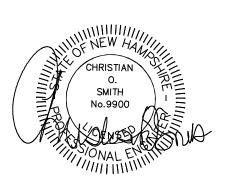
ARBORWOOD RIDGE SUBDIVISION (MAP 16 LOT 29)

CIVIL ENGINEERS:



70 PORTSMOUTH AVE, THIRD FLOOR, SUITE 2 **STRATHAM**, N.H. 03885 PHONE: 603-583-4860, ASSOCIATES, PLLC FAX. 603-583-4863



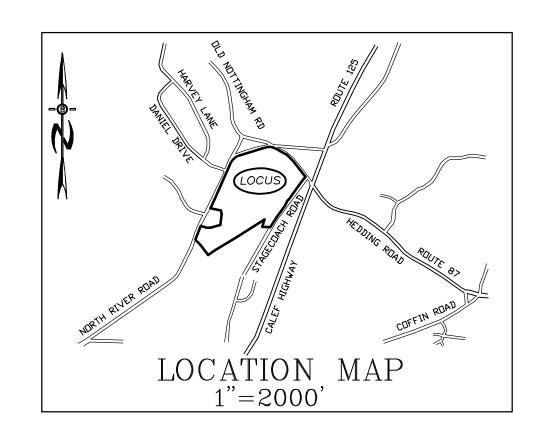
WETLAND / SOIL CONSULTANT:



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

LAND SURVEYOR:

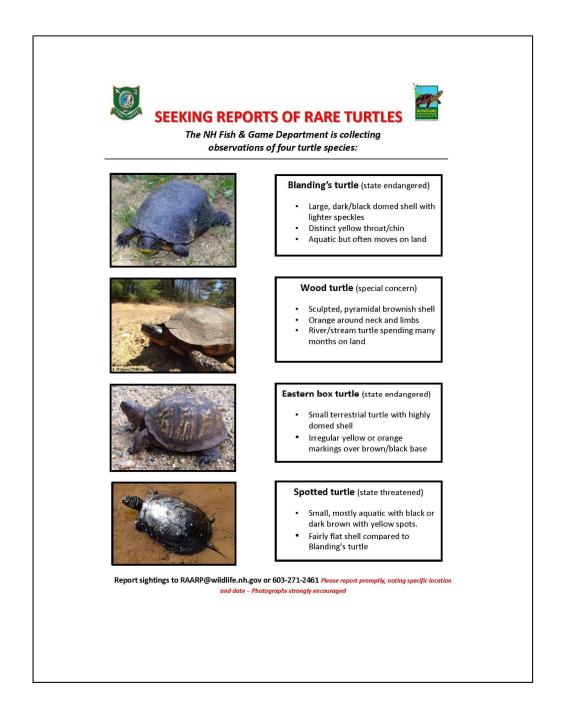




INDEX TITLE SHEET SUBDIVISION BOUNDARY PLANS EXISTING CONDITION PLANS 3 - 4SUBDIVISION SITE PLAN DRIVEWAY ACCESS PLANS PLAN & PROFILES DRAINAGE POND PLAN FIRE CISTERN DETAIL CONSTRUCTION DETAIL PLAN EROSION & SEDIMENT CONTROL DETAILS

PLAN SET LEGEND

5/8" REBAR	•	OVERHEAD ELEC. LINE	он w
DRILL HOLE	•	FENCING	x
CONC. BOUND	⊡	DRAINAGE LINE	
UTILITY POLE	O		
DRAIN MANHOLE	©	STONE WALL	XXXXXX -
EXISTING CATCH BASIN		TREE LINE	-
PROPOSED CATCH BASIN	=	ABUT. PROPERTY LINES	
PINES, ETC.	**	EXIST. PROPERTY LINES	
MAPLES, ETC.		BUILDING SETBACK LINES	
EXIST. SPOT GRADE		EXIST. CONTOUR	100
	96×69		<u></u>
PROP. SPOT GRADE	96×69)	PROP. CONTOUR	
SINGLE POST SIGN	- 0-	SOIL LINES	



TURTLES HAVE BEEN REPORTED IN THE AREA. IF TURTLES ARE FOUND LAYING EGGS IN THE WORK AREA, PLEASE CONTACT MELISSA DOPERALSKI AT 271-1738 or JOSH MEGYESY AT 271-1125 FOR FURTHER INSTRUCTIONS

LAND OWNERS:

JOHN & BECKY FAUNCE LIV.TRUST 2417 LEARY BAY CIRCLE ANCHORAGE, AK 99515

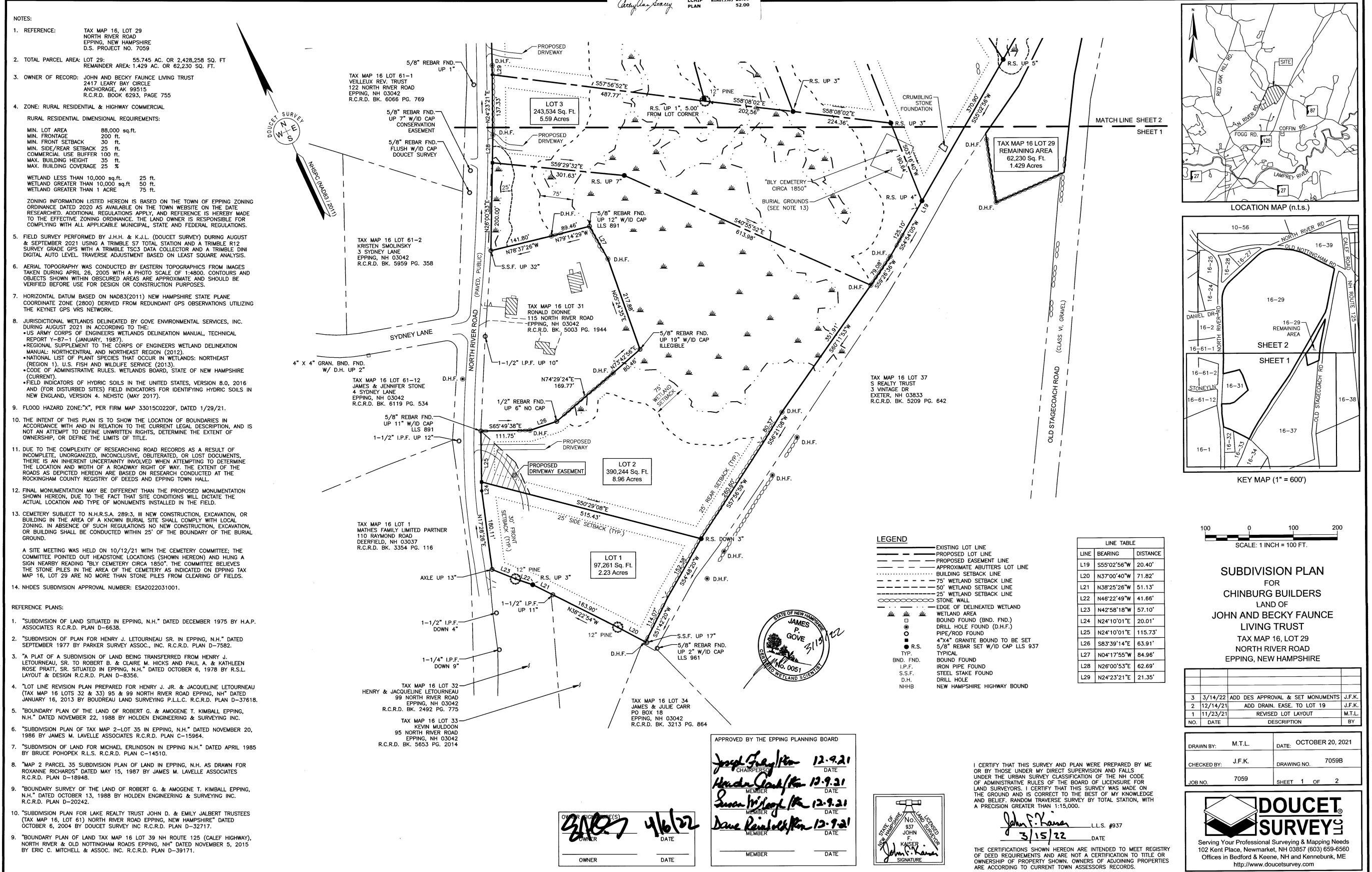
DEVELOPER:

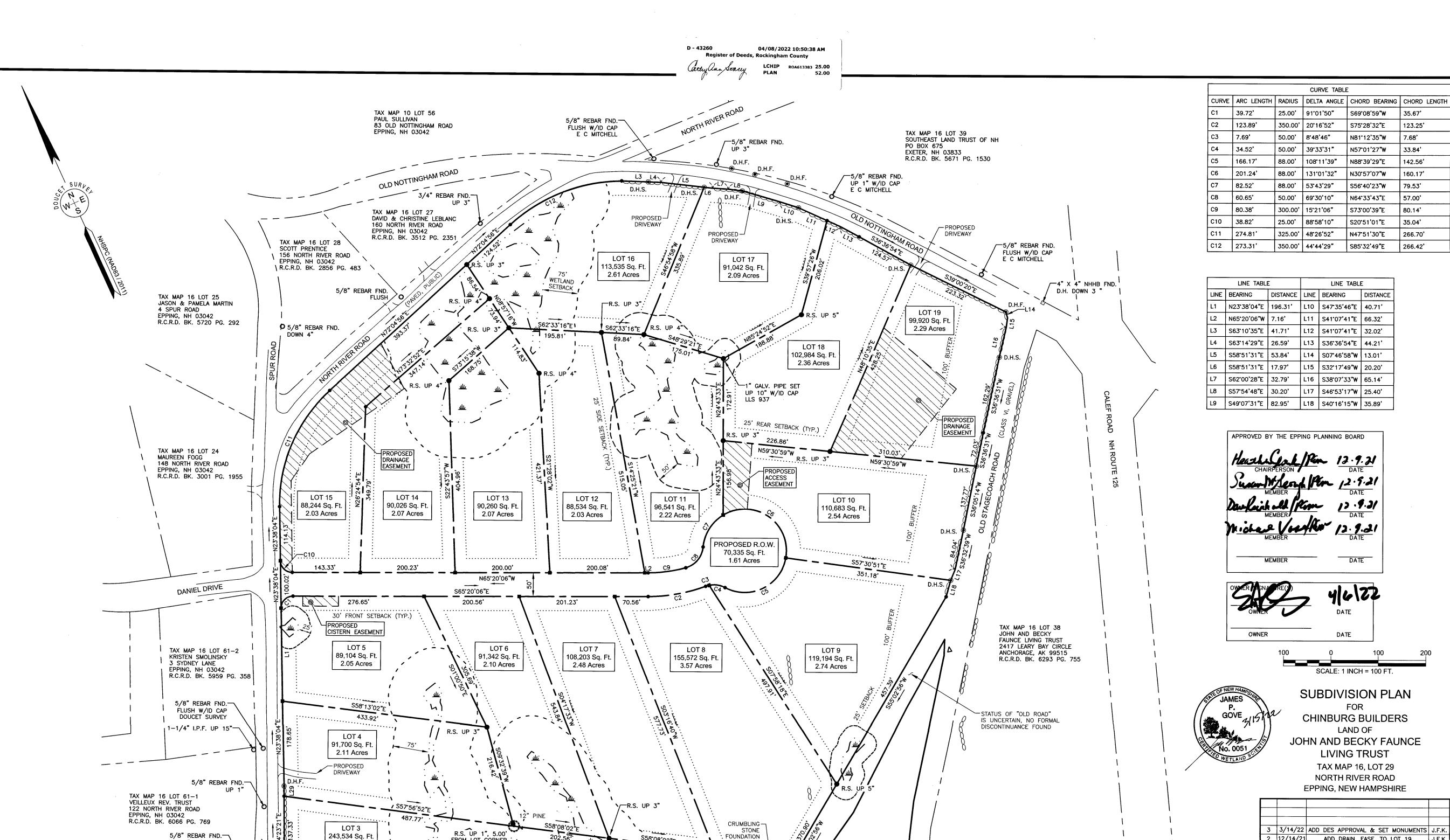
CHINBURG DEVELOPMENT 3 PENSTOCK WAY NEWMARKET, NH 03857

REQUIRED PERMITS

NHDES SUBDIVISION APPROVAL NUMBER: eSA2022031001 EPA NOI: PENDING

REVISIONS:	DATE:
REVISED PER ENG. REVIEW	11-22-21
REVISED PER ENG. REVIEW	12-14-21
REVISED PER NHDES SUBSURFACE REVIEW	1-18-22
REVISED PER NOD	2-22-22





CIRCA 1850"

BURIAL GROUNDS -(SEE NOTE 13)

243,534 Sq. Ft.

5.59 Acres

~-PROPOSED

DRIVEWAY /

UP 7" W/ID CAP

CONSÉRVATION

5/8" REBAR FND.-

FLUSH W/ID CAP

DOUCET SURVEY

EASEMENT

3 3/14/22 ADD DES APPROVAL & SET MONUMENTS J.F.K. 2 12/14/21 ADD DRAIN. EASE. TO LOT 19 1 11/23/21 REVISED LOT LAYOUT NO. DATE DESCRIPTION

DATE: OCTOBER 20, 2021 DRAWN BY: CHECKED BY: J.F.K. SHEET 2 OF 2



Offices in Bedford & Keene, NH and Kennebunk, ME

http://www.doucetsurvey.com

TAX MAP 16 LOT 29

REMAINING AREA 62,230 Sq. Ft.

