REQUEST FOR ACTION BY:

TOWN OF CLARENCE, N.Y.

- ☐ Appeal Board
- ☐ Planning Board
- ☐ Town Board

- ☐ Appeal
- ☐ Rezone
- ☐ Revise Ordinance
- ☐ Subdivision
- ☐ Limited Use Permit
- ☐ Other

Rec'd. by: Jonathan Bleuer

Date July 23, 2014

Action Desired Applicant requests a variance of 80 ft. to allow for the construction of a 140 ft. wind turbine located at 8850 Clarence Center Road. Principle structure is located within the Residential Single Family zone.

Reason

Town Code Reference:

§173-4(C)

PLEASE PRINT

Name CEC energy - Ryan Storke

Address 2 Remington Park Dr

Cazenovia NY 13035

Town/City **State** **Zip**

Phone 315-655-8670

Signed SIGNATURE ON FILE

Requests for action on zoning should be filled out completely in above spaces if practicable, otherwise give brief description and refer to attached papers. The complete request with all necessary plans, maps, signatures, should be filed with the Secretary of the Planning Board. Requests (except appeals) may be filed with the Town Clerk or Town Board, but will generally be referred to Planning Board with subsequent loss of time.

Initial Action

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Hearing Held by ..... **on** ..... **19** .....

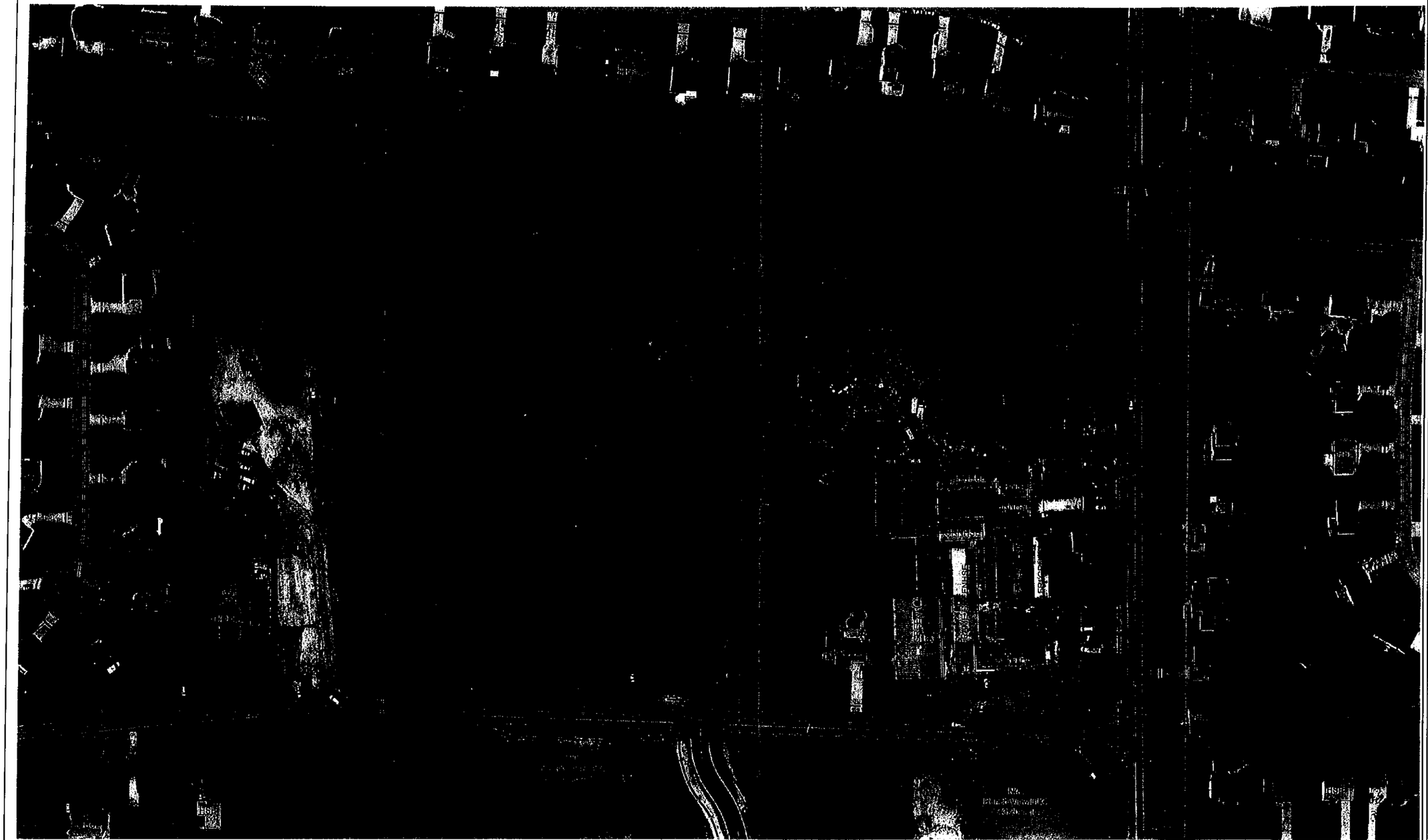
Final Action Taken

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Filed with Town Clerk **on** ..... **19** .....

Filed with County Clerk **on** ..... **19** .....



GRAPHIC SCALE
160 0 80 160 320 480
SCALE: 1"=160'
(11x17" SHEET)

LEGEND

- ROAD CENTERLINE
- RIGHT-OF-WAY LINE
- PARCEL LINE
- VILLAGE BOUNDARY LINE
- EXISTING BUILDING
- UG E — ELECTRIC CONDUIT
- OH — EXISTING OVERHEAD UTILITY LINES

NOTES:

1. THIS MAP WAS CREATED USING AERIAL IMAGES AND TAX MAP DATA, NOT AN ACTUAL FIELD SURVEY. LOCATIONS OF PROPERTY LINES, ROADS, STRUCTURES, ETC. ARE APPROXIMATE.
2. LOCATION OF PROPOSED FACILITY (EXCLUDING PROPOSED TURBINE) ARE APPROXIMATE AND BASED ON SKETCH PROVIDED BY OWNER.

SITE DATA

TAX MAP NO. 43.16-1-10.11
LOT SIZE: 18.9± ACRES

REV	DESCRIPTION	DATE	BY
7			
6			
5			
4			
3			
2			
1			

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FISHER ASSOCIATES, P.E., L.S., L.A., P.C.
This Site Location Law Section 7209 design shall be a violation of Section 7209 of the NYS Education Law to alter in any way, any item on this drawing, (c) alter on item in any way.
If an item bearing the seal of an engineer, architect, landscape architect, land surveyor or land surveyor shall be affixed to any survey, plan or drawing, the engineer, architect, landscape architect, land surveyor or land surveyor shall affix to the item his seal and a specific description of the alteration, and a specific description of the alteration.

PA PROJECT NO.
140052-02
PROJECT MANAGER
D. YANOSH
DRAWN BY
D. PEARL
SCALE
AS SHOWN
ISSUE DATE
07-14-2014

FISHER ASSOCIATES
WWW.FISHERASSOC.COM
145 Culver Road, Suite 160
Phone: 585-381-9250

PROJECT
CEC ENERGY
THOMPSON BROTHERS
8850 CLARENCE CENTER RD
CLARENCE CENTER, NY 14032

TITLE OF DRAWING
SITE PLAN

DRAWING NO.
C-1

SHEET 1 OF 1

FILE NAME: H:\Projects\140052-CEC_Wind_2014\Eng\CAD\02-THOMPSON\CUT\C-1 Site Plan THOMPSON.dwg
DATE/TIME: 7/14/2014 12:20:00 PM
USER: Don Yanosh

BERGEY
WINDPOWER

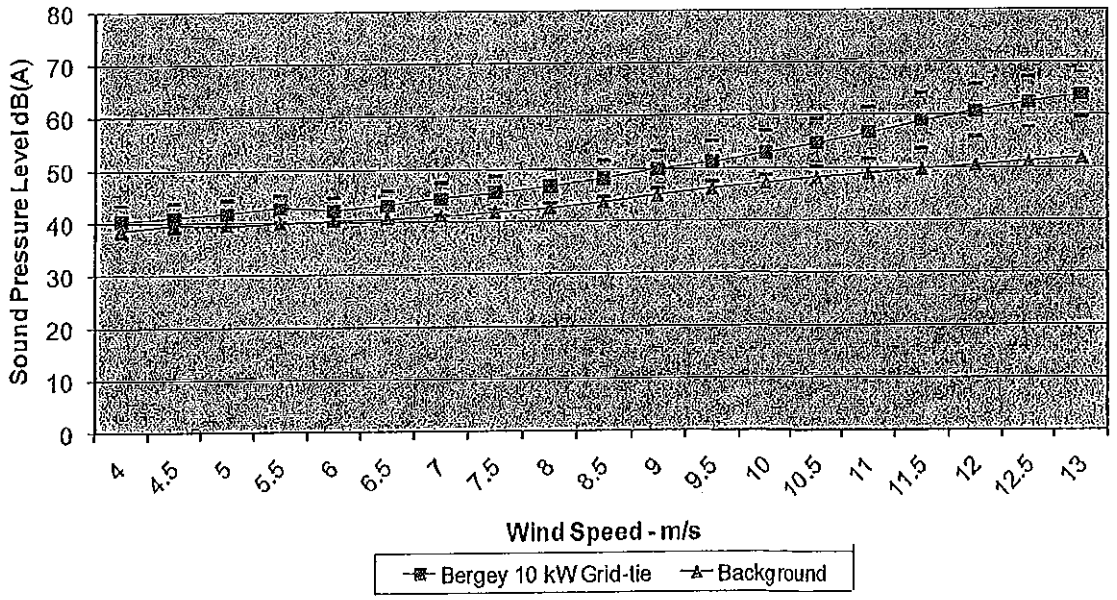
July 14, 2010

Acoustic Characteristics of the Bergey Excel-S 10 kW Wind Turbine

The following noise level data were taken by the USDA Agricultural Research Service in Bushland, Texas. USDA-Bushland is a contractor to the U.S. Department of Energy and has been field testing small wind turbines since the 1970's. This acoustics testing was conducted in support of certification of the BWC Excel-S to AWEA 9.1-2009. Per the AWEA standard, the tests were conducted in accordance with IEC 61400-11, "Wind Turbine Generator Systems, Part 11 - Acoustic Noise Measurement Techniques".

The sampling microphone was a calibrated Larson Davis Model 824, which was placed 34.2m (112 ft) from the base of the 30m (100 ft) wind turbine tower. The slant distance was 46m (151 ft). Wind speed was taken at a height of 10 m (33 ft)

Noise Data Collected on Bergey 10 kW Grid-tie, 30.5 m tower
USDA-ARS Lab near Bushland, TX (June 2010)



The data range provided is 4 m/s – 13 m/s because the calculation of the turbine component of the total sound pressure was calculated using background sound data at the same site from an earlier test on another brand of wind turbine and that test range was 4 – 13 m/s. Background sound levels must be taken with the wind turbine shutdown and that is more difficult to achieve on the Bergey Excel than the other brand previously tested. New background sound data over a wider range is currently being gathered. We do not believe there will be any significant differences in the results when this newer background data is available.

The calculation of the wind turbine contribution to total sound levels for follows the guidelines in IEC 61400-11.

For a typical 5 m/s (11.2 mph) average wind speed site the wind speed will be below 11 m/s (25 mph) over 95% of the time. In this range the Excel-S wind turbine will add just 1 – 6 dBA to the background. As a general rule it takes 3 dBA added before a person will perceive a separate noise source.

AWEA Rated Sound Level: 52.1 dBA

The Rated Sound Level is the sound level at 60 m (197 ft) that the wind turbine will not exceed 95% of the time in a 5 m/s (11 mph) average wind speed site. The previous version of the BWC Excel-S had an AWEA Rated Sound Level of 54.7 dBA. The new version is quieter because the more powerful neodymium alternator has reduced the rated rotor speed from 300 RPM to 240 RPM.

The Sound Power Level is the total noise right at the source – the top of the tower. For the BWC Excel-S turbine the Sound Power Level corresponding to the AWEA Rated Sound Level is 91.0 dBA. Sound diminishes with distance. The Sound Pressure Level is the sound a listener would hear at the distance given, in this case 60m (197 ft)

The binned sound pressure and sound power level data is provided on the following page.

2010 Excel-S Acoustics Test Data
Bushland, 46 m Slant Distance

Wind Bin (m/s)	Recorded Sound Pressure Level (dBA)	Std Dev	Backgrd Sound Pressure Level* (dBA)	Turbine Sound Pressure Level (dBA)	Turbine Sound Power Level (dBA)
1	37.08	0.35			
1.5	36.14	0.55			
2	36.70	1.68			
2.5	38.57	3.05			
3	39.18	3.03			
3.5	39.94	3.27			
4	40.39	3.04	38.7	40.39	78.5
4.5	41.06	2.75	39.55	41.06	79.2
5	41.76	2.47	39.48	41.76	79.9
5.5	42.71	2.66	39.84	42.71	80.9
6	43.51	2.66	40.31	42.21	80.4
6.5	44.56	2.81	40.67	43.26	81.4
7	45.75	3.01	41.2	44.45	82.6
7.5	46.87	3.10	41.87	45.57	83.7
8	48.08	3.24	42.65	46.78	84.9
8.5	49.55	3.41	43.72	48.25	86.4
9	51.04	3.60	44.91	49.83	88.0
9.5	52.40	3.78	46.14	51.23	89.4
10	53.92	4.17	47.17	52.89	91.0
10.5	55.53	4.53	48.13	54.66	92.8
11	57.31	4.92	48.91	56.63	94.8
11.5	59.35	5.22	49.73	58.85	97.0
12	61.07	4.88	50.48	60.67	98.8
12.5	62.69	4.71	51.17	62.37	100.5
13	64.02	4.24	51.85	63.75	101.9
13.5	65.44	3.79			
14	66.60	3.29			
14.5	67.39	3.12			
15	68.10	3.04			
15.5	68.92	3.40			
16	69.60	3.18			
16.5	70.02	2.63			
17	71.42	1.82			
17.5	71.79	1.71			
18	71.53	3.22			
18.5	72.14	2.30			
19	73.00	1.13			
19.5	70.10	4.93			
20	62.00	0.00			

* - From 2006 test on another turbine

Sound Levels at a Distance from the Turbine

Sound Power Level is defined as the sound level at a distance of 1 meter (3.3 ft) from the source, which we take as the center of the rotor or, in other words, hub height. As a person gets farther and farther away from the wind turbine, the intensity of the sound they will hear reduces as the square of the distance. The following table provides the AWEA Rated Sound Levels at different distances from the base of the turbine, assuming a 30m (100 ft) tower. These levels do not include a contribution from background noise levels.

Distance from Turbine (meters)	Distance (feet)	Slant Distance (m)	Sound Press. Level (dBA)
30	98.42	42.4	53.5
60	196.85	67.1	49.5
90	295.27	94.9	46.5
120	393.70	123.7	44.2
150	492.12	153.0	42.4
180	590.55	182.5	40.8
210	688.97	212.1	39.5
240	787.40	241.9	38.4
270	885.82	271.7	37.4
300	984.25	301.5	36.5
330	1,082.67	331.4	35.6
360	1,181.10	361.2	34.9
390	1,279.52	391.2	34.2

BERGEY WINDPOWER

2200 INDUSTRIAL BLVD.
NORMAN, OK 73069 USA
T: 405-364-4212
F: 405-364-2078
E-MAIL: kencraig@bergey.com
WEB: www.bergey.com

Wind Turbine Tower Structural & Foundation Analysis Date: 02 June 2014

Tower Owner: United Wind Inc. Client
Tower Location: Sites requiring basic wind speed <= 100 mph and Topographic Category 3 crest height <= 100 ft
Turbine/Tower Type: Excel-10 or Excel-6 Turbine on SSV-140 ft tower

Design Codes: NYBC-2010, IBC-2012, TIA 222-G, ACI 318-11

Design wind conditions:	100 mph basic
Design ice accumulation:	<= 1.0 inch radial
Design wind with Ice:	40 mph
Design frost depth:	<= 64 inches
Assumed soil strength:	2000 psf allowed bearing load

Analysis Performed by:

Engineer: Kenneth G. Craig

New York P.E. Number: 083114

License Expiration Date: 31 October 2016

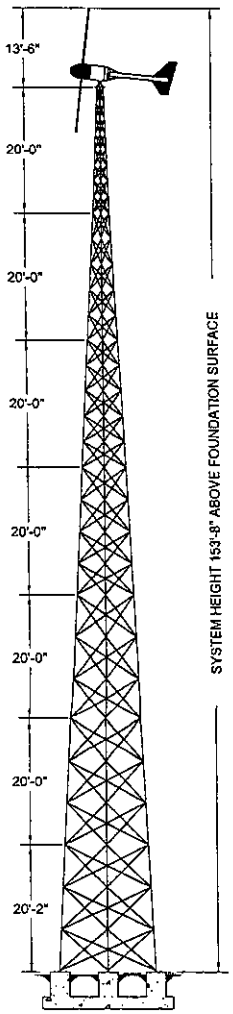
Kenneth G Craig

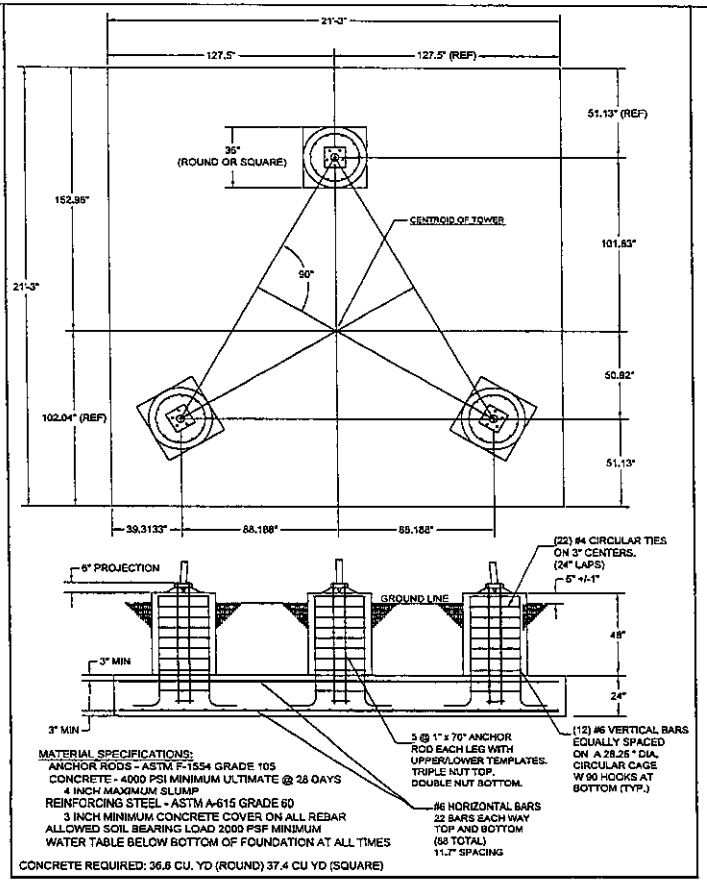
02 June 2014
Date

General Notes:

1. The minimum yield strength of tower steel members is as noted below:
   a. Tower legs are ASTM A618 Grade 3, minimum yield strength 50 ksi.
   b. Tower flanges are ASTM A572 Grade 50, minimum yield strength 50 ksi.
   c. All lattice elements are ASTM A36, minimum yield strength 30 ksi.
   d. Anchor rods are ASTM F1554 Grade 105, minimum yield strength 105 ksi.
2. All structural bolts conform to ASTM A-325 unless otherwise noted.
3. PAL nuts are to be used with all tower and anchor hardware.
4. All high strength bolts are to be tightened to a "snug-tight" condition as defined in the June 23, 2000 AISC "Specification for structural joints using ASTM A325 or A490 bolts." No other specification for minimum torque or bolt tension is required.
5. It is the responsibility of the customer and/or installers to verify the installation is in compliance with all relevant local, state and federal codes.
6. BWC provides tower analysis at minimal cost as a service to our customers. Customers are responsible for hiring all local engineers, inspectors, supervisors and other construction- or code-related personnel and services.

WARNING: It is a violation of New York State law Article 145 for any unauthorized or unsupervised person to alter these documents in any way.





Notes and Requirements

Tower Wiring:
3 x #6 AWG MC Armored Cable

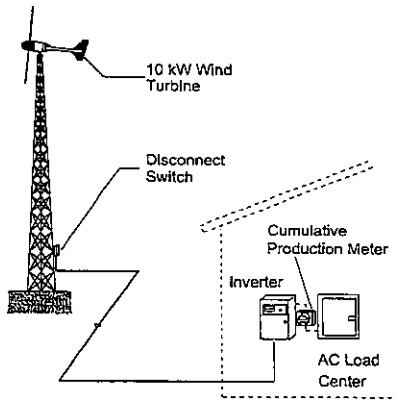
Safety Switch:
60A 600V 3-pole Fusible
NEMA Type 3R Rainproof
Serves as lockable disconnect
3 @ 45A Fuses Type FRS-R-45
Delta LA603 3-Phase Surge Arrestor

Grounding:
1 @ 8' copper-clad ground rods
1 rod per tower leg
#2 AWG bare 7-strand ground cable
#8 bare solid bond wire between tower base ground rod and inverter / utility ground

Wire Run:
Consult BWC tables for wire size based on length of wire run.
Underground conductors and bond wire must be housed in conduit.
Minimum conduit burial depth is 18".

