



Fee must accompany application

- \$700 Minor Addition
- \$1,240 Construction <10,000 SF
- \$2,095 Construction 10,000 SF to 50,000
- \$3,460 Industrial Construction >50,000 SF
- \$3,460 Commercial Construction >50,000
- \$200 Plan Commission Consultation
- \$125 Fire Department Plan Review

PAID DR

DATE

3/20/25

CHK# 2041

SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

Please read and complete this application carefully. All applications must be signed and dated.

1 APPLICANT OR AGENT

Bellecraft Builders
Curt Bushman
W230 S4353 Milky Way Rd
Waukesha, WI 53189

Phone (414) 254-1458

E-Mail cccbush@hotmail.com

PROPERTY OWNER

Bliffert Germantown Holdings LLC
1116 W16474 Main St.
Germantown WI

Phone (262) 261-7121

E-Mail dan.plate@bliffertlumber.com

Dan Plate - 262-989-7741

2 PROPERTY ADDRESS

1116 W16474 Main St. Germantown

3 NEIGHBORING USES - Specify name and type of use, e.g. Enviro Tech - Industrial, Smith - Residential, etc.

North	South	East	West
<u>R.R. Track</u>	<u>Residential</u>	<u>Residential</u>	<u>woods</u>

4 READ AND INITIAL THE FOLLOWING:

f I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.

f I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.

X I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

5 SIGNATURES - ALL APPLICATION MUST BE SIGNED BY OWNER!

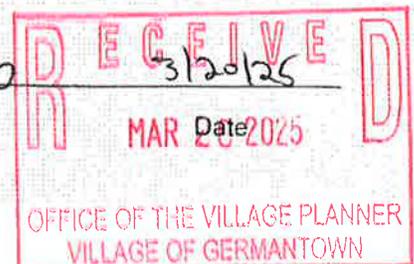
CR 3-19-25

Applicant

Date

T. Wagon 3/20/25

Owner



Village of

Germantown

Village of Germantown
Clerk Treasurer
N112W17001 MEQUON ROAD
Germantown, WI 53022
(262)250-4700
Welcome

03/20/2025 02:07PM PRAVINA P
000861-0032
Payment Effective Date 03/19/2025

MISCELLANEOUS

ZONING FEES (GENZON)

2025 Item: GENZON

1 @ \$1,240.0000

ZONING FEES (GENZON) \$1,240.00

\$1,240.00

Subtotal \$1,240.00

Total \$1,240.00

CHECK \$1,240.00

Check Number 2041

Change due \$0.00

Thank you for your payment

Village of Germantown COPY
DUPLICATE RECEIPT

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGAL DESCRIPTION:

Lot 3 of Certified Survey Map No. 490, recorded in the office of the Register of Deeds for Washington County, Wisconsin, on February 23, 1972 in Volume 3 of Certified Survey Maps, at Page 10, as Document No. 329102, being part of the Northwest 1/4, Section 22, Township 9 North, Range 20 East. Said land being in the Village of Germantown, County of Washington, State of Wisconsin.
AND
A strip of land situated in the Village of Germantown described as follows: Part of the Southeast 1/4 of the Northwest 1/4 of Section 22, Township 9 North, Range 20 East, described as follows: Beginning at the intersection of the Wisconsin and Southern Railroad's Southwest right of way line, being parallel to and 49.5 feet Southwest of the centerline of the Main Line track, and a line 120 feet West of and parallel to the North-South 1/4 Section line of Section 22; then Northwest along said Railroad property line 330 feet; Northeast 25.6 feet normal to said Railroad centerline; then Southeast parallel to and 23 feet Southwest of said centerline of the Main Line track to an intersection with a line 120 feet West of the North-South 1/4 Section line; then South along said line to the Point of Beginning. Said land being in the Village of Germantown, County of Washington, State of Wisconsin.



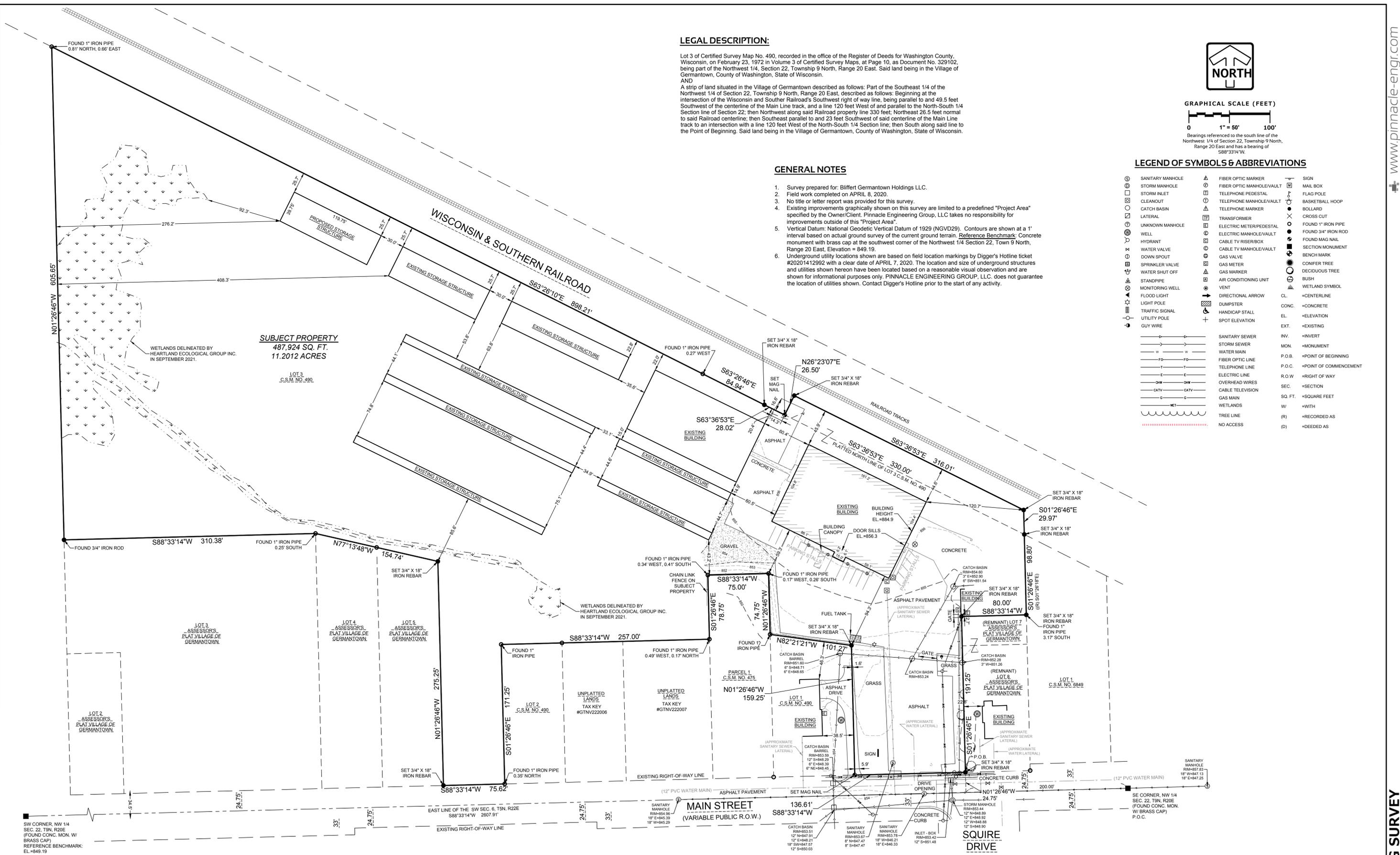
GRAPHICAL SCALE (FEET)
0 1" = 50' 100'
Bearings referenced to the south line of the Northwest 1/4 of Section 22, Township 9 North, Range 20 East and has a bearing of S88°33'14"W.

LEGEND OF SYMBOLS & ABBREVIATIONS

⊙	SANITARY MANHOLE	⚠	FIBER OPTIC MARKER	⊠	SIGN
⊙	STORM MANHOLE	⚠	FIBER OPTIC MANHOLE/VAULT	⊠	MAIL BOX
⊙	STORM INLET	⊠	TELEPHONE PEDESTAL	⊠	FLAG POLE
⊙	CLEANOUT	⊠	TELEPHONE MANHOLE/VAULT	⊠	BASKETBALL HOOP
⊙	CATCH BASIN	⊠	TELEPHONE MARKER	⊠	BOLLARD
⊙	LATERAL	⊠	TRANSFORMER	⊠	CROSS CUT
⊙	UNKNOWN MANHOLE	⊠	ELECTRIC METER/PEDESTAL	⊠	FOUND 1" IRON PIPE
⊙	WELL	⊠	ELECTRIC MANHOLE/VAULT	⊠	FOUND 3/4" IRON ROD
⊙	HYDRANT	⊠	CABLE TV RISER/BOX	⊠	FOUND MAG NAIL
⊙	WATER VALVE	⊠	CABLE TV MANHOLE/VAULT	⊠	SECTION MONUMENT
⊙	DOWN SPOUT	⊠	GAS VALVE	⊠	BENCH MARK
⊙	SPRINKLER VALVE	⊠	GAS METER	⊠	CONIFER TREE
⊙	WATER SHUT OFF	⊠	GAS MARKER	⊠	DECIDUOUS TREE
⊙	STANDPIPE	⊠	AIR CONDITIONING UNIT	⊠	BUSH
⊙	MONITORING WELL	⊠	VENT	⊠	WETLAND SYMBOL
⊙	FLOOD LIGHT	⊠	DIRECTIONAL ARROW	⊠	CL.
⊙	LIGHT POLE	⊠	DUMPSTER	⊠	=CENTERLINE
⊙	TRAFFIC SIGNAL	⊠	HANDICAP STALL	⊠	CONC.
⊙	UTILITY POLE	⊠	SPOT ELEVATION	⊠	=CONCRETE
⊙	GLUY WIRE	⊠		⊠	EL.
⊙		⊠		⊠	=ELEVATION
⊙		⊠		⊠	EXT.
⊙		⊠		⊠	=EXISTING
⊙		⊠		⊠	INV.
⊙		⊠		⊠	=INVERT
⊙		⊠		⊠	MON.
⊙		⊠		⊠	=MONUMENT
⊙		⊠		⊠	P.O.B.
⊙		⊠		⊠	=POINT OF BEGINNING
⊙		⊠		⊠	P.O.C.
⊙		⊠		⊠	=POINT OF COMMENCEMENT
⊙		⊠		⊠	R.O.W.
⊙		⊠		⊠	=RIGHT OF WAY
⊙		⊠		⊠	SEC.
⊙		⊠		⊠	=SECTION
⊙		⊠		⊠	SQ. FT.
⊙		⊠		⊠	=SQUARE FEET
⊙		⊠		⊠	W.
⊙		⊠		⊠	=WITH
⊙		⊠		⊠	(R)
⊙		⊠		⊠	=RECORDED AS
⊙		⊠		⊠	(D)
⊙		⊠		⊠	=DEEDED AS

