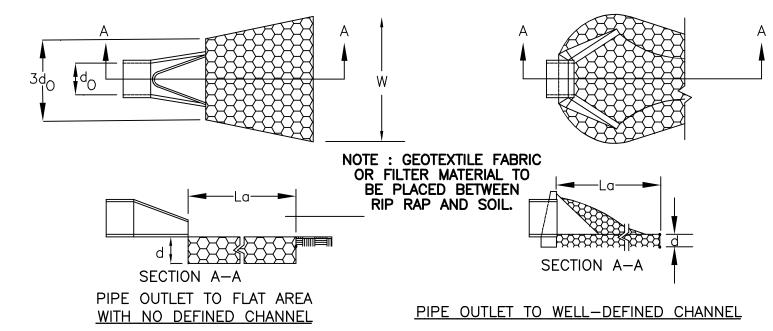
SUBDIVISION SPEC'S.



PART No.	PIPE SIZE	А	B(MAX)	Н	L	w
1510-NP	15" 375 mm	6.5" 165 mm	10" 254 mm	6.5" 165 mm	25" 635 mm	29" 735 mm
1810-NP	18" 450 mm	7.5" 190 mm	15" 380 mm	6.5" 165 mm	32" 812 mm	35" 890 mm
2410-NP	24" 600 mm	7.5" 190 mm	18" 450 mm	6.5" 165 mm	36" 900 mm	45" 1140 mm
3010-NP	30" 750 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm
3610-NP	36" 900 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm

NOTE: PE THREADED ROD W/ WING NUTS PROVIDED FOR END SECTIONS 15"-24". 30" & 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S RECOMMENDATIONS.

ADS N-12 FLARED END SECTIONS NOT TO SCALE (ALL DIMENSIONS ARE NOMINAL)



CONSTRUCTION SPECIFICATIONS . THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES

SHOWN ON THE PLANS. 2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION. 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. 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 TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES. 4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED

TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES. 5. STONE FOR RIRAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE-THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT. 6. FLAT ROCKS SHALL NOT USED FOR RIP RAP. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER

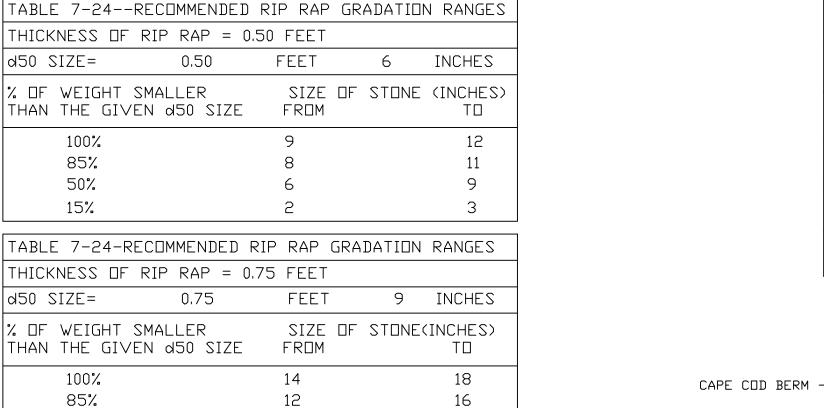
ROCKS. **MAINTENANCE**

50%

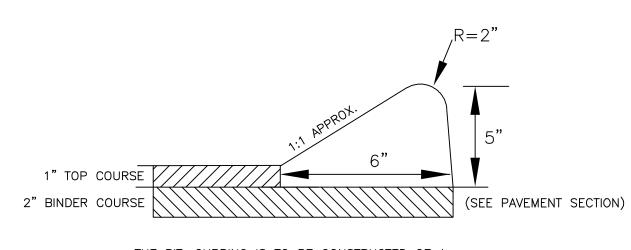
15%

1. THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

PIPE DUTLET PROTECTION

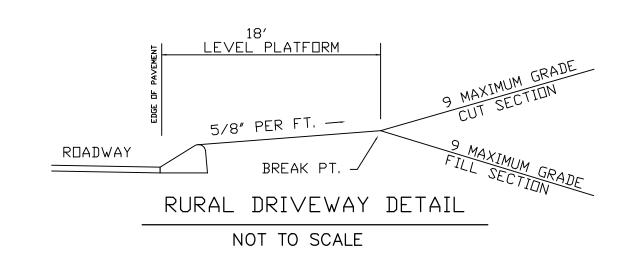


14



THE BIT. CURBING IS TO BE CONSTRUCTED OF A POLYFIBER CURB MIX CONTAINING 59.2% SAND, 27.6% 3/8" STONE, 9.2% 1/2" STONE, 0.3% FIBERS, AND 3.0% ASPHALT.

CAPE COD BERM DETAIL NOT TO SCALE



TRAFFIC CONTROL SCHEDULE						
SIGN NUMBER	SIGN	SIZE OI		DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"
R2-1	SPEED LIMIT 25	18"	24"	BLACK ON WHITE	CHANNEL	7'-0"
41-0342		30"	30"	BLACK ON YELLOW	CHANNEL	8'-6"
W14-2	NO	24"	24"	BLACK ON YELLOW	CHANNEL	7'-0"