Inverter:
PowerSync II, UL listed

Load Panel:
2-Pole, 240V, 60A breakers, dedicated



Material Specifications

1. Tower Legs: ASTM A572 Grade 50
   Minimum yield strength 50,000 psi
2. Tower Flanges: ASTM A572 Grade 50
   Minimum yield strength 50,000 psi
3. Tower Lattice: ASTM A36
   Minimum yield strength 30,000 psi
4. Tower Bolts: ASTM A325 Construction Grade
   Minimum yield stress 92,000 psi
   Minimum tensile strength 120,000 psi
5. Anchor rods: ASTM F1554 Grade 105
   Minimum yield stress 105,000 psi
   Minimum tensile strength 125,000 psi

Foundation Notes

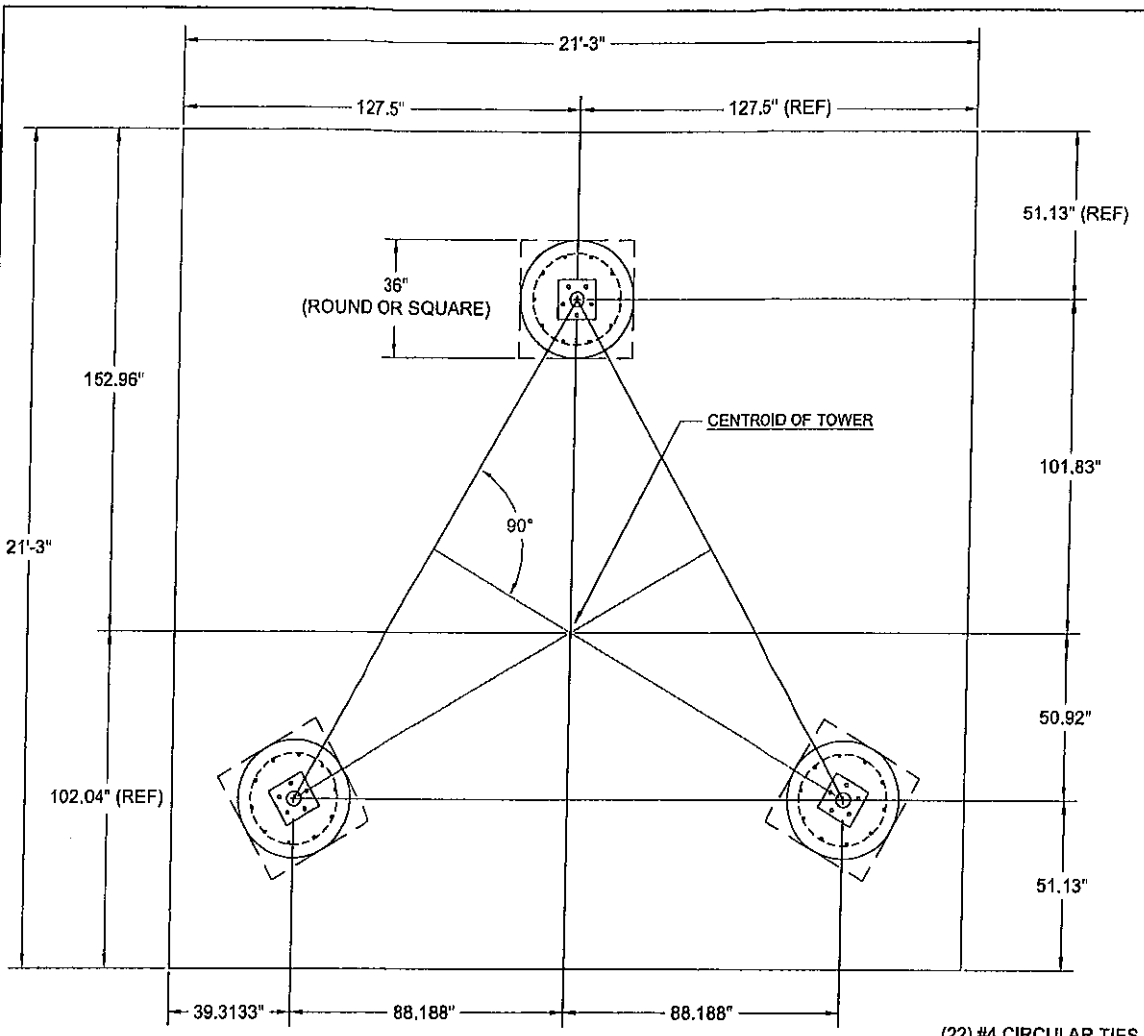
1. Concrete 4000 psi minimum ultimate strength
2. Reinforcing bars ASTM A615 Grade 60 deformed
3. Minimum concrete cover on all reinforcing bar 3"
4. Compact fill in 8" lifts to minimum 100 pcf
5. Soil allowable bearing load 2000 psf.

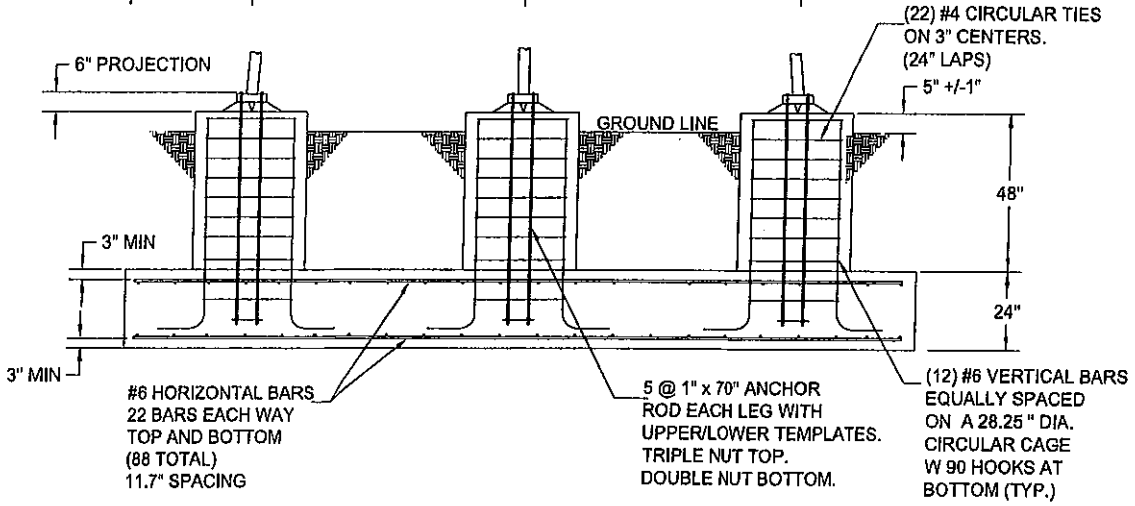
Design Criteria

1. IBC-2012 and NYBC-2010 compliant
2. Design basic wind speed 100 mph (3-second gust)
3. Design exposure category "C"
4. Topographic category 3, crest height 100 ft
5. Rotor thrust 2400 lb.
6. Turbine weight 1200 lb.
7. Ice accumulation 1.0 inch radial

BERGEY WINDPOWER

DRAWN K.G.C. 05-02-2014	TITLE: SUMMARY SHEET - STOCK SSV-140 TOWER SYSTEM XL-10 OR XL-5 TURBINE 100 MPH BASIC WIND SPEED
CHECKED	
APPROVED	
SCALE: NONE	DWG NO.: 1416-XL-SSV-140





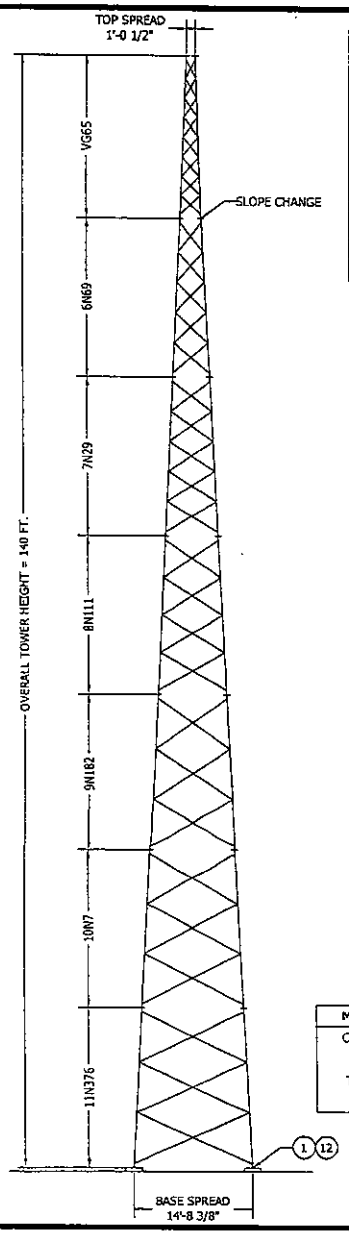
MATERIAL SPECIFICATIONS:

ANCHOR RODS - ASTM F-1554 GRADE 105
CONCRETE - 4000 PSI MINIMUM ULTIMATE @ 28 DAYS
4 INCH MAXIMUM SLUMP
REINFORCING STEEL - ASTM A-615 GRADE 60
3 INCH MINIMUM CONCRETE COVER ON ALL REBAR
ALLOWED SOIL BEARING LOAD 2000 PSF MINIMUM
WATER TABLE BELOW BOTTOM OF FOUNDATION AT ALL TIMES

CONCRETE REQUIRED: 36.6 CU. YD (ROUND) 37.4 CU YD (SQUARE)

BERGEY WINDPOWER

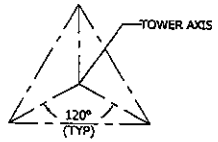
	TITLE: SSV-140 FOUNDATION MAT-WITH-PIERS
DRAWN: K.G.C. 05-14-2013	CLIENT DATA: STOCK FOUNDATION IBC 100 MPH BASIC WIND SPEED TOPO CATEGORY 3, CREST 100 FT.
CHECKED	
APPROVED	
SCALE: NONE	DWG NO.: PPT3-SSV-140-100 — 0



TOWER DESIGN LOADING		
DESIGN WIND LOAD PER ANSI/TIA-222-G USING THE FOLLOWING DESIGN CRITERIA: BASIC WIND SPEED (NO ICE): 125 MPH BASIC WIND SPEED (ICE): 60 MPH DESIGN ICE THICKNESS = 1.25 IN. STRUCTURE CLASS: II EXPOSURE CATEGORY: C TOPOGRAPHIC CATEGORY: 1 EARTHQUAKE SPECTRAL RESPONSE ACCELERATION, Ss: <1.000 THIS TOWER IS DESIGNED TO SUPPORT THE FOLLOWING LOADS:		
ELEVATION (FT)	**ANTENNA TYPE**	**LINE SIZE (NOM)**
TOP	BERGEY 10KW TURBINE ALLOWABLE THRUST = 2,400 LBS	(2) 1" CONDUIT

STRUCTURE HAS BEEN DESIGNED TO DEFLECT NO MORE THAN 16.8" AT 60 MPH OPERATIONAL WIND CONDITION. DESIGN BASED ON STATIC LOADING ONLY. DYNAMIC AND HARMONIC CONDITIONS HAVE NOT BEEN CONSIDERED AND ARE THE RESPONSIBILITY OF OTHERS.

LATERAL THRUST AND DEFLECTION CRITERIA PROVIDED BY BERGEY WINDPOWER INC. FOR USE AS A COMPONENT OF A 10 KW WIND SYSTEM.



TOWER CONFIGURATION
N.T.S.

MAXIMUM FACTORED REACTIONS			
COMPRESSION	=	151.2	KIPS
TENSION	=	132.1	KIPS
TOTAL SHEAR	=	25.4	KIPS
O.T.M.	=	1886.4	FT-KIPS

ANCHOR MATERIAL				
ITEM	**QTY**	**PART NO.**	**DESCRIPTION**	**DWG. NO.**
1	1	15F1470	ANCHOR BOLT STR ASSY 15-1X48	15F1470
607018LAB - TOWER ACCESSORIES				
ITEM	**QTY**	**PART NO.**	**DESCRIPTION**	**DWG. NO.**
2	1	11N376	SECTION ASSY 11N 20' 4EH BASE	11N376
3	1	10N7	SECTION ASSY 10N 20' 3.5EH	A780395
4	1	9N182	SECTION ASSY 9N 20' 3.5EH	A830385
5	1	8N111	SECTION ASSY 8N 20' 3EH	A800209
6	1	7N29	SECTION ASSY 7N 20' 2.5EH	A780168
7	1	6N69	SECTION ASSY 6N 20' 2.5STD	A790310
8	1	VG6S	SECTION ASSY VG1S 20' 2.5STD	A810205
9	1	ACWS	SIGN ANTI-CLIMB WARNING ASSY	N/A
10	1	A790135	DRAWING BOLT ASSY	A790135
11	1	B651264	STEPBOLT DETAIL	B651264
12	3	BGK8GGX	KIT BASE GRD SSV 1"AB GALV.	B070997
13	1	710004	CARTON, NO. 80	N/A
607018SD - SAFETY DEVICE				
ITEM	**QTY**	**PART NO.**	**DESCRIPTION**	**DWG. NO.**
14	1	TT605950	SAFETY DEVICE TUF TUG SSV 140'	N/A
15	1	TT-WG-500	WIRE GRAB FALL ARRESTOR	N/A

GENERAL NOTES

1. ROHN PRODUCTS, LLC TOWER DESIGNS CONFORM TO ANSI/TIA/EIA-222-G UNLESS OTHERWISE SPECIFIED UNDER TOWER DESIGN LOADING.
2. TURBINE AND LINES LISTED IN TOWER DESIGN LOADING TABLE ARE PROVIDED BY OTHERS UNLESS OTHERWISE SPECIFIED.
3. THE DESIGN LOADING CRITERIA INDICATED HAS BEEN PROVIDED TO ROHN. THE DESIGN LOADING CRITERIA HAS BEEN ASSUMED TO BE BASED ON SITE-SPECIFIC DATA IN ACCORDANCE WITH ANSI/TIA/EIA-222-G AND MUST BE VERIFIED BY OTHERS PRIOR TO INSTALLATION.
4. SEE INDIVIDUAL SECTION ASSEMBLY DRAWINGS FOR PART NUMBERS AND SECTION ASSEMBLY DETAILS.
5. STEP BOLTS ARE PROVIDED ON ONE LEG ONLY FOR SECTIONS VG THROUGH 11N SECTIONS.
6. REFER TO THE LATEST REVISIONS OF THE DRAWINGS SHOWN IN THE BILL OF MATERIALS.
7. A NUT LOCKING DEVICE IS PROVIDED FOR ALL TOWER AND ANCHOR BOLTS.
8. THE LEG PART NUMBER IS STAMPED AT THE BOTTOM OF EACH LEG OF EACH SECTION.
9. DESIGN ASSUMES LEVEL GRADE AT TOWER SITE.
10. WORK SHALL BE IN ACCORDANCE WITH ANSI/TIA/EIA-222-G, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
11. TOLERANCE ON TOWER STEEL HEIGHT IS EQUAL TO PLUS 1% OR MINUS 1/2%.
12. PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
13. TOWER MEMBER DESIGN DOES NOT INCLUDE STRESSES DUE TO ERECTION SINCE ERECTION EQUIPMENT AND CONDITIONS ARE UNKNOWN. DESIGN ASSUMES COMPETENT AND QUALIFIED PERSONNEL WILL ERECT THE TOWER.
14. DESIGN ASSUMES THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA/EIA-222-G.
15. TOWER ORIENTATION TO BE DETERMINED BY OTHERS.
16. STEP BOLTS WITH SAFETY DEVICE, LESS HARNESS, ARE PROVIDED FOR CLIMBING THE ENTIRE TOWER HEIGHT.
17. THE DESIGN OF THE REFERENCED STRUCTURE HAS BEEN BASED ON EQUIVALENT STATIC LOADING CONDITIONS PROVIDED BY THE TURBINE MANUFACTURER. THE TURBINE MANUFACTURER MUST APPROVE THE DESIGN FOR PROPER PERFORMANCE WITH THE INTENDED TURBINE CONSIDERING AS A MINIMUM, FATIGUE, HARMONICS AND DYNAMIC LOADING. ROHN DOES NOT ACCEPT RESPONSIBILITY AND PROVIDES NO WARRANTY FOR FATIGUE, HARMONICS OR DYNAMIC LOADING RELATED ISSUES.
18. FOUNDATIONS SHALL BE DESIGNED TO SUPPORT THE REACTIONS SHOWN FOR THE CONDITIONS EXISTING AT THE SITE.
19. WIND TURBINE INTERFACE TO TOWER TO BE PROVIDED BY OTHERS.
20. NUMBERS SHOWN IN BALLOONS DENOTE ITEM NUMBERS IN BILL OF MATERIAL.

FILE NO.
0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP

DWG REFERENCE

ROHN PRODUCTS LLC
PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

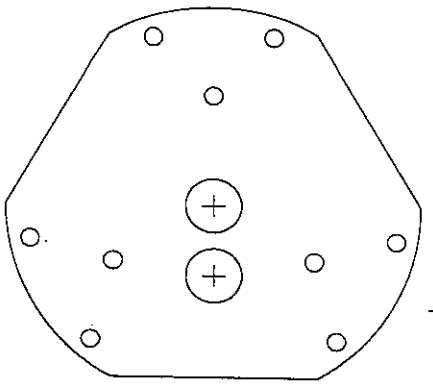
THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.

BERGEY WINDPOWER CO., INC.
ERECTION PROFILE
140 FT SSV TOWER
GENERIC

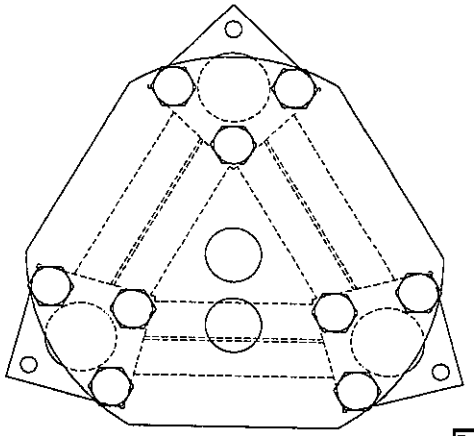
DWN:	CHK'D:	DATE:
CHW	KTL	Apr/29/2010

ENG'R: HA

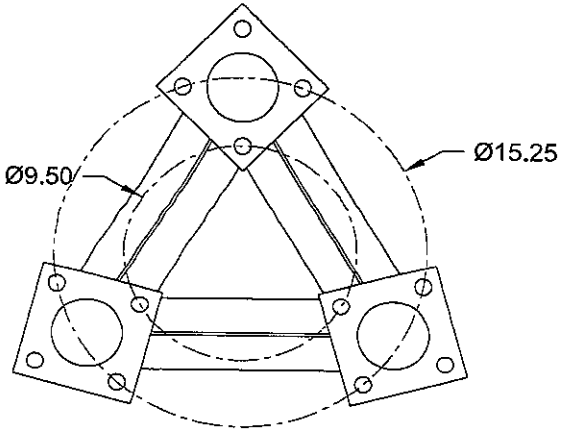
DRAWING NO: 607018-01-A1 REV: 0



TURBINE LOWER PLATE



TURBINE BOLTED TO TOWER
WITH (9) ASTM A-325 BOLTS
SIZE 5/8"-11 x 3-1/4" LONG



TOWER TOP GEOMETRY

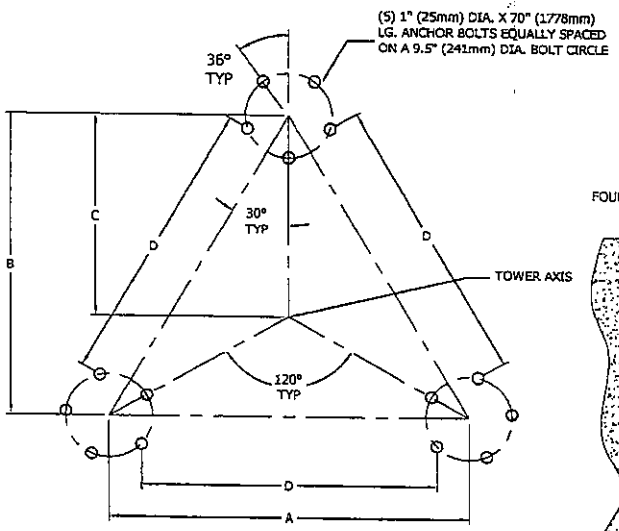
Excel-10 Turbine Attahment Bolt Stress					
Turbine thrust load =	2,400	lb acting	2	ft above tower top	
Turbine max yaw-induced moment =	6,000	ft-lb			
Turbine max overturning moment =	10,800	ft-lb (wind load + yaw-induced moment)			
For (6) A325 bolts	0.625	inch diam. acting on	15.25	inch bolt circle	
and (3) A325 bolts	0.625	inch diam. acting on	9.5	inch bolt circle	
Moment of inertia about tower axis = I =			127.86	in^4	
Max tensile stress in bolts = M x c / I =			8,046	psi	
F.S. (tensile) = allowed / applied =			5.47	(Allowed = 44 ksi)	
Max shear stress in bolts (assume 2 bolts engaged) = F / A =			3,911	psi	
F.S. (shear) = allowed / applied =			5.37	(Allowed = 21 ksi)	

TOLERANCES
UNLESS OTHERWISE
SPECIFIED

.X = ± .060
.XX = ± .030
.XXX = ± .010

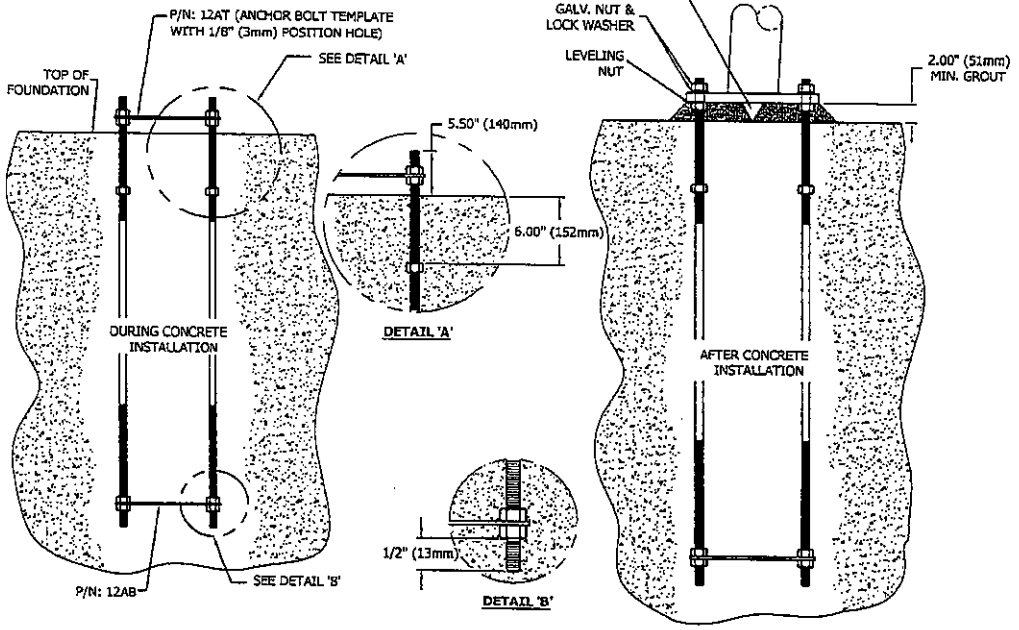
BERGEY WINDPOWER

DRAWN K. G. C. 05-08-2013	TITLE ATTACHMENT OF EXCEL-10 TURBINE TO SSV TOWERS
CHECKED	
APPROVED	DWG NO.
SCALE NONE	



PLAN VIEW
N.T.S.