GENERAL NOTES

1. Survey prepared for: Bliffert Germantown Holdings LLC.
2. Field work completed on APRIL 8, 2020.
3. No title or letter report was provided for this survey.
4. Existing improvements graphically shown on this survey are limited to a predefined "Project Area" specified by the Owner/Client. Pinnacle Engineering Group, LLC takes no responsibility for improvements outside of this "Project Area".
5. Vertical Datum: National Geodetic Vertical Datum of 1929 (NGVD29). Contours are shown at a 1' interval based on actual ground survey of the current ground terrain. Reference Benchmark: Concrete monument with brass cap at the southwest corner of the Northwest 1/4 Section 22, Town 9 North, Range 20 East. Elevation = 849.19.
6. Underground utility locations shown are based on field location markings by Digger's Hotline ticket #20201412992 with a clear date of APRIL 7, 2020. The location and size of underground structures and utilities shown hereon have been located based on a reasonable visual observation and are shown for informational purposes only. PINNACLE ENGINEERING GROUP, LLC. does not guarantee the location of utilities shown. Contact Digger's Hotline prior to the start of any activity.



PLAN | DESIGN | DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

N116W16474 MAIN STREET
BEING LOT 3 OF C.S.M. NO. 490 AND ADDITIONAL LANDS IN THE SE 1/4 OF THE NW 1/4 OF SEC. 22, T9N, R20E, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

EXISTING SURVEY

REVISIONS

REG. JOB NO. 2000.10
REG. PM. ASZ
DATE 03/19/2025
SCALE 1"=50'
SHEET 1
1 of 1
© CODY VAUGHT 2025
EXISTING SURVEY

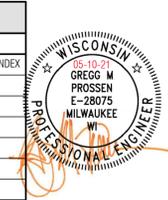
www.pinnacle-engr.com

BLIFFERT GERMANTOWN LUMBER YARD COLD STORAGE BUILDING

N116 W16522 MAIN STREET
GERMANTOWN WI 53022

the CONSORTIUM ae PROJECT #:0021-13

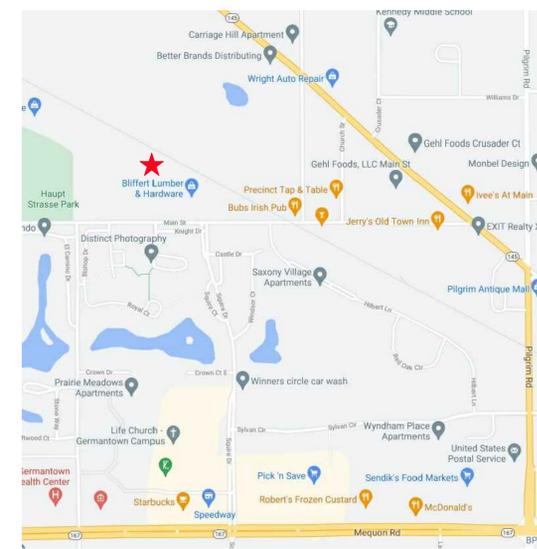
Sheet Set Index	
Sheet #	Sheet Title
A1.00	PLAN, MAP, CODE NOTES, SCHEDULES, INDEX
C-2	CIVIL SITE PLAN
A4.00	BUILDING ELEVATIONS
A4.10	BUILDING ELEVATIONS
S001	STRUCTURAL NOTES & SCHEDULES
S100	FOUNDATION PLAN
S101	ROOF FRAMING PLAN



GOOGLE EARTH AERIAL



GOOGLE VICINITY MAP



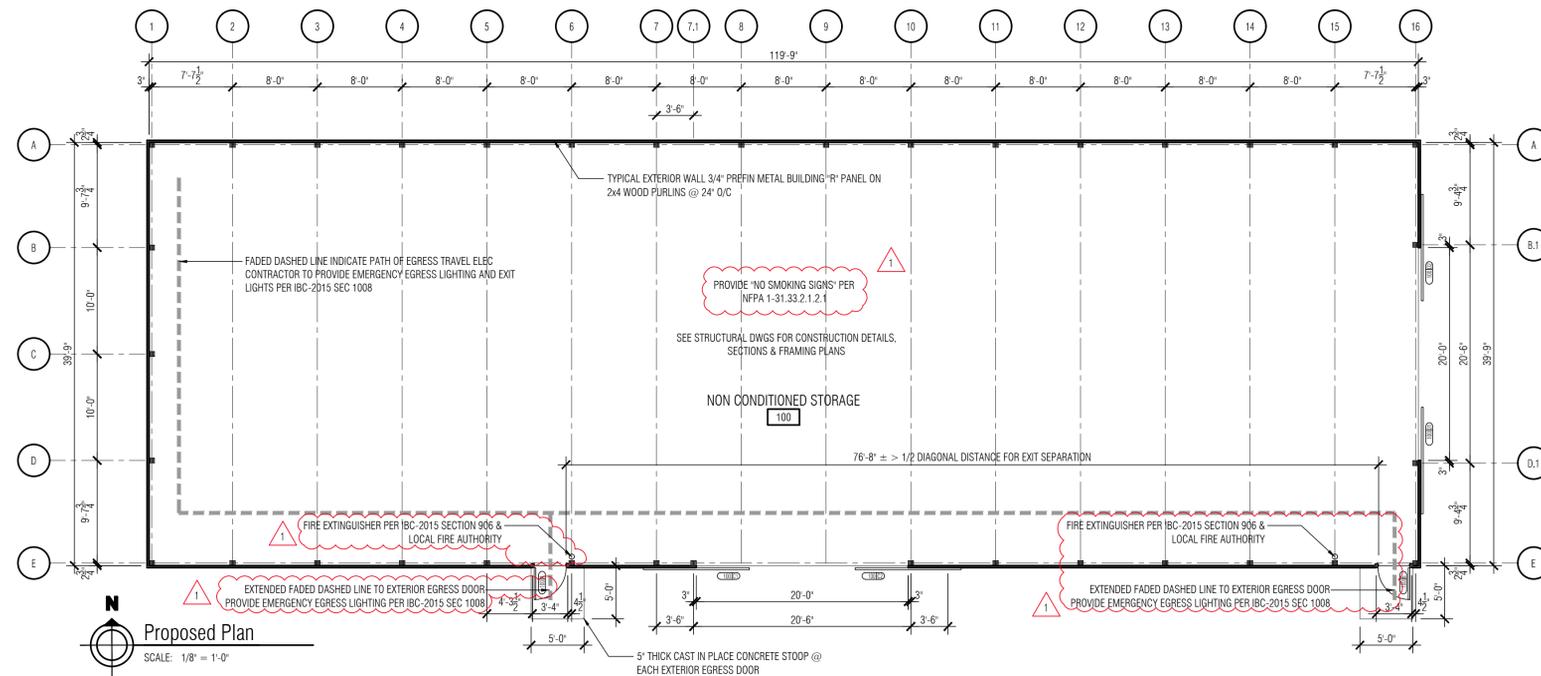
PROJECT & CODE INFORMATION

BUILDING AREA: 4,760 S.F.
BUILDING CODE: IBC-2015, ICC/ANSI 117.1 - 2009
OCCUPANCY CLASSIFICATION: GROUP S1 STORAGE, NON-CONDITIONED SPACE
CONSTRUCTION TYPE: TYPE VB COMBUSTIBLE, NOT RATED, NOT PROTECTED
MINIMUM FIRE SEPARATION DISTANCE: 17.5'
SPRINKLERED: NO

OCCUPANT LOAD: 10 OCCUPANTS (FOR EGRESS PURPOSES)
EGRESS PATH: 150' TRAVEL DISTANCE TO EXIT, 1/2 DIAGONAL DISTANCE MINIMUM SEPARATION

TOILET FACILITIES: SANITARY FACILITIES (TOILETS) LOCATED IN NEW RETAIL/OFFICE AREA ALTERATION. THIS UN-CONDITIONED STORAGE BUILDING DOES NOT SERVE THE PUBLIC (REQ'D PER 2902.3). SANITARY FACILITIES LOCATED APPROXIMATELY 500' FROM THIS BUILDING.

ACCESSIBILITY: WORK PROPOSED PROVIDES ACCESSIBLE COMPLIANT PATH PROVIDED TO PRIMARY FUNCTION PER IBC 1104.4.



