

GENERAL LEGEND

$ \begin{array}{r} \textcircled{\textcircled{\square}} \\ \textcircled{\square} \\ \square \\ 100 \times 0 \\ \hline \times 100.00 \\ \hline \times 100.00 \\ \hline 99.50 \end{array} $	$ \begin{array}{r} \bullet \\ \blacksquare \\ 100 \times 0 \\ \hline \times 100.00 \\ \hline \times 100.00 \\ \hline 99.50 \end{array} $
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DESCRIPTION
PROPERTY LINES
SETBACK LINES
CENTERLINE
FRESHWATER WETLANDS LINE
TREE LINE
STONEWALL
BARBED WIRE
FENCE
STOCKADE FENCE
SOIL BOUNDARY
FLOOD PLAIN LINE
EASEMENT
MAJOR CONTOUR
MINOR CONTOUR
EDGE OF PAVEMENT
SILT FENCE
DRAINAGE LINE
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
GUARDRAIL
IRON PIPE/IRON ROD
DRILL HOLE
IRON ROD/DRILL HOLE
STONE/GRANITE BOUND
SPOT GRADE
PAVEMENT SPOT GRADE
CURB SPOT GRADE

BENCHMARK (TBM)
DOUBLE POST SIGN
SINGLE POST SIGN
WELL
TEST PIT
FAILED TEST PIT
MONITORING WELL
PERC TEST
PHOTO LOCATION

TREES AND BUSHES
UTILITY POLE
LIGHT POLES
DRAIN MANHOLE
SINGLE GRATE CATCH BASIN
DOUBLE GRATE CATCH BASIN
TRANSFORMER
CULVERT W/WINGWALLS
CULVERT W/FLARED END SECTION
CULVERT W/STRAIGHT HEADWALL
STONE CHECK DAM
DRAINAGE FLOW DIRECTION

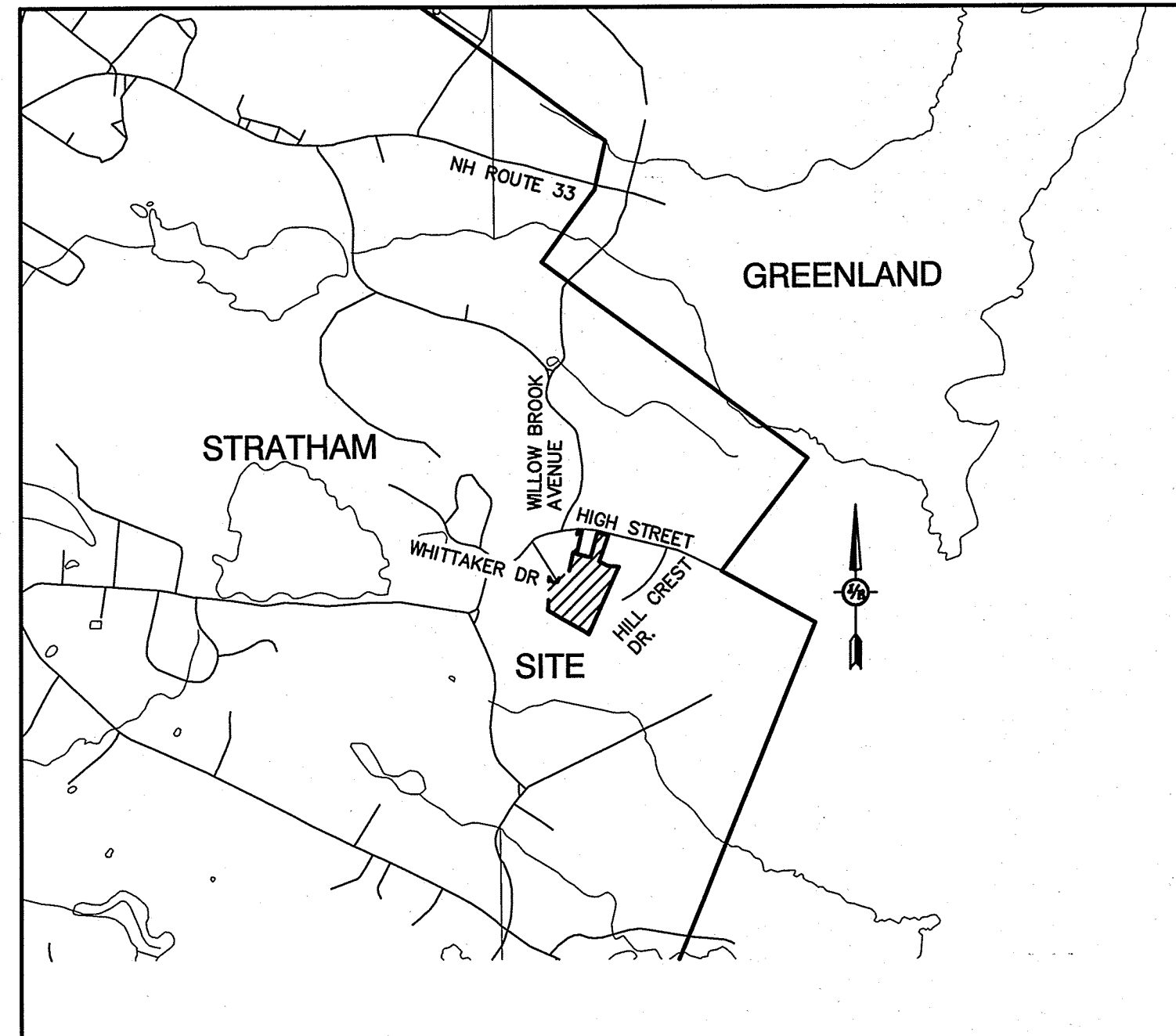
4K SEPTIC AREA
VEGETATED FILTER STRIP
RIPRAP
FRESHWATER WETLANDS

STABILIZED CONSTRUCTION
ENTRANCE

CONCRETE

GRAVEL

SNOW STORAGE



LOCUS MAP
SCALE 1" = 2000'

CS	COVER SHEET
A1	SUBDIVISION PLAN
C1	EXISTING CONDITIONS PLAN
C2	GRADING AND DRAINAGE PLAN
P1	PLAN AND PROFILE
D1-D2	DETAIL SHEETS
E1	EROSION AND SEDIMENT CONTROL DETAILS

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
PO BOX 219
STRATHAM, NH 03885
(603) 772-4746
CONTACT: JONATHAN RING, PE.
EMAIL: JRING@JONESANDBEACH.COM

ROBIN SULLIVAN
8 WHITTAKER DRIVE
STRATHAM, NH 03885

GOVE ENVIRONMENTAL SERVICES, INC.
8 CONTINENTAL DRIVE, UNIT H
EXETER, NH 03833-7507
(603) 778-0644
CONTACT: JIM GOVE

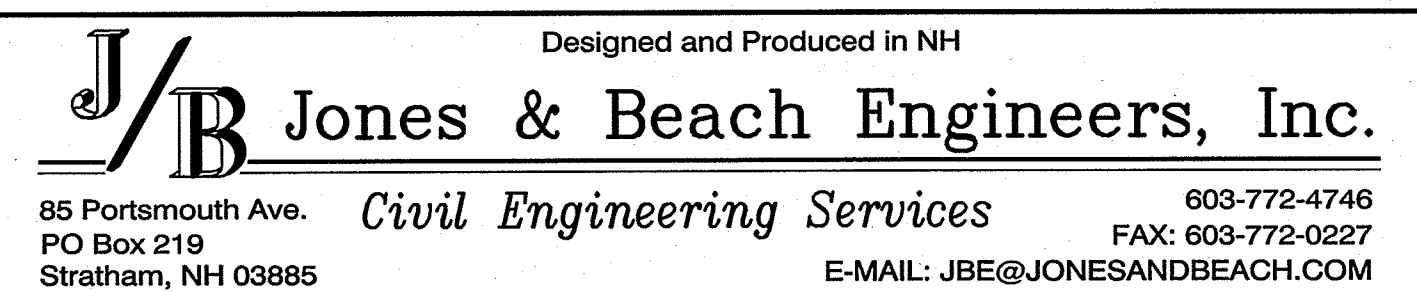
JAMES VERRA AND ASSOCIATES, INC.
101 SHATTUCK WAY, SUITE 8
NEWINGTON, NH 03801
(603) 436-3557
CONTACT: JAMES VERRA
EMAIL: JAMESV@JVASURVEYORS.COM

UNITIL
6 LIBERTY LANE WEST
HAMPTON, NH 03842
(800) 852-7276

FAIRPOINT COMMUNICATIONS
1575 GREENLAND ROAD
GREENLAND, NH 03840
(603) 427-5525
CONTACT: JOE CONSIDINE

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

6	2/14/18	REVISED PER TOWN COMMENTS	PLB
5	12/20/17	REVISED PER PLANNING BOARD	PLB
4	11/16/17	REVISED PER PLANNING BOARD	LAZ
3	10/5/17	REVISED PER PLANNING BOARD	PLB
2	8/16/17	REVISED PER PLANNING BOARD	LAZ
REV.	DATE	REVISION	BY



Plan Name:	COVER SHEET
Project:	SULLIVAN SUBDIVISION 8 WHITTAKER DRIVE, STRATHAM, NH 03885
Owner of Record:	ROBIN SULLIVAN 8 WHITTAKER DRIVE, STRATHAM, NH 03885

DRAWING No.

CS

SHEET 1 OF 8
JBE PROJECT NO. 13070.1

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SULLIVAN SUBDIVISION, 8 WHITTAKER DRIVE, STRATHAM, NH

ADDITIONAL ABUTTERS NOT SHOWN

19/62
KENT & ELIZABETH ANSON
1 HILLCREST DR.
STRATHAM, NH 03885
5604/2025 (03/27/15)

19/63
TILTON REVOCABLE TRUST
MARION E. TILTON, TRUSTEE
3 HILLCREST DR.
STRATHAM, NH 03885
5804/0476 (03/15/17)

19/71
MORRISSETTE-LONGWELL
REVOCABLE TRUST
SCOTT LONGWELL &
ROBIN MORRISSETTE TRUSTEES
1 WHITTAKER DR.
STRATHAM, NH 03885
5760/1328 (10/07/16)

19/74
RUSS REVOCABLE TRUST
BRADLEY & LYNN RUSS
TRUSTEES
2 WHITTAKER DR.
STRATHAM, NH 03885
3354/2460 (12/28/98)

19/78 (CL. HIGH ST)
PEAR TREE ASSOCIATION
7 BARTLETT RD
STRATHAM, NH 03885

15/44 (125 UNION RD)
TOWN OF STRATHAM
10 BUNKER HILL AVE
STRATHAM, NH 03885
2838/1716 (05/25/90)

19-73
RANKS FAMILY TRUST
6 WHITTAKER DRIVE
STRATHAM, NH 03885
5796/0753

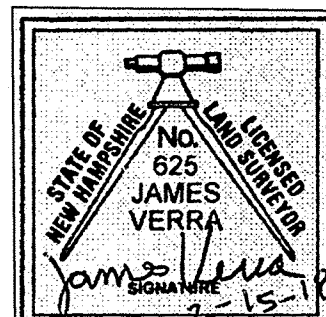
BOUNDARY LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 59°07'21" W	129.78
L2	N 60°57'17" W	29.77
L3	N 59°32'42" W	45.60
L4	N 62°25'46" W	62.58
L5	N 60°57'22" W	66.30
L6	N 60°07'37" W	101.81
L7	N 58°22'08" W	192.46
L8	N 01°49'26" E	436.94
L9	S 27°33'01" E	43.93
L10	S 89°08'03" E	143.34
L11	N 12°21'12" E	811.45
L12	S 82°39'41" E	50.12
L13	N 12°21'17" W	324.04
L14	N 71°51'25" E	191.08
L15	N 14°31'22" E	133.05
L16	S 77°28'18" E	150.97
L17	S 18°37'14" W	2.00
L18	S 18°37'14" W	364.78
L19	S 63°09'29" E	128.61
L20	S 86°04'20" E	143.87
L21	S 24°10'28" W	53.26
L22	S 24°03'44" W	925.79
L23	N 71°51'25" E	134.42 (TIE)
L24	S 89°28'20" E	112.45
L25	N 12°31'28" E	51.19

BOUNDARY CURVE TABLE					
CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	154.36	60.00	147°24'03"	N 78°45'26" E	115.18
C2	156.06	60.00	153°31'52"	N 21°42'51" W	154.04

REFERENCE PLANS:

- MINOR SUBDIVISION OF LAND, HIGH STREET, STRATHAM, NEW HAMPSHIRE, FOR TERRA REALTY TRUST, DATED 3/1/1995, REVISED 2/29/1996, RCRD PLAN # D-24555.
- SUBDIVISION OF LAND FOR V.E.T. DEVELOPMENT, STRATHAM, NH DATED 8/3/1987, REVISED 10/16/1987, RCRD PLAN # D-17330.
- FINAL SUBDIVISION PLAN, HILLCREST DRIVE SUBDIVISION, STRATHAM, NH DATED 11/25/1986, REVISED 12/3/1986, RCRD PLAN # D-15868.
- PEAR TREE, STARHAM, NEW HAMPSHIRE, SUBDIVISION PLAN DATED 6/6/1989, REVISED. 7/28/1989, RCRD PLAN # D-19552.

