NOTICE OF MEETING
VILLAGE OF FOX POINT
BUILDING BOARD

Schwemer Hall
7200 North Santa Monica Blvd.
Fox Point, WI 53217

Wednesday
February 14, 2024
5:00 P.M.

Join Zoom Meeting

https://us02web.zoom.us/j/87052797201

Meeting ID: 870 5279 7201

Dial by your location: 312.626.6799

AGENDA

1. Roll call of board members and quorum confirmation.
2. Discussion, corrections, and approval of the minutes of the January 10, 2024 Building Board meeting.
3. Kristen Bachman, 805 E Dean Rd, proposed roof mounted solar.
4. Lisa Mussak, 7121 N Barnett Ln, proposed greenhouse.
5. Kendall Strand, 506 E Bradley Rd, proposed detached garage.
6. Scott Davis, 7748 N Club Cir, proposed covered patio, detached garage, and covered pavilion with deck.
7. Adjourn.

PLEASE NOTE: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aids. For additional information or to request these services, contact the Village Clerk at 414-351-8900. It is possible that members of, and possibly a quorum of members of, other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

VILLAGE OF FOX POINT
BUILDING BOARD MINUTES

A meeting of the Building Board was held via Zoom, on Wednesday, January 10, 2024, at 5:00 pm. Those present included:

Justin Racinowski
Jeff Weber
William Feldman-Absent
Sharon Celek
Lucille Sells
Michael Rakow

Notice of the meeting was provided to the North Shore Now and to all others as required by State open meeting laws and posted on the official bulletin boards.

MINUTES

Motion was made by Jeff Weber to approve the minutes of December 16, 2023, as discussed and amended. Motion was seconded by Justin Racinowski. Motion Caried.

AGENDA

1. **Shaka Smart, 7624 N Beach Dr, resubmittal new single-family home.** It was the consensus of the Building Board to approve as submitted.
2. **Steve Fouhal, 1130 E Dean Rd, proposed 2nd story addition.** It was the consensus of the Building Board to approve as submitted.
3. **Jack Bretl, 7437 N Lombardy Rd, proposed addition.** It was the consensus of the Building Board to approve as submitted.
4. **1506 E Dean Rd, proposed addition.** It was the consensus of the Building Board to approve as submitted.

ADJOURN

Motion to adjourn Building Board was made by Sharon Celek. Motion seconded by Lucille Sells. Motion Caried. Building Board adjourned at 5:26 pm.

Respectfully Submitted,

Michael Rakow
Building Inspector
Village of Fox Point

DRAFT

VILLAGE OF FOX POINT

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B- _____

OFFICE USE ONLY
Issued Date
Zoning

BUILDING PERMIT

Job Address 805 E Dean Road, Fox Point, WI 53217	**Building Type:** Residential ☑ Commercial ☐
Description of Work	
6.72 kW roof mounted solar array	
Estimated Cost of Project $ 10,812.30	

Owner/Occupant	
Business Name	Contact Name Kristen Bachman
Address 805 E Dean Road	City/State/Zip Fox Point, WI 53217
Phone 414-559-1778	Email khbachman10@gmail.com

Cautionary Statement required when homeowner is applying for permit*

Contractor	
Company Name Arch Solar	Contact Name Dani Beierschmitt
Address 1237 Pilgrim Rd	City/State/Zip Plymouth, WI
Phone 815-391-0755	Email danielle@archsolar.com
Dwelling Contractor #	Dwelling Contractor Qualifier # 122-201-337

Square Footage Under Construction				
1st Floor	2nd Floor	Basement	Addition	Garage

Description		Rate	Amount
Project - Per $1,000 of estimated cost		$10.00	108.12
Building Board		$75.00	75.00
Footing early start - $230.00 one and two family; $305.00 commercial			
Plan Review - $275.00 one and two family; New Single Family Construction $330.00 plus $30.00/unit commercial			
State Seal		$75.00	
Razing, Interior Demolition $925.00 max/bld	$95.00 minimum plus	$0.13/sqft	
Moving buildings	$250.00 plus	$0.13/sqft	
Fuel tanks - Per 1,000 gallons		$25.00	
Re-inspection		$100.00	
Work started without permit		**Double**	
	Minimum Fee	**$70.00**	
Payable to: Village of Fox Point	**Total Permit Fee**		$108.12

Applicant Signature _____ **Date** 01/02/2024

Rev 01/22

ISSUED PERMITS are available on the Village website under *PERMITS & LICENSES*

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217 414-351-8900

Receipt No: 1.059838 Jan 10, 2024

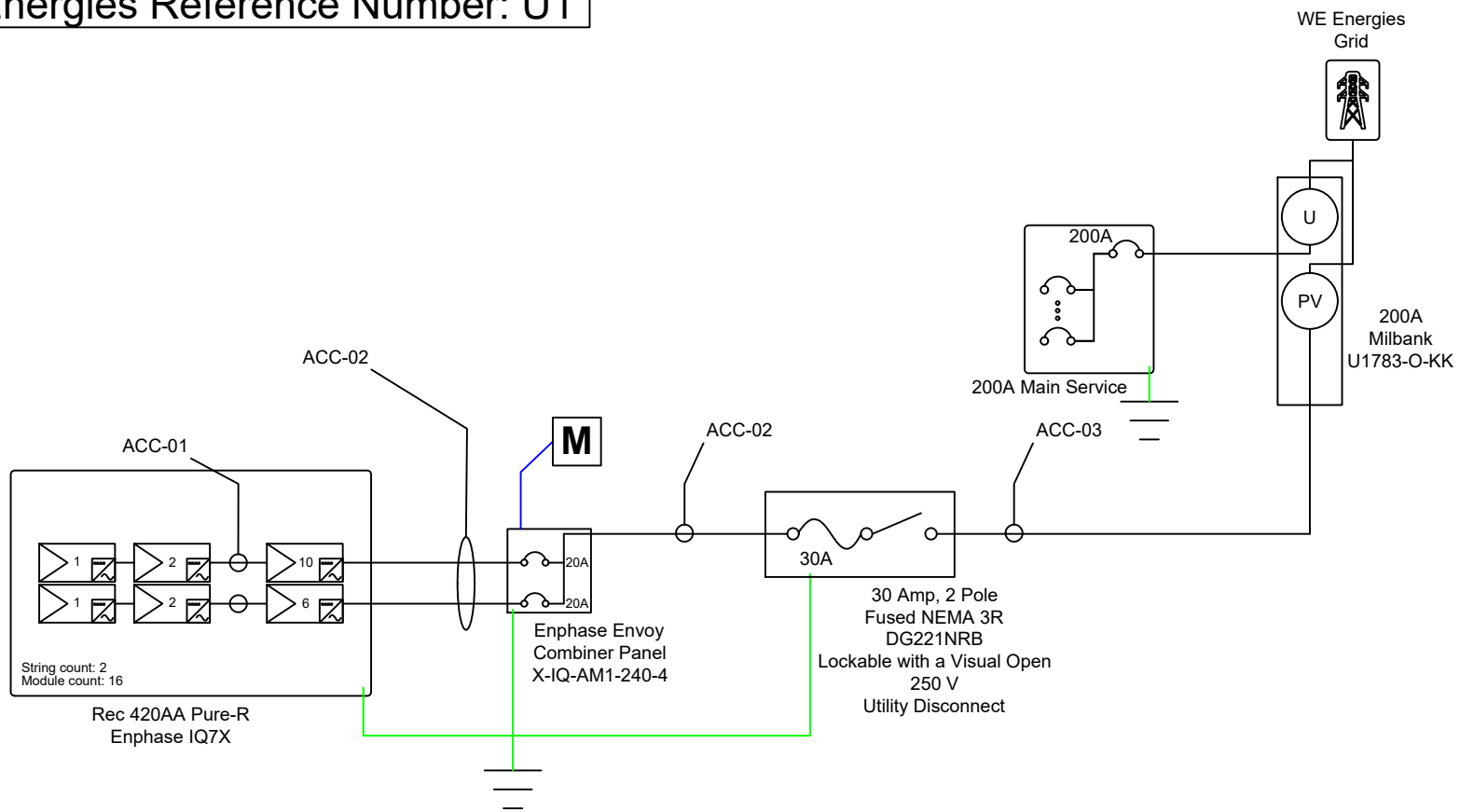
805 E Dean Road

Previous Balance:	.00
LICENSES & PERMITS - BUILDING PERMIT	108.12
24-44460 BUILDING PERMIT	
LICENSES & PERMITS - ELECTRICAL PERMIT	60.00
24-44430 ELECTRICAL PERMIT	
Total:	168.12
CHECK Check No: 2530	168.12
Payor: Arch Solar, Inc.	
Total Applied:	168.12
Change Tendered:	.00

Duplicate Copy

01/10/2024 10:30 AM

WE Energies Reference Number: U1



Conductor Schedule									Conduit Schedule	
ID	Sets	Phase Quantity	Color & Size	Insulation	Material	Voltage Drop	Neutral	Ground	Size	Type
ACC-01	1	2	BR #12 AWG	THWN	Cu	.90%	-	#10 THWN Cu	-	-
ACC-02	1	2	BR #10 AWG	THWN	Cu	.29%	-	#10 THWN Cu	3/4"	EMT
ACC-03	1	2	BR #6 AWG	THWN	Cu	.05%	#6 THWN Cu	-	3/4"	EMT

Module Specifications	
Rec Solar 420AA Pure-R (QTY:16)	
STC Rating	420 W
Vmp	50 V
Imp	8.4 A
Voc	59.4 V
Isc	8.8 A

Array Specifications (6.72 kWdc Total)		
1 String of 10 Modules / 1 String of 6 Modules		
Max DC Power Rating	4.20 kW	2.52 kW
Operating AC Voltage	240 V	240 V
Operating AC Current	13.1 A	7.86 A
Max AC System Voltage	240 V	240 V
AC Short Circuit Current	20 A	20 A

Inverter Specifications	
Enphase IQ7X	
Max AC Power Rating	315W / 5.04 kWac Total
Max DC Input Voltage	79.5 V
Max DC Input Current	10 A
Nominal AC OperatingVoltage	240 V
Max AC Operating Current	1.31A Each / 20.96 A Total

ARCH SOLAR
THE ENERGY EXPERTS

1237 Pilgrim Road
Plymouth WI, 53073

Phone: (920) 838-6610
www.archelec.com

Bachman- 6.72 kWdc, 5.04 kWac, Fox Point

Customer: Kristen Bachman
Address: 805 East Dean Road
City: Fox Point
State: WI
Zip Code: 53217
Contact: Kristen Bachman
Phone: (414) 559-1778
Email: khbachman10@gmail.com

Project Number: 23R-184
System Size: 6.72 kWdc

Designer: Mike Gietman
920.838.6610

One Line Diagram

Revision: 1
Date: 1.9.24

RIGHT ANGLE *ENGINEERING*

STRUCTURAL CERTIFICATION REPORT

Roof-mounted Solar Panels

November 21, 2023

To: Arch Solar
1237 Pilgrim Road
Plymouth, WI 53073

Re: Kristen Bachman
805 E Dean Rd
Fox Point, WI 53217
AHJ: **Milwaukee (County)**, WI

Arch Solar proposes to install new roof-mounted solar panels at this residence and asked *Right Angle Engineering* to review the existing structure for suitability. This letter summarizes the methods that were used to survey, evaluate, and certify the existing roof framing and the attachment of the new solar panels to it.

STRUCTURAL DESIGN

Building Code:	International Residential Code 2018
Design Standards:	ASCE 7-16
Snow:	Ground: p_g= 30.0 psf | Flat Roof: p_f= 20.79 psf | Sloped Roof: p_s= 15.25 psf
Wind:	Ultimate Wind Speed = 106.0 mph | Exposure = C
Seismic:	Risk Category = 2 | Seismic Design Category = B | Site Class = D

STRUCTURE

Field Technicians from *Arch Solar* visited the site and observed the existing structure :

Array Name	Panel Quantity	Roof Framing	Material	Pitch
Array 1	3	2x8 Rafter | 16" o.c.	Asphalt Shingles	26°
Array 2	2	2x8 Rafter | 16" o.c.	Asphalt Shingles	26°
Array 3	5	2x8 Rafter | 16" o.c.	Asphalt Shingles	26°
Array 4	2	2x8 Rafter | 16" o.c.	Asphalt Shingles	26°
Array 5	4	2x8 Rafter | 16" o.c.	Asphalt Shingles	26°

ANCHORAGE

The solar panel anchorage shall be installed according to the manufacturer's most current installation manual. Anchorage shall be staggered to distribute the load evenly to adjacent roof members. The solar panels should be mounted parallel (max 10 inches) to the roof surface.

Array Name	Connection Type	Fastener	Max Anchorage Spacing
Array 1	Halo UltraGrip (HUG)	(2) #14 Wood Screws (2.0" embedment) into roof substructure	48"
Array 2	Halo UltraGrip (HUG)	(2) #14 Wood Screws (2.0" embedment) into roof substructure	48"
Array 3	Halo UltraGrip (HUG)	(2) #14 Wood Screws (2.0" embedment) into roof substructure	48"
Array 4	Halo UltraGrip (HUG)	(2) #14 Wood Screws (2.0" embedment) into roof substructure	48"
Array 5	Halo UltraGrip (HUG)	(2) #14 Wood Screws (2.0" embedment) into roof substructure	48"

Installation Instructions

Solar panels and the equipment shall be installed per the manufacturer's installation specifications. Improper installation will void this certification. Deviations from the approved structural plans (including equipment substitutions) are not

allowed without written approval from Right Angle Engineering. Prior to installation, the installer should:

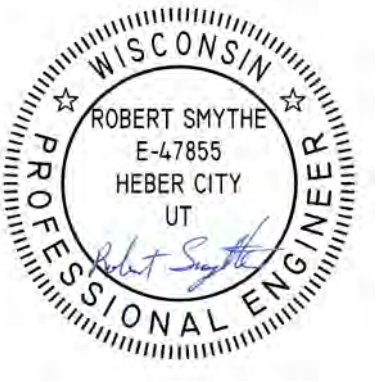
- Confirm that the existing structure matches the information provided in the structural survey, the approved installation plans and this certification.
- Identify discrepancies between this certification and the approved installation plans. If found, then this certification shall govern.
- Identify structural elements that are dangerous (cracked, broken, excessive sag, signs of overstress, rot,decay, fire, water). If found, installation shall cease until those elements are adequately abated and made to comply with the referenced building code.
- Verify that both the existing structure and the solar addition has been permitted through the AHJ.
- All snow retention systems below the solar arrays must be removed in order for the snow to slide off the roof freely.

STRUCTURAL CERTIFICATION

I certify the addition of solar panels on the roof of this structure does not cause the structure to become unsafe or make it generally less compliant with the life-safety requirements of the referenced building code. Based on the evaluation methods described below, for the loads that exist at this site, the existing framing will safely support the new solar panels if they are installed and attached correctly. Electrical design is not included in this certification.

Array Name	Certification Method	Retrofits
Array 1	Stress analysis International Residential code	None required
Array 2	Stress analysis International Residential code	None required
Array 3	Stress analysis International Residential code	None required
Array 4	Stress analysis International Residential code	None required
Array 5	Stress analysis International Residential code	None required

Regards,



11/21/2023

Robert D. Smythe, P.E.
Right Angle Engineering

Job Details

Roof Snow Load - ASCE 7-16	
Ground Snow Load (p_g) *Section 7.2*	30.0 psf
Exposure Factor (C_e) *Table 7.3-1*	0.9
Thermal Factor (C_t) *Table 7.3-2*	1.1
Importance Factor (I_s) *Table 1.5-2*	1
Flat Roof Snow Load (p_f) *Equation 7.3-1*	20.79 psf
Slippery Surface Slope Factor (C_s) *Figure 7.4-1*	0.73
Non-Slippery Surface Slope Factor (C_s) *Figure 7.4-1*	1
Roof Snow Load *Equation 7.4-1*	20.79 psf
Reduced Snow Load (Slippery Surface) *Equation 7.4-1*	15.25 psf

Design Criteria	
Wind Speed (V_{ult}) *Local Design Criteria*	106.0mph
Exposure Category	C
Risk Category	2
Mean Roof Height	20 ft
Roof Type	Gable Roof
Building Type	Enclosed

Roof Live Load	
Existing Roof Live Load *ASCE 7-16 Table 4.3-1*	20 psf

[1]Roof Dead Load			
Asphalt Shingles	2.0 psf	**No Drywall**	0.0 psf
5/8" Plywood Sheathing	2.0 psf	**Solar Panel Array**	2.74 psf
Roof Framing	3.15 psf	**Dead Load Without Panels**	8.35 psf
Insulation	1.2 psf		

[1]Roof Dead Load is taken from the worst case scenario dead load from all arrays of the job in order to provide a more conservative evaluation.

Array 1

Array Details	
Roof Framing	2x8 Rafter *DF No.2*
Spacing	16.0"
Beam Span	8.0'
Roof Pitch	26°
Panel Quantity	3
Panel Array Area	64.91 ft²
Panel Orientation	Landscape
Lag Screw Embedment	2.0"
Roof Attachment Type	Halo UltraGrip (HUG) (2) #14 Wood Screws
Shear Capacity *Ironridge testing*	368.0 lbs
Pullout Capacity *Ironridge testing*	1004.0 lbs
Velocity Pressure *Equation 26.10-1 (K_z=0.9, K_{ht}=1, K_d=0.85, K_e=0.98)*	21.52 psf

GCP Zones	1/2e	2n/2r /3e	3r
GC_p *Figure 30.3-(2A-5B)*	-1.5	-2.5	-3.6
Design Pressure Up [psf] *Equation 29.4-7 γ_a=0.8 γ_E=1.0*	-25.8	-43.0	-62.0
Exposed Design Pressure Up [psf] *γ_a=0.8 γ_E=1.5*	-38.7	-64.6	-93.0
Design Pressure Down [psf]	8.6	8.6	8.6
Tributary Area [ft^2]	46.7	41.2	28.1
Maximum Connection Spacing [in]	324	286	195
Maximum Rail Span [in]	48	48	48
Maximum Rail Cantilever [in]	16	16	16
Design Connection Spacing [in]	48	48	48
Deign Connection Spacing (exposed) [in]	48	48	48

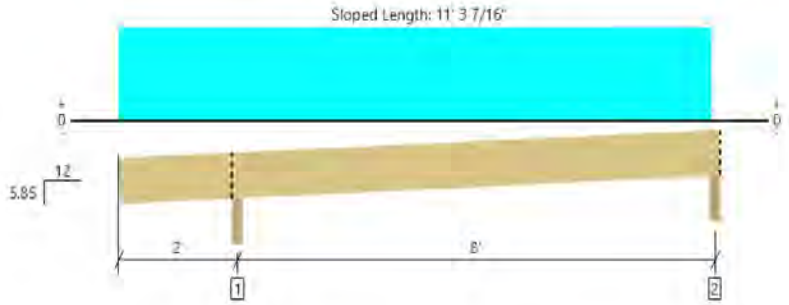
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist before panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	249 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	142 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	290 @ 6' 1 5/8"	1564	Passed (19%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.037 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.052 @ 6' 1/4"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	77	133	172	249	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	47	83	108	155	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	16.0	20.8	Dead load and snow load on roof before panels are added

Member Notes

Roof joist before solar panels are added

Weyerhaeuser Notes

Weyerhaeuser warrants that the sizing of its products will be in accordance with Weyerhaeuser product design criteria and published design values. Weyerhaeuser expressly disclaims any other warranties related to the software. Use of this software is not intended to circumvent the need for a design professional as determined by the authority having jurisdiction. The designer of record, builder or framer is responsible to assure that this calculation is compatible with the overall project. Accessories (Rim Board, Blocking Panels and Squash Blocks) are not designed by this software. Products manufactured at Weyerhaeuser facilities are third-party certified to sustainable forestry standards. Weyerhaeuser Engineered Lumber Products have been evaluated by ICC-ES under evaluation reports ESR-1153 and ESR-1387 and/or tested in accordance with applicable ASTM standards. For current code evaluation reports, Weyerhaeuser product literature and installation details refer to www.weyerhaeuser.com/woodproducts/document-library.

The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:31 PM UTC
ForteWEB v3.6, Engine: V8.3.1.5, Data: V8.1.4.1
File Name: Kristen Bachman-Array 1_ImportedDesignAll
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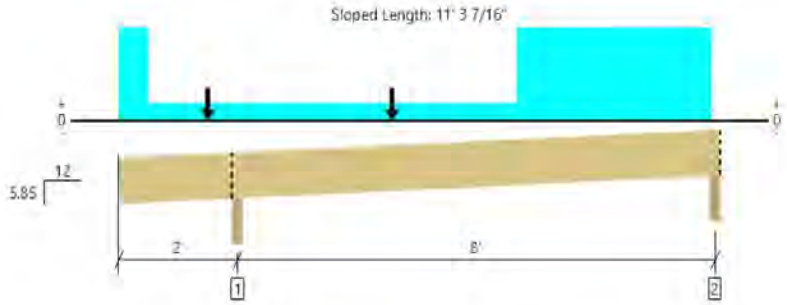
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist with solar panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	240 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	119 @ 2' 8 1/4"	1501	Passed (8%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	237 @ 6' 3/4"	1564	Passed (15%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.027 @ 6' 1/2"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.044 @ 6' 3/8"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	95	27	145	240	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	50	55	90	140	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	-	-	DL
2 - Uniform (PSF)	0 to 6"	16"	-	16.0	20.8	DL+SL below panels
3 - Point (lb)	1' 6"	N/A	10	-	64	solar and SL
4 - Point (lb)	4' 7 5/16"	N/A	10	-	64	solar and SL
5 - Uniform (PSF)	6' 8 9/16" to 10'	16"		16.0	20.8	DL+SL above panels

Member Notes

Roof joist with solar panels

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ForteWEB Software Operator	Job Notes
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Weyerhaeuser

11/21/2023 9:48:31 PM UTC
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File Name: Kristen Bachman-Array 1_ImportedDesignAll
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Array 2

Array Details	
Roof Framing	2x8 Rafter *DF No.2*
Spacing	16.0"
Beam Span	8.0'
Roof Pitch	26°
Panel Quantity	2
Panel Array Area	43.27 ft²
Panel Orientation	Portrait
Lag Screw Embedment	2.0"
Roof Attachment Type	Halo UltraGrip (HUG) (2) #14 Wood Screws
Shear Capacity *Ironridge testing*	368.0 lbs
Pullout Capacity *Ironridge testing*	1004.0 lbs
Velocity Pressure *Equation 26.10-1 (K_z=0.9, K_{ht}=1, K_d=0.85, K_e=0.98)*	21.52 psf

GCP Zones	1/2e	2n/2r /3e	3r
GC_p *Figure 30.3-(2A-5B)*	-1.5	-2.5	-3.6
Design Pressure Up [psf] *Equation 29.4-7 γ_a=0.8 γ_E=1.0*	-25.8	-43.0	-62.0
Exposed Design Pressure Up [psf] *γ_a=0.8 γ_E=1.5*	-38.7	-64.6	-93.0
Design Pressure Down [psf]	8.6	8.6	8.6
Tributary Area [ft^2]	46.7	41.2	28.1
Maximum Connection Spacing [in]	179	158	108
Maximum Rail Span [in]	48	48	48
Maximum Rail Cantilever [in]	16	16	16
Design Connection Spacing [in]	48	48	48
Deign Connection Spacing (exposed) [in]	48	48	48

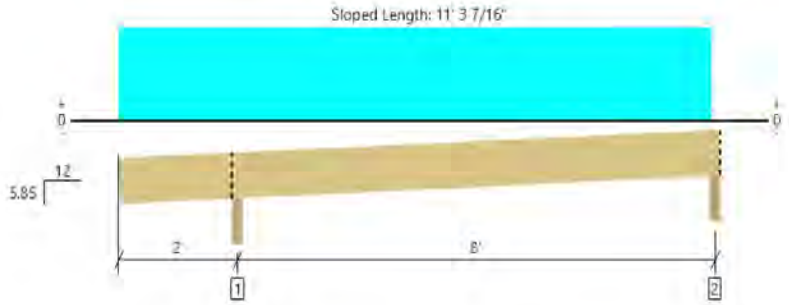
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist before panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



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Shear (lbs)	142 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	290 @ 6' 1 5/8"	1564	Passed (19%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.037 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.052 @ 6' 1/4"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	77	133	172	249	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	47	83	108	155	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	16.0	20.8	Dead load and snow load on roof before panels are added

Member Notes

Roof joist before solar panels are added

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:33 PM UTC
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File Name: Kristen Bachman-Array 2_ImportedDesignAll
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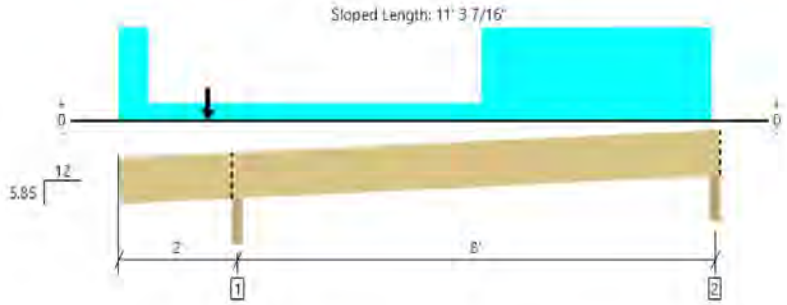
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist with solar panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	242 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	105 @ 1' 3 3/4"	1501	Passed (7%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	182 @ 6' 11 1/8"	1564	Passed (12%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.015 @ 6' 5 3/4"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.029 @ 6' 3 11/16"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	94	33	147	242	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	46	62	77	123	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	-	-	DL
2 - Uniform (PSF)	0 to 6"	16"	-	16.0	20.8	DL+SL below panels
3 - Point (lb)	1' 6"	N/A	16	-	99	solar and SL
4 - Uniform (PSF)	6' 1 1/2" to 10'	16"	-	16.0	20.8	DL+SL above panels

Member Notes

Roof joist with solar panels

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Imported.tes Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:33 PM UTC
ForteWEB v3.6, Engine: V8.3.1.5, Data: V8.1.4.1
File Name: Kristen Bachman-Array 2_ImportedDesignAll
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Array 3

Array Details	
Roof Framing	2x8 Rafter *DF No.2*
Spacing	16.0"
Beam Span	8.0'
Roof Pitch	26°
Panel Quantity	5
Panel Array Area	108.18 ft²
Panel Orientation	Landscape
Lag Screw Embedment	2.0"
Roof Attachment Type	Halo UltraGrip (HUG) (2) #14 Wood Screws
Shear Capacity *Ironridge testing*	368.0 lbs
Pullout Capacity *Ironridge testing*	1004.0 lbs
Velocity Pressure *Equation 26.10-1 (K_z=0.9, K_{ht}=1, K_d=0.85, K_e=0.98)*	21.52 psf

GCP Zones	1/2e	2n/2r /3e	3r
GC_p *Figure 30.3-(2A-5B)*	-1.5	-2.5	-3.6
Design Pressure Up [psf] *Equation 29.4-7 γ_a=0.8 γ_E=1.0*	-25.8	-43.0	-62.0
Exposed Design Pressure Up [psf] *γ_a=0.8 γ_E=1.5*	-38.7	-64.6	-93.0
Design Pressure Down [psf]	8.6	8.6	8.6
Tributary Area [ft^2]	46.7	41.2	28.1
Maximum Connection Spacing [in]	324	286	195
Maximum Rail Span [in]	48	48	48
Maximum Rail Cantilever [in]	16	16	16
Design Connection Spacing [in]	48	48	48
Deign Connection Spacing (exposed) [in]	48	48	48

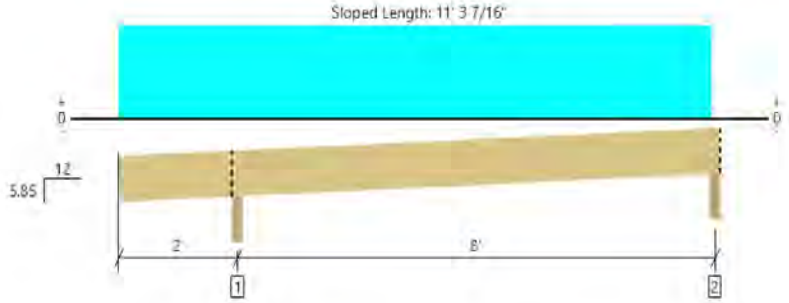
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist before panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	249 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	142 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	290 @ 6' 1 5/8"	1564	Passed (19%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.037 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.052 @ 6' 1/4"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	77	133	172	249	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	47	83	108	155	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	16.0	20.8	Dead load and snow load on roof before panels are added

Member Notes

Roof joist before solar panels are added

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:36 PM UTC
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File Name: Kristen Bachman-Array 3_ImportedDesignAll
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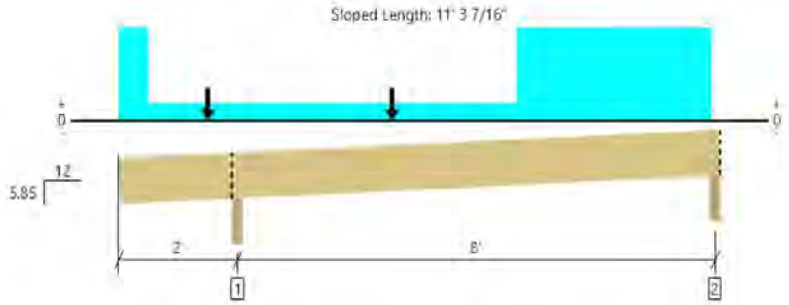
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist with solar panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	262 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	128 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	251 @ 5' 9 1/4"	1564	Passed (16%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.029 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.047 @ 6' 1/8"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	98	27	164	262	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	50	55	93	143	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	-	-	DL
2 - Uniform (PSF)	0 to 6"	16"	-	16.0	20.8	DL+SL below panels
3 - Point (lb)	1' 6"	N/A	12	-	74	solar and SL
4 - Point (lb)	4' 7 5/16"	N/A	12	-	74	solar and SL
5 - Uniform (PSF)	6' 8 9/16" to 10'	16"		16.0	20.8	DL+SL above panels

Member Notes

Roof joist with solar panels

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:36 PM UTC
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File Name: Kristen Bachman-Array 3_ImportedDesignAll
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Array 4