ROOM FINISH SCHEDULE

ROOM No	NAME	Base Area	FLOOR	WALLS				CEILING		REMARKS
				MAT'L	BASE	NORTH	EAST	SOUTH	WEST	
100	NON CONDITIONED STORAGE	4760 SF	EXP-SC	--	EXP	EXP	EXP	EXP	16'-0"	UNCONDITIONED

DOOR AND FRAME SCHEDULE

No.	DOOR		HEIGHT	TYPE	MAT'L	FINISH	FRAME			HARDWARE	REMARKS
	WIDTH	HEIGHT					TYPE	MAT'L	FINISH		
100.A	3'-0"	7'-0"	1	MTL	PT		A	HM	PT	HS-1	LEVER STYLE LOCKSET, CLOSER, 1.5 PR BUTTS
100.B	3'-0"	7'-0"	1	MTL	PT		A	HM	PT	HS-1	LEVER STYLE LOCKSET, CLOSER, 1.5 PR BUTTS
100.C1	10'-0"	14'-0"					--	--	--	HS-2	SLIDING BARN DOOR PAIR SURFACE MTD
100.C2	10'-0"	14'-0"					--	--	--	HS-2	SLIDING BARN DOOR PAIR SURFACE MTD
100.D1	10'-0"	14'-0"					--	--	--	HS-2	SLIDING BARN DOOR PAIR SURFACE MTD
100.D2	10'-0"	14'-0"					--	--	--	HS-2	SLIDING BARN DOOR PAIR SURFACE MTD

GENERAL DOOR & FRAME NOTES:
HS-1 1.5 PAIR BB HINGES, CLOSER, LOCKSET (ACCESSIBLE STYLE LEVER HANDLE)
HS-2 SURFACE MOUNTED BARN DOOR STYLE HARDWARE FOR BI-PARTING DOORS. OPENING 20' WIDE x 14' HIGH

Project:
BLIFFERT
GERMANTOWN
LUMBER YARD COLD
STORAGE BUILDING

N116 W16522 MAIN STREET
Location:
GERMANTOWN WI 53022

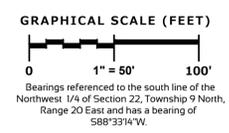
Sheet:
PLAN, MAP, CODE NOTES,
SCHEDULES, INDEX

Date:	Issue Set:
2021-05-10	#1 2021-05-19 PLAN REVIEWER NOTES

Date:
2021-05-10
Project No.:
0021-13
Sheet No.:

A1.00

DESIGNED: ASZ
DRAFTED: BR
REVIEWED: ASZ
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- The storage structures shown are from an ALTA/NSPS Land Title Survey completed by Edgewood Surveying last revised March 14, 2019 as provided by client.

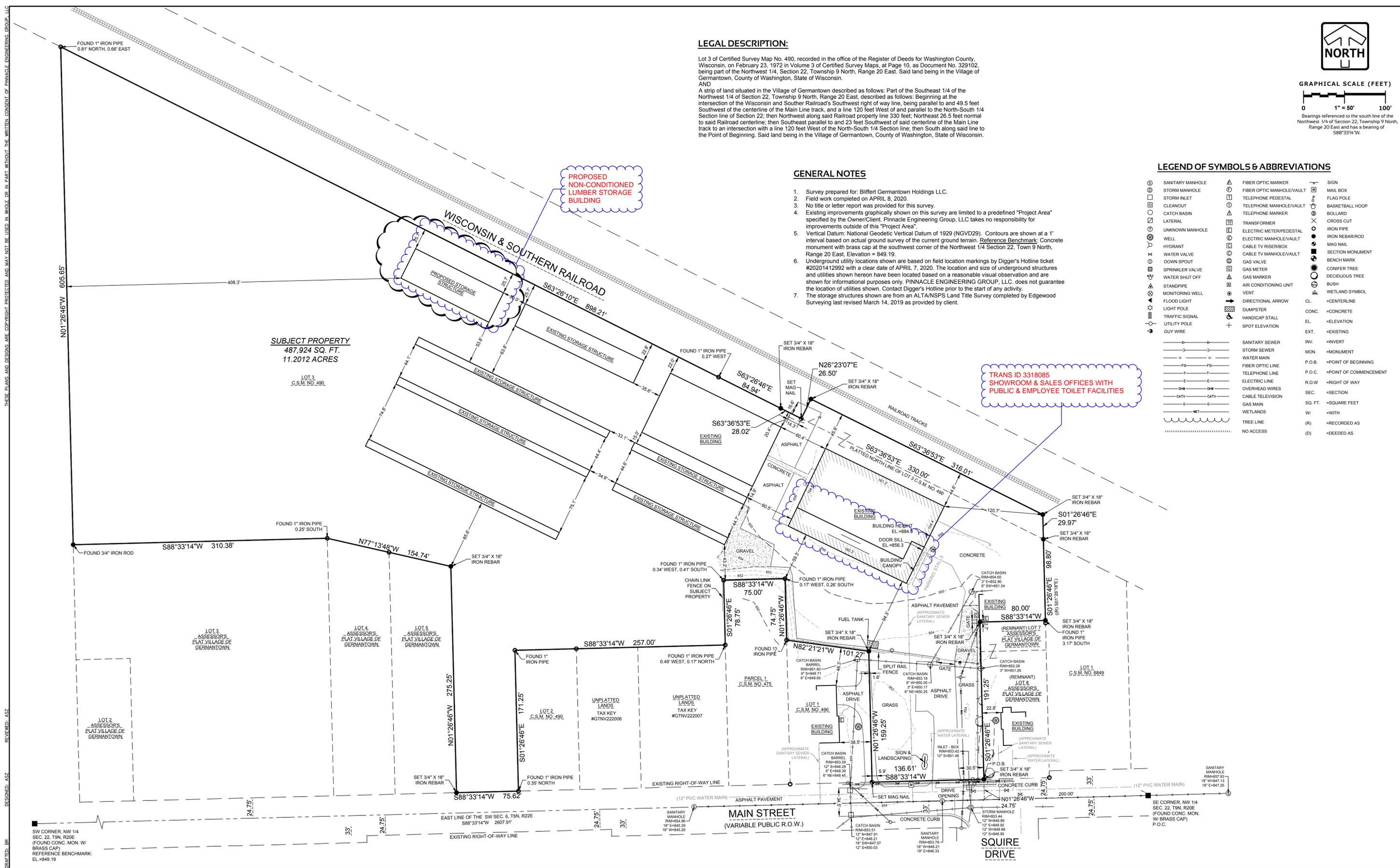
LEGEND OF SYMBOLS & ABBREVIATIONS

⊙	SANITARY MANHOLE	△	FIBER OPTIC MARKER	—	SIGN
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⊗	CLEANOUT	⊕	TELEPHONE MANHOLE/VAULT	⊕	BASKETBALL HOOP
⊘	CATCH BASIN	⊕	TELEPHONE MARKER	⊕	BOLLARD
⊙	LATERAL	⊕	TRANSFORMER	⊕	CROSS CUT
⊙	UNKNOWN MANHOLE	⊕	ELECTRIC METER/PEDESTAL	⊕	IRON PIPE
⊙	WELL	⊕	ELECTRIC MANHOLE/VAULT	⊕	IRON REBAR/ROD
⊙	HYDRANT	⊕	CABLE TV RISER/BOX	⊕	MAG NAIL
⊙	WATER VALVE	⊕	CABLE TV MANHOLE/VAULT	⊕	SECTION MONUMENT
⊙	DOWN SPOUT	⊕	GAS VALVE	⊕	BENCH MARK
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⊙	STANDPIPE	⊕	AIR CONDITIONING UNIT	⊕	BUSH
⊙	MONITORING WELL	⊕	VENT	⊕	WETLAND SYMBOL
⊙	FLOOD LIGHT	→	DIRECTIONAL ARROW	CL	=CENTERLINE
⊙	LIGHT POLE	▭	DUMPSTER	CONC.	=CONCRETE
⊙	TRAFFIC SIGNAL	⊕	HANDICAP STALL	EL.	=ELEVATION
⊙	UTILITY POLE	+	SPOT ELEVATION	EXT.	=EXISTING
⊙	GUY WIRE	—	SANITARY SEWER	INV.	=INVERT
—	—	—	STORM SEWER	MON.	=MONUMENT
—	—	—	WATER MAIN	P.O.B.	=POINT OF BEGINNING
—	—	—	FIBER OPTIC LINE	P.O.C.	=POINT OF COMMENCEMENT
—	—	—	TELEPHONE LINE	R.O.W.	=RIGHT OF WAY
—	—	—	ELECTRIC LINE	SEC.	=SECTION
—	—	—	OVERHEAD WIRES	SQ. FT.	=SQUARE FEET
—	—	—	CABLE TELEVISION	W/	=WITH
—	—	—	GAS MAIN	WETLANDS	
—	—	—	WETLANDS	(R)	=RECORDED AS
—	—	—	TREE LINE	(D)	=DEEDED AS
—	—	—	NO ACCESS		