1.429 Acres

MATCH LINE SHEET 2

SHEET 1

I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY ME OR BY THOSE UNDER MY DIRECT SUPERVISION AND FALLS UNDER THE URBAN SURVEY CLASSIFICATION OF THE NH CODE

THE GROUND AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. RANDOM TRAVERSE SURVEY BY TOTAL STATION, WITH

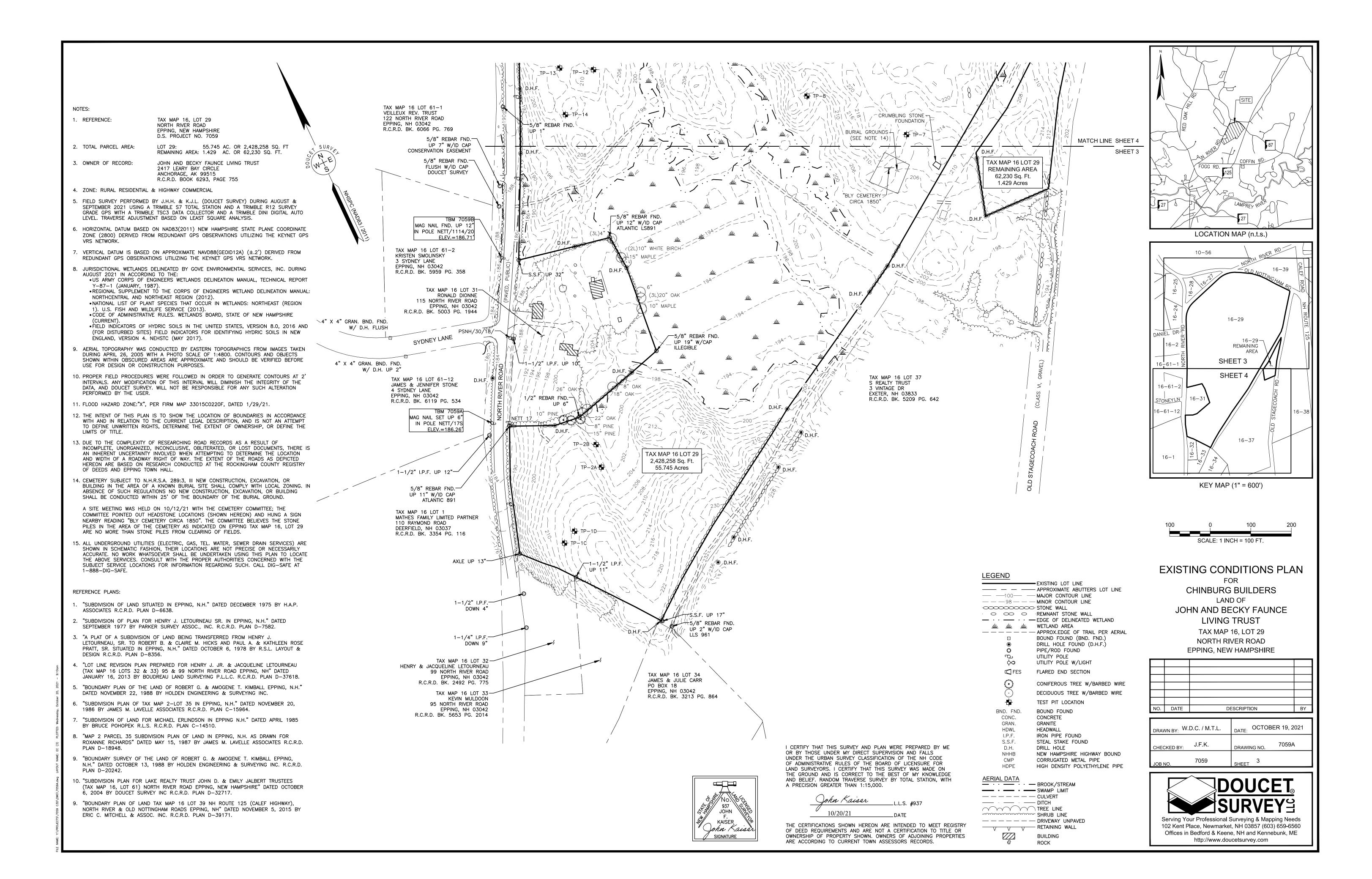
CERTIFICATIONS SHOWN HEREON ARE INTENDED TO MEET REGISTRY

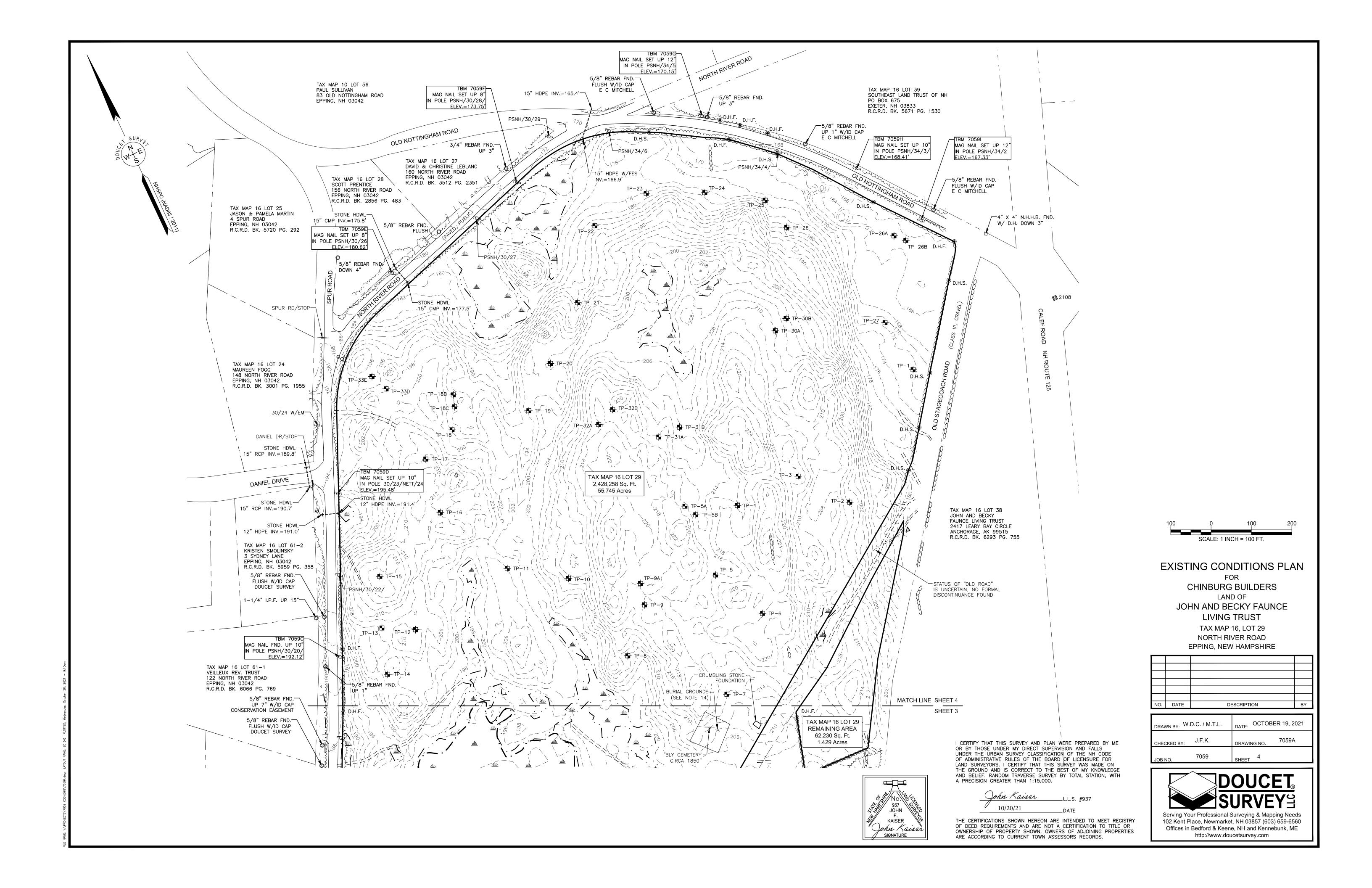
OF DEED REQUIREMENTS AND ARE NOT A CERTIFICATION TO TITLE OR

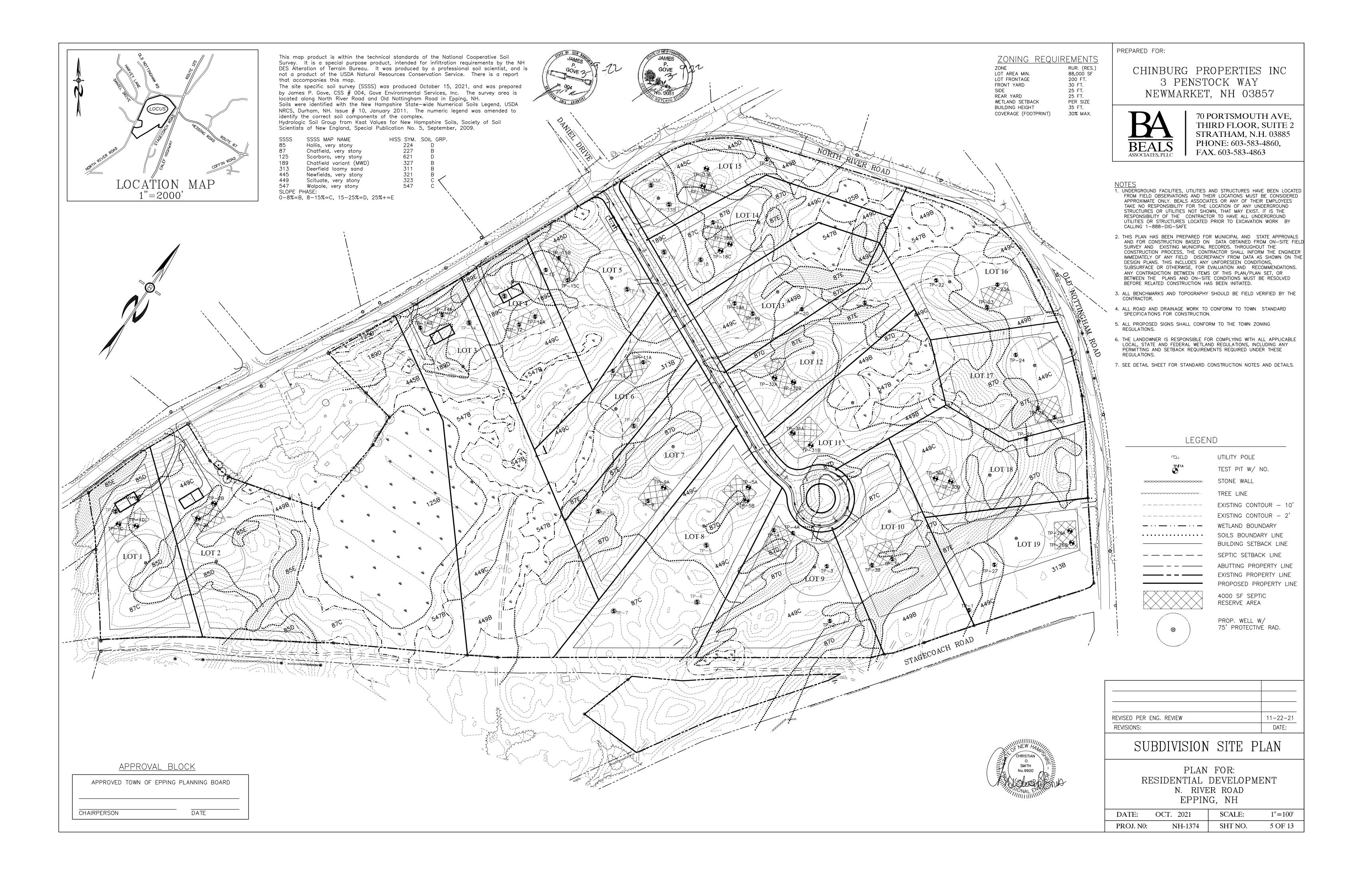
ARE ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.

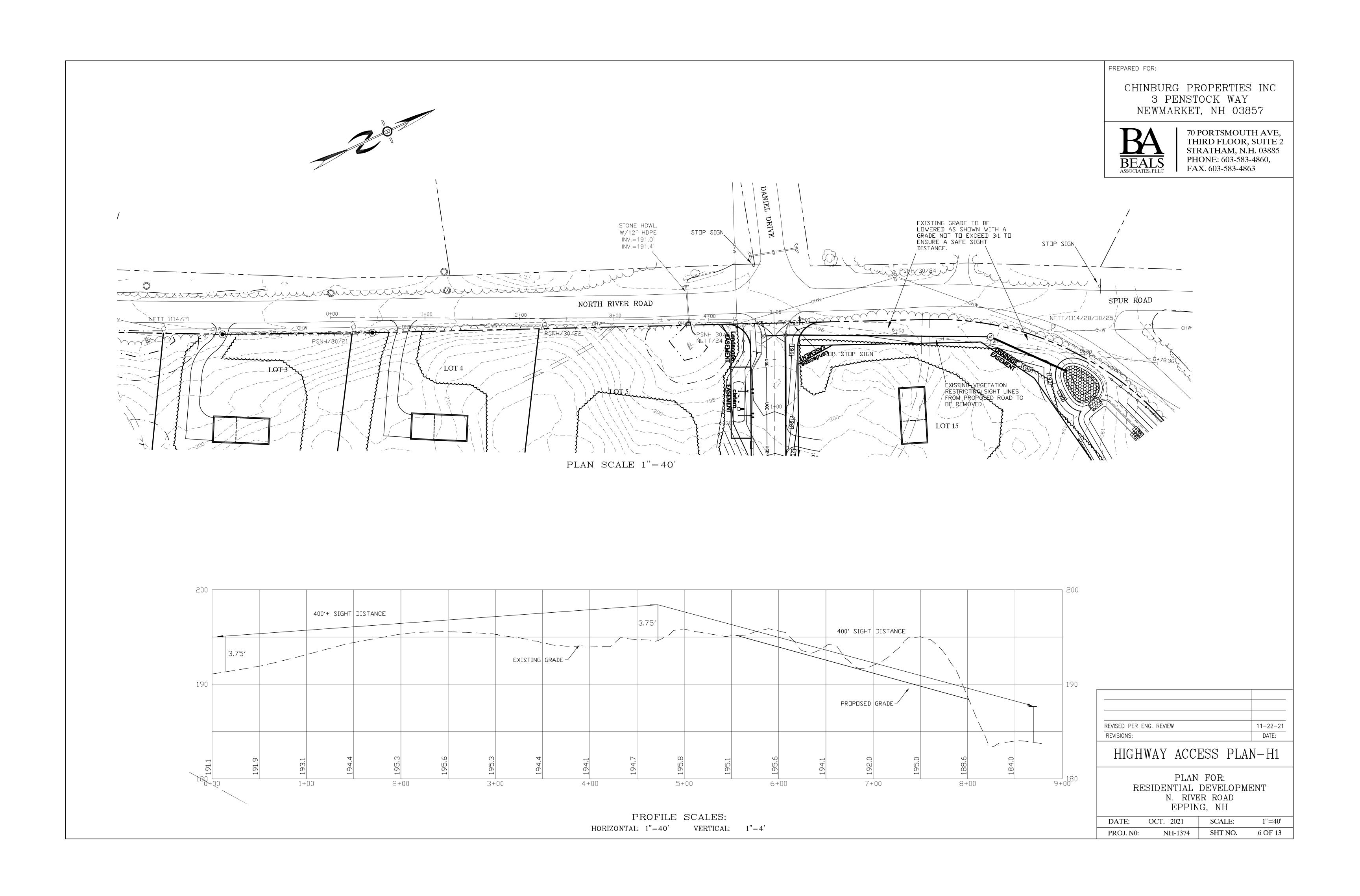
OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES

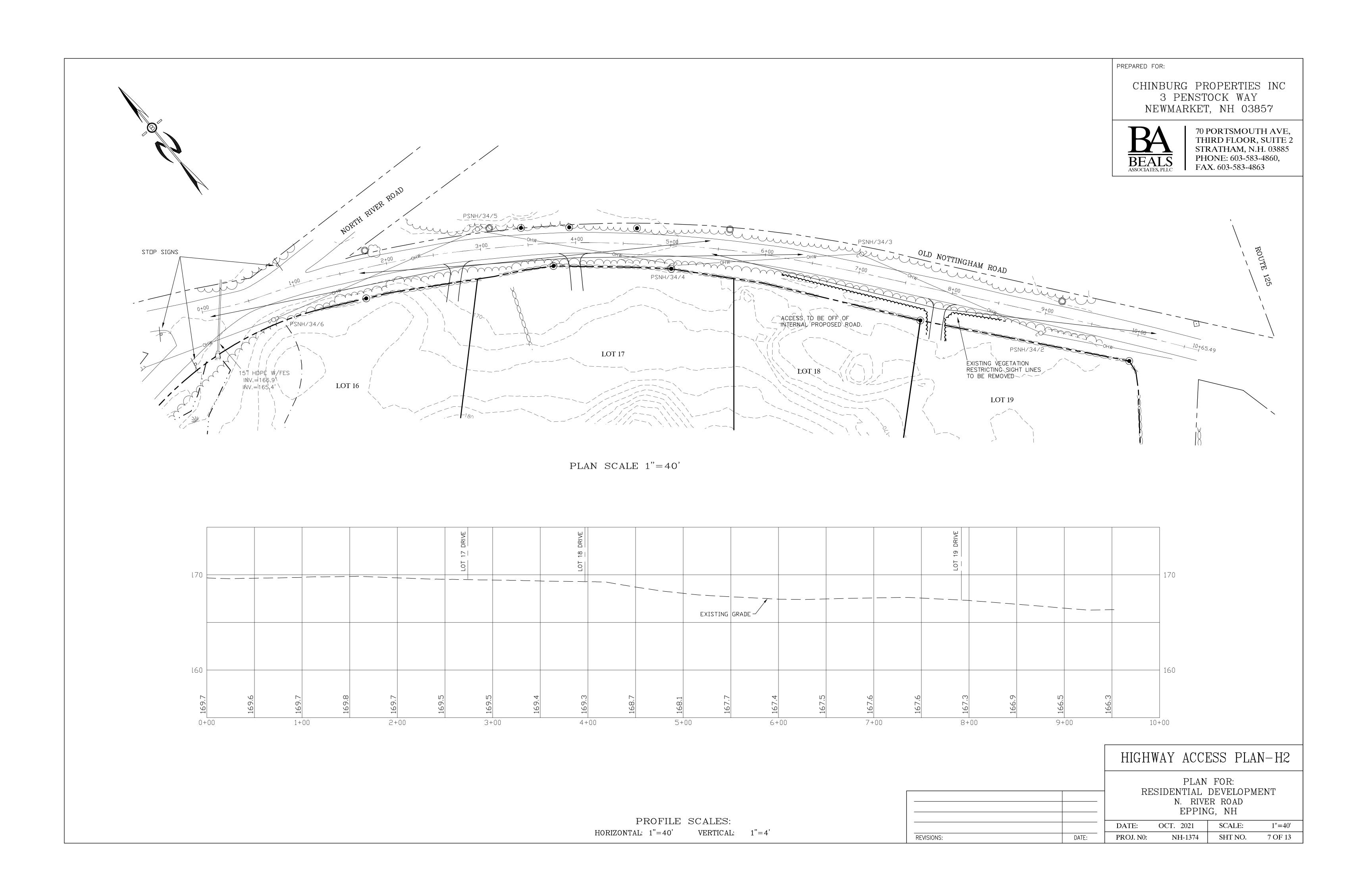
OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. I CERTIFY THAT THIS SURVEY WAS MADE ON

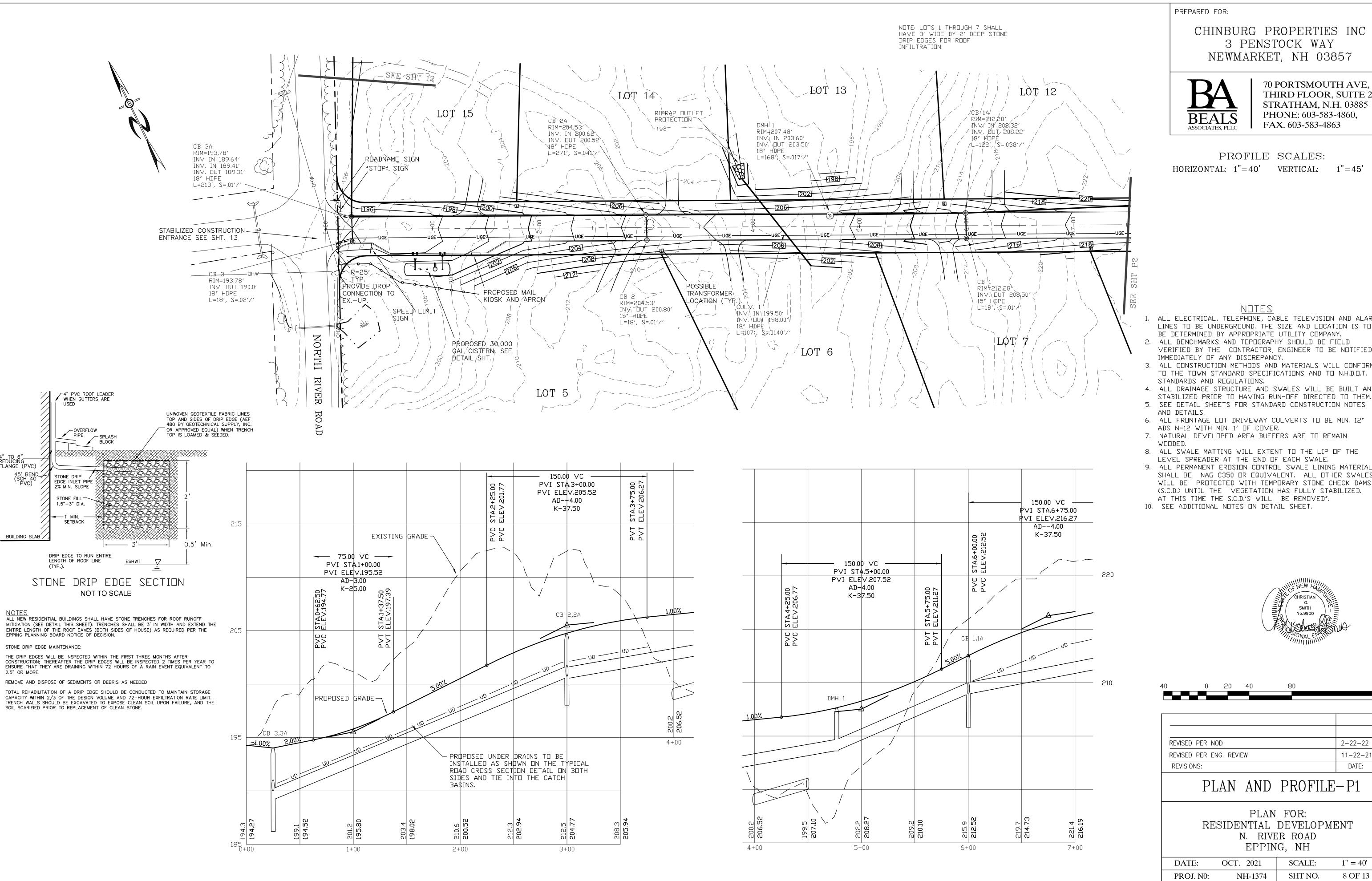












CHINBURG PROPERTIES INC 3 PENSTOCK WAY NEWMARKET, NH 03857

> 70 PORTSMOUTH AVE, THIRD FLOOR, SUITE 2 STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

PROFILE SCALES: HORIZONTAL: 1"=40' VERTICAL: 1"=45'

- ALL ELECTRICAL, TELEPHONE, CABLE TELEVISION AND ALARM LINES TO BE UNDERGROUND. THE SIZE AND LOCATION IS TO
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR, ENGINEER TO BE NOTIFIED
- 3. ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM
- 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
- 6. ALL FRONTAGE LOT DRIVEWAY CULVERTS TO BE MIN. 12"
- 7. NATURAL DEVELOPED AREA BUFFERS ARE TO REMAIN
- 8. ALL SWALE MATTING WILL EXTENT TO THE LIP OF THE
- LEVEL SPREADER AT THE END OF EACH SWALE.
- SHALL BE NAG C350 OR EQUIVALENT. ALL OTHER SWALES WILL BE PROTECTED WITH TEMPORARY STONE CHECK DAMS (S.C.D.) UNTIL THE VEGETATION HAS FULLY STABILIZED.