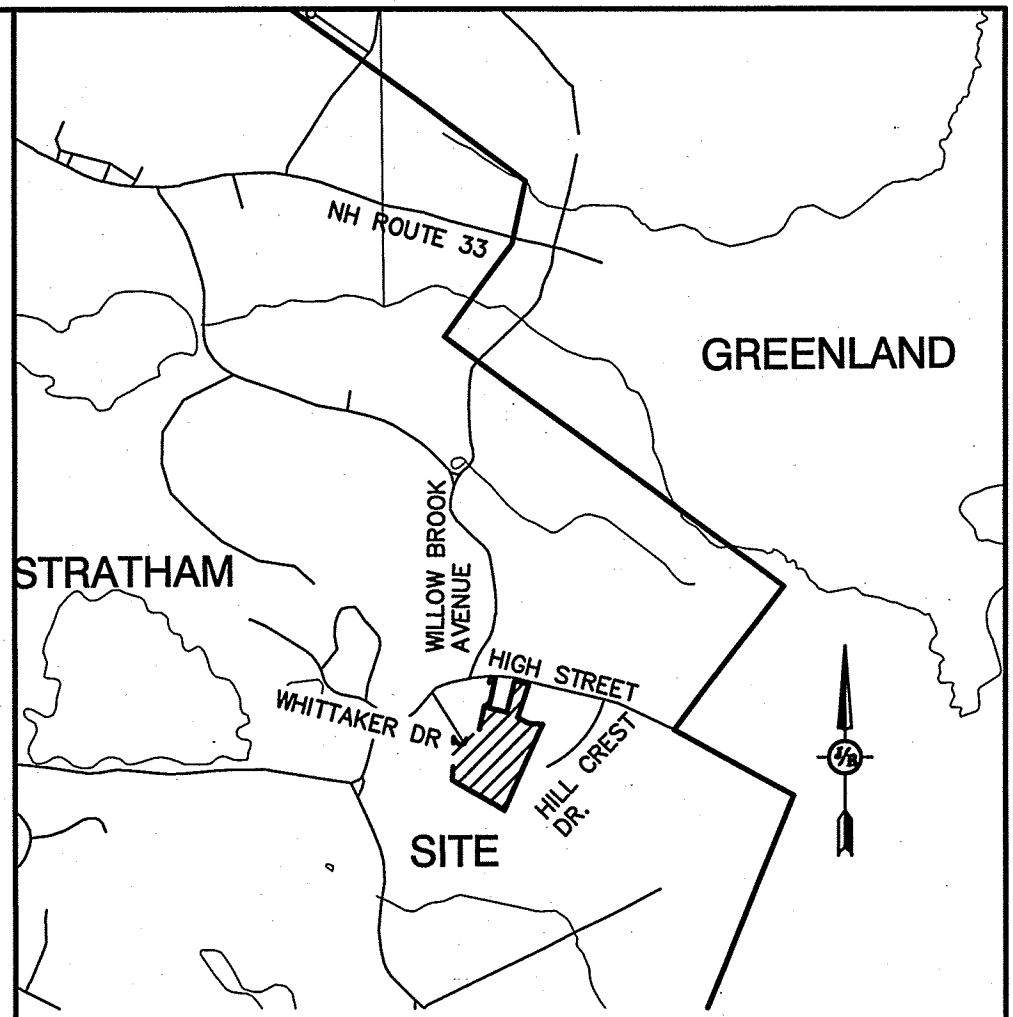
WILLOW BROOK AVENUE



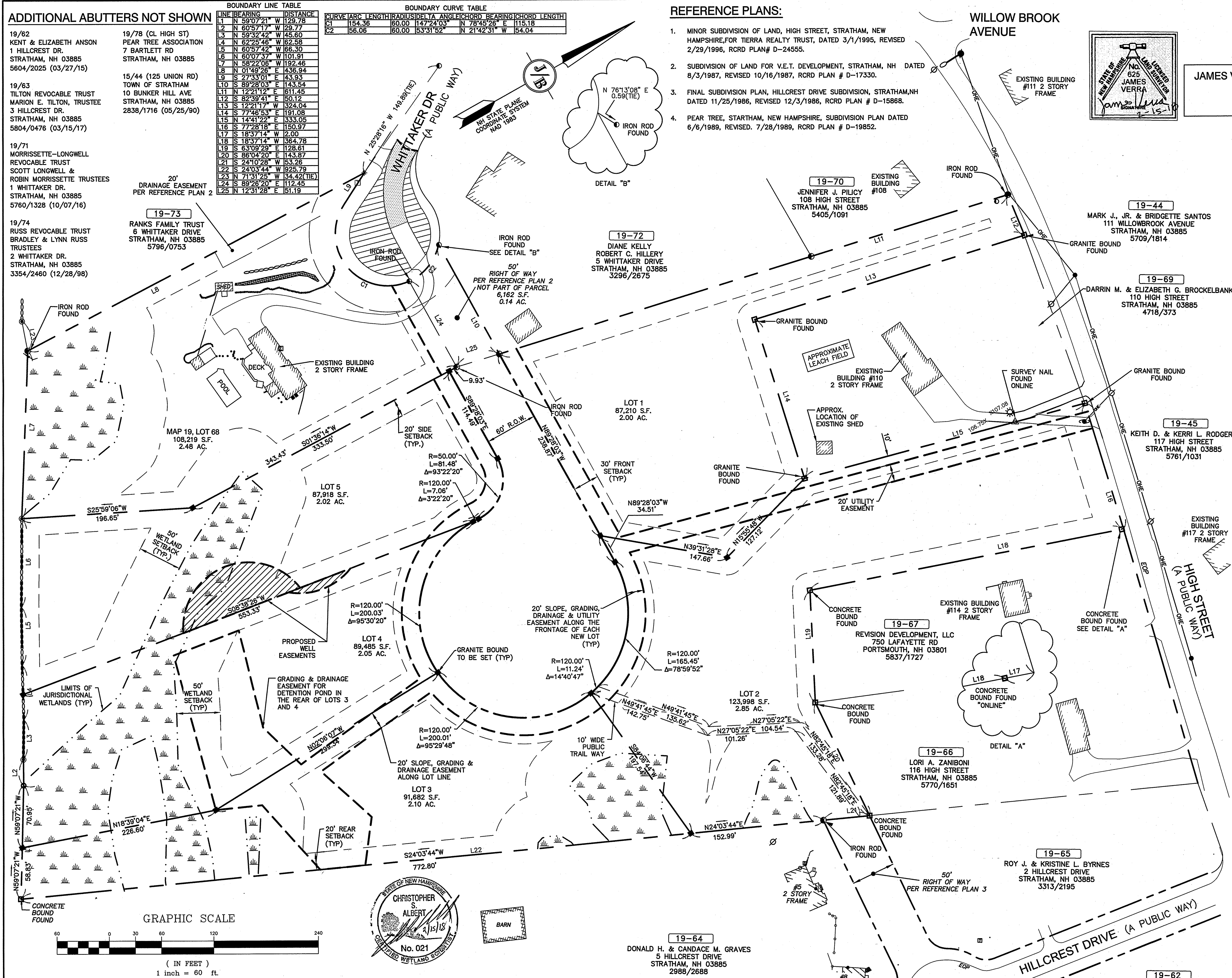
JAMES VERRA AND ASSOCIATES, INC.
101 SHATTUCK WAY, SUITE 8
NEWINGTON, NH 03801-7876
PROJECT NUMBER: 20391-B

SUBDIVISION NOTES:

- THE INTENT OF THIS PLAN IS TO SUBDIVIDE MAP 19, LOT 68 INTO FIVE (5) SINGLE FAMILY RESIDENTIAL LOTS WITH ONSITE WATER, SEPTIC, PLUS EXISTING HOUSE. COMPLETE EIGHT (8) SHEET PLAN SET IS ON FILE AT THE PLANNING BOARD OFFICE.
- ZONING DISTRICT: RESIDENTIAL AGRICULTURAL
LOT AREA MINIMUM = 2 ACRE
LOT FRONTAGE MINIMUM = 250'
BUILDING SETBACKS (MINIMUM):
FRONT SETBACK = 30'
SIDE SETBACK = 20'
REAR SETBACK = 20'
WETLAND SETBACK = 50'
MAX BUILDING HEIGHT = 35'
- WITH APPROVAL OF THIS PLAN BY THE PLANNING BOARD, THE FOLLOWING WAIVERS ARE GRANTED FROM THE "SUBDIVISION REGULATIONS":
A) SECTION 3.3.2 & 3.3.3 - PLAN SCALE TO ALLOW 1" = 60'.
B) SECTION 4.4.3 TO ALLOW CUL-DE-SAC.
C) SECTION 4.4.3.i.i. DEAD-END STREET.
D) SECTION 4.4.3.i.ii. DEAD-END OVER 800 L.F.
E) SECTION 4.5.1.f. SIDE SLOPES 3:1
F) SECTION ADDENDUM TABLE 1-ROAD WIDTH 22'.
- NHDES APPROVAL FOR SUBDIVISION PERMIT NO. _____ DATED _____
- THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 3301500265E, DATED MAY 17, 2005.
- ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.). THIS DOCUMENT IS TO BE KEPT ONSITE AT ALL TIMES AND UPDATED AS REQUIRED.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- ALL CONSTRUCTION WILL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- GRANITE BOUNDS TO BE SET AT ALL ROADWAY POINTS OF CURVATURE AND TANGENCY, AND AT ALL PROPERTY CORNERS AND ANGLE POINTS, UNLESS OTHERWISE INDICATED.
- THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY CHRISTOPHER ALBERT OF JONES & BEACH ENGINEERS, INC., DURING WINTER, 2016.
- LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
- UPON APPROVAL BY THE TOWN, THE PROPOSED ROAD WILL BE CONVEYED TO THE TOWN.
- ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
- ALL LOTS ARE SUBJECT TO A 20' WIDE EASEMENT ALONG FRONTAGE FOR SLOPE, GRADING, DRAINAGE AND UTILITIES.
- ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- THE TAX MAP AND LOT NUMBERS AND ABUTTING OWNERS ARE BASED ON THE TOWN OF STRATHAM TAX RECORDS AND ARE SUBJECT TO CHANGE.
- RESEARCH WAS PERFORMED AT THE TOWN OF STRATHAM ASSESSOR'S OFFICE AND THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- HORIZONTAL DATUM: NAD 1983 ESTABLISHED BY SURVEY GRADE GPS OBSERVATION AND NGS "OPUS" SOLUTION. REFERENCE FRAME: NAD83 (2011) (EPOCH: 2010.0000), US SURVEY FOOT. VERTICAL DATUM: NAVD 1988. PRIMARY BENCHMARK: NHDOT 348-0070.
- ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.