A	B	C	D
14'-8 3/8" (4.481M)	12'-8 3/4" (3.880M)	8'-5 7/8" (2.587M)	14'-1 5/16" (4.301M)



ANCHOR BOLT INSTALLATION TOLERANCES

1. FACE SPREAD DIMENSION CENTER-TO-CENTER OF ANCHOR BOLT CIRCLES - PLUS OR MINUS 1/16" (2mm) OR 1/16"(2mm) PER 20 FT. (6m) OF FACE SPREAD.
2. MAXIMUM DIFFERENCE BETWEEN ANY TWO FOUNDATION ELEVATIONS - 1/2" (13mm).
3. CONCRETE DIMENSIONS - PLUS OR MINUS 1" (25mm).
4. DEPTH OF FOUNDATION - PLUS 3" (76mm) OR MINUS 0".
5. DRILLED FOUNDATIONS OUT OF PLUMB - 1.0 DEGREE.
6. REINFORCING STEEL PLACEMENT - PER A.C.I. 301.
7. PROJECTION OF EMBEDMENTS - PLUS OR MINUS 1/8" (3mm).
8. VERTICAL EMBEDMENTS OUT OF PLUMB -1/2 DEGREE.
9. MAXIMUM DISTANCE FROM CENTERLINE OF ANCHOR BOLTS TO CENTERLINE OF FOUNDATION - 1/24 OF PIER DIAMETER UP TO A MAXIMUM OF 2" (50mm).
10. ANCHOR BOLT SPACING - 1/16" (2mm).
11. ANCHOR BOLT CIRCLE ORIENTATION - 1/4 DEGREE.
12. ANCHOR BOLT CIRCLE DIAMETER - PLUS OR MINUS 1/16" (2mm).

!!! WARNING !!!

- ENSURE DIMENSION 'D' IS CORRECT ON ALL FACES PRIOR TO PLACING CONCRETE.
- AFTER ANCHOR BOLTS ARE INSTALLED AND CONCRETE HAS TAKEN ITS INITIAL SET, ANCHOR BOLTS MUST NOT BE MOVED, BENT OR REALIGNED IN ANY MANNER. A NUT LOCKING DEVICE MUST BE INSTALLED ON ALL ANCHOR BOLTS.

NOTES

1. ALL ANCHOR BOLTS MUST MEET OR EXCEED REQUIREMENTS OF A.S.T.M. F1554-S2, S5 GRADE 105.
2. GROUT TO BE 5000 PSI MIN. ULTIMATE STRENGTH/7 DAY NON-SHRINKING AND NON-METALLIC.
3. SPECIAL CARE MUST BE TAKEN WHEN LIFTING ANCHOR BOLT CLUSTER, IN ORDER TO PREVENT ANCHOR BOLT TEMPLATE DISTORTION.
4. ANCHOR BOLT ASSEMBLY MUST BE ADEQUATELY SUPPORTED AND RESTRAINED TO PREVENT MOVEMENT OF THE CLUSTER DURING CONCRETE INSTALLATION.
5. IT IS THE RESPONSIBILITY OF THE FOUNDATION CONTRACTOR TO VERIFY THAT THE CORRECT ANCHOR BOLT TEMPLATE AND FOUNDATION SHOWN ON RESPECTIVE SITE DRAWINGS ARE BEING USED.
6. IT IS THE RESPONSIBILITY OF THE FOUNDATION DESIGN ENGINEER TO INSURE THAT THE ANCHORAGES PROVIDED ARE COMPATIBLE WITH THE PROPOSED FOUNDATION DESIGNS AND THAT THE CAPACITIES OF THE ANCHORAGES ARE NOT LIMITED BY THE STRENGTH OF THE FOUNDATIONS.

FILE NO.
Standard-SSV

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP

DWG REFERENCE

ROHN PRODUCTS LLC
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PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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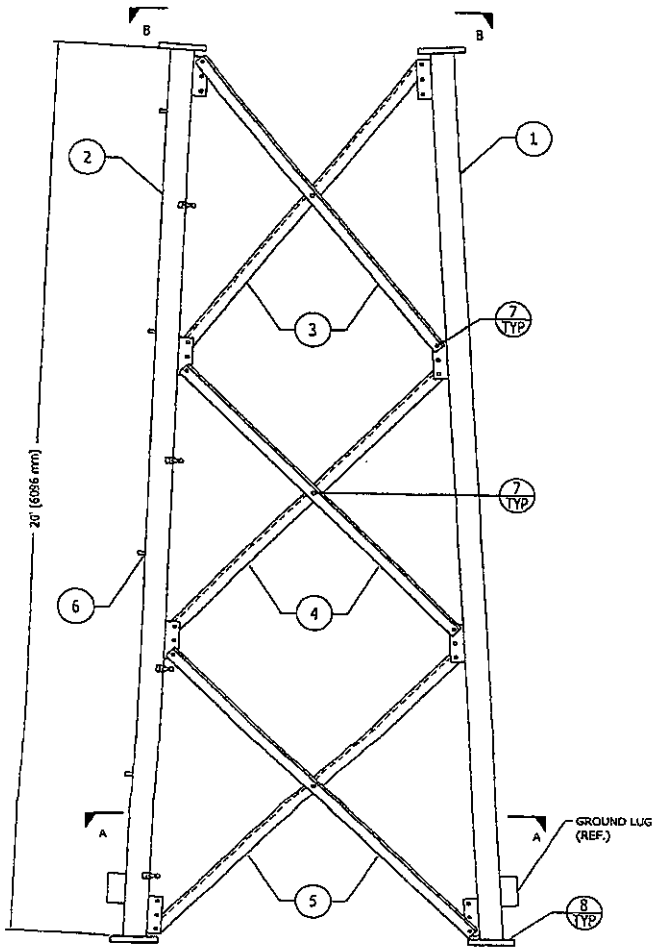
ANCHOR BOLT LAYOUT
1"[25mm]Ø BOLTS (P/N: 15H1470)

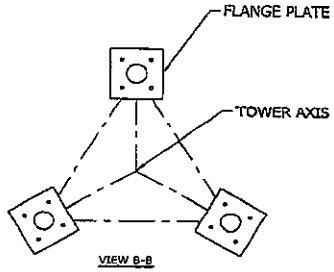
DWN:	CHK'D:	DATE:
ABS	M.F	Apr/05/2010

ENG'R: DWG

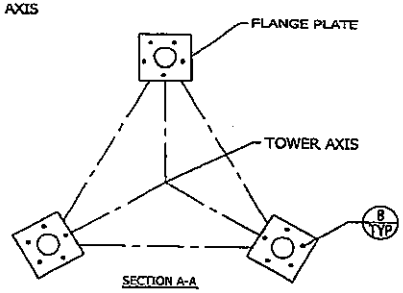
DRAWING NO: 15H1470 REV: 0



ELEVATION VIEW



VIEW B-B



SECTION A-A

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	N/A	7" X 7" X 1" (P/N: R-7G)	12'-8 1/8" [3964mm]
BOTTOM	N/A	3 1/3° STD	12" X 12" X 1 1/4" (P/N: R-12A)	14'-8 3/8" [4480mm]

BILL OF MATERIAL

ITEM	PART NO.	QTY	DESCRIPTION	
1	VL6112	2	LEG SSV 9-11N 4EH 20' 7 12BASE	[PIPE 102mm EH]
2	VL6112S	1	LEG SSV 9-11N 4EH 20' 7 12BASE	[PIPE 102mm EH]
3	V858	6	BRACE DS SS11T L3X.19X14.04'	[L 76x76x5]
4	V859	6	BRACE DS SS11T L3X.19X14.64'	[L 76x76x5]
5	V860	6	BRACE DS SS11T L3X.19X15.16'	[L 76x76x5]
6	5/8STEP	16	BOLT ASSY STEP 5/8X7 W/DBN	[M16x178]
7	210017GA	45	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
8	110164	15	Nut 1 in (Jam - Pal) HDG	[M25]

GENERAL NOTES:

1. LEG PART NUMBER IS STAMPED AT THE BOTTOM OF EACH LEG AND MUST BE LOCATED AT THE BOTTOM OF THE SECTION FOR PROPER ASSEMBLY.
2. STEP BOLTS ARE PROVIDED ON ONE LEG ONLY.
3. THIS SECTION IS A BASE SECTION. SEE THE TOWER ASSEMBLY FOR ANCHOR BOLTS. PAL NUTS ARE SUPPLIED FOR THE ANCHOR BOLTS.
4. DRAWING IS N.T.S. AND IS FOR ASSEMBLY PURPOSES ONLY.
5. NOMINAL METRIC EQUIVALENTS ARE GIVEN FOR REFERENCE ONLY AND SHALL NOT BE SUBSTITUTED FOR THE DESCRIBED SIZES UNLESS OTHERWISE APPROVED BY ROHN PRODUCTS.

FILE NO. 0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP

DWG REFERENCE

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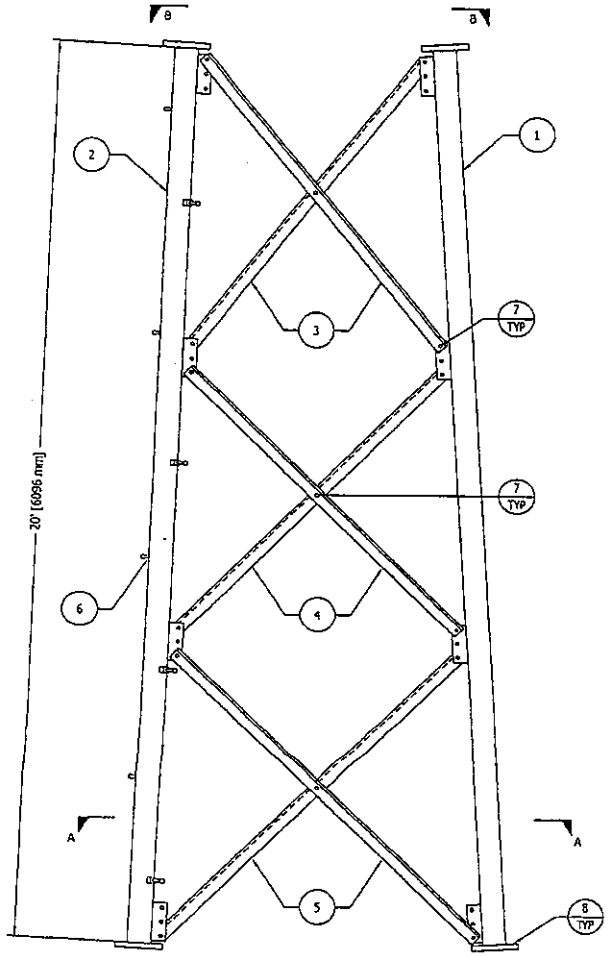
BERGEY WINDPOWER CO., INC.
SECTION ASSEMBLY
DETAILS FOR SSV 11N376 (BASE)
GENERIC

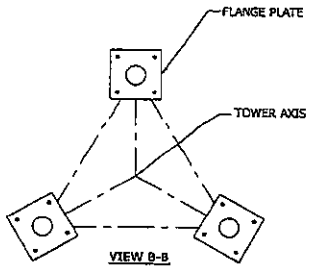
DWN:	CHK'D:	DATE:
CHW	KTL	Apr/08/2010

ENGR: HA

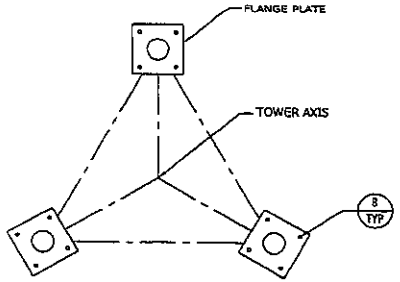
DRAWING NO: 11N376 REV: 0



ELEVATION VIEW



VIEW B-B



SECTION A-A

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	N/A	7" X 7" X 1" (P/N: R-7F)	10'-7 5/8" [3242mm]
BOTTOM	1/4" [6mm] STD	N/A	7" X 7" X 1" (P/N: R-7H)	12'-8 1/8" [3864mm]

BILL OF MATERIAL

ITEM	PART NO.	QTY	DESCRIPTION	
1	VL222	2	LEG SSV 9-11N 3.5EH 20' 7 7OFF	[PIPE 89mm EH]
2	VL222S	1	LEG SSV 9-11N 3.5EH 20' 7 7OFF	[PIPE 89mm EH]
3	TN101	6	BRACE DS SS10T L2.5X.19X12.29'	[L 64x64x5]
4	TN102	6	BRACE DS SS10T L2.5X.19X12.86'	[L 64x64x5]
5	TN103	6	BRACE DS SS10T L2.5X.19X13.35'	[L 64x64x5]
6	5/8STEP	16	BOLT ASSY STEP 5/8X7 W/DBN	[M16x178]
7	210017GA	45	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
8	210063GA	12	BOLT ASSY 7/8 X 3-1/2 HSB A325	[M22x89]

GENERAL NOTES:

1. LEG PART NUMBER IS STAMPED AT THE BOTTOM OF EACH LEG AND MUST BE LOCATED AT THE BOTTOM OF THE SECTION FOR PROPER ASSEMBLY.
2. STEP BOLTS ARE PROVIDED ON ONE LEG ONLY.
3. FLANGE BOLTS ARE FOR FLANGE PLATES AT THE BOTTOM OF THE SECTION.
4. DRAWING IS N.T.S. AND IS FOR ASSEMBLY PURPOSES ONLY.
5. NOMINAL METRIC EQUIVALENTS ARE GIVEN FOR REFERENCE ONLY AND SHALL NOT BE SUBSTITUTED FOR THE DESCRIBED SIZES UNLESS OTHERWISE APPROVED BY ROHN PRODUCTS.

FILE NO. 0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
4	REDRAWN, ADDED METRIC. DATE: 04/01/2005	LJK	TR	HA
5	REDRAWN TO NEW AUTOCAD FORMAT. DATE: Sep/09/2005	KDL	JTB	AAS
6	REDRAWN TO NEW STANDARDS DATE: Apr/09/2010	CHW	KDL	HA

DWG REFERENCE

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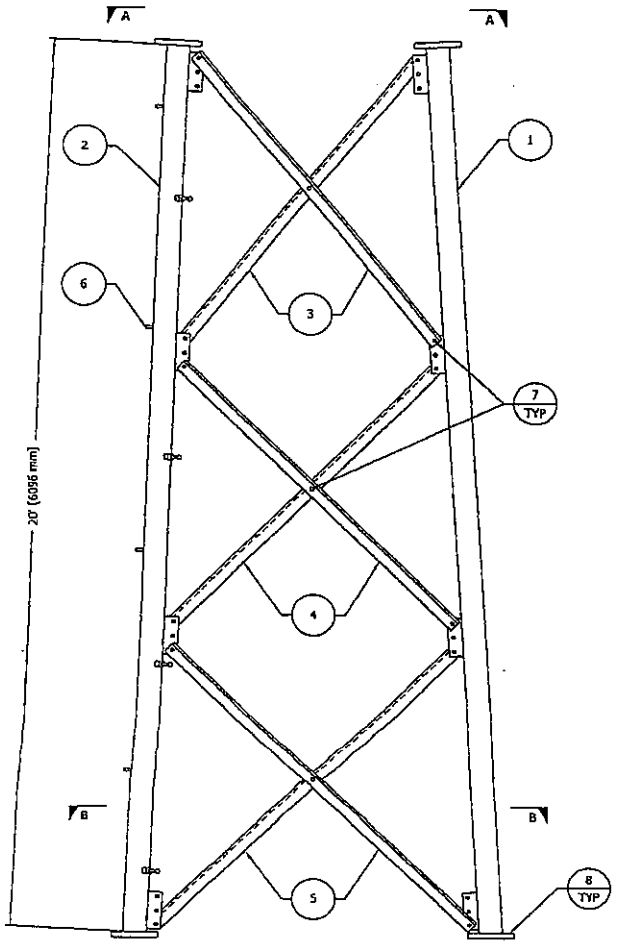
BERGEY WINDPOWER CO., INC.
SECTION ASSEMBLY
SECTION R-10N7
GENERIC

DWN:	CHK'D:	DATE:
AED	HRK	Nov/30/1978

ENG'R: TWS

DRAWING NO: A780395 REV: 6



ELEVATION VIEW

BILL OF MATERIAL				
ITEM	PART NO.	QTY	DESCRIPTION	
1	VL89	2	LEG SSV 9-11IN 3.5EH 20' 7 7 S9	[PIPE 89mm EH]
2	VL89S	1	LEG SSV 9-11IN 3.5EH 20' 7 7 S9	[PIPE 89mm EH]
3	V8379	6	BRACE DS S59T L2.5X.19X10.63"	[L 64x64x5]
4	V8380	6	BRACE DS S59T L2.5X.19X11.17"	[L 64x64x5]
5	V8381	6	BRACE DS S59T L2.5X.19X11.61"	[L 64x64x5]
6	5/8STEP	16	BOLT ASSY STEP 5/8X7 W/DBN	[M16x178]
7	210017GA	45	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
8	210063GA	12	BOLT ASSY 7/8 X 3-1/2 HSB A325	[M22x89]

GENERAL NOTES:

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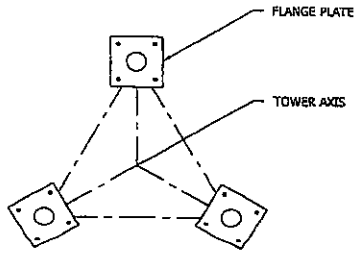
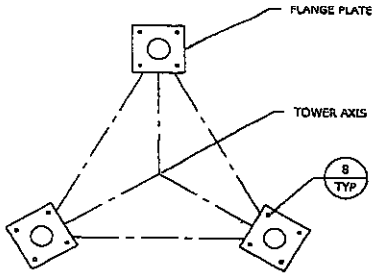


VIEW A-A



SECTION B-B

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	N/A	7" X 7" X 1" (P/N: R-7F)	8'-7 5/8" [2632mm]
BOTTOM	N/A	N/A	7" X 7" X 1" (P/N: R-7F)	10'-7 5/8" [3242mm]

FILE NO. 0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
1	REDRAWN IN AUTOCAD FORMAT DATE: Apr/29/2013	CHW	KTL	MA

DWG REFERENCE

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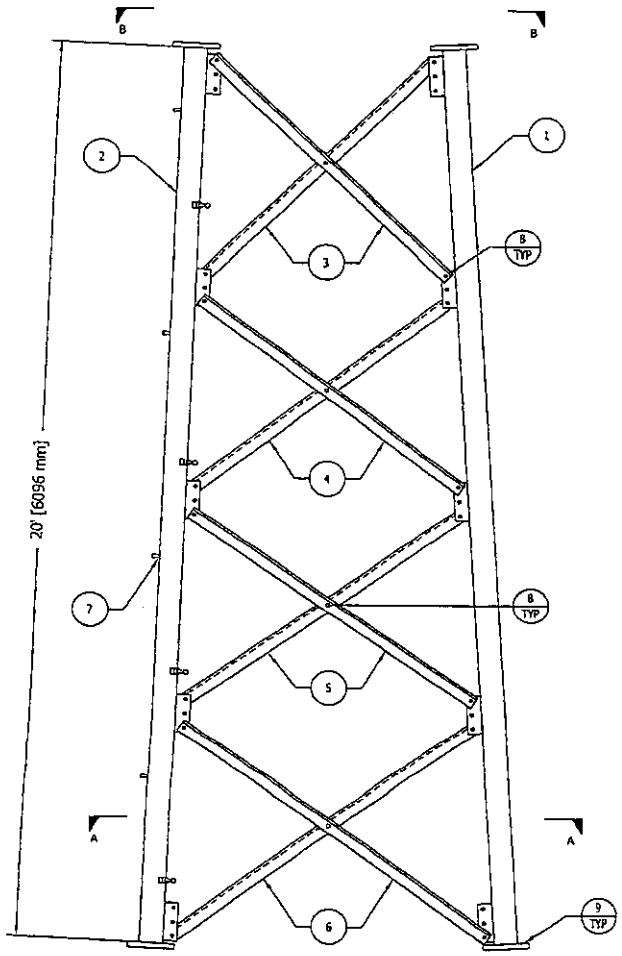
BERGEY WINDPOWER CO., INC.
SECTION ASSEMBLY
DETAILS FOR SSV 9N182
GENERIC

DWN:	CHKD:	DATE:
B_F	KTL	Nov/22/1983

ENGR: T.S

DRAWING NO: A830385 REV: 1



ELEVATION VIEW

ITEM	QTY	PART NO.	DESCRIPTION	DWG. NO.
1	2	VL6S1	LEG SSV 8N 3EH 20'6 7OFF S9	[PIPE 76mm EH]
2	1	VL6S1S	LEG SSV 8N 3EH 20' 6 7OFF S9	[PIPE 76mm EH]
3	6	VB142	BRACE DS SS8T L1.75X.13X7.95'	[L 44x44x3]
4	6	VB143	BRACE DS SS8T L1.75X.13X8.36'	[L 44x44x3]
5	6	VB144	BRACE DS SS8T L1.75X.13X8.79'	[L 44x44x3]
6	6	VB14S	BRACE DS SS8T L1.75X.13X9.10'	[L 44x44x3]
7	16	S/8STEP	BOLT ASSY STEP S/80 W/DBN	[M16x178]
8	60	210017GA	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
9	12	210063GA	BOLT ASSY 7/8 X 3-1/2 HSB A325	[M22x89]

GENERAL NOTES:

1. LEG PART NUMBER IS STAMPED AT THE BOTTOM OF EACH LEG AND MUST BE LOCATED AT THE BOTTOM OF THE SECTION FOR PROPER ASSEMBLY.
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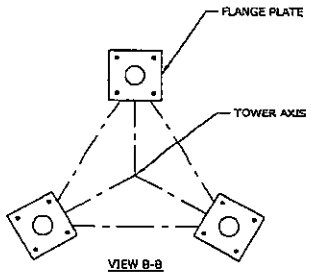
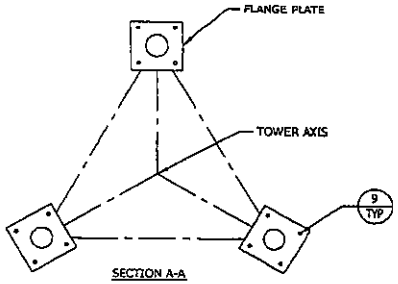


VIEW B-B



SECTION A-A

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	N/A	6" X 6" X 3/4" (P/N: R-6C)	6'-7 1/4" [2013mm]
BOTTOM	1/4" [6mm] STD	N/A	7" X 7" X 1" (P/N: R-7A)	8'-7 5/8" [2632mm]

FILE NO.
0607018

REVISIONS

REV.	DESCRIPTION	DWN:	CHK	APP
1	REDRAWN NEW AUTOCAD FORMAT. DATE: May/29/2008	KEI	KTL	HA
2	UPDATED TO NEW STANDARDS DATE: Apr/12/2010	CHW	KTL	HA