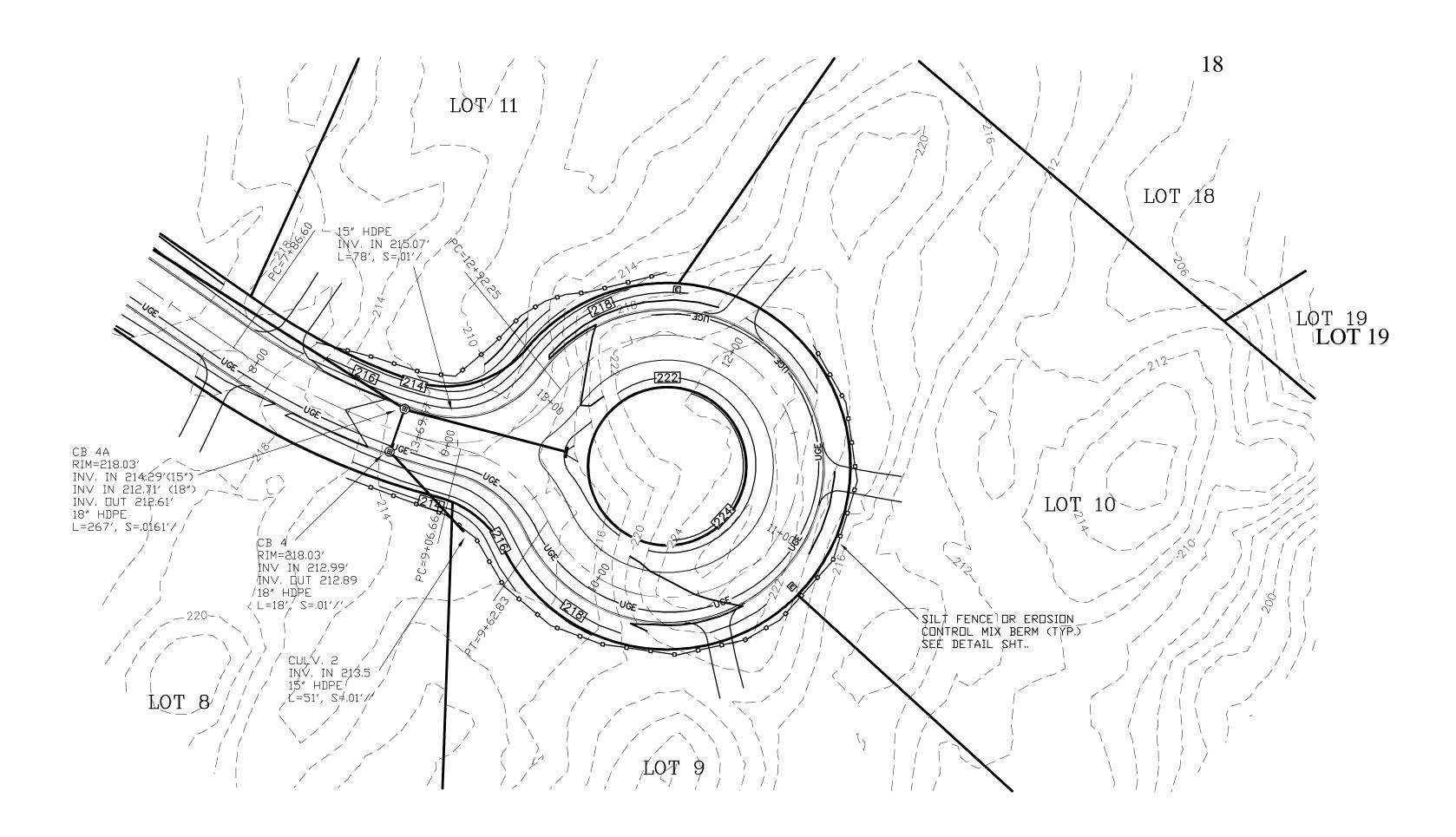




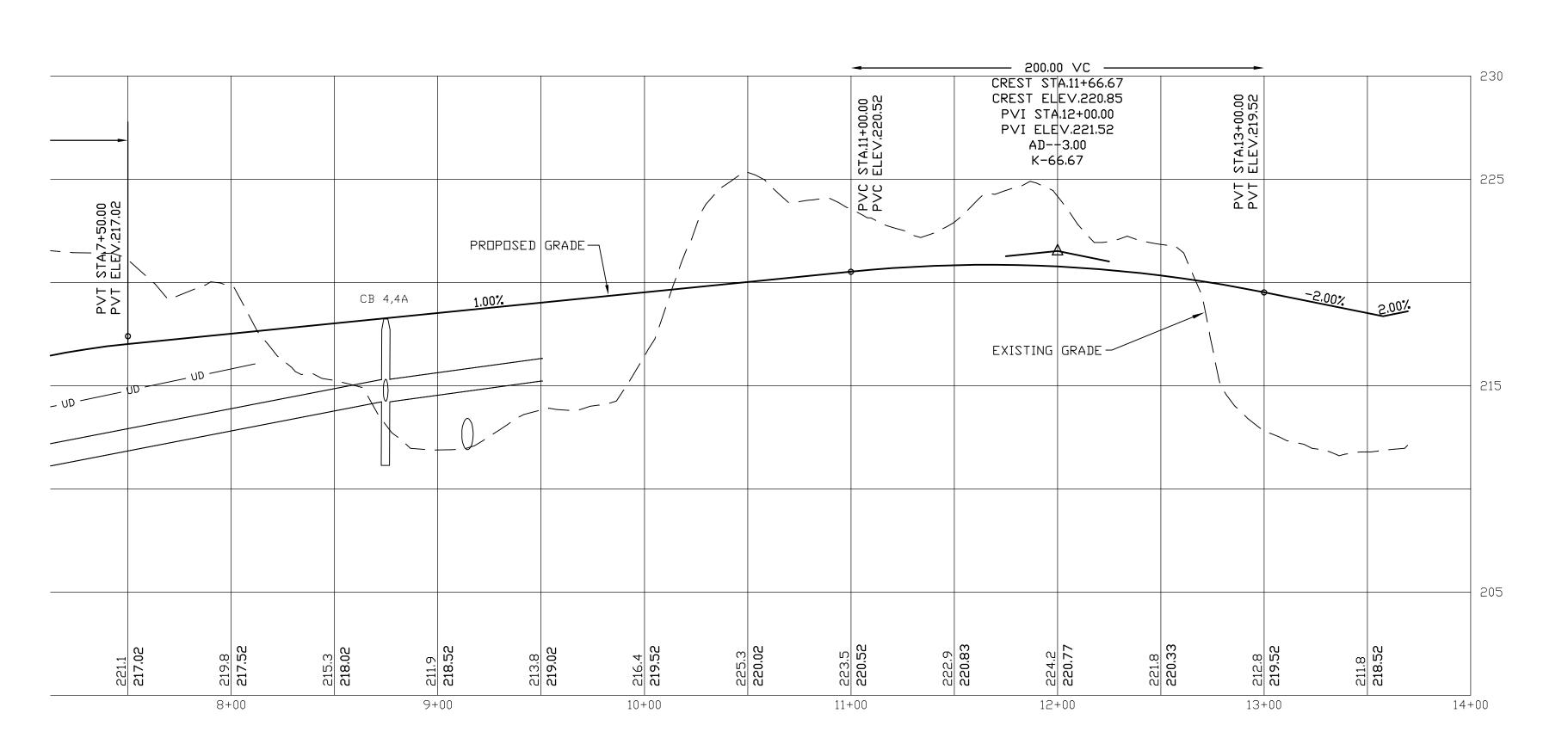
REVISED PER NOD	2-22-22
REVISED PER ENG. REVIEW	11-22-21
REVISIONS:	DATE:

DATE:	OCT. 2021	SCALE:	1" = 40'
PROJ. N0:	NH-1374	SHT NO.	8 OF 13





PROFILE SCALES: HORIZONTAL: 1"=40' VERTICAL: 1"=45'





CHINBURG PROPERTIES INC 3 PENSTOCK WAY NEWMARKET, NH 03857



70 PORTSMOUTH AVE, THIRD FLOOR, SUITE 2 STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

BLASTING NOTES

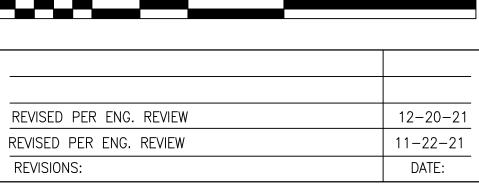
- A. Best Management Practices for Blasting. All activities related to blasting shall follow Best Management Practices (BMPs) to prevent contamination of groundwater including preparing, reviewing and following an approved blasting plan; proper drilling, explosive handing and loading procedures; observing the entire blasting procedures; evaluating blasting performance; and handling and storage of blasted
- (1) Loading practices. The following blasthole loading practices to minimize environmental effects shall be followed:
- (a) Drilling logs shall be maintained by the driller and communicated directly to the blaster. The logs shall indicate depths and lengths of voids, cavities, and fault zones or other weak zones
- encountered as well as groundwater conditions. (b) Explosive products shall be managed on?site so that they are either used in the borehole, returned to the the delivery vehicle, or placed
- in secure containers for off site disposal. (c) Spillage around the borehole shall either be placed in the borehole or cleaned up and returned to an appropriate vehicle for handling or placement in secured containers for off?site disposal.
- (d) Loaded explosives shall be detonated as soon as possible and shall not be left in the blastholes overnight, unless weather or other safety concerns reasonably dictate that detonation should be
- (e)Loading equipment shall be cleaned in an area where wastewater can be properly contained and handled in a manner that prevents release of contaminants to the environment.
- (f) Explosives shall be loaded to maintain good continuity in the column load to promote complete detonation. Industry accepted loading practices for priming, stemming, decking and column rise
- need to be attended to. (2) Explosive Selection. The following BMPs shall be followed to reduce the potential for groundwater contamination when explosives are used (a) Explosive products shall be selected that are appropriate for site
- conditions and safe blast execution. (b) Explosive products shall be selected that have the appropriate water resistance for the site conditions present to minimize the potential for hazardous effect of the product upon groundwater.
- (3) Prevention of Misfires. Appropriate practices shall be developed and implemented to prevent misfires.
- (4) Muck Pile Management. Muck piles (the blasted pieces of rock) and rock piles shall be managed in a manner to reduce the potential for contamination by implementing the following measures:

 (a) Remove the muck pile from the blast area as soon as reasonably
- (b) Manage the interaction of blasted rock piles and stormwater to prevent contamination of water supply wells or surface water.
- (5) Spill Prevention Measures and Spill Mitigation. Spill prevention and spill mitigation measures shall be implemented to prevent the release of fuel and other related substances to the environment. The measures
- shall include at a minimum: (a) The fuel storage requirements shall include: 1. Storage of regulated substances on an impervious surface.
- 2. Secure storage areas against unauthorized entry.
 3. Label regulated containers clearly and visibly.
 4. Inspect storage areas weekly. 5. Cover regulated containers in outside storage areas.

Equipment" or its successor document.

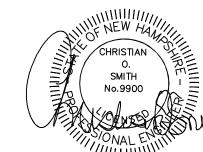
- 6. Wherever possible, keep regulated containers that are stored outside more than 50 feet from surface water and storm drains, 75 feet
- from private wells, and 400 feet from public wells. 7. Secondary containment is required for containers containing regulated substances stored outside, except for on premise use heating fuel tanks, or aboveground or underground storage tanks otherwise
- regulated. (b) The fuel handling requirements shall include:

 1. Except when in use, keep containers containing regulated substances
- closed and sealed. 2. Place drip pans under spigots, valves, and pumps.3. Have spill control and containment equipment readily available in all
- work areas,
- 4. Use funnels and drip pans when transferring regulated substances.
 5. Perform transfers of regulated substances over an impervious
- (c) The training of on?site employees and the on?site posting of release response information describing what to do in the event of a spill of regulated substances.
- (d) Fueling and maintenance of excavation, earthmoving and other construction related equipment will comply with the regulations of the New Hampshire Department of Environmental Services [note these requirements are summarized in WD?DWGB?22?6 Best Management Practices for Fueling and Maintenance of Excavation and Earthmoving



PLAN AND PROFILE-P2

DATE:	OCT. 2021	SCALE:	1" = 40'
PROJ. N0:	NH-1374	SHT NO.	9 OF 13





CHINBURG PROPERTIES INC 3 PENSTOCK WAY NEWMARKET, NH 03857



70 PORTSMOUTH AVE, THIRD FLOOR, SUITE 2 STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

DRAINAGE NOTES:

DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

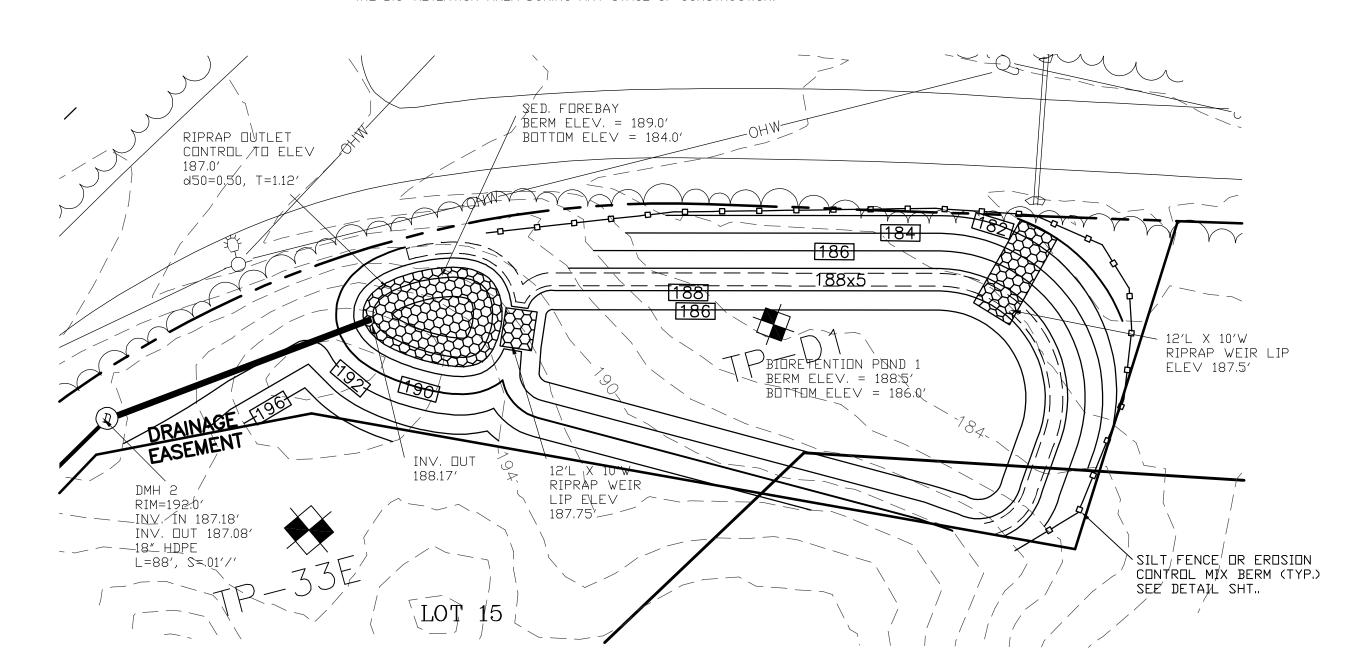
DO NOT PLACE SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY

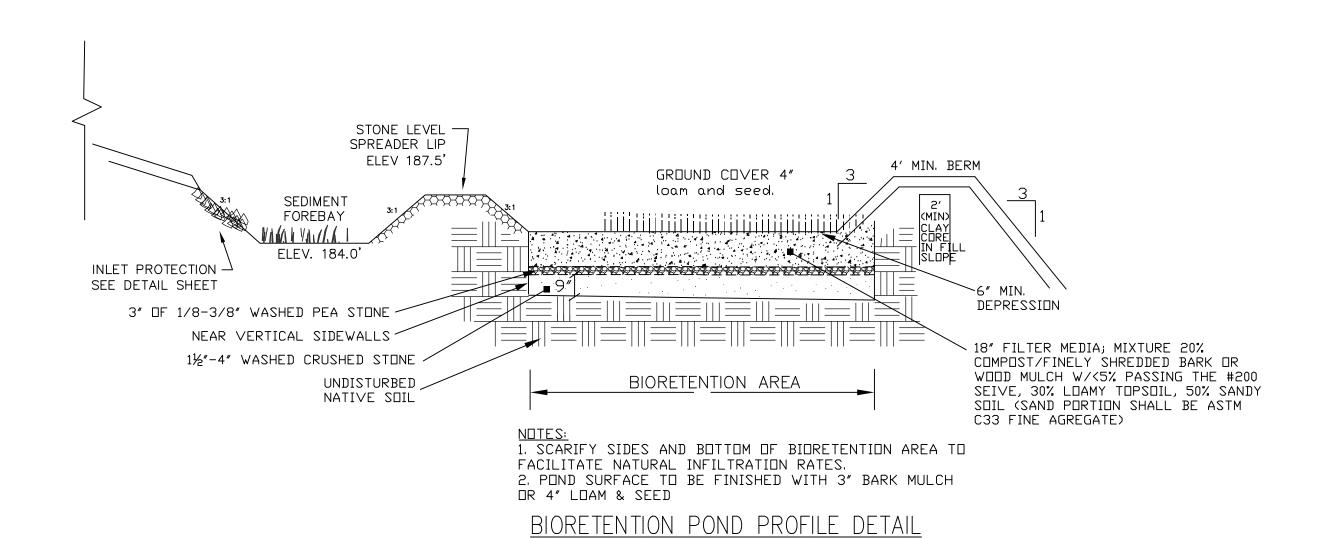
STABILIZED.