DUCTILE IRON FRAME AND

GRATE WITH H20 LOADING

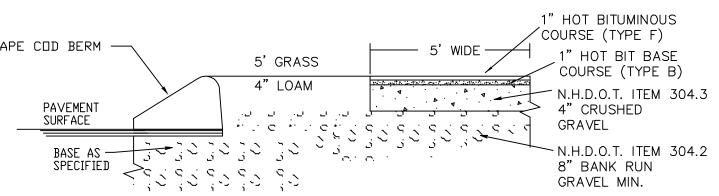
PRECAST CATCH BASIN

NOT TO SCALE

NEENEH R#3570A DR

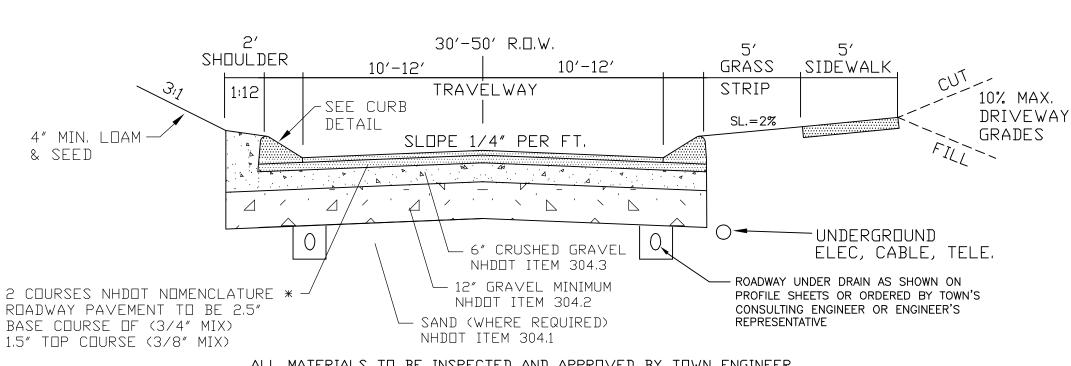
ALT. SLAB TOP REINFORCED TO MEET OR EXCEED

REQUIREMENTS OF H-20



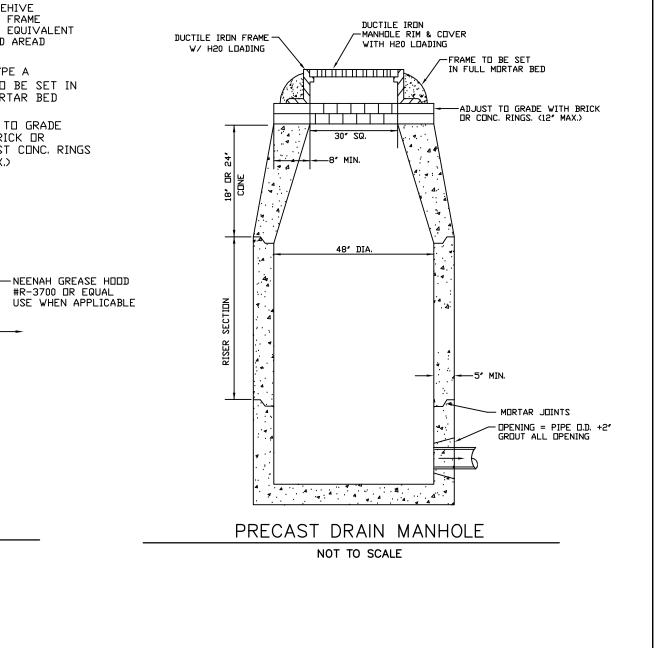
BIT. SIDEWALK DETAIL

NOT TO SCALE



ALL MATERIALS TO BE INSPECTED AND APPROVED BY TOWN ENGINEER AND MEET NHDOT STANDARDS. TOWN MAY REQUIRE UNDERDRAIN OR ADDITIONAL DRAINAGE TO INCLUDE OVER EXCAVATION OF UNSUITABLE MATERIALS AND INSTALLATION OF GEOTEXTILE FABRIC, SEE ADDITIONAL NOTES ON DETAIL SHEETS.

TYPICAL CROSS SECTION



NEENAH BEEHIVE GRATE AND FRAME

IN GRASSED AREAD

NHDOT TYPE A

R-4353 OR EQUIVALENT

- FRAME TO BE SET IN

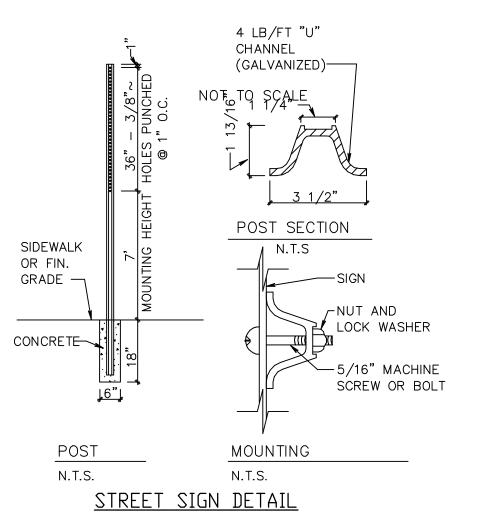
-ADJUST TO GRADE

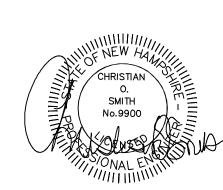
PRE-CAST CONC. RINGS

FULL MORTAR BED

WITH BRICK OR

(12" MAX.)

