

GENERAL NOTES

- A.) Neither driveway nor parking areas are allowed over septic system unless H-20 components are used and system is vented.
- B.) The designer will not be responsible for the system as designed unless constructed as shown. Any changes must be approved in writing by the designer.
- C.) Contractor shall be responsible for verifying the location of all underground and overhead utilities prior to the commencement of work.
- D.) A copy of this plan was submitted to the Chatham Water Department for their review, on

CONSTRUCTION NOTES

- 1.) All materials and construction shall conform to the State Environmental Code, Title 5, and the requirements of the local Board of Health.
- 2.) Topsoil, subsoil, peat, or other unsuitable or impervious material [15.255 (1)] shall be removed five (5) feet laterally in all directions beyond the outer perimeter of the soil absorption system to the depth of the naturally occurring pervious material(s) and replaced with fill material meeting the specifications of 310 CMR 15.255 (3), [15.255(5)].
- 3.) Septic tank(s), grease trap(s), dosing chamber(s) and distribution box(es) shall be set on a level stable base which has been mechanically compacted. If the component is placed in fill, proper compaction is required to ensure stability and to prevent settling; native ground with a 6 inch stone base is otherwise adequate [15.221(2)].
- 4.) Base aggregate shall consist of 3/4" to 1-1/2" double washed stone free of iron, fines and dust and shall be installed from below the crown of the distribution line to the bottom of the soil absorption system [15.247 (1)]. Base aggregate shall be covered with a 2" layer of 1/8" to 1/2" double washed stone free of iron, fines and dust [15.247 (2)].
- 5.) From the date of installation of the soil absorption system until receipt of a Certificate of Compliance, the perimeter of the soil absorption system shall be staked and flagged to prevent the use of such area for all activities which might damage the system [15.246(2)].
- 6.) The Board of Health shall require inspection of all construction by an agent of the Board of Health and the designer and shall require such persons to certify in writing that all work has been completed in accordance with the terms of the permit and approved plans. 48 hours advance notice is requested.

SEPTIC TANK NOTES

- 1.) 1,500 Gallon Two Compartment Septic Tank MicroFAST[®] ready (H-10)
- 2.) Septic tank(s) shall be installed on a level stable base that has been mechanically compacted and onto which 6 inches of crushed stone has been placed [15.228(1)].
- 3.) Raise covers of the septic tank with pre-cast concrete or corrugated polyethylene water tight risers to within 6" of finish grade [15.228(2)].

DISTRIBUTION BOX NOTES

- 1.) Outlet pipes from D-box shall remain level for at least 2 feet before pitching to soil absorption system [15.232(3)(c)]. Water test D-box to assure even distribution [15.232(3)(b)].
- 2.) Raise covers of the D-Box with pre-cast concrete water tight risers over inlet and outlet tees to within 6" of finish grade.

86 Miles Street, Harwich Port
05-05-2014 - AM; Partly Sunny
Excavator - TWN
Soil evaluator Scott Arnold; witness John Chatham