LOCUS SCALE: 1"=200'



APPROVED - STRATHAM, NH PLANNING BOARD	PROJECT PARCEL TOWN OF STRATHAM, NH MAP 19, LOT 68
APPLICANT/OWNER ROBIN SULLIVAN 8 WHITTAKER DRIVE STRATHAM, NH 03885 BK 4199 PG 2969	
TOTAL LOT AREA 14.99 ACRES	
DATE:	

Design: JSR	Draft: PLB	Date: 6/26/13
Checked: JSR	Scale: AS NOTED	Project No.: 13070.1
Drawing Name: 13070-PLAN.dwg		
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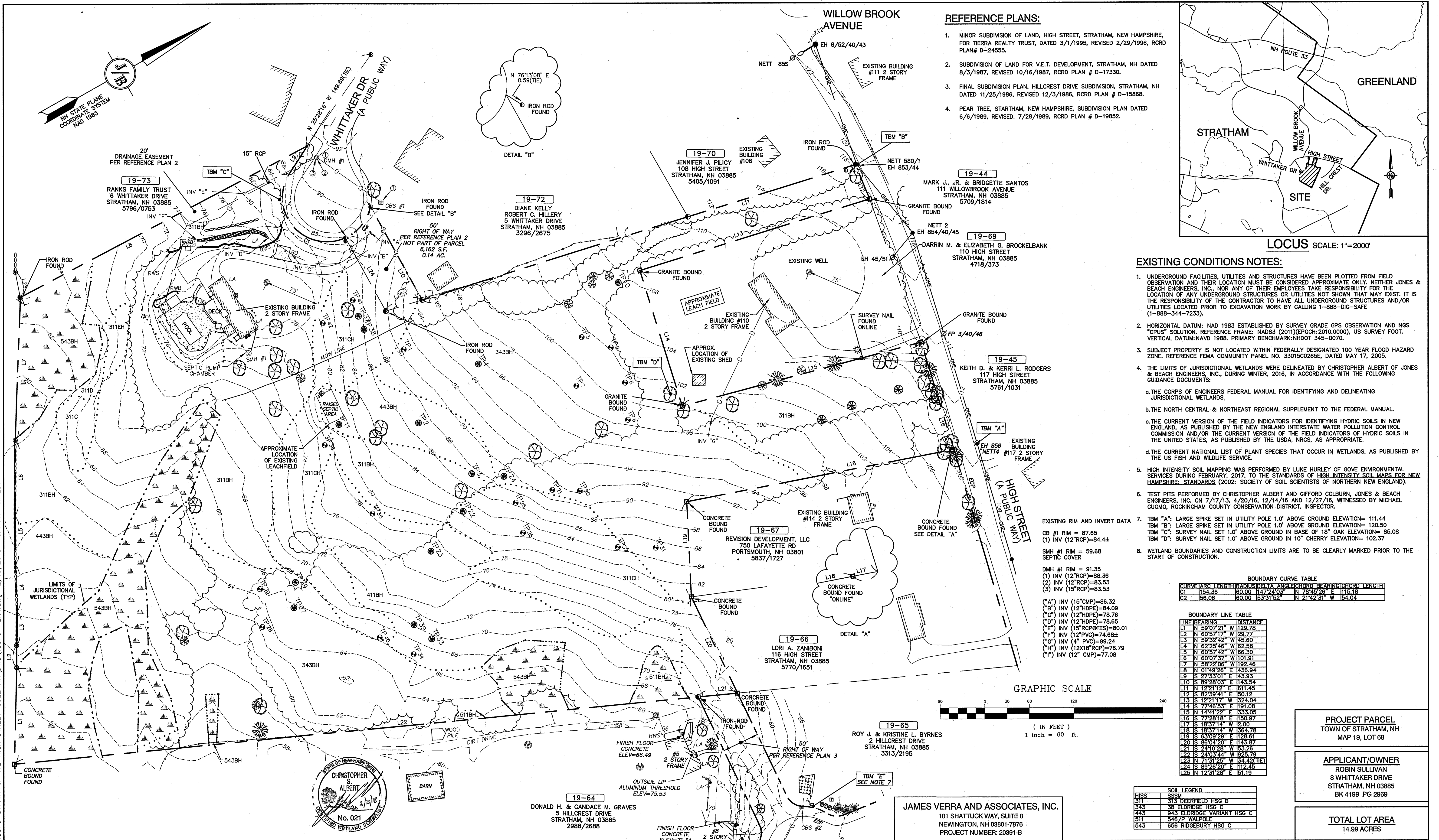
REV.	DATE	REVISION	BY
6	2/14/18	REVISED PER TOWN COMMENTS	PLB
5	12/20/17	REVISED PER PLANNING BOARD	PLB
4	11/16/17	REVISED PER PLANNING BOARD	LAZ
3	10/5/17	REVISED PER PLANNING BOARD	PLB
2	8/16/17	REVISED PER PLANNING BOARD	LAZ
1			

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

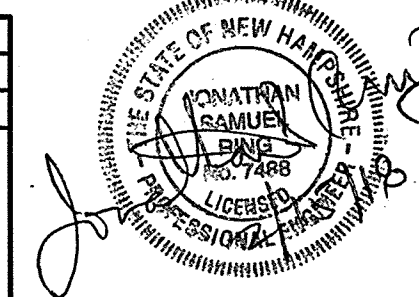
Plan Name:	SUBDIVISION PLAN MAP 19, LOT 68
Project:	SULLIVAN SUBDIVISION 8 WHITTAKER DRIVE, STRATHAM, NH 03885
Owner of Record:	ROBIN SULLIVAN 8 WHITTAKER DRIVE, STRATHAM, NH 03885

DRAWING No.
A1
SHEET 2 OF 8
JBE PROJECT NO. 13070.1

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2	8/16/17	REVISED PER PLANNING BOARD	LAZ
REV.	DATE	REVISION	BY

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

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

Plan Name: **EXISTING CONDITIONS PLAN**

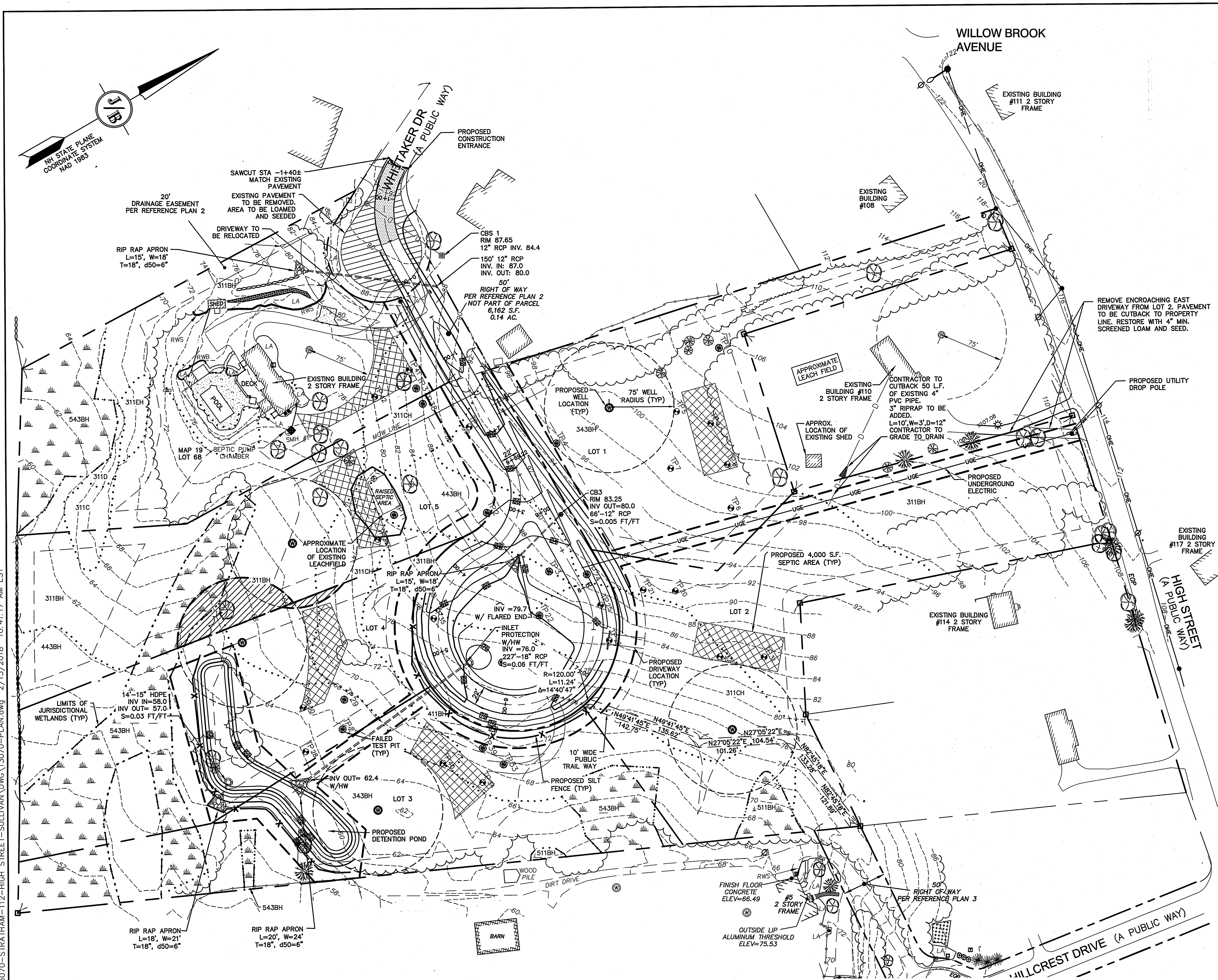
Project: **SULLIVAN SUBDIVISION**
8 WHITTAKER DRIVE, STRATHAM, NH 03885

Owner of Record: **ROBIN SULLIVAN**
8 WHITTAKER DRIVE, STRATHAM, NH 03885

DRAWING No. **C1**

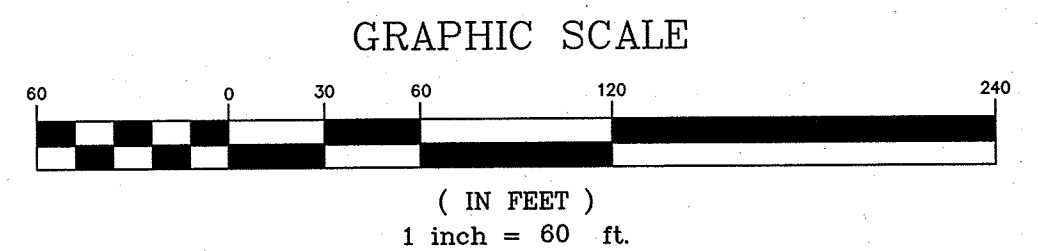
SHEET 3 OF 8
JBE PROJECT NO. 13070.1

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GRADING AND DRAINAGE NOTES:

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
- ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
- ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
- SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.25" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
- CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
- SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
- EACH NEW LOT SHALL HAVE A STONE DRIP EDGE AROUND EACH HOUSE, AND A RAIN GARDEN AT DRIVEWAY LOW POINT. SEE DETAILS ON SHEET D2. THESE FEATURES SHALL BE SHOWN ON THE SUBSURFACE EFFLUENT DISPOSAL SYSTEM PLAN PREPARED FOR EACH LOT PRIOR TO ISSUANCE OF A BUILDING PERMIT.