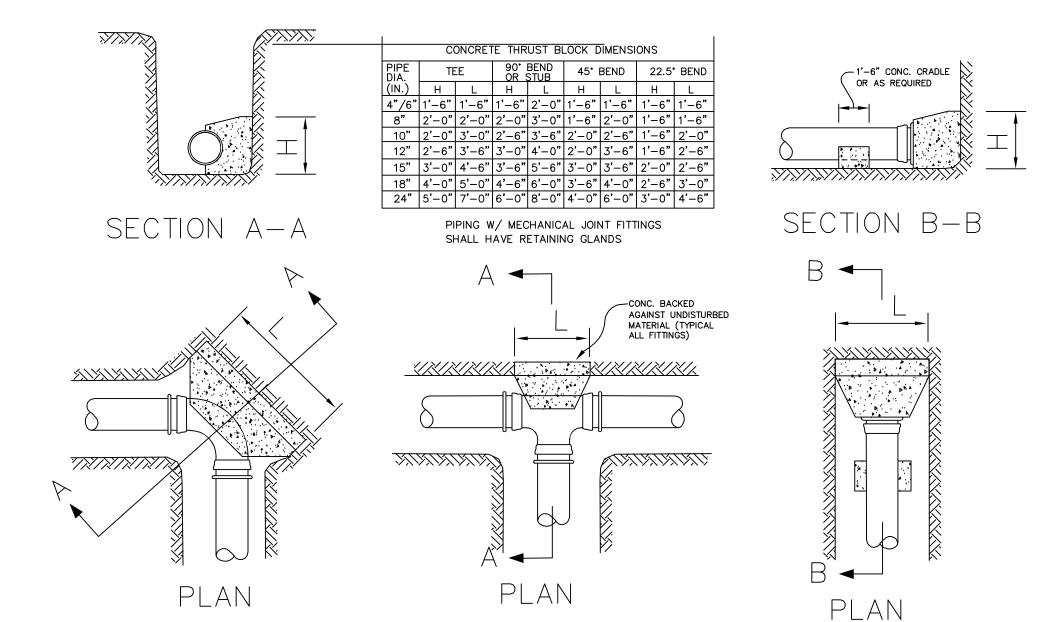






CONSTRUCTION DETAILS D1

DATE:	AUG. 2020	SCALE	NTS'
PROJ. N0:	NH-1263	SHEET NO.	12 OF 15



THRUST BLOCK DETAILS

PLASTIC MARKER TAPE

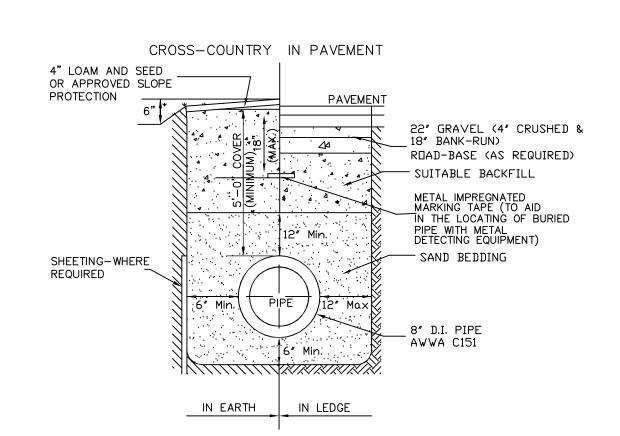
PERMEABLE SAND (1" O MAX)

ABOVE CABLES

3" CATV CABLE

(PVC-SCH 40)

-4" TELEPHONE



TYPICAL TRENCH DETAIL FOR WATER SYSTEM

SET TO FINISH -THE END OF THE INSTALLED WATER SERVICE TO BE MARKED BY A 2X4. -BUFFALO BOX CURB STOP CORPORATION SERVICE PIPE 3/4" STOP -WATERMAIN — OPEN LEFT TYPE "K" COPPER TUBING - FLARED CONNECTIONS INSTALL WITH GOOSE NECK TO PROVIDE FLEXIBILITY DOUBLE STRAP STAINLESS STEEL SADDLE(TAPPED WITH

TYPICAL WATER SERVICE CONNECTION

C.C. THREADS)

PREPARED FOR:

J&L TERRA HOLDINGS, INC. 79 EXETER ROAD N. HAMPTON, N.H. 03862

BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

NOTES

- 1) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: REFILL WITH BEDDING MATERIAL. (SEE NOTE 6 ALSO)
- 2) BEDDING: MINIMUM 12" SAND BLANKET AS SPECIFIED AND REMAINING FILL AS SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C-33 STONE

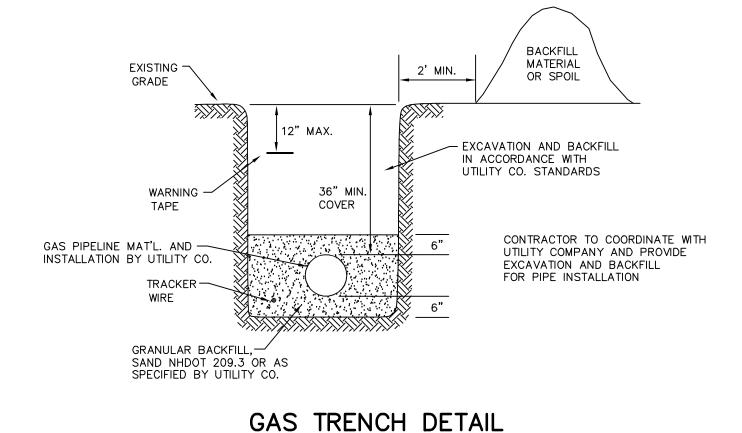
1 INCH SCREEN PASSING 3/4 INCH SCREEN 90-100% PASSING 20-50% PASSING 3/8 INCH SCREEN 0-10% PASSING No. 4 SIEVE PASSING No. 8 SIEVE 0-5%

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 3/4 INCH TO 1-1/2 INCH SHALL BE USED.

- 3) SUITABLE MATERIAL IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS: SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION.
- 4) FOR CROSS COUNTRY CONSTRUCTION: BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

SEPERATION NOTES:

- 1. WATER MAIN RELATIONS TO SHALL BE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WATER WORKS" SO-CALLED TEN STATE STANDARDS AND NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL DESIGN STANDARDS.
- 2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPERATE TRENCH WITH A VERTICAL SPERATION AT LEAST 18 INCHES APART.



SCH-40 PVC) 7,200 VAC. OTHER POWER, TELEPHONE CATV, ETC., CABLES ARE NO CLOSER THAN 12". UTILITY TRENCH DETAIL

O_

NOTE: ALL UTILITIES SHALL BE REVIEWED AND

APPROVED BY APPROPRIATE UTILITY COMPANY.

TO GREATEST EXTENT POSSIBLE AND LOCATED

12" MIN.

AT PROPERTY LINE CORNERS.