DWG REFERENCE

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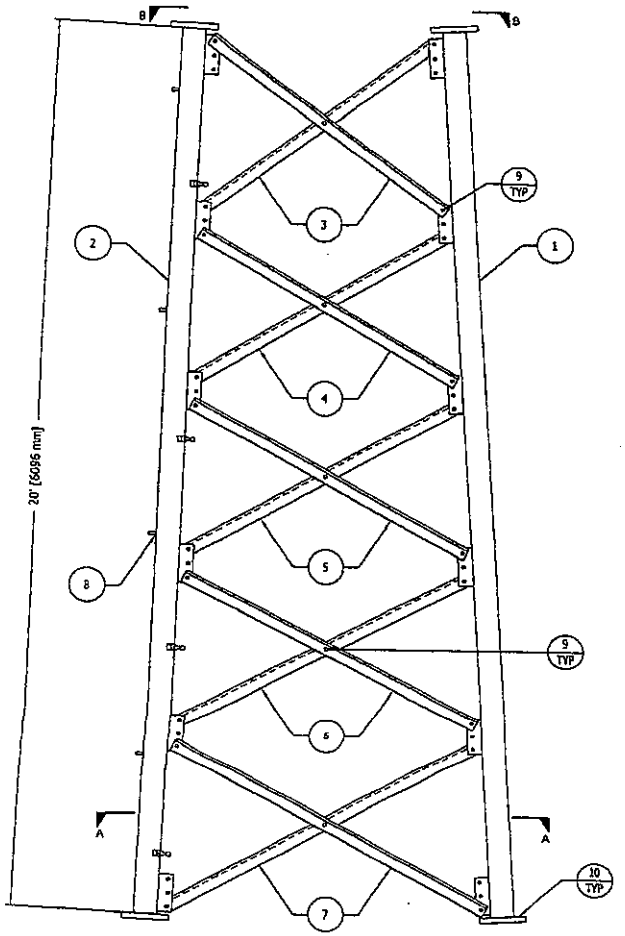
SECTION ASSEMBLY
DETAILS FOR SSV 8N111
GENERIC

DWN:	CHK'D:	DATE:
AJG	JHD	Jun/04/1980

ENG'R: OH

DRAWING NO: A800209 REV: 2



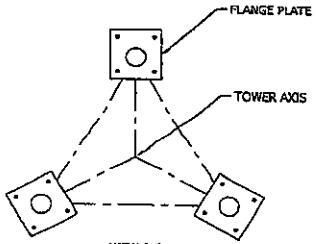
ELEVATION VIEW

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	N/A	5" X 5" X 3/4" (P/N: R-5C)	4'-6 3/4" [1391mm]
BOTTOM	1/4" [6mm] STD	N/A	6" X 6" X 3/4" (P/N: R-6A)	6'-7 1/4" [2013mm]

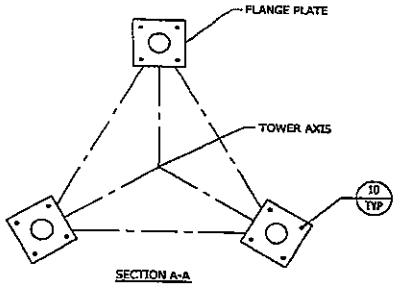
ITEM	QTY	PART NO.	DESCRIPTION	DWG. NO.
1	2	VL133	LEG SSV 6-7N 2.5EH 20' S 60F	[PIPE 76mm EH]
2	1	VL133S	LEG SSV 6-7N 2.5EH 20' S 60F	[PIPE 76mm EH]
3	6	N71	BRACE DS SS7T L1.5X.13X5.71'	[L 38x38x3]
4	6	N72	BRACE DS SS7T L1.5X.13X6.03'	[L 38x38x3]
5	6	N73	BRACE DS SS7T L1.5X.13X6.35'	[L 38x38x3]
6	6	N74	BRACE DS SS7T L1.5X.13X6.69'	[L 38x38x3]
7	6	N75	BRACE DS SS7T L1.5X.13X6.92'	[L 38x38x3]
8	16	5/8STEP	BOLT ASSY STEP 5/8X7 W/DBN	[M16x178]
9	75	210017GA	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
10	12	210050GA	BOLT ASSY 3/4 X 2-3/4 HSB A325	[M19x70]

GENERAL NOTES:

1. LEG PART NUMBER IS STAMPED AT THE BOTTOM OF EACH LEG AND MUST BE LOCATED AT THE BOTTOM OF THE SECTION FOR PROPER ASSEMBLY.
2. STEP BOLTS ARE PROVIDED ON ONE LEG ONLY.
3. FLANGE BOLTS ARE FOR FLANGE PLATES AT THE BOTTOM OF THE SECTION.
4. DRAWING IS N.T.S. AND IS FOR ASSEMBLY PURPOSES ONLY.
5. NOMINAL METRIC EQUIVALENTS ARE GIVEN FOR REFERENCE ONLY AND SHALL NOT BE SUBSTITUTED FOR THE DESCRIBED SIZES UNLESS OTHERWISE APPROVED BY ROHN PRODUCTS.



VIEW B-B



SECTION A-A

FILE NO. 0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
2	UPDATED TO NEW STANDARDS DATE: Apr/13/2010	CHW	KTL	NA

DWG REFERENCE

ROHN PRODUCTS LLC
PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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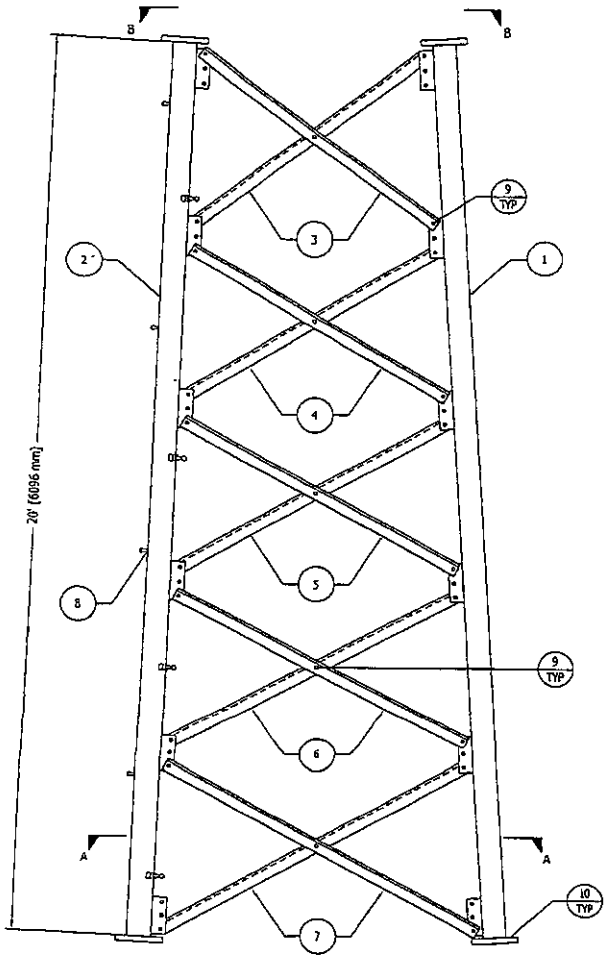
BERGEY WINDPOWER CO., INC.
SECTION ASSEMBLY
DETAILS FOR SSV 7N29
GENERIC

DWN:	CHK'D:	DATE:
AED	OH	Sep/13/1978

ENG'R: T.S

DRAWING NO: A780168

REV: 2

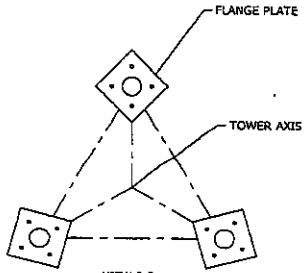


ELEVATION VIEW

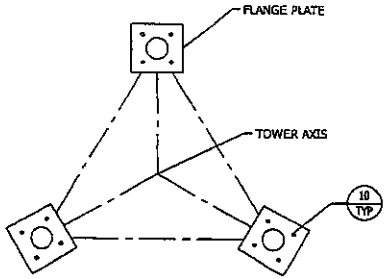
ITEM	QTY	PART NO.	DESCRIPTION	DWG. NO.
1	2	VL649	LEG SSV 6-7N 2.5STD 20' 5-S	[PIPE 64mmSTD]
2	1	VL649S	LEG SSV 6-7N 2.5STD 20' 5-S	[PIPE 64mmSTD]
3	6	N61	BRACE DS SS6T L1.5X.13X4.39"	[L 38x38x3]
4	6	N62	BRACE DS SS6T L1.5X.13X4.61"	[L 38x38x3]
5	6	N63	BRACE DS SS6T L1.5X.13X4.86"	[L 38x38x3]
6	6	N64	BRACE DS SS6T L1.5X.13X5.14"	[L 38x38x3]
7	6	N65	BRACE DS SS6T L1.5X.13X5.28"	[L 38x38x3]
8	16	5/8STEP	BOLT ASSY STEP 5/8X7 W/D8N	[M16x178]
9	75	210017GA	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
10	12	210033GA	BOLT ASSY 5/8 X 2-1/2 HSB A325	[M16x64]

GENERAL NOTES:

1. LEG PART NUMBER IS STAMPED AT THE BOTTOM OF EACH LEG AND MUST BE LOCATED AT THE BOTTOM OF THE SECTION FOR PROPER ASSEMBLY.
2. STEP BOLTS ARE PROVIDED ON ONE LEG ONLY.
3. FLANGE BOLTS ARE FOR FLANGE PLATES AT THE BOTTOM OF THE SECTION.
4. DRAWING IS N.T.S. AND IS FOR ASSEMBLY PURPOSES ONLY.
5. NOMINAL METRIC EQUIVALENTS ARE GIVEN FOR REFERENCE ONLY AND SHALL NOT BE SUBSTITUTED FOR THE DESCRIBED SIZES UNLESS OTHERWISE APPROVED BY ROHN PRODUCTS.



VIEW B-B



SECTION A-A

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	3 1/3° REV	5" X 5" X 3/4" (P/N: R-5C)	2'-6 1/2" [775mm]
BOTTOM	N/A	N/A	5" X 5" X 3/4" (P/N: R-5C)	4'-6 3/4" [1391mm]

FILE NO.
G607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
1	REDRAWN TO NEW AUTOCAD FORMAT. DATE: Oct/18/2005	XBJ	JDM	HA
2	REVISED VIEW "B-B" DATE: Oct/07/2008	LGC	JDM	HA
3	UPDATED TO NEW STANDARDS DATE: Apr/12/2010	CHW	KTL	HA

DWG REFERENCE

ROHN PRODUCTS LLC
PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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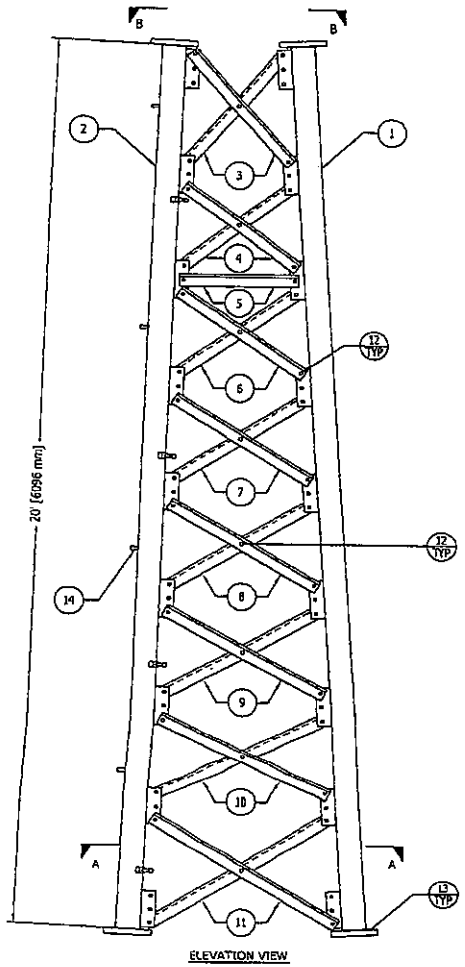
BERGEY WINDPOWER CO., INC.
SECTION ASSEMBLY
DETAILS FOR SSV 6N59
GENERIC

DWN:	CHK'D:	DATE:
AED	KTL	Dec/21/1979

ENGR: TWS

DRAWING NO: A790310

REV: 3



ELEVATION VIEW

ITEM	QTY	PART NO.	DESCRIPTION	DWG. NO.
1	2	VG52	LEG WGT VG1S 2.5STD 20' S-S S9	[PIPE 64mmSTD]
2	1	VG52S	LEG WGT VG1S 2.5STD 20' S-S S9	[PIPE 64mmSTD]
3	6	VG62	BRACE D VG1S L1.5X.19X1.339'	[L 38x38x5]
4	6	VG63	BRACE D VG1S L1.5X.19X1.615'	[L 38x38x5]
5	3	VG49	ANGLE PLATE SUPP1.75X.19X11.25	[L 44x44x5]
6	6	VG64	BRACE D VG1S L1.5X.19X1.896'	[L 38x38x5]
7	6	VG54	BRACE D VG1S L1.5X.19X2.193'	[L 38x38x5]
8	6	VG55	BRACE D VG1S L1.5X.19X2.594'	[L 38x38x5]
9	6	VG56	BRACE D VG1S L1.5X.19X2.969'	[L 38x38x5]
10	6	VG57	BRACE D VG1S L1.5X.19X3.46'	[L 38x38x5]
11	6	VG58	BRACE D VG1S L1.5X.19X4.01'	[L 38x38x5]
12	126	210017GA	BOLT ASSY 1/2 X 1-1/4 HSB A325	[M13x32]
13	12	210033GA	BOLT ASSY 5/8 X 2-1/2 HSB A325	[M16x64]
14	16	5/8STEP	BOLT ASSY STEP 5/8X7 W/DBN	[M16x178]

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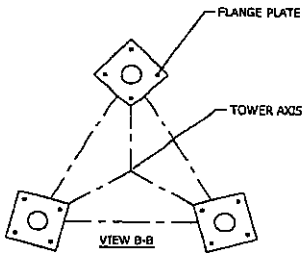
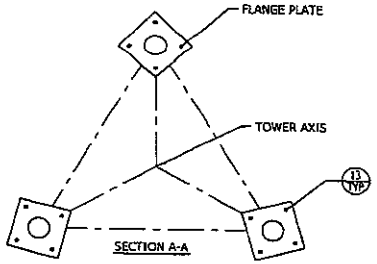


VIEW B-B



SECTION A-A

FLANGE	OFFSET	BEVEL	FLANGE PLATE (P/N)	SPREAD
TOP	N/A	2 1/2" REV	5" X 5" X 3/4" (P/N: R-SC)	1'-0 1/2" [318mm]
BOTTOM	N/A	2 1/2" STD	5" X 5" X 3/4" (P/N: R-SC)	2'-6 1/2" [775mm]

FILE NO. 0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
1	REDRAWN TO NEW AUTOCAD FORMAT. DATE: Oct/13/2005	KED	JDM	KLA
2	REVISED VIEW A-A & B-B DATE: Oct/07/2008	JDM	TWS	KLA
3	UPDATED TO NEW STANDARDS DATE: Apr/12/2010	CHW	KTL	MA

DWG REFERENCE

ROHN PRODUCTS LLC
PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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BERGEY WINDPOWER CO., INC.
SECTION ASSEMBLY
DETAILS FOR SSV VG6S
GENERIC

DWN:	CHK'D:	DATE:
GLS	RAM	Dec/15/1981

ENGR: TWS

DRAWING NO: A810205 REV: 3

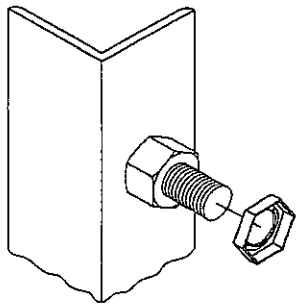
ASSEMBLY BOLT INSTALLATION

1. ALL STRUCTURE ASSEMBLY BOLTS ARE TO BE INSERTED OUT AND/OR UP, (EX. WITH NUTS AND PAL NUTS ON OUTSIDE OF TOWER FACE AND/OR ON TOP FLANGE PLATES) UNLESS PROHIBITED BY LACK OF CLEARANCE.
2. ALL ASSEMBLY AND ANCHOR BOLTS ARE TO BE TIGHTENED IN ACCORDANCE WITH ANSI/TIA/EIA-222-F 1996 SECTION 1.1.3.2 - (WHERE HIGH STRENGTH BOLTS ARE USED FOR BEARING-TYPE CONNECTIONS, AS A MINIMUM, THE BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN THE NOVEMBER 13, 1985, AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS").
3. FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.

CAUTION: DO NOT OVER TORQUE !! GALVANIZING ON BOLTS, NUTS AND STEEL PARTS MAY ACT AS A LUBRICANT, THUS OVER TIGHTENING MAY OCCUR AND MAY CAUSE BOLT TO CRACK AND SNAP OFF.

PAL NUT INSTALLATION

1. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT (SEE PICTURE). PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS OR LOCK WASHERS ARE PROVIDED.



FILE NO.
0607018

REVISIONS

REV.	DESCRIPTION	DWN	CHK	APP
1	DATE: Aug/23/2005			
2	DATE: Aug/23/2005			
3	DATE: Aug/23/2005			
4	DATE: Aug/23/2005			
5	DATE: Aug/23/2005			
6	UPDATED DATE: Aug/30/2005	JDM	MA	MA

DWG REFERENCE

ROHN PRODUCTS LLC
PO BOX 5999
PEORIA, IL 61601-5999
TOLL FREE 800-727-ROHN

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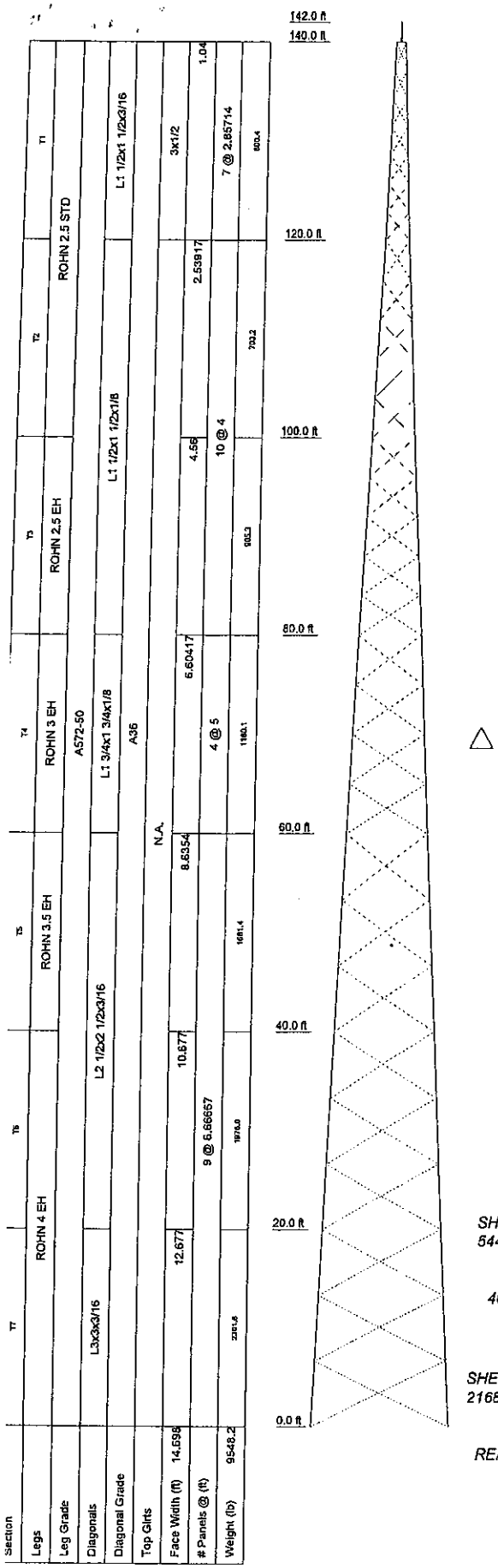
BERGEY WINDPOWER CO., INC.

BOLT ASSEMBLY INSTALLATION
GENERIC

DWN:	CHK'D:	DATE:
ON		Jul/05/1979

ENGR: TWS

DRAWING NO: A790135 REV: 6



MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50000 psi	65000 psi	A36	36000 psi	58000 psi

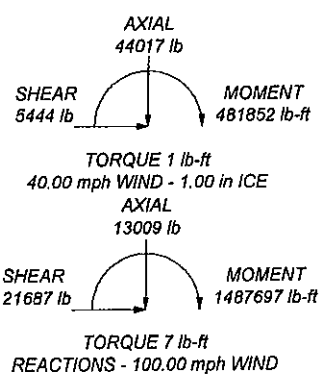
TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-G Standard.
2. Tower designed for a 100.00 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 40.00 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50.00 mph wind.
5. Tower Structure Class II.
6. Topographic Category 3 with Crest Height of 100.00 ft
7. Force Couples (top of tower)
   EXCEL Wind Turbine
   A: 1200.00 lb, H: 2400.00 lb, M: 4800.00 lb-ft
   Ice-A: 1740.00 lb, H: 1800.00 lb, M: 3600.00 lb-ft
   Service-A: 1200.00 lb, H: 2400.00 lb, M: 10800.00 lb-ft
8. Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications.
9. Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
10. Welds are fabricated with ER-70S-6 electrodes.

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 121212 lb
SHEAR: 13308 lb

UPLIFT: -104608 lb
SHEAR: 11327 lb



Bergey Windpower Company 2200 Industrial Blvd. Norman, Oklahoma Phone: 405-364-4212 FAX: 405-364-2078 Power from the Wind	Job: ***Excel-10 Turbine on Rohn SSL-140 Tower @ 100 mph basic wind speed***		
	Project: ***Analysis - IBC-2012, NYBC-2010 & ACI 318-11 Standards***		
	Client: United Wind: Topo category 3 (crest <= 100 ft); Exposure C; 1.0 inch ice	Drawn by: Ken Craig, P.E.	App'd:
	Code: TIA-222-G	Date: 06/02/14	Scale: NTS
	Path: C:\Users\Ken\BWC\Files\Towers\Rohn\SSV\Analyses\Peds-and-plans\140-2010\SSV-140-222G.eri		Dwg No. E-1

ANALYSIS

of

TOWER

STRUCTURE

REQUEST FOR ACTION BY:

TOWN OF CLARENCE, N.Y.

- ☐ Appeal Board
- ☐ Planning Board
- ☐ Town Board

- ☐ Appeal
- ☐ Rezone
- ☐ Revise Ordinance
- ☐ Subdivision
- ☐ Limited Use Permit
- ☐ Other

Rec'd. by: James Callahan

Date July 28, 2014

Action Desired Applicant requests a variance of 300 sq. ft. to allow for the construction of a 500 sq ft. detached accessory structure located at 6471 Deerview Court.

Principle structure is located within the Residential Single Family zone.