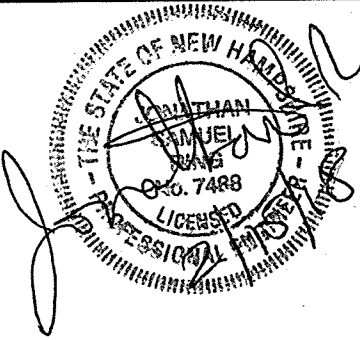


PROJECT PARCEL
TOWN OF STRATHAM, NH
MAP 19, LOT 68

APPLICANT/OWNER
ROBIN SULLIVAN
8 WHITTAKER DRIVE
STRATHAM, NH 03885
BK 4199 PG 2969

TOTAL LOT AREA
14.99 ACRES

Design: JSR Draft: PLB Date: 6/26/13
Checked: JSR Scale: AS NOTED Project No.: 13070.1
Drawing Name: 13070-PLAN.dwg
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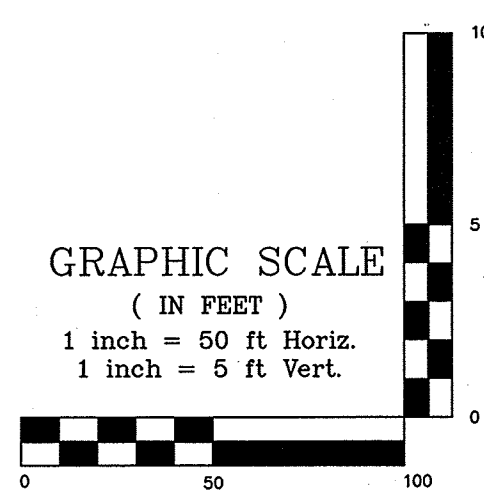
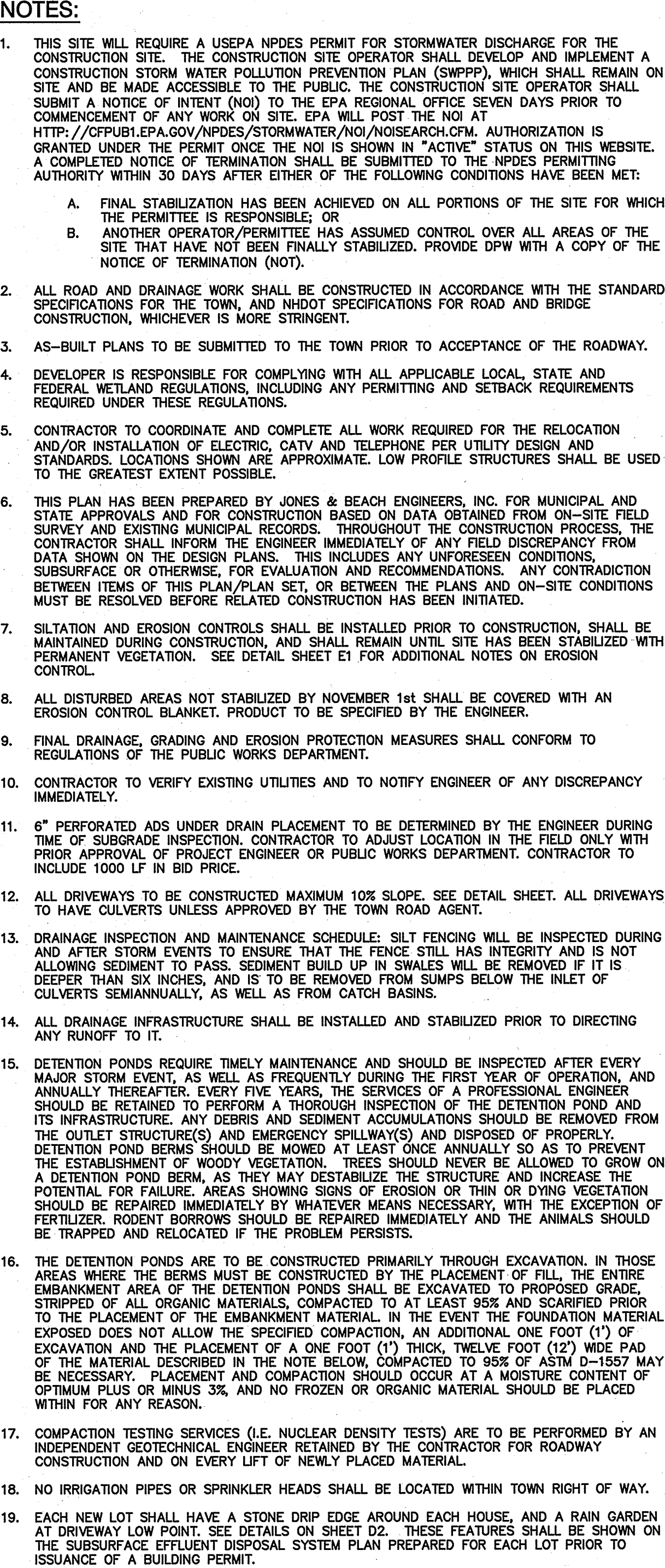


REV.	DATE	REVISION	BY
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J/B Jones & Beach Engineers, Inc.
Designed and Produced in NH
85 Portsmouth Ave. Civil Engineering Services 603-772-4746
PO Box 219 Stratham, NH 03885 FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **GRADING AND DRAINAGE PLAN**
Project: **SULLIVAN SUBDIVISION
8 WHITTAKER DRIVE, STRATHAM, NH 03885**
Owner of Record: **ROBIN SULLIVAN
8 WHITTAKER DRIVE, STRATHAM, NH 03885**

DRAWING No.
C2
SHEET 4 OF 8
JBE PROJECT NO. 13070.1



Design: JSR	Draft: PLB	Date: 6/26/13
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PO Box 219
Stratham, NH 03885 FAX: 603-772-0227
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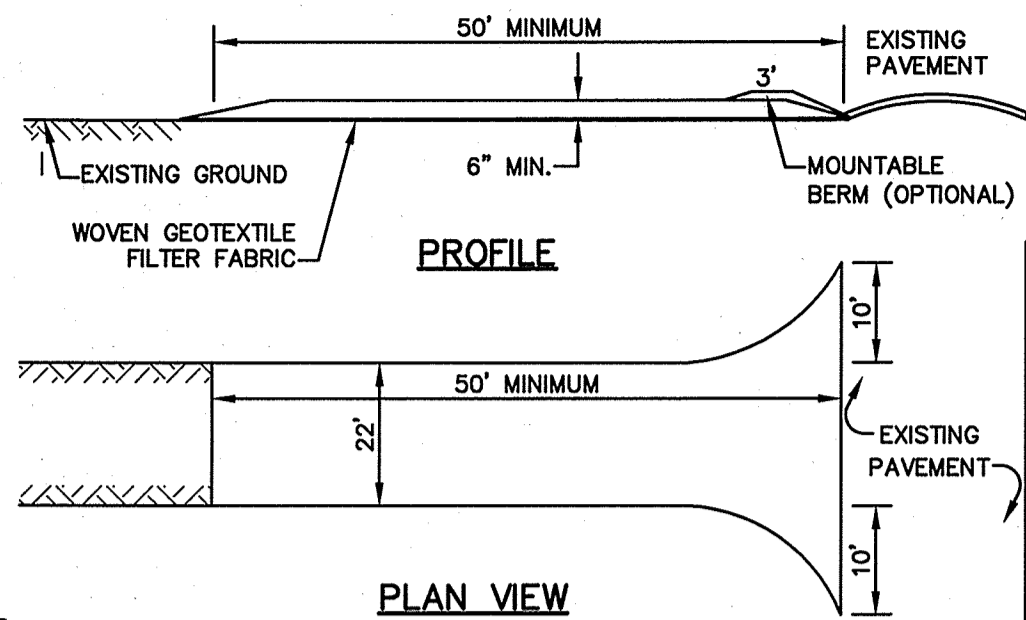
Plan Name:	PLAN AND PROFILE
Project:	SULLIVAN SUBDIVISION 8 WHITTAKER DRIVE, STRATHAM, NH 03885
Owner of Record:	ROBIN SULLIVAN 8 WHITTAKER DRIVE, STRATHAM, NH 03885

DRAWING No.

P1

SHEET 5 OF 8

JBE PROJECT NO.13070.1

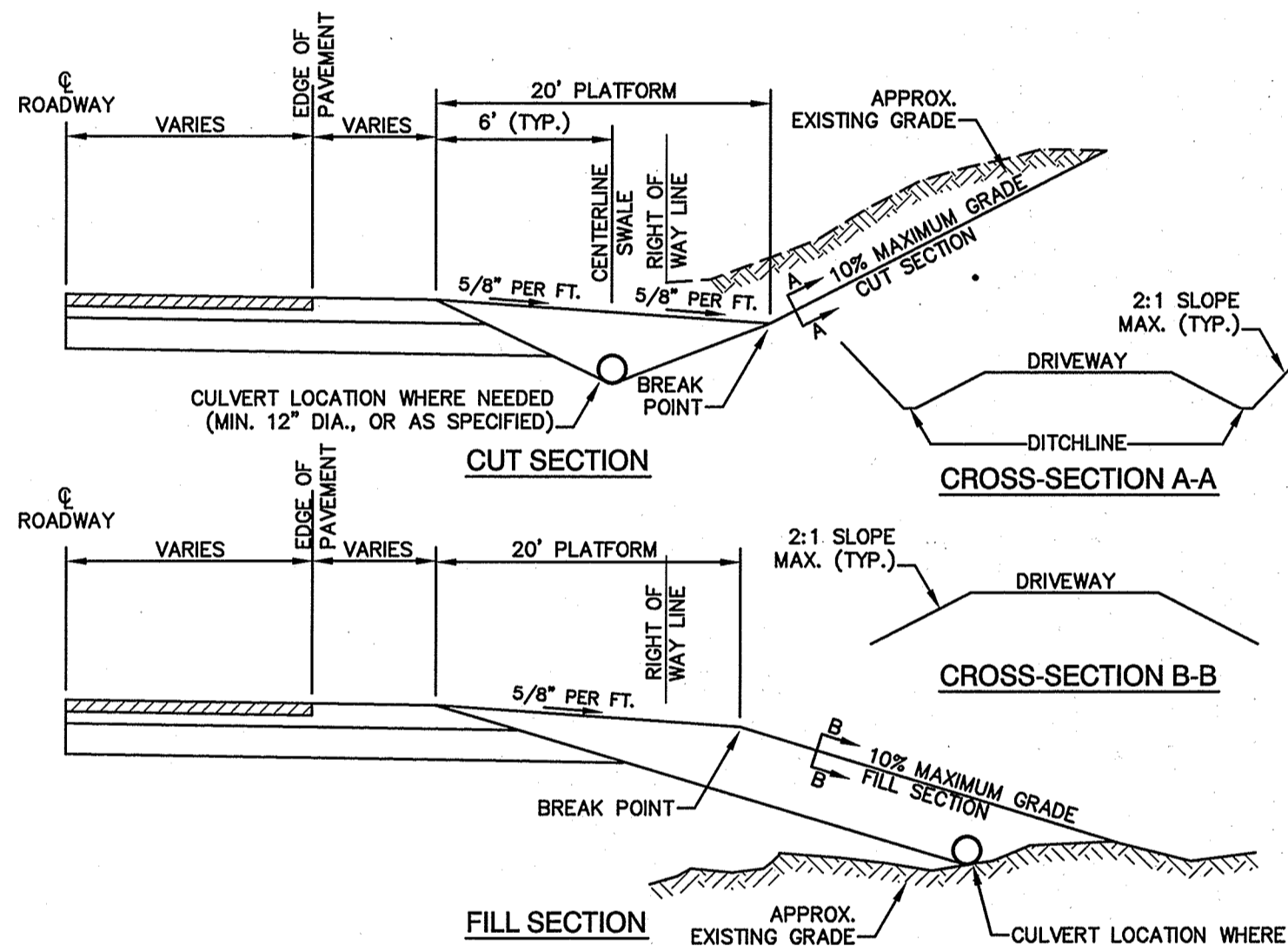


NOTES:

1. STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 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. 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, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL 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 STONE 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 THE PUBLIC RIGHT-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 THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

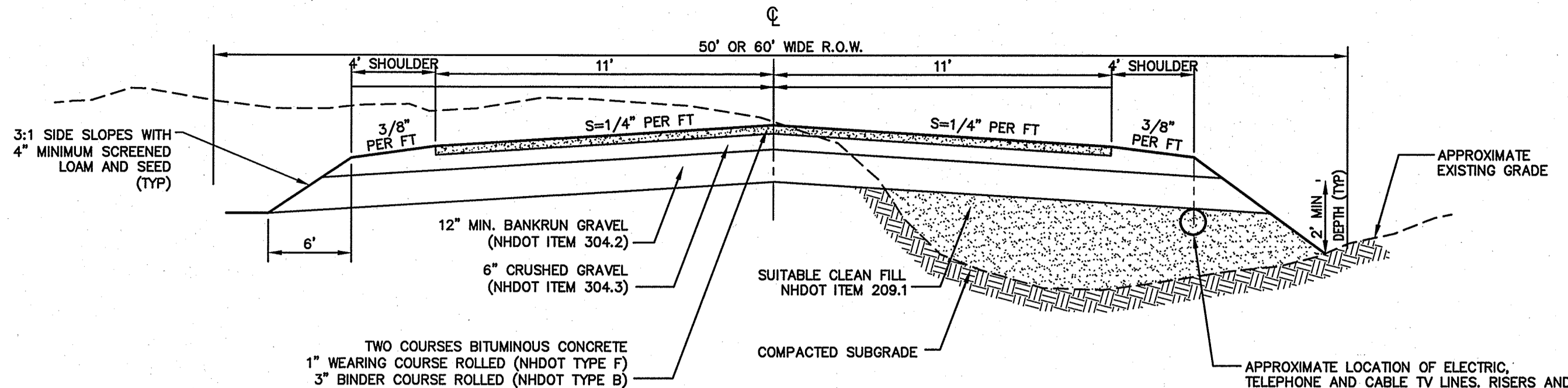
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