4" ELECTRIC SERVICE

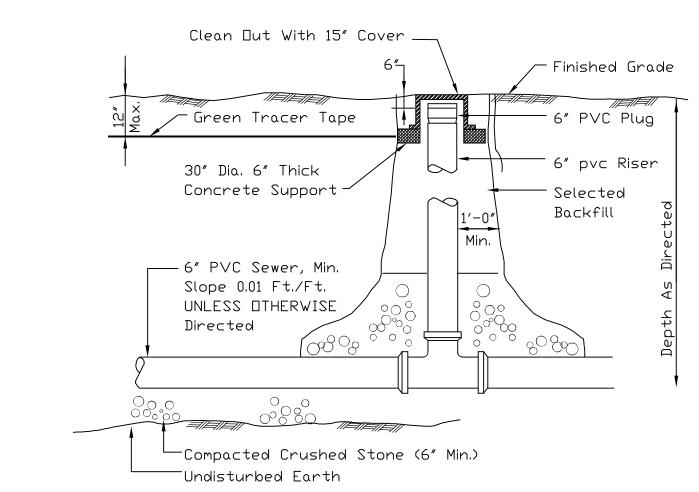
CABLES 250 VAC OR LESS

BURIAL UNLESS UNDER ROADWAY) PVC-SCH 40

PRIMARY POWER CABLE -

(DIRECT BURIAL UNLESS UNDER ROADWAY AND AS LOCATED IN DWGS, 4"

SERVICE BOX CONNECTIONS SHALL BE "FLUSH MOUNT"

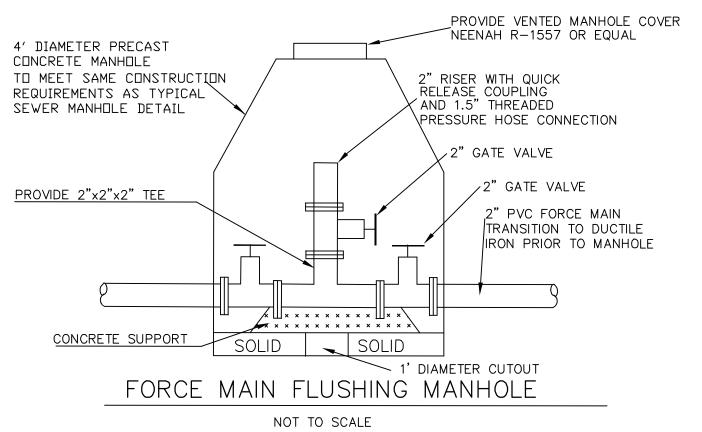


SEWER SERVICE CLEAN OUT

LOAM AREA | PAVED AREA 4" COMPACTED LOAM ___ — SEE NOTES 1 & 2 & SEEDED METAL IMPREGNATED GREEN-MARKING TAPE (TO AID IN THE LOCATING OF BURIED PAVEMENT DETAIL PIPE WITH METAL DETECTING EQUIPMENT) (SEE NOTE ROADWAY BACKFILL SHALL CONFORM TO STANDARD SPEC'S 12" PROTECTIVE SAND BLANKET COMPACTED AS SPECIFIED (SEE NOTE #7 ABOVE) CRUSHED STONE OR SCREENED GRAVEL BEDDING FOR FULL WIDTH OF THE PIPE 6" BELOW PIPE IN EARTH 1 44 4 UNDISTURBED SOIL — 12" BELOW PIPE IN LEDGE ----- 3'-0" MIN. -----OR D + 2'(WHICHEVER IS GREATER)

> 1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS. 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPEC'S.

TYPICAL SEWER TRENCH DETAIL NOT TO SCALE



REVISIONS: UTILITY DETAILS

DATE:

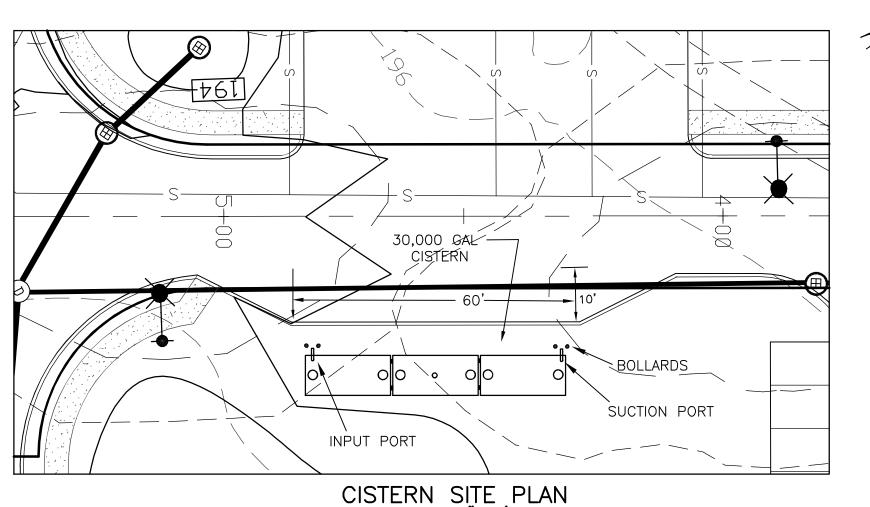
DATE:	AUG. 2020	SCALE	1" = 40'
PROJ. N0:	NH-1263	SHEET NO.	13 OF 15