Reason

Town Code Reference:

§229-55(H)

PLEASE PRINT

Name John and Pauline Gebura

Address 6471 Deerview Court

Clarence Center NY 14032

Town/City **State** **Zip**

Phone 741-2329

Signed SIGNATURE ON FILE

Requests for action on zoning should be filled out completely in above spaces if practicable; otherwise give brief description and refer to attached papers. The complete request with all necessary plans, maps, signatures, should be filed with the Secretary of the Planning Board. Requests (except appeals) may be filed with the Town Clerk or Town Board, but will generally be referred to Planning Board with subsequent loss of time.

Initial Action

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Hearing Held by ..... **on** ..... **19** .....

Final Action Taken

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Filed with Town Clerk **on** ..... **19** .....

Filed with County Clerk **on** ..... **19** .....

N

Proposed Detached Accessory Structure

500 sq. ft.

* note the parcel lines displayed are approximate

6471 Deerview Court

6471 Deerview Court - Variance Request

Reasons;

1) Current regulations allow two small accessory buildings of up to 200 sq ft each. For our unique location two small accessory buildings would be disproportionate to the large property size and would also fail to meet our storage needs. The very large amount of open space we have available, and orientation of our residence on the property, are much more conducive to a single larger storage building.

2) Substantially insufficient storage space; We have been unable to park in our 2-car garage because it needs to be used exclusively for storage. The proposed gardening/storage building would allow us to use the attached garage as originally intended. Outdoors overnight parking during WNY winters creates many challenges the following morning, particularly as we get older.

3) We enjoy gardening, bicycling, canoeing, camping, snowmobiling, fishing, grilling, and many other outdoor activities. We also perform all our own gardening and yard work, and the majority of our home maintenance. These activities all require adequate storage for the necessary equipment and tools (please see attached list of items requiring additional storage).

4) The proposed gardening/storage building would facilitate the storage of our square stern 15' canoe that we currently must store outdoors on a swing set that has been converted into a "canoe hanger". This is an unsightly method of storage that we would like to eliminate. Other large items that are not conducive to smaller accessory buildings include a lawn tractor, rototiller, snowmobile, a very large amount of miscellaneous gardening equipment, winter storage for patio furniture, propane grille, and several extension ladders. A 12' extension ladder is now stored in our basement because there is no suitable way to store it in our garage.

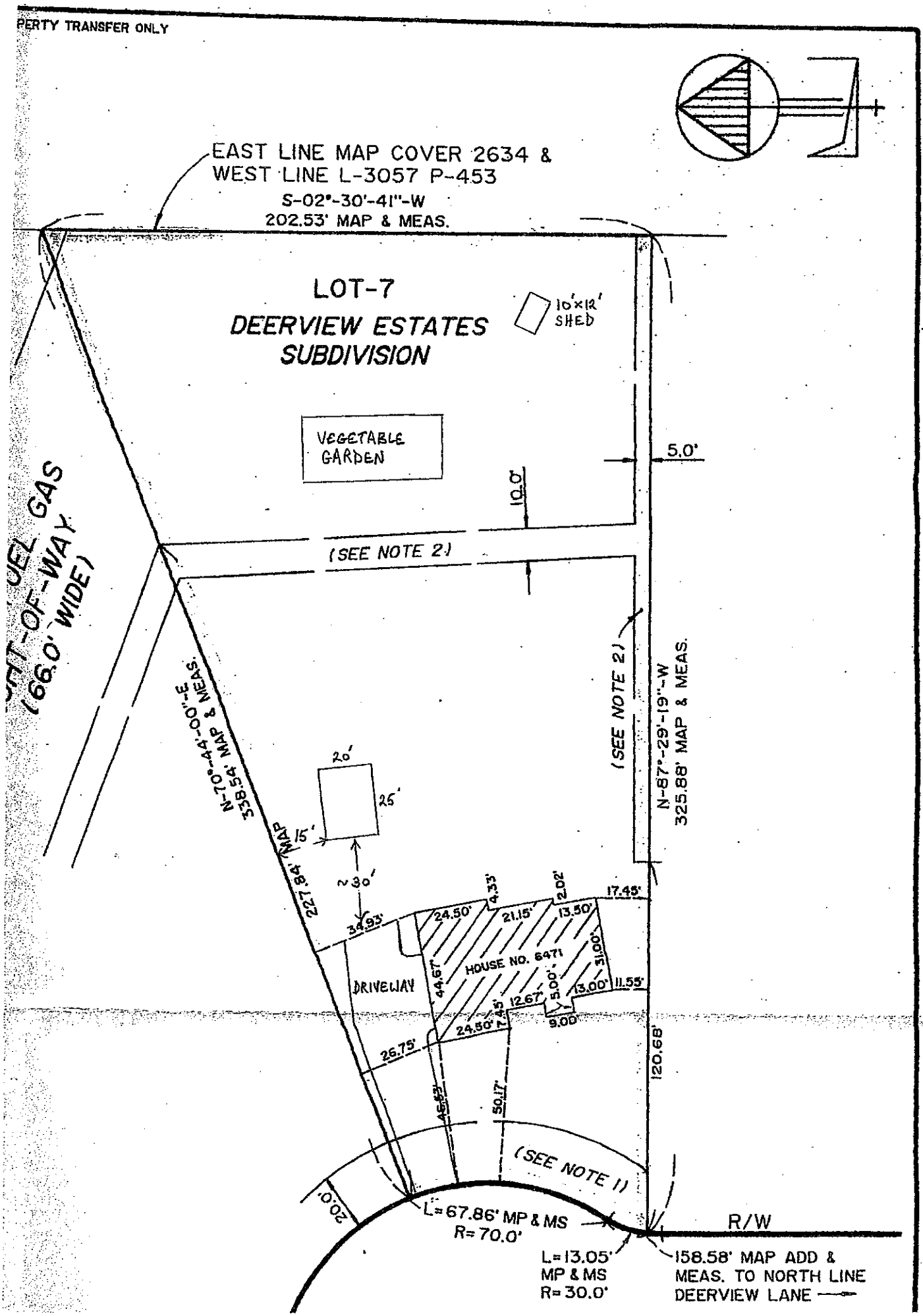
5) 19 Years ago we purchased this very large lot and built our home at this location because of our love for gardening and the outdoors. We've always had a large vegetable garden in our back yard, and shortly after we moved in we planted a large number of blue spruce along the perimeter of the property. These spruce trees (which are now 25+ ft tall) provide substantial privacy screening that benefits both ourselves and our neighbors. Our house was originally oriented on this lot with the intention of constructing additional storage in the proposed location, and many of the homes in our neighborhood have the benefit of 3-car garages for additional storage. At the time we purchased this property and built our home the entire Deerview development was zoned agricultural.

6471 Deerview Court - Variance Request

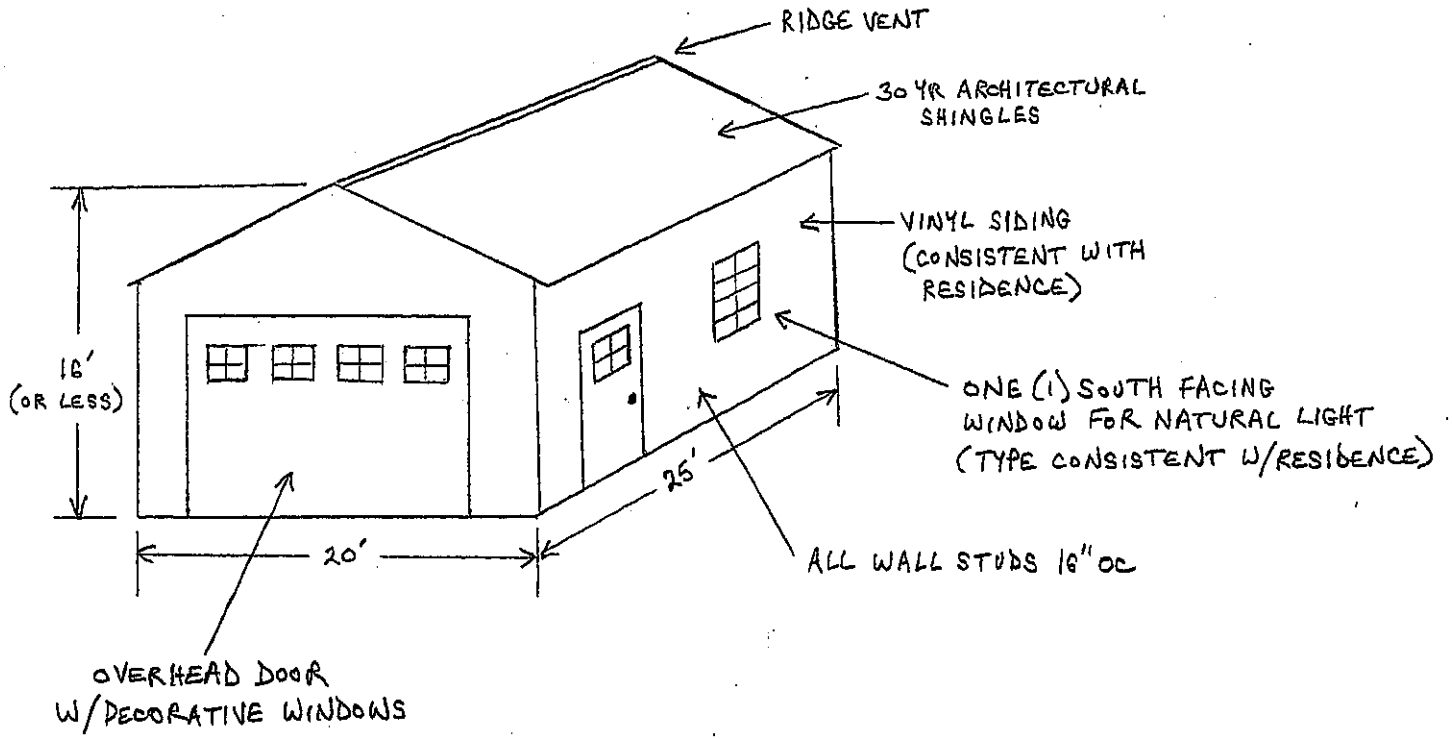
Some of the Items Requiring Additional Storage Capacity

15 ft canoe, paddles, electric motor
John Deere lawn tractor
rototiller
snowmobile
multiple bicycles
snowblower
walk behind lawn mower
snow shovels (summer storage)
garden tools (many shovels, rakes, etc.)
propane grille (winter storage)
propane smoker
backup portable generator
weed wackers
propane tanks for grille
patio furniture (winter storage)
ladders (2-extension, 2- folding)
tomato cages & stakes
canning jars
3hp gas lawn edger
lawn fertilizer spreader (tow behind)
fishing poles, tackle boxes, minnow buckets, nets, etc.
folding chairs and cots
90 mm refracting telescope
6" reflecting telescope
camping equipment (tents, stoves, lanterns, Coleman fuel, etc.)
car top carrier ("bubble")
long wallpaper prep table
table saw storage
metal patio fireplace (winter storage)
gasoline for mowers, generator, etc. (safer than garage)
water fountain (winter storage)
flower pots (many - both outdoor and indoor)
potting soil
garden hoses, sprinklers, etc.
metal ramp for pickup truck bed

PERTY TRANSFER ONLY



PROPOSED GARDENING/STORAGE BUILDING
6471 BEERVIEW COURT
CLARENCE CENTER, NY 14032
JULY 2014



Access Consent Form

I hereby consent to allow members of the Town of Clarence Zoning Board of Appeals to access my property (identified below) for the purpose of considering a request for variance.

John Schiera
Signature

7/27/14
Date

Address of Property:

6471 DEERVIEW COURT
CLARENCE CENTER, NY 14032

* -The Zoning Board of Appeals members may be visiting your premises during any reasonable hour of the day in order to better understand your request. Please follow the directions for preparing your property for inspection included in this packet.

NOTE: WE HAVE 2 DOGS, SO WE WOULD APPRECIATE A QUICK CALL (741-2329) PRIOR TO VISITS SO WE CAN ENSURE THE DOGS WILL BE INSIDE THE HOUSE DURING THE VISIT.
IF WE DON'T ANSWER THE HOME PHONE BECAUSE WE'RE AWAY, THE DOGS WILL ALWAYS BE INSIDE THE HOUSE.
(WE HAVE AN INVISIBLE FENCE FOR THE DOGS)

REQUEST FOR ACTION BY:
TOWN OF CLARENCE, N.Y.

- ☐ Appeal Board
- ☐ Planning Board
- ☐ Town Board

- ☐ Appeal
- ☐ Rezone
- ☐ Revise Ordinance
- ☐ Subdivision
- ☐ Limited Use Permit
- ☐ Other

Rec'd. by: James Callahan

Date July 30, 2014

Action Desired Applicant requests a variance of 456 sq. ft. to allow for the construction of a 728 sq. ft. attached garage located at 8200 Pinestone Court. Proposal would bring total attached garage space to 1,416 sq. ft. Principle structure is located within the Planned Unit Residential Development.

Reason

Town Code Reference:

§229-55(D)

PLEASE PRINT

Name Patricia Fabozzi

Address 8200 Pinestone Court

Williamsville NY 14221

Town/City **State** **Zip**

Phone

Signed SIGNATURE ON FILE

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Published (Attach Clipping) **on** ..... **19** .....

Hearing Held by ..... **on** ..... **19** .....

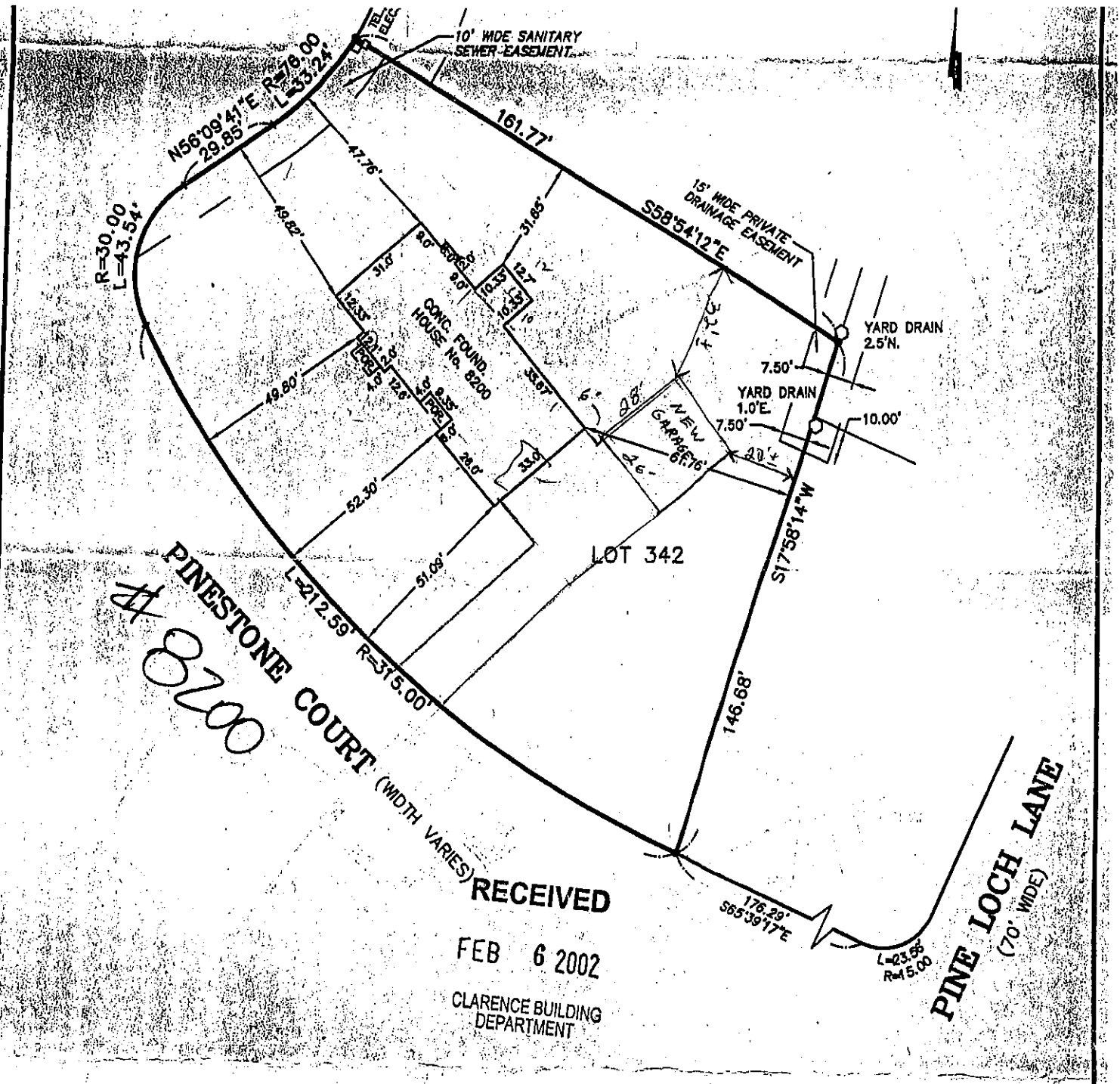
Final Action Taken

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Filed with Town Clerk **on** ..... **19** .....

Filed with County Clerk **on** ..... **19** .....



8200

RECEIVED
FEB 6 2002
CLARENCE BUILDING DEPARTMENT

SURVEY OF
SUB LOT 342 COVER 3065
LOCH LEA PHASE 3, PART 3
BEING PART OF LOT 8 SECT. 14 TOWNSHIP 12 RANGE 6
HOLLAND LAND SURVEY
TOWN OF CLARENCE, ERIE COUNTY, NEW YORK

62a12

DATE	REVISION/TYPE
12/8/01	FOUNDATION LOCATION

PRATT & HUTH ASSOCIATES, LLP
ENGINEERING • SURVEYING • PLANNING
4950 GENESEE STREET, SUITE 165
BUFFALO, NEW YORK 14225
(716) 633-4844 FAX 633-4940

Job No. 1042-342 Date: MARCH 13, 2001
Scale 1" = 40' Tax No.

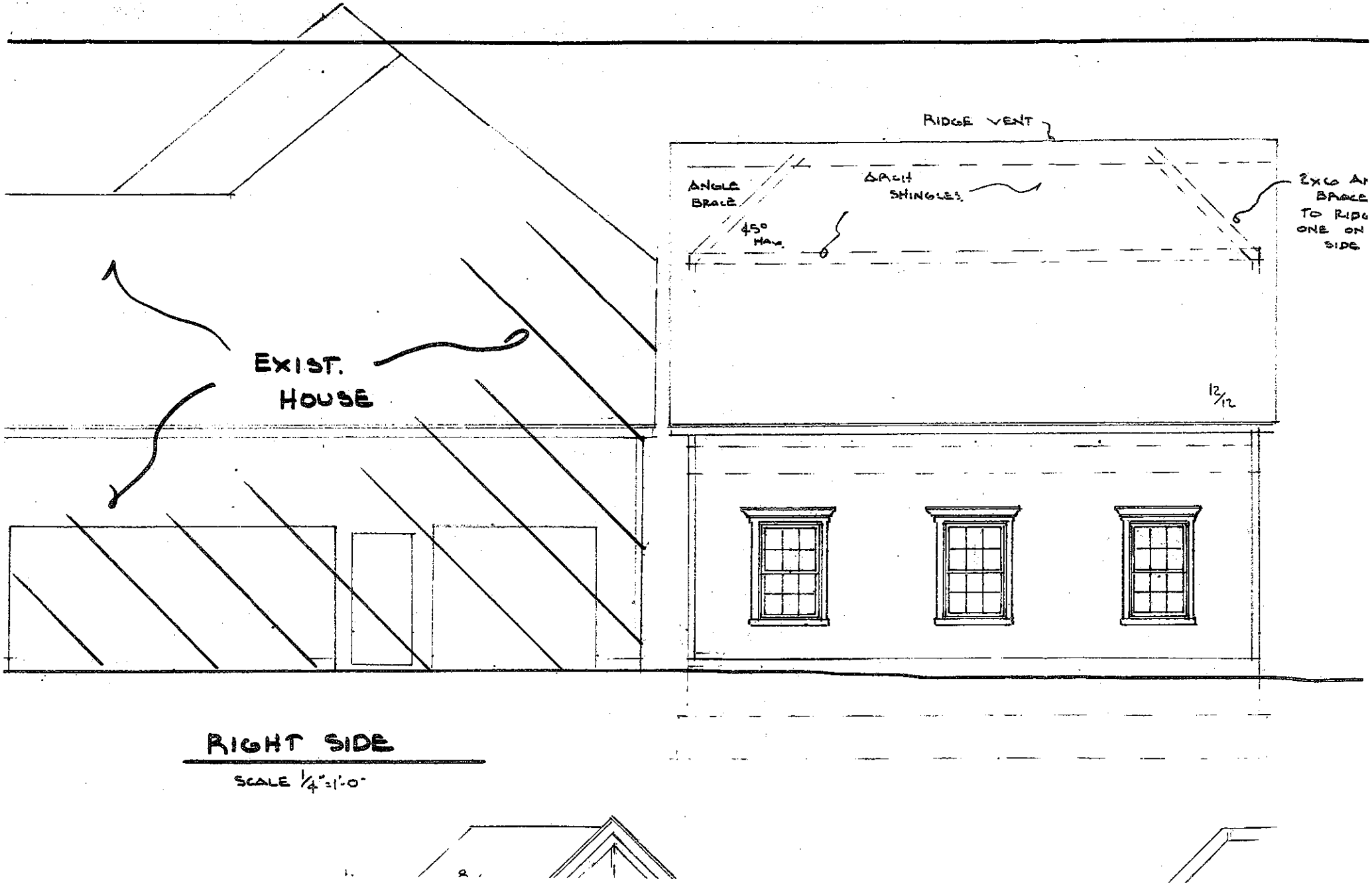
Proposed attached garage

728 sq. ft.