PROPOSED NON-CONDITIONED LUMBER STORAGE BUILDING

TRANS ID 3318085 SHOWROOM & SALES OFFICES WITH PUBLIC & EMPLOYEE TOILET FACILITIES

SUBJECT PROPERTY
487,924 SQ. FT.
11.2012 ACRES



PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

BLIFFERT LUMBER PROPOSED STORAGE STRUCTURE VILLAGE OF GERMANTOWN

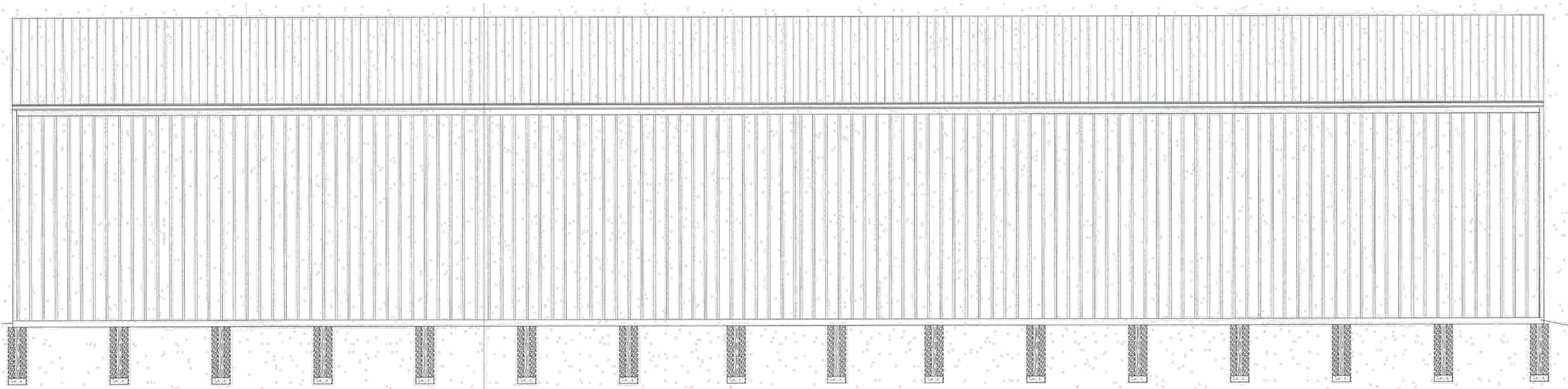
PROPOSED SITE PLAN

NO.	DATE	DESCRIPTION

REG. JOB NO.	2000.00.WI
REG. NO.	ASZ
START DATE	9/15/20
SCALE	1" = 50'

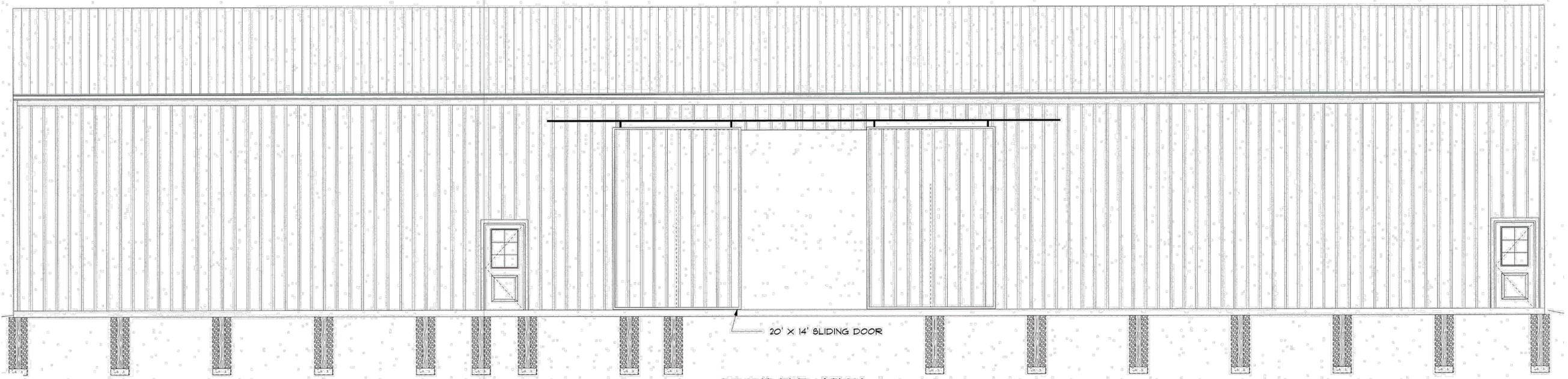
SHEET
C-2
C-2

www.pinnacle-engr.com
PROPOSED SITE PLAN
© COPYRIGHT 2019



REAR ELEVATION

SCALE: 3/16" = 1'-0"



FRONT ELEVATION

SCALE: 3/16" = 1'-0"

20' X 14' SLIDING DOOR

Project:
**BLIFFERT
 GERMANTOWN
 LUMBER YARD COLD
 STORAGE BUILDING**

N116 W16522 MAIN STREET
 Location:
 GERMANTOWN WI 53022

Sheet:
BUILDING ELEVATIONS

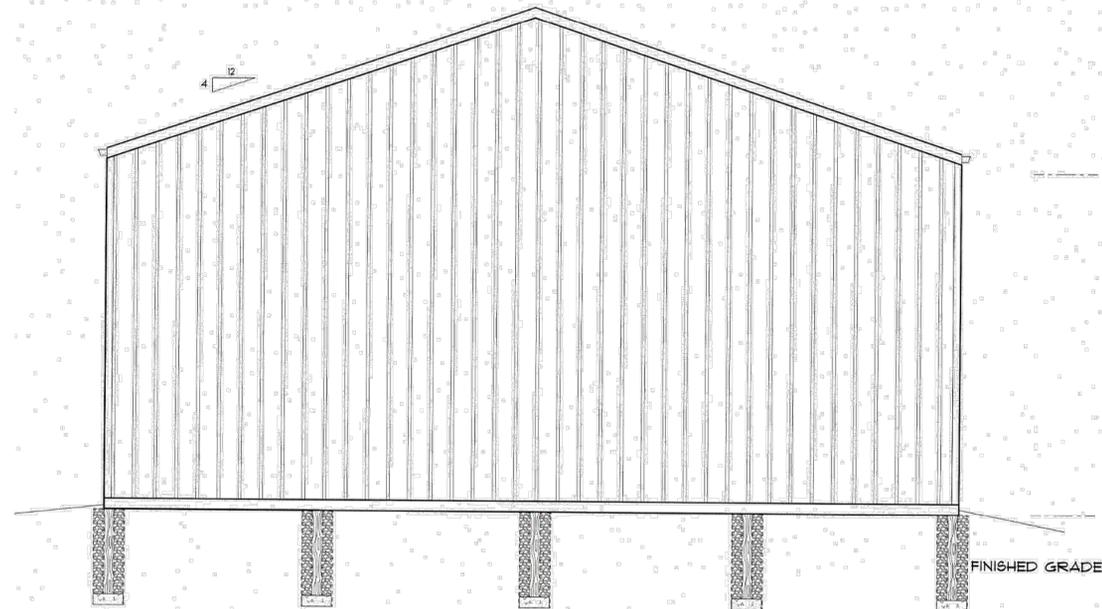
Date:	Issue Set:

Date:
 2021-05-10

Project No.:
 0021-13

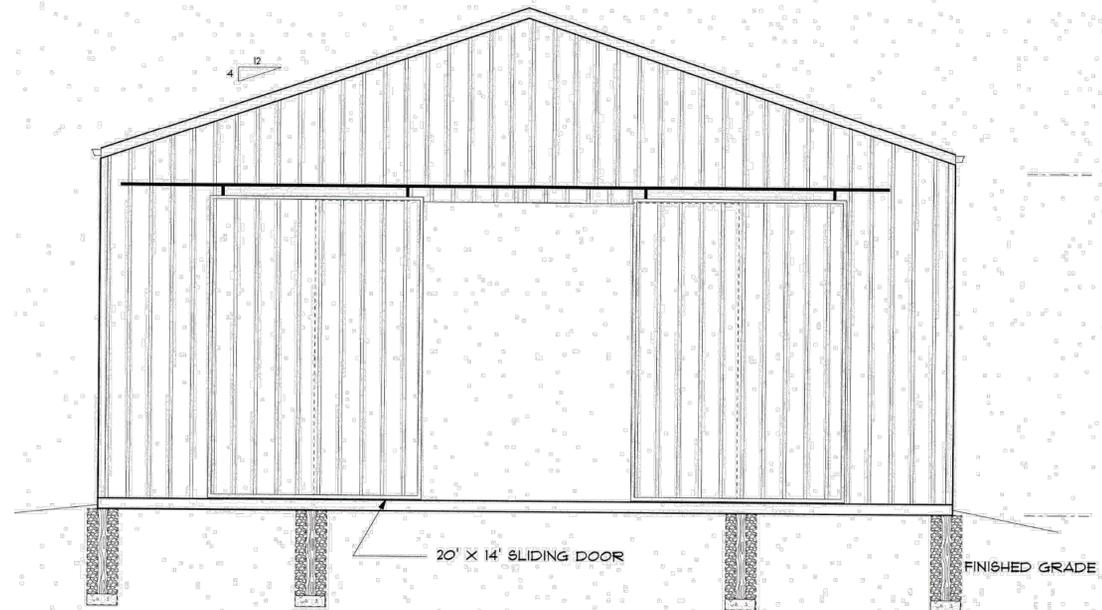
Sheet No.:

A4.00



LEFT ELEVATION

SCALE: 3/16" = 1'-0"



RIGHT ELEVATION

SCALE: 3/16" = 1'-0"

Project:
**BLIFFERT
 GERMANTOWN
 LUMBER YARD COLD
 STORAGE BUILDING**

N116 W16522 MAIN STREET
 Location:
 GERMANTOWN WI 53022

Sheet:
BUILDING ELEVATIONS

Date:	Issue Set:

Date:
2021-05-10

Project No.:
0021-13

Sheet No.:

A4.10

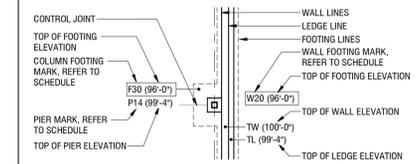
#	DATE	DESCRIPTION
2	MAR 1 2021	Revision 2

PROJECT NUMBER	PROJECT MANAGER
20171	PDR

SHEET INDEX	
S001	GENERAL STRUCTURAL NOTES AND SCHEDULES
S100	FOUNDATION PLAN
S101	ROOF FRAMING PLAN

1	2	3	4	5	6																																																																																																																																																																																																																																																																																									
<h3>GENERAL</h3> <ul style="list-style-type: none"> ALL MATERIALS, CONSTRUCTION, PLANS AND DETAILS SHALL CONFORM w/ THE APPLICABLE CODES AND STANDARDS AS SHOWN IN THESE DRAWINGS AS WELL AS THE PROJECT SPECIFICATIONS, FIRE UNDERWRITER RULES AND REGULATIONS AND ASTM STANDARDS RELATED TO EACH ELEMENT. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL BE FAMILIAR w/ THE ENTIRE SET OF CONSTRUCTION DOCUMENTS (NOT LIMITED TO CIVIL, ARCHITECTURAL, PLUMBING, ELECTRICAL, STRUCTURAL, AND MECHANICAL, ETC.) IN ORDER TO PROVIDE ALL CONSTRUCTION AND MATERIALS FOR THE PROJECT. THE CONTRACTOR SHALL REFER TO ALL DRAWINGS OF THE CONSTRUCTION DOCUMENTS FOR ADDITIONAL SPECIFIED ITEMS SUCH AS MEMBERS, ELEVATIONS, BRICK LEDGES, DIMENSIONS, SLEEVES, PENETRATIONS, DEPRESSIONS, ETC. NOT SHOWN ON THE STRUCTURAL DRAWINGS THAT MAY BE REQUIRED FOR COMPLETION OF THE PROJECT. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER. DETAILS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING UNLESS NOTED OTHERWISE. DRAWINGS REPRESENT THE FINISHED STRUCTURAL SYSTEM AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, LAGGING, SHORING, BRACING, FORM WORK, ETC. AS REQUIRED FOR THE PROTECTION AND SAFETY OF LIFE AND PROPERTY DURING CONSTRUCTION. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER WILL NOT INVOLVE REVIEW OF THESE ITEMS. ALL INSPECTIONS REQUIRED BY THE BUILDING CODES, JURISDICTION OR THESE PLANS SHALL BE PROVIDED BY AN INDEPENDENT INSPECTION AGENCY OR THE BUILDING DEPARTMENT. SITE VISITS BY THE ARCHITECT OR STRUCTURAL ENGINEER DO NOT CONSTITUTE AN INSPECTION. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR FULL COMPLIANCE w/ ALL LOCAL, STATE AND FEDERAL REGULATIONS CONCERNING THE HEALTH AND SAFETY OF WORKERS AND THE PUBLIC IN AND AROUND THE CONSTRUCTION SITE. CONSTRUCTION MATERIALS SHALL BE UNIFORMLY LAID OUT SUCH THAT NOTED STRUCTURAL DESIGN LIVE LOAD PER SQUARE FOOT IS NOT EXCEEDED. PLANS ARE NOT TO BE SCALED. NOTES ON SPECIFIC PLANS AND DETAILS AS SHOWN ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. IN NO CASE SHALL STRUCTURAL ALTERATIONS, MODIFICATIONS OR WORK AFFECTING STRUCTURAL MEMBERS BE MADE w/OUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS RELATED TO ELEVATOR/ESCALATOR/EQUIPMENT PITS AND SHAFTS w/ SELECTED MANUFACTURER. CONTRACTOR SHALL CONFIRM ELEVATOR/ESCALATOR/EQUIPMENT SUPPORT BEAM/GUIDE RAIL ELEVATIONS AND LOCATIONS w/ THE APPROVED ELEVATOR/ESCALATOR/EQUIPMENT SHOP DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATING REQUIREMENTS. UNLESS NOTED OTHERWISE, CENTERLINE OF FRAMING ELEMENTS SHALL BE PLACED UNLESS NOTED OTHERWISE. IF ANY ERRORS OR OMISSIONS APPEAR IN THESE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IN WRITING PRIOR TO PROCEEDING w/ WORK. NO PROVISIONS HAVE BEEN MADE FOR FUTURE EXPANSION. 	<h3>CAST-IN-PLACE CONCRETE</h3> <ul style="list-style-type: none"> CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE w/ ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE." CONCRETE SLAB CONSTRUCTION SHALL BE IN ACCORDANCE w/ ACI 302 "GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION." CONCRETE MIXING, TRANSPORTING AND PLACEMENT SHALL CONFORM TO ACI 304 "GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE." CONCRETE PLACED DURING HOT OR COLD WEATHER SHALL CONFORM TO ACI 305 "GUIDE TO HOT WEATHER CONCRETING" AND ACI 306 "GUIDE TO COLD WEATHER CONCRETING." CONCRETE SHALL BE MECHANICALLY CONSOLIDATED IN ACCORDANCE w/ ACI 309 "GUIDE FOR CONSOLIDATION OF CONCRETE." SLAB ON-GRADE NEED ONLY BE VIBRATED AROUND EMBEDDED ITEMS, THICKENED SLABS, TRENCHES, FLOOR DRAINS, ETC. CONCRETE SHALL BE CURED IN ACCORDANCE w/ ACI 308 "GUIDE TO EXTERNAL CURING OF CONCRETE" OR ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," WHICHEVER IS APPLICABLE UNLESS ALTERNATE METHODS ARE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER. WHERE CURING COMPOUNDS ARE APPROVED, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING COMPATIBILITY w/ FLOORING PRIOR TO CURING COMPOUND APPLICATION. MAXIMUM UNCONFINED CONCRETE FREE FALL SHALL BE LIMITED TO 5'-0". WATER SHALL BE CLEAN AND POTABLE AND SHALL CONFORM TO ASTM C84. NO WATER SHALL BE ADDED AT THE JOBSITE UNLESS SPECIFICALLY APPROVED IN WRITING BY THE CONCRETE SUPPLIER. CONCRETE MIXING OPERATION SHALL CONFORM TO ASTM C94. CLEAR COVER REQUIREMENTS FOR CONCRETE REINFORCEMENT SHALL CONFORM TO THE FOLLOWING UNLESS SPECIFICALLY NOTED OTHERWISE: <ul style="list-style-type: none"> CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3" CONCRETE EXPOSED TO EARTH OR WEATHER <ul style="list-style-type: none"> #5 AND SMALLER 1-1/2" #6 THROUGH #10 2" CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT w/ GROUND <ul style="list-style-type: none"> SLABS, WALLS, JOISTS: #11 AND SMALLER 3/4" BEAMS, COLUMNS: PRIMARY, TIES, STIRRUPS OR SPIRALS 1-1/2" UNLESS OTHERWISE DETAILED, PROVIDE (2) #5 BARS AROUND ALL OPENINGS AND (2) #5 DIAGONAL BARS AT ALL OPENINGS AND RE-ENTRANT CORNERS. BARS SHALL EXTEND A MINIMUM OF 30" PAST OPENING. EXISTING SURFACES THAT ARE TO RECEIVE NEW CONCRETE SHALL BE INTENTIONALLY REGRADED TO AN AMPLITUDE OF 1/4" UNLESS NOTED OTHERWISE. BASE PLATE GROUT SHALL BE NON-SHRINK, NON-METALLIC w/ A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI. THICKNESS SHALL AS DETAILED. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER UNLESS SPECIFICALLY DETAILED OTHERWISE. TOP SURFACES OF WALLS EXPOSED TO VIEW SHALL BE FINISHED SMOOTH UNLESS NOTED OTHERWISE. ALL REINFORCING BARS, ANCHOR BOLTS, WIRE MESH, DOWELS, AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN FINAL POSITION PRIOR TO PLACING CONCRETE. PROVIDE SLEEVES FOR PLUMBING, ELECTRICAL AND MECHANICAL PENETRATIONS. PENETRATIONS THROUGH BEAMS AND COLUMNS ARE ONLY PERMITTED WHERE SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING LOCATION OF ALL PENETRATIONS AND EMBEDDED CONDUIT THROUGH OR IN CONCRETE. CONCRETE IS NOT TO BE CUT OR CORED w/OUT PRIOR APPROVAL OF STRUCTURAL ENGINEER. COORDINATION OF OTHER TRADES RELATED TO THE CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR. CONDUIT PIPES OR SIMILAR ITEMS RUNNING THROUGH OR IN CONCRETE SHALL BE PLACED SO THEY ARE NOT CLOSER THAN 3 DIAMETERS ON CENTER. CONCRETE COVER IS NOT LESS THAN 1" AND NO REINFORCING STEEL IS DISPLACED UNLESS APPROVED BY THE STRUCTURAL ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF IRREGULARITIES OR DEFECTS IN CONCRETE WORK PRIOR TO PLACEMENT OF FINISH MATERIALS. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS AND TEST DATA COMPLIANT w/ REFERENCED ACI STANDARDS AND THE LOCAL BUILDING CODE. MIX DESIGNS SHALL INCLUDE THE PROJECT NAME AND INDICATE WHERE EACH MIX IS TO BE USED IN THE STRUCTURE. CONTRACTOR SHALL HIRE A MATERIALS TESTING LABORATORY TO CAST AND TEST CYLINDERS, SAMPLING, PREPARATION AND TESTING SHALL CONFORM TO ASTM C172, ASTM C31 AND ASTM C39. TEST RESULTS MUST BE SUBMITTED TO ARCHITECT AND STRUCTURAL ENGINEER. ACCEPTANCE CRITERIA WILL BE BASED ON ACI 318. TEST RESULTS SHALL PROVIDE THE FOLLOWING INFORMATION AT A MINIMUM: <ul style="list-style-type: none"> LOCATION IN PROJECT WHERE SAMPLE WAS TAKEN w/ MIX DESIGNATION. COMPRESSIVE STRENGTH AT 7 DAYS. COMPRESSIVE STRENGTH AT 28 DAYS. AIR CONTENT. SUMP. WATER ADDED AT JOB SITE. SHOP DRAWINGS FOR REINFORCEMENT DETAILING, FABRICATING, BENDING AND PLACING OF CONCRETE REINFORCEMENT SHALL CONFORM TO ACI 318 AND CRSI MANUAL OF STANDARD PRACTICE. BAR SCHEDULES, STIRRUP SPACING, BENT BAR DIAGRAMS, AND ARRANGEMENT OF REINFORCEMENT SHALL BE SHOWN. CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A618 (GRADE 60). ALL SPLICES IN CONCRETE REINFORCEMENT SHALL BE CLASS B LAP SPLICES UNLESS NOTED OTHERWISE. ADJACENT SPLICES SHALL BE STAGGERED A MINIMUM OF 3'-0" UNLESS DETAILED OTHERWISE. REFER TO LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE. PROVIDE CORNER BARS AT ALL CORNERS AND WALL INTERSECTIONS. SLAB ON-GRADE CONTROL JOINTS SHALL BE PLACED AS INDICATED ON STRUCTURAL DRAWINGS. SAW CUTTING SHALL BE PERFORMED AS SOON AS CUT WILL NOT RAVEL THE JOINT. 1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED WHERE SLABS ABUT ALL VERTICAL SURFACES. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. WELDED WIRE FABRIC SHALL BE LAPPED ONE WIRE SPACE PLUS 2" FOR PLAIN WIRE AND 8" FOR DEFORMED WIRE. SMOOTH FACED FORMS SHALL BE USED FOR ALL CONCRETE EXPOSED TO VIEW. 	<h3>METAL PLATE WOOD TRUSSES</h3> <ul style="list-style-type: none"> TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ANSIT/PT 1, "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFICALLY COVERED BY ANSIT/PT 1, DESIGN SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF ANS/WAC MDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND ALL APPLICABLE LOCAL CODE REQUIREMENTS. TRUSSES SHALL BE MANUFACTURED TO MEET THE QUALITY REQUIREMENTS OF ANSIT/PT 1 AND IN ACCORDANCE WITH THE INFORMATION PROVIDED IN THE FINAL APPROVED TRUSS DESIGN DRAWINGS. IN ADDITION TO UNIFORM LOADS, TRUSSES SHALL BE DESIGNED FOR SNOW DRIFT, MECHANICAL EQUIPMENT AND ANY SPECIAL LOAD AS SHOWN ON CONSTRUCTION DRAWINGS. ROOF TRUSSES SHALL BE DESIGNED TO RESIST ALL WIND/SEISMIC UPLIFT LOADS AS REQUIRED BY THE APPLICABLE BUILDING CODE. ROOF TRUSSES SHALL HAVE A MAXIMUM LIVE OR SNOW LOAD DEFLECTION OF L/360 w/ A MAXIMUM OF 1". DEAD LOAD SHALL BE LIMITED TO L/240. FLOOR TRUSSES SHALL HAVE A MAXIMUM LIVE LOAD DEFLECTION OF L/560 w/ A MAXIMUM OF 1". DEAD LOAD SHALL BE LIMITED TO L/360. TRUSS SUPPLIER SHALL FURNISH TRUSS SHOP DRAWINGS TO THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO FABRICATION. AT A MINIMUM, THE SHOP DRAWINGS SHALL INCLUDE BUILDING CODE, TRUSS LAYOUT, DEPTH/SPAN/SPACING, SUPPORT LOCATIONS, NUMBER OF TRUSS PILES IF GREATER THAN ONE, REQUIRED BEARING LENGTHS, TRUSS CONNECTION ASSEMBLY AND DESIGN LOADS INCLUDING LATERAL FORCES. TRUSSES MUST BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE PROJECT IS LOCATED. TRUSS CALCULATIONS, UPLIFT SUBMITTED w/ TRUSS SHOP DRAWINGS, MAXIMUM END REACTIONS, UPLIFT FORCES, DEFLECTION, METAL PLATE CONNECTOR TYPE, SIZE, LOCATION, GAGE, WOOD SPECIES SIZE AND GRADE MUST BE SHOWN AT A MINIMUM. REQUIRED PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAIN LOCATION MUST ALSO BE SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING, INSTALLATION, AND TEMPORARY RESTRAINT BRACING OF THE TRUSSES IN A GOOD WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN SBC/ATY'S (BCS) "BUILDING COMPONENT SAFETY INFORMATION: GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES." DAMAGE TO TRUSSES SHALL BE REPORTED TO THE TRUSS SUPPLIER PRIOR TO ERECTION. TRUSSES SHALL BE SET AND SECURED LEVEL AND PLUMB AND IN CORRECT LOCATION. EACH TRUSS SHALL BE FIELD IN CORRECT ALIGNMENT UNTIL PERMANENT RESTRAIN AND BRACING IS INSTALLED. CUTTING AND ALTERING TRUSSES IS NOT PERMITTED. FIELD ALTERATIONS TO TRUSSES MUST BE APPROVED BY THE TRUSS DESIGNER. TRUSSES SHALL BE PERMANENTLY RESTRAINED AND BRACED IN A MANNER CONSISTENT WITH GOOD BUILDING PRACTICES AS OUTLINED IN BC/SI AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. TRUSSES SHALL FURTHERMORE BE ANCHORED OR RESTRAINED TO PREVENT OUT-OF-PLANE MOVEMENT SO AS TO KEEP ALL TRUSS MEMBERS FROM SIMULTANEOUSLY BUCKLING TOGETHER IN THE SAME DIRECTION. SUCH PERMANENT LATERAL RESTRAINT SHALL BE ACCOMPLISHED BY ANCHORAGE TO SOLID END WALLS, PERMANENT DIAGONAL BRACING IN THE PLANE OF THE WEB MEMBERS OR OTHER SUITABLE MEANS. MATERIALS USED IN TEMPORARY AND PERMANENT RESTRAINT AND BRACING SHALL BE FURNISHED BY THE CONTRACTOR. METAL CONNECTOR PLATES SHALL BE MANUFACTURED BY A STRUCTURAL BUILDING COMPONENTS ASSOCIATION (SBCA) MEMBER PLATE MANUFACTURER AND SHALL BE OF GALVANIZED STEEL, ALUMINUM-ZINC ALLOY COATED STEEL OR STAINLESS STEEL, CONFORMING TO THE REQUIREMENTS OF ANSIT/PT 1. MINIMUM THICKNESS IN INCHES (OR MM FOR METRIC UNITS), INCLUDING BOTH UNCOATED AND COATED THICKNESSES, IF GALVANIZED AND ALUMINUM-ZINC ALLOY COATED, SHALL BE SPECIFIED FOR EACH TYPE OF METAL CONNECTOR PLATE. WORKING STRESSES IN STEEL ARE TO BE APPLIED TO EFFECTIVENESS RATIOS FOR PLATES AS DETERMINED BY TEST AND IN ACCORDANCE WITH ANSIT/PT 1. FOR EXTERIOR TRUSSES OR TRUSSES IN MOISTURE SENSITIVE AREAS, METAL CONNECTION PLATES SHALL BE COATED w/ SPECIAL COATING OR BE STAINLESS STEEL. TRUSS MANUFACTURER TO PROVIDE TREATED WOOD MEMBERS OR QUALIFICATION THAT TRUSS LONGEVITY WILL NOT BE COMPROMISED IN DESCRIBED CONDITIONS. TRUSS CONNECTIONS TO SUPPORT STRUCTURE SHALL BE DESIGNED, DETAILED AND SUPPLIED BY THE TRUSS SUPPLIER. CONTRACTOR AND TRUSS SUPPLIER SHALL FIELD VERIFY ALL SPAN DIMENSIONS. 	