Array Details	
Roof Framing	2x8 Rafter *DF No.2*
Spacing	16.0"
Beam Span	8.0'
Roof Pitch	26°
Panel Quantity	2
Panel Array Area	43.27 ft²
Panel Orientation	Landscape
Lag Screw Embedment	2.0"
Roof Attachment Type	Halo UltraGrip (HUG) (2) #14 Wood Screws
Shear Capacity *Ironridge testing*	368.0 lbs
Pullout Capacity *Ironridge testing*	1004.0 lbs
Velocity Pressure *Equation 26.10-1 (K_z=0.9, K_{ht}=1, K_d=0.85, K_e=0.98)*	21.52 psf

GCP Zones	1/2e	2n/2r /3e	3r
GC_p *Figure 30.3-(2A-5B)*	-1.5	-2.5	-3.6
Design Pressure Up [psf] *Equation 29.4-7 γ_a=0.8 γ_E=1.0*	-25.8	-43.0	-62.0
Exposed Design Pressure Up [psf] *γ_a=0.8 γ_E=1.5*	-38.7	-64.6	-93.0
Design Pressure Down [psf]	8.6	8.6	8.6
Tributary Area [ft^2]	46.7	41.2	28.1
Maximum Connection Spacing [in]	324	286	195
Maximum Rail Span [in]	48	48	48
Maximum Rail Cantilever [in]	16	16	16
Design Connection Spacing [in]	48	48	48
Deign Connection Spacing (exposed) [in]	48	48	48

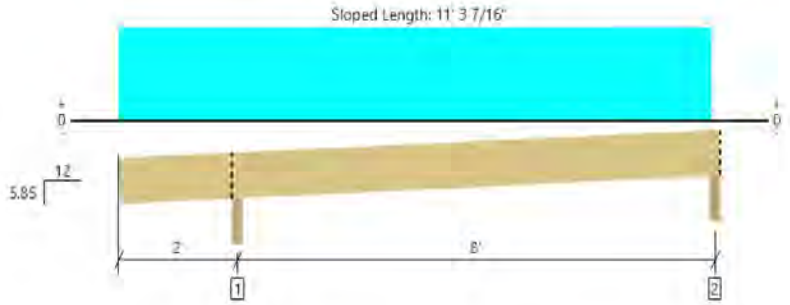
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist before panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	249 @ 2'	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	142 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	290 @ 6' 1 5/8"	1564	Passed (19%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.037 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.052 @ 6' 1/4"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	77	133	172	249	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	47	83	108	155	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	16.0	20.8	Dead load and snow load on roof before panels are added

Member Notes

Roof joist before solar panels are added

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The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:38 PM UTC
ForteWEB v3.6, Engine: V8.3.1.5, Data: V8.1.4.1
File Name: Kristen Bachman-Array 4_ImportedDesignAll
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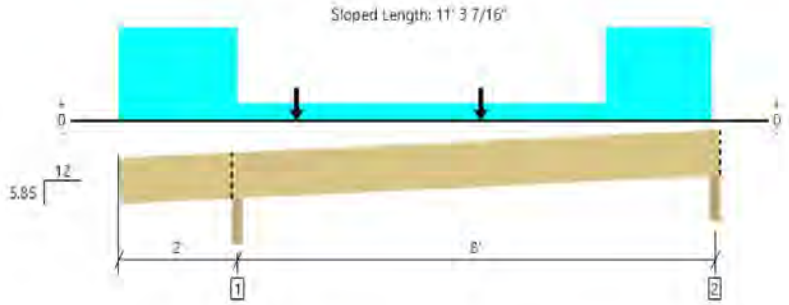
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist with solar panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	230 @ 2"	3650 (3.50")	Passed (6%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	141 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	248 @ 6' 1 5/16"	1564	Passed (16%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.023 @ 6' 3/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.042 @ 6' 5/16"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	89	52	141	230	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	52	31	75	128	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	-	-	DL
2 - Uniform (PSF)	0 to 2'	16"	-	16.0	20.8	DL+SL below panels
3 - Point (lb)	3"	N/A	9	-	54	solar and SL
4 - Point (lb)	6' 1 5/16"	N/A	9	-	54	solar and SL
5 - Uniform (PSF)	8' 2 9/16" to 10'	16"	-	16.0	20.8	DL+SL above panels

Member Notes

Roof joist with solar panels

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

11/21/2023 9:48:38 PM UTC
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File Name: Kristen Bachman-Array 4_ImportedDesignAll
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Array 5

Array Details	
Roof Framing	2x8 Rafter *DF No.2*
Spacing	16.0"
Beam Span	8.0'
Roof Pitch	26°
Panel Quantity	4
Panel Array Area	86.54 ft²
Panel Orientation	Landscape
Lag Screw Embedment	2.0"
Roof Attachment Type	Halo UltraGrip (HUG) (2) #14 Wood Screws
Shear Capacity *Ironridge testing*	368.0 lbs
Pullout Capacity *Ironridge testing*	1004.0 lbs
Velocity Pressure *Equation 26.10-1 (K_z=0.9, K_{ht}=1, K_d=0.85, K_e=0.98)*	21.52 psf

GCP Zones	1/2e	2n/2r /3e	3r
GC_p *Figure 30.3-(2A-5B)*	-1.5	-2.5	-3.6
Design Pressure Up [psf] *Equation 29.4-7 γ_a=0.8 γ_E=1.0*	-25.8	-43.0	-62.0
Exposed Design Pressure Up [psf] *γ_a=0.8 γ_E=1.5*	-38.7	-64.6	-93.0
Design Pressure Down [psf]	8.6	8.6	8.6
Tributary Area [ft^2]	46.7	41.2	28.1
Maximum Connection Spacing [in]	324	286	195
Maximum Rail Span [in]	48	48	48
Maximum Rail Cantilever [in]	16	16	16
Design Connection Spacing [in]	48	48	48
Deign Connection Spacing (exposed) [in]	48	48	48

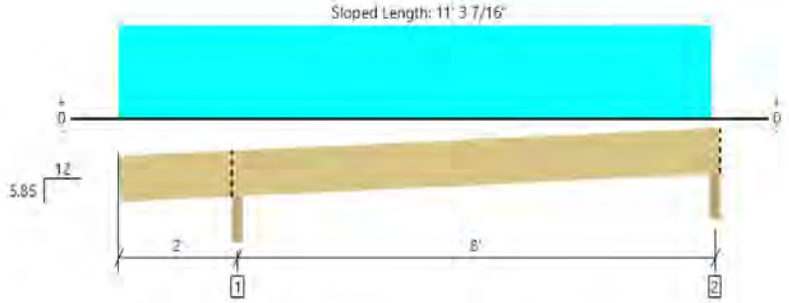
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist before panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	249 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	142 @ 2' 8 1/4"	1501	Passed (9%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	290 @ 6' 1 5/8"	1564	Passed (19%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.037 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.052 @ 6' 1/4"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	77	133	172	249	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	47	83	108	155	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	16.0	20.8	Dead load and snow load on roof before panels are added

Member Notes

Roof joist before solar panels are added

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Imported test Software Operator

ForteWEB Software Operator	Job Notes
Jaxon Davis Right Angle Engineering (925) 787-3067 jaxon@rightangleeng.com	Roof joist before and after solar panels are added

Weyerhaeuser

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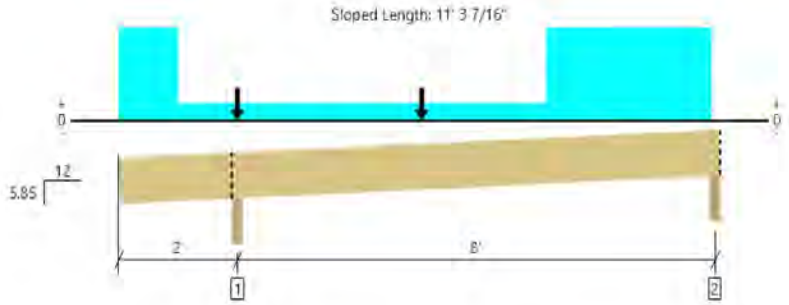
FORTEWEB

MEMBER REPORT

PASSED

Roof, roof: Joist with solar panels

1 piece(s) 2 x 8 DF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 11' 7"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 5.85/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	253 @ 2"	3650 (3.50")	Passed (7%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	113 @ 9' 3 3/4"	1501	Passed (8%)	1.15	1.0 D + 1.0 S (Alt Spans)
Moment (Ft-lbs)	259 @ 5' 1 5/16"	1564	Passed (17%)	1.15	1.0 D + 1.0 S (Alt Spans)
Live Load Defl. (in)	0.027 @ 6' 1/8"	0.442	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)
Total Load Defl. (in)	0.046 @ 6' 1/16"	0.589	Passed (L/999+)	--	1.0 D + 1.0 S (Alt Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Overhang deflection criteria: LL (2L/240) and TL (2L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - DF	3.50"	3.50"	1.50"	95	35	158	253	Blocking
2 - Beveled Plate - DF	3.50"	3.50"	1.50"	51	47	89	140	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11' 3" o/c	
Bottom Edge (Lu)	11' 3" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10'	16"	8.3	-	-	DL
2 - Uniform (PSF)	0 to 1'	16"	-	16.0	20.8	DL+SL below panels
3 - Point (lb)	2"	N/A	11	-	70	solar and SL
4 - Point (lb)	5' 1 5/16"	N/A	11	-	70	solar and SL
5 - Uniform (PSF)	7' 2 9/16" to 10'	16"		16.0	20.8	DL+SL above panels

Member Notes

Roof joist with solar panels

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Weyerhaeuser

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File Name: Kristen Bachman-Array 5_ImportedDesignAll
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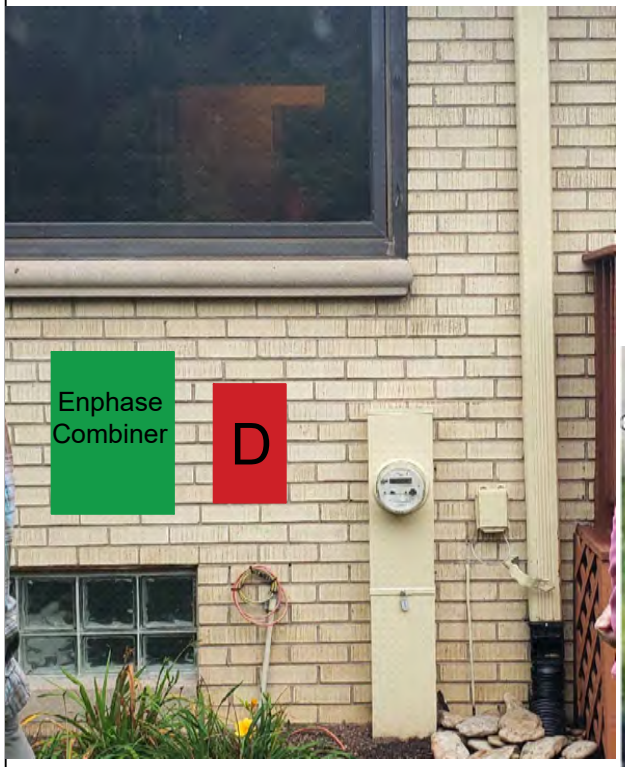
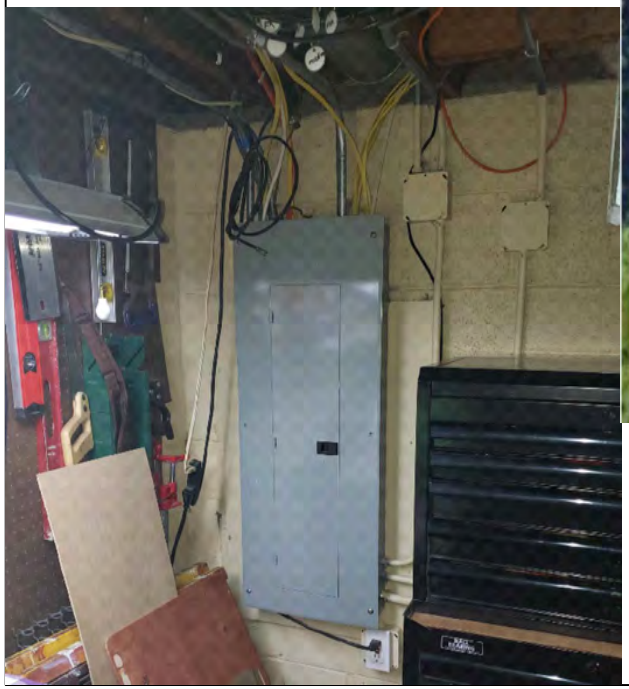
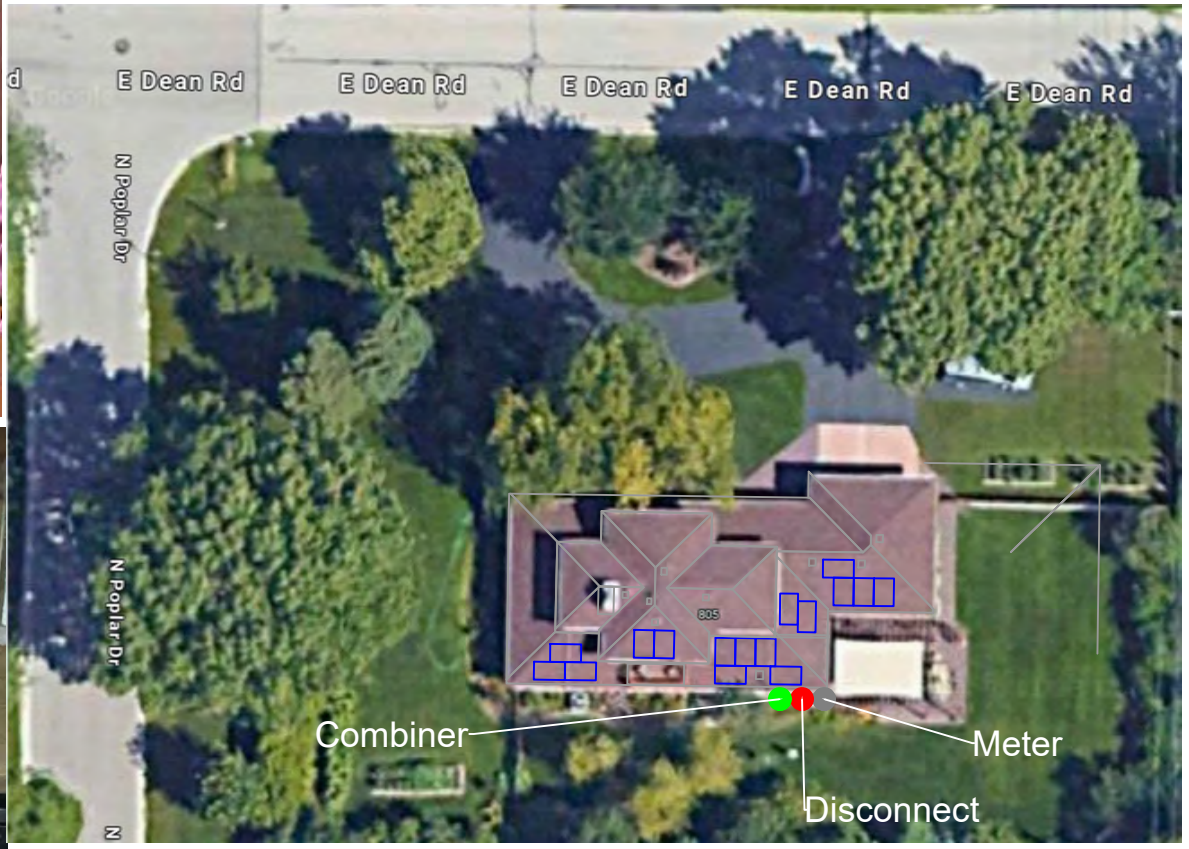
Equipment Location:

Revenue meter is located outside the South side of the House.
Combiner and Disconnect will be adjacent to meters.

Array #	Array Pitch	True Azim.	Mag. Azim.	PV SqFt
1	26°	181°	184°	62
2	26°	181°	184°	104
3	26°	181°	184°	42
4	27°	181°	184°	83
5	27°	91°	94°	42







Main Panel Located in basement.

Plot Plan: Scale - NTS

N

Bachman- 6.72 kWdc, 5.04 kWac, Fox Point

ARCH SOLAR
THE ENERGY EXPERTS

1237 Pilgrim Road
Plymouth WI, 53073

Phone: (920) 838-6610
www.archelec.com

Customer: Kristen Bachman
Address: 805 East Dean Road
City: Fox Point
State: WI
Zip Code: 53217
Contact: Kristen Bachman
Phone: (414) 559-1778
Email: khbachman10@gmail.com

Project Number:	System Size:
23R-184	6.72 kWdc

Designer: 920.838.6610
Mike Gietman

Site Plan

Revision: 1 Date: 12.12.23

IQ7X Microinverter

The high-powered, smart grid-ready IQ7X Microinverter dramatically simplifies the installation process while achieving the highest system efficiency for systems with 96-cell modules.

Part of the Enphase Energy System, the IQ7X Microinverter integrates with the IQ Gateway, IQ Battery, and the Enphase Installer App monitoring and analysis software.

Enphase 25 year limited warranty

The IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25 years.*

Connect PV modules quickly and easily to IQ7X Microinverters using the included Q-DCC-2 adapter cable with plug-and-play MC4 connectors.

UL CERTIFIED SAFETY

IQ7X Microinverters are UL Listed as PV rapid shutdown equipment and conform with various regulations when installed according to the manufacturer's instructions.

Easy to install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014, 2017, 2020, and 2023)

Efficient and reliable

- Optimized for high powered 96-cell modules
- Highest CEC efficiency of 97.5%
- More than a million hours of testing
- Class II double-insulated enclosure
- UL Listed

Smart grid-ready

- Complies with advanced grid support, voltage, and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA) and IEEE 1547:2018 (UL 1741-SB, 3rd Ed.)

* 25-year warranty is valid, provided an internet-connected IQ Gateway is installed.

To learn more about Enphase offering, visit Enphase.com

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IQ7X Microinverters

INPUT DATA (DC)	UNITS	IQ7X-96-2-US
Commonly used module pairings [1]	W	320–460
Module compatibility	–	To meet compatibility, PV modules must be within the following maximum input DC voltage and maximum module I_{sc}. Module compatibility can be checked at https://enphase.com/installers/microinverters/calculator.
MPPT voltage range	V	53–64
Operating range	V	25–79.5
Minimum/Maximum start voltage	V	33/79.5
Maximum input DC voltage	V	79.5
Maximum continuous input DC current	A	6.5
Maximum module I_{sc}	A	10
Overvoltage class DC port	–	II
DC port backfeed current	mA	0
PV array configuration	–	1 x 1 ungrounded array; no additional DC side protection required; AC side protection requires a maximum of 20 A per branch circuit.

OUTPUT DATA (AC)	UNITS	IQ7X-96-2-US@240 VAC	IQ7X-96-2-US@208 VAC
Peak output power	VA	320	
Maximum continuous output power	VA	315	
Nominal grid voltage (L-L)	V	240, split-phase (L-L), 180°	208, single-phase (L-L), 120°
Minimum and Maximum grid voltage [2]	V	211–264	183–229
Maximum continuous output current	A	1.31	1.51
Nominal frequency	Hz	60	
Extended frequency range	Hz	49–68	
AC short-circuit fault current over three cycles	A_{rms}	5.8	
Maximum units per 20 A (L-L) branch circuit [3]	–	12	10
Overvoltage class AC port	–	III	
AC port backfeed current	mA	18	
Power factor setting	–	1.0	
Grid-tied power factor (adjustable)	–	0.85 leading ... 0.85 lagging	
CEC weighted efficiency	%	97.5	97.0

MECHANICAL DATA	UNITS	
Ambient temperature range	°C (°F)	-40 to 60 (-40 to 140)
Relative humidity range	%	4 to 100 (condensing)
DC connector type	–	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)
Dimensions (H × W × D)	mm (in)	212 (8.3) × 175 (6.9) × 30.2 (1.2)
Weight	kg (lbs)	1.1 (2.4)
Cooling	–	Natural convection–no fans
Approved for wet locations	–	Yes
Pollution degree	–	PD3
Enclosure	–	Class II double-insulated, corrosion-resistant polymeric enclosure
Environmental category/UV exposure rating	–	NEMA Type 6/Outdoor

COMPLIANCE	
Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB 3rd Ed.), HEI Rule 14H SRD 2.0 UL 62109-1, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV rapid shutdown equipment and conforms with NEC 2014, NEC 2017, NEC 2020, and NEC 2023 section 690.12 and C22.1-2015. Rule 64-218 rapid shutdown of PV Systems for AC and DC conductors when installed according to the manufacturer's instructions.

(1) Pairing PV modules with wattage above the limit may result in additional clipping losses.
(2) Nominal voltage range can be extended beyond nominal if required by the utility.
(3) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

Revision history

REVISION	DATE	DESCRIPTION
DSH-00208-2.0	November 2023	Included NEC 2023 specification in the "Compliance" section.
DSH-00208-1.0	September 2023	Updated module compatibility specification.
Previous releases.		

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Tech Brief

IRONRIDGE

AIRE

Racking Accelerated™

Aire® is a carefully-engineered, ergonomic racking system for pitched roofs—honoring both speed and precision. Each component has been designed to enforce a quality installation that can withstand the elements.

We've worked hand-in-glove with installers to provide the strongest, feature-rich, open-channel rail on the market. Two rail sizes come in black-anodized and mill finishes. Listed to UL 2703 and backed by a 25-year warranty.

Fully-Certified Cable Tray

Aire™ is the only system listed as a cable tray. It uses NEC-compliant rail, with NEMA VE1 and C2.22 ratings. The high-strength open channel sheds water to keep wire connectors high and dry, while Wire Clips tame unruly PV & DG cables.

Glove-Friendly Components

Aire Lock™ clamps are free-standing and universal, with Twist-n-Click™ Technology for easy placement. The clamps do not impede wires in the tray below and they provide clean aesthetics with 1/2-inch module gaps.

One-Tool 1/2" System

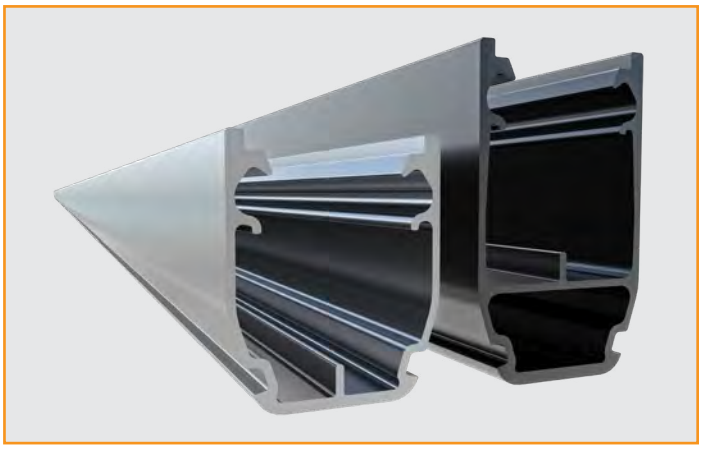
Hassle-Free Rail Alignment

The Aire Dock™ works with all of our attachments for composition shingle, tile, and metal roofs. The integrated bolt drops into open slots, allowing the rail to click-in and then easily Slide-n-Glide™ into the optimal position.

Intertek

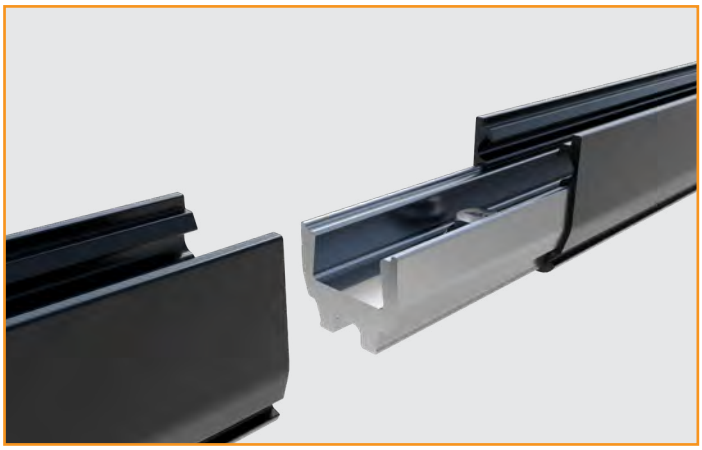
Aire® Flush Mount System

Racking Accelerated™



Two Optimized Aire® Rail Sizes

A1 Rail meets most load conditions, while the heftier A2 Rail is best in heavy-snow and high-wind regions.



Internal Bonded Structural Splices

Aire® Ties connect two pieces of rail together without penetrations. Its water-relief “bridge” allows drainage.

Easy Hardware & Wire Placement

Quarter turn and Aire Lock® clamps stand freely. Wire Clips press in, with a flat-head slot for quick removal.

Aesthetically-Pleasing Hidden Ends

Aire Lock® Stealth clamps module row ends. With a 15° angled bolt, rail cuts are not needed for access.

Rail Selection

The provided table* illustrates span differences for Aire® A1 and A2 Rails. It was prepared in compliance with applicable codes and standards.

Values based on the following criteria: ASCE 7-16, Gable Roof Flush Mount, Roof Zones 1 & 2e, Exposure B, Roof Slope of 8° to 20° and Mean Building Height of 30 ft.

Visit IronRidge.com for detailed certification letters.

External Load		Rail Span Between Attachments				
Snow (PSF)	Wind (MPH)	4’	5’ 4”	6’	8’	10’ 4”
None	120					
	150					
	180	A1	A2			
20	150					
	180					
30	150					
	180					
40	180					
80	180					
120	180					

Mobile Resources

*Table is for illustration purposes only. Use approved certification letters for actual design guidance.

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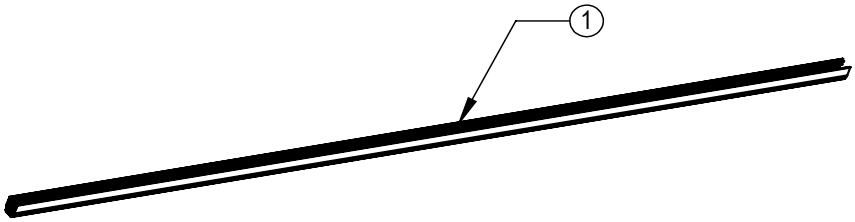
IRONRIDGE

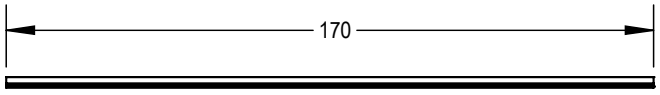
AIRE RAIL A1

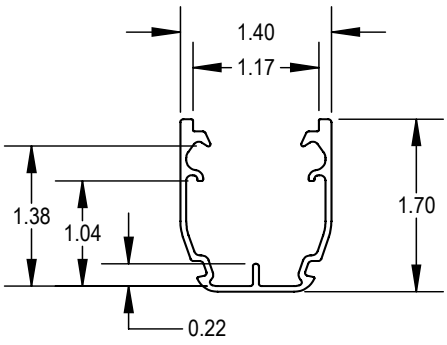


ITEM NO	DESCRIPTION	QTY IN KIT
1	Aire Rail, A1, Black(or Clear), 170	1

Part Number	Description
AE-A1-170B	AIRE RAIL, A1, BLACK, 170
AE-A1-170M	AIRE RAIL, A1, MILL, 170

1) Aire A1





Part Number	Material	Value
AE-A1-170B	6000-Series Aluminum	Black
AE-A1-170M	6000-Series Aluminum	Clear

v1.0

SOLAR'S MOST TRUSTED

REC

REC ALPHA PURE-R SERIES

PRODUCT SPECIFICATIONS

COMPACT PANEL SIZE

9 A MODULE CURRENT
COMPATIBLE WITH MLPE

430 WP

20.7 W/FT²

22.3% EFFICIENCY

PRODUCT
REC
25 YEAR
PRO TRUST
WARRANTY
PERFORMANCE
LABOR

ELIGIBLE

LEAD-FREE
ROHS COMPLIANT

EXPERIENCE
α
PERFORMANCE

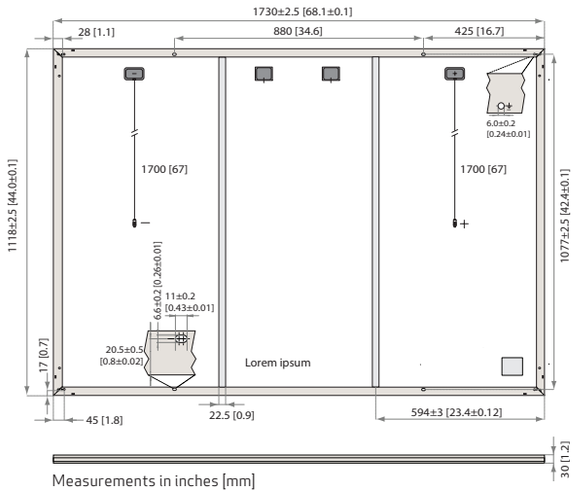
REC ALPHA PURE-R SERIES

PRODUCT SPECIFICATIONS

SOLAR'S MOST TRUSTED

GENERAL DATA

Cell type:	80 half-cut REC bifacial, heterojunction cells with lead-free, gapless technology
Glass:	0.13 in (3.2 mm) solar glass with anti-reflective surface treatment in accordance with EN 12150
Backsheet:	Highly resistant polymer (black)
Frame:	Anodized aluminum (black)
Junction box:	4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	Stäubli MC4 PV-KBT4/KST4 (12 AWG) in accordance with IEC 62852, IP68 only when connected
Cable:	12 AWG (4 mm²) PV wire, 67 + 67 in (1.7 + 1.7 m) in accordance with EN 50618
Dimensions:	68.1 x 44.0 x 1.2 in (20.77 ft²) / 1730 x 1118 x 30 mm (1.93 m²)
Weight:	47.4 lbs (21.5 kg)
Origin:	Made in Singapore



Measurements in inches [mm]

ELECTRICAL DATA

	Product Code*: RECxxxAA PURE-R			
STC				
Power Output - P_{MAX} (Wp)	400	410	420	430
Watt Class Sorting - (W)	0/+10	0/+10	0/+10	0/+10
Nominal Power Voltage - V_{MPP} (V)	48.8	49.4	50.0	50.5
Nominal Power Current - I_{MPP} (A)	8.20	8.30	8.40	8.52
Open Circuit Voltage - V_{OC} (V)	58.9	59.2	59.4	59.7
Short Circuit Current - I_{SC} (A)	8.80	8.84	8.88	8.91
Power Density (W/ft²)	19.26	19.74	20.22	20.70
Panel Efficiency (%)	20.7	21.2	21.8	22.3
NMOT				
Power Output - P_{MAX} (Wp)	305	312	320	327
Nominal Power Voltage - V_{MPP} (V)	46.0	46.6	47.1	47.6
Nominal Power Current - I_{MPP} (A)	6.64	6.70	6.80	6.88
Open Circuit Voltage - V_{OC} (V)	55.5	55.8	56.0	56.3
Short Circuit Current - I_{SC} (A)	7.11	7.16	7.20	7.24

Values at standard test conditions (STC: air mass AM 1.5, irradiance 10.75 W/sq ft (1000 W/m²), temperature 77°F (25°C), based on a production spread with a tolerance of P_{MAX}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s). * Where xxx indicates the nominal power class (P_{MAX}) at STC above.

CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730	
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
UL 61730	Fire Type 2
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
IEC 62321	Lead-free acc. to RoHS EU 863/2015
ISO 14001, ISO 9001, IEC 45001, IEC 62941	

Intertek Lead-Free

TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P_{MAX}:	-0.24 %/°C
Temperature coefficient of V_{OC}:	-0.24 %/°C
Temperature coefficient of I_{SC}:	0.04 %/°C

*The temperature coefficients stated are linear values

MAXIMUM RATINGS

Operational temperature:	-40 ... +85°C
System voltage:	1000 V
Test load (front):	+7000 Pa (146 lbs/ft²)*
Test load (rear):	-4000 Pa (83.5 lbs/ft²)*
Series fuse rating:	25 A
Reverse current:	25 A

*See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

WARRANTY

	Standard	REC ProTrust	
Installed by an REC Certified Solar Professional	No	Yes	Yes
System Size	All	≤25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

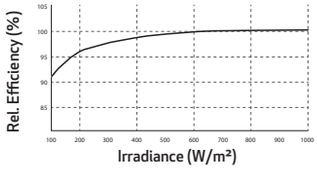
See warranty documents for details. Conditions apply

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	858 (26 pallets)
Panels per 53 ft truck:	858 (26 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Available from:

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

REC Solar PTE. LTD.
20 Tuas South Ave. 14
Singapore 637312
post@recgroup.com
www.recgroup.com

REC

Specifications subject to change without notice.

Ref: PD-DS-AAPR Rev 3.1 03.23

VILLAGE OF FOX POINT

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B- _____

OFFICE USE ONLY
Issued Date
Zoning

BUILDING PERMIT

Job Address 7121 N Barnett Ln	**Building Type:** Residential ☑ Commercial ☐
Description of Work	
Installation of a redwood greenhouse/foundation to match aesthetic of home facade	
(Facade elements include wood arches (painted) & lannon stone wall – see "F" in photos)	
Estimated Cost of Project $ 40,000	

Owner/Occupant Erich & Lisa Mussak	
Business Name n/a	Contact Name Lisa Mussak
Address 7121 N Barnett Ln	City/State/Zip Fox Point, WI 53217
Phone 414.840.6393	Email lisa.stapelmann@gmail.com

Cautionary Statement required when homeowner is applying for permit*

Contractor	
Company Name Secret Garden (subcontractor: Frenti Contractors)	Contact Name Mike Bohlen
Address 7501 W Donges Bay Rd	City/State/Zip Mequon, WI 53092
Phone Secret Garden: (414) 351-5370; Frenti: (262) 749-2422	Email Mike@TheSecretGardenLandscape.com
Dwelling Contractor #	Dwelling Contractor Qualifier # 081900803 (Frenti)

Square Footage Under Construction				
1st Floor	2nd Floor	Basement	Addition 140 sq ft	Garage

Description		Rate	Amount
Project - Per $1,000 of estimated cost		$10.00	400.00
Building Board		$75.00	75
Footing early start - $230.00 one and two family; $305.00 commercial			
Plan Review - $275.00 one and two family; New Single Family Construction $330.00 plus $30.00/unit commercial			
State Seal		$75.00	
Razing, Interior Demolition $925.00 max/bld	$95.00 minimum plus	$0.13/sqft	
Moving buildings	$250.00 plus	$0.13/sqft	
Fuel tanks - Per 1,000 gallons		$25.00	
Re-inspection		$100.00	
Work started without permit		**Double**	
	Minimum Fee	**$70.00**	
Payable to: Village of Fox Point	**Total Permit Fee**		$ 475.00

Applicant Signature Lisa Mussak Digitally signed by Lisa Mussak Date: 2024.01.24 13:35:12 -06'00' **Date** 1.24.24

Rev 01/22

ISSUED PERMITS are available on the Village website under *PERMITS & LICENSES*

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217 414-351-8900

Receipt No: 1.059881 Jan 26, 2024

7121 N Barnett Lane

Previous Balance:	.00
LICENSES & PERMITS - OTHER PERMIT	75.00
10-44540 OTHER PERMIT	
Tota	75.00
CHE K C ck No: 2590	75.(
Payor: Mussak	
Total Applied:	75.(
Change Tendered:	

Duplicate Copy

01/26/2024 8:21 AM

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

CAUTIONARY STATEMENT TO OWNERS OBTAINING BUILDING PERMITS

101.65(1r) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s. 101.654(2)(a), the following consequences might occur:

(a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

(b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1)(a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

Wetlands Notice to Permit Applicants

You are responsible for complying with state and federal laws concerning the construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources wetlands identification web page or contact a Department of Natural Resources service

Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil

I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and will comply with those standards.

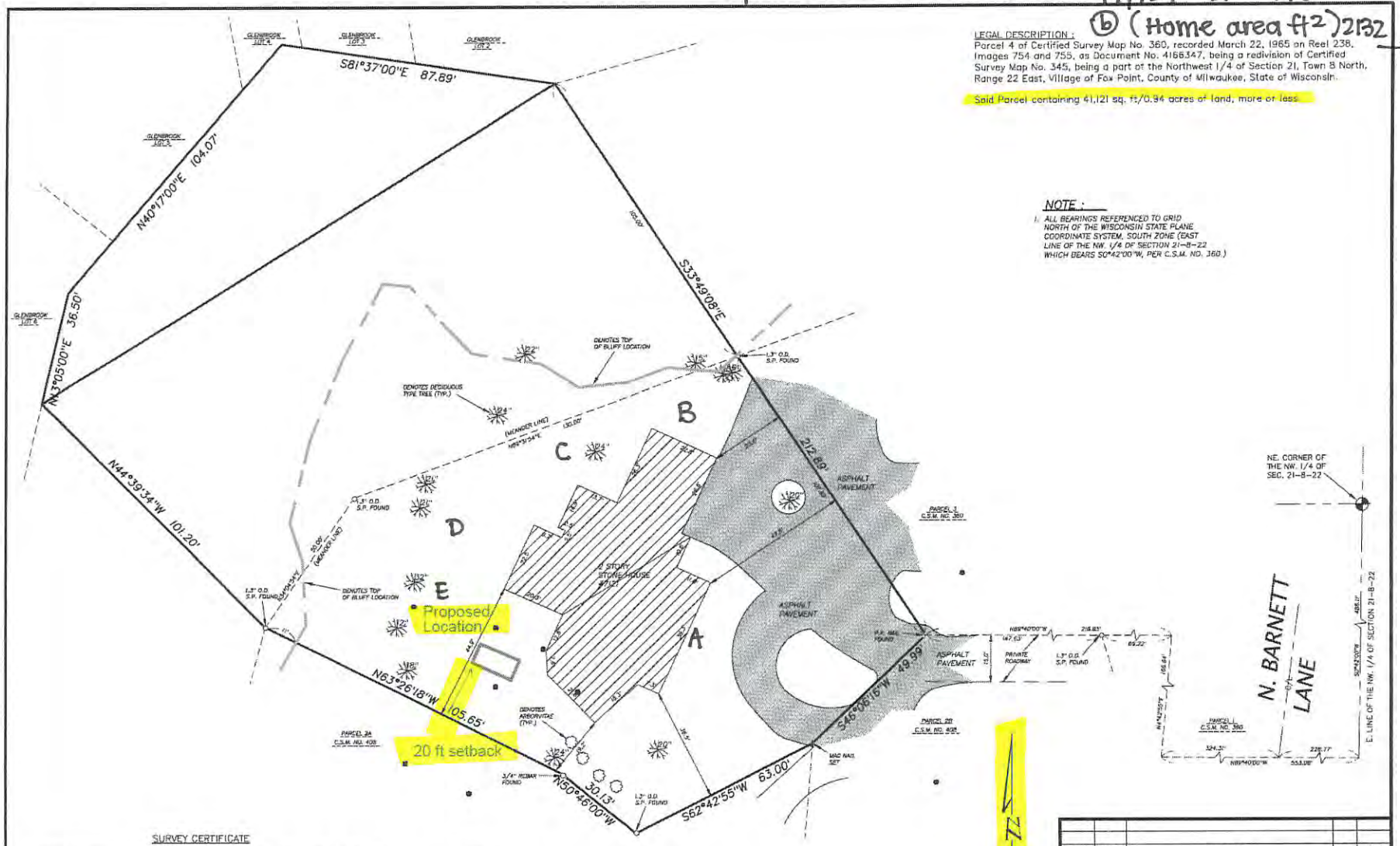
Lisa Mussak	7121 N. Barnett Ln.
Homeowner's Name – PRINTED	Property Address
Lisa Mussak Digitally signed by Lisa Mussak Date: 2024.01.24 13:36:02 -06'00'	1.24.24
Homeowner's Signature	Date

Rev 09/20

(a) (Lot size) (Project ft²)

open area calculation: 41,121 & 140 → 0.34%

(b) (Home area ft²) 2132 → 5.2%



LEGAL DESCRIPTION:
Parcel 4 of Certified Survey Map No. 360, recorded March 22, 1965 on Reel 238, Images 754 and 755, as Document No. 4166347, being a redivision of Certified Survey Map No. 345, being a part of the Northwest 1/4 of Section 21, Town 8 North, Range 22 East, Village of Fox Point, County of Milwaukee, State of Wisconsin.

Said Parcel containing 41,121 sq. ft./0.94 acres of land, more or less.

NOTE:
1. ALL BEARINGS REFERENCED TO GRID NORTH OF THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (EAST LINE OF THE NW. 1/4 OF SECTION 21-8-22 WHICH BEARS S0°42'00"W, PER C.S.M. NO. 360.)

SURVEY CERTIFICATE

I have surveyed the above described property and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all visible structures thereon, boundary fences, apparent easements, roadway, and visible encroachments, if any.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase mortgage, or guarantee the title thereto within one (1) year form date hereof.

Dated at City of Mequon, State of Wisconsin this 9th day of April, 2022.

James G. Schneider
Surveyor – S-2127

WISCONSIN JAMES G. SCHNEIDER S-2127 MEQUON WI LAND SURVEYOR

THIS IS AN ORIGINAL PRINT ONLY IF STAMPED IN RED

SCALE 1" = 20'

NSE

NORTH SHORE ENGINEERING, INC.
Consulting Engineers & Land Surveyors
11433 N. Port Washington Rd., Mequon, Wisconsin, 53092
(262) 241-9400 • FAX: (262) 241-5337
www.NorthShoreEngineering.net

MARK	DATE	REVISION	BY	APVD

"PROPERTY SURVEY"

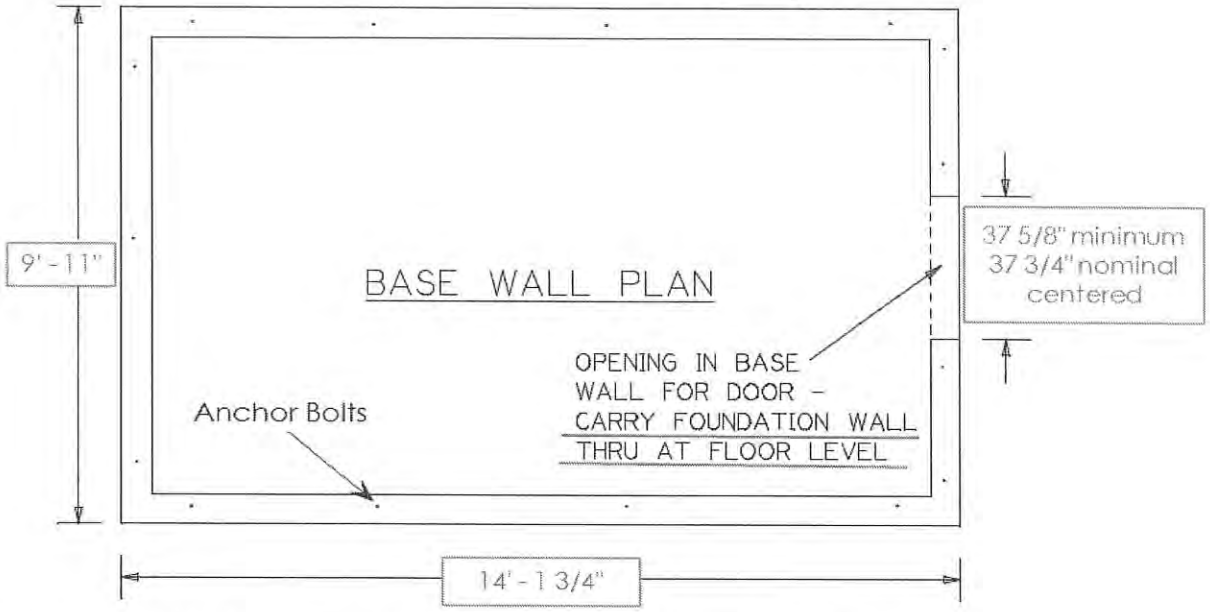
for
Erich Mussak

7121 N. Barnett Lane
Fox Point, WI

DATE:	April 9, 2022	DRAWN BY:	A.R.H.
FIELD CREW:	B.A.J. & S.P.Z.	Plat No.	15-5224-22

CONSTRUCTION DRAWINGS - BASE WALL

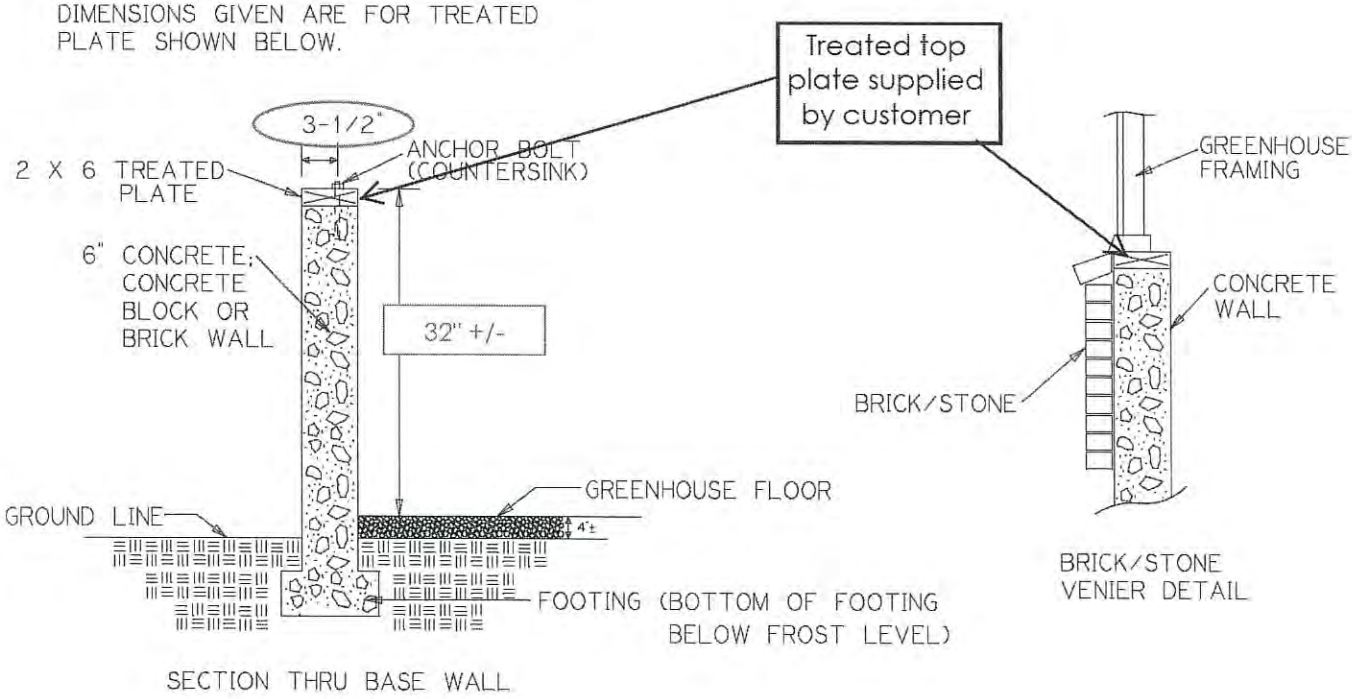
Drawing #1



- Locate anchor bolts 8" away from the corners and each side of the door, spaced 36" to 48" apart and 3½" in from the outside edge.

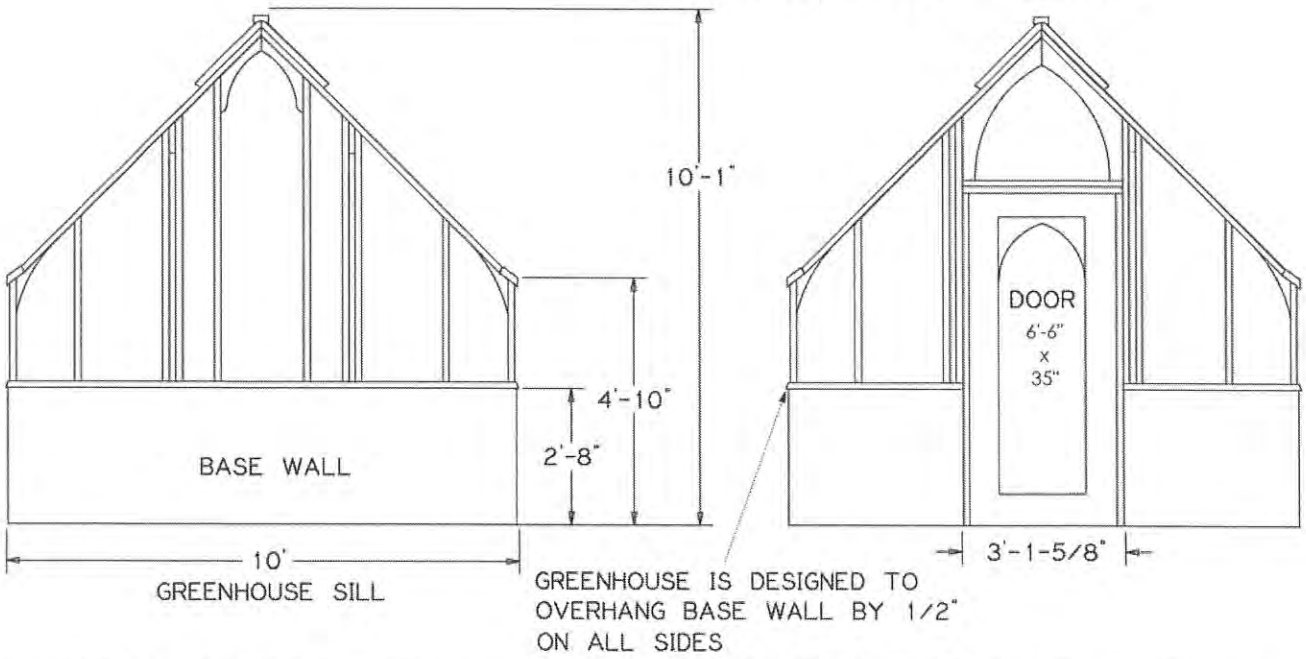
NOTE:
FOR BRICK/STONE VENIER OUTSIDE DIMENSIONS GIVEN ARE FOR TREATED PLATE SHOWN BELOW.

Drawing #2



CONSTRUCTION DRAWINGS - ELEVATIONS

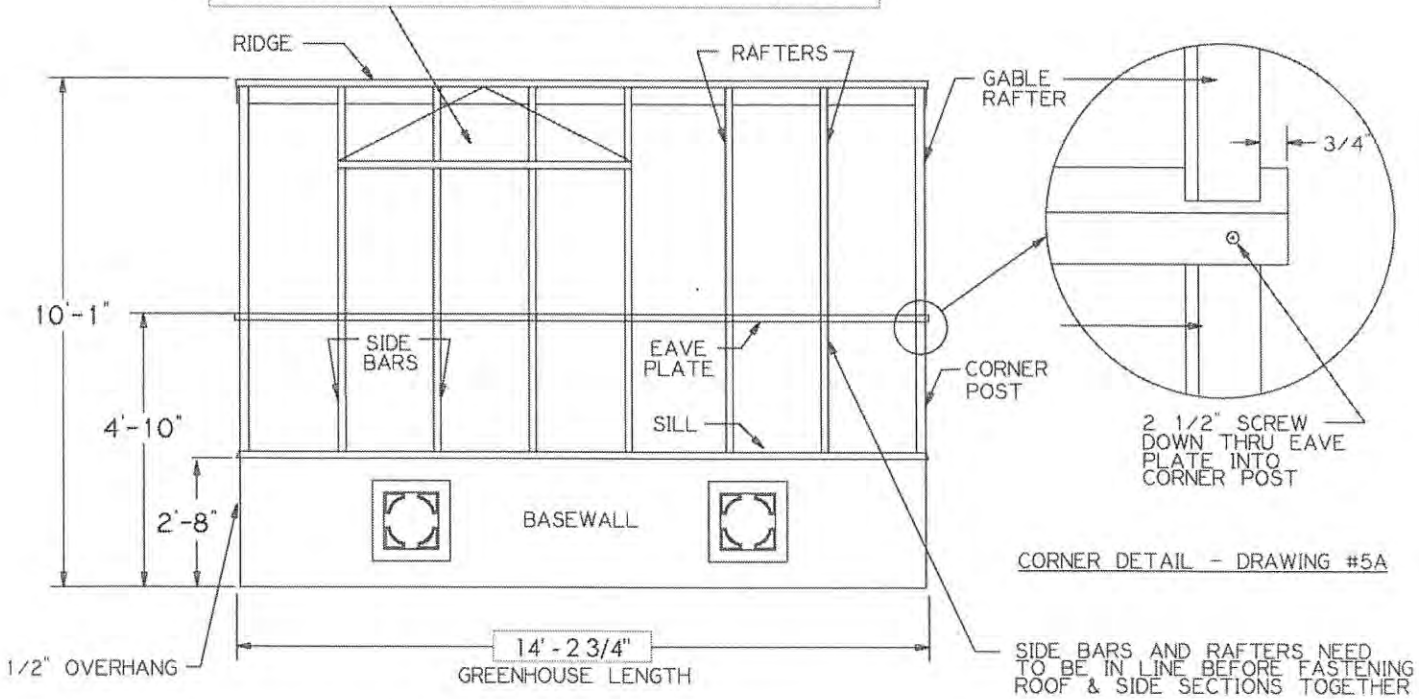
Note: Your door is hinged left to swing in.



NON-DOOR ELEVATION - DRAWING #3

DOOR END ELEVATION - DRAWING #4

Your greenhouse has 2 roof vents; See "Construction Drawings - Roof View" for locations.



CORNER DETAIL - DRAWING #5A

SIDE ELEVATION - DRAWING #5

Your greenhouse has 8 bays per side.

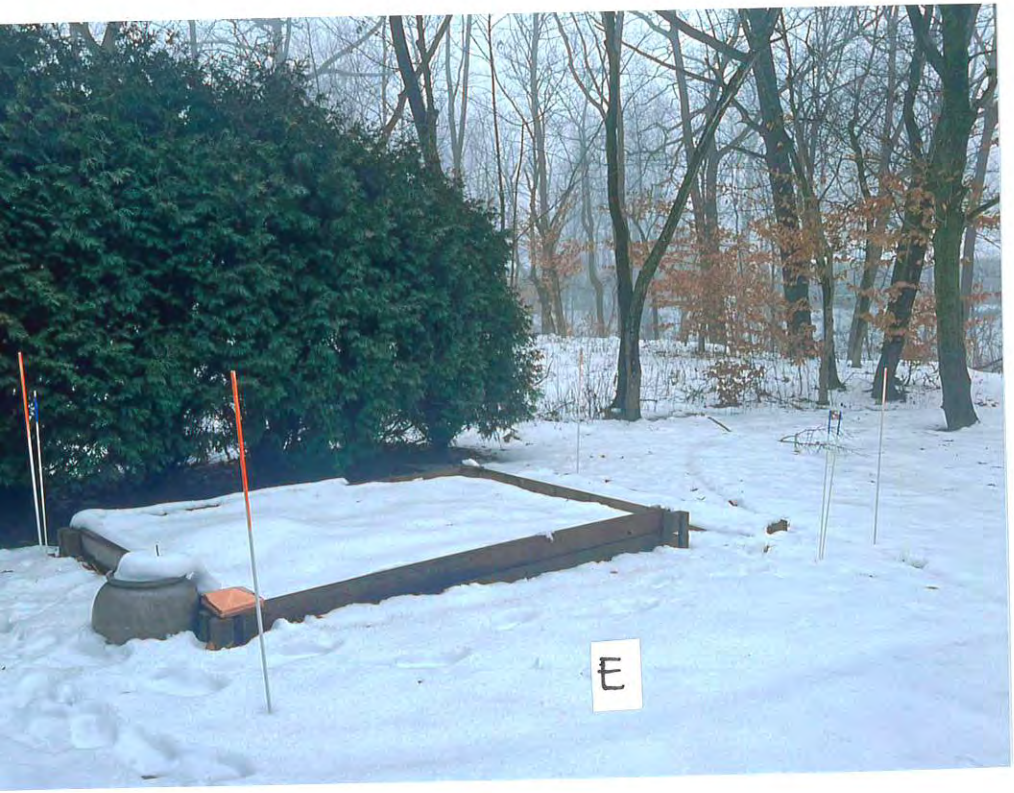
C
D
B
E
A

A
(F)
7121

B

D

E


E

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B- _____

OFFICE USE ONLY
Issued Date
Zoning

BUILDING PERMIT

Job Address 506 E Bradley Rd	**Building Type:** Residential ☑ Commercial ☐
Description of Work	
New 24x36 garage addition	
Estimated Cost of Project $ 30,000	

Owner/Occupant Kendall Strand	
Business Name N/A	Contact Name Kendall Strand
Address 506 E Bradley Rd	City/State/Zip Fox Point, WI, 53217
Phone 720-775-5640	Email kendall.strand@gmail.com

Cautionary Statement required when homeowner is applying for permit

Contractor	
Company Name	Contact Name
Address	City/State/Zip
Phone	Email
Dwelling Contractor #	Dwelling Contractor Qualifier #

Square Footage Under Construction				
1st Floor	2nd Floor	Basement	Addition	Garage 864

Description		Rate	Amount
Project - Per $1,000 of estimated cost		$10.00	300
Building Board		$75.00	75
Footing early start - $230.00 one and two family; $305.00 commercial			
Plan Review - $275.00 one and two family; New Single Family Construction $330.00 plus $30.00/unit commercial			
State Seal		$75.00	
Razing, Interior Demolition $925.00 max/bld	$95.00 minimum plus	$0.13/sqft	95
Moving buildings	$250.00 plus	$0.13/sqft	
Fuel tanks - Per 1,000 gallons		$25.00	
Re-inspection		$100.00	
Work started without permit		**Double**	
	Minimum Fee	**$70.00**	
Payable to: Village of Fox Point	**Total Permit Fee**		$ 470

Applicant Signature _____ **Date** 1/26/2024

Rev 01/22

ISSUED PERMITS are available on the Village website under *PERMITS & LICENSES*

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217

414-351-8900

Receipt No: 1.059887

Jan 26, 2024

506 E Bradley Road

Previous Balance:	.00
LICENSES & PERMITS - BUILDING PERMIT	470.00
24-44460 BUILDING PERMIT	
Total	470.00
CHECK Check No: 1705	470.00
Payor: Strand	
Total Applied:	470.00
Change Tendered:	.00

Duplicate Copy

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Fox Point, WI 53217
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CAUTIONARY STATEMENT TO OWNERS OBTAINING BUILDING PERMITS

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(a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

(b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1)(a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

Wetlands Notice to Permit Applicants

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Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil

I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and will comply with those standards.

Kendall Strand	506 E Bradley Rd, Fox Point,
Homeowner's Name – PRINTED	Property Address
	1/26/2024
Homeowner's Signature	Date

Rev 09/20

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
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BUILDING BOARD

Building Board typically meets on the second Wednesday of every month at 5:00 p.m. The application deadline is 12:00 p.m., two Fridays prior to the meeting. All applications must be complete and include the proper filing fee.

Building Board meetings will be held via Zoom. Building Board agenda with the Zoom address will be posted on the website under **Agendas & Minutes**.

Examples of projects that must appear before the Building Board: New Construction, Additions, Exterior Improvements, Detached Garage, Decks, Sheds > 100 sq. ft., Window Replacement, New Doors, Patio Doors, Pools, Signs, and Solar Systems.

Complete Building Board Applications must include:

- ☐ **One set of drawings** to 1/4 inch scale on 24" x 36" maximum size sheets. These shall include all elevations, floor plans, foundation plan, and cross sections.
  - *Elevation Drawings* shall include all proposed elevations of the building, even if changes to the elevation are not proposed. This is to ensure consistency of all elevations. In cases where a building element may be skewed from another, it may be necessary to draw more than the four primary elevations of the building to clearly explain the intent of the design. All building elevations must be fully dimensioned to indicate heights above grade for all components. If the project is a building addition or remodeling, the original structure should be clearly illustrated as new building versus existing structure.
  - *The complete existing elevation should be shown in all cases of additions and remodeling.* All building materials must be identified and noted on each elevation drawing. This is to include, but not limited to, type and size of siding, type and size of masonry, window type size and material, roofing material, fascia, rakes, soffits, eaves, and flashing materials. It is recommended to bring material samples and colors.
  - *Dimensioned floor plans* shall include all floor plans of the proposed building. Each plan must include complete dimensions, and include room names for each space. In the case of an addition, each room shall be tagged either existing or new. In the case where there is a detached garage, a separate plan, fully dimensioned, for the garage must be included.
- ☐ **Color photos** that includes all elevations of existing home and any accessory structures on the property.
- ☐ **Survey** less than one year old **or** an accurate survey showing all existing buildings, decks, in-ground pools, hardscaping and any non-pervious paving, prepared by a certified surveyor registered by the State of Wisconsin. **Required for Additions, Accessory Structures, Decks, New Construction, In-ground Pools/Hot Tubs (and pads for above-ground hot tubs), and Solar Panels (Ground mount only).** This must include all property lines with distances bearings, North arrow, exact location of all existing and proposed buildings, parking areas, drives, public improvements, easements, and other key features of the site. Show distances from front, rear and side property lines.
- ☐ **Site plan** include a North arrow and dimensions. **Required for Additions, Accessory Structures, Decks, New Construction, In-ground Pools/Hot Tubs, and Solar Panels (Ground mount only).** This document must include all property lines, utility and access easements, zoning setbacks, exact location of all existing and proposed buildings or additions including roof overhangs, all hard surfaced areas (parking areas, drives, patios, sidewalks, etc.), swimming pools, and other accessory structures.
- ☐ **Open area** calculation required for Additions, Accessory Structures, Decks, New Construction, In-ground Pools/Hot Tubs, and Solar Panels (Ground mount only).
- ☐ **One Electronic copy of entire Building Board packet** emailed to mrakow@villageoffoxpoint.com
- ☐ **Completed Building Permit Application.**
- ☐ **Building Board Fee** $75.00 payable to the Village of Fox Point.