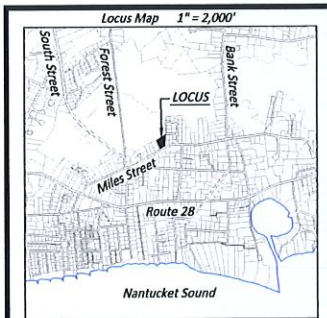
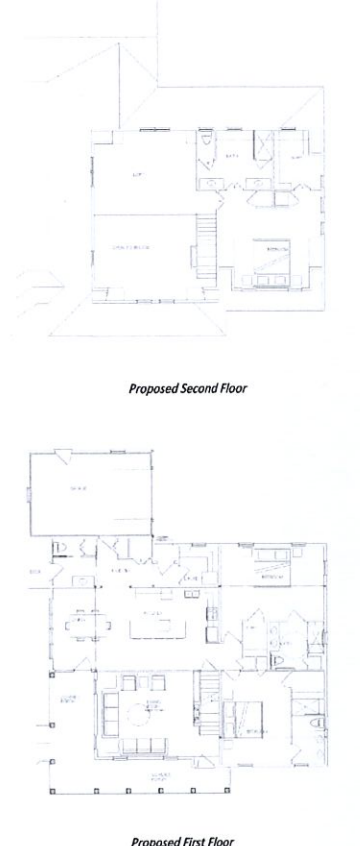
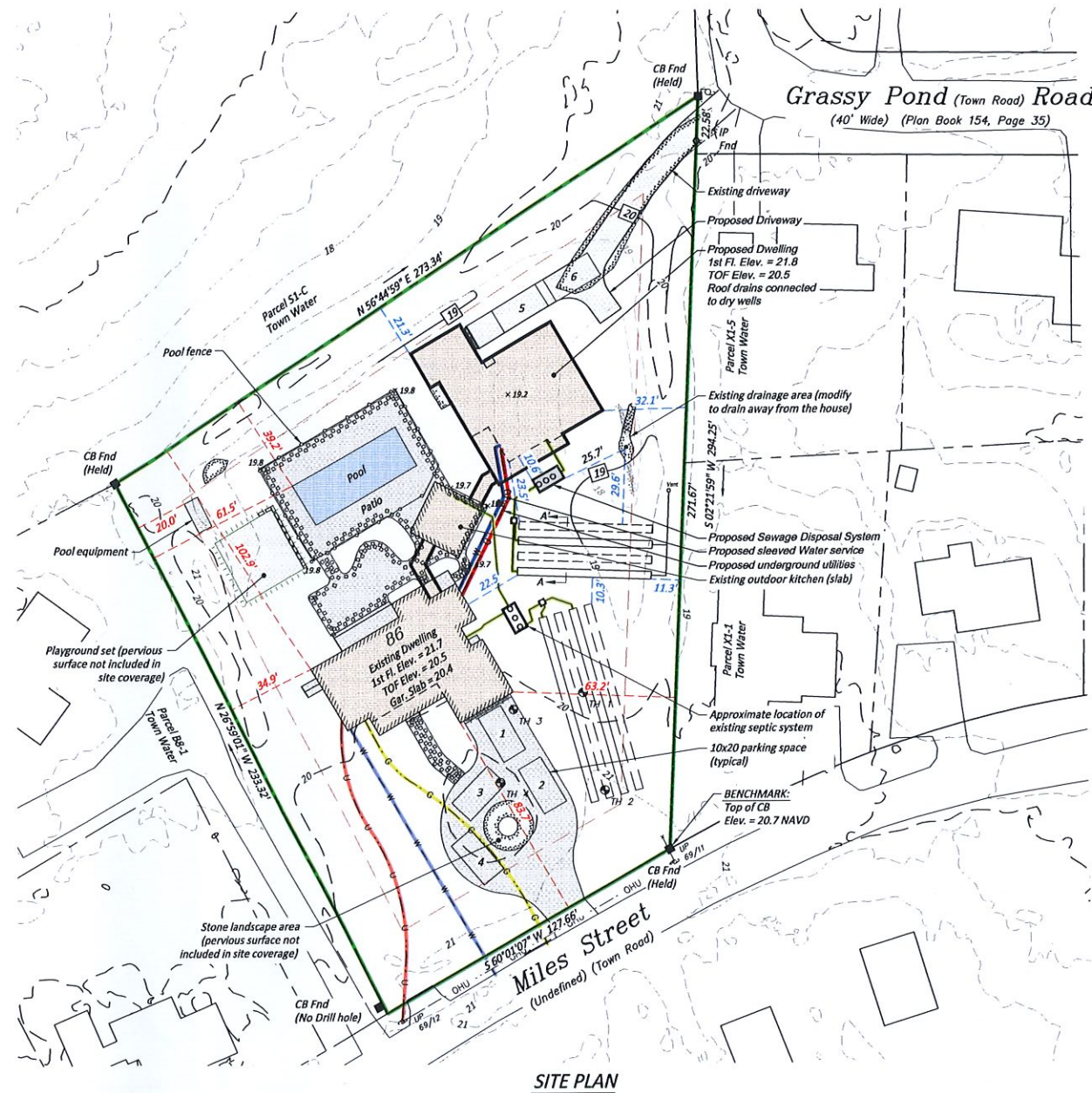
Depth	Elevation	Horizon	Soil Matrix	Soil Texture	Soil Structure
Test Hole #1	18.8				
0 to 8	18.1	A	7.5YR4/2	Loamy Sand	Very friable
8 to 28	16.5	B	7.5YR5/6	Loamy Sand	Very friable
28 to 120	8.8	C	10YR5/6	Medium Sand	Loose
	53			Percolation Test, Rate <2 min./inch	
Test Hole #2	19.7				
0 to 10	18.9	A	7.5YR3/1	Loamy Sand	
10 to 27	17.5	B	7.5YR4/6	Loamy Sand	
27 to 132	8.7	C	10YR5/6	Coarse Sand	
Test Hole #3	18.9				
0 to 11	18.0	A	7.5YR3/2	Loamy Sand	Very friable
11 to 23	17.0	B	7.5YR4/6	Loamy Sand	Very friable
23 to 132	7.9	C	10YR4/6	Medium Sand	Loose
Test Hole #4	19.4				
0 to 8	18.7	A	7.5YR3/2	Loamy Sand	Very friable
8 to 13	18.3	E	7.5YR6/1	Loamy Sand	Loose
13 to 42	15.9	B	7.5YR4/6	Loamy Sand	Very friable
42 to 120	9.4	C	10YR5/6	Medium Sand	Loose
	62			Percolation Test, Rate <2 min./inch	

SYSTEM DESIGN CALCULATIONS

- 1.) Basis of Design
Number of Bedrooms: 3
Other: (Future Bedrooms) 2
- 2.) Design Daily Flow Sewage Flow: 550 GPD
- 3.) Septic Tank Capacity
Required: 1500 Gal.
Provided: 1500 Gal.
- 4.) Soil Absorption System Capacity
Required: 550 GPD
Provided: 556 GPD*
- 5.) A garbage disposal is NOT permitted with this design

* [2 x (2' + 3' + 2') x 52 L.F. + 4 ends x 2' x 3'] x 0.74 GPD/S.F.