<h3>DESIGN INFORMATION</h3> <h4>BUILDING CODE</h4> <table border="1"> <tr> <td>CODE</td> <td>INTERNATIONAL BUILDING CODE 2015</td> </tr> </table> <h4>GRAVITY SYSTEM</h4> <table border="1"> <tr> <td>ELEMENT</td> <td>DEAD LOAD</td> <td>LIVE LOAD</td> </tr> <tr> <td>ROOF</td> <td>10 PSF</td> <td>REFER TO SNOW LOAD</td> </tr> </table> <h4>SNOW CRITERIA</h4> <table border="1"> <tr> <td>DESIGN INFORMATION</td> <td>DESIGN INFORMATION</td> </tr> <tr> <td>SNOW EXPOSURE FACTOR</td> <td>25 PSF PLUS DRIFT WHERE INDICATED</td> </tr> <tr> <td>FLAT ROOF SNOW LOAD</td> <td>25 PSF</td> </tr> <tr> <td>SNOW EXPOSURE FACTOR</td> <td>Ce = 1.0</td> </tr> <tr> <td>SNOW IMPORTANCE FACTOR</td> <td>I_s = 1.0</td> </tr> <tr> <td>THERMAL FACTOR</td> <td>T_t = 1.2</td> </tr> <tr> <td>GROUND SNOW</td> <td>P_g = 25 PSF</td> </tr> <tr> <td>RAIN ON SNOW SURCHARGE</td> <td>0 PSF</td> </tr> <tr> <td>SLOPED ROOF FACTOR</td> <td>C_s = 1.0</td> </tr> </table> <h4>WIND CRITERIA</h4> <table border="1"> <tr> <td>DESIGN INFORMATION</td> <td>DESIGN INFORMATION</td> </tr> <tr> <td>BASIC WIND SPEED (3 SECOND GUST)</td> <td>105 MPH (ULTIMATE)</td> </tr> <tr> <td>WIND DIRECTIONALITY FACTOR</td> <td>K_d = 1.0</td> </tr> <tr> <td>MEAN ROOF HEIGHT</td> <td>19.7 FT</td> </tr> <tr> <td>WIND IMPORTANCE FACTOR</td> <td>I_w = 1.0</td> </tr> <tr> <td>WIND OCCUPANCY CATEGORY</td> <td>I</td> </tr> <tr> <td>WIND EXPOSURE CATEGORY</td> <td>B</td> </tr> <tr> <td>INTERNAL PRESSURE COEFFICIENT</td> <td>IC_{pi} = +0.18</td> </tr> <tr> <td>TOPOGRAPHIC FACTOR</td> <td>K_t = 1.0</td> </tr> <tr> <td>DESIGN PROCEDURE</td> <td>SIMPLE DIAPHRAGM</td> </tr> </table> <h4>ROOF SURFACE WIND PRESSURES ULTIMATE</h4> <table border="1"> <tr> <td>AREA</td> <td>10 SF</td> <td>50 SF</td> <td>100 SF</td> </tr> <tr> <td>NEGATIVE ZONE 1</td> <td>-18.1 PSF</td> <td>-18.9 PSF</td> <td>-18.4 PSF</td> </tr> <tr> <td>NEGATIVE ZONE 2</td> <td>-31.5 PSF</td> <td>-25.6 PSF</td> <td>-23.1 PSF</td> </tr> <tr> <td>NEGATIVE ZONE 3</td> <td>-46.5 PSF</td> <td>-39.5 PSF</td> <td>-36.5 PSF</td> </tr> <tr> <td>POSITIVE ZONE 1</td> <td>16.0 PSF</td> <td>16.0 PSF</td> <td>16.0 PSF</td> </tr> <tr> <td>POSITIVE ZONE 2 AND 3</td> <td>16.0 PSF</td> <td>16.0 PSF</td> <td>16.0 PSF</td> </tr> </table> <h4>WALL SURFACE WIND PRESSURES ULTIMATE</h4> <table border="1"> <tr> <td>AREA</td> <td>10 SF</td> <td>100 SF</td> <td>500 SF</td> </tr> <tr> <td>NEGATIVE ZONE 4</td> <td>-21.4 PSF</td> <td>-18.9 PSF</td> <td>-18.4 PSF</td> </tr> <tr> <td>NEGATIVE ZONE 5</td> <td>-26.4 PSF</td> <td>-20.5 PSF</td> <td>-18.4 PSF</td> </tr> <tr> <td>POSITIVE ZONE 4 AND 5</td> <td>19.7 PSF</td> <td>16.8 PSF</td> <td>16.0 PSF</td> </tr> </table> <h4>SEISMIC CRITERIA</h4> <table border="1"> <tr> <td>DESIGN INFORMATION</td> <td>DESIGN INFORMATION</td> </tr> <tr> <td>SEISMIC IMPORTANCE FACTOR</td> <td>I = 1.0</td> </tr> <tr> <td>OCCUPANCY CATEGORY</td> <td>I</td> </tr> <tr> <td>MAPPED SPECTRAL RESPONSE ACCELERATION (SHORT)</td> <td>S_s = 10.3%g</td> </tr> <tr> <td>MAPPED SPECTRAL RESPONSE ACCELERATION (LONG)</td> <td>S₁ = 5.1%g</td> </tr> <tr> <td>SITE CLASS</td> <td>D</td> </tr> <tr> <td>SPECTRAL RESPONSE COEFFICIENT (SHORT)</td> <td>SDS = 0.11</td> </tr> <tr> <td>SPECTRAL RESPONSE COEFFICIENT (LONG)</td> <td>SDI = 0.082</td> </tr> <tr> <td>SEISMIC DESIGN CATEGORY</td> <td>B</td> </tr> <tr> <td>BASIC SEISMIC FORCE RESISTING SYSTEM</td> <td>LIGHT FRAME WALLS WITH SHEAR PANELS</td> </tr> <tr> <td>DESIGN BASE SHEAR</td> <td>0.055W</td> </tr> <tr> <td>SEISMIC RESPONSE COEFFICIENT</td> <td>C_s = 0.055</td> </tr> <tr> <td>RESPONSE MODIFICATION FACTOR</td> <td>2.5</td> </tr> <tr> <td>ANALYSIS PROCEDURE</td> <td>EQUIVALENT LATERAL FORCE ANALYSIS</td> </tr> </table> <h4>GEOTECHNICAL CRITERIA</h4> <table border="1"> <tr> <td>INFORMATION</td> <td>DESIGN INFORMATION</td> </tr> <tr> <td>SOIL UNIT WEIGHT</td> <td>145 PCF</td> </tr> <tr> <td>ACTIVE EARTH PRESSURE (MOVEMENT)</td> <td>35 PSF/FT</td> </tr> <tr> <td>AT-REST PRESSURE (BRACED)</td> <td>50 PSF/FT</td> </tr> <tr> <td>PASSIVE PRESSURE</td> <td>300 PSF</td> </tr> <tr> <td>COEFFICIENT OF SLIDING FRICTION</td> <td>0.35</td> </tr> <tr> <td>SUBGRADE MODULUS</td> <td>150 PCF</td> </tr> <tr> <td>ALLOWABLE NET BEARING PRESSURE</td> <td>4,000 (PER REPORT)</td> </tr> <tr> <td>REPORT</td> <td>BASED ON REPORT PREPARED BY BUTLER ENGINEERING, INC. FOR DESCRIPTION OF SOILS. REPORT DATED FEBRUARY 25.</td> </tr> </table>	CODE	INTERNATIONAL BUILDING CODE 2015	ELEMENT	DEAD LOAD	LIVE LOAD	ROOF	10 PSF	REFER TO SNOW LOAD	DESIGN INFORMATION	DESIGN INFORMATION	SNOW EXPOSURE FACTOR	25 PSF PLUS DRIFT WHERE INDICATED	FLAT ROOF SNOW LOAD	25 PSF	SNOW EXPOSURE FACTOR	Ce = 1.0	SNOW IMPORTANCE FACTOR	I _s = 1.0	THERMAL FACTOR	T _t = 1.2	GROUND SNOW	P _g = 25 PSF	RAIN ON SNOW SURCHARGE	0 PSF	SLOPED ROOF FACTOR	C _s = 1.0	DESIGN INFORMATION	DESIGN INFORMATION	BASIC WIND SPEED (3 SECOND GUST)	105 MPH (ULTIMATE)	WIND DIRECTIONALITY FACTOR	K _d = 1.0	MEAN ROOF HEIGHT	19.7 FT	WIND IMPORTANCE FACTOR	I _w = 1.0	WIND OCCUPANCY CATEGORY	I	WIND EXPOSURE CATEGORY	B	INTERNAL PRESSURE COEFFICIENT	IC _{pi} = +0.18	TOPOGRAPHIC FACTOR	K _t = 1.0	DESIGN PROCEDURE	SIMPLE DIAPHRAGM	AREA	10 SF	50 SF	100 SF	NEGATIVE ZONE 1	-18.1 PSF	-18.9 PSF	-18.4 PSF	NEGATIVE ZONE 2	-31.5 PSF	-25.6 PSF	-23.1 PSF	NEGATIVE ZONE 3	-46.5 PSF	-39.5 PSF	-36.5 PSF	POSITIVE ZONE 1	16.0 PSF	16.0 PSF	16.0 PSF	POSITIVE ZONE 2 AND 3	16.0 PSF	16.0 PSF	16.0 PSF	AREA	10 SF	100 SF	500 SF	NEGATIVE ZONE 4	-21.4 PSF	-18.9 PSF	-18.4 PSF	NEGATIVE ZONE 5	-26.4 PSF	-20.5 PSF	-18.4 PSF	POSITIVE ZONE 4 AND 5	19.7 PSF	16.8 PSF	16.0 PSF	DESIGN INFORMATION	DESIGN INFORMATION	SEISMIC IMPORTANCE FACTOR	I = 1.0	OCCUPANCY CATEGORY	I	MAPPED SPECTRAL RESPONSE ACCELERATION (SHORT)	S _s = 10.3%g	MAPPED SPECTRAL RESPONSE ACCELERATION (LONG)	S ₁ = 5.1%g	SITE CLASS	D	SPECTRAL RESPONSE COEFFICIENT (SHORT)	SDS = 0.11	SPECTRAL RESPONSE COEFFICIENT (LONG)	SDI = 0.082	SEISMIC DESIGN CATEGORY	B	BASIC SEISMIC FORCE RESISTING SYSTEM	LIGHT FRAME WALLS WITH SHEAR PANELS	DESIGN BASE SHEAR	0.055W	SEISMIC RESPONSE COEFFICIENT	C _s = 0.055	RESPONSE MODIFICATION FACTOR	2.5	ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE ANALYSIS	INFORMATION	DESIGN INFORMATION	SOIL UNIT WEIGHT	145 PCF	ACTIVE EARTH PRESSURE (MOVEMENT)	35 PSF/FT	AT-REST PRESSURE (BRACED)	50 PSF/FT	PASSIVE PRESSURE	300 PSF	COEFFICIENT OF SLIDING FRICTION	0.35	SUBGRADE MODULUS	150 PCF	ALLOWABLE NET BEARING PRESSURE	4,000 (PER REPORT)	REPORT	BASED ON REPORT PREPARED BY BUTLER ENGINEERING, INC. 