A REPRESENTATIVE MUST ATTEND BUILDING BOARD MEETING

Date: 1/26/2024 - 5:41 AM
Design Name: 2436 attic storage
Design ID: 302951172964
Estimated Price: $18,573.22
**Today's estimated price. Future pricing may go up or down. Tax, labor, and delivery not included.*

MENARDS Design&Buy™ GARAGE

How to recall and purchase your design at home:

OR

1. On Menards.com, enter "Design & Buy" in the search bar
2. Select the Garage Designer
3. Recall your design by entering Design ID: 302951172964
4. Follow the on-screen purchasing instructions

How to purchase your design at the store:

1. Enter Design ID: 302951172964 at the Design-It Center Kiosk in the Building Materials Department
2. Follow the on-screen purchasing instructions

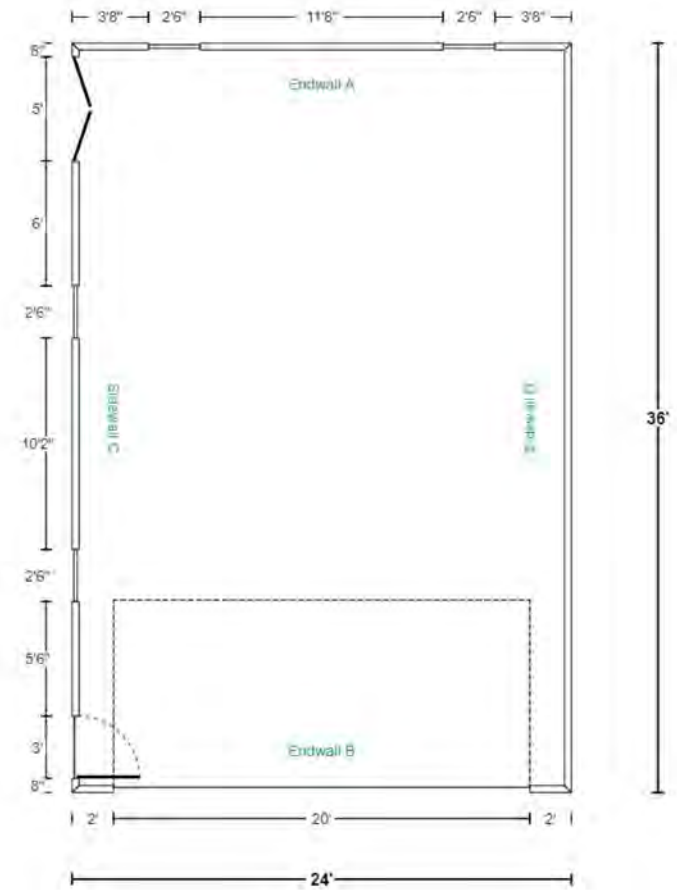
Floor type (concrete, dirt, gravel) is NOT included in estimated price. The floor type is used in the calculation of materials needed. Labor, foundation, steel beams, paint, electrical, heating, plumbing, and delivery are also NOT included in estimated price. This is an estimate. It is only for general price information. This is not an offer and there can be no legally binding contract between the parties based on this estimate. The prices stated herein are subject to change depending upon the market conditions. The prices stated on this estimate are not firm for any time period unless specifically written otherwise on this form. The availability of materials is subject to inventory conditions.

MENARDS IS NOT RESPONSIBLE FOR ANY LOSS INCURRED BY THE GUEST WHO RELIES ON PRICES SET FORTH HEREIN OR ON THE AVAILABILITY OF ANY MATERIALS STATED HEREIN. All information on this form, other than price, has been provided by the guest and Menards is not responsible for any errors in the information on this estimate, including but not limited to quantity, dimension and quality. Please examine this estimate carefully.

MENARDS MAKES NO REPRESENTATIONS, ORAL, WRITTEN OR OTHERWISE THAT THE MATERIALS LISTED ARE SUITABLE FOR ANY PURPOSE BEING CONSIDERED BY THE GUEST. BECAUSE OF WIDE VARIATIONS IN CODES, THERE ARE NO REPRESENTATIONS THAT THE MATERIALS LISTED HEREIN MEET YOUR CODE REQUIREMENTS. THE PLANS AND/OR DESIGNS PROVIDED ARE NOT ENGINEERED. LOCAL CODE OR ZONING REGULATIONS MAY REQUIRE SUCH STRUCTURES TO BE PROFESSIONALLY ENGINEERED AND CERTIFIED PRIOR TO CONSTRUCTION.

Date: 1/26/2024 - 5:41 AM
Design Name: 2436 attic storage
Design ID: 302951172964
Estimated Price: $18,573.22
**Today's estimated price. Future pricing may go up or down. Tax, labor, and delivery not included.*

MENARDS Design&Buy™ GARAGE



Date: 1/26/2024 - 5:41 AM
Design Name: 2436 attic storage
Design ID: 302951172964
Estimated Price: $18,573.22
**Today's estimated price. Future pricing may go up or down. Tax, labor, and delivery not included.*

MENARDS Design&Buy™ GARAGE

Dimensions

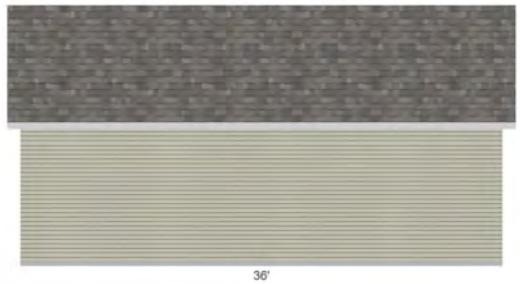
Wall Configurations

*Some items like wainscot, gutter, gable accents, are not displayed if selected.

ENDWALL B

20X9 White Deep Ribbed Torsion Spring

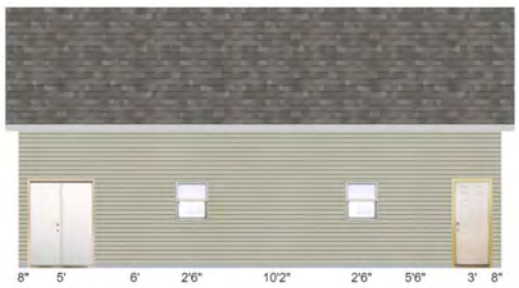
26"W x 36"H JELD-WEN® Vinyl Double Hung



SIDEWALL D

Date: 1/26/2024 - 5:41 AM
Design Name: 2436 attic storage
Design ID: 302951172964
Estimated Price: $18,573.22
**Today's estimated price. Future pricing may go up or down. Tax, labor, and delivery not included.*

MENARDS Design&Buy™ GARAGE



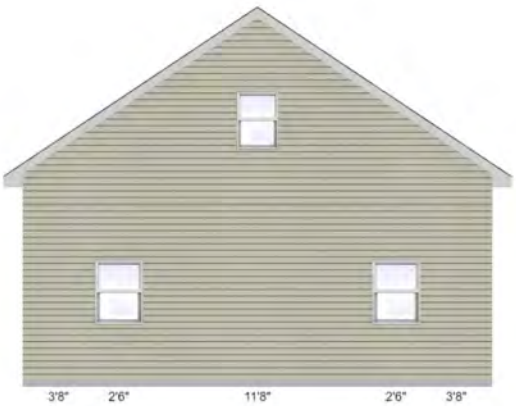
SIDEWALL C

Commander® 36W x 80H Primed Steel 6-Panel

Mastercraft® 60W x 80H Primed Steel Flush Double

30"W x 36"H JELD-WEN® Vinyl Single Hung

30"W x 36"H JELD-WEN® Vinyl Single Hung



ENDWALL A

30"W x 40"H JELD-WEN® Vinyl Double Hung

30"W x 40"H JELD-WEN® Vinyl Double Hung

26"W x 36"H JELD-WEN® Vinyl Double Hung

Date: 1/26/2024 - 5:41 AM
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Materials

Building Type

Building Location Zip Code:	53217
Building Type:	Gable Room-In-Attic

Building Info

Building Width:	24'
Building Length:	36'
Building Height:	10'
Wall Framing Stud:	2 x 4
Truss Type:	Standard
Roof Pitch:	8/12 Pitch
Room Size:	6'6" x 10'
Floor:	3/4 x 4 x 8 Tongue-and-Groove OSB Sturd-I-Floor
Room In Attic Access Option:	None
Eave Overhang:	12"
Gable Overhang:	12"
Curb:	Poured Curb
Curb Height:	4"
Foundation Type:	Poured
Custom Garage Plan:	Yes I need a custom building plan

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MENARDS Design&Buy™ GARAGE

Wall Info

Siding Material Types:	Vinyl
Vinyl Siding:	ABTCO® Cedar Creek™ Double 4, Color: Antique Ivory
Vinyl Corner Trim Color:	White
Accent Material Type:	None
Wainscot Material Type:	None
Wall Sheathing:	7/16 x 4 x 8 OSB(Oriented Strand Board)
House Wrap:	Kimberly-Clark BLOCK-IT®9'x75'House Wrap
Gable Vents:	None

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MENARDS Design&Buy™ GARAGE

Roof Info

Roof Sheathing:	1/2 x 4 x 8 OSB(Oriented Strand Board)
Roofing Material Type:	Architectural Shingle
Architectural Roofing:	Owens Corning® TruDefinition® Duration® Limited Lifetime Warranty Architectural Shingles (32.8 sq. ft.), Color: Colonial Slate
Roof Underlayment:	Owens Corning® ProArmor® Synthetic Roofing Underlayment 42" x 286' (1,000 sq. ft.)
Ice and Water Barrier:	Owens Corning® WeatherLock® G Granulated Self-Sealing Ice and Water Barrier 3' x 66.7'(200sq.ft)
Fascia Material Type:	Textured Aluminum Fascia
Fascia:	6" x 12' Aluminum Rustic Fascia, Color: White
Soffit Material Type:	Aluminum Soffit
Soffit:	16" x 12' Aluminum Vented Soffit, Color: White
Gutter Material Type:	None
Ridge Vent:	None
Roof Vents:	None

Openings

Service Door:	Commander® 36W x 80H Primed Steel 6-Panel
Service Door:	Mastercraft® 60W x 80H Primed Steel Flush Double
Overhead Door:	20X9 White Deep Ribbed Torsion Spring
Additional Information:	C4SS Torsion Spring
Overhead Door Trim Type:	Vinyl
Vinyl Trim Color:	White
Windows:	30"W x 40"H JELD-WEN® Vinyl Double Hung
Windows:	30"W x 40"H JELD-WEN® Vinyl Double Hung
Windows:	26"W x 36"H JELD-WEN® Vinyl Double Hung
Windows:	26"W x 36"H JELD-WEN® Vinyl Double Hung
Windows:	30"W x 36"H JELD-WEN® Vinyl Single Hung
Windows:	30"W x 36"H JELD-WEN® Vinyl Single Hung

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Additional Options

Ceiling Insulation:	None
Wall Insulation:	None
Ceiling Finish:	None
Wall Finish:	None
Attic Area Insulation:	None
Attic Area Interior Finishing:	None
Mounting Blocks:	No
Hydronic Radiant Heat:	No
Anchor bolt:	Grip Fast® 1/2 x 10 HDG Anchor Bolt w/ Nut & Washer
Framing Fasteners:	Grip Fast® 3-1/4 16D Vinyl-Coated Smooth Shank Sinker Nail - 5 lb. Box
Sheathing Fasteners:	Grip Fast® 2-1/2 8D Vinyl-Coated Smooth Shank Sinker Nail - 5 lb. Box
Roofing/Shingle Fasteners:	Grip Fast® 1-1/4 Electro-Galvanized Coil Roofing Nails - 7,200 Count
Truss Fastener:	FastenMaster® TimberLOK® 5/16 x 6 Hex Drive Black Hex Head Timber Screw - 50 Count
Overhead Opening Hardware:	No

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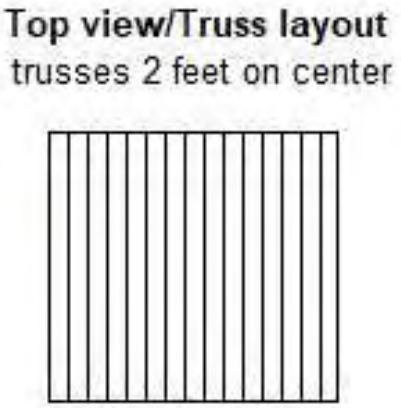
MENARDS Design&Buy™ GARAGE

Helpful Hints for Garage Construction

- Studs are estimated 16 inches on center with single treated bottom plate and double top plate.
- If steel is estimated (Pro-Rib or Pro-Snap), the steel lengths should be verified based off the actual framing. Plate height (stud length), truss heel and other framing should be confirmed. Steel is estimated to the inch, make sure the lengths are accurate based on final overall building design.
- Trusses included are estimated at 2 feet on center spacing. The design is based on the zip code provided, design and loading should be verified.
- Trusses should not be cut or modified with the exception of trimming the truss tails to the correct overhang.
- **Gable RIA Trusses** are designed with increased loading in the room area only.
- Larger Room-in-Attic trusses may be built in 2 parts and are assembled on site.
- Regular trusses are estimated as end trusses, stud and framing material is included to frame the wall area. This allows for easier framing of openings.



Menards Building Checklist Planning

- Get a permit. Check restrictions, building codes or local zoning to make sure your design complies with all requirements.
- Contact local utilities to ensure construction will not disturb any electrical, cable or plumbing.
- If necessary, hire a professional to help with planning and construction.
- Consider site conditions including soil type, grade, and runoff before finalizing your design.
- Material estimates provided can be changed to meet your needs.
- Menards offers professional delivery of materials. Delivery is extra based on the distance from your local Menards store to your building site.
- Practice good safety habits, use PPE including eye protection & dust masks during construction.
- Make sure to follow good building practice and all manufacturer's instructions. Use all the hardware and fasteners recommended.

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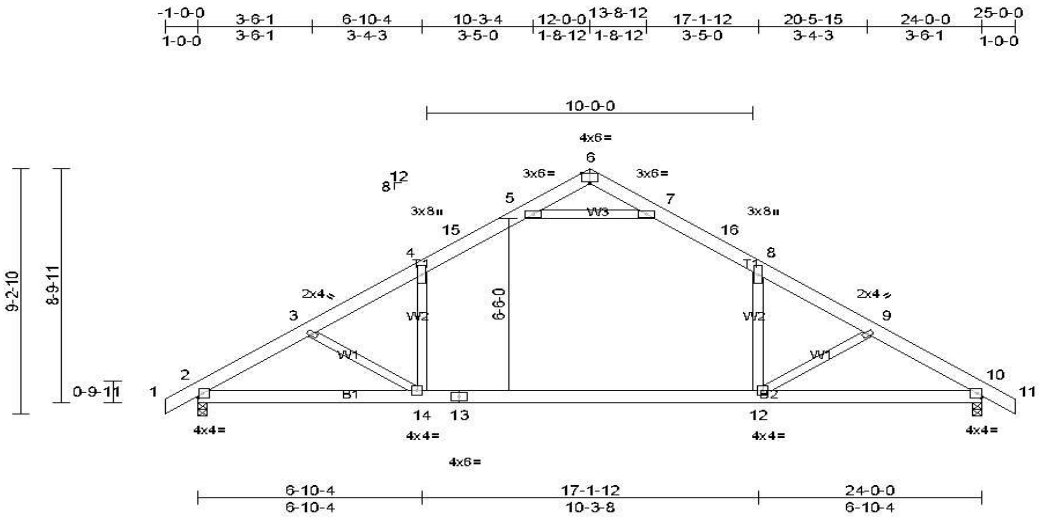
MENARDS Design&Buy™ GARAGE

Job	Truss	Truss Type	Qty	Ply	
QTREC0804378	GA1	ATTIC	17	1	Job Reference (optional)

Midwest Manufacturing, Eau Claire, WI — Run: 8.61 S Aug 11 2022 Print: 8.610 S Aug 11 2022 MiTek Industries, Inc. Wed Aug 23 09:43:0- — Page: 1
ID:B9zr07LEi1CCfKr5XWf3rtylFFL-HWWCVVGCdM6aBw5aFSRL8Q3?otp2?93OugX66xyl?e8



Scale = 1:63.9

Plate Offsets (X, Y): [2:0-1-9,0-2-0], [6:0-3-0,Edge], [10:0-1-9,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.46	12-14	>624	240	MT20	244/190
Snow (Ps/Pg)	27.7/40.0	Lumber DOL	1.15	BC	0.52	Vert(TL)	-0.66	12-14	>428	180		
TCDL	7.0	Rep Stress Incr	YES	WB	0.40	Horiz(TL)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2009/TPI2007	Matrix-S		Attic	-0.27	12-14	>455	360		
BCDL	10.0										Weight: 154 lb	FT = 15%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1711/0-3-8, (min. 0-1-8), 10=1711/0-3-8, (min. 0-1-8)
Max Horiz 2=-194 (LC 7)
Max Uplift 2=-44 (LC 9), 10=-44 (LC 10)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2591/38, 3-4=-2295/22, 4-15=-1615/82, 5-15=-1486/104, 5-6=0/764, 6-7=0/764, 7-16=-1486/104, 8-16=-1615/82, 8-9=-2295/22, 9-10=-2591/38
BOT CHORD 2-14=-24/2003, 13-14=0/1652, 12-13=0/1652, 10-12=0/2003
WEBS 5-7=-2571/98, 4-14=0/914, 8-12=0/914, 3-14=-520/134, 9-12=-520/134

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 90mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-05; Pr=30.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=40.0 psf (ground snow); Ps=27.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
4) Roof design snow load has been reduced to account for slope.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 27.7 psf on overhangs non-concurrent with other live loads.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-14, 8-12
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2 and 44 lb uplift at joint 10.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Plat of Survey

0' 30' 60'

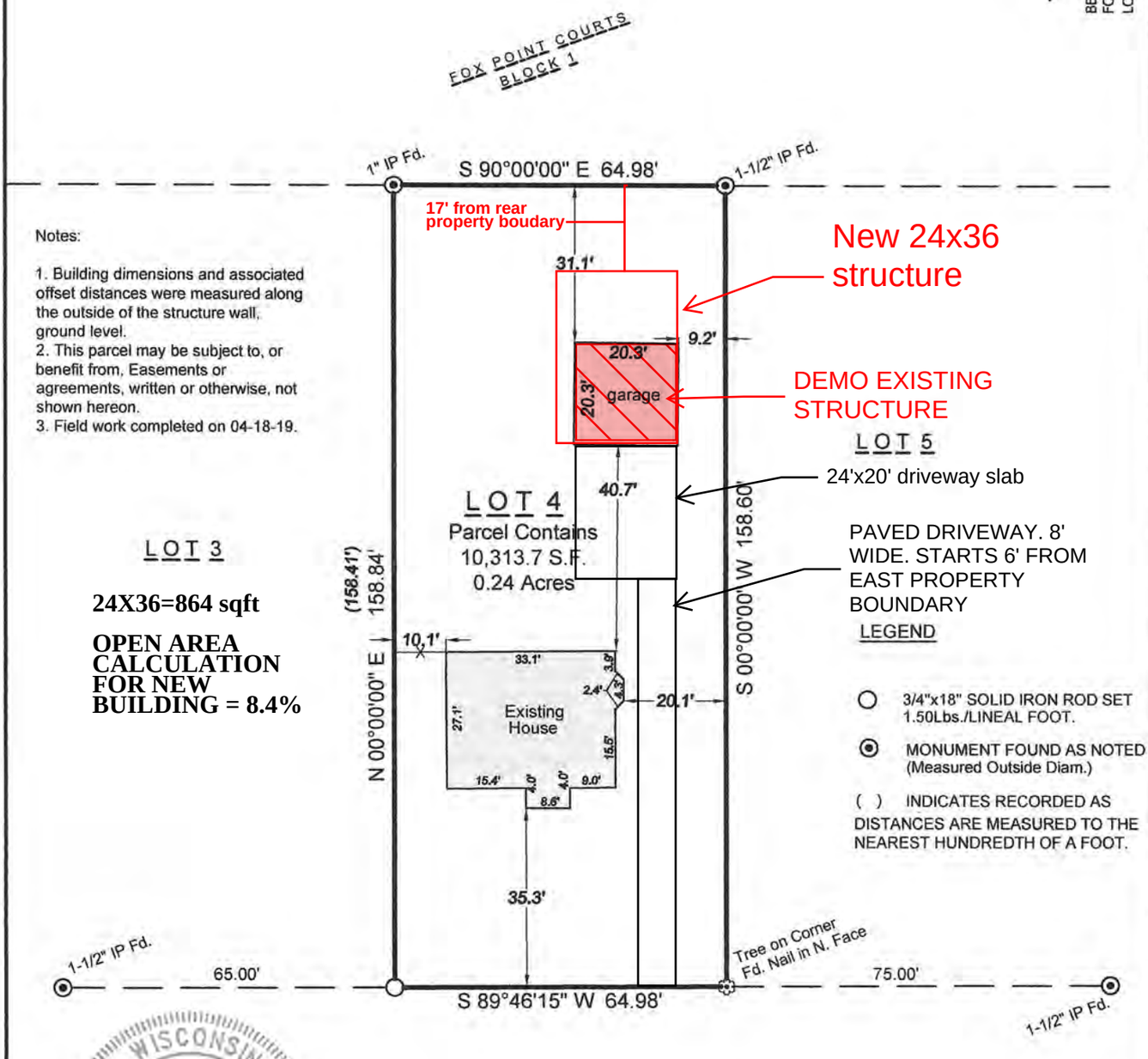
Legal Description:

Lot 4, in Block 1, in Fox Point Courts, being a Subdivision of part of the South West ¼ of Section 9, in Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County, Wisconsin

PREPARED FOR:
KENDALL STRAND
506 E. BRADLEY ST.
FOX POINT, WI 53217

N

BEARINGS ARE REFERENCED TO FOX POINT COURTS, NORTH LINE LOT 4, BLOCK 1 BEARS N 0°00'00" E



Notes:

1. Building dimensions and associated offset distances were measured along the outside of the structure wall, ground level.
2. This parcel may be subject to, or benefit from, Easements or agreements, written or otherwise, not shown hereon.
3. Field work completed on 04-18-19.

24X36=864 sqft

OPEN AREA CALCULATION FOR NEW BUILDING = 8.4%

E. BRADLEY RD.
(110' R.O.W.)

WISCONSIN
PHILLIP J. LANDRY S-3176 BROOKFIELD WI
LAND SURVEYOR

SURVEYOR'S CERTIFICATE

I, Phillip J. Landry, professional land surveyor for C3E Geomatics LLC, hereby certify that we surveyed the property described above and that the map is a true representation thereof and shows the size and location of the property, it's exterior boundaries. Said survey meets the minimum standards for property surveys of the Wisconsin Administrative Code (A-E7) and the map hereon is correct to the best of my knowledge and belief. This Survey is solely for the use of the present owners of the property at the date below.

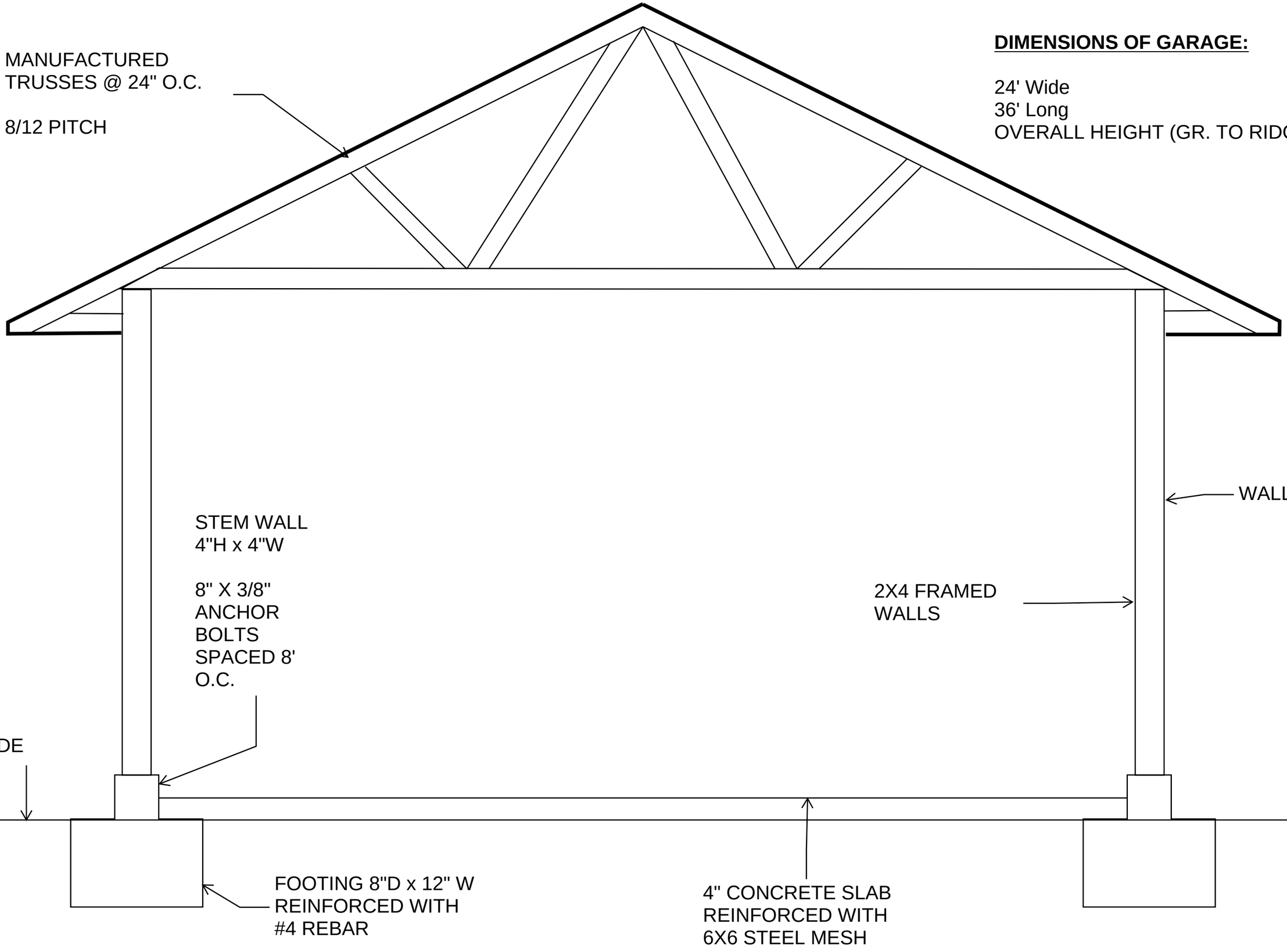
Dated this 30th Day of April, 2019: Phillip J. Landry S-3176

C3E GEOMATICS
18575 Brookfield Lake Drive • Unit 61
Brookfield, WI 53045 • (262) 312-1034
c3egeomatics.com

Job# 19043

DIMENSIONS OF GARAGE:

24' Wide
36' Long
OVERALL HEIGHT (GR. TO RIDGE) 19' 2"



506 E Bradley Rd street view

506 E Bradley Rd rear and east view, facing south

506 E Bradley Rd, existing garage to be demolished

VILLAGE OF FOX POINT

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B- _____

OFFICE USE ONLY
Issued Date
Zoning

BUILDING PERMIT

Job Address 7748 N. Club Circle	**Building Type:** Residential ☑ Commercial ☐
Description of Work	
Complete kitchen remodel. build 40'x20' attached covered patio, 26'6"x30' free standing garage, 16'x15' covered pavilion w/ 9'6"x15'6" wooden deck	
Estimated Cost of Project $ 660,000.00	

Owner/Occupant Scott and Pam Davis	
Business Name	Contact Name Scott Davis
Address 7748 N. Club Circle	City/State/Zip Fox Point/ WI/ 53217
Phone 414-795-3022	Email scott.davisdesignstudio@gmail.com

Cautionary Statement required when homeowner is applying for permit*

Contractor	
Company Name Alair Homes Milwaukee	Contact Name Arthur Cartes
Address N85W16100 Appleton Ave	City/State/Zip Menomonee Falls/WI 53051
Phone 414-315-6740	Email art.cartes@aliarhomes.com
Dwelling Contractor #1457	Dwelling Contractor Qualifier #1065997

Square Footage Under Construction				
1st Floor 314	2nd Floor	Basement	Addition 800	Garage 795

Description		Rate	Amount
Project - Per $1,000 of estimated cost		$10.00	
Building Board		$75.00	75
Footing early start - $230.00 one and two family; $305.00 commercial			
Plan Review - $275.00 one and two family; New Single Family Construction $330.00 plus $30.00/unit commercial			
State Seal		$75.00	75
Razing, Interior Demolition $925.00 max/bld	$95.00 minimum plus	$0.13/sqft	
Moving buildings	$250.00 plus	$0.13/sqft	
Fuel tanks - Per 1,000 gallons		$25.00	
Re-inspection		$100.00	
Work started without permit		**Double**	
	Minimum Fee	**$70.00**	
Payable to: Village of Fox Point		**Total Permit Fee**	$

Applicant Signature Arthur Cart **Date** 1/31/24

Rev 01/22

ISSUED PERMITS are available on the Village website under *PERMITS & LICENSES*

VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

CAUTIONARY STATEMENT TO OWNERS OBTAINING BUILDING PERMITS

101.65(1r) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s. 101.654(2)(a), the following consequences might occur:

(a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

(b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1)(a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

Wetlands Notice to Permit Applicants

You are responsible for complying with state and federal laws concerning the construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources wetlands identification web page or contact a Department of Natural Resources service

Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil

I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and will comply with those standards.