Zone	Zoning Compliance Table		
	Existing	Required	Proposed
Lot area	47,565 S.F.± or 1.092 Ac.±	40,000 S.F. 0.918 Ac.	47,565 S.F.± 1.092 Ac.±
Frontage	127.66 Ft.	150 Ft.	127.66 Ft.
Front 1 setback	83.7 Ft.	25 Ft.	83.7 Ft.
Side 1 setback	34.9 Ft.	20 Ft.	34.9 Ft.
Side 2 setback	63.2 Ft.	20 Ft.	32.1 Ft.
Rear setback	39.2 Ft.	20 Ft.	21.3 Ft.
Building coverage	3,065 S.F.± or 6.44%	7,135 S.F. 15%	5,885 S.F.± 12.37%
Site coverage	11,010 S.F.± or 23.15%	14,270 S.F. 30%	14,153 S.F.± 29.76%
Building height	27.1 Ft.±	30 Ft.	27.1 Ft.±



SEWAGE DISPOSAL SYSTEM
86 Miles Street, Harwich, Massachusetts
February 1, 2023

OWNER OF RECORD:
Oliver Holmes, LLC
Deed Book 27,785, Page 376

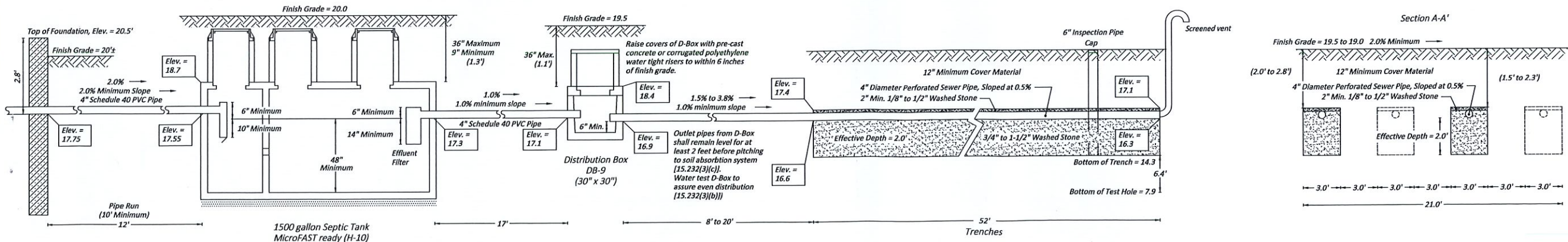
Description of Revision	Date
Added (6) parking spaces	03-03-2023
Reduced footprint of proposed dwelling	10-18-2023

OLIVER HOLMES, LLC
EAST-SOUTHEAST, LLC
www.ese-llc.com * office@ese-llc.com
1038 Main Street, Chatham, MA 02633
(508) 945-3965 * Fax: (508) 945-5885



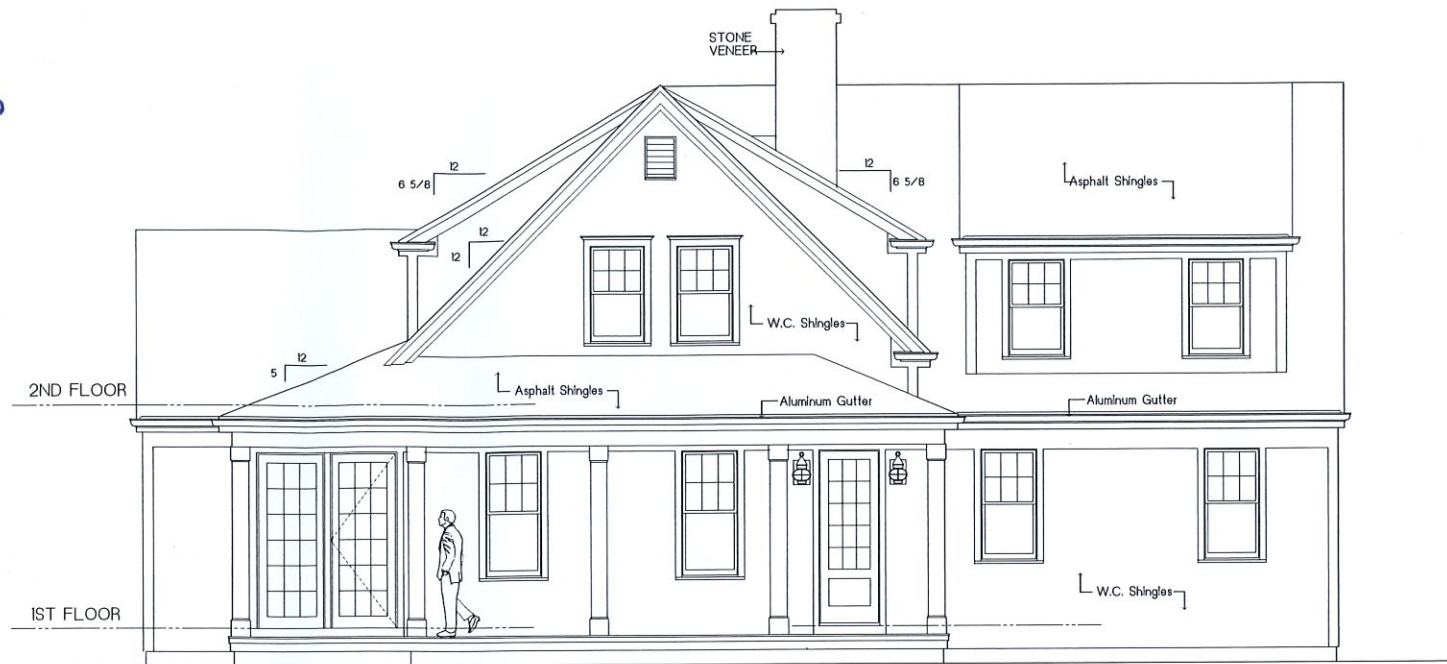
Vertical Datum: NAVD '88
Horizontal Datum: NAD '83 (2011)
Scale: 1" = 30' (U.S. Survey Feet)
H-4163-02.0 Sheet 1 of 1

