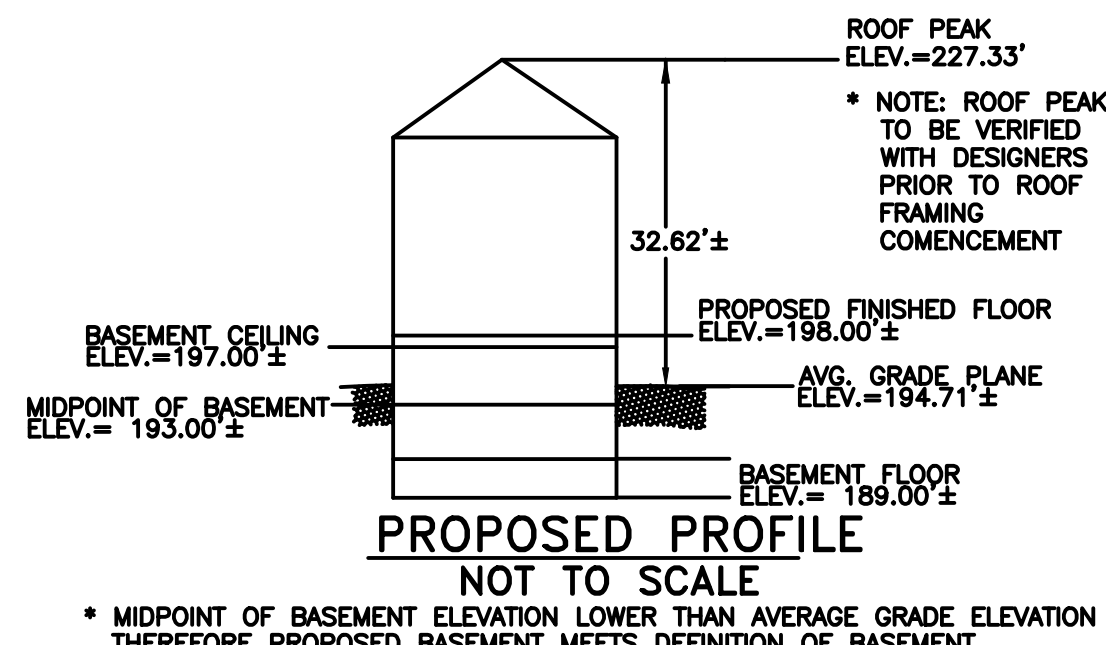


NOTES:

1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY PETER NOLAN & ASSOCIATES LLC AS OF 10-21-2019.
2. DEED REFERENCE BOOK 55889 PAGE 137, PLAN REFERENCE 667 OF 1954, PLAN REFERENCE 1392 OF 1953, MIDDLESEX SOUTH REGISTRY OF DEEDS.
3. THIS PLAN IS NOT INTENDED TO BE RECORDED.
4. I CERTIFY THAT THE DWELLING SHOWN IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X, ON FLOOD HAZARD BOUNDARY MAP NUMBER 25017C0558E, PANEL NUMBER 0558E, COMMUNITY NUMBER: 250208, DATED 06/04/2010.
5. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT USES OF THE LAND; HOWEVER THIS NOT CONSTITUTE A GUARANTEE THAN NO SUCH EASEMENTS EXIST.
6. FIRST FLOOR ELEVATIONS ARE TAKEN AT THRESHOLD.
7. NO RESPONSIBILITY IS TAKEN FOR ZONING TABLE AS PETER NOLAN & ASSOCIATES LLC ARE NOT ZONING EXPERTS. TABLE IS TAKEN FROM TABLE PROVIDED BY LOCAL ZONING ORDINANCE. CLIENT AND/OR ARCHITECT TO VERIFY THE ACCURACY OF ZONING ANALYSIS.
8. ZONING DISTRICT = MR1, LOT CREATED BEFORE 1953