DON SCOTT DAVIS
Homeowner's Name – PRINTED

7748 N. CLUB CIRCLE, FOX POINT
Property Address

Homeowner's Signature

2/1/24
Date

Rev 09/20

Report Criteria:
Receipt.Receipt number = 1059911

Receipt Number	Date	Category	Customer Number	Customer Name	Distribution	Description	A	R	D	G	V	Distribution Amount	Receipt Total
02/02/2024													
Receipt Group 1													
1.059911	02/02/2024	LICENSES & P		7748 N Club Circle	OTHER PERMIT	OTHER PERMIT	N	Y	N	N	N	75.00	75.00
Total 1:													75.00
Total 02/02/2024:													75.00
Grand Totals:													75.00

LEGAL DESCRIPTION :

That part of the fractional Northeast 1/4 of Section 16, in Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County I Wisconsin, which is bounded and described as follows: Commencing at a reference point which is N0°09'00"W, 444.88 feet and S89°56'00"E, 474.16 feet from the center of Section 16; thence N83°24'00"W, 30.39 feet to a point; thence N2°34'00"W, 423.84 feet to a point, said last mentioned point being the point of beginning of the land hereby described; thence N2°34'00"W, 36.10 feet to a point; thence N57°31'00"E, 180.49 feet to a point; thence N50°10'00"E, 196.20 feet to a point; thence S44°08'00 E, 306.95 feet to a point; thence S79°07'27"W, 234.24 feet to a point; thence N88°50'03"W, 285.06 feet to the point of beginning.

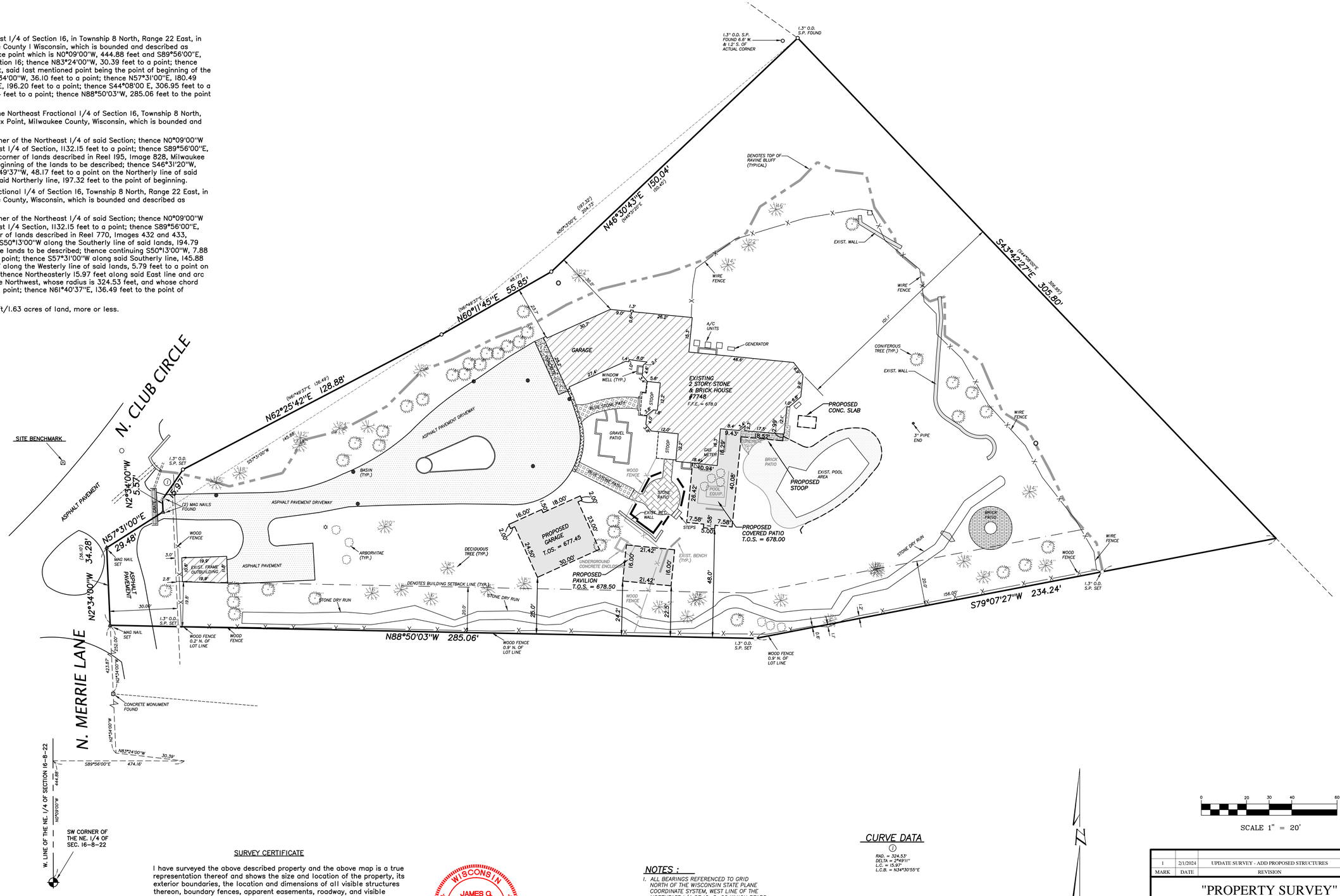
Excepting therefrom that part of the Northeast Fractional 1/4 of Section 16, Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County, Wisconsin, which is bounded and described as follows:

Commencing at the Southwest corner of the Northeast 1/4 of said Section; thence N0°09'00"W along the West line of the Northeast 1/4 of Section, 1132.15 feet to a point; thence S89°56'00"E, 731.28 feet to the Northerly most corner of lands described in Reel 195, Image 828, Milwaukee County records and the point of beginning of the lands to be described; thence S46°31'20"W, 150.45 feet to a point; thence S61°49'37"W, 48.17 feet to a point on the Northerly line of said lands; thence N50°13'00"E along said Northerly line, 197.32 feet to the point of beginning.

And that part of the Northeast Fractional 1/4 of Section 16, Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County, Wisconsin, which is bounded and described as follows:

Commencing at the Southwest corner of the Northeast 1/4 of said Section; thence N0°09'00"W along the West line of the Northeast 1/4 Section, 1132.15 feet to a point; thence S89°56'00"E, 731.28 feet to the Southeast corner of lands described in Reel 770, Images 432 and 433, Milwaukee County records; thence S50°13'00"W along the Southerly line of said lands, 194.79 feet to the point of beginning of the lands to be described; thence continuing S50°13'00"W, 7.88 feet along said Southerly line to a point; thence S57°31'00"W along said Southerly line, 145.88 feet to a point; thence N2°34'00"W along the Westerly line of said lands, 5.79 feet to a point on the East line of North Club Circle; thence Northeasterly 15.97 feet along said East line and arc of a curve, whose center lies to the Northwest, whose radius is 324.53 feet, and whose chord bears N34°30'55"E, 15.97 feet to a point; thence N61°40'37"E, 136.49 feet to the point of beginning.

Said Parcel containing 71,045 sq. ft/1.63 acres of land, more or less.



SURVEY CERTIFICATE

I have surveyed the above described property and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all visible structures thereon, boundary fences, apparent easements, roadway, and visible encroachments, if any.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase mortgage, or guarantee the title thereto within one (1) year form date hereof.

Dated at City of Mequon, State of Wisconsin this 21st day of April, 2022.

James G. Schneider
Surveyor – S–2127

WISCONSIN
JAMES G. SCHNEIDER
S-2127
MEQUON, WI
LAND SURVEYOR

THIS IS AN ORIGINAL PRINT ONLY IF STAMPED IN RED

NOTES :

1. ALL BEARINGS REFERENCED TO GRID NORTH OF THE WISCONSIN STATE PLANE COORDINATE SYSTEM, WEST LINE OF THE NORTHEAST 1/4 OF 16–8–22 WHICH BEARS N0°09'00W, PER DEED DESCRIPTION.
2. SITE AND MAIN BENCHMARK ON FIRE HYDRANT NORTH OF CLUB CIRCLE WEST END OF PROPERTY AS SHOWN ON SURVEY. FOX POINT BENCHMARK #214, N, FLANGE BOLT ELEVATION = 684.22.
3. ( ) DENOTES BEARING OR DISTANCE PER DEED.

CURVE DATA

(1)
RAD. = 324.53'
DELTA = 2°49'11"
L.C. = 15.97'
L.C.B. = N34°30'55"E

0 20 30 40 60
SCALE 1" = 20'

NORTH SHORE ENGINEERING, INC.
Consulting Engineers & Land Surveyors
11433 N. Port Washington Rd., Mequon, Wisconsin, 53092
(262) 241-9400 • FAX: (262) 241-5337
www.NorthShoreEngineering.net

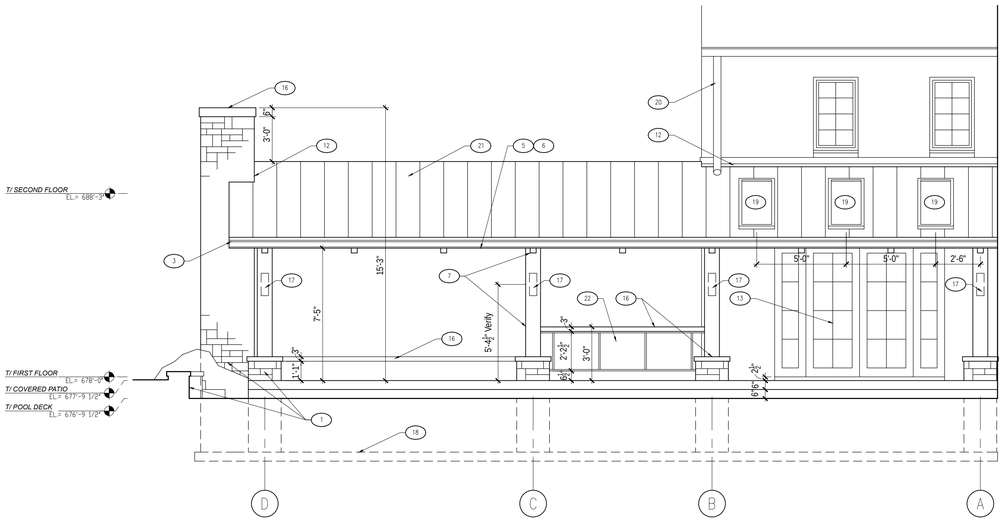
MARK	DATE	REVISION	BY	APVD
1	2/1/2024	UPDATE SURVEY - ADD PROPOSED STRUCTURES	JMB	JGS

"PROPERTY SURVEY"

for
Scott Davis Design

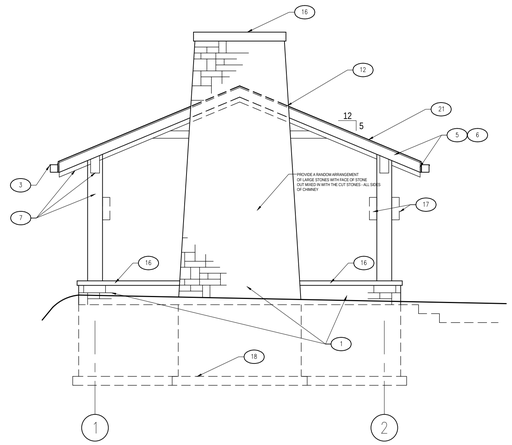
7748 N. Club Circle
Fox Point, WI

DATE:	April 21, 2022	DRAWN BY:	A.R.H.
FIELD CREW:	E.A.J. & S.F.Z.	Plat No.	LS-5218-22



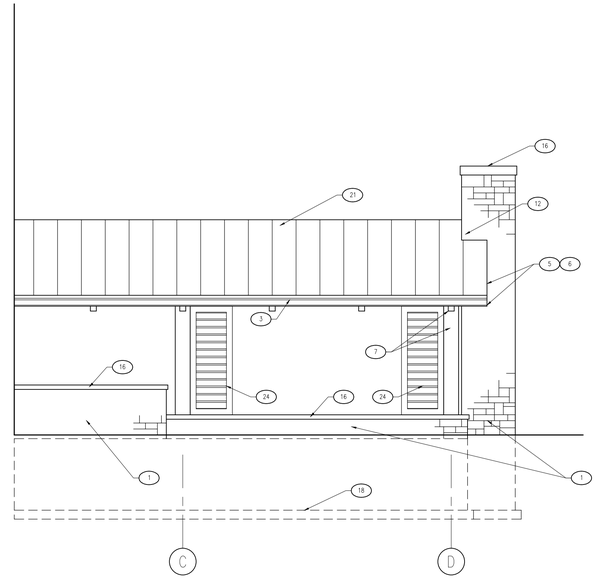
1/400 Covered Patio - East Elevation

1/4"=1'-0"



2/400 Covered Patio - South Elevation

1/4"=1'-0"



3/400 Covered Patio - West Elevation

1/4"=1'-0"

EXTERIOR FINISH MATERIALS SCHEDULE	
ITEM	
1	STONE TO MATCH EXISTING HOUSE
2	STUCCO TO MATCH EXISTING HOUSE
3	COPPER GUTTER AND DOWNSPOUT, MATCH EXISTING
4	WINDOW SYSTEM, MATCH EXISTING NEW MARVIN WINDOWS. CLAD EXTERIOR, WOOD INTERIOR. SPACER BAR WITH LEADED TAPE INSIDE AND OUT.
5	COMPOSITE BOARD TRIM, MATCH EXISTING
6	COMPOSITE BOARD FASCIA, MATCH EXISTING
7	TIMBER STRUCTURE - SIZE TBD
8	ROOFING SYSTEM - MATCH EXISTING "CEDUR" SHINGLES
9	EXPOSED CONCRETE FOUNDATION WALL
10	COMPOSITE WOOD VENT
11	CUSTOM WOOD GARAGE DOOR - MATCH EXISTING
12	FLASHING AT ROOF TRANSITION
13	EXTERIOR DOOR & SIDELITES-MARVIN, CLAD EXTERIOR, WOOD INTERIOR. SPACER BAR WITH LEADED TAPE INSIDE AND OUT. APPROVE FINISH WITH ARCHITECT
14	WOOD BRACKETS SIMILAR TO EXISTING SUPPORTING GUTTERS
15	CORBELS, MATCH EXISTING
16	LIMESTONE CAP
17	EXTERIOR LIGHT FIXTURE
18	FOUNDATION AND FOOTINGS - SIZE AND REINFORCING BY GC AND STRUCTURAL ENGINEER
19	SKYLIGHT
20	RELOCATE EXIST. DOWNSPUTS AND ADJUST GUTTERS AS NECESSARY
21	ROOFING SYSTEM - STANDING SEAM METAL(COPPER)
22	COUNTER SEATING WITH LIMESTONE COUNTER ON METAL FRAME WITH DECORATIVE PANELS
23	BRICK WINDOW SURROUND - MATCH EXISTING
24	WOOD SLIDING SCREEN PANELS- THREE PER SIDE, TOTAL OF SIX

NOTE: GENERAL CONTRACTOR / SURVEYOR RESPONSIBLE FOR SETTING / VERIFYING BUILDING FLOOR ELEVATIONS

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davisdesignstudio2@gmail.com

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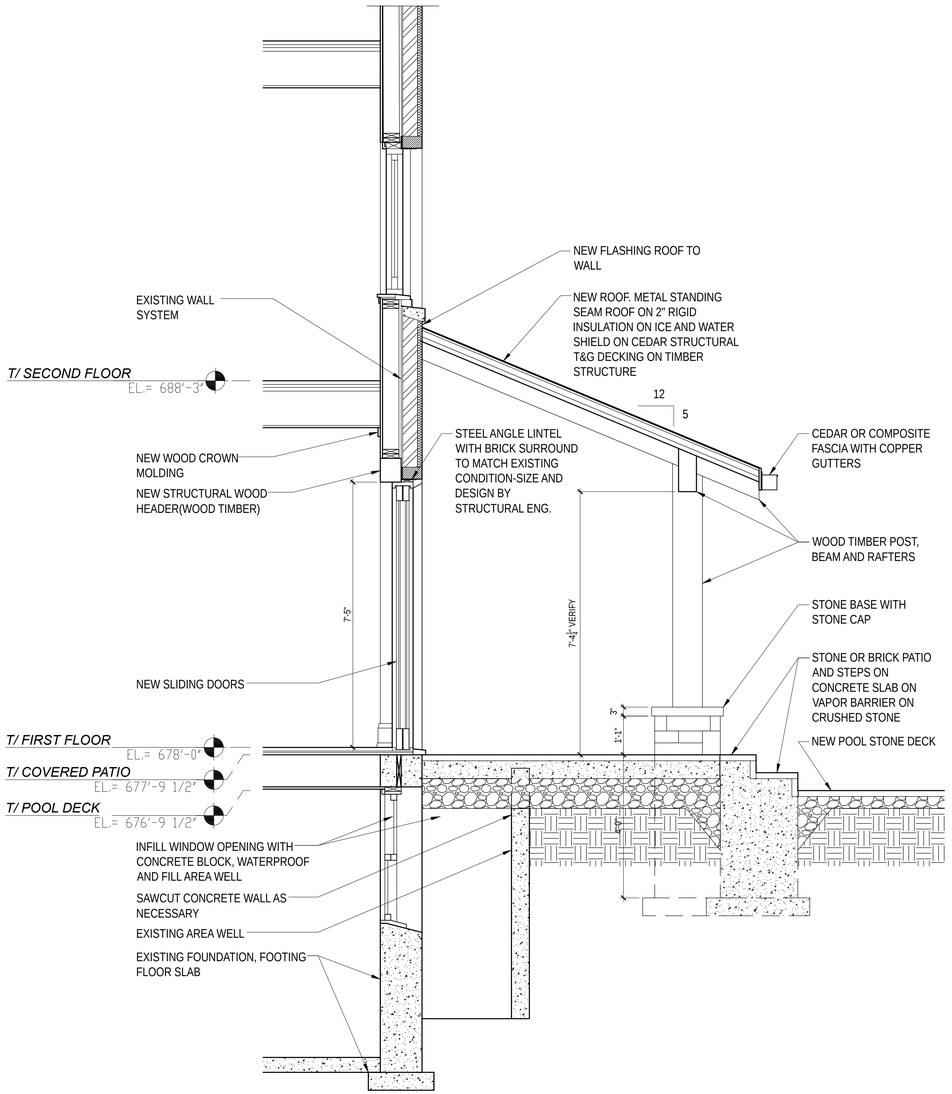
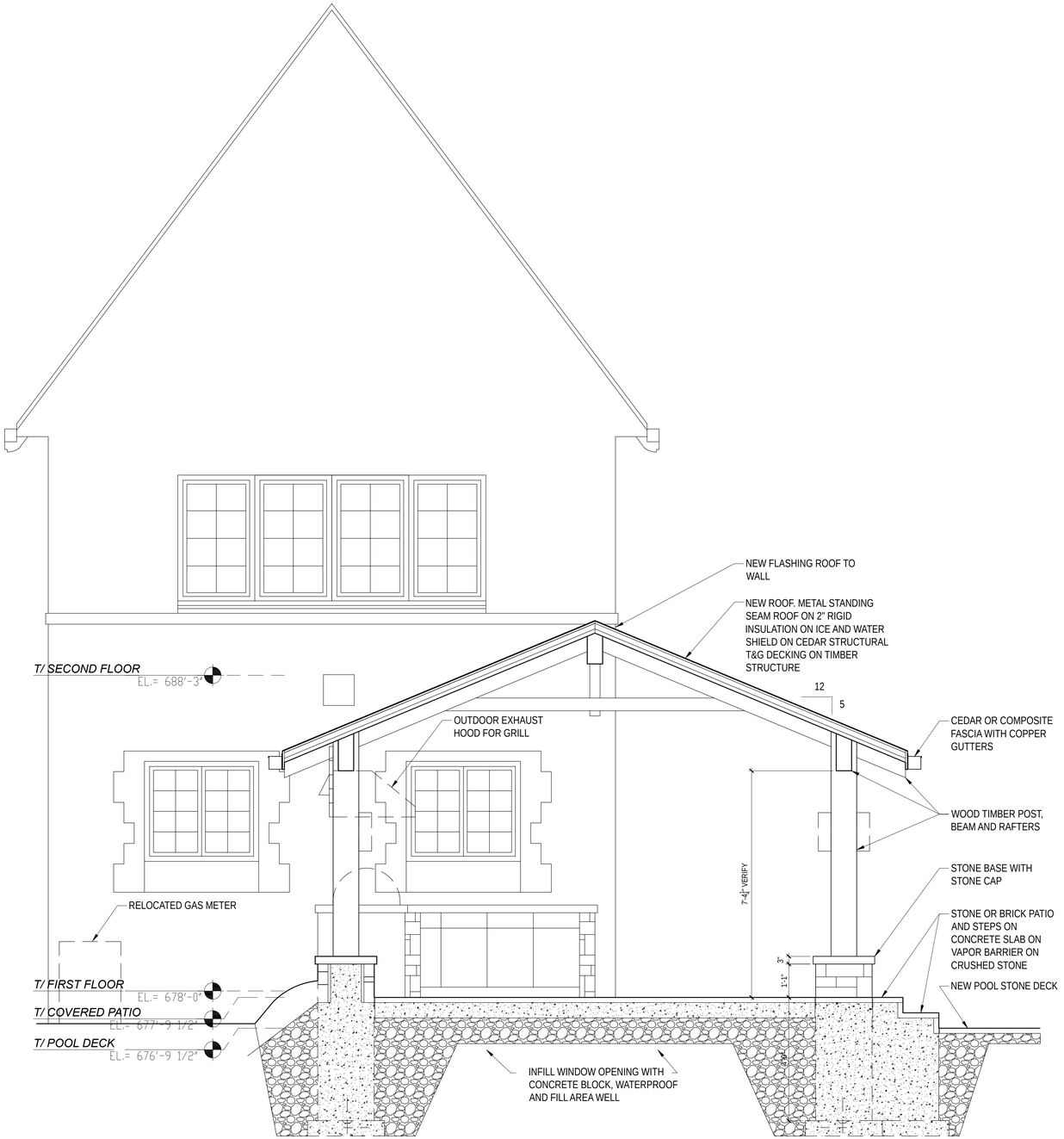
400



1/500 Section - Covered Patio

1/2"=1'-0"



2/500 Section - Covered Patio

1/2"=1'-0"

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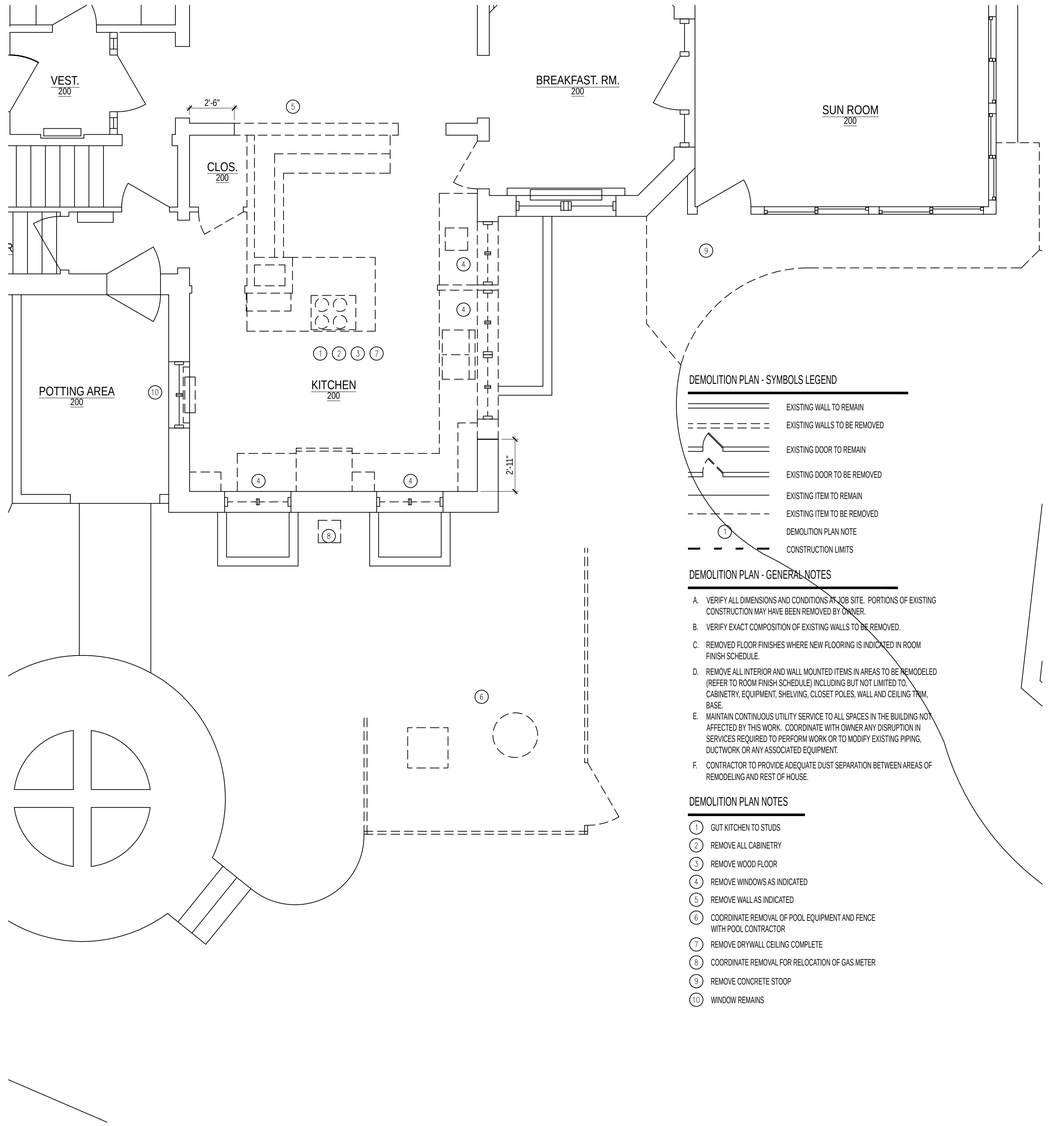


DEMOLITION PLAN - SYMBOLS LEGEND

- EXISTING WALL TO REMAIN
- EXISTING WALLS TO BE REMOVED
- EXISTING DOOR TO REMAIN
- EXISTING DOOR TO BE REMOVED
- EXISTING ITEM TO REMAIN
- EXISTING ITEM TO BE REMOVED
- (1) DEMOLITION PLAN NOTE
- CONSTRUCTION LIMITS

DEMOLITION PLAN - GENERAL NOTES

A. VERIFY ALL DIMENSIONS AND CONDITIONS IN JOB SITE. PORTIONS OF EXISTING CONSTRUCTION MAY HAVE BEEN REMOVED BY OWNER.

B. VERIFY EXACT COMPOSITION OF EXISTING WALLS TO BE REMOVED.

C. REMOVED FLOOR FINISHES WHERE NEW FLOORING IS INDICATED IN ROOM FINISH SCHEDULE.

D. REMOVE ALL INTERIOR AND WALL MOUNTED ITEMS IN AREAS TO BE REMODELED (REFER TO ROOM FINISH SCHEDULE) INCLUDING BUT NOT LIMITED TO, CABINETRY, EQUIPMENT, SHELVING, CLOSET POLES, WALL AND CEILING TRIM, BASE.

E. MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL SPACES IN THE BUILDING NOT AFFECTED BY THIS WORK. COORDINATE WITH OWNER ANY DISRUPTION IN SERVICES REQUIRED TO PERFORM WORK OR TO MODIFY EXISTING PIPING, DUCTWORK OR ANY ASSOCIATED EQUIPMENT.

F. CONTRACTOR TO PROVIDE ADEQUATE DUST SEPARATION BETWEEN AREAS OF REMODELING AND REST OF HOUSE.

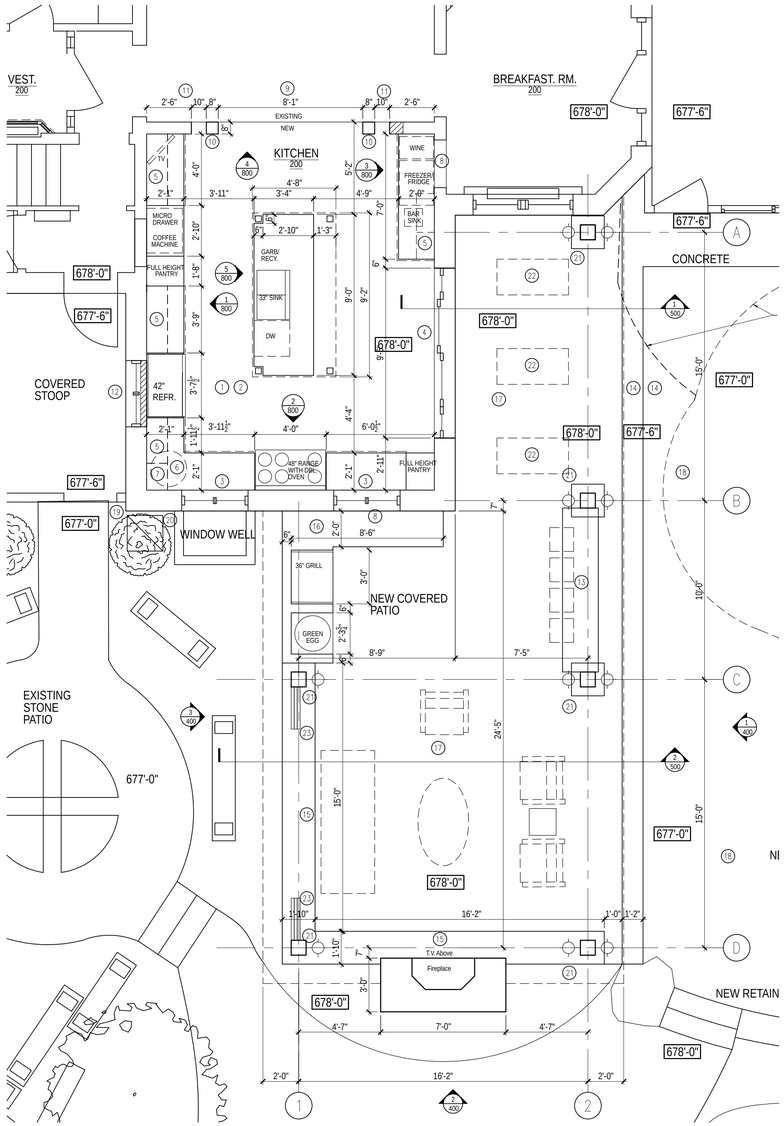
DEMOLITION PLAN NOTES

1. GUT KITCHEN TO STUDS
2. REMOVE ALL CABINETRY
3. REMOVE WOOD FLOOR
4. REMOVE WINDOWS AS INDICATED
5. REMOVE WALL AS INDICATED
6. COORDINATE REMOVAL OF POOL EQUIPMENT AND FENCE WITH POOL CONTRACTOR
7. REMOVE DRYWALL CEILING COMPLETE
8. COORDINATE REMOVAL FOR RELOCATION OF GAS METER
9. REMOVE CONCRETE STOOP
10. WINDOW REMAINS

1/201 KITCHEN AND COVERED PATIO DEMOLITION PLAN

1/4"=1'-0"

N



FLOOR PLAN - SYMBOLS LEGEND

- EXISTING PARTITION
- EXISTING DOOR
- NEW WALL
- NEW DOOR AND TAG
- EXTERIOR ELEVATION
- EXTERIOR SECTION
- INTERIOR ELEVATION
- (1) PLAN NOTE
- ONE HOUR FIRE RESISTIVE CONSTRUCTION
- WAINSCOT

FLOOR PLAN - GENERAL NOTES

A. DIMENSIONS ON FLOOR PLAN ARE BASED ON FACE OF DRYWALL TO FACE OF DRYWALL.

B. ELECTRICAL, MECHANICAL, AND PLUMBING TO BE DESIGN BUILD BY THE GENERAL CONTRACTOR. WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT CODE.