N

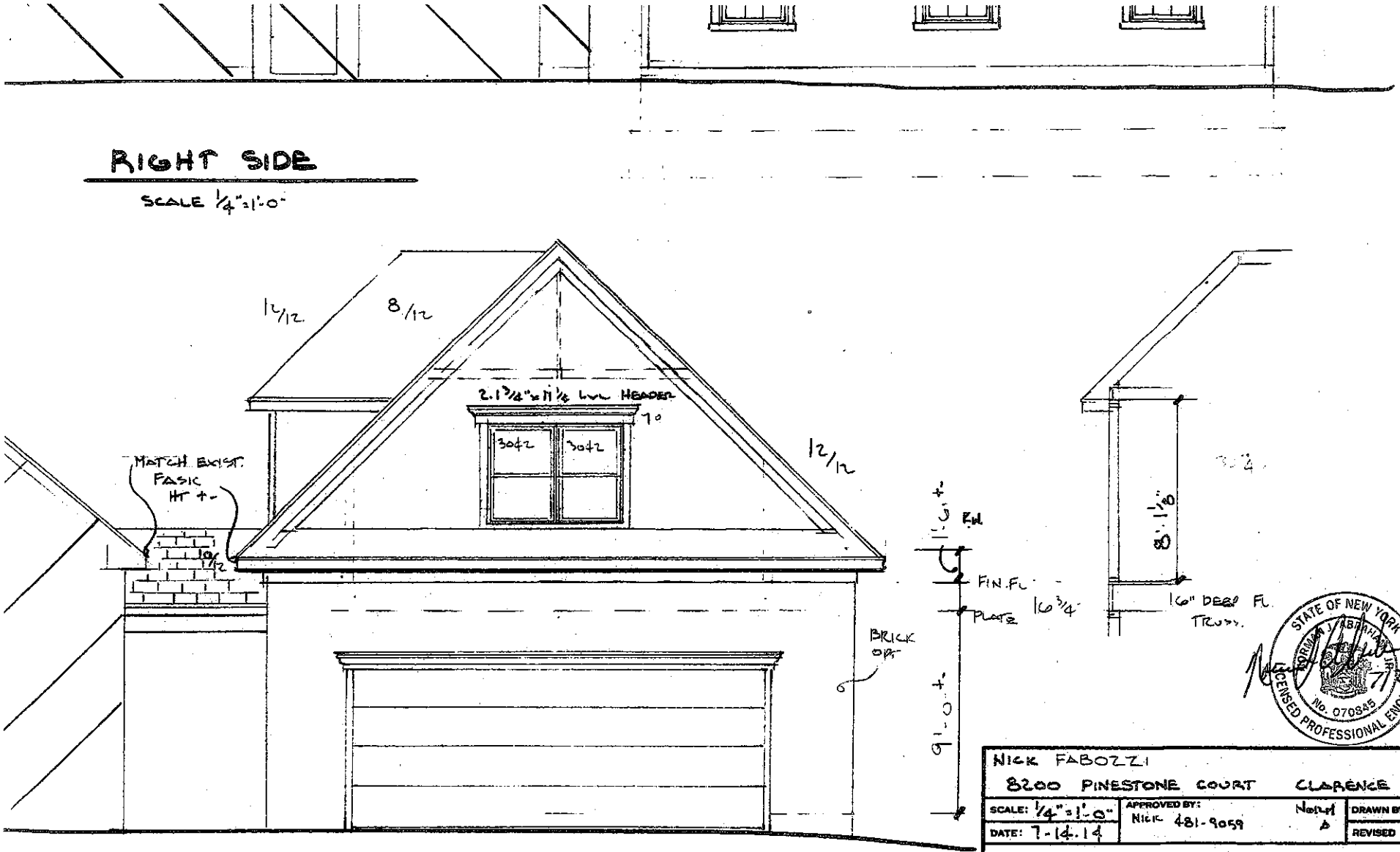
* note the parcel lines displayed are approximate

8200 Pinestone Court



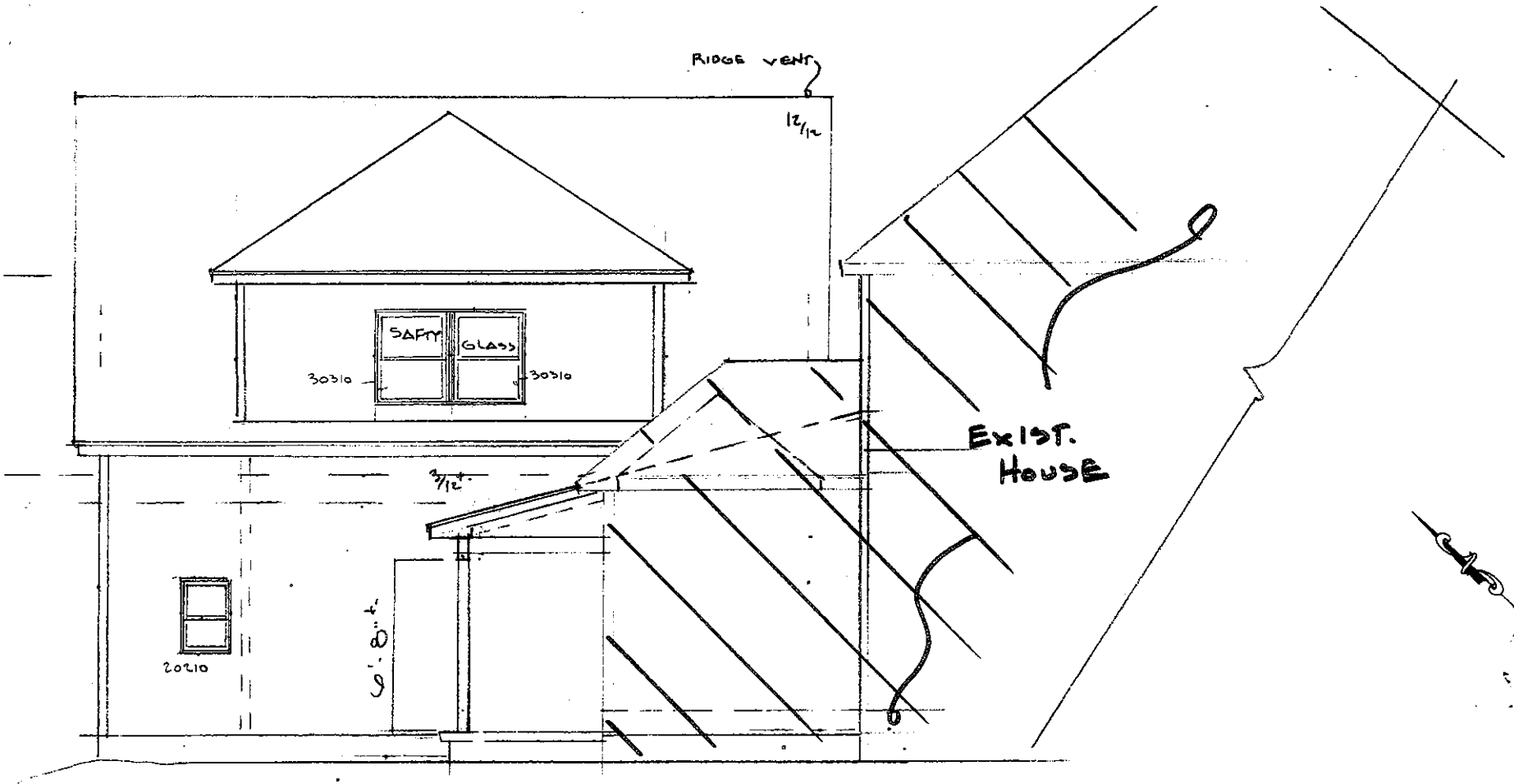
RIGHT SIDE

SCALE 1/4"=1'-0"

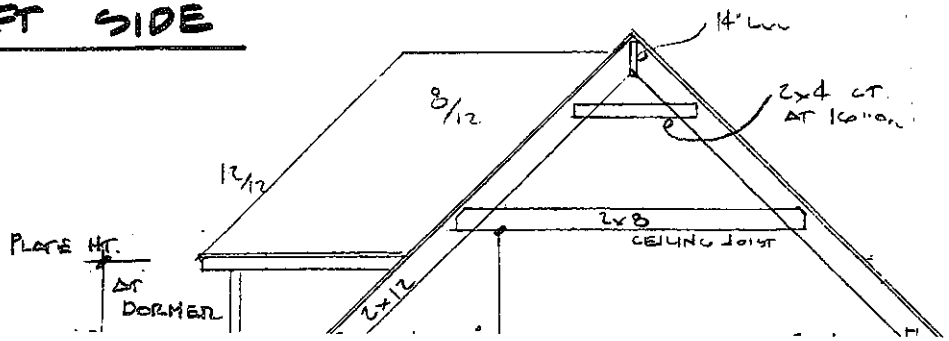


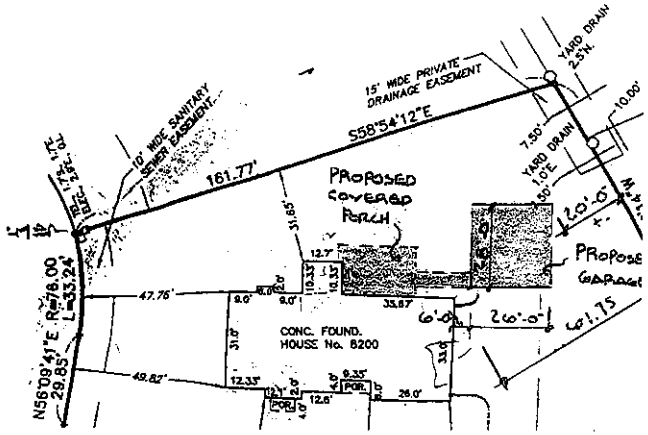
STATE OF NEW YORK
NORMAN J. ABRAHAM JR.
No. 070845
LICENSED PROFESSIONAL ENGINEER
7/28/14

NICK FABOZZI 8200 PINESTONE COURT CLARENCE NY.		
SCALE: 1/4"=1'-0" DATE: 7-14-14	APPROVED BY: NICK 481-9059 NORM A	DRAWN BY ANDRES REVISED
ELEVATIONS		
		DRAWING NUMBER A-1


RIDGE VENT
12/12
SAFTY GLASS
30310
30310
3/12
20210
6'-8"
EXIST. HOUSE

LEFT SIDE

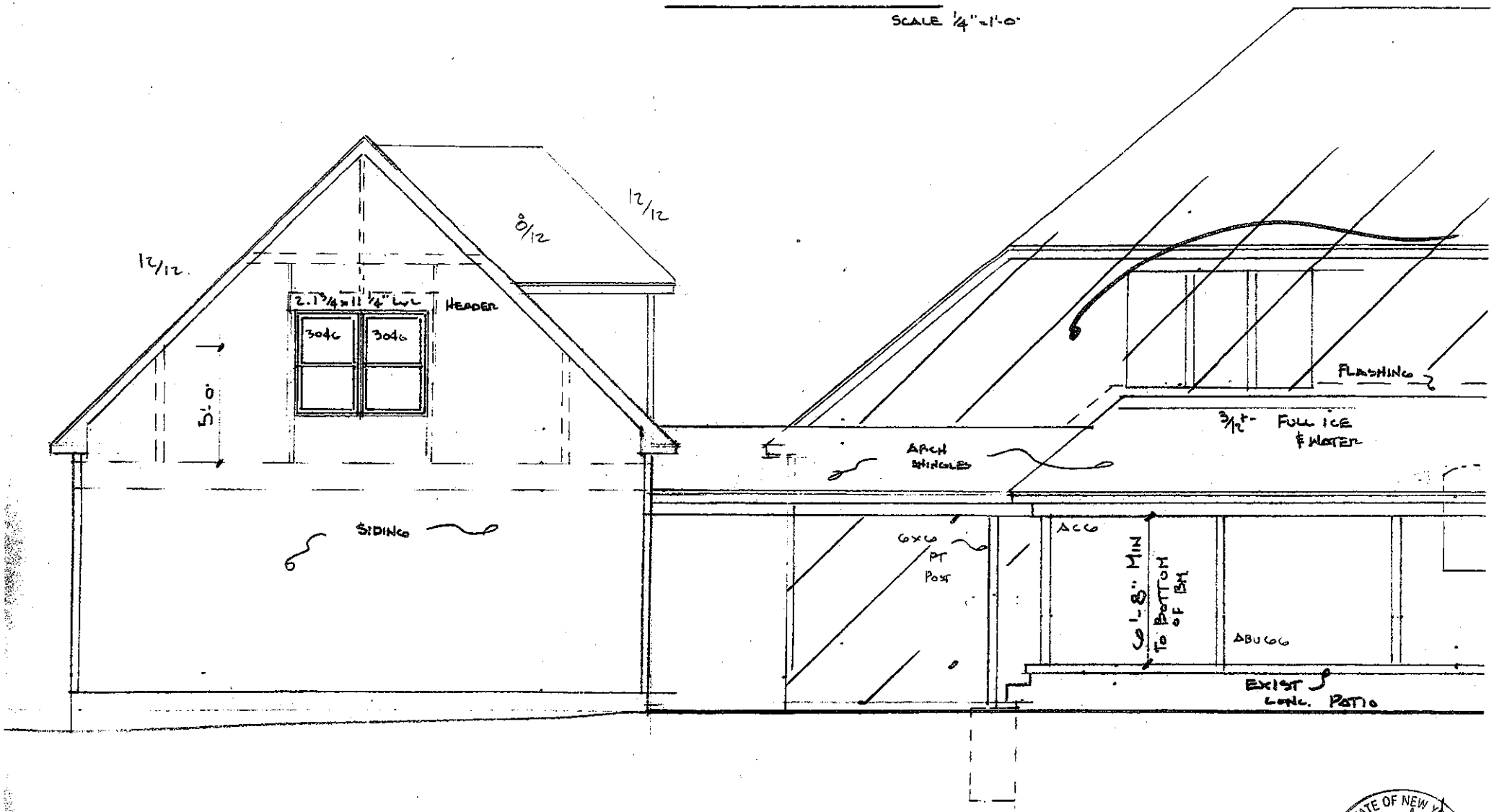

14" LVL
8/12
2x4 CT. AT 16" O.C.
12/12
2x8
CEILING JOIST
PLATE HT. AT DORMER
2x12


15' WIDE PRIVATE DRAINAGE EASEMENT
10' WIDE SANITARY SEWER EASEMENT
S58°54'12"E
161.77'
YARD DRAIN 2.5'N.
YARD DRAIN 1.0'E.
PROPOSED COVERED PORCH
PROPOSE GARAGE
CONC. FOUND. HOUSE No. 8200
N56°09'41"E R=78.00 L=33.24'
29.85'
47.76'
49.82'
35.87'
31.65'
20'-0"
26'-0"
61.75'
6'-0"
10.00'
7.50'
50'

ABU 66

SECTION

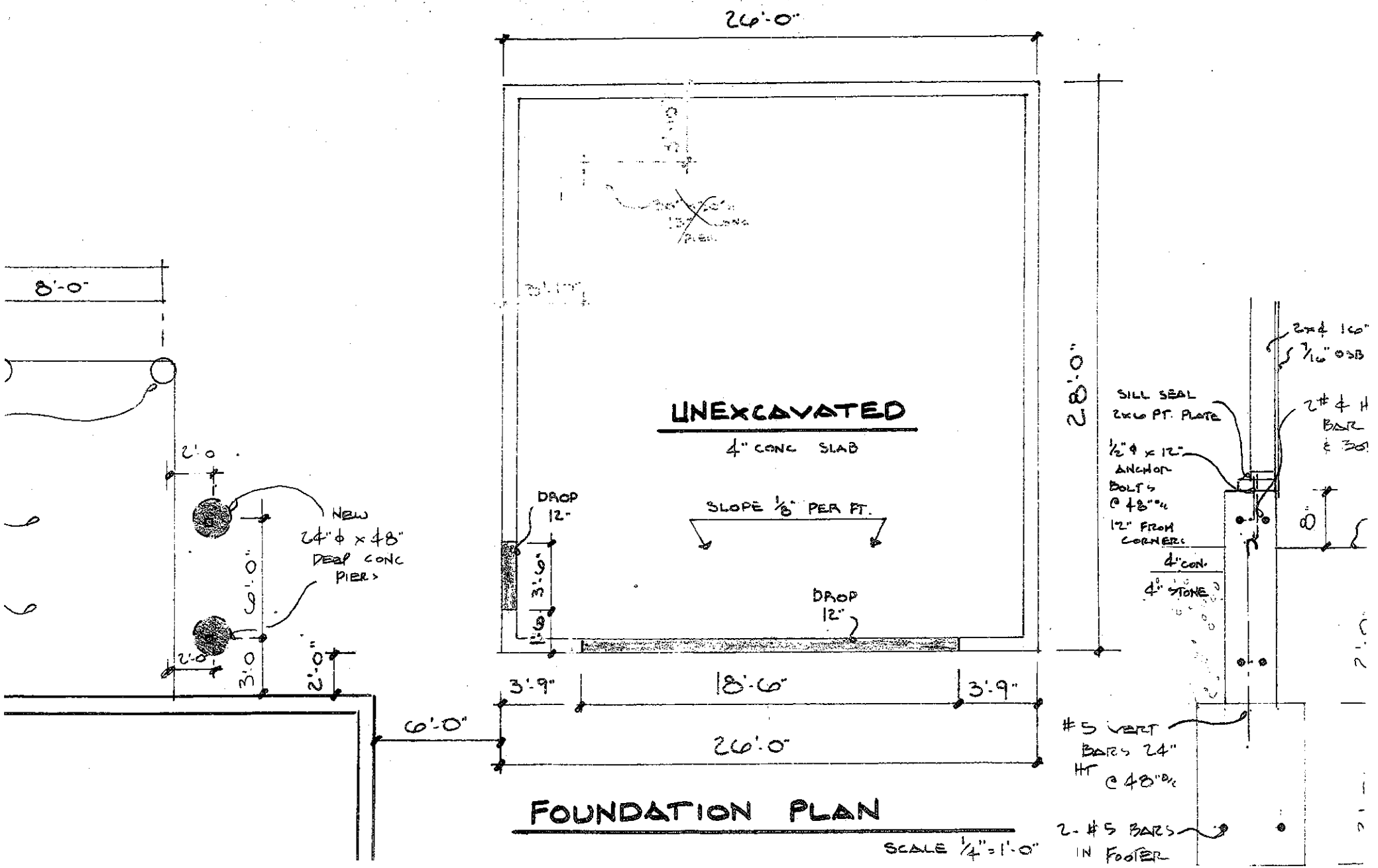
SCALE 1/4"=1'-0"



REAR

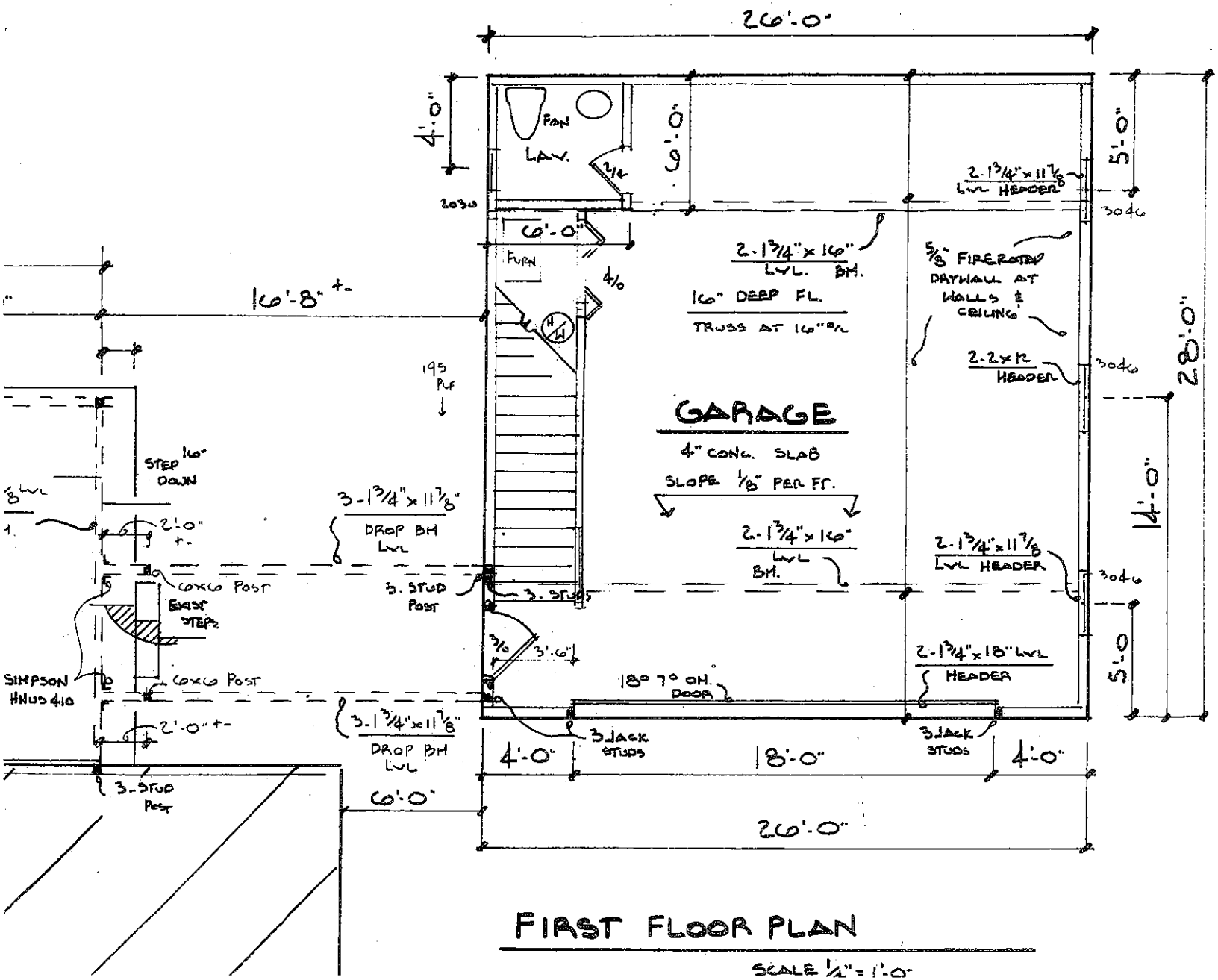
SCALE 1/4"= 1'-0"

STATE OF NEW YORK



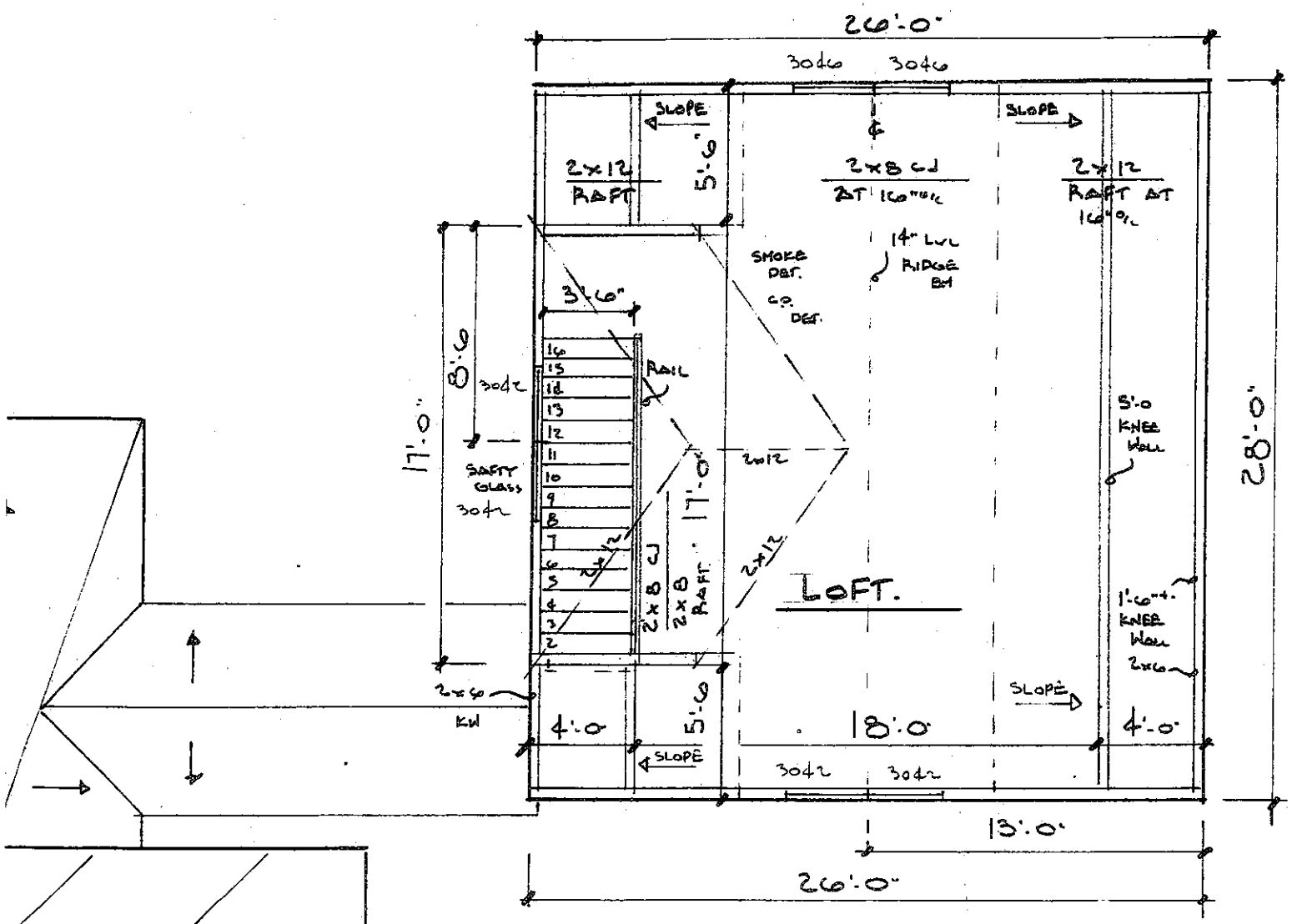
FOUNDATION PLAN

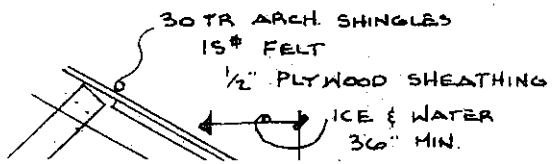
SCALE 1/4"=1'-0"



FIRST FLOOR PLAN

SCALE ½" = 1'-0"





SECOND FLOOR PLAN

REQUEST FOR ACTION BY:

TOWN OF CLARENCE, N.Y.