DO NOT DISCHARGE SEDIMENT—LADEN WATERS FROM

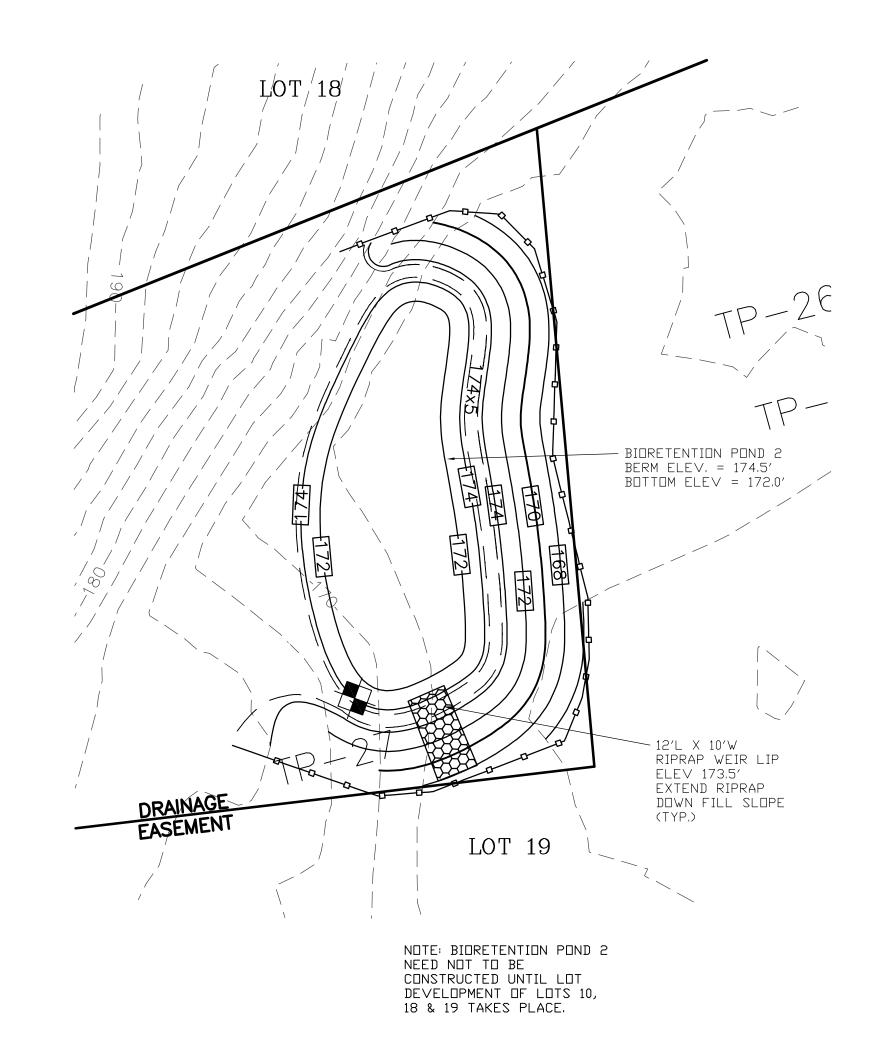
CONSTRUCTION ACTIVITIES (RUNOF, WATER FROM EXCAVATIONS) TO

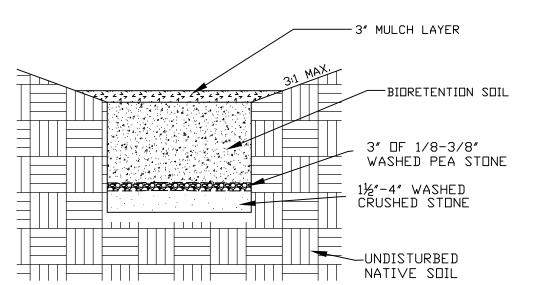
THE BIO—RETENTION AREA DURING ANY STAGE OF CONSTRUCTION.



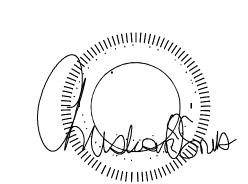


NOT TO SCALE





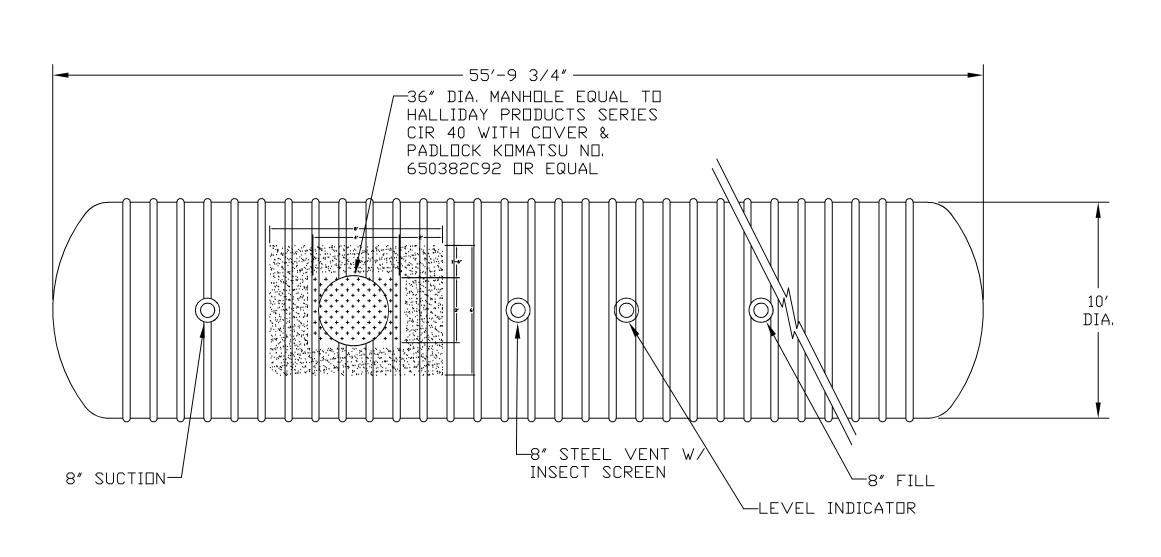
BIORETENTION SECTION Not to scale



REVISED PER ENG. REVIEW	11-22-21
REVISIONS:	DATE:

DRAINAGE POND PLAN

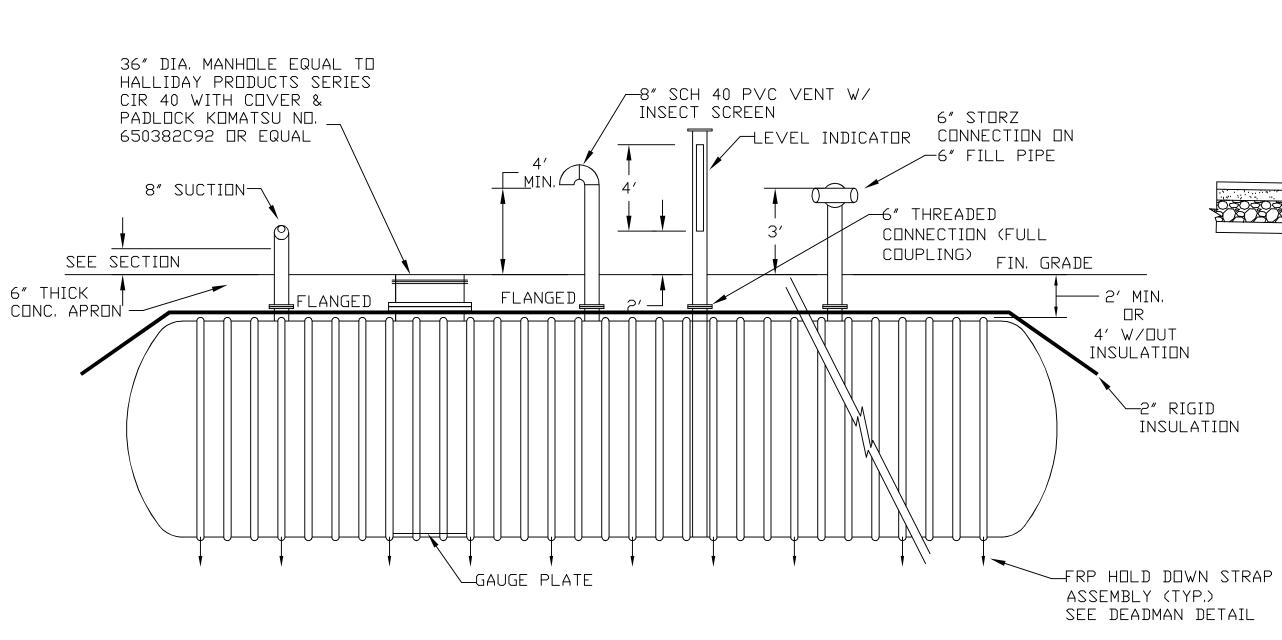
DATE:	SEPT. 2021	SCALE:	1'' = 40'
PROJ. N0:	NH-1374	SHT NO.	10 OF 13

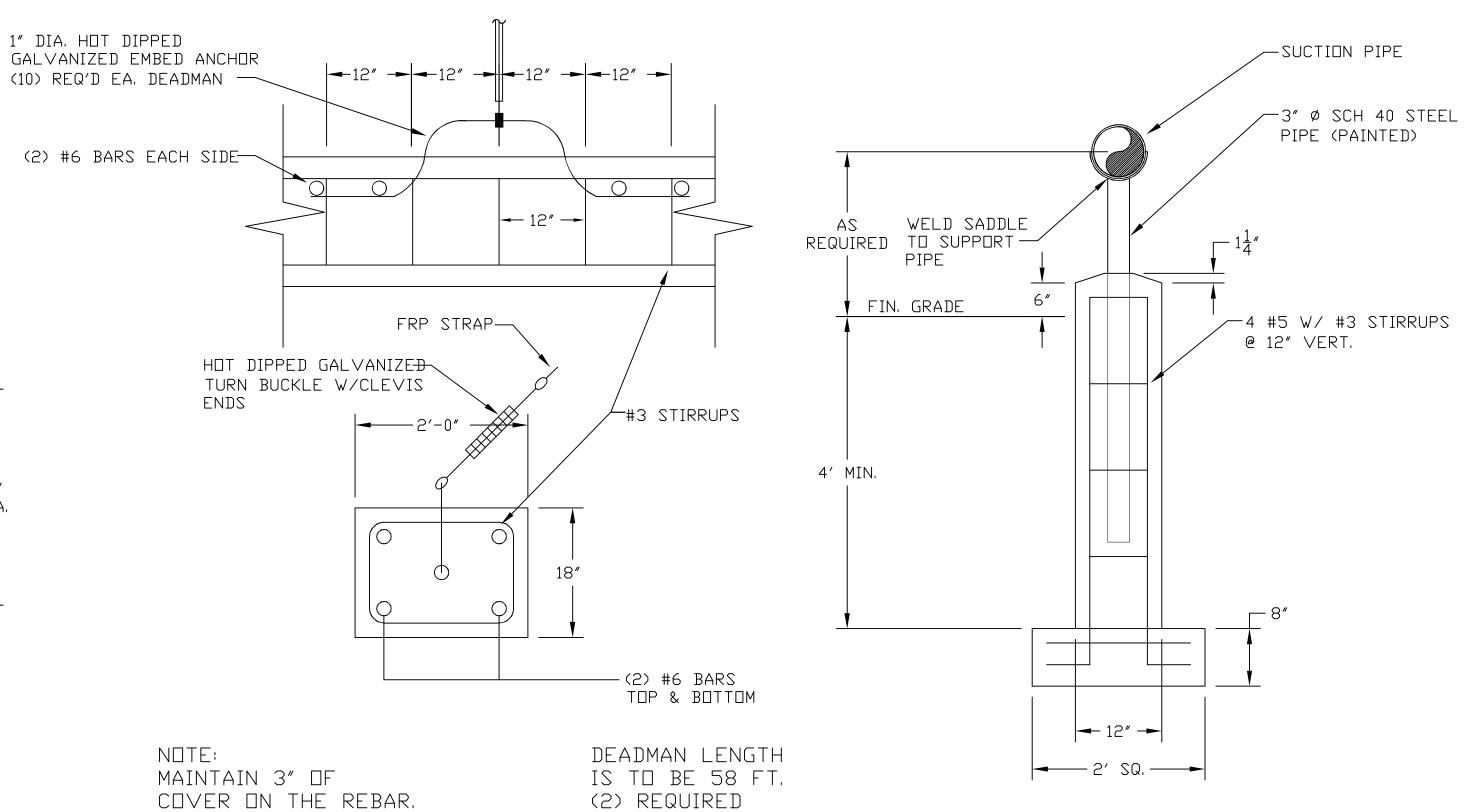


ALL CAST-IN PLACE CONCRETE TO BE 4,000 P.S.I. COMPRESSIVE STRENGTH MIN.