PROFILE OF SYSTEM
(Not to Scale)

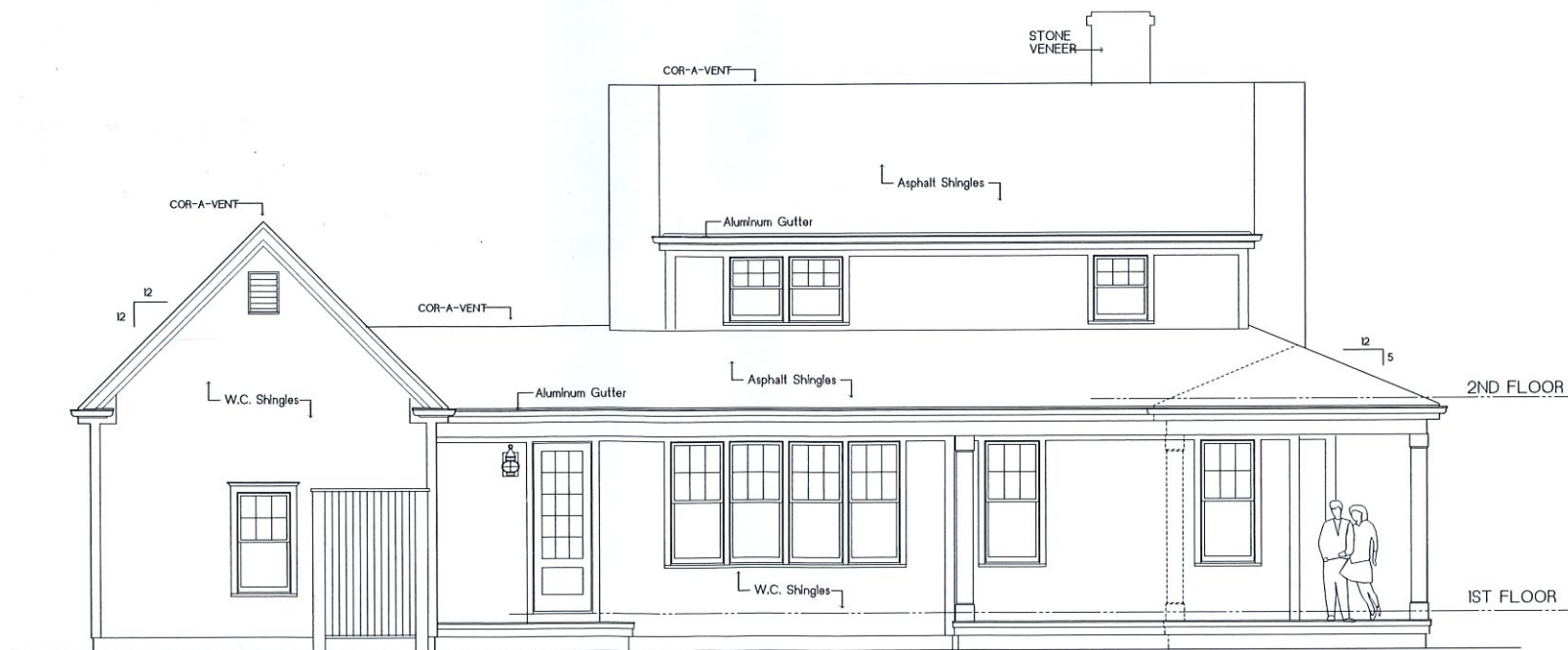


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1 Proposed
FRONT ELEVATION
Scale: 1/4"=1'-0"



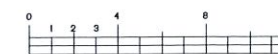
2 Proposed
LEFT ELEVATION
Scale: 1/4"=1'-0"

- Nail Spacing
- Indicates Carbon Detector
- Indicates Smoke Detector
- Indicates Heat Detector
- X/K/J X=Number of King and Jack Studs
2/K/J Unless noted
- APA Portal Wall. Use w/STHD 14 Holdown Strap. See (TT-1000)

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*Refer to "General Nailing Schedule-Table
2, WFCM Wood Frame Construction
Manual
Note: All construction shall be in accordance with American Forest and
Paper Association "Wood Frame Construction Manual for One and Two
Family dwellings (WFCM). Contractor shall be responsible to review all
details to assure proper installation methods.