TYPICAL DRIVEWAY SECTIONS

NOT TO SCALE

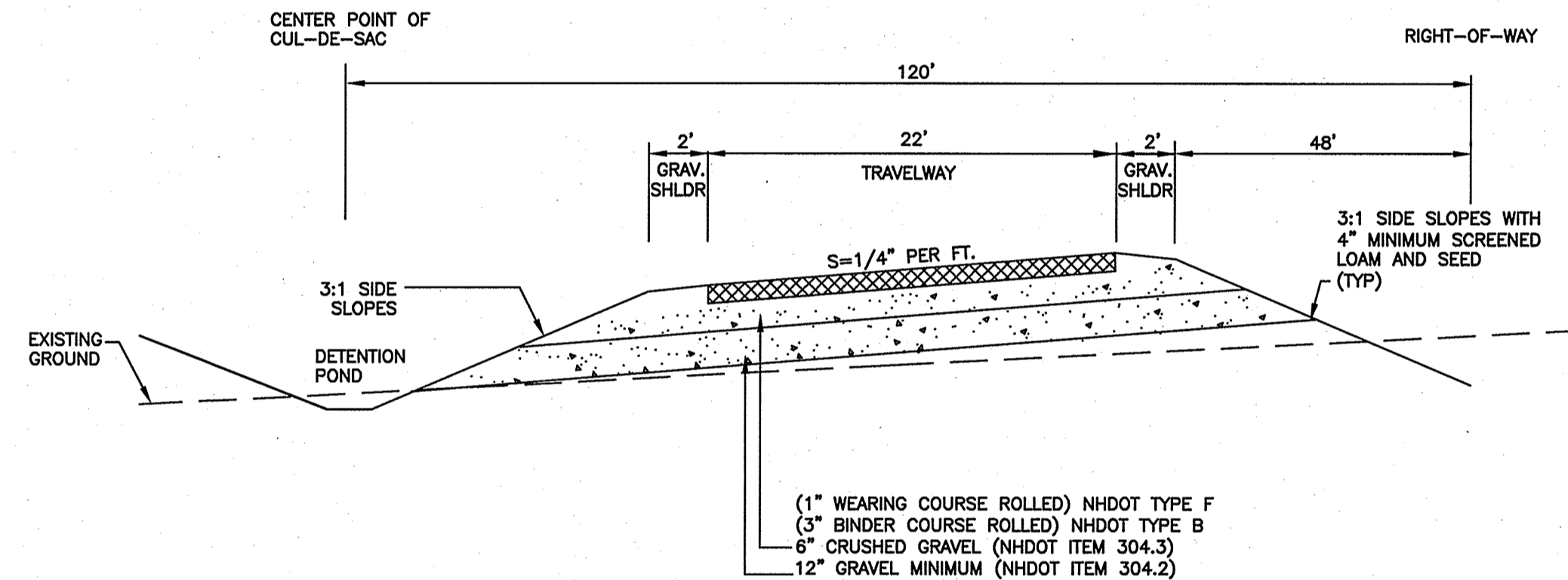


NOTES:

1. REMOVE ALL ORGANICS, TOPSOIL AND MATERIAL YIELDING TO A 10 TON ROLLER. SUBBASE AREAS THAT CONTAIN UNSUITABLE MATERIALS MUST BE EXCAVATED TO A DEPTH NO LESS THAN 36\"/>
2. ALL MATERIALS TO BE AS SPECIFIED PER TOWN STANDARDS AND NHDOT, WHICHEVER IS MOST STRINGENT. GRADATION AND COMPACTION TEST RESULTS (95% MIN.) SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
3. TOWN MAY REQUIRE UNDERDRAIN, ADDITIONAL GRAVEL AND/OR ADDITIONAL DRAINAGE IF SOIL CONDITIONS WARRANT.

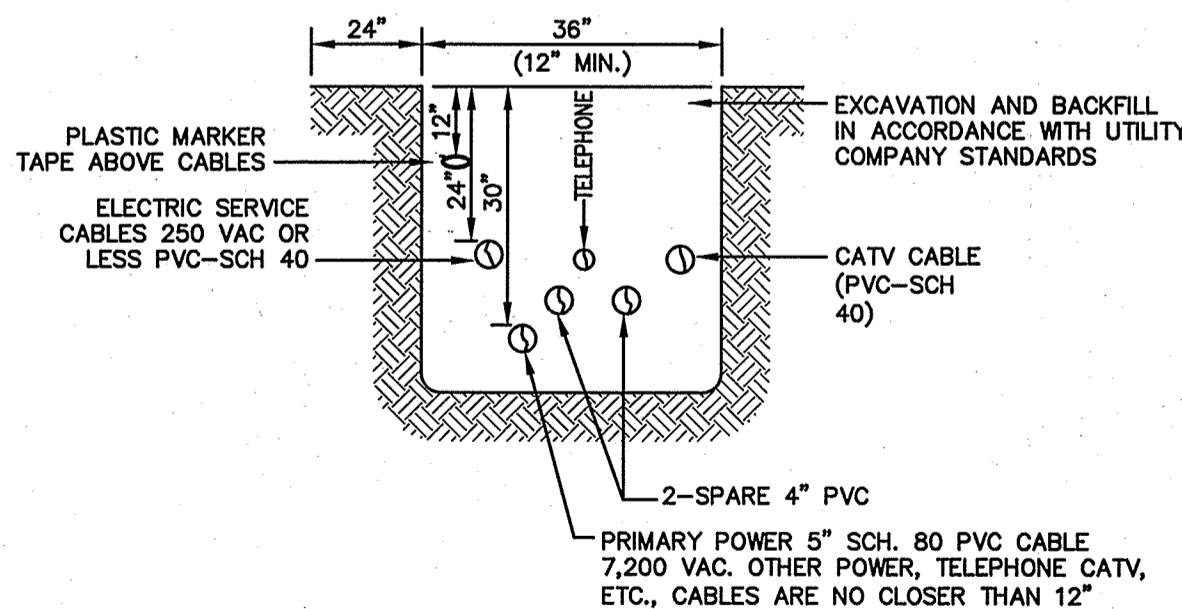
TYPICAL ROADWAY SECTION

NOT TO SCALE



TYPICAL CUL-DE-SAC CROSS SECTION

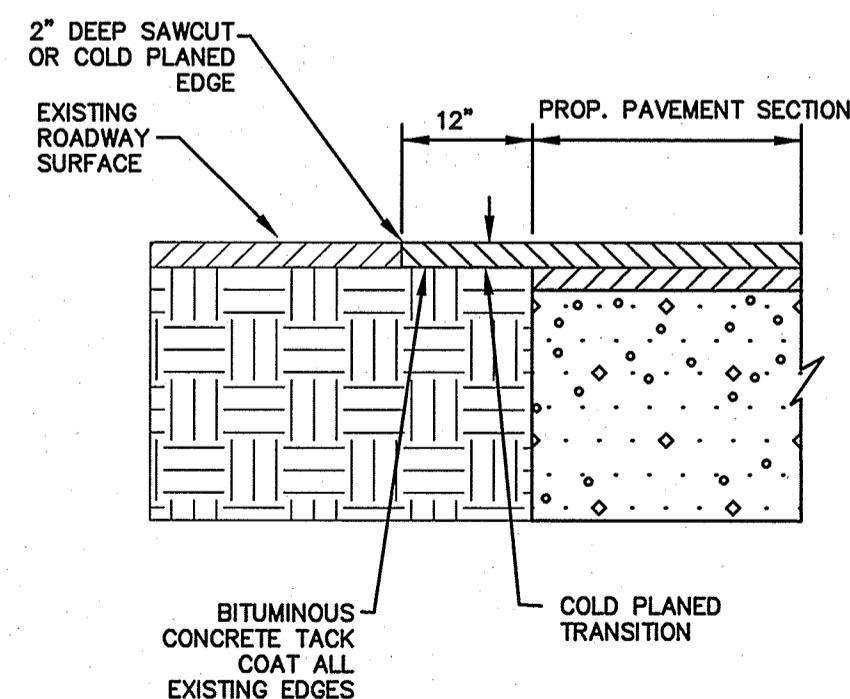
NOT TO SCALE



NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

UTILITY TRENCH

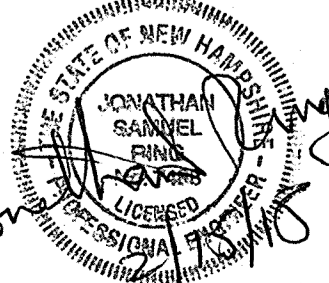
NOT TO SCALE



FULL DEPTH PAVEMENT TRANSITION

NOT TO SCALE

Design: JSR	Draft: PLB	Date: 6/26/13
Checked: JSR	Scale: AS NOTED	Project No.: 13070.1
Drawing Name: 13070-PLAN.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



6	2/14/18	REVISED PER TOWN COMMENTS	PLB
5	12/20/17	REVISED PER PLANNING BOARD	PLB
4	11/16/17	REVISED PER PLANNING BOARD	LAZ
3	10/5/17	REVISED PER PLANNING BOARD	PLB
2	8/16/17	REVISED PER PLANNING BOARD	LAZ
REV.	DATE	REVISION	BY

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

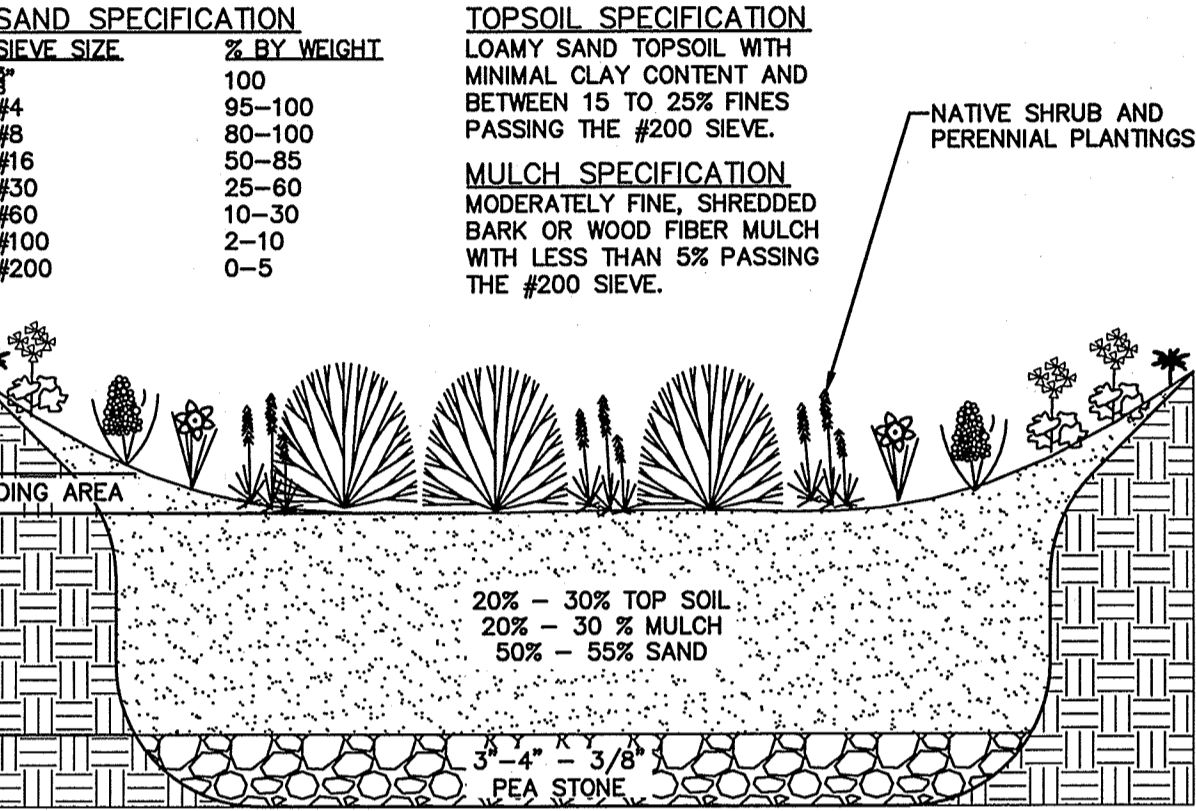
603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	SULLIVAN SUBDIVISION 8 WHITTAKER DRIVE, STRATHAM, NH 03885
Owner of Record:	ROBIN SULLIVAN 8 WHITTAKER DRIVE, STRATHAM, NH 03885

DRAWING No.	D1
SHEET 6 OF 8	JBE PROJECT NO. 13070.1

TYPICAL RAIN GARDEN PLANTINGS

BOTANICAL NAME	COMMON NAME	SIZE
PERENNIALS		
"ANNABELLE" HYDRANGEA	HYDRANGEA	1 GAL.
HEMEROCALLIS 'STELLA D'ORO'	DAYLILY	1 GAL.
VIBURNUM TRILOBUM	AMERICAN CRANBERRY	1 GAL.
AUREA BOWLES' GOLDEN SEDGE	SEDGE GRASS	1 GAL.
SPIREA	BRIDLE VEIL	1 GAL.
DECIDUOUS SHRUBS:		
VIBURNUM DENTATUM	ARROWOOD VIBURNUM	
ALNUS INCANA	SPECKLED ALDER	
CORNUS STOLONIFERA	REDOSEIER DOGWOOD	
VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	
ILEX VERTICILLATA	WINTERBERRY	