30,000 GAL. FIRE CISTERN TANK - PLAN VIEW

SCALE: 1/8" = 1'-0"

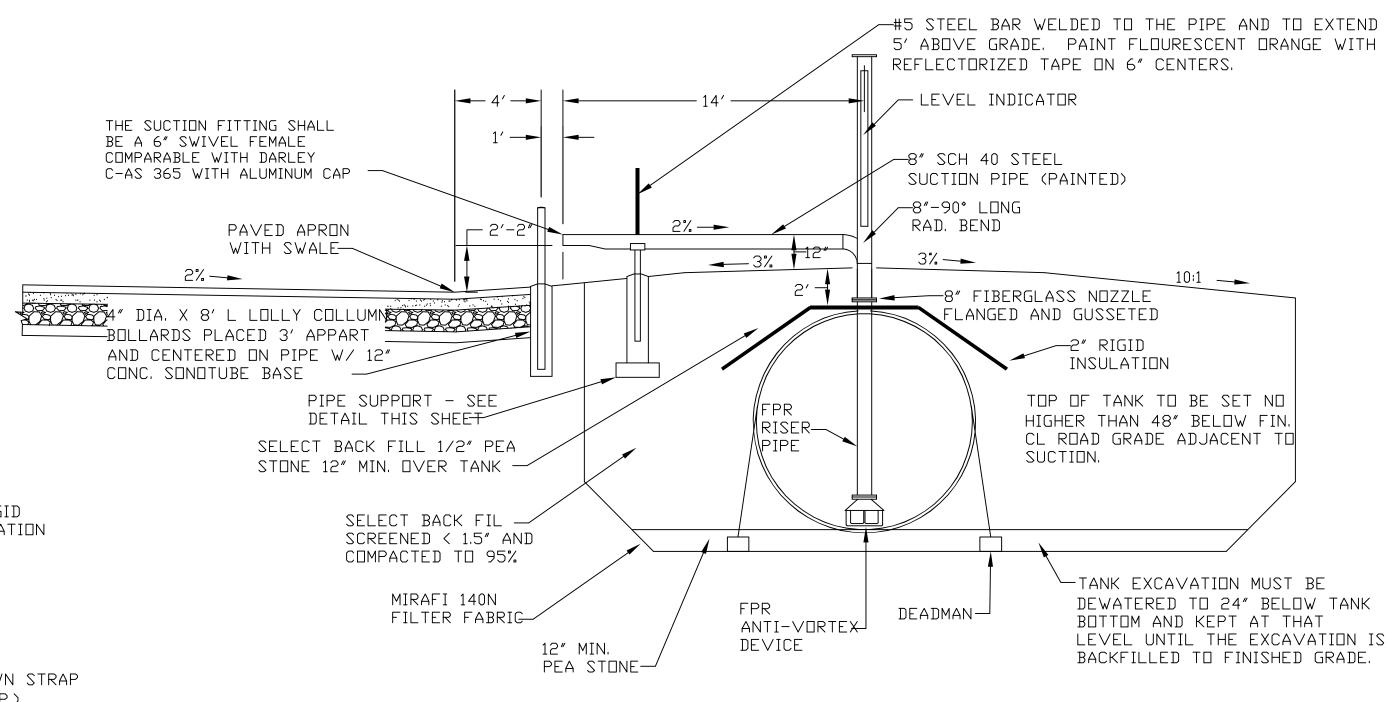


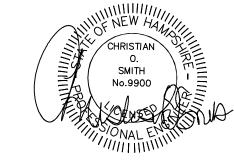


DEADMAN - DETAIL

SCALE: NONE

PIPE SUPPORT - DETAIL





30,000 GAL. FIRE CISTERN TANK - ELEVATION

SCALE: 1/8" = 1'-0"

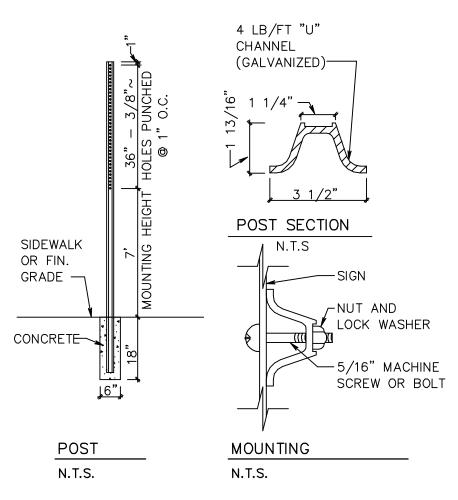
30,000 GAL. FIRE CISTERN TANK - SECTION

SCALE: 1/8'' = 1'-0''

		_
		DATE:
REVISIONS:	DATE:	PROJ. N

TYPICAL	30,000) GAI	. FIRE	CISTERN
	PLAN	AND	DETAILS	

RE	CSIDENTIAL N. RIVE	FOR: DEVELOPMI CR ROAD G, NH	ENT
E:	SEPT. 2021	SCALE:	NOTED
J. N0:	NH-1374	SHEET NO.	11

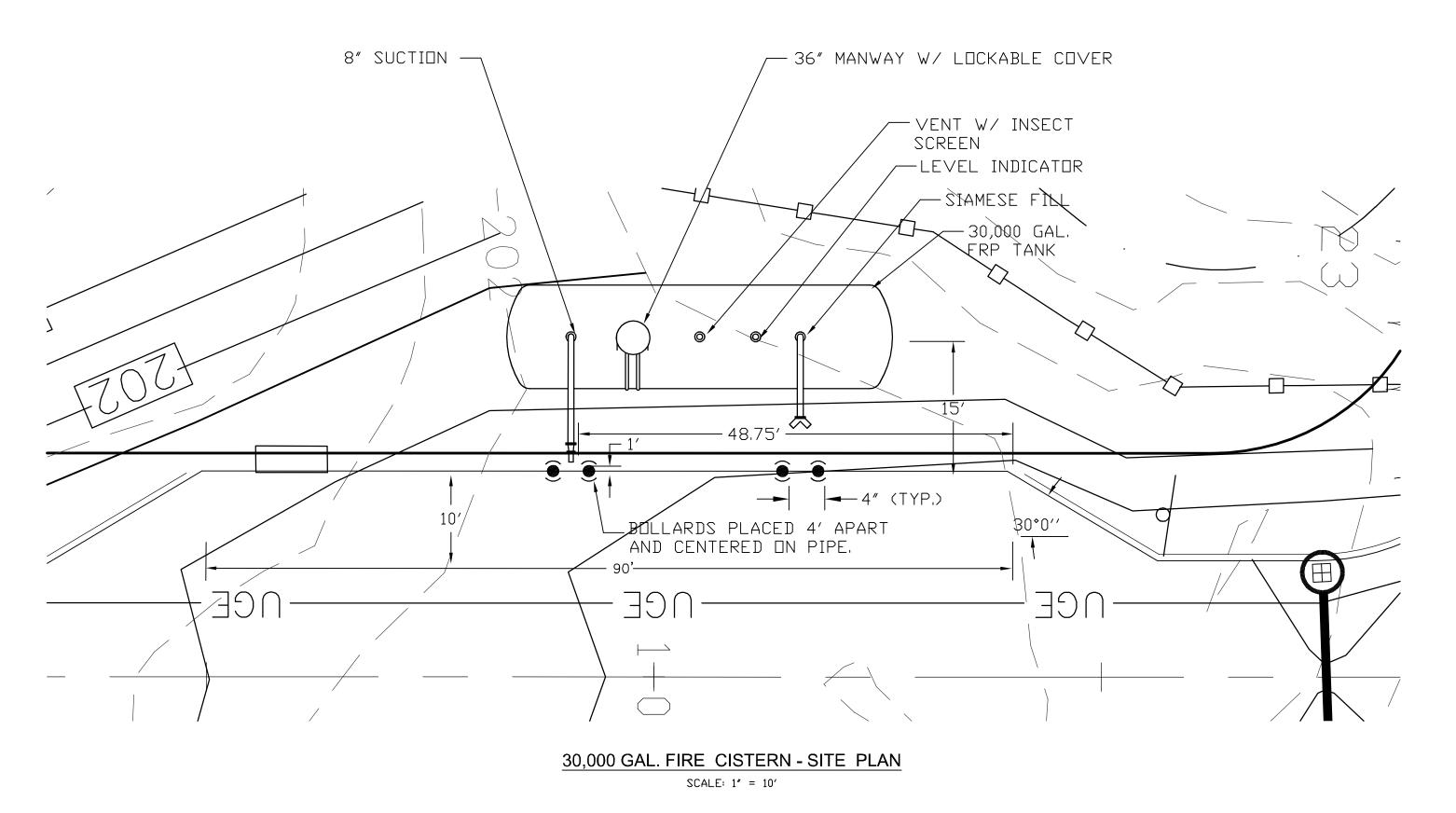


TRAFFIC CONTROL SCHEDULE							
SIGN NUMBER	SIGN	SIZE OI		DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"	
R2-1	SPEED LIMIT 25	18"	24"	BLACK ON WHITE	CHANNEL	7'-0"	
W14-2	NO	24"	24"	BLACK ON YELLOW	CHANNEL	7'-0"	

STREET SIGN DETAIL

STOP SIGN (R1-1) 30" × 30"

SPEED LIMIT SIGN (R2-1) 24" × 30"



NDTE:

1. IF THE VEHICLE PAD IS TO BE CONSTRUCTED AT A LOCATION WHERE A ROADSIDE SWALE OR DITCH EXISTS AN APPROPRIATELY SIZED SMOOTH INTERIOR CULVERT PIPE MUST BE INSTALLED THE FULL LENGTH OF THE PAD WITH MORTAR AND RUBBLE HEADWALLS AT EACH END.

2. THE INTENT OF SHEETS 1 AND 2 FOR THE 30,000 GALLON F.R.P. CISTERN IS TO PROVIDE A STANDARD DESIGN APPROACH TO BE USED BY PROJECT DESIGN ENGINEERS. EACH PROPOSED CISTERN MUST BE SPECIFICALLY DESIGNED FOR THE SITE.

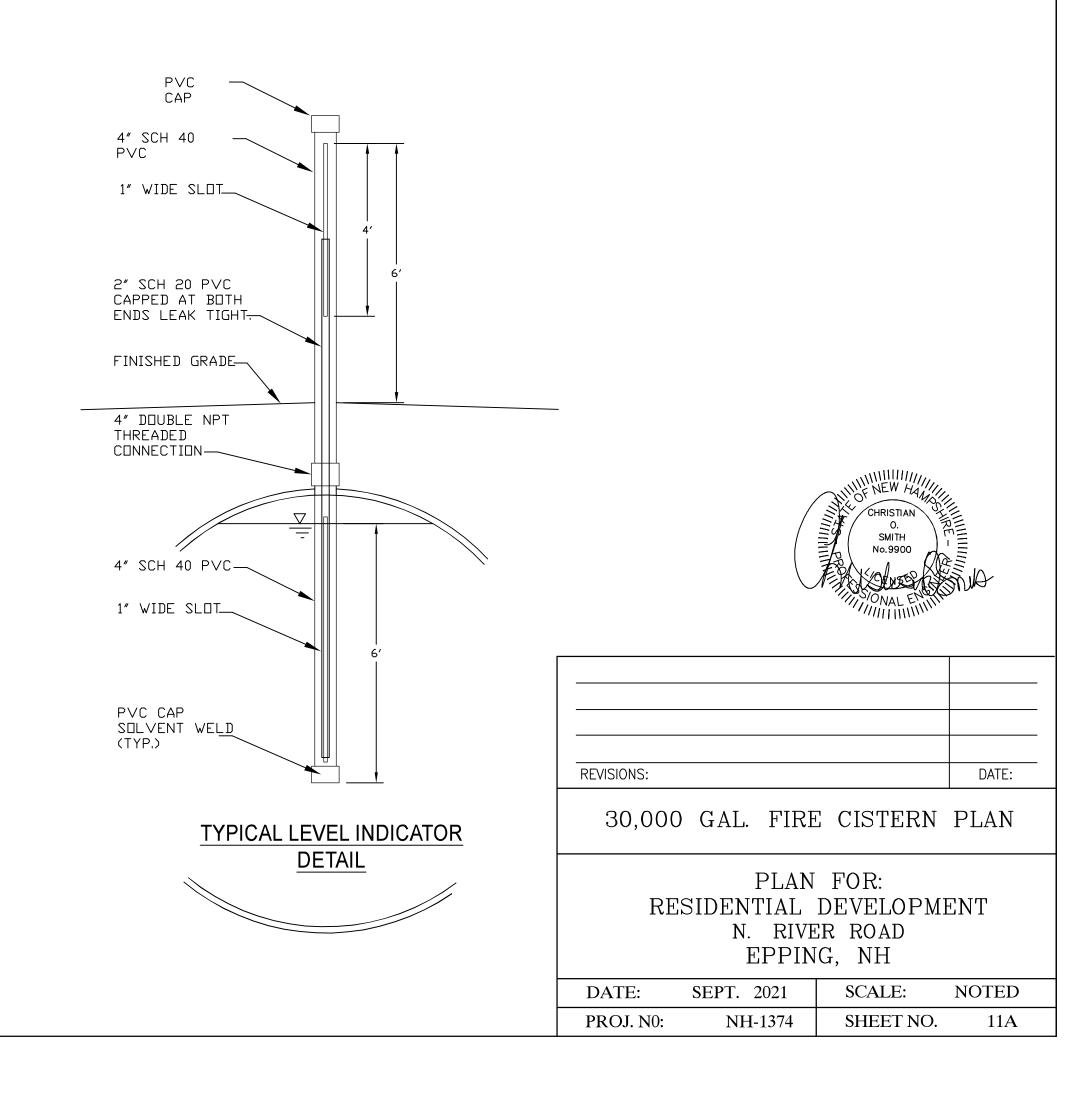
3. THE DESIGN OF CISTERN SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE FIRE DEPARTMENT AS WELL AS THE PLANNING BOARD.