C. WINDOW CASING AND BASE TO MATCH EXISTING. TRIM CASINGS AS REQUIRED

D. ALL NEWLY CONSTRUCTED WALLS SHALL TERMINATE AT THE UNDERSIDE OF ROOF-FLOOR STRUCTURE, UNLESS NOTED OTHERWISE.

E. ALL NECESSARY STRUCTURAL ENGINEERING OF BEAMS, HEADERS, SLABS, FOOTINGS, ETC. TO BE ENGAGED THROUGH GENERAL CONTRACTOR AND COORDINATED W/ ARCHITECTURAL DRAWINGS.

F. PROVIDE MOISTURE RESISTANT GYPSUM BOARD IN ALL BATHROOMS.

G. AT ALL NEW SOFFITS/CEILING FRAMING BE SURE TO LOOK AT REFLECTED CEILING PLAN AND PLACE FRAMING TO ACCOMODATE NEW LIGHTING LOCATIONS.

FLOOR PLAN NOTES

1. NEW WOOD OR STONE FLOOR.
2. NEW WOOD BASE AND CASING THROUGHOUT. MATCH EXISTING.
3. NEW SLIDING WINDOW. MARVIN ULTIMATE.
4. NEW SLIDING DOOR W/SIDELITES. MARVIN ULTIMATE SLIDING FRENCH DOOR.
5. UPPER CABINETS.
6. LAZY SUSAN CORNER CABINET AT LOWERS.
7. EXTEND UPPER CABINET DOWN TO COUNTER WITH PULLOUT.
8. PASS THROUGH WINDOW.
9. NEW OPENING TO GREAT ROOM.
10. WOOD TIMBER COLUMNS.
11. CHAMFER PLASTER CORNERS TO MATCH EXISTING.
12. EXISTING WINDOW TO REMAIN. FILL INTERIOR WITH BOARD AN INSULATION WITH VAPOR BARRIER AND DRYWALL.
13. RAISED COUNTER.
14. STEP DOWN TO POOL DECK.
15. KNEEWALL/HEARTH.
16. GRILL AREA WORK COUNTER.
17. STONE PAVER FLOOR.
18. NEW POOL DECK PAVERS.
19. RELOCATED GAS METER.
20. NEW WATER SPIGOT.
21. WOOD TIMBER COLUMNS ON STONE BASE.
22. SKYLIGHTS ABOVE
23. SLIDING SCREENWALL. DESIGN TBD

CS-WSP DENOTES METHOD CS-WSP (CONTINUOUS STRUCTURAL WOOD PANEL SHEATHING. 4' X 8' WOOD STRUCTURAL PANEL SHEATHING WITH A THICKNESS NOT LESS THAN 3/8" OSB FOR 16" STUD SPACING. NAILING: 6D COMMON NAIL OR 8D BOX NAIL (2-3/8" LONG X 0.113 DIAMETER) 6" OC ALL EDGES AND 12" OC IN FIELD.

CS-PF DENOTES CONTINUOUS SHEATHING PORTAL FRAMED METHOD. MUST COMPLY WITH SPS 321.25 (FIGURE 321.25-A)

2/201 KITCHEN AND COVERED PATIO FLOOR PLAN

1/4"=1'-0"

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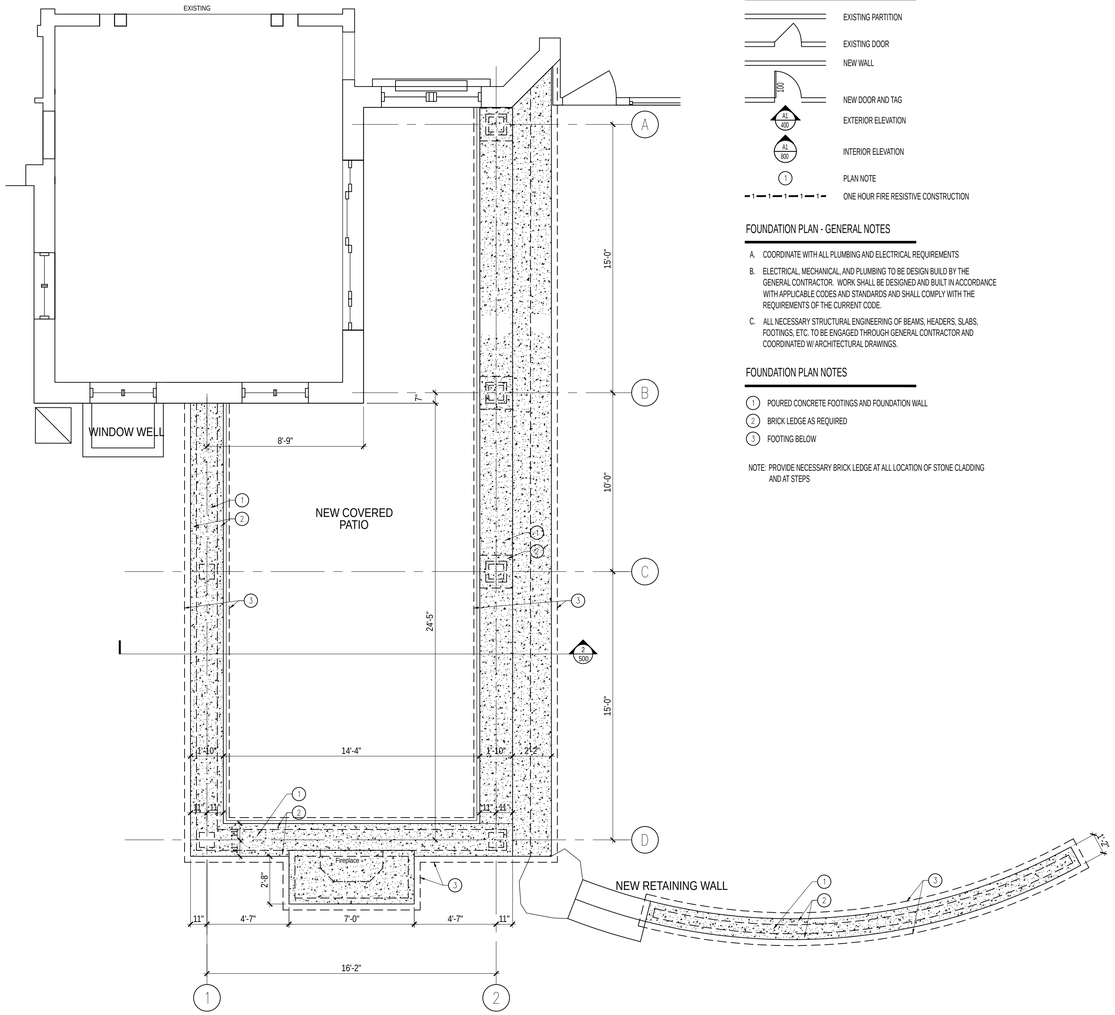


FOUNDATION PLAN - SYMBOLS LEGEND

- EXISTING PARTITION
- EXISTING DOOR
- NEW WALL
- NEW DOOR AND TAG
- EXTERIOR ELEVATION
- INTERIOR ELEVATION
- PLAN NOTE
- ONE HOUR FIRE RESISTIVE CONSTRUCTION

FOUNDATION PLAN - GENERAL NOTES

A. COORDINATE WITH ALL PLUMBING AND ELECTRICAL REQUIREMENTS

B. ELECTRICAL, MECHANICAL, AND PLUMBING TO BE DESIGN BUILD BY THE GENERAL CONTRACTOR. WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT CODE.

C. ALL NECESSARY STRUCTURAL ENGINEERING OF BEAMS, HEADERS, SLABS, FOOTINGS, ETC. TO BE ENGAGED THROUGH GENERAL CONTRACTOR AND COORDINATED W/ ARCHITECTURAL DRAWINGS.

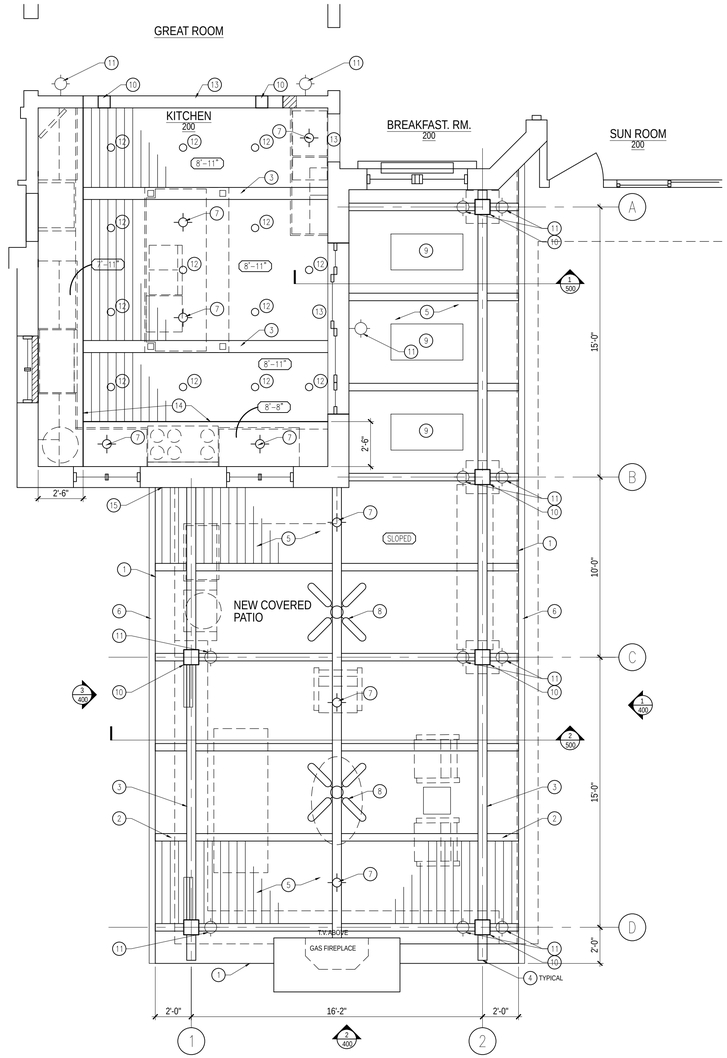
FOUNDATION PLAN NOTES

1. POURED CONCRETE FOOTINGS AND FOUNDATION WALL
2. BRICK LEDGE AS REQUIRED
3. FOOTING BELOW

NOTE: PROVIDE NECESSARY BRICK LEDGE AT ALL LOCATION OF STONE CLADDING AND AT STEPS

1/200 COVERED PATIO FOUNDATION PLAN

1/4"=1'-0"



REFLECTED CEILING PLAN - SYMBOLS LEGEND

- DRYWALL CEILING
- EXHAUST GRILLE
- SURFACE-MOUNTED FLUORESCENT LIGHT
- LED TRACK LIGHTING
- SURFACE-MOUNTED / PENDANT LIGHT
- RECESSED DOWN LIGHT
- WALL-MOUNTED LIGHT
- CEILING FAN
- REFLECTED CEILING PLAN NOTE

REFLECTED CEILING PLAN NOTES

1. ROOF OUTLINE
2. WOOD TIMBER RAFTERS - NOTCHED ON BEAMS
3. SOLID WOOD TIMBER BEAMS/TRUSSES
4. HOLD RAFTERS BACK FROM EDGE OF ROOF 1½"
5. WOOD TONGUE AND GROOVE STRUCTURAL CEILING
6. METAL GUTTER
7. PENDENT LIGHT
8. EXTERIOR GRADE CEILING FAN
9. SKYLIGHT
10. SOLID WOOD TIMBER COLUMNS
11. SCONCE LIGHT
12. 5" LED RECESSED DOWNLIGHT IN KITCHEN
13. WOOD TIMBER HEADER
14. DRYWALL SOFFIT
15. VENT RANGE FROM SIDEWALL OF HOUSE. PROVIDE MAKE UP AIR AS REQUIRED.

NOTE: GENERAL CONTRACTOR TO BE RESPONSIBLE FOR ALL STRUCTURAL FRAMING WHICH IS TO BE DESIGNED AND/OR VERIFIED BY A STRUCTURAL ENGINEER.

NOTE: CONDUIT FOR CEILING LIGHTING TO BE RUN ON TOP OF ROOF NOTCHED IN RIGID INSULATION.

2/200 KITCHEN AND COVERED PATIO REFLECTED CEILING PLAN

1/4"=1'-0"

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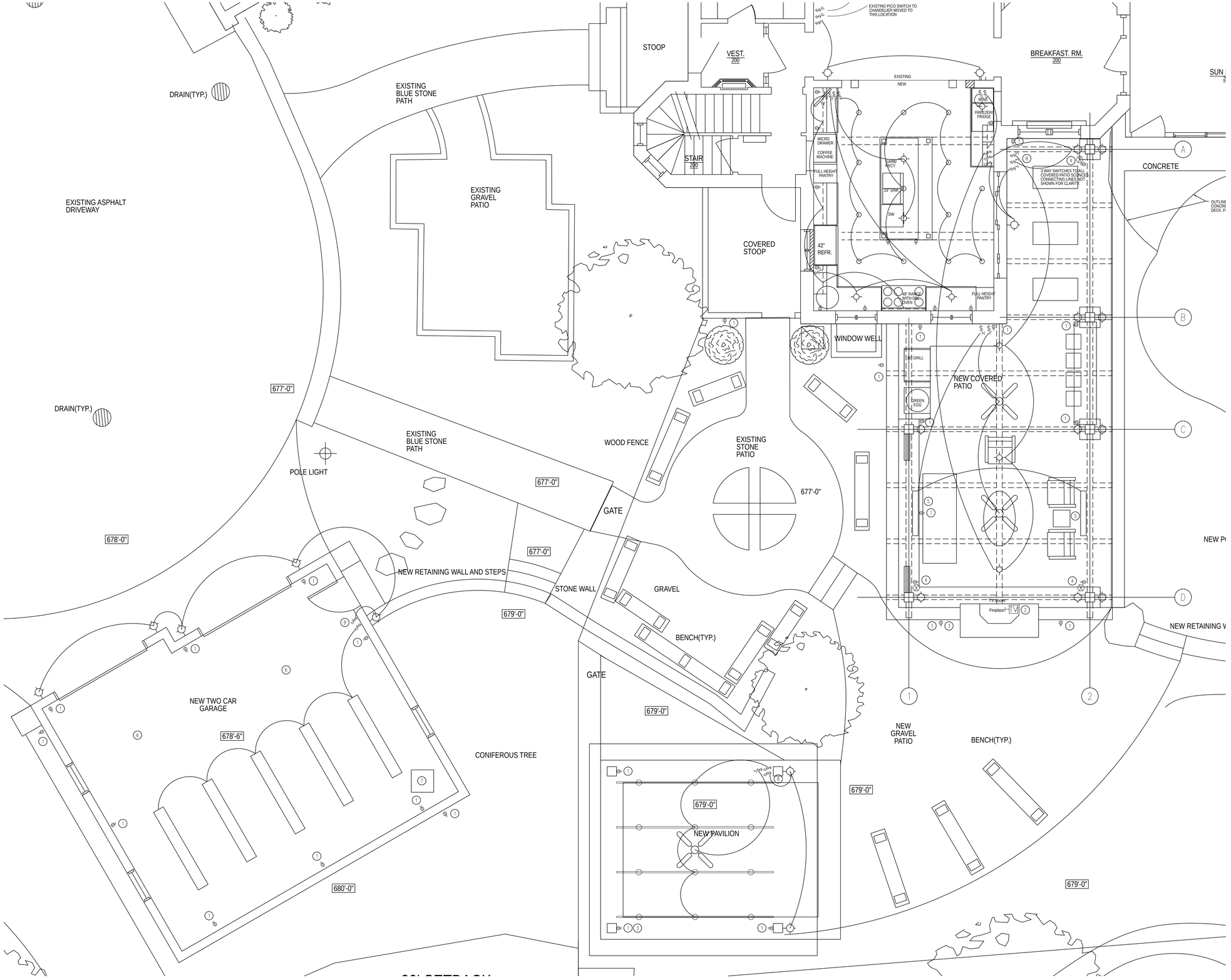

ELECTRICAL PLAN - SYMBOLS LEGEND

- EXHAUST GRILLE
- SURFACE-MOUNTED FLUORESCENT LIGHT
- SURFACE-MOUNTED / PENDANT LIGHT
- RECESSED DOWN LIGHT
- CEILING FAN
- WALL MOUNTED LIGHT FIXTURE
- TELEPHONE / DATA JACK
- SPEAKER
- CABLE AND DATA WALL CONNECTION
- DUPLEX RECEPTACLE
- HALF HOT DUPLEX RECEPTACLE
- FLOOR DUPLEX RECEPTACLE
- QUAD RECEPTACLE
- 220 RECEPTACLE
- SINGLE POLE SWITCH
- 3-WAY SWITCH
- DIMMER SWITCH
- FAN SWITCH
- ELECTRIC HEATER SWITCH
- ELECTRICAL PLAN NOTE

ELECTRICAL GENERAL PLAN NOTES

A. PROVIDE SMOKE AND CARBON DIOXIDE DETECTORS AS REQUIRED BY CODE.

B. PROVIDE EXHAUST FAN AT ALL TOILET ROOMS - CONFIRM EXHAUST LOCATION ON EXTERIOR WITH OWNER / ARCHITECT.

C. ALL LIGHTS TO BE DIMMABLE, LED AND 2700 K

D. COORDINATE AUDIO SPEAKER LAYOUT/SELECTION WITH OWNER.

E. ELECTRICAL PLANS ARE FOR INFORMATION ONLY TO PROVIDE PREFERRED LOCATIONS FOR FIXTURES, OUTLETS, SWITCHES, ETC. ACTUAL INSTALLATIONS TO MEET APPLICABLE ELECTRICAL CODE AND VERIFIED WITH OWNER AND ARCH. DURING ELECTRICAL WALK THRU.

F. RECEPTACLE QUANTITIES AND LOCATIONS TO BE CODE COMPLIANT. ADDITIONAL LOCATIONS AND/OR QUANTITIES NOTED ON LIGHTING PLAN

G. SEE REFLECTED CEILING PLAN FOR LIGHT FIXTURE DESIGNATIONS

ELECTRICAL PLAN NOTES

1. EXTERIOR GRADE OUTLET. RECESS WHERE POSSIBLE. REVIEW WITH OWNER
2. PROVIDE CABLE AND DATA AT TV LOCATION
3. PROVIDE DATA CABLE FOR WIFI EXTENDER
4. HIGH OUTLET FOR SPEAKER
5. PROVIDE ELECTRICAL CONNECTION FOR ELECTRIC HEATER
6. OVERHEAD GARAGE DOOR OPENER
7. GARAGE GAS HEATER WITH THERMOSTAT CONTROL DOWN TO 30 DEGREES
8. ASTROLOGICAL CONTROLLED SWITCH FOR SCONCES
9.

2/200 ELECTRICAL PLAN

1/4"=1'-0"

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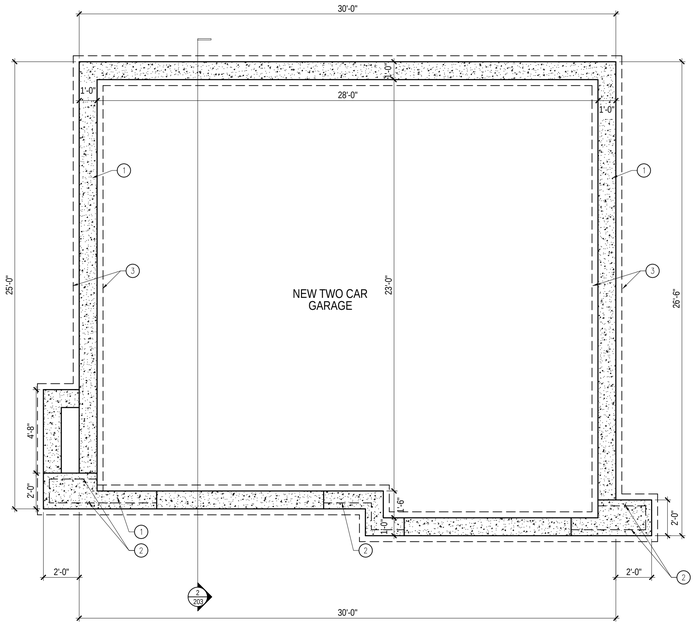

FOUNDATION PLAN - SYMBOLS LEGEND

- EXISTING PARTITION
- EXISTING DOOR
- NEW WALL
- NEW DOOR AND TAG
- EXTERIOR ELEVATION
- INTERIOR ELEVATION
- PLAN NOTE
- ONE HOUR FIRE RESISTIVE CONSTRUCTION

FOUNDATION PLAN - GENERAL NOTES

A. COORDINATE WITH ALL PLUMBING AND ELECTRICAL REQUIREMENTS

B. ELECTRICAL, MECHANICAL, AND PLUMBING TO BE DESIGN BUILD BY THE GENERAL CONTRACTOR. WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT CODE.

C. ALL NECESSARY STRUCTURAL ENGINEERING OF BEAMS, HEADERS, SLABS, FOOTINGS, ETC. TO BE ENGAGED THROUGH GENERAL CONTRACTOR AND COORDINATED W/ ARCHITECTURAL DRAWINGS.

FOUNDATION PLAN NOTES

1. POURED CONCRETE FOOTINGS AND FOUNDATION WALL
2. BRICK LEDGE AS REQUIRED
3. FOOTING BELOW

NOTE: PROVIDE NECESSARY BRICK LEDGE AT ALL LOCATION OF STONE CLADDING AND AT STEPS

1/203 DETACHED GARAGE FOUNDATION PLAN

1/4"=1'-0"

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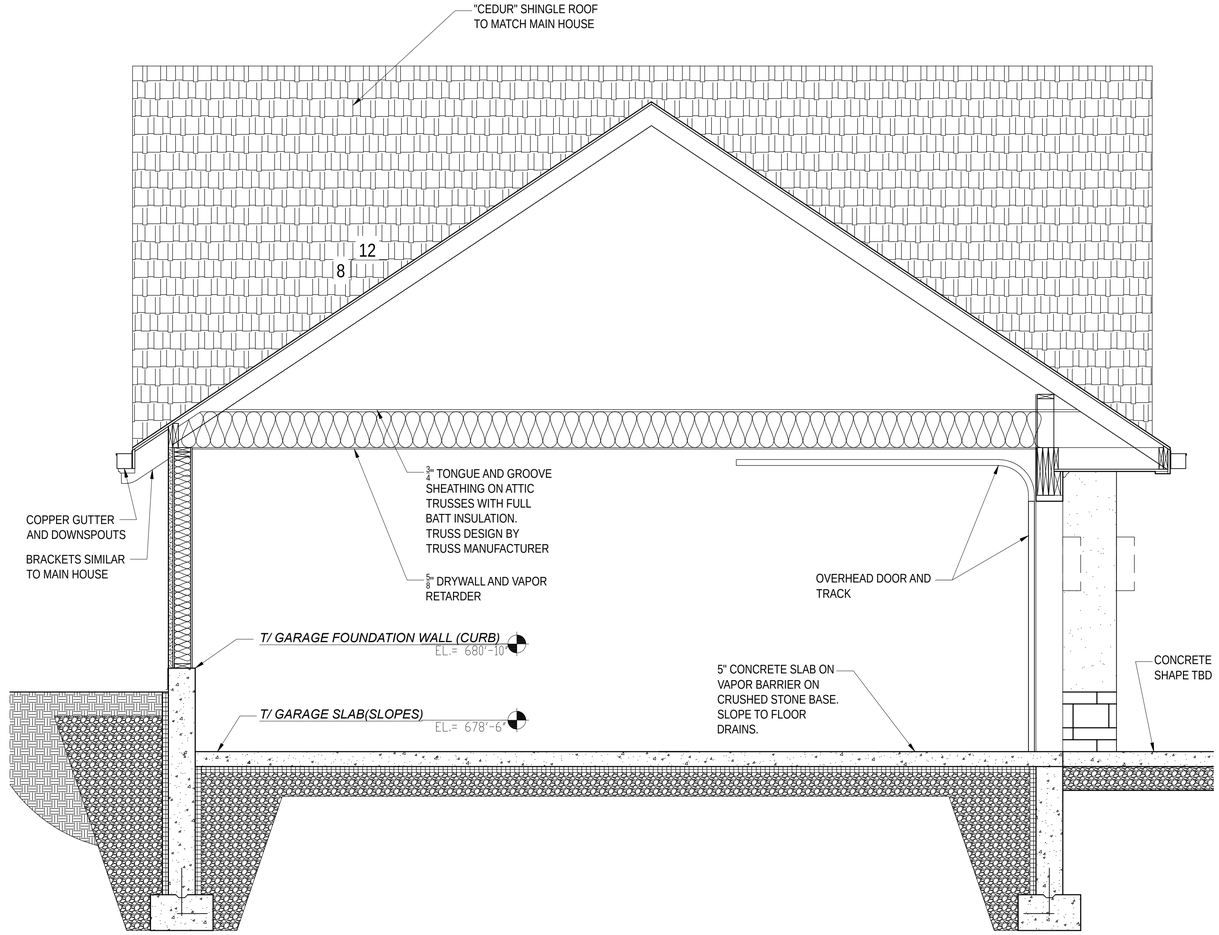

2/203 DETACHED GARAGE BUILDING SECTION

1/2"=1'-0"

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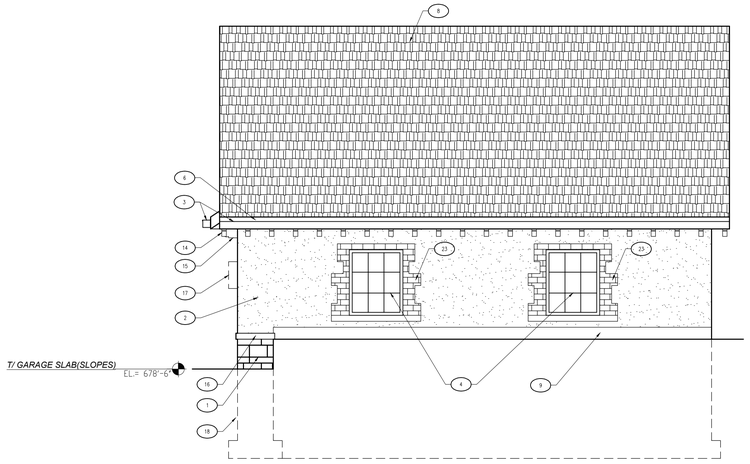
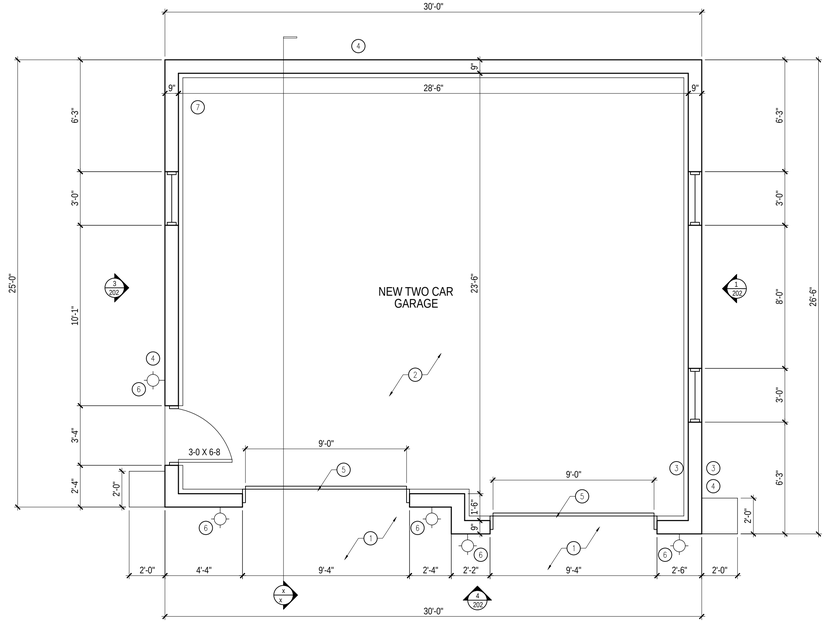


1 202 Garage - West Elevation

1/4"=1'-0"



2 202 Garage Floor Plan

1/4"=1'-0"

N

FLOOR PLAN - SYMBOLS LEGEND - GARAGE

- EXISTING PARTITION
- EXISTING DOOR
- NEW WALL
- NEW DOOR AND TAG
- EXTERIOR ELEVATION
- INTERIOR ELEVATION
- PLAN NOTE

FLOOR PLAN - GENERAL NOTES - GARAGE

A. DIMENSIONS ON FLOOR PLAN ARE BASED ON FACE OF FINISHED SURFACE TO FACE OF FINISHED SURFACE UNLESS TAGGED A TO CENTERLINE.