DESIGN CONSIDERATIONS

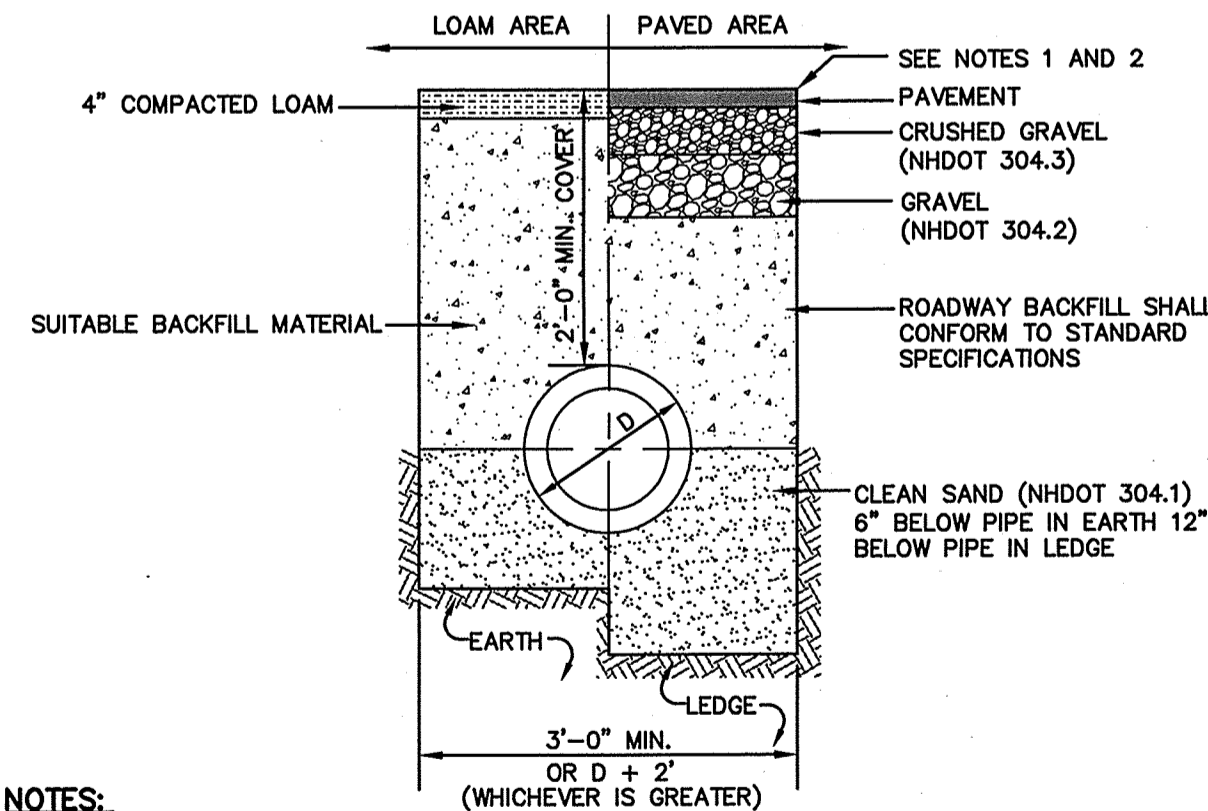
- DO NOT DIRECT RUNOFF TO THE BIORETENTION SYSTEMS UNTIL IT HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUN-OFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
- PLANT LAYOUT WITHIN INDIVIDUAL RAIN GARDENS MAY VARY BETWEEN HOMES HOWEVER ALL RAIN GARDENS ARE TO BE PLANTED FROM EDGE TO EDGE WITH A 1' MAXIMUM SPACING BETWEEN PERENNIALS. LEAVE ENOUGH ROOM BETWEEN SHRUBS FOR FULL GROW-OUT OF EACH SPECIES USED.

MAINTENANCE REQUIREMENTS:

- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

RAIN GARDEN (with open side and bottom) - HOUSE LOTS

NOT TO SCALE

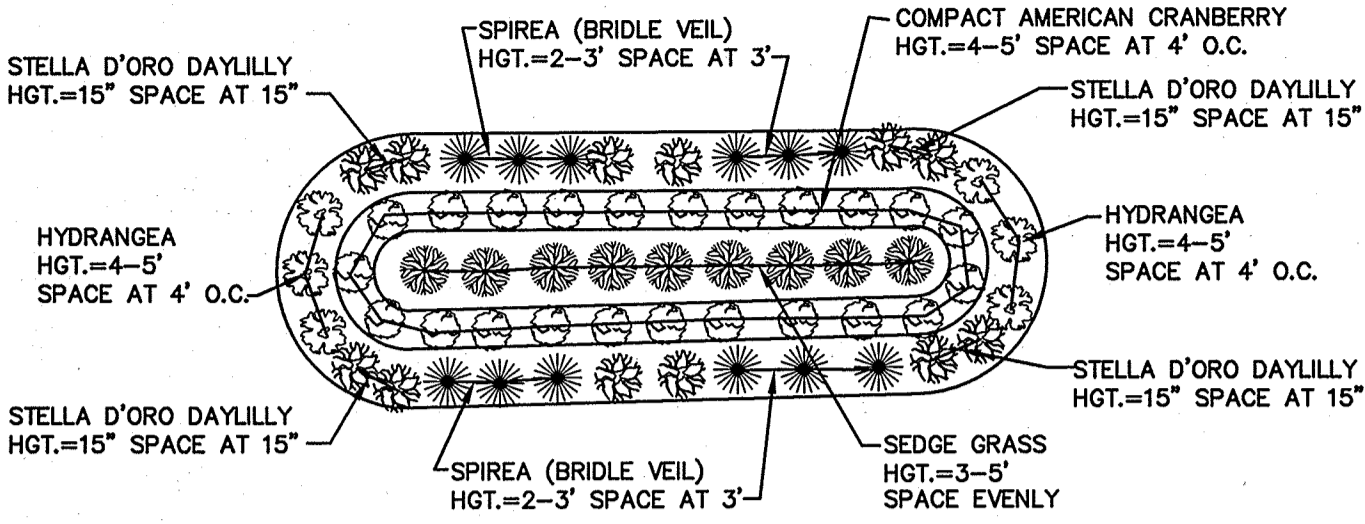


NOTES:

- PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
- NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND TOWN SPECIFICATIONS.
- ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

DRAINAGE TRENCH

NOT TO SCALE

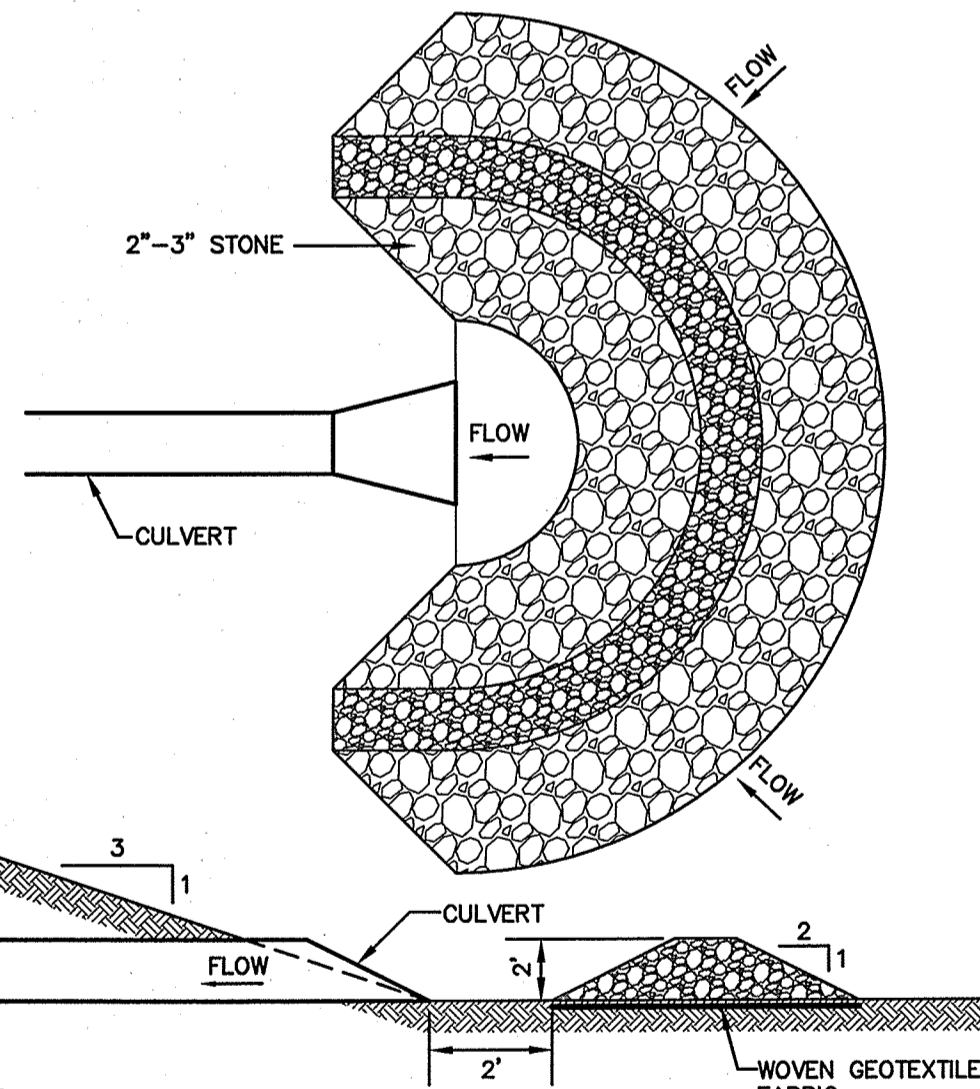


NOTES:

- ELEVATIONS VARY BY LOT. CONTRACTOR TO PLACE RAIN GARDENS ON EACH RESIDENTIAL LOT AND PLANT AS SHOWN ABOVE. SHAPE AND DIMENSIONS MAY VARY DEPENDING ON SITE CONDITIONS.
- RAIN GARDENS TO BE 75' MINIMUM FROM SEPTIC SYSTEMS.
- DRIVEWAY RUNOFF SHALL BE DIRECTED INTO PROPOSED RAIN GARDENS TO EXTENT POSSIBLE.
- BOTTOM OF RAIN GARDEN TO BE A MINIMUM 1,000 S.F. SHAPE AND DIMENSIONS MAY VARY DUE TO SITE CONDITIONS.
- VEGETATION WITHIN EACH RAIN GARDEN MUST BE STABILIZED WITH GROWTH PRIOR TO DIRECTING RUNOFF INTO THE RAIN GARDEN.
- EACH NEW LOT SHALL HAVE A STONE DRIP EDGE AROUND EACH HOUSE, AND A RAIN GARDEN AT DRIVEWAY LOW POINT. SEE DETAILS ON THIS SHEET. THESE FEATURES SHALL BE SHOWN ON THE SUBSURFACE EFFLUENT DISPOSAL SYSTEM PLAN PREPARED FOR EACH LOT PRIOR TO ISSUANCE OF A BUILDING PERMIT.

TYPICAL RAIN GARDEN PLANTINGS - HOUSE LOTS

NOT TO SCALE

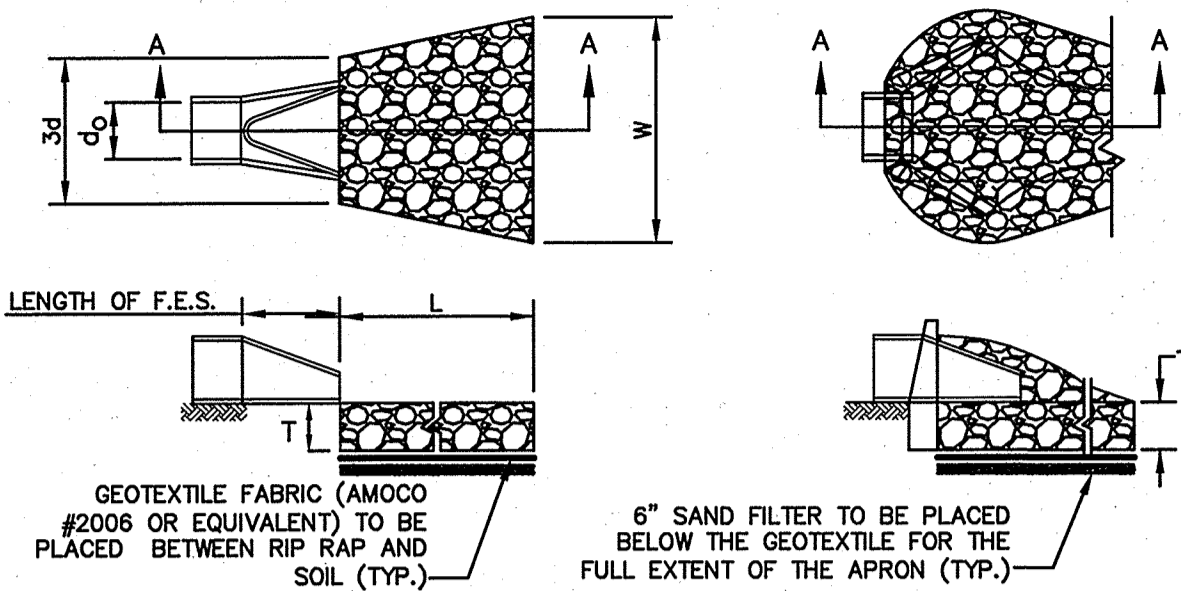


NOTES:

- TEMPORARY CULVERT INLET PROTECTION CHECK DAMS SHALL BE CONSTRUCTED OF 2-3" STONE OVER WOVEN GEOTEXTILE FABRIC.
- INLET PROTECTION MEASURES SHALL BE INSTALLED AT THE OPENINGS OF ALL EXISTING AND PROPOSED CULVERTS LOCATED BELOW (DOWNSTREAM) FROM AND WITHIN 100' OF THE PROJECT SITE.
- SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURE WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE STRUCTURE.
- STRUCTURES SHALL BE REMOVED WHEN THE SITE IS STABILIZED WITH VEGETATION AND THE CHANNEL SHALL BE SMOOTHED AND REVEGETATED.