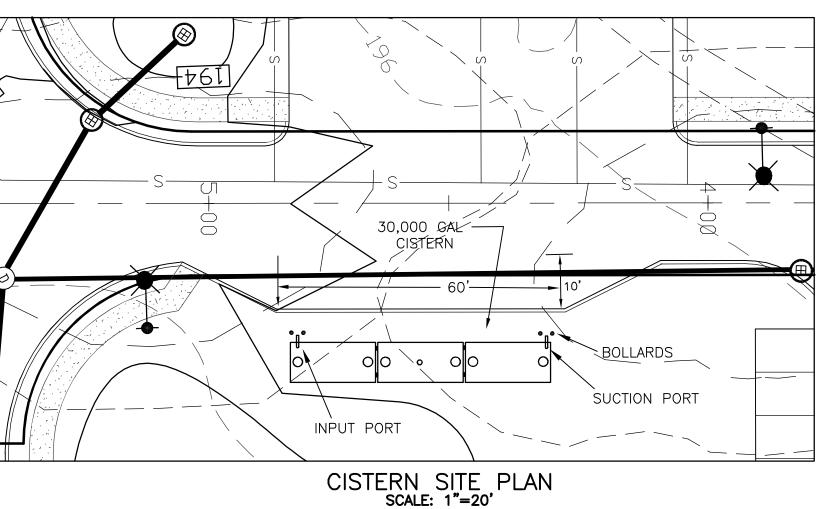
CISTERN SPECIFICATIONS

- 1. THE CISTERN SHALL BE DESIGNED TO BE TROUBLE FREE, AND IT SHALL BE DESIGNED TO LAST 50
- 2. THE MINIMUM CAPACITY SHALL BE 10,000 GALLONS. DEPENDING ON THE DEVELOPMENT LAYOUT/CONFIGURATION, ADDITIONAL GALLON REQUIREMENTS MAY BE IMPOSED AT THE DISCRETION OF THE FIRE CHIEF. ALL EXCEPTIONS, ADDITIONS, OR DELETIONS WILL BE IN WRITING.
- 3. THE SUCTION CAPACITY SHALL BE CAPABLE OF DELIVERING 1,000 GALLONS PER MINUTE (GPM) FOR THREE-QUATERS OF THE CISTERN CAPACITY.
- 4. THE ENTIRE CISTERN AND APPURTENANCES SHALL BE RATED FOR HS-20 HIGHWAY LOADING. 5. DRAWINGS OF THE DESIGN ARE FOR ESTIMATING GENERAL REQUIREMENT AND DESIGN PURPOSES ONLY
- AND ARE NOT INTENDED FOR USE AS DESIGN. 6. EACH CISTERN SHALL BE DESIGNED, SITED TO THE PARTICULAR LOCATION, STAMPED BY A
- REGISTERED ENGINEER, AND APPROVED BY THE FIRE CHIEF. 7. ALL SUCTION AND FILL PIPING SHALL BE AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) SCHEDULE 40 STEEL. ALL VENT PIPING SHALL BE ASTM SCHEDULE 40 STEEL WITH WELDED JOINTS. ALL PIPING LOCATED WITHIN THE TANK SHALL BE ASTM SCHEDULE 40 STEEL WITH WELDED JOINTS.

ALL PIPING LEADING FROM THE TANK TO THE HYDRANT SHALL BE ASTM SCHEDULE 40 STEEL.

- 8. THE FINAL SUCTION CONNECTION SHALL BE FIVE INCH PUMPER NOZZLE WITH A CAP. THE SUCTION PIPE SHALL BE BRACED TO ENSURE DURABILITY DURING PUMPING OPERATIONS. THE FIRE CHIEF SHALL APPROVE BRACE CONFIGURATION AND INSTALLATION. THE SUCTION PIPE CONNECTION SHALL BE TWENTY-FOUR INCHES ABOVE THE LEVEL OF THE VEHICLE PAD WHERE VEHICLE WHEELS WILL BE LOCATED WHEN THE CISTERN IS IN USE.
- 9. THE FILLER CONNECTION SHALL BE INTALLED INTO THE EIGHT INCH VENT WITH 4" MALE STEEL STORZ FITTING. THIS FITTING SHALL BE 24" ABOVE FINISH GRADE AND FACE THE ROAD. A THIRTY-TWO INCH DIAMETER MANHOLE WITH COVER WILL BE LOCATED ON TOP OF THE CISTERN. THE CONFIGURATION OF THIS MANHOLE SHALL ALLOW THE UNIT TO BE SECURED WITH TWO PADLOCKS AND SHALL BE APPROVED BY THE FIRE CHIEF. THE PADLOCKS WILL BE SUPPLIED BY THE FIRE DEPARTMENT.
- 10. THE DISTANCE FROM THE BOTTOM OF THE SUCTION PIPE TO THE PUMPER CONNECTION SHALL NOT EXCEED FOURTEEN FEET VERTICAL.
- 11. ALL HORIZONTAL SUCTION PIPING SHALL SLOPE SLIGHTLY UPHILL TOWARD THE PUMPER CONNECTION.
- 12. BEDDING FOR THE CISTERN SHALL CONSIST OF A MINIMUM OF TWELVE INCHES OF 3/4" TO 1 1/2" WASHED PEA STONE, COMPACTED. NO FILL SHALL BE USED UNDER THE STONE. OVER EXCAVATION SHALL BE FILLED WITH THE SAME STONE BEDDING MATERIAL
- 13. ALL BACKFILL MATERIALS SHALL BE SCREENED GRAVEL WITH NO STONES LARGER THAN SIX INCHES AND SHALL BE COMPACTED TO 95 PERCENT OF ITS ORIGINAL VOLUME IN ACCORDANCE WITH ASTM D 1557. 16. THE TOP OF CISTERN SHALL BE INSULATED WITH VERMIN RESISTANT FOAM INSULATION AND TWO FEET OF BACKFILL WITH A MINIMUM WEIGHT OF 120 PCF, COMPACTED. FOAM USED FOR THIS INSTALLATION SHALL BE CLOSED CELL POLYURETHANE FOAM WITH AN INSULATION FACTOR OF R=5 PER INCH. ALL BACKFILL SHALL EXTEND TEN FEET BEYOND THE EDGE OF THE VEHICLE PAD AND THEN HAVE A MAXIMUM OF 3:1 SLOPE, LOAM AND SEEDED.
- 14. BEFORE ANY BACKFILLING IS DONE THE ENTIRE CISTERN SHALL BE COMPLETED AND INSPECTED BY THE FIRE CHIEF.
- 15. AFTER BACKFILLING, BOLLARDS OR LARGE STONES SHALL BE PLACED TO PROTECT THE TANK AND APPURTENANCES.
- 16. THE PITCH OF THE SHOULDER AND VEHICLE PAD FROM THE EDGE OF THE PAVEMENT TO THE PUMPER SUCTION CONNECTION SHALL BE ONE PERCENT TO THREE PERCENT DOWNGRADE.
- 17. THE SHOULDER AND VEHICLE PAD SHALL BE OF A SUFFICIENT LENGTH TO ALLOW CONVENIENT ACCESS TO THE SUCTION CONNECTION WHEN THE PUMPER IS SET AT 45 DEGREES TO THE ROAD. THE SHOULDER AND VEHICLE PAD SECTION SHALL CONSIST OF 3" BITUMINOUS PAVING, REFER TO SITE PLAN FOR REQUIREMENTS.
- 18. THE SUCTION FITTING SHALL BE LOCATED BETWEEN 22 AND 24 FEET FROM THE NEAREST RUNNING EDGE OF ROAD PAVEMENT. TWO CONCRETE FILLED STEEL BOLLARDS SHALL BE PLACED IN A MANNER TO PROTECT THE HYDRANT. THE BASE OF THESE BOLLARDS SHALL EXTEND BELOW THE FROST LINE. THE UPPER PORTION OF THE BOLLARDS SHALL EXTEND THIRTY SIX INCHES ABOVE THE LEVEL OF THE VEHICLE PAD WHERE VEHICLE WHEELS WILL BE LOCATED WHEN THE CISTERN IS IN USE. 19. ALL CONSTRUCTION, BACKFILL, AND GRADING MATERIALS SHALL BE IN ACCORDANCE WITH PROPER
- CONSTRUCTION PRACTICES AND SHALL BE ACCEPTABLE TO THE FIRE CHIEF. 20. THE FIRE CHIEF (OR REPRESENTATIVE) AND THE ENGINEER'S INSPECTOR WILL BE NOTIFIED BY THE
- CONTRACTOR TO OBSERVE THE FOLLOWING POINTS OF INSTALLATION:
- A. EXCAVATION COMPLETE.
- B. CRUSHED STONE INSTALLED AND COMPACTED
- C. BACKFILLING COMPLETE PRIOR TO PLACEMENT OF INSULATION.
- D. PLACEMENT OF INSULATION.
- E. START AND FINISH OF LEAKAGE TEST.
- F. PIPING MANWAYS AND BOLLARDS IN PLACE AND PAINTED.
- G. ALL BACKFILLING LOAM, SEED, ETC. COMPLETE WITH TURNOUT GRAVEL IN PLACE AND GRADED.
- H. PAVEMENT COMPLETE, AND ALL OTHER WORK 100% COMPLETE.
- 21. THE FIRE CHIEF SHALL BE NOTIFIED OF THE DATE THAT SITE WORK IS TO BEGIN. 22. ANY EXCEPTION, ADDITIONS, OR DELETIONS ARE DATED AND NOTED BELOW:
- 23. CONCRETE MUST HAVE A MINIMUM OF 150 PCF.
- 24. STONE AND GRAVEL BACKFILL MUST HAVE A MINIMUM OF 120 PCF.