B. ELECTRICAL, MECHANICAL, AND PLUMBING TO BE DESIGN BUILD BY THE GENERAL CONTRACTOR. WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT CODE.

C. CONCRETE SLAB TO HAVE VAPOR BARRIER AND SCORING TO PREVENT/CONTROL CRACKING.

D. COORDINATE WITH FENCING COMPANY LOCATION OF FUTURE FENCE. CONSULT ARCHITECT.

E. ALL NECESSARY STRUCTURAL ENGINEERING OF BEAMS, COLUMNS, HEADERS, SLABS, FOOTINGS, ETC. TO BE ENGAGED THROUGH GENERAL CONTRACTOR AND COORDINATED W/ ARCHITECTURAL DRAWINGS. THIS INCLUDES ALL STRUCTURAL CONNECTIONS AS WELL.

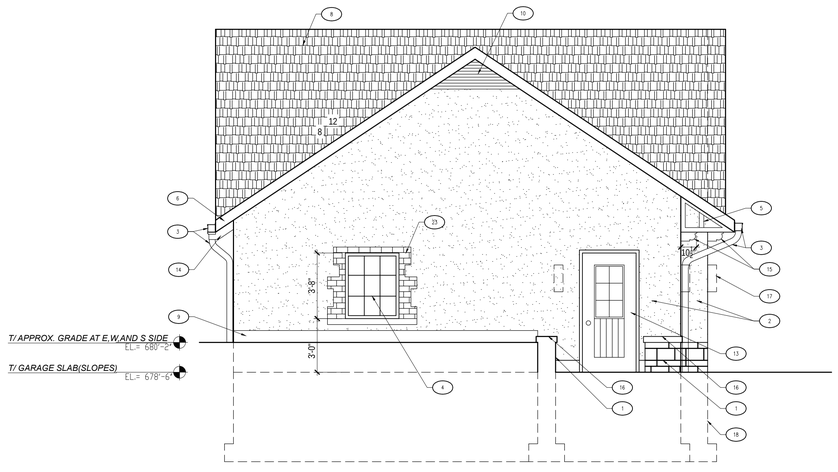
F. AT ALL NEW SOFFITS/CEILING FRAMING BE SURE TO LOOK AT REFLECTED CEILING PLAN AND PLACE FRAMING TO ACCOMODATE NEW LIGHTING LOCATIONS.

FLOOR PLAN NOTES

1. CONCRETE APRON, SHAPE AND SIZE TBD.
2. CONCRETE SLAB WITH VAPOR BARRIER. COORDINATE ELEVATION AND PITCH WITH DRAINAGE PLAN
3. HOSE BIB
4. WEATHER RESISTANT DUPLEX RECEPTACLE
5. OVERHEAD GARAGE DOORS BY OWNER
6. EXTERIOR WALL SCONCE
7. CEILING MOUNTED GARAGE HEATER
8. PROVIDE FLOOR DRAIN IN GARAGE. VERIFY DRAIN REQUIREMENTS.

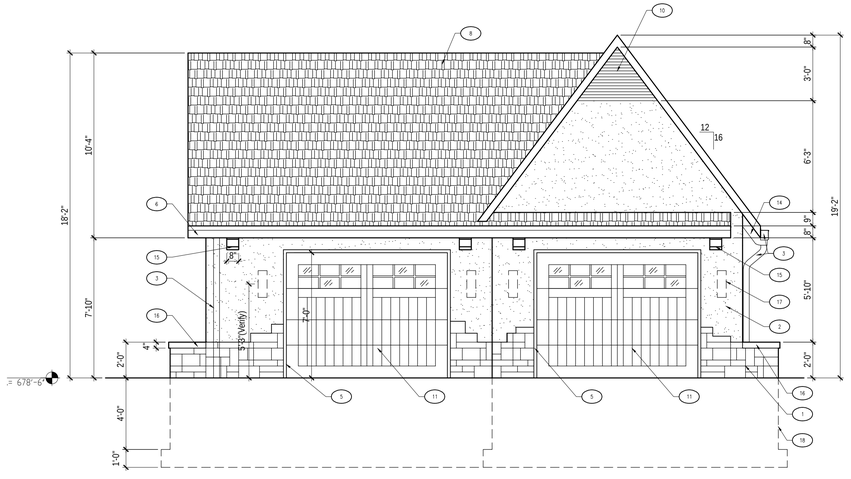
CS-WSP DENOTES METHOD CS-WSP (CONTINUOUS STRUCTURAL WOOD PANEL SHEATHING. 4' X 8' WOOD STRUCTURAL PANEL SHEATHING WITH A THICKNESS NOT LESS THAN 3/8" OSB FOR 16" STUD SPACING. NAILING: 6D COMMON NAIL OR 8D BOX NAIL (2-3/8" LONG X 0.113 DIAMETER) 6" OC ALL EDGES AND 12" OC IN FIELD.

CS-PF DENOTES CONTINUOUS SHEATHING PORTAL FRAMED METHOD. MUST COMPLY WITH SPS 321.25 (FIGURE 321.25-A)



3 202 Garage - East Elevation

1/4"=1'-0"



4 202 Garage - North Elevation

1/4"=1'-0"

EXTERIOR FINISH MATERIALS SCHEDULE

ITEM	
1	STONE TO MATCH EXISTING HOUSE
2	STUCCO TO MATCH EXISTING HOUSE
3	COPPER GUTTER AND DOWNSPOUT, MATCH EXISTING
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7	TIMBER STRUCTURE - SIZE TBD
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12	FLASHING AT ROOF TRANSITION
13	EXTERIOR DOOR & SIDELITES-MARVIN, CLAD EXTERIOR, WOOD INTERIOR. SPACER BAR WITH LEADED TAPE INSIDE AND OUT. APPROVE FINISH WITH ARCHITECT
14	WOOD BRACKETS SIMILAR TO EXISTING SUPPORTING GUTTERS
15	CORBELS, MATCH EXISTING
16	LIMESTONE CAP
17	EXTERIOR LIGHT FIXTURE
18	FOUNDATION AND FOOTINGS - SIZE AND REINFORCING BY GC AND STRUCTURAL ENGINEER
19	SKYLIGHT
20	RELOCATE EXIST. DOWNSPUTS AND ADJUST GUTTERS AS NECESSARY
21	ROOFING SYSTEM - STANDING SEAM METAL(COPPER)
22	COUNTER SEATING WITH LIMESTONE COUNTER ON METAL FRAME WITH DECORATIVE PANELS
23	BRICK WINDOW SURROUND - MATCH EXISTING
24	WOOD SLIDING SCREEN PANELS- THREE PER SIDE, TOTAL OF SIX

NOTE: GENERAL CONTRACTOR / SURVEYOR RESPONSIBLE FOR SETTING / VERIFYING BUILDING FLOOR ELEVATIONS

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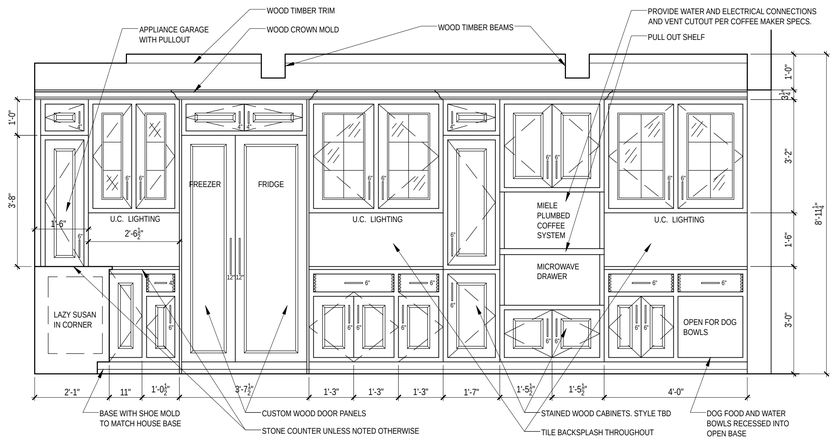
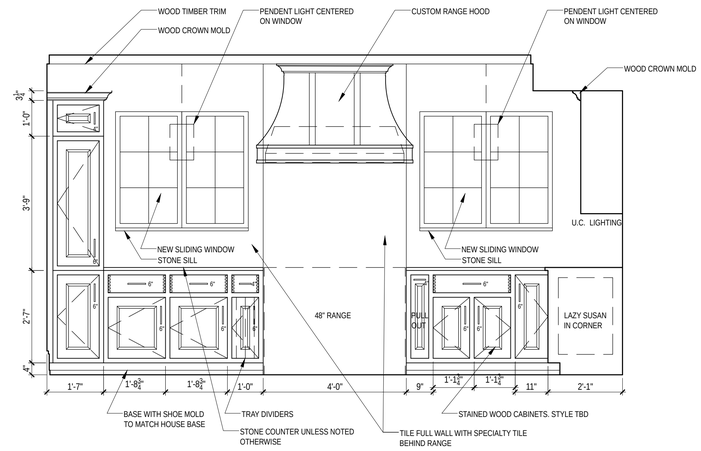


1 / 800 Kitchen - West Elevation

1/2"=1'-0"



2 / 800 Kitchen - South Elevation

1/2"=1'-0"

INTERIOR ELEVATIONS - SYMBOLS LEGEND

DTL SHT — INTERIOR DETAIL REFERENCE

INTERIOR ELEVATIONS - GENERAL NOTES

A. INTERIOR ELEVATION DIMENSIONS ARE BASED ON FACE OF FINISHED WALL TO FACE OF FINISHED WALL.

CASEWORK - GENERAL NOTES

A. PROVIDE 1 1/2" (MINIMUM) FILLERS AT PERPENDICULAR JUNCTION OF ALL CABINETS AND AT PERPENDICULAR JUNCTURE WITH ADJACENT WALL(S). UNLESS NOTED OTHERWISE. SCRIBE ALL EDGES AND APPLY SEALANT TO JOINTS.

B. PROVIDE SEALANT BETWEEN BACKSPLASH / SIDESPLASH OR COUNTERTOP AND WALL.

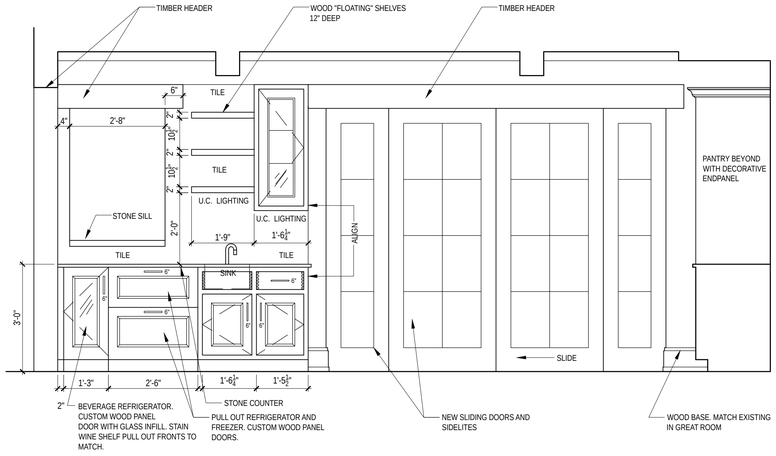
C. ALL SHELVING IN CASEWORK TO BE ADJUSTABLE UNLESS NOTED OTHERWISE.

D. CABINET STYLE TO BE FULL OVERLAY OR INSET - TBD

E. ALL CABINET DRAWERS/DOORS TO BE SOFT CLOSE.

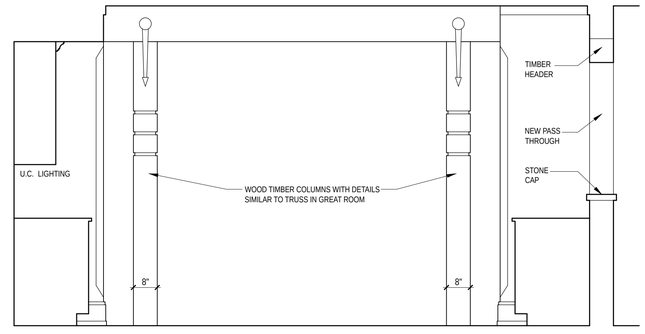
F. CROWN MOLDING TO BE:TBD

G. ALL CABINETS TO HAVE PULL OUT DRAWERS UNLESS NOTED OTHERWISE



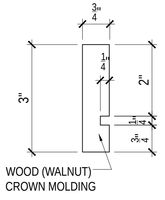
3 / 800 Kitchen - East Elevation

1/2"=1'-0"



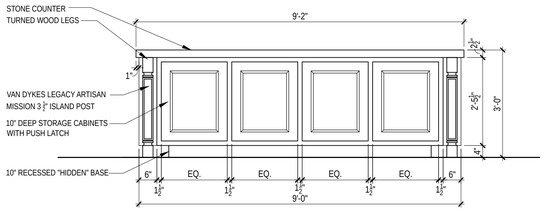
4 / 800 Kitchen - North Elevation

1/2"=1'-0"

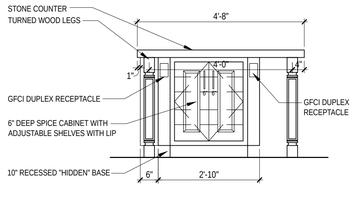


5 / 800 Kitchen - Crown Molding Detail

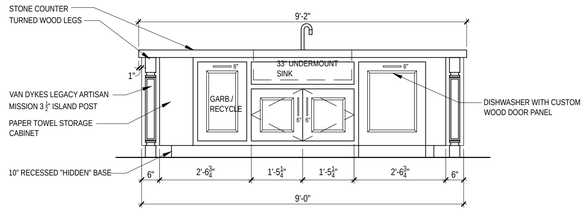
6"=1'-0"



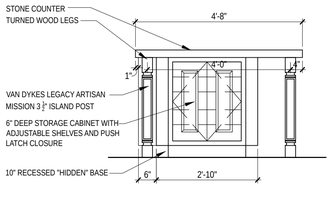
KITCHEN ISLAND ELEVATION LOOKING WEST



KITCHEN ISLAND ELEVATION LOOKING NORTH



KITCHEN ISLAND ELEVATION LOOKING EAST



KITCHEN ISLAND ELEVATION LOOKING SOUTH

5 / 800 Kitchen - Island Elevations

1/2"=1'-0"

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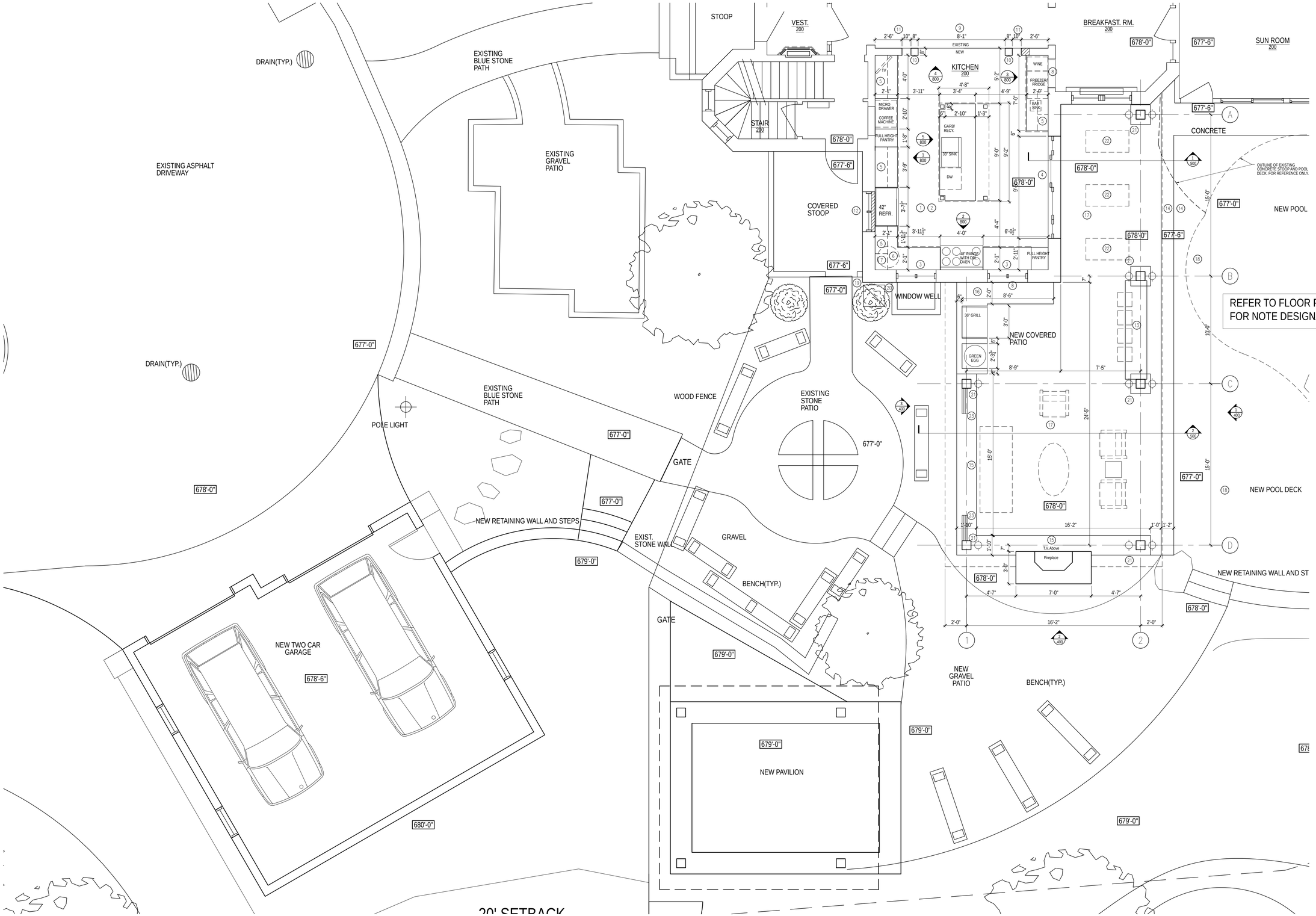

1 / 003 ENLARGED PARTIAL SITE PLAN

1/4"=1'-0"

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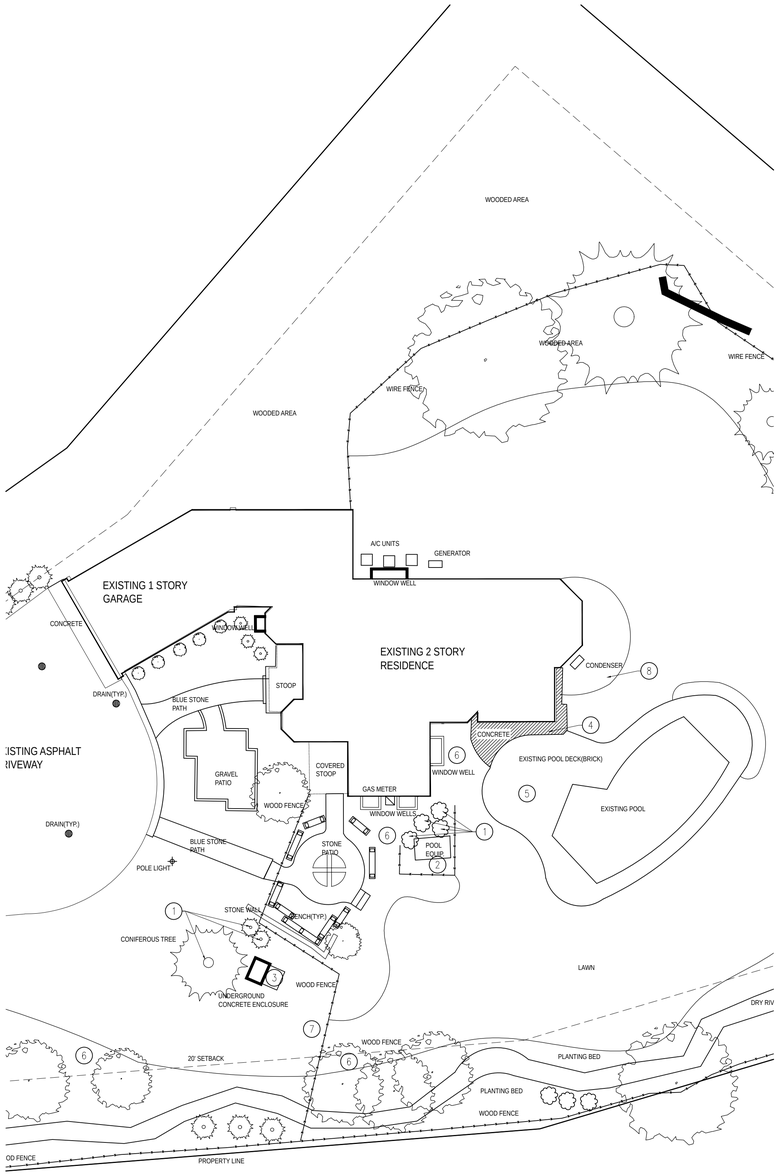

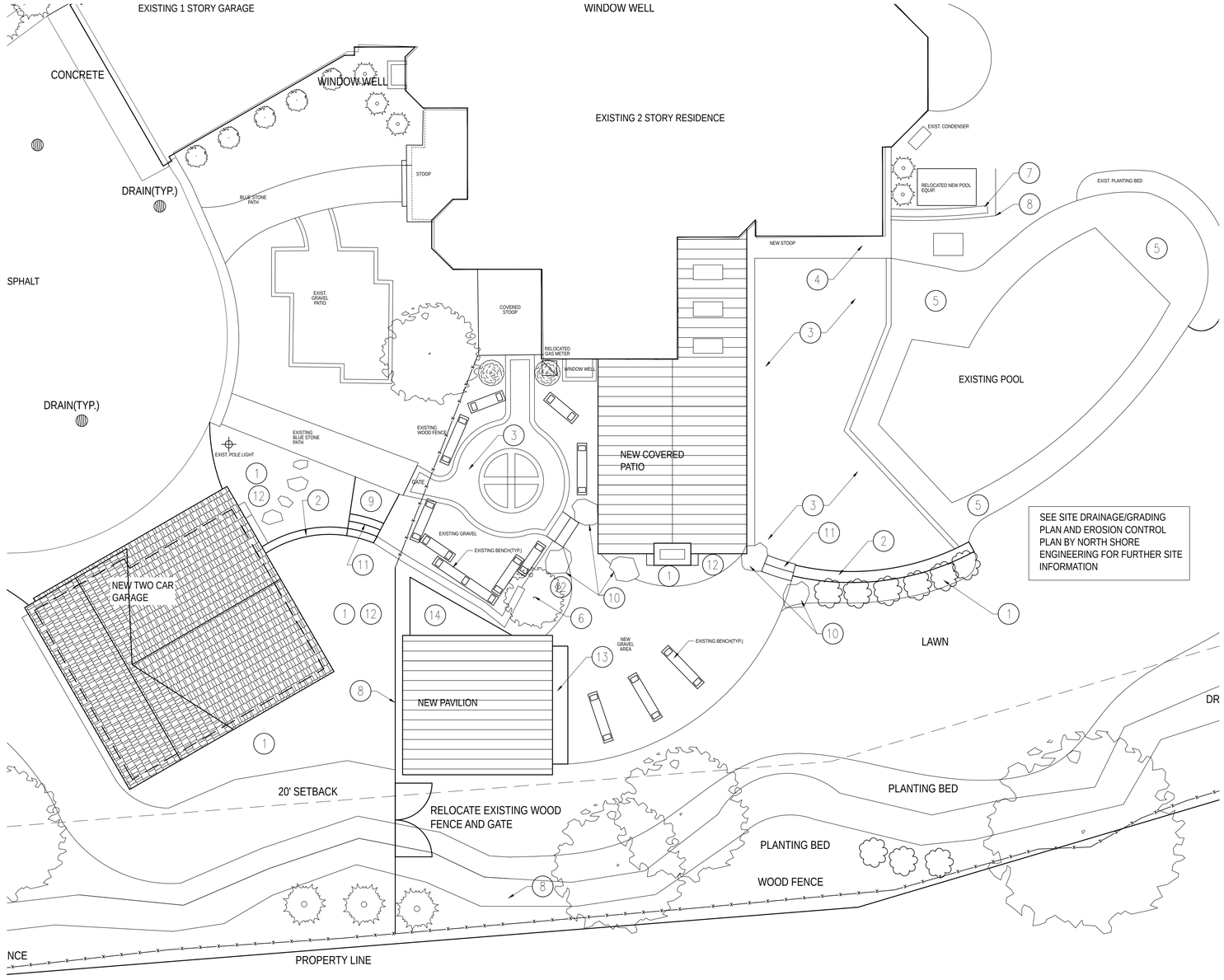

1 002 SITE DEMO PLAN

1/16"=1'-0"

N

SITE DEMOLITION PLAN - SYMBOLS LEGEND

- (1) SITE DEMOLITION PLAN NOTE
- CONSTRUCTION LIMITS
- EXISTING ITEMS TO BE REMOVED
- EXISTING ITEMS TO REMAIN

SITE DEMOLITION PLAN - GENERAL NOTES

A. FIELD VERIFY DIMENSIONS AND CONDITIONS AT JOB SITE.

B. REFER TO SITE SURVEY, GRADING PLAN, SITE UTILITIES PLAN, EROSION CONTROL PLAN, LANDSCAPING PLAN, PLUMBING PLAN, HVAC PLAN AND ELECTRICAL PLAN FOR ADDITIONAL INFORMATION PERTAINING TO SITE PLANNING.

C. MARK ALL UTILITIES. ALL DAMAGED UTILITY OR SERVICES ARE TO BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE OWNER.

SITE DEMOLITION PLAN NOTES

1. REMOVE TREE AS MARKED
2. REMOVE POOL EQUIPMENT AND CONCRETE PAD
3. REMOVE AND FILL IN OLD WELL VAULT
4. CUT AND REMOVE CONCRETE STOOP AS SHOWN IN HATCHED AREA
5. REMOVE AND STORE EXISTING DRY LAID BRICK. SEE LANDSCAPE PLAN FOR SCOPE
6. REMOVE LANDSCAPE PLANTINGS AS NECESSARY FOR PROJECT. CONFIRM WITH OWNER BEFORE REMOVAL
7. REMOVE AND SAVE FOR REUSE PORTION OF FENCE. SEE LANDSCAPE PLAN FOR SCOPE
8. LANDSCAPER TO MODIFY EXISTING IRIS BED TO ACCOMMODATE NEW POOL EQUIPMENT
9.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
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TOLL FREE
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2 002 LANDSCAPE PLAN

1/8"=1'-0"

N

LANDSCAPE PLAN - SYMBOLS LEGEND

- (1) LANDSCAPE PLAN NOTE
- CONSTRUCTION LIMITS
- EXISTING ITEMS TO BE REMOVED
- EXISTING ITEMS TO REMAIN

LANDSCAPE PLAN - GENERAL NOTES

A. FIELD VERIFY DIMENSIONS AND CONDITIONS AT JOB SITE.

B. REFER TO SITE SURVEY, GRADING PLAN, SITE UTILITIES PLAN, EROSION CONTROL PLAN, LANDSCAPING PLAN, PLUMBING PLAN, HVAC PLAN AND ELECTRICAL PLAN FOR ADDITIONAL INFORMATION PERTAINING TO SITE PLANNING.

C. MARK ALL UTILITIES. ALL DAMAGED UTILITY OR SERVICES ARE TO BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE OWNER.