TEMPORARY CULVERT INLET PROTECTION CHECK DAM

NOT TO SCALE



SECTION A-A

PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

SECTION A-A

PIPE OUTLET TO WELL-DEFINED CHANNEL

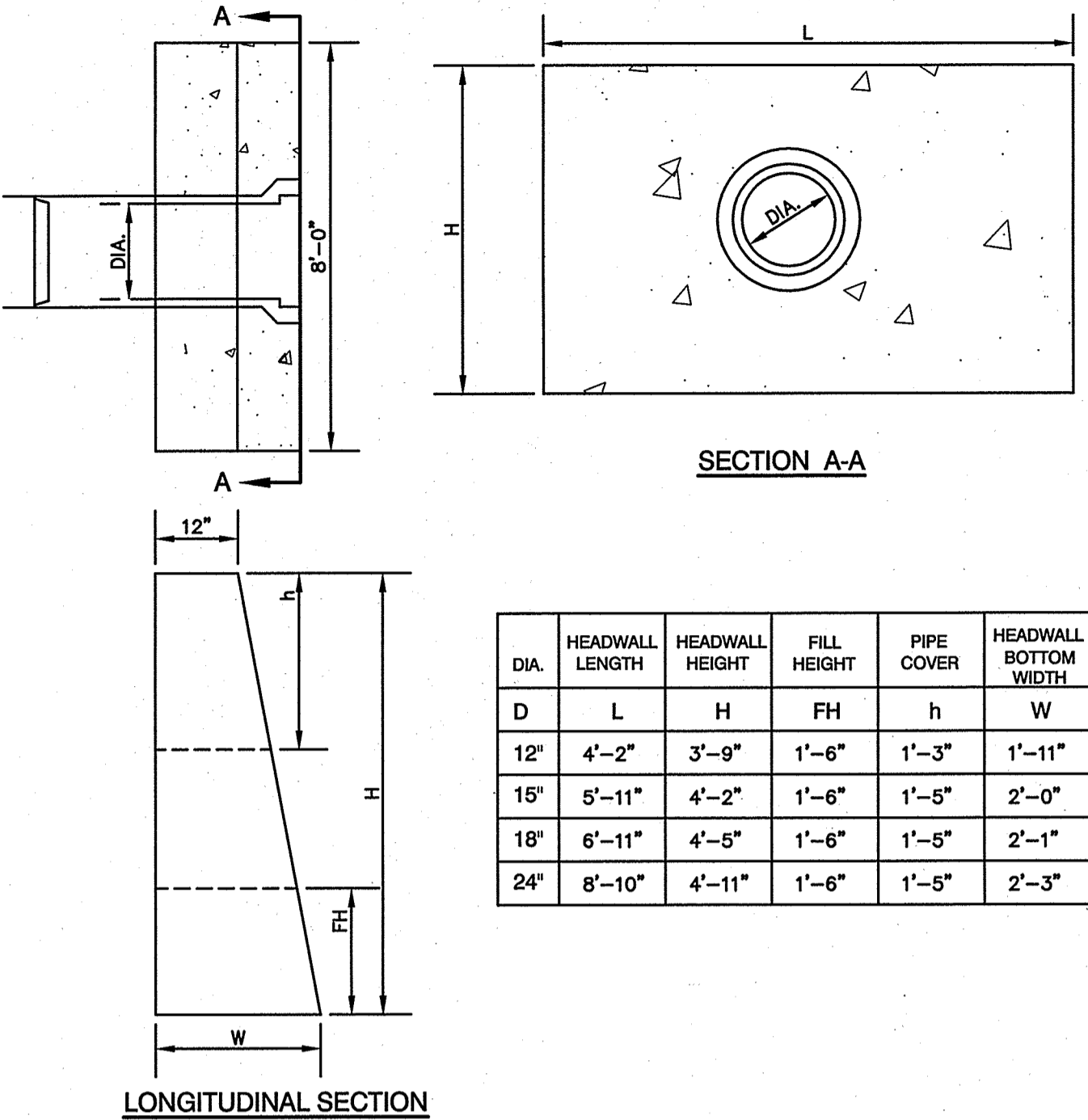
TABLE 7-24--RECOMMENDED RIP RAP GRADATION RANGES		
THICKNESS OF RIP RAP = 1.0 FEET		
d50 SIZE=	0.5 FEET	6 INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM TO	
100%	9	12
85%	8	11
50%	6	9
15%	2	3

NOTES:

- THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
- THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP. 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.
- 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.
- OUTLETS TO A DEFINED CHANNEL SHALL HAVE 2:1 OR FLATTER SIDE SLOPES AND SHOULD BEGIN AT THE TOP OF THE CULVERT AND TAPER DOWN TO THE CHANNEL BOTTOM THROUGH THE LENGTH OF THE APRON.
- MAINTENANCE: 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.

RIP RAP OUTLET PROTECTION APRON

NOT TO SCALE

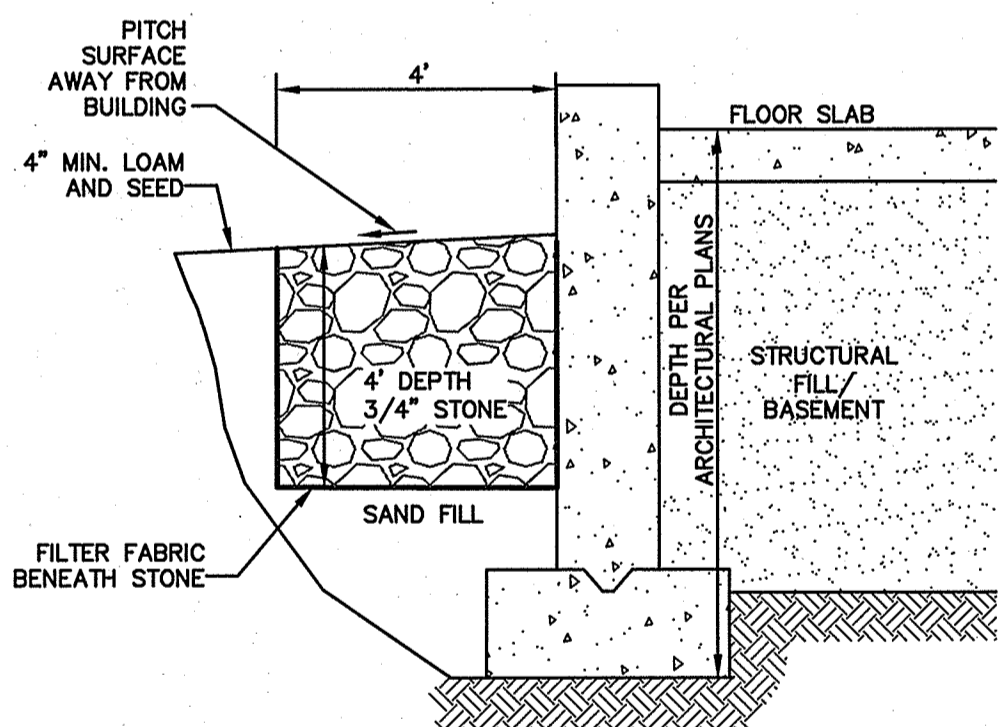


NOTES:

- ALL DIMENSIONS GIVEN IN FEET & INCHES.
- PROVIDE BELL END AT INLET HEADWALL, AND SPIGOT END AT OUTLET END HEADWALL.
- CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS. CEMENT TO BE TYPE III PER ASTM C-150. REINFORCING TO MEET OR EXCEED ASTM A-615 GRADE 60 DEFORMED BARS.
- 1" THREADED INSERTS PROVIDED FOR FINAL ATTACHMENT IN FIELD BY OTHERS.

PRECAST CONCRETE HEADWALL

NOT TO SCALE

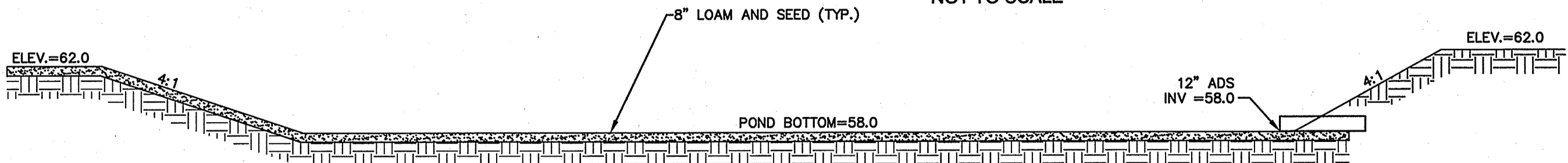


NOTES:

- EACH NEW LOT SHALL HAVE A STONE DRIP EDGE AROUND EACH HOUSE, AND A RAIN GARDEN AT DRIVEWAY LOW POINT. SEE THIS DETAIL. THESE FEATURES SHALL BE SHOWN ON THE SUBSURFACE EFFLUENT DISPOSAL SYSTEM PLAN PREPARED FOR EACH LOT PRIOR TO ISSUANCE OF A BUILDING PERMIT.

STONE DRIP EDGE DETAIL - HOUSE LOTS

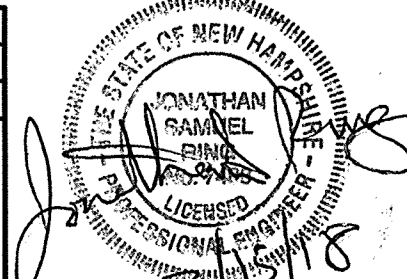
NOT TO SCALE



DETENTION POND SYSTEM SECTION

NOT TO SCALE

Design: JSR	Draft: PLB	Date: 6/26/13
Checked: JSR	Scale: AS NOTED	Project No.: 13070.1
Drawing Name: 13070-PLAN.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
6	2/14/18	REVISED PER TOWN COMMENTS	PLB
5	12/20/17	REVISED PER PLANNING BOARD	PLB
4	11/16/17	REVISED PER PLANNING BOARD	LAZ
3	10/5/17	REVISED PER PLANNING BOARD	PLB
2	8/16/17	REVISED PER PLANNING BOARD	LAZ

J/B Jones & Beach Engineers, Inc.

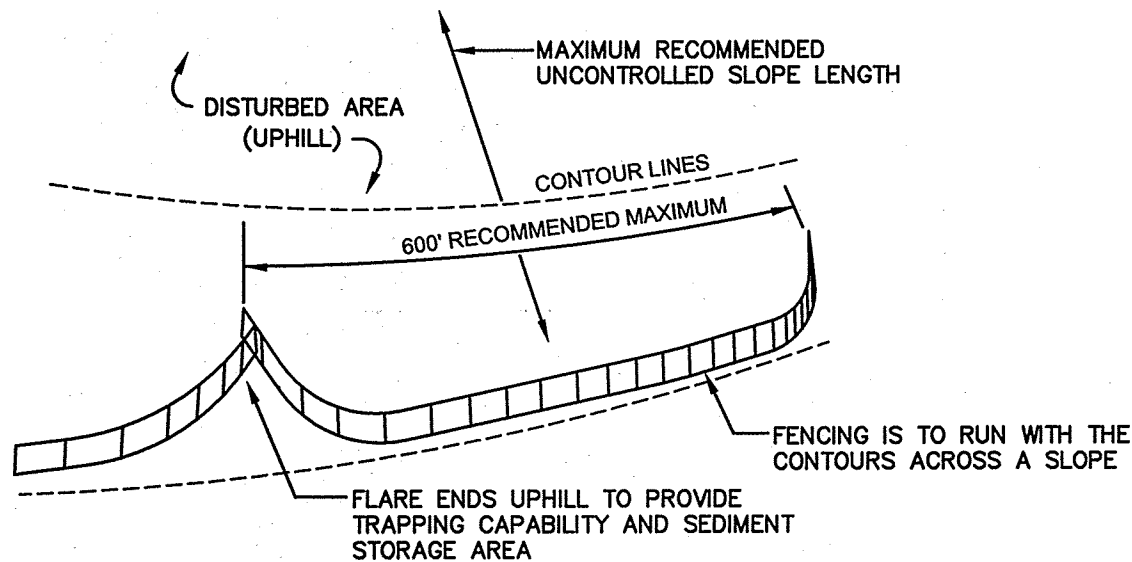
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885

Civil Engineering Services

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

Plan Name:	DETAIL SHEET
Project:	SULLIVAN SUBDIVISION 8 WHITTAKER DRIVE, STRATHAM, NH 03885
Owner of Record:	ROBIN SULLIVAN 8 WHITTAKER DRIVE, STRATHAM, NH 03885

DRAWING No.	D2
SHEET 7 OF 8	JBE PROJECT NO. 13070.1




CONSTRUCTION SPECIFICATIONS:

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 REVEGETATED.