∕-1-4" VENT PIPE

6" CONC. FILLED

(TYP. OF 4)

(SEE DETAIL)

36" (MIN.)¬

O MAX.

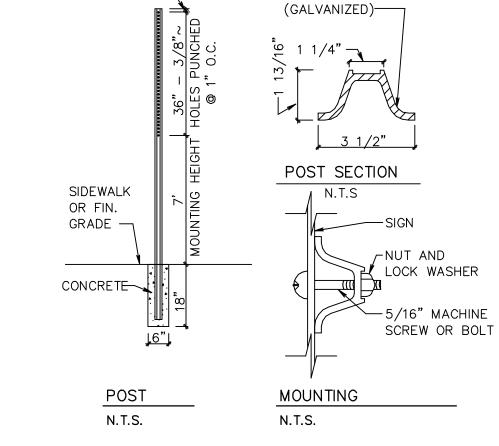
BOTH CONNECTIONS

TO 3/4" CRUSHED, WASHED

STONE AND COMPACTED

EDGE OF PAVEMENT

FIRE TRUCK TURNOUT



STREET SIGN DETAIL STOP SIGN (R1-1) 30" × 30" SPEED LIMIT SIGN (R2-1) 24" × 30"

PREPARED FOR:

J&L TERRA HOLDINGS, INC.

79 EXETER ROAD

N. HAMPTON, N.H. 03862

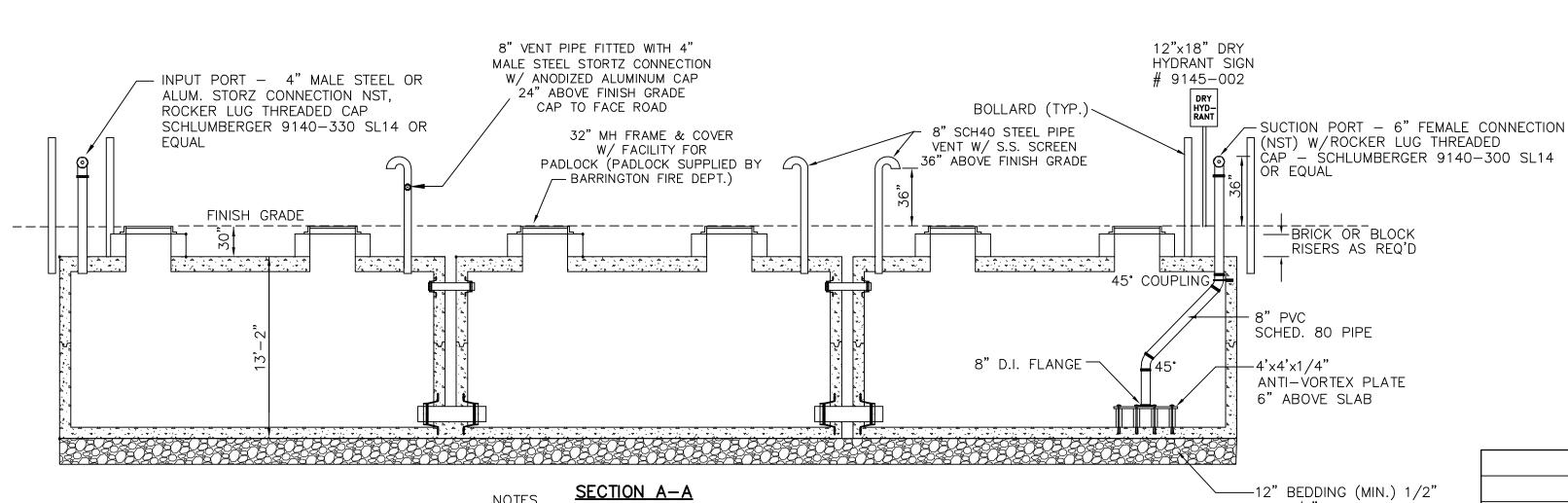
BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885