ZIBRAT & MCCARTHY LLP
63 Crowell Road
Chatham, Mass. 02633
508-945-9424

PROPOSED GARAGE FOR:
OLIVER HOMES LLC
86 MILES ST. HARWICH PORT, MA.



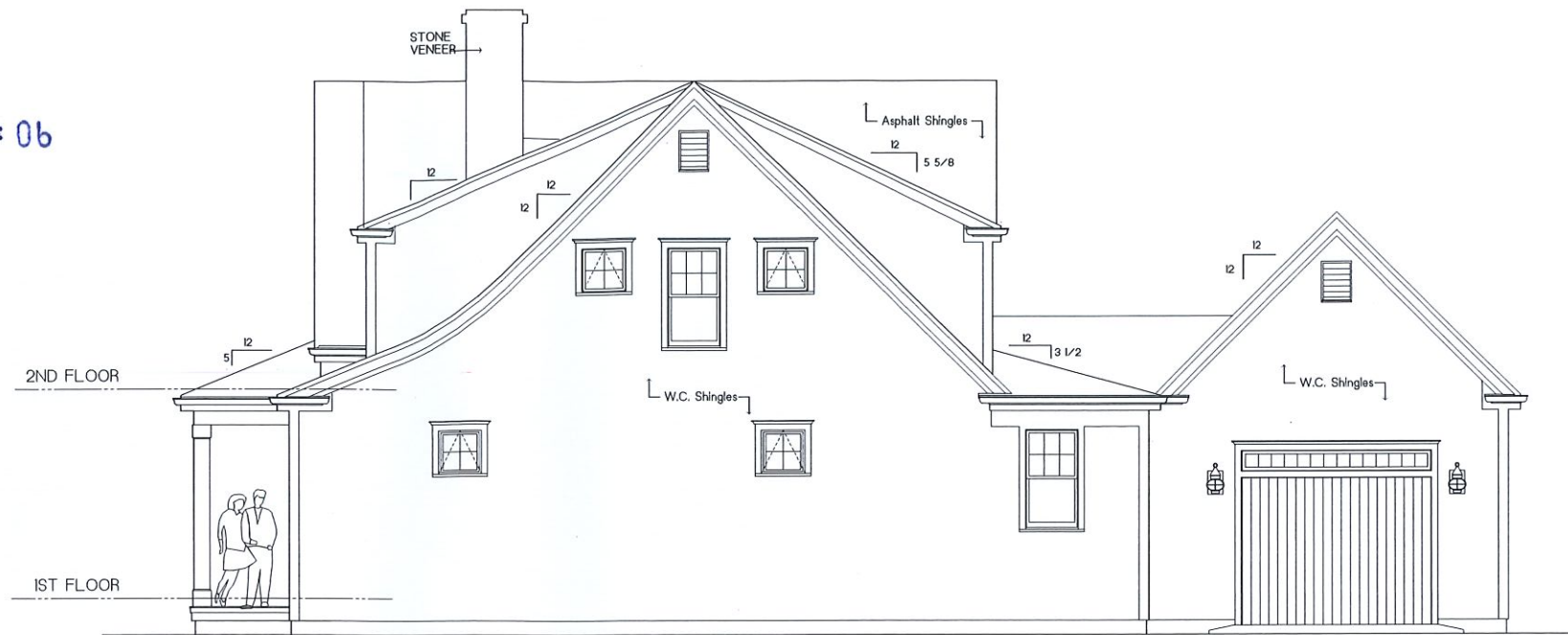
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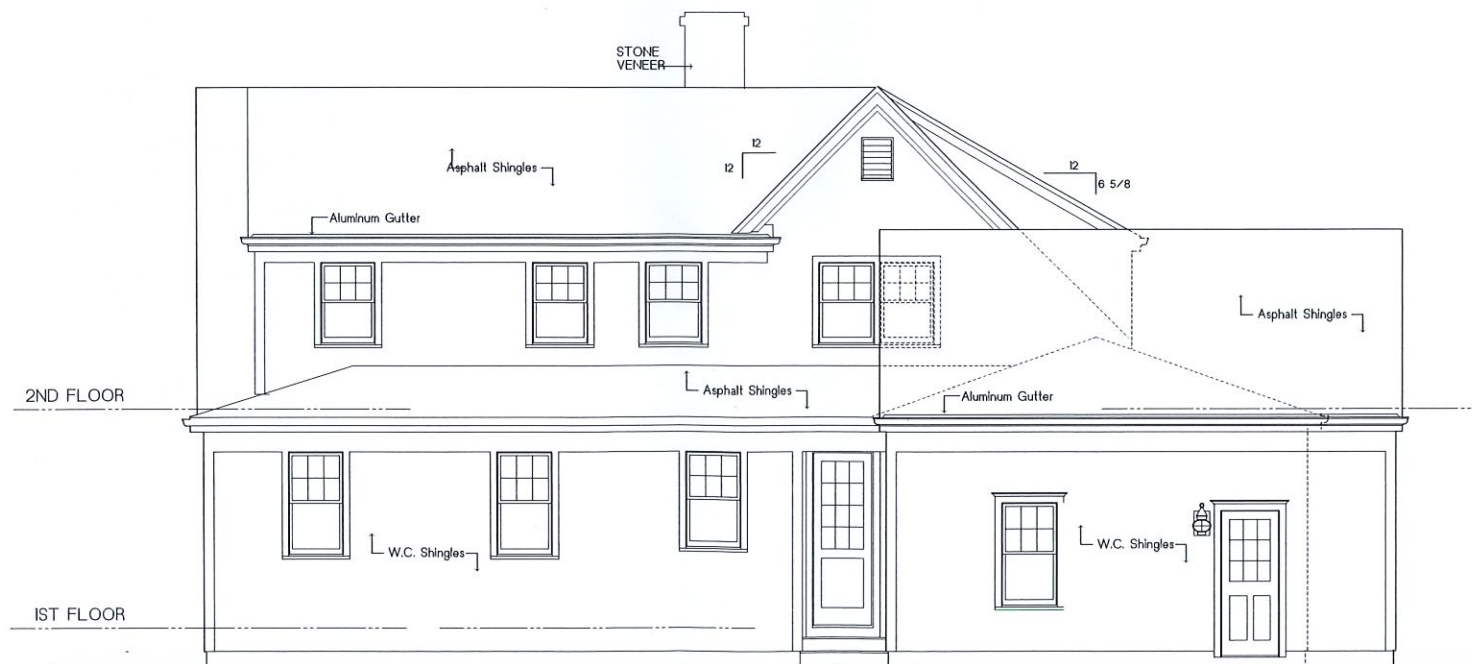
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3 Proposed
RIGHT ELEVATION
Scale: 1/4"=1'-0"