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LANDSCAPE PLAN NOTES

1. NEW PLANTINGS - SPECIES/TYPE TBD
2. NEW STONE RETAINING WALL
3. NEW DRY LAID STONE PAVING IN ASHLAR PATTERN WITH BRICK SAILOR COURSE BORDER USING EXISTING BRICK AND POLYMERIC SAND
4. NEW WET LAID STONE STOOP WITH BRICK AT EDGE AS A CONTINUATION OF FIRST STEP TO OUTDOOR COVERED PATIO
5. TAKE UP AND RELAY EXISTING BRICK AROUND POOL WITH POLYMERIC SAND IN SAME PATTERN AS EXISTING
6. REMOVE AND STORE JAPANESE MAPLE TO BE REUSED WHEN APPROPRIATE
7. STONE RUBBLE RETAINING WALL TO HELP CREATE FLAT AREA FOR POOL EQUIPMENT PAD
8. NEW FENCE BY OWNER
9. NEW BLUESTONE WALK(USE EXISTING ON SITE) AND LANNON STONE STEPS
10. BOULDER(S), TYPE TBD
11. LANNON STONE STEPS
12. MULCH BED WITH PLANTINGS
13. DRY LAID EXISTING BRICK IN HERRINGBONE PATTERN IN POLYMERIC SAND
14. IPE WOOD DECK WITH CONCEALED FASTENERS

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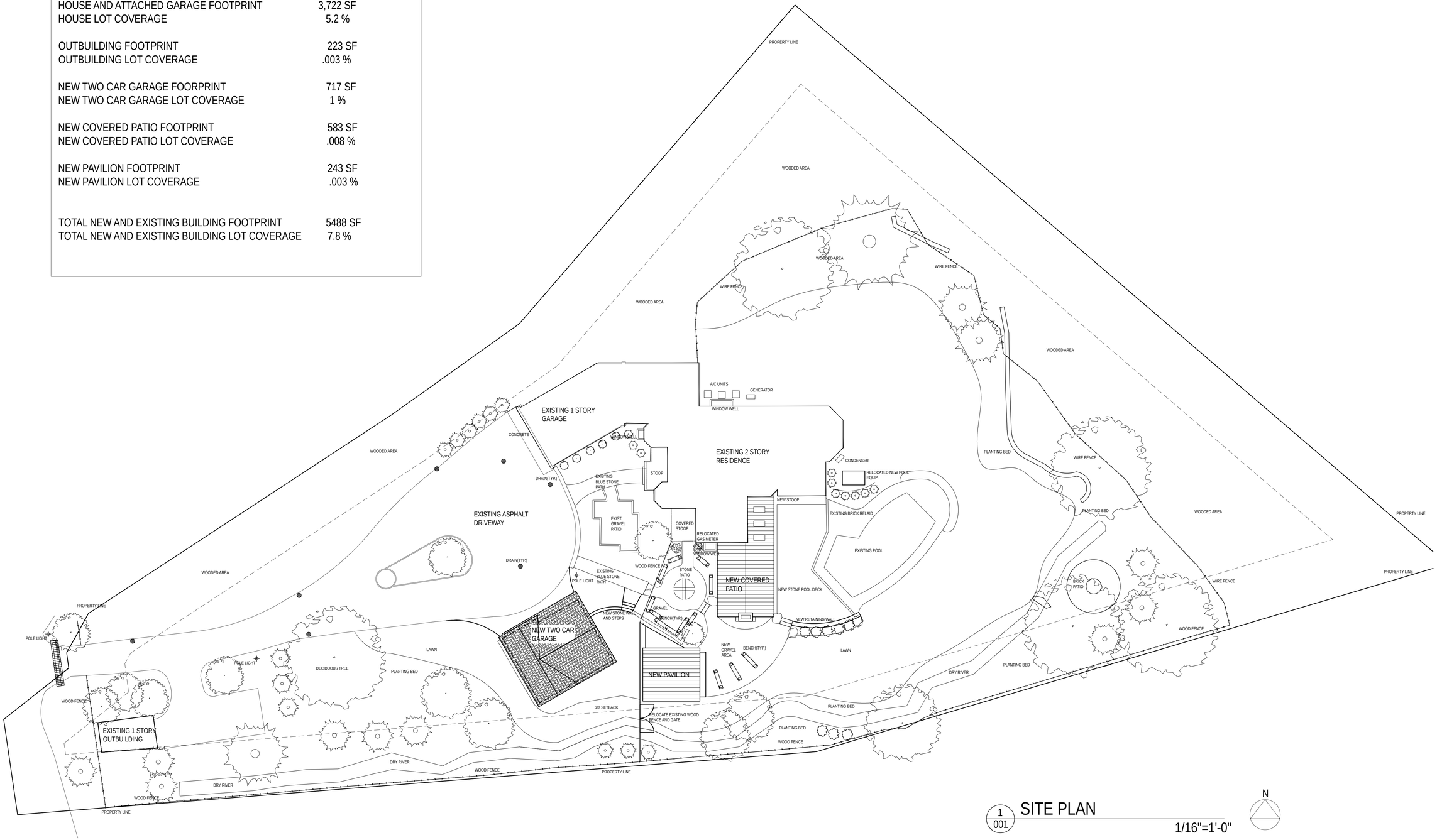
SITE DATA	
LOT SIZE	71,045 SF (1.63 ACRES)
HOUSE AND ATTACHED GARAGE FOOTPRINT	3,722 SF
HOUSE LOT COVERAGE	5.2 %
OUTBUILDING FOOTPRINT	223 SF
OUTBUILDING LOT COVERAGE	.003 %
NEW TWO CAR GARAGE FOORPRINT	717 SF
NEW TWO CAR GARAGE LOT COVERAGE	1 %
NEW COVERED PATIO FOOTPRINT	583 SF
NEW COVERED PATIO LOT COVERAGE	.008 %
NEW PAVILION FOOTPRINT	243 SF
NEW PAVILION LOT COVERAGE	.003 %
TOTAL NEW AND EXISTING BUILDING FOOTPRINT	5488 SF
TOTAL NEW AND EXISTING BUILDING LOT COVERAGE	7.8 %



1/001 SITE PLAN

1/16"=1'-0"

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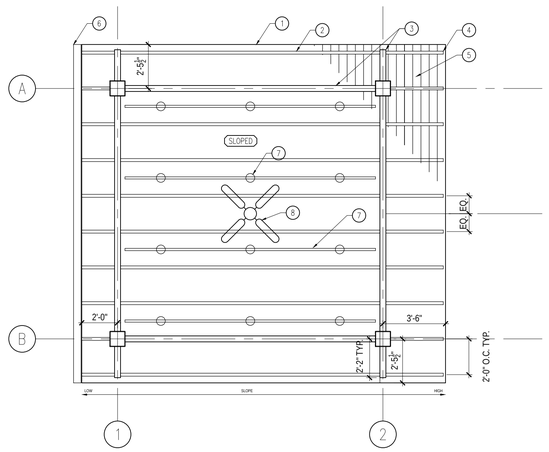


1 / 204 Pavilion Reflected Ceiling/Lighting Plan

1/4"=1'-0"

N

REFLECTED CEILING PLAN - SYMBOLS LEGEND

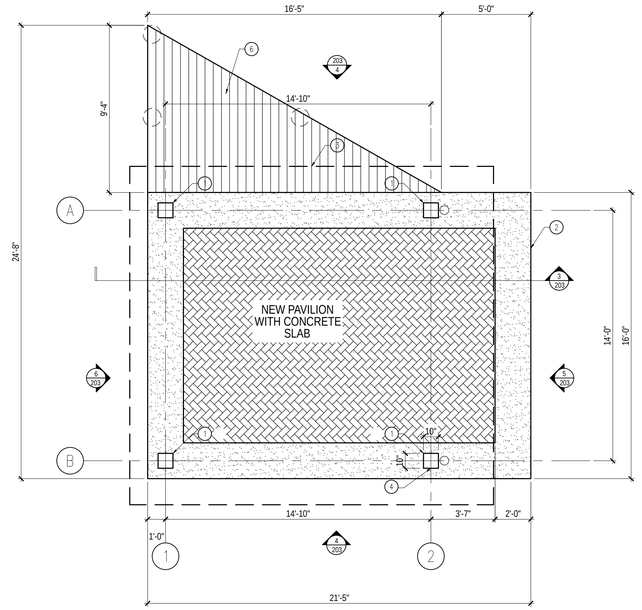
- DRYWALL CEILING
- EXHAUST GRILLE
- SURFACE-MOUNTED FLUORESCENT LIGHT
- LED TRACK LIGHTING
- SURFACE-MOUNTED / PENDANT LIGHT
- RECESSED DOWN LIGHT
- WALL-MOUNTED LIGHT
- CEILING FAN
- (1) REFLECTED CEILING PLAN NOTE

REFLECTED CEILING PLAN NOTES

1. ROOF OUTLINE
2. WOOD RAFTERS - NOTCHED ON BEAMS
3. SOLID WOOD TIMBER BEAMS
4. HOLD RAFTERS BACK FROM EDGE OF ROOF 1½"
5. WOOD TONGUE AND GROOVE STRUCTURAL CEILING
6. METAL GUTTER
7. EXTERIOR GRADE LED TRACK LIGHTING
8. EXTERIOR GRADE CEILING FAN

NOTE: GENERAL CONTRACTOR TO BE RESPONSIBLE FOR ALL STRUCTURAL FRAMING WHICH IS TO BE DESIGNED AND/OR VERIFIED BY A STRUCTURAL ENGINEER.

NOTE: CONDUIT FOR CEILING LIGHTING TO BE RUN ON TOP OF ROOF NOTCHED IN RIGID INSULATION.



2 / 204 Pavilion Floor Plan

1/4"=1'-0"

N

FLOOR PLAN - SYMBOLS LEGEND - PAVILION

- EXISTING PARTITION
- EXISTING DOOR
- NEW WALL
- NEW DOOR AND TAG
- EXTERIOR ELEVATION
- INTERIOR ELEVATION
- (1) PLAN NOTE

FLOOR PLAN - GENERAL NOTES - PAVILION

A. DIMENSIONS ON FLOOR PLAN ARE BASED ON FACE OF FINISHED SURFACE TO FACE OF FINISHED SURFACE UNLESS TAGGED A TO CENTERLINE.

B. ELECTRICAL, MECHANICAL, AND PLUMBING TO BE DESIGN BUILD BY THE GENERAL CONTRACTOR. WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS AND SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT CODE.

C. CONCRETE SLAB TO HAVE VAPOR BARRIER AND SCORING TO PREVENT/CONTROL CRACKING.

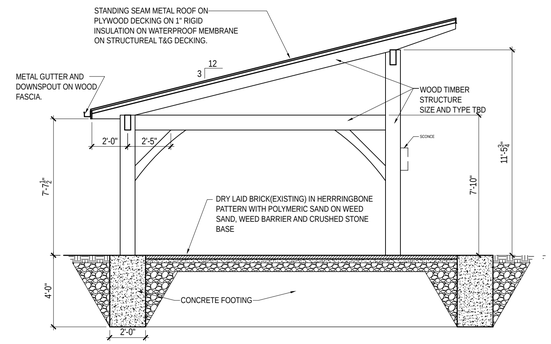
D. COORDINATE WITH FENCING COMPANY LOCATION OF FUTURE FENCE. CONSULT ARCHITECT.

E. ALL NECESSARY STRUCTURAL ENGINEERING OF BEAMS, COLUMNS, HEADERS, SLABS, FOOTINGS, ETC. TO BE ENGAGED THROUGH GENERAL CONTRACTOR AND COORDINATED W/ ARCHITECTURAL DRAWINGS. THIS INCLUDES ALL STRUCTURAL CONNECTIONS AS WELL.

F. AT ALL NEW SOFFITS/CEILING FRAMING BE SURE TO LOOK AT REFLECTED CEILING PLAN AND PLACE FRAMING TO ACCOMODATE NEW LIGHTING LOCATIONS.

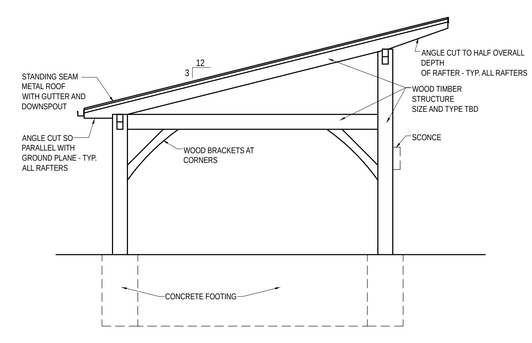
FLOOR PLAN NOTES

1. WOOD COLUMNS
2. CONCRETE FOOTING/PERIMETER. COORDINATE ELEVATION AND PITCH WITH DRAINAGE PLAN
3. ROOF LINE ABOVE
4. PROVIDE HOSE BIB AS INDICATED
5. DRY LAID BRICK(EXISTING) WITH POLYMERIC SAND ON SAND, WEED BARRIER AND CRUSHED STONE BASE
6. WOOD IPE DECK WITH SONOTUBE FOUNDATION. CONCEALED FASTERNER AT DECK



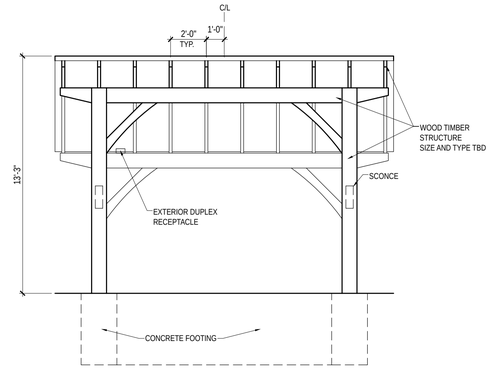
3 / 204 Pavilion Section

1/4"=1'-0"



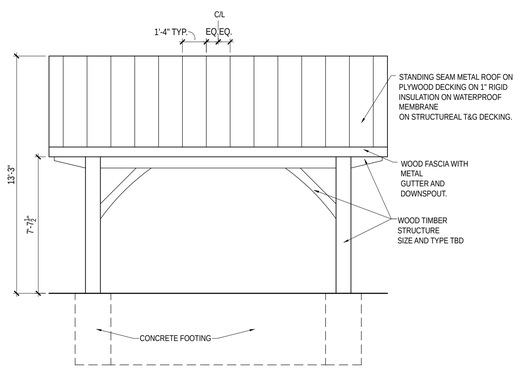
4 / 204 Pavilion - South Elevation (North Sim.)

1/4"=1'-0"



5 / 204 Pavilion - East Elevation

1/4"=1'-0"



6 / 204 Pavilion - West Elevation

1/4"=1'-0"

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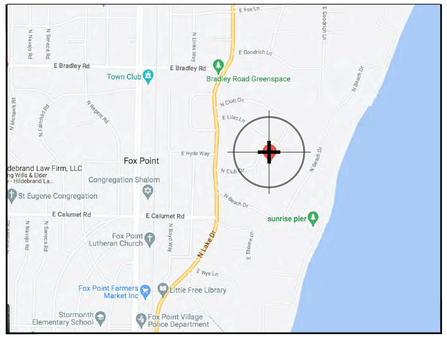
DAVIS RESIDENCE - ADDITIONS & REMODELING

DESIGN DEVELOPMENT DOCUMENTS - 100%



Project Location Map

N

Project Location:
7748 North Club Circle
Fox Point, WI. 53217

Drawing Index

000	Title Sheet
	Survey
001	New Site Plan
002	Site Demolition and Landscape Plan
003	Enlarged Partial Site Plan
200	Kitchen and Covered Patio Foundation and Reflected Ceiling Plan
201	Kitchen and Covered Patio Demolition and Floor Plan
202	Detached Garage Plans and Elevations
203	Detached Garage Foundation Plan and Section
204	Pavilion Plans and Elevations
205	Electrical Plan
400	Covered Patio Elevations
500	Covered Patio Sections
800	Kitchen Interior Elevations

Project Information

Applicable Codes and Zoning

Wisconsin Uniform Dwelling Code (One- and Two-Family Dwellings)
Village of Fox Point, WI Zoning, A-1 Residence District

NOTICE REGARDING DRAWINGS: FOR CONVENIENCE OF REFERENCE, THE DRAWINGS PREPARED BY THE UNDERSIGNED ARCHITECT HAVE BEEN BOUND TOGETHER WITH DRAWINGS PREPARED BY OTHER PERSONS OR FIRMS HIRED DIRECTLY BY THE DESIGN–BUILDER OR OWNER AND NOT UNDER THE DIRECTION OR CONTROL OF THE ARCHITECT. THE DRAWINGS PREPARED BY THE ARCHITECT CAN BE IDENTIFIED BY THE ARCHITECT'S TITLEBLOCK ON EACH INDIVIDUAL DRAWING FOR WHICH IT IS RESPONSIBLE. THE OTHER DRAWINGS ARE THE SOLE RESPONSIBILITY OF THEIR RESPECTIVE PREPARERS.

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Fox Point, WI 53217
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LEGAL DESCRIPTION :

That part of the fractional Northeast 1/4 of Section 16, in Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County I Wisconsin, which is bounded and described as follows: Commencing at a reference point which is N0°09'00"W, 444.88 feet and S89°56'00"E, 474.16 feet from the center of Section 16; thence N83°24'00"W, 30.39 feet to a point; thence N2°34'00"W, 423.84 feet to a point, said last mentioned point being the point of beginning of the land hereby described; thence N2°34'00"W, 36.10 feet to a point; thence N57°31'00"E, 180.49 feet to a point; thence N50°10'00"E, 196.20 feet to a point; thence S44°08'00 E, 306.95 feet to a point; thence S79°07'27"W, 234.24 feet to a point; thence N88°50'03"W, 285.06 feet to the point of beginning.

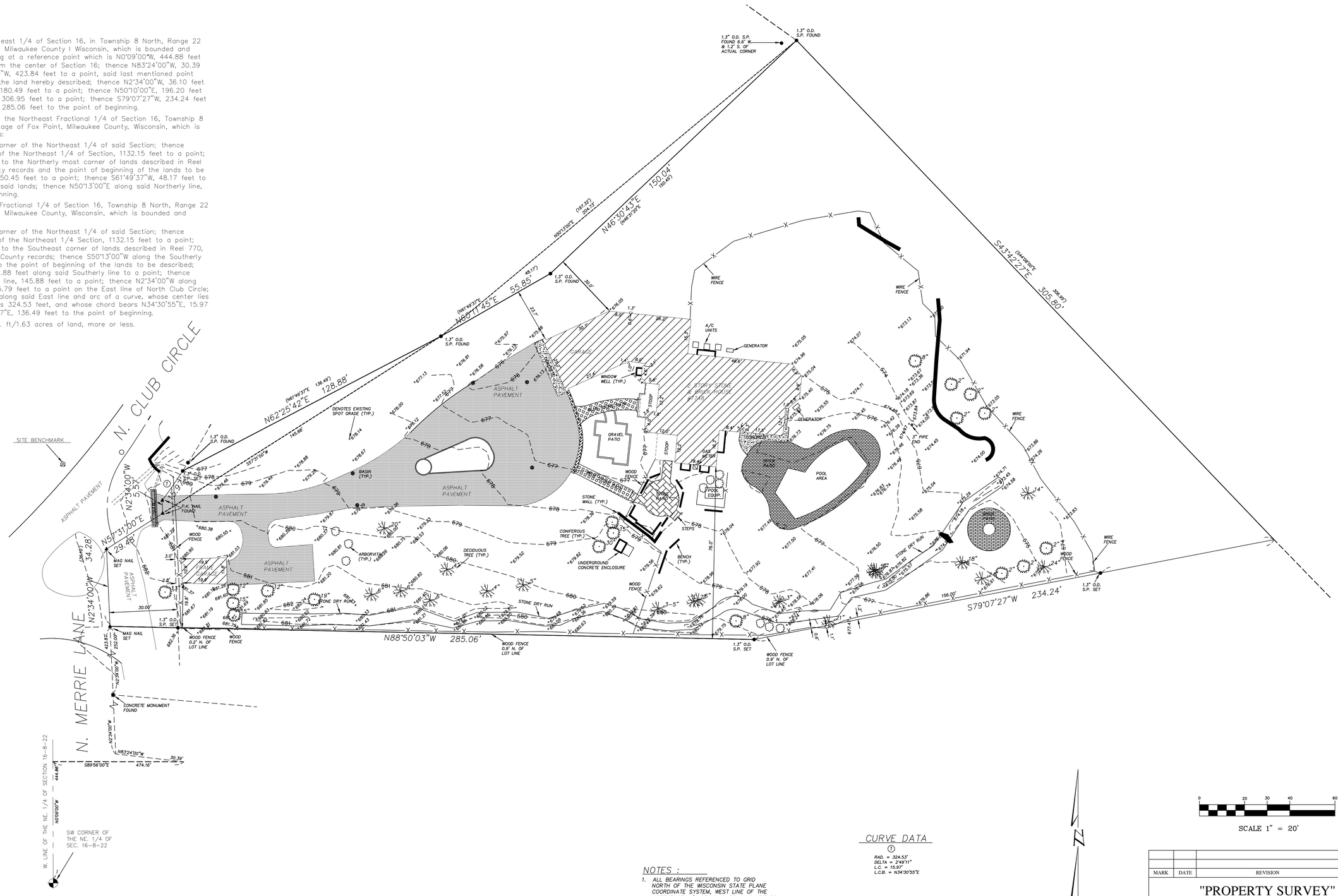
Excepting therefrom that part of the Northeast Fractional 1/4 of Section 16, Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County, Wisconsin, which is bounded and described as follows:

Commencing at the Southwest corner of the Northeast 1/4 of said Section; thence N0°09'00"W along the West line of the Northeast 1/4 of Section, 1132.15 feet to a point; thence S89°56'00"E, 731.28 feet to the Northerly most corner of lands described in Reel 195, Image 828, Milwaukee County records and the point of beginning of the lands to be described; thence S46°31'20"W, 150.45 feet to a point; thence S61°49'37"W, 48.17 feet to a point on the Northerly line of said lands; thence N50°13'00"E along said Northerly line, 197.32 feet to the point of beginning.

And that part of the Northeast Fractional 1/4 of Section 16, Township 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County, Wisconsin, which is bounded and described as follows:

Commencing at the Southwest corner of the Northeast 1/4 of said Section; thence N0°09'00"W along the West line of the Northeast 1/4 Section, 1132.15 feet to a point; thence S89°56'00"E, 731.28 feet to the Southeast corner of lands described in Reel 770, Images 432 and 433, Milwaukee County records; thence S50°13'00"W along the Southerly line of said lands, 194.79 feet to the point of beginning of the lands to be described; thence continuing S50°13'00"W, 7.88 feet along said Southerly line to a point; thence S57°31'00"W along said Southerly line, 145.88 feet to a point; thence N2°34'00"W along the Westerly line of said lands, 5.79 feet to a point on the East line of North Club Circle; thence Northeasterly 15.97 feet along said East line and arc of a curve, whose center lies to the Northwest, whose radius is 324.53 feet, and whose chord bears N34°30'55"E, 15.97 feet to a point; thence N61°40'37"E, 136.49 feet to the point of beginning.

Said Parcel containing 71,045 sq. ft/1.63 acres of land, more or less.



CURVE DATA

① RAD. = 324.53'
DELTA = 2°49'11"
L.C. = 15.97'
L.C.B. = N34°30'55"E

NOTES :

1. ALL BEARINGS REFERENCED TO GRID NORTH OF THE WISCONSIN STATE PLANE COORDINATE SYSTEM, WEST LINE OF THE NORTHEAST 1/4 OF 16-8-22 WHICH BEARS N0°09'00W, PER DEED DESCRIPTION.
2. SITE AND MAIN BENCHMARK ON FIRE HYDRANT NORTH OF CLUB CIRCLE WEST END OF PROPERTY AS SHOWN ON SURVEY. FOX POINT BENCHMARK #214, N. FLANGE BOLT ELEVATION = 684.22.
3. ( ) DENOTES BEARING OR DISTANCE PER DEED.

N

0 20 30 40 60

SCALE 1" = 20'

MARK	DATE	REVISION	BY	APVD

"PROPERTY SURVEY"

for

Scott Davis Design

7748 N. Club Circle
Fox Point, WI

DATE:	April 21, 2022	DRAWN BY:	A.R.H.
FIELD CREW:	E.A.J. & S.F.Z.	Plat No.	LS-5218-22

NORTH SHORE ENGINEERING, INC.
Consulting Engineers & Land Surveyors
11433 N. Port Washington Rd., Mequon, Wisconsin, 53092
(262) 241-9400 FAX: (262) 241-5337
www.NorthShoreEngineering.net

Existing Home - West Elevation

Existing Home - East Elevation

Existing Home - North Elevation

Existing Home - South Elevation

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Existing Home Images

Existing Home - North East Elevation

Existing Home - South West Elevation

Existing Home - West Elevation

Existing Detached Garage

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Existing Home Images

Existing Home - West Elevation

Existing Home - East Elevation

Existing Home - North Elevation

Existing Home - South Elevation

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Existing Home Images

Perspective View Looking East

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Perspective View Looking North

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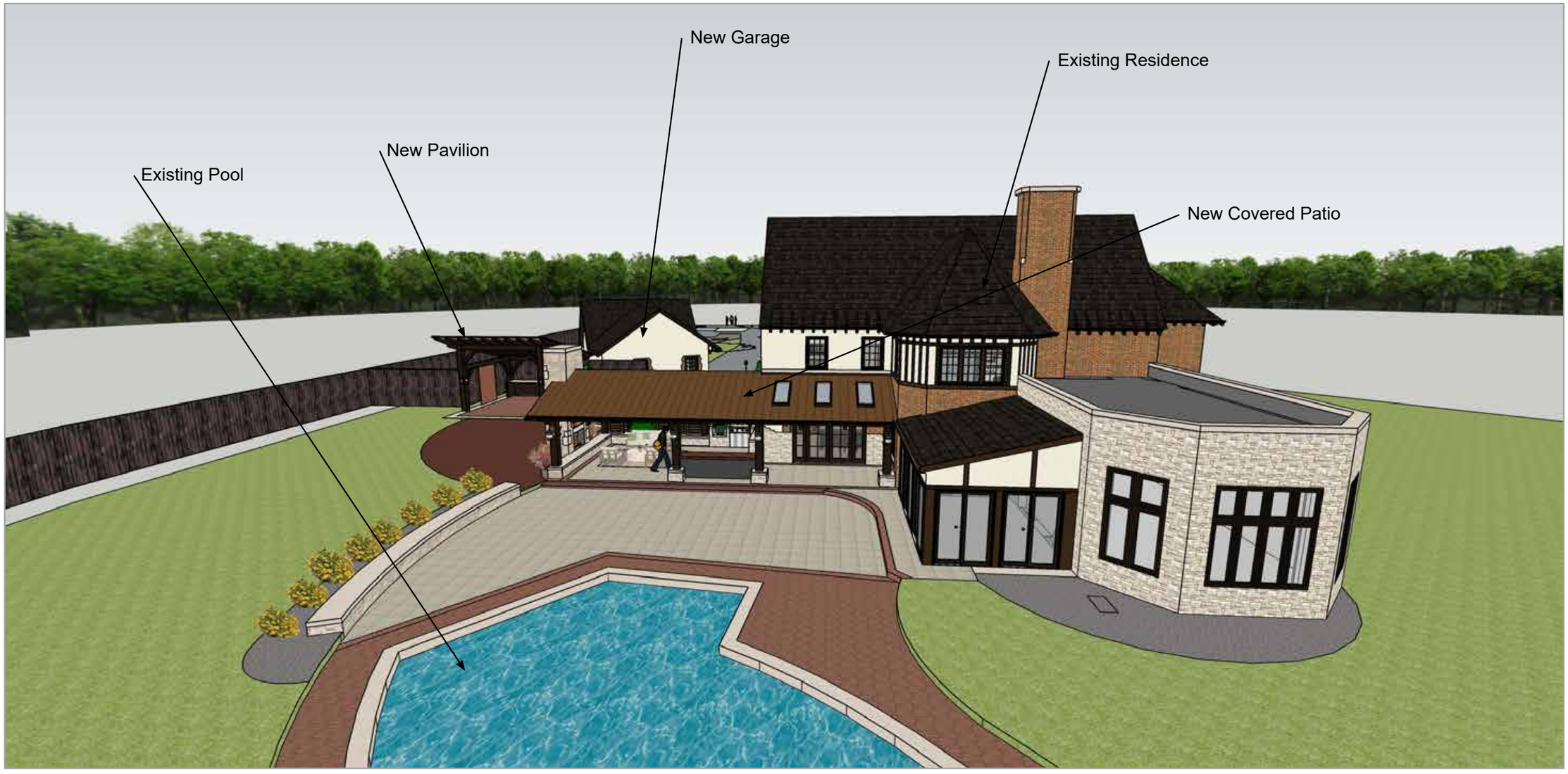

Perspective View Looking West

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Perspective View Looking South

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Perspective View 7

Perspective View 8

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Covered Patio - Exterior Perspectives

1-3-2024

Perspective View 9

Perspective View 10

Covered Patio - Exterior Perspectives

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Perspective View 11

Perspective View 12

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Covered Patio - Exterior Perspectives

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Perspective View 13

Perspective View 14

Aerial Views - Exterior Perspectives

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Perspective View 15

Perspective View 16

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Detached Garage - Exterior Perspectives

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Perspective View 17

Perspective View 18

Pavilion - Exterior Perspectives

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Perspective View Looking East

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Perspective View Looking North

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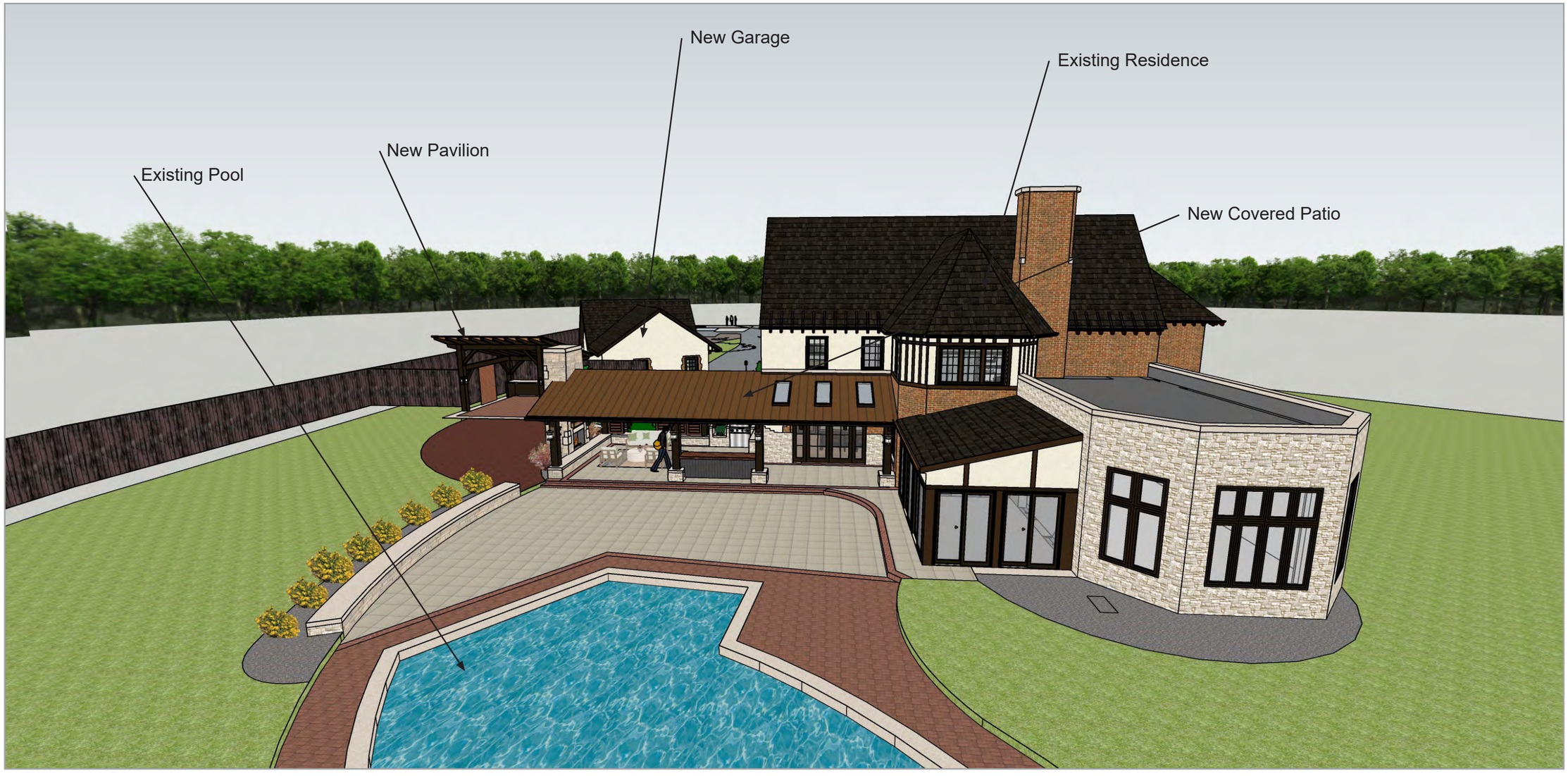

Perspective View Looking West

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Perspective View Looking South

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Detached Garage - Exterior Perspectives

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1-3-2024

Perspective View 17

Perspective View 18

Pavilion - Exterior Perspectives

1-3-2024

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