4 LB/FT "U"

CHANNEL

PHONE: 603-583-4860, FAX. 603-583-4863



3-8" FLOW PIPES

PLAN VIEW

1. CONCRETE: 5,000 PSI AFTER 28 DAYS. 2. REINFORCED FOR H-20 LOADING. 3. JOINTS SEALED WATER TIGHT.

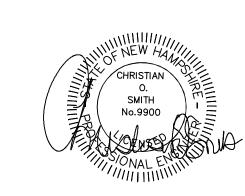
CSI 10000 GAL HEAVY DUTY TANK

MODEL HT10K OR EQUAL

4. ALL BELOW GRADE EXTERIOR SURFACES OF THE TANK SHALL BE COATED WITH

KOL-TAR'S BLACK SHIELD ASPHALT COATING, OR APPROVED EQUAL 5. CISTERN INSTALLATION MUST CONFORM WITH ALL LOCAL FIRE DEPARTMENT REQUIREMENTS.

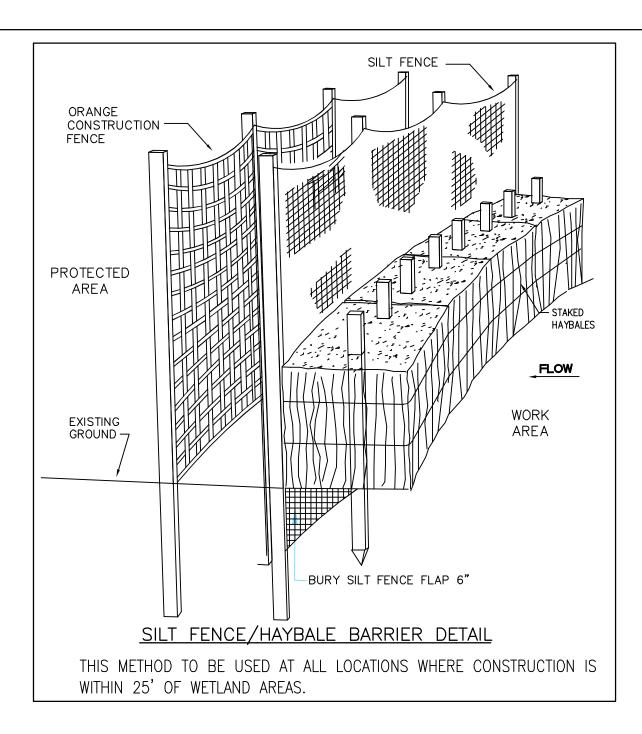
PROPOSED 30,000 GAL. FIRE CISTERN DETAIL NOT TO SCALE



REVISIONS: DATE:

FIRE CISTERN DETAILS

DATE:	AUG. 2020	SCALE	NTS
PROJ. N0:	NH-1263	SHEET NO.	14 OF 15



TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BE EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED*

2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR DIRECTED BY THE ENGINEER ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS.

3. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF SEED PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET

4. SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.5" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.

5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.

6. AREAS MUST BE SEEDED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL.

* 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 INCHES OF NON-EROSIVE MATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED.
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

CONSTRUCTION SPECIFICATIONS

- 1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
- 2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED
- 3. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
- 4. STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES IN TO THE SOIL.
- 5. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP. 6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
- 7. THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABATE AND CONTROL THE
- EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING. 8. THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION, TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW RSA 430:53 AND NH CODE ADMINISTRATIVE RULES AGR 3800. THE PROJECT SHALL MEET ALL
- REQUIREMENTS AND THE INTENT OF . RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES 9. THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FORTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT
- http://cfpubl.epa.gov/npdes/stormwater/noi/noisearch.cfm. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS"

CONSTRUCTION SEQUENCE

CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.

2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR

TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM. 3. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS

4. EXCAVATE AND STOCKPILE TOPSOIL /LOAM. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. 5. CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED.

6. CONSTRUCT THE ROADWAY/DRIVEWAYS AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, PARKING AREAS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE. 7. INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS

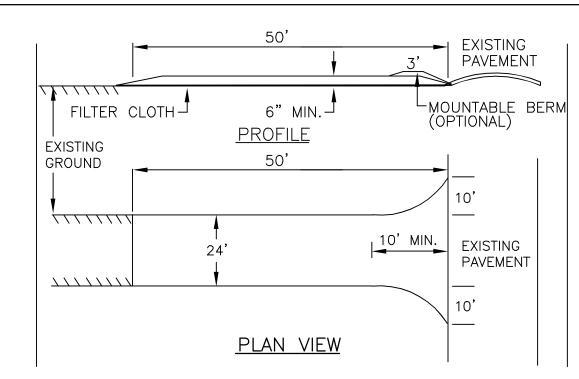
SHALL STABILIZED IMMEDIATELY AFTER GRADING 8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.

9. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY. 10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION

11. COMPLETE PERMANENT SEEDING AND LANDSCAPING 12. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND

SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVEGETATE ALL DISTURBED AREAS. 13. ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.

14. FINISH PAVING ALL ROADWAYS/DRIVEWAYS. 15. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT. 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A

SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY. 3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER. 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT

6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS—OF—WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED

STABILIZED CONSTRUCTION ENTRANCE

WINTER MAINTENANCE

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15—25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH. ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT

SEEDING SPECIFICATIONS

1. GRADING AND SHAPING

3. ESTABLISHING A STAND

A. SLOPES SHALL NOT BE STEEPER THAN 2:1;3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

2. SEEDBED PREPARATION A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.

B. 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 MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

AGRICULTURAL LIMESTONE, 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(P205), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.