LEGEND

- UTILITY POLE
- WATER GATE
- HYDRANT
- GAS GATE
- SEWER MANHOLE
- CLEANOUT
- DRAIN MANHOLE
- CATCH BASIN
- TREE
- LIGHT POLE
- SIGN
- TO BE REMOVED
- TO BE ABANDONED
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- FG FINISHED GRADE
- SG SPOT GRADE
- TH# DEEP TEST HOLE
- PT# PERCOLATION TEST
- 71.4 X SPOT ELEVATION
- 71 PROPOSED CONTOUR
- 71 EXISTING CONTOUR
- D DRAIN LINE
- W WATER LINE
- SS SEWER LINE
- G GAS LINE
- X FENCE
- PROPOSED WALL



ROOF=2,885.5, DRIVEWAY=1,794.7, DECK/LANDINGS/STEPS/WALKWAYS=295.7
TOTAL PROPOSED IMPERVIOUS AREA: 4,975.9 SF

ROOF=1,214, DRIVEWAY=1,127.6, WALKWAYS & STEPS=515.1, PATIO=185.8, SHED=30.2
TOTAL EXISTING IMPERVIOUS AREA: 3,072.7 SF

NOTE: ANY TREE BEING REMOVED SHALL COMPLY WITH CITY OF NEWTON TREE ORDINANCE

NOTE: SURFACE WATER TO BE DIVERTED FROM ALL SIDES OF FOUNDATION WALL

NOTE: CONTRACTOR TO ENSURE SEWER LINE IS PITCHED AT AN EQUAL SLOPE OF BETWEEN 2% AND 10% FROM HOUSE TO MAIN CONNECTION

NOTE: CONTRACTOR TO CONFIRM LOCATION OF DOWN SPOUTS PRIOR TO CARRYING OUT ANY DRAINAGE WORKS

NOTE: SEWER AND WATER MAIN LINE LOCATION TO BE CONFIRMED BY CONTRACTOR

NOTE: ANY PROPOSED RETAINING WALL IN SETBACK SHALL NOT EXCEED 4 FEET IN HEIGHT IN REFERENCE TO EXISTING GRADES.

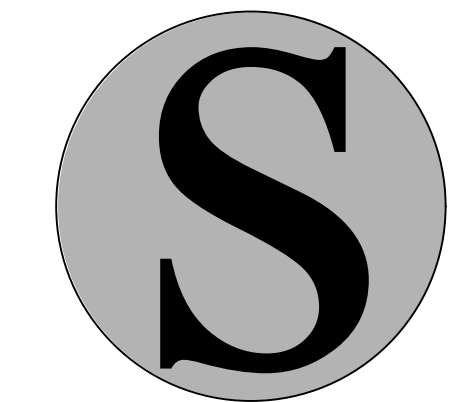
NOTE: CONTRACTOR TO ENSURE ALL RAIN WATER FROM SPLASH BLOCKS (IF ANY) IS DIVERTED AWAY FROM BUILDING FOUNDATION AND DIVERTED AWAY FROM NEIGHBORING PROPERTIES

NOTE: SPRUHAN ENGINEERING, P.C., ACCEPTS NO LIABILITY FOR GROUND WATER OR OTHER SURFACE WATER IN BASEMENT

NOTE: DRAINAGE SYSTEM IS DESIGNED FOR 100 YEAR STORM EVENT FOR ALL RUNOFF FROM PROPOSED IMPERVIOUS AREAS SHOWN. CONTRACTOR SHALL NOT CONNECT SUMP PUMP TO THE SYSTEM WITHOUT APPROVAL FROM ENGINEERING DEPARTMENT.