- ☒ Appeal Board
- ☐ Planning Board
- ☐ Town Board

- ☒ Appeal
- ☐ Rezone
- ☐ Revise Ordinance
- ☐ Subdivision
- ☐ Limited Use Permit
- ☐ Other

Rec'd. by: Planning and Zoning

Date July 30, 2014

Action Desired Applicant requests a variance for the placement of a pond lacking the appropriate design standards, setbacks and parcel size located at 9209 Tonawanda Creek Road.

Principle structure is located within the Agricultural Floodzone.

Reason

Town Code Reference:

§93-19

PLEASE PRINT

Name William Moses

Address 9209 Tonawanda Creek Rd

Clarence Center NY 14032

Town/City **State** **Zip**

Phone 444-0793

Signed SIGNATURE ON FILE

Requests for action on zoning should be filled out completely in above spaces if practicable, otherwise give brief description and refer to attached papers. The complete request with all necessary plans, maps, signatures, should be filed with the Secretary of the Planning Board. Requests (except appeals) may be filed with the Town Clerk or Town Board, but will generally be referred to Planning Board with subsequent loss of time.

Initial Action

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Hearing Held by ..... **on** ..... **19** .....

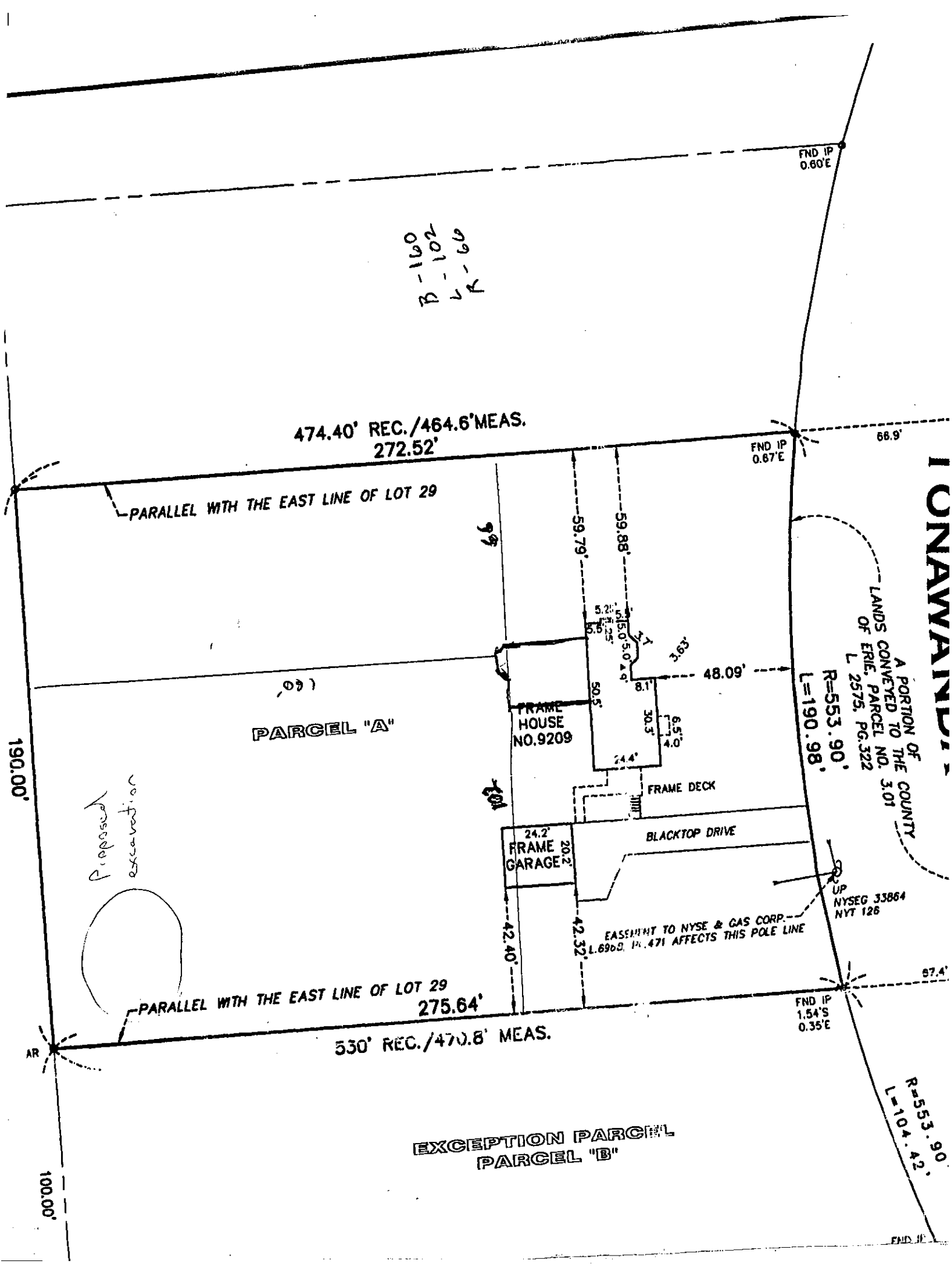
Final Action Taken

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

Filed with Town Clerk **on** ..... **19** .....

Filed with County Clerk **on** ..... **19** .....



FND IP
0.60'E
B-160
L-102
R-66
474.40' REC./464.6'MEAS.
272.52'
FND IP
0.67'E
66.9'
PARALLEL WITH THE EAST LINE OF LOT 29
59.79'
59.88'
A PORTION OF
LANDS CONVEYED TO THE COUNTY
OF ERIE, PARCEL NO. 3.01
L 2575, PG.322
R=553.90'
L=190.98'
48.09'
3.63'
8.1'
50.5'
30.3'
6.5'
4.0'
24.4'
FRAME
HOUSE
NO.9209
PARCEL "A"
190.00'
FRAME DECK
24.2'
FRAME
GARAGE
20.2'
BLACKTOP DRIVE
UP
NYSEG 33864
NYT 126
EASEMENT TO NYSE & GAS CORP.
L.6968, PG.471 AFFECTS THIS POLE LINE
42.40'
42.32'
Proposed excavation
67.4'
FND IP
1.54'S
0.35'E
PARALLEL WITH THE EAST LINE OF LOT 29
275.64'
530' REC./470.8' MEAS.
AR
R=553.90'
L=104.42'
EXCEPTION PARCEL
PARCEL "B"
100.00'

N

* note the parcel lines displayed are approximate

9209 Tonawanda Creek Road

REQUEST FOR ACTION BY:

TOWN OF CLARENCE, N.Y.

- ☒ Appeal Board
- ☐ Planning Board
- ☐ Town Board

- ☒ Appeal
- ☐ Rezone
- ☐ Revise Ordinance
- ☐ Subdivision
- ☐ Limited Use Permit
- ☐ Other

Rec'd. by: Jonathan Bleuer

Date July 30, 2014

Action Desired Applicant requests a variance of 7 ft. to allow for a 38 ft. front yard setback located at 5275 Old Goodrich Road.

Principle structure is located within the Residential Single Family zone.

Reason

Town Code Reference:

§229-52(A)(3)

note: 45' front yard setback as determined by Code Enforcement Officer

PLEASE PRINT

Name Rick Gaulin

Address 5275 Old Goodrich Road

Clarence NY

Town/City **State** **Zip**

Phone 239-1071

Signed SIGNATURE ON FILE

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Initial Action

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

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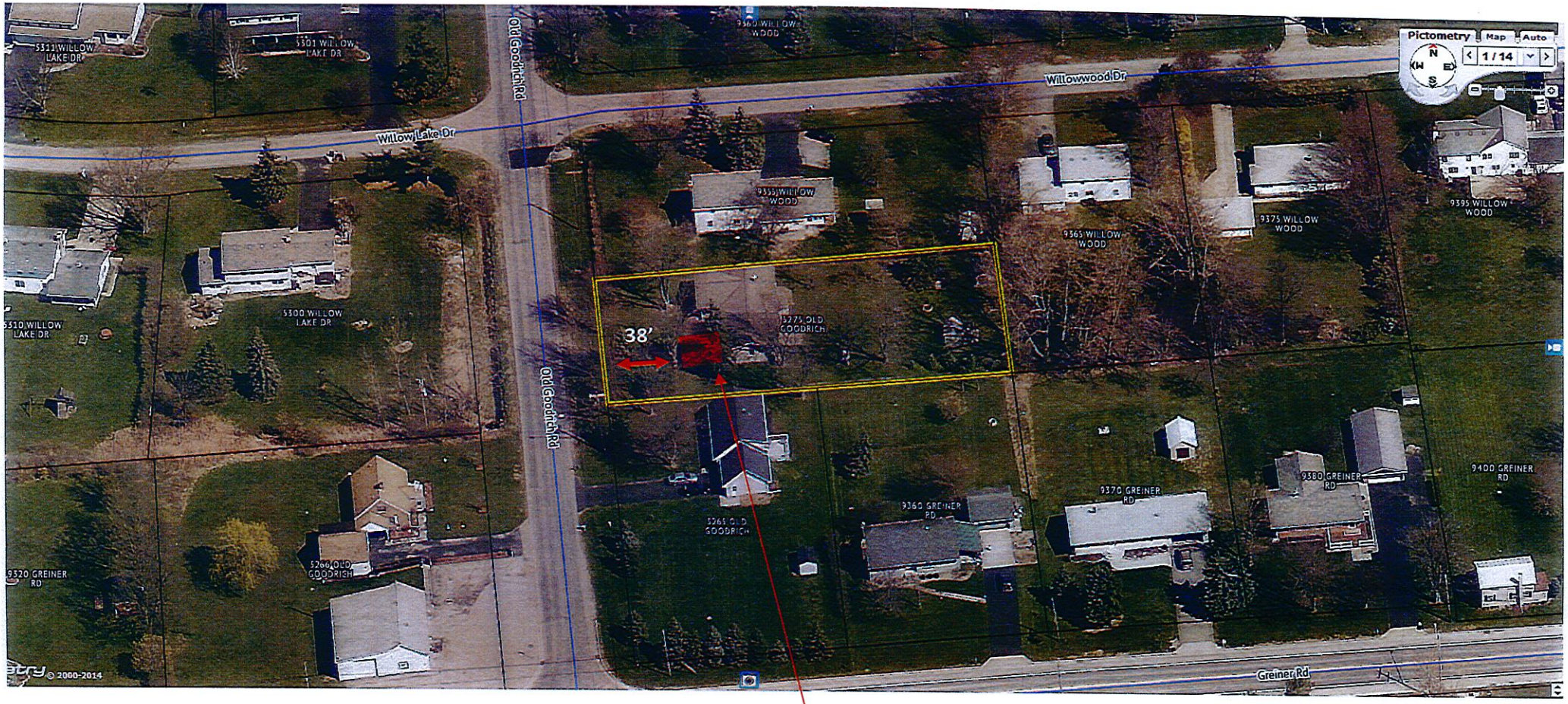


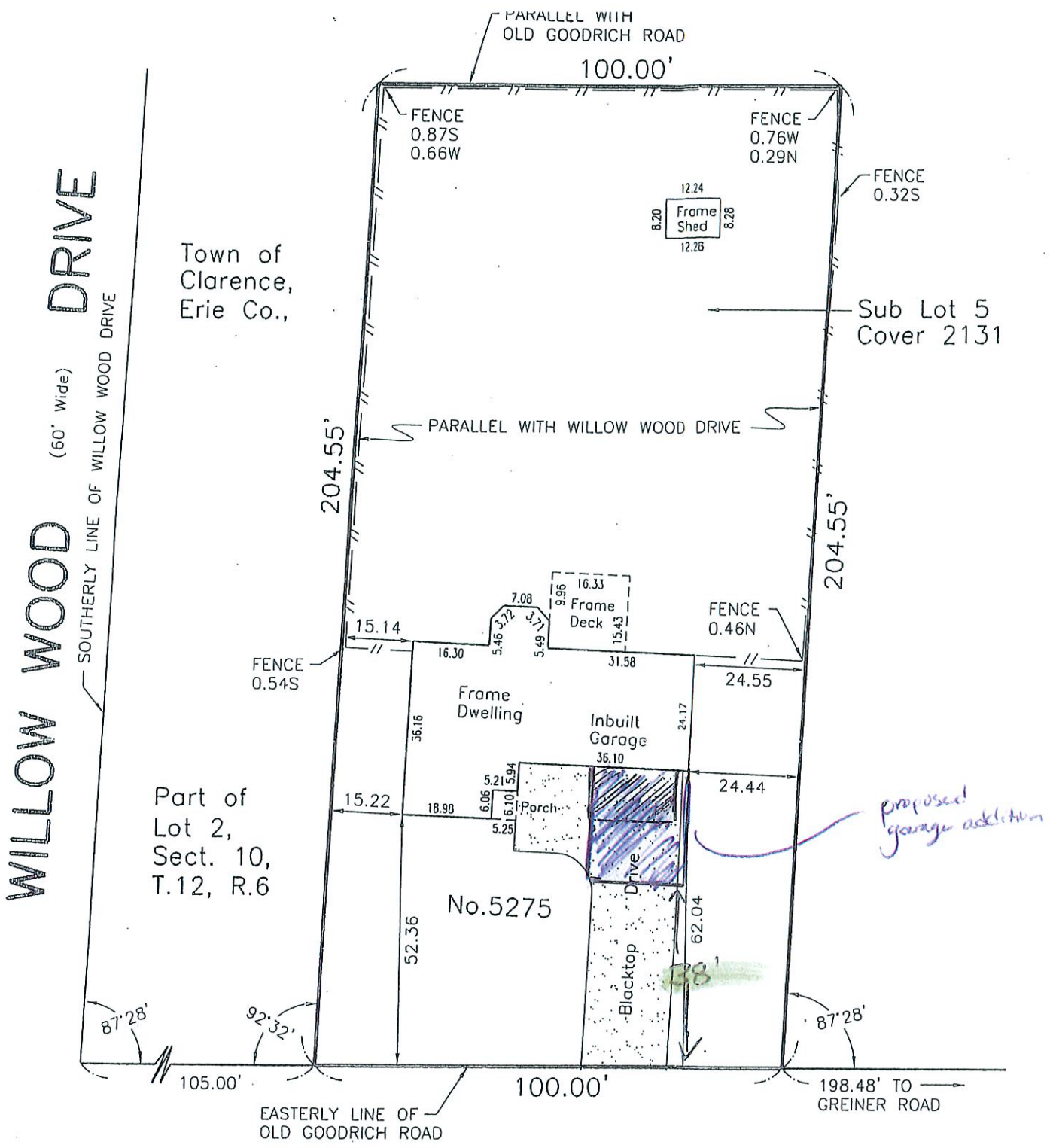
Proposed Garage Addition

480 sq. ft.

N

* note the parcel lines displayed are approximate

5275 Old Goodrich Road



OLD GOODRICH (66' Wide) ROAD

Existing Garage
20 x 24 : ~~624~~ 480
New Garage
20 x 24 = 480.
1104 sf
960

Existing Garage cannot exceed 480

SURVEY

made for

HOGAN & WILLIG, PLLC

One John James Audubon Parkway
First Floor

Amherst, N.Y.

May 23, 2008

H. FENTER

Project Notes

1. All work is to be coordinated with the owner. The contractor is to meet with the owner prior to construction.
2. Contractor shall keep the job free of debris and make final cleanup to the satisfaction of the owner. Contractor shall be responsible for removal of all construction debris from the project site & shall provide dumpsters etc. as required. Remove all debris on a daily basis.
3. Contractor shall be responsible for the protection of all existing buildings and other installations that are to remain intact while performing the specified work. Provide and maintain fire extinguishers on project site during construction.
4. Unless indicated otherwise, all material furnished and incorporated into the work shall be new, unused and of quality standard to the industry for first class work of similar nature and character. Install all materials to the manufacturer's recommendations and best standard of the trades involved.
5. Remove all existing constructions and finishes necessary for the completion of the work as depicted on the drawings, including but not limited to, items shown on the plans with dashed lines. Necessary disconnects and alterations to existing mechanical and electrical systems shall be included. Patch as required all constructions to remain in accordance with the contract drawings. Where contractor is designated to make removals, disposition of materials is responsibility of the contractor. Verify with owner, disposition and removal of any components of salvageable value.
6. Do not scale drawings
7. Sections, details materials, methods, etc., shown and/or noted on the drawings shall apply to all similar locations unless otherwise noted.
8. Contractor to provide necessary blocking or other supports within walls to accommodate all finishes, equipment, fixtures, etc., whether or not indicated on the drawings
9. Patch all finishes to match existing, including but not limited to, gypsum board, plaster, acoustic systems, wood trim, covers, base, panels, rails and wainscot. Verify match of new finish materials to existing color, texture, thickness, cut, etc. to satisfaction of owner prior to installations. Provide other materials to match existing when required to be approved by owner. All exposed portions of wall shall be finished with coats of spackling, sanded and left in paint ready condition.
10. All wood butt joints to be mitered.
11. All wood in contact with concrete or masonry shall be pressure treated.
12. Footings to sit on undisturbed soil.
13. Caulking at all exterior joints, openings, between wall and foundation, etc.
14. Provide sealant at all joints in different materials.
15. While every attempt has been made in the preparation of these documents to avoid mistakes, the maker can not guarantee against the possibility of human error. The builder or contractor on the job must check and verify all dimensions and other details of these drawings prior to construction and be responsible for them.
16. The makers of these documents are not responsible for or have control of means, methods, and techniques of construction or responsible for the actions of the contractor or the actions of the contractor's sub-contractors.
17. Framing plans, if provided, are for illustrative purposes only. Do not estimate or count members from these sheets. Use conventional estimating procedures. Actual framing may vary from what is shown. The contractor, builder, framer, etc., shall use their professional knowledge, judgment, & discretion during the construction of this building.
18. Visit the site to verify existing conditions. Existing concealed conditions and connections are based upon information taken from limited field investigations. Contractor shall make required adjustments to system components as necessitated by actual field conditions at no additional cost to owner or architect. Report any discrepancies between the drawings and actual field conditions to the architect before construction begins.