POTASH(K20), 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.)

B. 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.

C. REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET) FOR RATES OF SEEDING. ALL LEGUMES (CROWN VETCH, BIRDS FOOT TREFOIL, AND FLAT PEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.

D. 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 20 OR FROM AUGUST

4. MULCH

A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.

B. 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 90 LBS PER 1000 SQ. FT.

5. MAINTENANCE TO ESTABLISH A STAND

A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO

C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

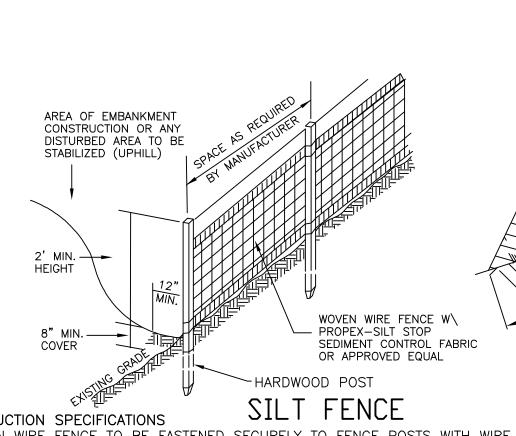
WIRE SCREEN SHALL BE PLACED BETWEEN STONE AND BLOCKS TO PREVENT THE AGGREGATE FROM BEING WASHED INTO THE STRUCTURE RUNOFF WATER WITH SEDIMENT ---FILTERED WATER - DROP INLET WITH GRATE

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED IN A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED

TEMPORARY CATCH BASIN INLET PROTECTION (Block and Gravel Drop Inlet Sediment Filter)

NOT TO SCALE

MAINTENANCE NOTE:



CONSTRUCTION SPECIFICATIONS 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8". 2. THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.

3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER. THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING. 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES"

DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF. 5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE. 6. 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 RE-VEGETATED

MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY. 2. 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. 3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE 4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN

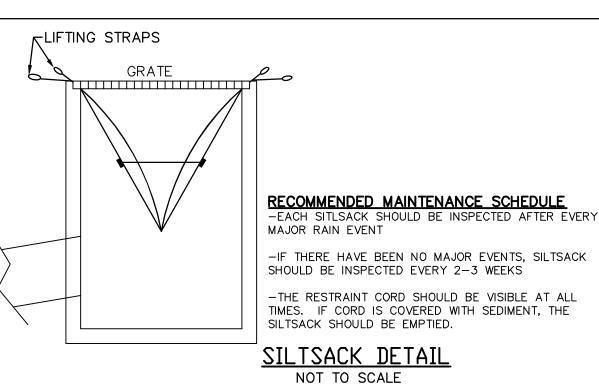
REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL	A B C	FAIR POOR POOR	GOOD GOOD GOOD	GOOD FAIR EXCELLENT	FAIR FAIR GOOD
AREAS	D E	FAIR FAIR	FAIR EXCELLENT	GOOD EXCELLENT	EXCELLENT POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH	A C D	GOOD GOOD GOOD	GOOD EXCELLENT EXCELLENT	GOOD EXCELLENT EXCELLENT	FAIR FAIR FAIR
FLOWING WATER. LIGHTLY USED PARKING	Α	GOOD	GOOD	GOOD	FAIR
LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE	B C D	GOOD GOOD FAIR	GOOD EXCELLENT GOOD	FAIR EXCELLENT	POOR FAIR EXCELLENT
RECREATION SITES.	_			GOOD	
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F G	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	<u>2/</u> <u>2/</u>

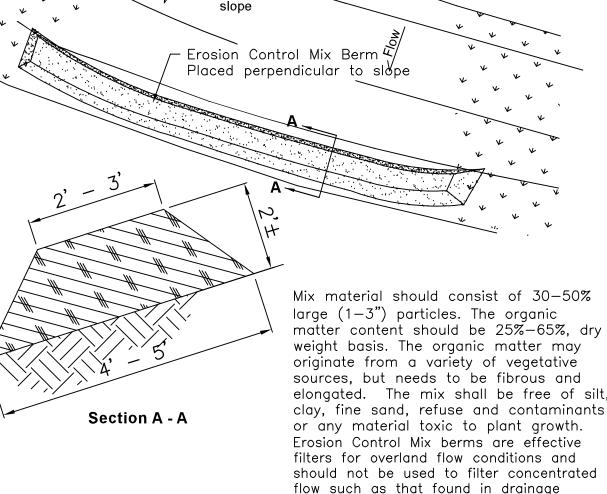
GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS. / REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36. 27 POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

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



EROSION PROTECTION TYPE E

Bare or vegetated



Erosion Control Mix Berm

ditchs, streams, etc.

	SEEDING RATES					
	<u>MIXTURE</u>	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.			
	A. TALL FESCUE CREEPING RED FESCUE RED TOP TOTAL	20 20 <u>2</u> 42	0.45 0.45 <u>0.05</u> 0.95			
	B. TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR	15 10 15	0.35 0.25 0.35			
	FLAT PEA TOTAL	30 40 OR 55	0.75 0.95 OR 1.35			
*	C. TALL FESCUE CREEPING RED FESCUE BIRDS FOOT TREFOIL TOTAL	20 20 <u>8</u> 48	0.45 0.45 <u>0.20</u> 1.10			
	D. TALL FESCUE FLAT PEA TOTAL	20 30 50	0.45 <u>0.75</u> 1.20			
	E. CREEPING RED FESCUE 1/ KENTUCKY BLUEGRASS 1/ TOTAL	50 50 100	1.15 1.15 2.30			
	F. TALL FESCUE 1	150	3.60			
	1/ FOR HEAVY USE ATHLETIC FIELD NEW HAMPSHIRE COOPERATIVE EXTE CURRENT VARIETIES AND SEEDING F	NSION TURF S				

REVISIONS: DATE:

EROSION & SEDIMENTATION

DATE:	AUG. 2020	SCALE	NTS
PROJ. N0:	NH-1263	SHEET NO.	15 OF 15