4 Proposed
REAR ELEVATION
Scale: 1/4"=1'-0"

- Nail Spacing
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- Indicates Smoke Detector
- Indicates Heat Detector
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ZMc
designs

Scale

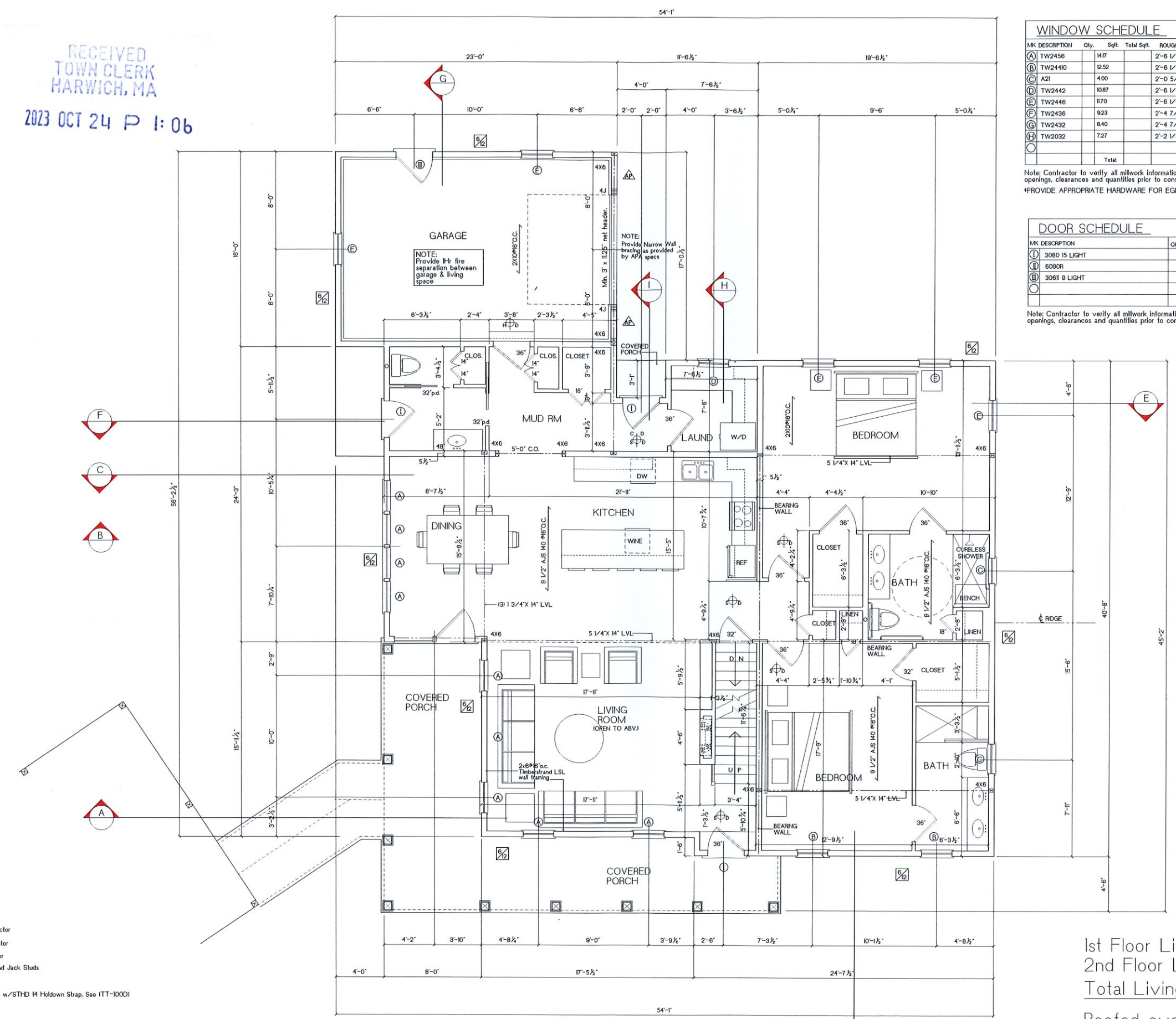
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WINDOW SCHEDULE