ZONING LEGEND		
ZONING DISTRICT: MR1 (LOT CREATED BEFORE 12/07/1953)		
	REQUIRED	PROPOSED
MIN. AREA	7,000 S.F	10,182± S.F.
MIN. YARD FRONT	*AVG ALIGN 26.08'	29.2'
SIDE	*10'	10.3'
	*15'	15.7'
MAX. LOT COVERAGE	30%	28.3%
MIN. OPEN SPACE	50%	50.7%
MIN. FRONTAGE	70'	90.73'
MAX. BLDG. HEIGHT	36'	32.62±

* AVERAGE ALIGNMENT (26.56'+25.6')/2=26.08'
* FAR BONUS TAKEN



Spruhan Engineering, P.C.

80 JEWETT ST., (SUITE 2)
NEWTON, MA 02458

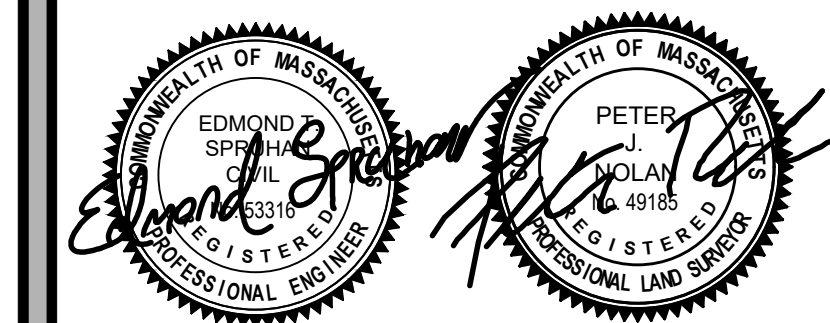
Tel: 617-816-0722
Email: edmond@spruhaneng.com

21 LOUISE ROAD,
NEWTON,
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE
SS	REVISED PER CITY OF NEWTON REQUIREMENTS	5/26/20
HF	REVISED PER CLIENT REQUEST PROPOSED SEWER LINE	9/21/20



SCALE 1"=10'

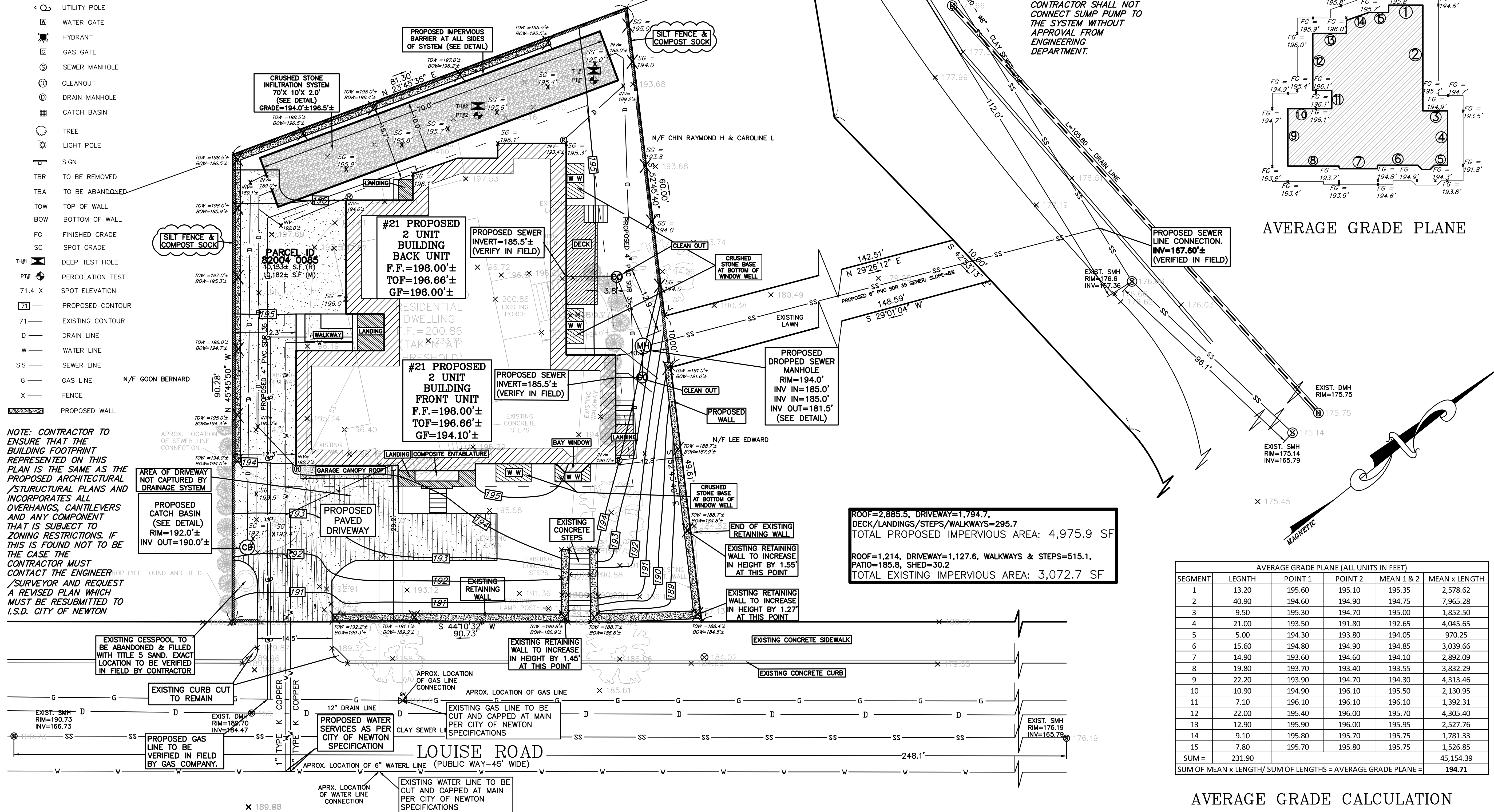
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SHEET:

1 OF 4

DATE: 09/21/20
DRAWN BY: S.S.
CHECKED BY: E.S.
APPROVED BY: E.S.

PROPOSED CIVIL PLAN



AVERAGE GRADE PLANE

ROOF=2,885.5, DRIVEWAY=1,794.7, DECK/LANDINGS/STEPS/WALKWAYS=295.7
TOTAL PROPOSED IMPERVIOUS AREA: 4,975.9 SF

ROOF=1,214, DRIVEWAY=1,127.6, WALKWAYS & STEPS=515.1, PATIO=185.8, SHED=30.2
TOTAL EXISTING IMPERVIOUS AREA: 3,072.7 SF

AVERAGE GRADE PLANE (ALL UNITS IN FEET)					
SEGMENT	LEGNTH	POINT 1	POINT 2	MEAN 1 & 2	MEAN x LENGTH
1	13.20	195.60	195.10	195.35	2,578.62
2	40.90	194.60	194.90	194.75	7,965.28
3	9.50	195.30	194.70	195.00	1,852.50
4	21.00	193.50	191.80	192.65	4,045.65
5	5.00	194.30	193.80	194.05	970.25
6	15.60	194.80	194.90	194.85	3,039.66
7	14.90	193.60	194.60	194.10	2,892.09
8	19.80	193.70	193.40	193.55	3,832.29
9	22.20	193.90	194.70	194.30	4,313.46
10	10.90	194.90	196.10	195.50	2,130.95
11	7.10	196.10	196.10	196.10	1,392.31
12	22.00	195.40	196.00	195.70	4,305.40
13	12.90	195.90	196.00	195.95	2,527.76
14	9.10	195.80	195.70	195.75	1,781.33
15	7.80	195.70	195.80	195.75	1,526.85
SUM=	231.90				45,154.39
SUM OF MEAN x LENGTH / SUM OF LENGTHS = AVERAGE GRADE PLANE =					194.71

AVERAGE GRADE CALCULATION