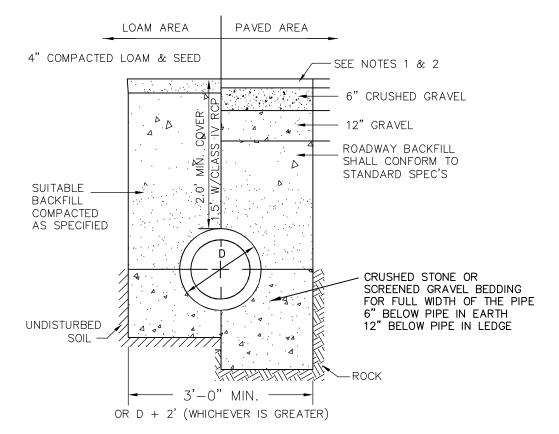
REQUIREMENTS:

- (A). ALL EXTERNAL SUCTION, VENT, LEVEL INDICATOR AND FILL PIPING SHALL BE SCHEDULE 40 STEEL.
- (B). ALL BENDS SHALL BE LONG SWEEP BENDS. (C). ALL HORIZONTAL PIPING SHALL SLOPE AWAY FROM THE ROAD, TOWARDS THE TANK AT 2%.
- (D). ALL PIPE-TO-TANK CONNECTIONS SHALL BE FLANGED & GUSSETED CONNECTIONS WITH THE EXCEPTION OF THE LIQUID LEVEL GAUGE, WHICH SHALL BE A 6" NPT FULL THREADED COUPLING.
- (E). ALL UNDERGROUND, EXPOSED PIPING SHALL BE COATED WITH ONE APPLICATION OF CIM 1000.
- (F). ALL ABOVE-GROUND PIPING SHALL BE PAINTED WITH THE FOLLOWING:
 4 MILS OF EPOXY PRIMER
- 4-6 MILS OF "SAFETY RED" EPOXY PAINT (BOLLARDS TO BE "SAFETY YELLOW")
- 2-3 MILS OF URETHANE COVER COAT (G). THE PIPE DIAMETERS ARE TO BE:
- SUCTI⊡N 8″ - FILL - 6″
- VENT 8"
- FILL GAUGE 4"

 (H). THE FILL FITTING SHALL BE 6" SCH 40 STEEL WITH STORZ CONNECTORS WITH LOCKING CAPS, AND BE 36"

 ABOVE THE FINISH PAVEMENT.
- (I). THE SUCTION FITTING SHALL BE A 6" SWIVEL FEMALE COMPARABLE WITH DARLEY C-AS 365 WITH ALUMINUM CAP, AND THE CONNECTION CAP WILL BE SECURELY CHAINED TO THE FILL PIPE OR COUPLING. THE CENTERLINE OF THE SUCTION POINT MUST BE 36 INCHES ABOVE THE FINISH PAVEMENT OF THE PAVED APRON AT THAT
- (J). THE BOLLARDS SHALL BE LOCATED FOUR (4) FEET APART, WITH THE FILL AND SUCTION PIPE CONNECTIONS AT THE CENTER OF THIS MEASUREMENT, ONE FOOT IN FRONT OF THE SUCTION AND FILL CONNECTIONS.
- (H). WARRANTY:
- (I). REQUIREMENTS:
 (A). THE FIRE CISTERN TANK WARRANTY SHALL BE 2 YEARS.
- (B). A COPY OF THE WRITTEN WARRANTY SHALL BE PROVIDED TO THE AUBURN FIRE DEPARTMENT PRIOR TO THE FINAL ACCEPTANCE OF THE FIRE CISTERN.
- (I). TESTING:
- (I). REQUIREMENTS
- (A). AFTER BACKFILLING OF THE TANK AND THE MANWAY AND MISCELLANEOUS PIPING IS INSTALLED, THE CONTRACTOR SHALL SCHEDULE THE REQUIRED FLOW TEST WITH THE FIRE DEPARTMENT. THE TANK SHALL BE FILLED APPROXIMATELY HALF (½)FULL. THE CISTERN MUST BE ABLE TO PROVIDE AT LEAST 1,000 GALLONS PER MINUTE FOR A PERIOD OF FIVE (5) MINUTES.
- B). IF THE TANK PASSES THE FLOW TEST, THE TANK MUST BE FILLED WITH POTABLE WATER TO WITHIN 1 INCH OF THE MANWAY. THE INSTALLER MAY ALLOW THE FILLED TANK TO SIT FOR ONE (1) DAY PRIOR TO COMMENCEMENT OF THE TEST. THE TEST DURATION WILL BE FOURTEEN (14) CALENDAR DAYS. THE TANK LEVEL MEASUREMENTS WILL BE MADE AND RECORDED BY THE AGENT OF THE AUBURN FIRE DEPARTMENT. THE FIRE DEPARTMENT WILL PROVIDE THE SPECIFIED LOCK AND KEY FOR USE BY THE AGENT TO SECURE THE MANWAY COVER DURING THE TEST. THE TEST IS A ZERO-LEAKAGE TEST. AFTER THE FOURTEEN-DAY TEST, IF LEAKAGE IS VERIFIED, THE TANK AND OR COMPONENTS MUST BE REPAIRED TO STOP THE LEAK. ANY REPAIRS MADE MUST BE ACCEPTABLE TO THE AUBURN FIRE DEPARTMENT. ANY REPAIRS MADE TO THE TANK MUST BE DONE WITH
- PRIOR WRITTEN RECOMMENDATION BY THE TANK?S MANUFACTURER AND NOTED IN THE WRITTEN WARRANTY.
 (C). PRIOR TO THE FIRE DEPARTMENT APPROVING THE FIRE CISTERN FOR USE/ACCEPTANCE, THE WATER LEVEL MUST
 BE FILLED TO APPROXIMATELY 1" FROM THE MANWAY CONNECTION.





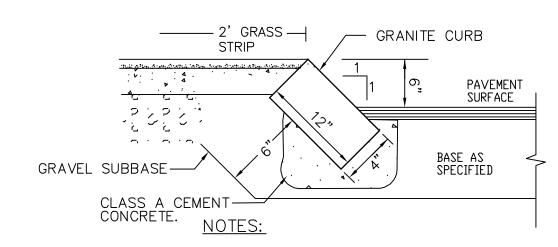
NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION

SPECIFICATIONS.

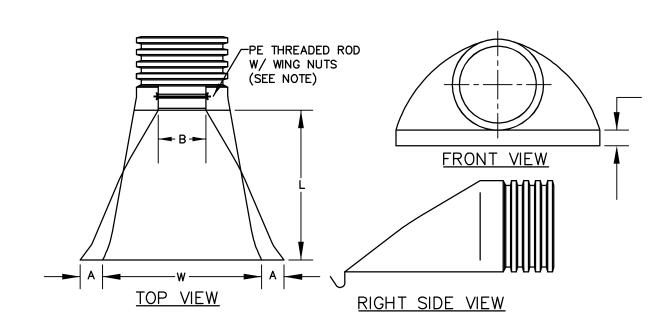
TYPICAL DRAINAGE TRENCH
NOT TO SCALE



- 1. EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
- JOINTS BETWEEN STONES SHALL BE MORTARED.
 SALVAGE GRANITE CURBS ON—SITE AND RESET TO THE EXTENT POSSIBLE.

GRANITE SLOPE CURB DETAIL

NOT TO SCALE

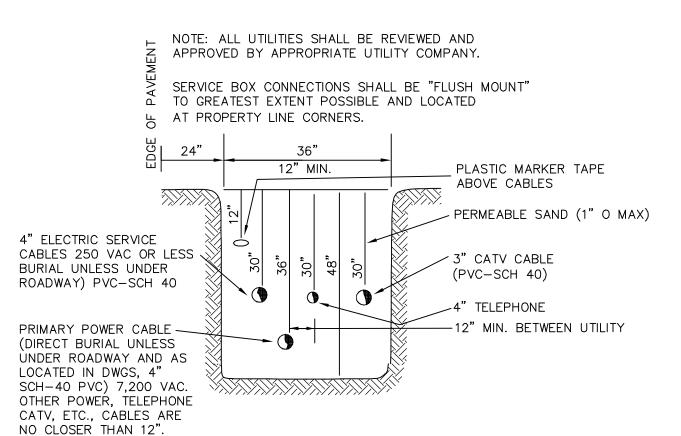


PART No.	PIPE SIZE	Α	B(MAX)	Н	L	W
1510-NP	15" 375 mm	6.5" 165 mm	10" 254 mm	6.5" 165 mm	25" 635 mm	29" 735 mm
1810-NP	18" 450 mm	7.5" 190 mm	15" 380 mm	6.5" 165 mm	32" 812 mm	35" 890 mm
2410-NP	24" 600 mm	7.5" 190 mm	18" 450 mm	6.5" 165 mm	36" 900 mm	45" 1140 mm
3010-NP	30" 750 mm	10.5" 266 mm	N/A	7.0"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

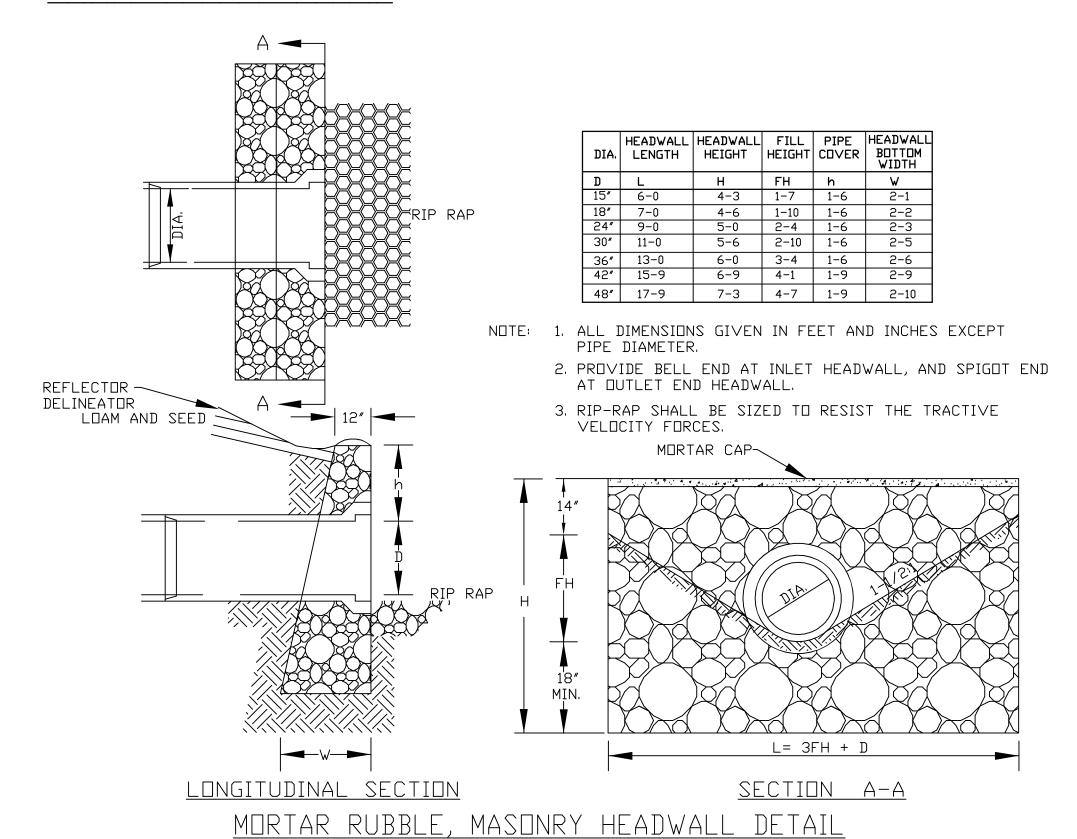
PE THREADED ROD W/ WING NUTS PROVIDED FOR END SECTIONS 15"-24".
30" & 36" END SECTIONS TO BE WELDED PER MANUFACTURER'S

ADS N-12 FLARED END SECTIONS

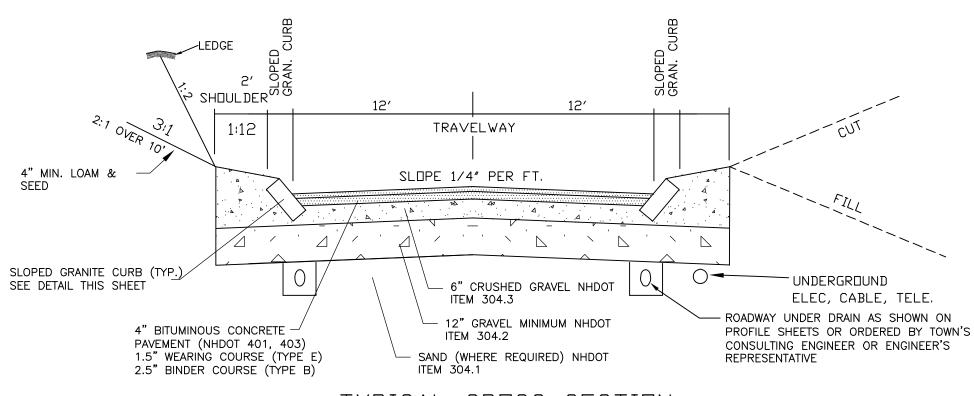
NOT TO SCALE (ALL DIMENSIONS ARE NOMINAL)



UTILITY TRENCH DETAIL



NOT TO SCALE



TYPICAL CROSS SECTION

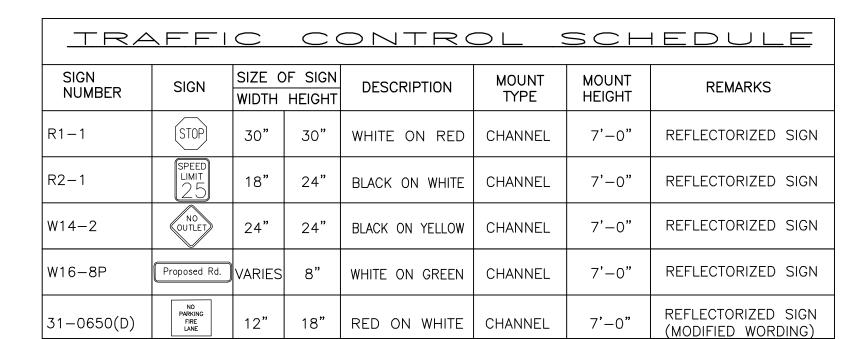
BACKFILL MATERIAL SHALL CONSIST OF STONES, ROCK FRAGMENTS AND FINE HARD DURABLE PARTICLES FREE FROM HARMFUL AMOUNTS OF ORGANIC MATTER. THE WEAR SHALL NOT EXCEDD 60 PERCENT.

2.1.1. GRANULAR BACKFILL (SAND) SHALL CONSIST PRIMARILY OF PARTICLES WITH 100% PASSING THE 3" SIEVE AND 70% PASSING THE NO. 4 SIEVE.

2.1.2. GRANULAR BACKFILL (GRAVEL) SHALL CONSIST OF A MIXTURE OF STONES AND ROCK FRAGMENTS AND PARTICLES WITH 95-100% PASSING THE 3" SIEVE AND 25-70% PASSING THE NO. 4 SIEVE.