MK DESCRIPTION	Qty.	Sqft	Total Sqft	ROUGH OPENING	COMMENTS
(A) TW2456	14/7			2'-6 1/8" X 5'-8 7/8"	ANDERSEN 400 SERIES
(B) TW2440	12/52			2'-6 1/8" X 5'-0 7/8"	ANDERSEN 400 SERIES
(C) A21	4/00			2'-0 5/8" X 2'-0 5/8"	ANDERSEN 400 SERIES
(D) TW2442	10/87			2'-6 1/8" X 4'-4 7/8"	ANDERSEN 400 SERIES
(E) TW2446	1/70			2'-6 1/8" X 4'-8 7/8"	ANDERSEN 400 SERIES
(F) TW2436	9/23			2'-4 7/8" X 3'-8 7/8"	ANDERSEN 400 SERIES
(G) TW2432	8/40			2'-4 7/8" X 3'-4 7/8"	ANDERSEN 400 SERIES
(H) TW2032	7/27			2'-2 1/8" X 3'-4 7/8"	ANDERSEN 400 SERIES
			Total		

Note: Contractor to verify all millwork information including rough openings, clearances and quantities prior to construction.
*PROVIDE APPROPRIATE HARDWARE FOR EGRESS

DOOR SCHEDULE

MK DESCRIPTION	Qty.	Sqft	Total Sqft	ROUGH OPENING	COMMENTS
(I) 3080 15 LIGHT		24.00		36 3/8" X 6 1/2"	THERMA-TRU
(J) 6080R		47.25		6'-0" X 8'-0"	ANDERSEN 400 SERIES
(K) 3081 8 LIGHT		20.75		-----	THERMA-TRU
			Total		

Note: Contractor to verify all millwork information including rough openings, clearances and quantities prior to construction.

- Nail Spacing
- Indicates Carbon Detector
- Indicates Smoke Detector
- Indicates Heat Detector
- XKXJ X=Number of King and Jack Studs
- 2K1J Unless noted
- APA Portal Wall. Use w/STHD H Holdown Strap. See (TT-1000)

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 *Refer to "General Nailing Schedule-Table 2. WFCM Wood Frame Construction Manual"
 Note: All construction shall be in accordance with American Forest and Paper Association "Wood Frame Construction Manual for One and Two Family dwellings (WCFM)". Contractor shall be responsible to review all details to assure proper installation methods.

Proposed
FIRST FLOOR PLAN
Scale: 1/4"=1'-0"

1st Floor Living Area=1,878.31 ft²
 2nd Floor Living Area=887.50 ft²
 Total Living Area=2765.81 ft²
 Roofed over area=2,570.04 ft²
 (INCLUDING GARAGE/PORCHES)