Fastener schedule for structural members

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING OF FASTENERS
JOIST TO SILL OR GIRDER, TOE NAIL	3-8d	-
TOP OR SOLE PLATE TO STUD, END NAIL	2-16d	-
STUD TO SOLE PLATE, TOE NAIL	3-8d or 2-16d	-
DOUBLE STUDS, FACE NAIL	10d	24" O.C.
DOUBLE TOP PLATES, FACE NAIL	10d	24" O.C.
DOUBLE TOP PLATES, MINIMUM 48-INCH OFFSET OF END JOINTS, FACE NAIL IN LAPPED AREA	8-16d	-
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL	3-8d	-
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS, FACE NAIL	2-10d	-
BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER	16d	16" O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOE NAIL	3-8d	-
CONTINUOUS HEADER TO STUD, TOE NAIL	4-8d	-
CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL	3-10d	-
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	3-10d	-
RAFTER TO PLATE, TOE NAIL	2-16d	-
1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d 2 STAPLES, 1 3/4	-
BUILT-UP CORNER STUDS	10d	24" O.C.
ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS: TOE NAIL FACE NAIL	 4-16d 3-16d	 - -
RAFTER TIES TO RAFTERS, FACE	3-8d	-
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING		
5/16 - 1/2 6d COMMON NAIL (SUBFLOOR,WALL) / 8d COMMON NAIL (ROOF)	6	12

Rafter / ceiling joist heel joint connections

RAFTER SLOPE	RAFTER SPACING (INCHES)	GROUND SNOW LOAD (PSF)							
		50							
		ROOF SPAN (FEET)							
		12	20	28	36				
		REQUIRED NUMBER OF 16d COMMON NAILS PER HEEL JOIST SPLICE							
4 : 12	12"	4	6	9	11				
	16"	5	8	12	15				

A. 40d BOX NAILS SHALL BE PERMITTED TO BE SUBSTITUTED FOR 16d COMMON NAILS.
B. NAILING REQUIREMENTS SHALL BE PERMITTED TO BE REDUCED 25 PERCENT IF NAILS ARE CLINCHED.
C. HEEL JOINT CONNECTIONS ARE NOT REQUIRED WHEN THE RIDGE IS SUPPORTED BY A LOAD-BEARING WALL, HEADER OR RIDGE BEAM
D. WHEN INTERMEDIATE SUPPORT OF THE RAFTER IS PROVIDED BY VERTICAL STRUTS OR PURLINS TO A LOAD-BEARING WALL, THE TABULATED HEEL JOINT CONNECTION REQUIREMENTS SHALL BE PERMITTED TO BE REDUCED PROPORTIONALLY TO THE REDUCTION IN SPAN.
E. EQUIVALENT NAILING PATTERNS ARE REQUIRED FOR CEILING JOIST TO CEILING JOIST LAP SPLICES.
F. WHEN RAFTER TIES ARE SUBSTITUTED FOR CEILING JOISTS, THE HEEL JOINT CONNECTION REQUIREMENT SHALL BE TAKEN AS THE TABULATED HEEL JOINT CONNECTION REQUIREMENT FOR TWO-THIRDS OF THE ACTUAL RAFTER SLOPE.
G. TABULATED HEEL JOINT CONNECTION REQUIREMENTS ASSUME THAT CEILING JOISTS OR RAFTER TIES ARE LOCATED AT THE BOTTOM OF THE ATTIC SPACE. WHEN CEILING JOISTS OR RAFTER TIES ARE LOCATED HIGHER IN THE ATTIC, HEEL JOINT CONNECTION REQUIREMENTS SHALL BE INCREASED BY THE FOLLOWING FACTORS:

H_C / H_R	RAFTER SPAN ADJUSTMENT FACTOR
1/3	0.67
1/4	0.76
1/5	0.83
1/6	0.90
1/15 OR LESS	1.00

WHERE:
H_C = HEIGHT OF CEILING JOISTS OR RAFTER TIES MEASURED VERTICALLY ABOVE THE TOP OF THE RAFTER SUPPORT WALLS
H_R = HEIGHT OF ROOF RIDGE MEASURED VERTICALLY ABOVE TOP OF RAFTER SUPPORT WALLS

Symbol Legend

Symbol	Meaning
(open rectangle)	Existing framed wall
(hatched rectangle)	New 2x4 stud wall
2x8 HEM FIR #2 RAFTERS AT 16" O.C. / 2x8 HEM FIR #2 CLNG. JOISTS AT 16" O.C.	New framing members
3/0 (Inches / Feet)	Door symbol

Design Criteria

1. Design Criteria Used:
   - A. Ground snow load: 50 psf
   - B. Wind Speed: 90 mph
   - C. Seismic Design: Category 'C'
   - D. Subject to damage from: Weathering: Severe; Frost line depth: 48"; Termite: None to slight; Decay: None to slight
   - E. Winter design Temp: 2° F
   - F. Ice shield underlayment required: Yes

1 **Cutting, Notching & Drilling Details**
Not to Scale

A **Typ. Foundation / Wall Section**
Scale: 3/4" = 1'-0"

New Floor Plan
Scale: 1/4" = 1'-0"

New Foundation Plan
Scale: 1/4" = 1'-0"

New Front Elevation
Scale: 1/4" = 1'-0"

New Side Elevation
Scale: 1/4" = 1'-0"

Project: **New Attached Garage Addition**

.

5275 Old Goodrich Road
Clarence, New York 14031

ROBERTS SHACKLETON BOY
ARCHITECTS AND ENGINEERS
68 Cayuga Road
Cheektowaga, New York 14225
Phone: 716-565-0722
Contact: Brian Effinger - 716-830-0749

Revisions: No:	Date:	Description:
.	.	.

Sheet Title: **Foundation & Floor Plans, Wall Section, Details and Notes**

Project No.: 14-875	Checked By: JEB
Scale: As Noted	Drawn By: BWE

Date: July 18, 2014

© 2014 All drawings & written material herein constitute original & unpublished work of the architect & may not be duplicated, used or disclosed without written consent of the architect. Do not scale drawings. Use given dimensions only. If not shown, verify correct dimensions with the architect. Contractor shall check and verify all dimensions & conditions at the site.

Drawing Number: **A-1**

REQUEST FOR ACTION BY:
TOWN OF CLARENCE, N.Y.

- ☐ Appeal Board
- ☐ Planning Board
- ☐ Town Board

- ☐ Appeal
- ☐ Rezone
- ☐ Revise Ordinance
- ☐ Subdivision
- ☐ Limited Use Permit
- ☐ Other

Rec'd. by: Jonathan Bleuer

Date August 1, 2014

Action Desired Applicant requests of variance of 240 sq. ft. to allow for the construction of a 440 sq. ft. detached garage located at 4920 Cliffside Drive West.

Principle structure is located within the Residential Single Family zoning classification.

Reason

Town Code Reference:

§229-55(H)

PLEASE PRINT

Name Gary & Judy Horvatits

Address 4920 Cliffside Dr West

Clarence NY 14031

Town/City **State** **Zip**

Phone

Signed SIGNATURE ON FILE

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Initial Action

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Approved ☐
Rejected ☐ **by** ..... **on** ..... **19** .....

Published (Attach Clipping) **on** ..... **19** .....

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Final Action Taken

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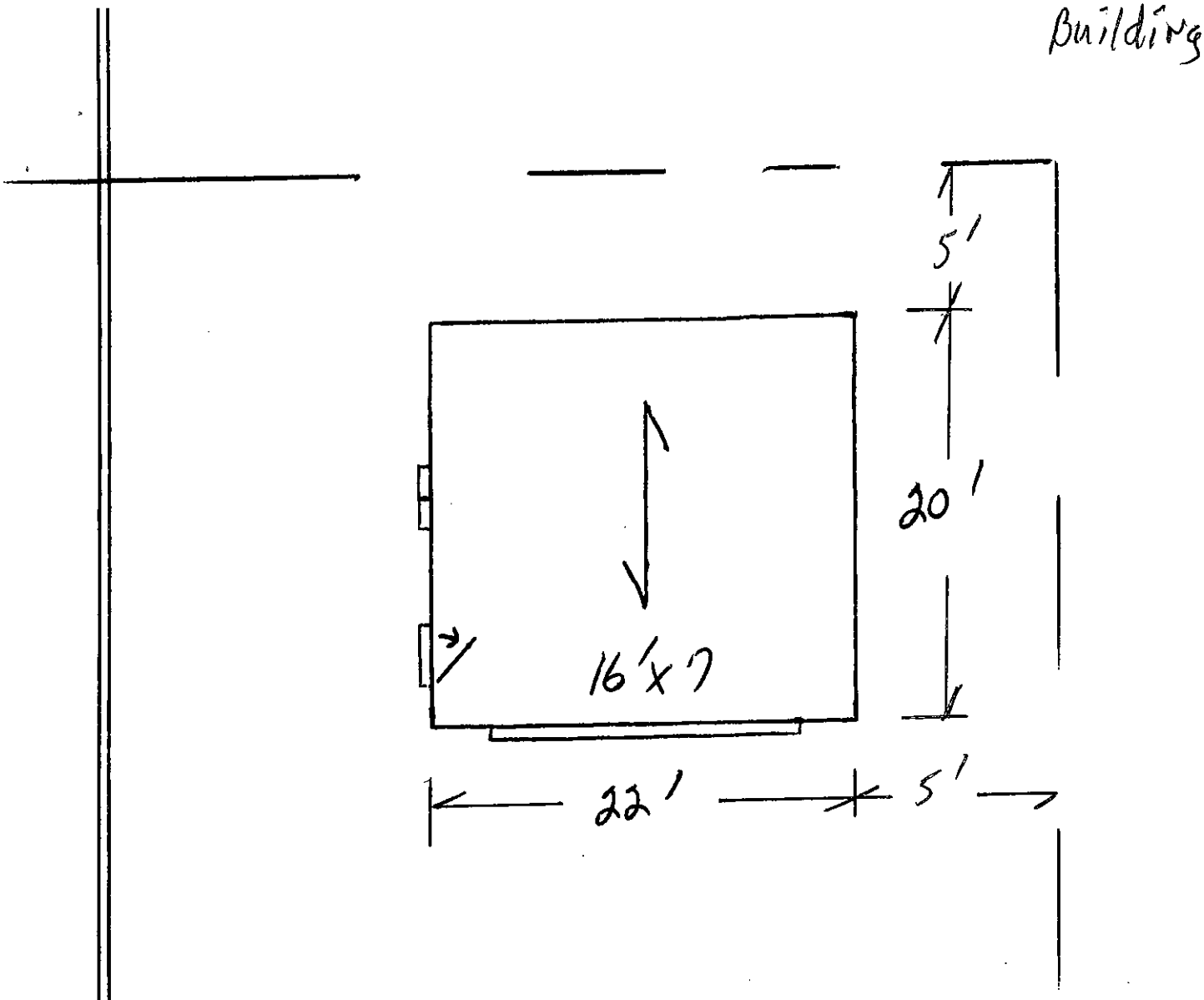
Filed with County Clerk **on** ..... **19** .....

Building



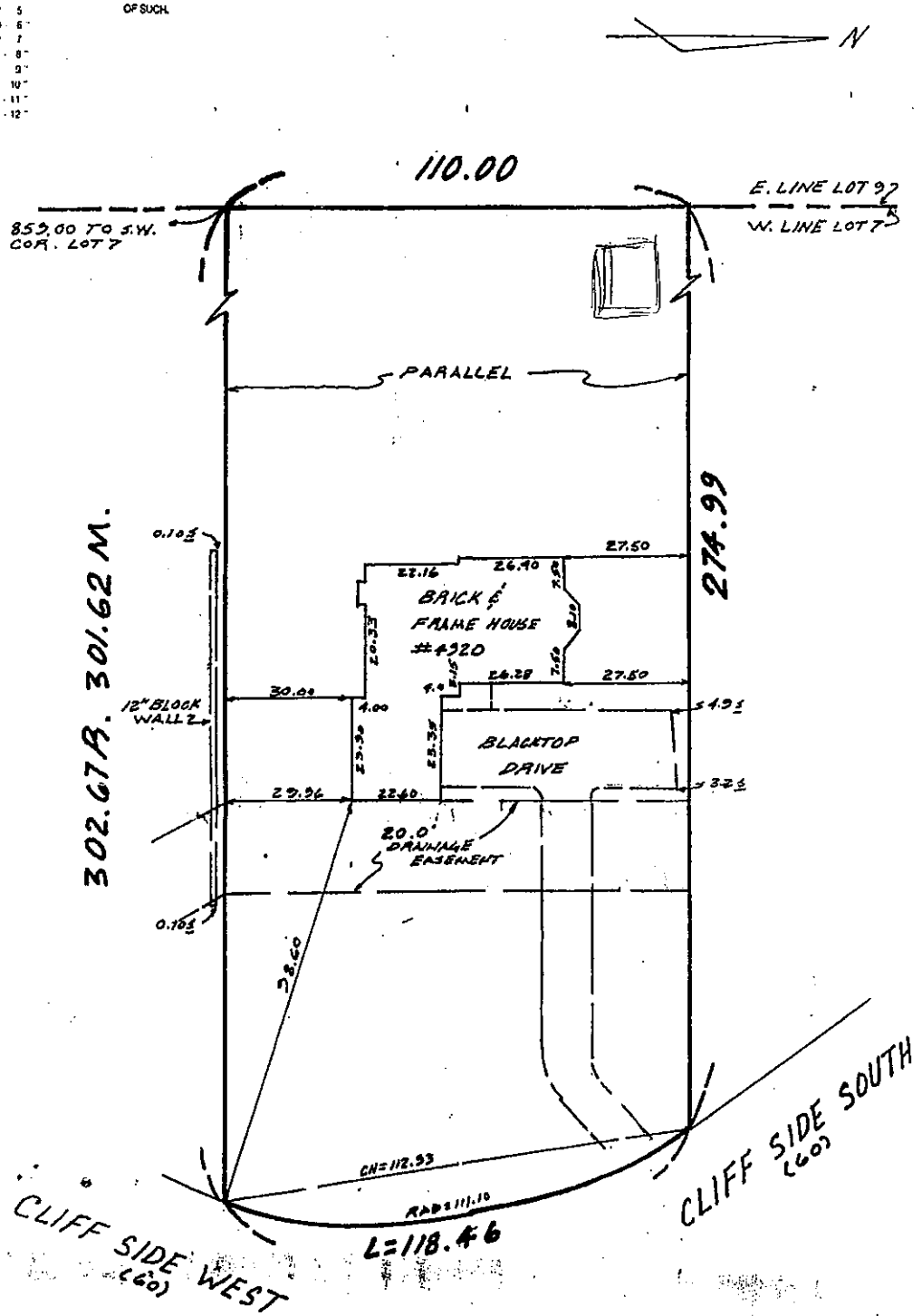
Gary & Judy
Horbatits
4920 Cliffside Dr. W.
Clarence, N.Y.
14031

866-0007
626-9968

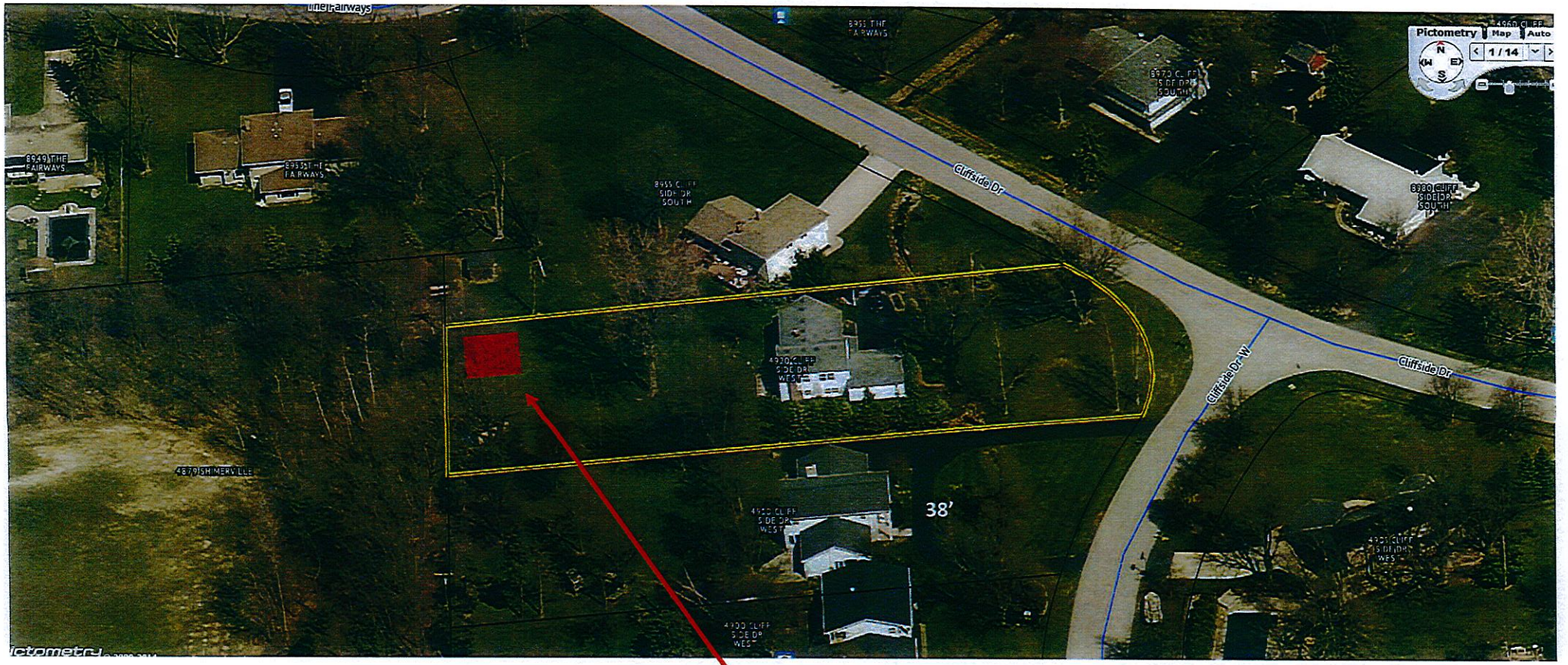
House

Feet Inches
0.08 - 1 inch
0.17 - 2"
0.25 - 3"
0.33 - 4"
0.42 - 5"
0.50 - 6"
0.58 - 7"
0.67 - 8"
0.75 - 9"
0.83 - 10"
0.92 - 11"
1.00 - 12"

NOTE: THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN EXAMINATION OF SUCH.



SURVEY DATE 4-14-1993	SCALE: 1"=30'	SBL NO. 71.01-5-26	CHARLES E. DENVER LICENSED LAND SURVEYOR N.Y.S. LICENSE NO. 49262 6 HUNTINGTON COURT WILLIAMSVILLE, N.Y. 14221 PHONE (716) 631-8041
LOCATION TOWN OF CLARENCE			
ERIE COUNTY, NEW YORK	JOB NO. 93-9083	RE-SURVEY	
PART LOT 7 SEC. 10 TWP 12 RGE 6			
MAP COVER 2178 S.L.2.			



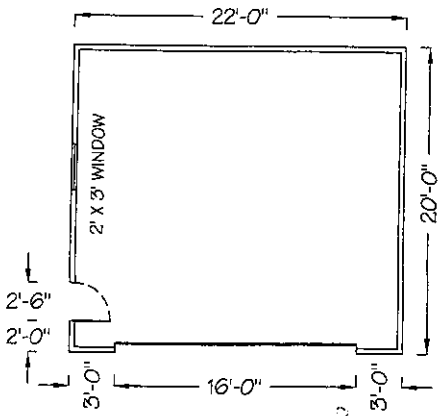
Proposed secondary detached garage

440 sq. ft.

N

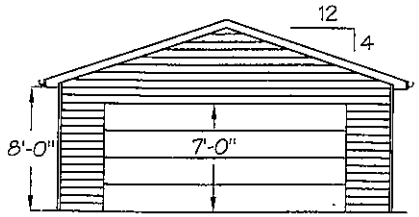
* note the parcel lines displayed are approximate

4920 Cliffside Drive West



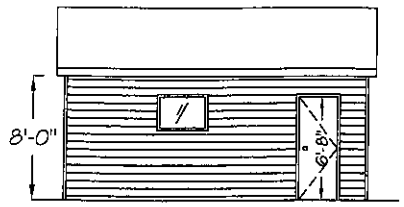
FLOOR PLAN

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



FRONT ELEVATION

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

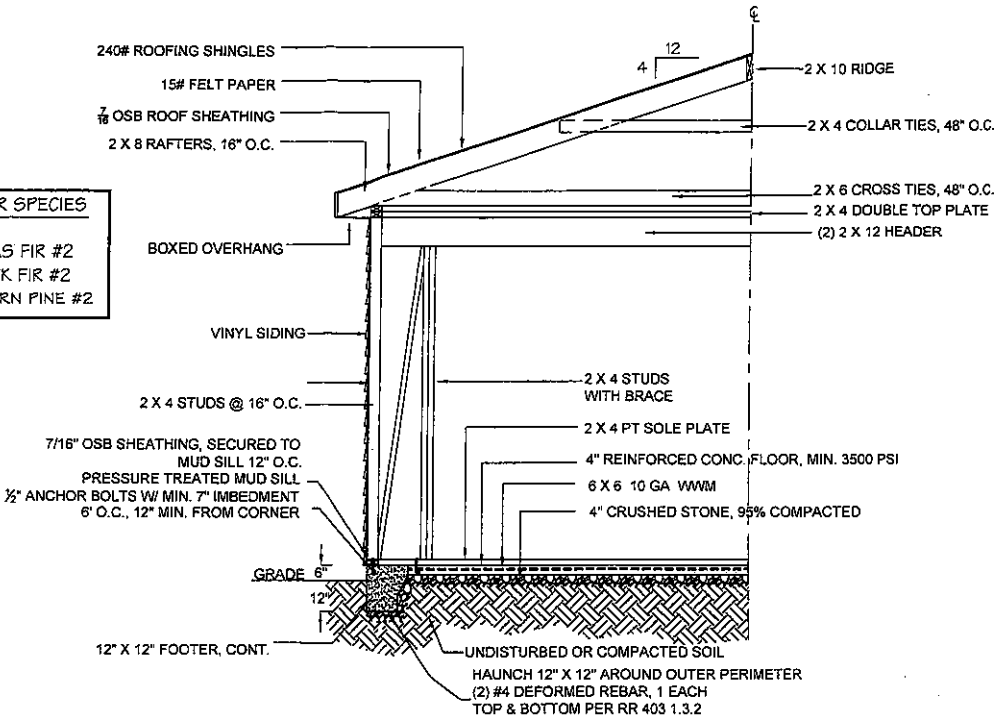


SIDE ELEVATION

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

LUMBER SPECIES

DOUGLAS FIR #2
HEMLOCK FIR #2
SOUTHERN PINE #2



GARAGE CROSS SECTION

SCALE: N. T. S.

NOTE: NEW YORK STATE CODE:

FASTEN TOP PLATE TO HEADER WITH TWO ROWS OF 16D SINKER NAILS AT 3' O.C. TYP.

1000 LB STRAP OPPOSITE SHEATHING

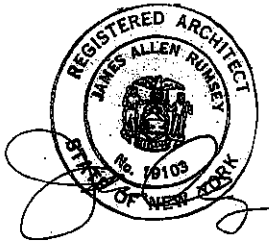
FASTEN SHEATHING TO HEADER WITH 8D COMMON OR GALVANIZED BOX NAILS IN 3" GRID PATTERN AS SHOWN AND 3" O.C. IN ALL FRAMING (STUDS, BLOCKING, AND SILLS) TYP.

MIN. WIDTH + 16" FOR ONE STORY STRUCTURES
MIN. WIDTH = 24" FOR USE IN THE FIRST OF TWO STORY STRUCTURES.

MIN. 2 X 4 FRAMING

3/8" MIN. THICKNESS WOOD STRUCTURAL PANEL SHEATHING

NYS BUILDING CODE
DESIGN CONDITIONS:
EXPOSURE "B"
SOIL BEARING 1500 PSF
SNOW LOAD 50 PSF
WIND: HORIZ. 20 PSF
VERT 10 PSF
UPLIFT 16 PSF



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ITEM	DATE	REVISION

HORVATITS GARAGE

4920 CLIFFSIDE DRIVE
CLARENCE, NEW YORK

FLOOR PLAN & SECTION

JAMES
ALLEN
RUMSEY
ARCHITECT
5729 EAST RIVER ROAD
GRAND ISLAND, NEW YORK 14072

F.J. WAILAND
ASSOCIATES INC.
Construction Management

PROJECT NO.	
DRAWN BY	cdb / mmw
DATE	25 NOV 2013
SCALE	1/8" = 1'-0"

SHEET NO. A-1