MAINTENANCE:

- SILT FENCE**

NOT TO SCALE

A circular professional engineer seal for the State of New Hampshire. The outer ring contains the text "STATE OF NEW HAMPSHIRE" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom. The inner circle contains the name "JONATHAN SAMUEL DANIEL" and the number "118118". The seal is stamped over a signature and the handwritten number "118118".

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.

85 Portsmouth Ave. *Civil Engineering Services* 603-772-4746
 PO Box 219 FAX: 603-772-0227
 Stratham, NH 03885 E-MAIL: JBE@JONESANDBEACH.COM

SEEDING RATES



ROCKINGHAM COUNTY CONSERVATION DISTRICT

110 North Road, Brentwood, NH 03833-6614

Tel: 603-679-2790 • Fax: 603-679-2860

www.rockinghamccd.org

29 January 2018

Tavis Austin, Town Planner
Town of Stratham
10 Bunker Hill Avenue
Stratham, NH 03885

RE: Sullivan Subdivision
Whittaker Drive
Tax map/lot: 19/68
RCCD #ST19-68-L18

Dear Mr. Austin;

At the request of the Planning Board, RCCD staff conducted a review of the wetland delineation submitted as part of this subdivision application. The wetland/upland boundaries were flagged by Chris Albert, Certified Wetland Scientist, of Jones and Beach Engineers. On this date Mike Cuomo of RCCD, Mr. Albert, and Luke Hurley of Gove Environmental Services met at the site to conduct a field review. There was patchy, thin snow on the ground when this work was done.

A plan was previously submitted to the Planning Board dated 1 March 1995 prepared by Durgin, Verra, and Associates which showed wetland soils that were more extensive than shown on the Jones and Beach Engineers plan. Further, a project abutter submitted a letter from West Environmental raising concerns about the accuracy of the wetland delineation.


RCCD staff examined the areas where a discrepancy exists between the 1995 wetland soil boundaries and the current wetland delineation along the easterly property line. With one exception described below, the current wetland delineation prepared by Mr. Albert is accurate.

In one location, a replacement flag 'C7' was hung upslope and to the north of Mr. Albert's flag C7. (The new flag C7 is 32 feet from the old flag C7 and 54 feet from flag C6.)

Speculating on the causes for the significantly different opinions on the wetland boundaries, please note that the 1995 plan used poorly drained soil criteria which are now substantially different. In some locations the work on the 1995 plan was simply wrong.

This site also has extensive areas which are dominated by vegetation *more likely* to grow in wetlands than uplands, but here are growing on non-wetland soils. These areas look like wetlands at first glance, but do not meet the definition of a wetland upon close inspection. This is due in part to historical manipulation of the site by human activity.

Sincerely,

A handwritten signature in black ink that reads "Michael Cuomo". The signature is written in a cursive style with a large, stylized "M" and "C".

Michael Cuomo
NH Certified Soil Scientist #6
NH Certified Wetland Scientist #4
NH Designer #788

A handwritten signature in black ink that reads "L. Lord". The signature is written in a cursive style with a large, stylized "L" and "Lord".

Leonard A. Lord
District Manager

Copy to: Mark Morong, CEO

CIVILWORKS NEW ENGLAND

181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: (603) 750.4266 FAX: (603) 749.7348

February 5, 2018

Stratham Planning Board
10 Bunker Hill Avenue
Stratham, NH 03885

Attn: Tavis Austin, Town Planner
(via email): TAustin@strathamNH.gov

Re: Subdivision Plan Review – Sullivan
Tax Map 19, Lot No. 68
112 High Street, Stratham, NH
Our Reference No. 1768

Dear Mr. Austin:

At your request, we have reviewed revised subdivision plans of the proposed Sullivan subdivision submitted by Jones & Beach Engineers, Inc. (JBE) in support of their application for Planning Board approval under subdivision review. The titles of the submitted plan sheets are listed below and are dated as noted:

PLAN NO.	TITLE	DATE	REV.
CS	Cover Sheet	12-20-17	5
A1	Subdivision Plan	12-20-17	5
C1	Existing Conditions Plan	12-20-17	5
C2	Grading and Drainage Plan	12-20-17	5
P1	Plan and Profile	12-20-17	5
D1	Detail Sheet	12-20-17	5
D2	Detail Sheet	12-20-17	5
E1	Erosion and Sediment Control Details	12-20-17	5

All plan sheets have been prepared by JBE. Also submitted were:

1. "DRAINAGE ANALYSIS SEDIMENT AND EROSION CONTROL PLAN", dated: June 29, 2017 and revised: December 20, 2017; as prepared by JBE.
2. Correspondence from JBE to the Stratham Planning Board dated: December 20, 2017.
3. "SITE PLAN REVIEW/SUBDIVISION WAIVER REQUEST FORMS" (5); dated: December 20, 2017.

The scope of our subdivision plan review includes:

1. Check for conformance with the Stratham Zoning Ordinance
2. Check for conformance with the Stratham Subdivision Regulations
3. Subdivision engineering and design review

This is a follow-up review of revised project plans relative to our October 16, 2017 report and correspondence regarding same.

ZONING ORDINANCE CONFORMANCE REVIEW:

All appears to be in order. As such, we have no comments to share at this time.

SUBDIVISION REGULATIONS CONFORMANCE REVIEW:

1. Section 3.3.2 states the scale of the "Subdivision Plan" should be no greater than 1"=50'. The submitted "subdivision plan" is at a scale of 1"=60'. A WAIVER from the Regulations has been requested by JBE.
2. The overall length of the proposed cul-de-sac is over 800'. The maximum length allowed in Section 4.4.3,a.,ii. Is 800'. A WAIVER from the Regulations has been requested to allow for this.
3. A WAIVER request has been submitted to allow for a 22' wide roadway (paved) width and a 20' wide cul-de-sac turnaround (paved) width where 24' is required.
4. A WAIVER request has been submitted to allow relief from the requirements of Section 4.4.3, 2.i. as same apply to the proposed dead-end street.
5. A WAIVER request has been submitted to allow 3:1 side slopes associated with the proposed roadway typical cross section.

SUBDIVISION ENGINEERING AND DESIGN REVIEW:

1. NHDES Subdivision Approval will be required for this subdivision proposal.
2. It would seem appropriate to call for the removal of the existing 15" culvert at STA 0+30.
3. The stormwater drainage design appears to be satisfactory. We have no concern at all with the negligible runoff increase at Analysis Point #3.
4. In general, we have no objections to the submitted WAIVER requests. The Town Road Agent should be consulted for his input on the WAIVER requests. Additionally, the Planning Board should give due consideration of the requests as same relate to municipal policy and history relative to these matters.
5. The proposed 5' wide "public trail way" seems rather narrow in terms of any future need relative to emergency response. A 10' wide "way" could easily accommodate a "Gator" or other similar off road vehicle operated by first responders.
6. There is no outlet protection called for at the 12" RCP (inv. 80.0) at STA 0-50 RT or at the 12" RCP (inv. 79.7) at STA 8+65 LT.

RECOMMENDATIONS:

The Board may wish to have the applicant address the comments contained herein prior to taking any action on the disposition of the plans.

Please feel free to contact me if there are any questions or comments regarding this subdivision review.

Very truly yours,
CIVILWORKS, INC.



Paul J. Connolly, P.E., P.L.S.

PJC/lrd

cc: Jonathan Ring, P.E. (JBE), via email: jring@Jonesandbeach.com

JONES & BEACH ENGINEERS INC.

85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885
603.772.4746 - JonesandBeach.com

February 15, 2018

Town of Stratham Planning Board
Attn. Tavis Austin, Town Planner
10 Bunker Hill Avenue
Stratham, NH 03885

**RE: Engineer Response Letter 3
Sullivan Subdivision
8 Whittaker Drive, Stratham, NH
JBE Project No. 13070.1**

Dear Mr. Austin,

We are in receipt of the Rockingham County Conservation District Wetland Review Letter dated January 29, 2018. The one wetland flag (C7) relocation has been done on the plans (Lot 2).

We have also received the Civilworks Engineer Review Letter dated February 5, 2018. We offer the following response:

Subdivision Engineering and Design Review:

1. *NHDES Subdivision Approval will be required for this subdivision proposal.*
RESPONSE: Agreed.

2. *It would seem appropriate to call for the removal of the existing 15" culvert at STA 0+30.*
RESPONSE: The existing 15" CMP will be removed.

3. *The stormwater drainage design appears to be satisfactory. We have no concern at all with the negligible runoff increase at Analysis Point #3.*
RESPONSE: Agreed.

4. *In general, we have no objections to the submitted Waiver requests. The Town Road Agent should be consulted for his input on the Waiver requests. Additionally, the Planning Board should give due consideration of the requests as same relate to municipal policy and history to these matters.*
RESPONSE: Agreed.

5. *The proposed 5' wide "public trail way" seems rather narrow in terms of any future need relative to emergency response. A 10' wide "way" could easily accommodate a "Gator" or other similar off road vehicle operated by first responders.*

RESPONSE: The "public trail way" has been increased to 10 foot wide.

6. *There is no outlet protection called for at the 12" RCP (inv. 80.0) at STA 0-50 RT or at the 12" RCP (inv. 79.7) at STA 8+65 LT.*

RESPONSE: Rip rap stone has been specified at the two locations referenced.

We look forward to a discussion of these items, and requested Waivers, at the Planning Board Public Hearing on March 7, 2018. Please let me know if you have any questions. Thank you very much for your time.

Very truly yours,

JONES & BEACH ENGINEERS, INC.



Jonathan S. Ring, P.E.
President

cc: Brian Sullivan (via email)

Kevin Baum, HPGR Lawyers (via email)



Mon 2/19/2018 1:37 PM

Jonathan Ring <jring@Jonesandbeach.com>

JBE 13070.1 - Stratham, 8 Whittaker Drive

To Paul Connolly|

Cc Tavis Austin; Denise Lemire; b.sull; Kevin Baum; Samantha Ziemicki

Paul, thank you very much for your email stating -- clean engineering review for these minor revisions. Cheers,

Jon Ring

From: Paul Connolly [<mailto:pconnolly@civilworksne.com>]

Sent: Sunday, February 18, 2018 7:33 PM

To: TAustin@strathamNH.gov

Cc: Jonathan Ring

Subject: Fwd: JBE 13070.1 - Stratham, 8 Whittaker Drive

Tavis,

I'm fine with the JBE responses and plan revisions. Please consider the short email as an indicator of our satisfaction with the final plan changes.

Paul C.

Sent from my iPhone

Begin forwarded message:

From: Stefanie Michaud <smichaud@jonesandbeach.com>

Date: February 15, 2018 at 2:32:54 PM EST

To: Robin <rdbsullivan@comcast.net>, Brian Sullivan <b.sull@comcast.net>, Kevin Baum <KBaum@hpgrlaw.com>, "Tavis Austin (TAustin@strathamnh.gov)" <TAustin@strathamnh.gov>, Denise Lemire <DLe mire@strathamnh.gov>, "Pconnolly@civilworksne.com" <Pconnolly@civilworksne.com>, "Mike Cuomo (rccd@rockinghamccd.org)" <rccd@rockinghamccd.org>

Cc: Jonathan Ring <jring@Jonesandbeach.com>, Patrick Bogle <pbogle@jonesandbeach.com>

Subject: JBE 13070.1 - Stratham, 8 Whittaker Drive

Good Afternoon,

Please find attached the documents that we are submitting to the Planning Board today for the above referenced property. Please feel free to contact our office if you have any questions or concerns. Thank you.

Stefanie Michaud

Jones&Beach Engineers, Inc.

85 Portsmouth Avenue

PO Box 219

Stratham, NH 03885

(603) 777-4746 (ext. #17)