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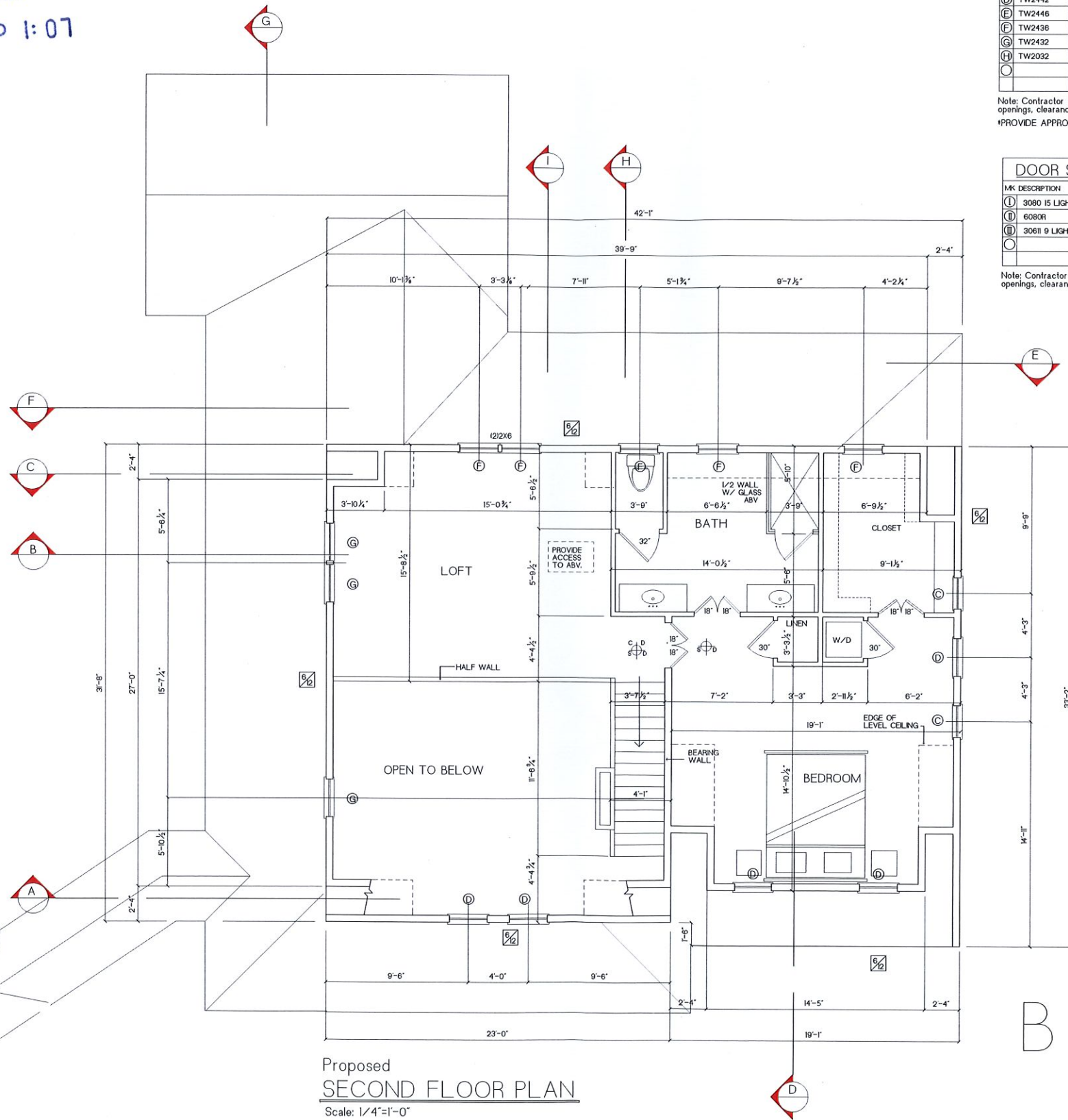


Scale

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Proposed
SECOND FLOOR PLAN
Scale: 1/4"=1'-0"

WINDOW SCHEDULE					
MK DESCRIPTION	Qty.	Sqft.	Total Sqft.	ROUGH OPENING COMMENTS	
(A) TW2456	1417			2'-6" 1/8" X 5'-8" 7/8"	ANDERSEN 400 SERIES
(B) TW24410	1252			2'-6" 1/8" X 5'-0" 7/8"	ANDERSEN 400 SERIES
(C) A21	400			2'-0" 5/8" X 2'-0" 5/8"	ANDERSEN 400 SERIES
(D) TW2442	1087			2'-6" 1/8" X 4'-4" 7/8"	ANDERSEN 400 SERIES
(E) TW2446	1170			2'-6" 1/8" X 4'-8" 7/8"	ANDERSEN 400 SERIES
(F) TW2438	923			2'-4" 7/8" X 3'-8" 7/8"	ANDERSEN 400 SERIES
(G) TW2432	840			2'-4" 7/8" X 3'-4" 7/8"	ANDERSEN 400 SERIES
(H) TW2032	727			2'-2" 1/8" X 3'-4" 7/8"	ANDERSEN 400 SERIES
			Total		

Note: Contractor to verify all millwork information including rough openings, clearances and quantities prior to construction.
*PROVIDE APPROPRIATE HARDWARE FOR EGRESS

DOOR SCHEDULE					
MK DESCRIPTION	Qty.	Sqft.	Total Sqft.	ROUGH OPENING COMMENTS	
(1) 3080 15 LIGHT		2400		36" 3/8" X 66" 1/2"	THERMA-TRU
(2) 6080R		4725		6'-0" X 8'-0"	ANDERSEN 400 SERIES
(3) 30811 9 LIGHT		2075			THERMA-TRU
			Total	6500	

Note: Contractor to verify all millwork information including rough openings, clearances and quantities prior to construction.

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- XXJ X=Number of King and Jack Studs
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Living Area=887.50 ft2





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