TOWN MAY REQUIRE UNDERDRAIN OR ADDITIONAL DRAINAGE TO INCLUDE OVER EXCAVATION OF UNSUITABLE MATERIALS AND INSTALLATION OF GEOTEXTILE FABRIC, IN CONDITIONS OF UNSUITABLE MATERIAL THE ENTIRE LENGTH AND WIDTH OF R.O.W. SHALL BE EXCAVATED 4' BELOW EXISTING GRADES UNSUITABLE MATERIAL REMOVED AND REPLACED WITH SUITABLE MATERIAL.

BANK RUN GRAVEL AND CRUSHED GRAVEL INSTALLED IN SIX INCH LIFTS, COMPACTED TO 95% COMPACTION OF THE OPTIMUM MODIFIED PROCTOR DENSITY.

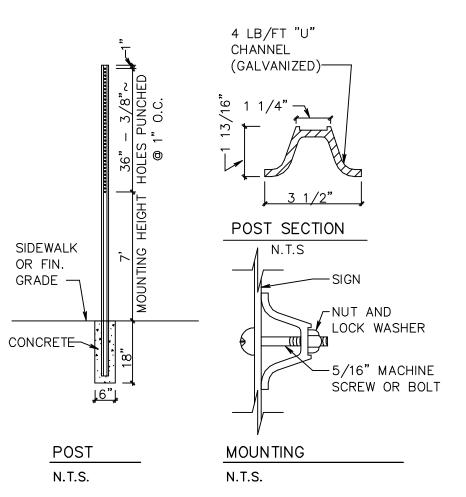


PREPARED FOR:

CHINBURG PROPERTIES INC 3 PENSTOCK WAY NEWMARKET, NH 03857



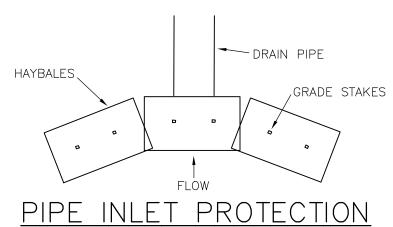
70 PORTSMOUTH AVE, THIRD FLOOR, SUITE 2 STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



STREET SIGN DETAIL

STOP SIGN (R1-1) 30" × 30"

SPEED LIMIT SIGN (R2-1) 24" × 30"



SPECIFICATIONS

SEDIMENT BARRIERS SHOULD BE INSTALLED PRIORTO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. BALES SHOULD BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. THE ENDS OF THE BARRIER SHOULD BE FLARED UP SLOPE. BARRIERS SHOULD NOT BE CONSTRUCTED MORE THAN ONE BALE HIGH.

ALL BALES SHOULD BE EITHER WIRE—BOUND OR STRING—TIED. BALES SHOULD BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES, PARALLEL TO THE GROUND SURFACE TO PREVENT DETERIORATION OF THE BINDINGS.

THE BARRIER SHOULD BE ENTRENCHED AND BACKFILLED. A TRENCH SHOULD BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES.

AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHOULD BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHOULD CONFORM TO
THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHOULD BE BUILT UP 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. IDEALLY, BALES SHOULD BE PLACED

10 FEET AWAY FROM THE TOE OF SLOPE.

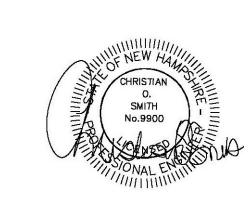
AT LEAST TWO STAKES DRIVEN THROUGH THE BALE AND PENETRATING AT LEAST 18 INCHES INTO THE GROUND, SHOULD SECURELY ANCHOR EACH BALE.

THE FIRST STAKE IN EACH BALE SHOULD BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES SHOULD

BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.

THE CARS DETWEEN BALES SHOULD BE CHINICED (FILLED BY WEDDING) WITH HAY TO DEEL/ENT WATER EDOM ESCAPING DETWEEN THE

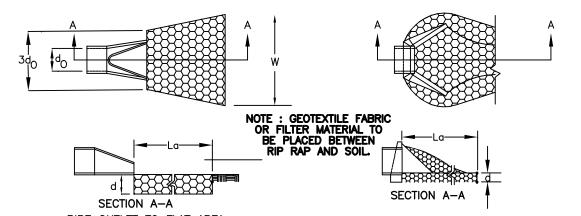
THE GAPS BETWEEN BALES SHOULD BE CHINKED (FILLED BY WEDGING) WITH HAY TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES.
INSPECTION SHOULD BE FREQUENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. BALE BARRIERS SHOULD BE REMOVED WHEN THEY
HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.



REVISIONS:	DA	TE:

CONSTRUCTION DETAILS

DATE:	SEPT. 2021	SCALE:	AS NOTED
PROJ. N0:	NH-1374	SHEET NO.	12 OF 13



PIPE OUTLET TO FLAT AREA
WITH NO DEFINED CHANNEL
PIPE OUTLET TO WELL-DEFINED CHANNEL

CONSTRUCTION SPECIFICATIONS

1. 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.

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

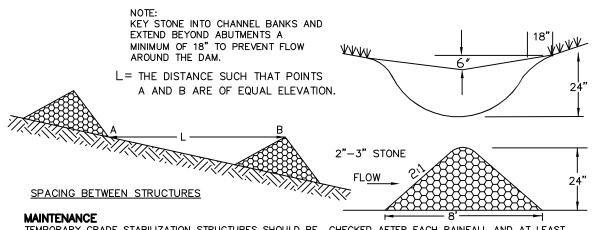
MAINTENANCE

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.

FILLED WITH SPALLS AND SMALLER ROCKS.

d50	OUTLET PIPE LOCATION	LENGTH(')	WIDTH (')
D		L	W
.25′	UD STA 0+50 LT	8	W-SWALE
.25′	STA 10+70	16	W-SWALE

PIPE DUTLET PROTECTION



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

AFTER VEGETATION HAS STABILIZED, THESE TEMPORARY STRUCTURES SHALL BE REMOVED WITH SPECIAL CARE AS TO AVOID DISTURBING ANY UNDERLYING EROSION CONTROL FABRIC AND/OR EXISTING VEGETATION

TEMPORARY STONE CHECK DAM

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.

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 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.
- EROSION CONTROL BLANKETS HAVE BEEN PI

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 HAY BALES ARE USED, THE BALES SHALL BE EMBEDDED AT LEAST 4 INCHES INTO THE SOIL. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
- 4. HAY OR 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 IN
- ORDER TO PREVENT, ABATE AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING.
 7. THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS 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

CONSTRUCTION SEQUENCE

1. 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.

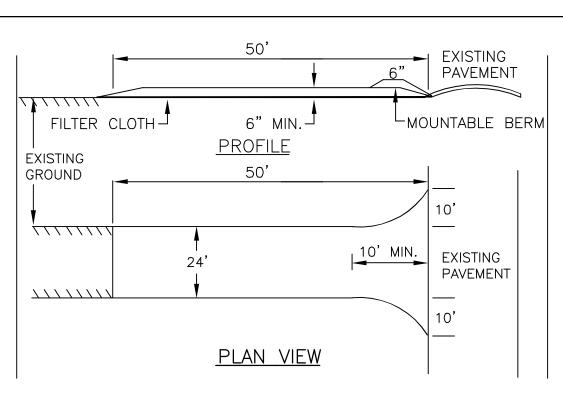
8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.

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 INFILTRATION BASINS, GRAVEL WETLANDS, SWALES AND DRAINAGE STRUCTURES SHALL BE CONSTRUCTED AND
FULLY STABILIZED (INCLUDING STABILIZATION OF ALL AREAS CONTRIBUTING STORMWATER TO EACH GIVEN STRUCTURE)
PRIOR TO HAVING RUNOFF DIRECTED TO THEM.
14. FINISH PAVING ALL ROADWAYS/DRIVFWAYS/PARKING AREAS.

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.

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

6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL

STABILIZED CONSTRUCTION ENTRANCE

WINTER MAINTENANCE

PROMPTLY.

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 OCTOBER 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.

3. 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 FENCING.

SEEDING SPECIFICATIONS

1. GRADING AND SHAPING

- 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.
- 3. ESTABLISHING A STAND

 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..
 FERTILIZER SHALL BE LIMITED TO AN ORGANIC SLOW RELEASE FERTILIZER PRODUCT (Pro Gro 5-3-4
- BY NORTH COUNTRY ORGANICS OR EQUIVALENT). Total Nitrogen (N)......5.0%
- 1.5% Water Soluble Nitrogen
- 3.5% Water Insoluble Nitrogen Available phosphate (P205)...3.0%
- Soluble Potash (K2D)......4.0%

 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 10 TO SEPTEMBER 1.

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

BECOME ESTABLISHED.

- 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.

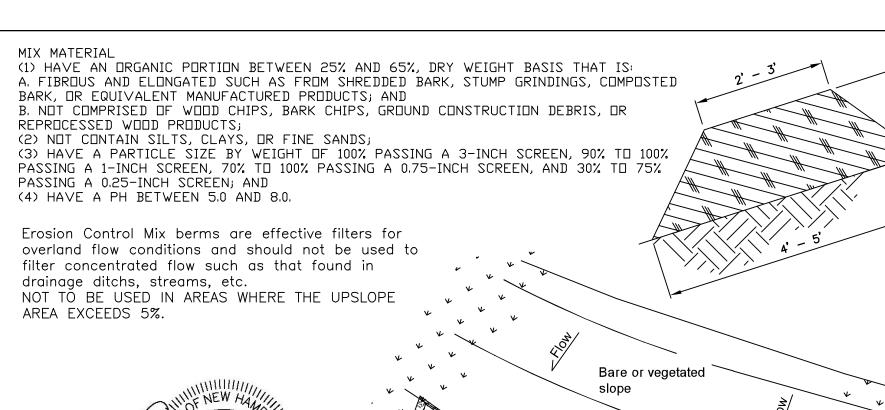


TABLE 7-24-RECOMMENDED RIP RAP GRADATION RANGES

d50 SIZE= 0.25 FEET 3 INCHES

% OF WEIGHT SMALLER SIZE OF STONE(INCHES)
THAN THE GIVEN d50 SIZE FROM TO

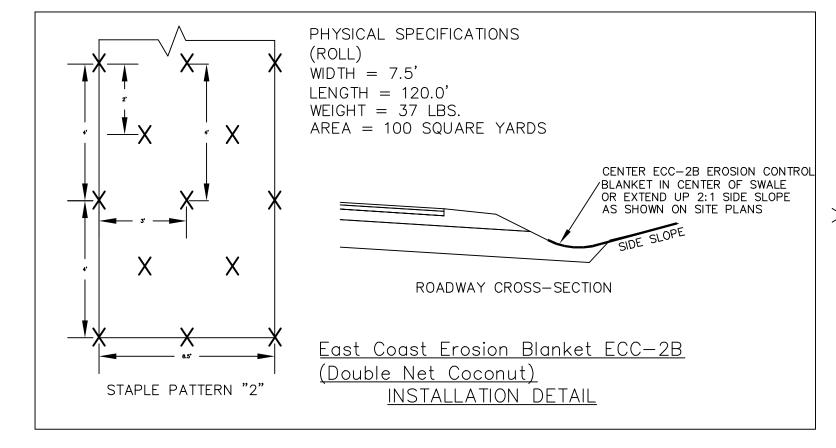
100% 5 6
85% 4 5
50% 3 5
15% 1 2

TABLE 7-24-RECOMMENDED R	RIP RAP GRA	ADA I IUN	RANGES
THICKNESS OF RIP RAP = 0.5	50 FEET		
d50 SIZE= 0.50	FEET	6	INCHES
% DF WEIGHT SMALLER THAN THE GIVEN 050 SIZE		STONE	(INCHES) TO
100%	9		12
85%	8		11
50%	6		9
15%	2		3

Erosion Control Mix Berm

SMITH

No.9900



Erosion Control Mix Berm

Placed perpendicular to

Section A - A

RATES	
POUNDS	POUNDS PER
PER ACRE	1,000 Sq. Ft
20	0.45
20	0.45
<u>2</u>	<u>0.05</u>
42	0.95
15	0.35
10	0.25
15	0.35
30	0.75
40 OR 55	0.95 OR 1.35
20	0.45
20	0.45
<u>8</u>	<u>0.20</u>
48	1.10
20	0.45
<u>30</u>	<u>0.75</u>
50	1.20
50	1.15
50	1.15
100	2.30
150	3.60
TENSION TURF S	HE UNIVERSITY O PECIALIST FOR
	POUNDS PER ACRE 20 20 42 15 10 15 30 40 OR 55 20 20 8 48 20 30 50 50 100 150

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

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 BARRIER.

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.

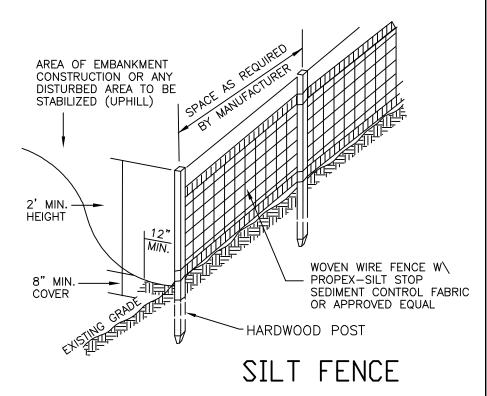
SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C	FAIR POOR POOR FAIR	GOOD GOOD FAIR	GOOD FAIR EXCELLENT GOOD	FAIR FAIR GOOD EXCELLENT
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	E A C D	GOOD GOOD GOOD	GOOD EXCELLENT EXCELLENT	GOOD EXCELLENT EXCELLENT	POOR FAIR FAIR FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C D	GOOD GOOD FAIR	GOOD GOOD EXCELLENT GOOD	GOOD FAIR EXCELLENT GOOD	FAIR POOR <u>FAIR</u> EXCELLENT
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.

1/ 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 PRIOR TO OCT. 15, IF PERMANENT SEEDING NOT YET COMPLETE.



REVISIONS: DATE:

EROSION & SEDIMENTATION

DATE:	SEPT. 2021	SCALE:	AS NOTED	
PROJ. N0:	NH-1374	SHEET NO.	13 OF 13	