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REPORT DATED FEBRUARY 25.	<h3>CONCRETE DESIGN STRENGTHS</h3> <table border="1"> <thead> <tr> <th>ELEMENT</th> <th>CONCRETE STRENGTH</th> <th>MAX AGGREGATE</th> <th>MAX W/C RATIO</th> <th>AIR CONTENT</th> <th>SUMP</th> </tr> </thead> <tbody> <tr> <td>FOOTINGS</td> <td>3,000 PSI</td> <td>1-1/2"</td> <td>0.59</td> <td>NONE</td> <td>5"</td> </tr> <tr> <td>FOUNDATION WALLS/PIERS</td> <td>4,000 PSI</td> <td>3/4"</td> <td>0.50</td> <td>6% +/-1.5%</td> <td>4"</td> </tr> <tr> <td>SLAB ON GRADE - INTERIOR (4" OR LESS THICKNESS)</td> <td>3,500 PSI</td> <td>1"</td> <td>0.48</td> <td>NONE</td> <td>4"</td> </tr> <tr> <td>SLAB ON GRADE - INTERIOR (5" OR GREATER THICKNESS)</td> <td>3,500 PSI</td> <td>1-1/2"</td> <td>0.48</td> <td>NONE</td> <td>4"</td> </tr> <tr> <td>SLAB ON GRADE - EXTERIOR</td> <td>4,500 PSI</td> <td>3/4"</td> <td>0.45</td> <td>6% +/-1.5%</td> <td>4"</td> </tr> <tr> <td>LEAN CONCRETE</td> <td>1,000 PSI</td> <td>1-1/2"</td> <td>0.55</td> <td>NONE</td> <td>6"</td> </tr> </tbody> </table> <h3>WOOD DESIGN STRENGTHS</h3> <table border="1"> <thead> <tr> <th>WOOD:</th> <th>STRENGTH</th> </tr> </thead> <tbody> <tr> <td>DIMENSIONAL LUMBER:</td> <td></td> </tr> <tr> <td>JOISTS/BEAMS/HEADERS:</td> <td>SPRUCE PINE FIR NO. 2 OR BETTER</td> </tr> <tr> <td>EXTERIOR LUMBER/MUDSILL:</td> <td>TREATED SOUTHERN PINE NO. 2 OR BETTER</td> </tr> <tr> <td>WALL STUDS/PLATES:</td> <td>SPRUCE PINE FIR NO. 2 OR BETTER</td> </tr> <tr> <td>LAMINATED VENEER LUMBER (LVL):</td> <td></td> </tr> <tr> <td>FRAMING:</td> <td>2.0 E 2,600 psi F_b</td> </tr> <tr> <td>LAMINATED STRAND LUMBER (LSL):</td> <td></td> </tr> <tr> <td>STUD:</td> <td>1.55 E</td> </tr> <tr> <td>PLATE:</td> <td>2,170 psi F_c PARALLEL 1.3 E 670 psi F_c PERPENDICULAR</td> </tr> <tr> <td>PARALLEL STRAND LUMBER (PSL):</td> <td></td> </tr> <tr> <td>POST:</td> <td>1.8 E</td> </tr> <tr> <td>LUMBER POSTS:</td> <td></td> </tr> <tr> <td>EXTERIOR:</td> <td>SPRUCE PINE FIR NO.1/NO.2 OR BETTER</td> </tr> <tr> <td>INTERIOR:</td> <td>SPRUCE PINE FIR NO.1/NO.2 OR BETTER</td> </tr> </tbody> </table> <h3>WOOD HEADER SCHEDULES</h3> <p>NOTES:</p> <ol style="list-style-type: none"> REFER TO GENERAL NOTES FOR WOOD SPECIFICS. UNLESS NOTED OTHERWISE, HEADERS SHALL BE ATTACHED TOGETHER w/ (2) ROWS OF 16d NAILS AT 16" o/c. WOOD POSTS/BEARING STUDS SHALL BE RUN CONTINUOUS TO LOWEST SUPPORT LEVEL. PROVIDE EQUIVALENT SIZE BLOCKING IN THE FLOOR SYSTEM TO TRANSFER VERTICAL LOADS. MULTIPLE PLY STUDS SHALL BE ATTACHED TOGETHER w/ (2) ROWS OF 16d NAILS AT 16" o/c. NAILS MUST PENETRATE AT LEAST 3/4" INTO AT LEAST (2) PILES. ADJACENT NAILS SHALL BE DRIVE FROM OPPOSITE OF COLUMN. PROVIDE ADDITIONAL STUDS UNDER GIRDER TRUSSES TO ENSURE COLUMN WIDTH IS AT LEAST EQUAL TO TRUSS WIDTH. AT A MINIMUM, BEARING STUDS SHOULD BE EQUAL TO PILES OF HEADER. WOOD FRAMING LEVELS INDICATED IN SCHEDULE ABOVE ARE REPRESENTED AS FOLLOWS: 1ST IS LOWEST LEVEL OF FRAMING, 2ND IS LEVEL VERTICAL ABOVE 1ST, ETC. <table border="1"> <thead> <tr> <th>MARK</th> <th>MEMBER SIZE</th> <th>COMMENTS</th> </tr> </thead> <tbody> <tr> <td>H12</td> <td>2x12</td> <td>ATTACH TO (4) 2x6 POST WITH SIMPSON HH4</td> </tr> <tr> <td>H18</td> <td>1-3/4"x18" LVL</td> <td>ATTACH TO (4) 2x6 POST WITH SIMPSON HUC0612-S05</td> </tr> </tbody> </table> <h3>WOOD HEADER SIZES</h3> <table border="1"> <thead> <tr> <th>MARK</th> <th>SIZE</th> <th>VERTICAL REINFORCEMENT</th> <th>TIES</th> <th>COMMENTS</th> </tr> </thead> <tbody> <tr> <td>P20R</td> <td>20" DIA</td> <td></td> <td></td> <td></td> </tr> <tr> <td>P26R</td> <td>26" DIA</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <h3>CONCRETE PIER SCHEDULE</h3> <p>TYPICAL CONCRETE PIER REINFORCING</p> <table border="1"> <thead> <tr> <th>MARK</th> <th>SIZE</th> <th>VERTICAL REINFORCEMENT</th> <th>TIES</th> <th>COMMENTS</th> </tr> </thead> <tbody> <tr> <td>P20R</td> <td>20" DIA</td> <td></td> <td></td> <td></td> </tr> <tr> <td>P26R</td> <td>26" DIA</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	ELEMENT	CONCRETE STRENGTH	MAX AGGREGATE	MAX W/C RATIO	AIR CONTENT	SUMP	FOOTINGS	3,000 PSI	1-1/2"	0.59	NONE	5"	FOUNDATION WALLS/PIERS	4,000 PSI	3/4"	0.50	6% +/-1.5%	4"	SLAB ON GRADE - INTERIOR (4" OR LESS THICKNESS)	3,500 PSI	1"	0.48	NONE	4"	SLAB ON GRADE - INTERIOR (5" OR GREATER THICKNESS)	3,500 PSI	1-1/2"	0.48	NONE	4"	SLAB ON GRADE - EXTERIOR	4,500 PSI	3/4"	0.45	6% +/-1.5%	4"	LEAN CONCRETE	1,000 PSI	1-1/2"	0.55	NONE	6"	WOOD:	STRENGTH	DIMENSIONAL LUMBER:		JOISTS/BEAMS/HEADERS:	SPRUCE PINE FIR NO. 2 OR BETTER	EXTERIOR LUMBER/MUDSILL:	TREATED SOUTHERN PINE NO. 2 OR BETTER	WALL STUDS/PLATES:	SPRUCE PINE FIR NO. 2 OR BETTER	LAMINATED VENEER LUMBER (LVL):		FRAMING:	2.0 E 2,600 psi F _b	LAMINATED STRAND LUMBER (LSL):		STUD:	1.55 E	PLATE:	2,170 psi F _c PARALLEL 1.3 E 670 psi F _c PERPENDICULAR	PARALLEL STRAND LUMBER (PSL):		POST:	1.8 E	LUMBER POSTS:		EXTERIOR:	SPRUCE PINE FIR NO.1/NO.2 OR BETTER	INTERIOR:	SPRUCE PINE FIR NO.1/NO.2 OR BETTER	MARK	MEMBER SIZE	COMMENTS	H12	2x12	ATTACH TO (4) 2x6 POST WITH SIMPSON HH4	H18	1-3/4"x18" LVL	ATTACH TO (4) 2x6 POST WITH SIMPSON HUC0612-S05	MARK	SIZE	VERTICAL REINFORCEMENT	TIES	COMMENTS	P20R	20" DIA				P26R	26" DIA				MARK	SIZE	VERTICAL REINFORCEMENT	TIES	COMMENTS	P20R	20" DIA				P26R	26" DIA				<h3>WOOD SHEAR WALL SCHEDULE</h3> <table border="1"> <thead> <tr> <th>MARK</th> <th>SHEATHING</th> <th>BLOCKING</th> <th>FASTENER SPACING</th> <th>ANCHOR BOLTS</th> <th>SOLE PLATE</th> <th>RM w/ TIE</th> <th>RM w/ A35</th> <th>RM w/ LTPS</th> </tr> </thead> <tbody> <tr> <td>SWW4</td> <td>15/32" APA RATED SHEATHING</td> <td>YES</td> <td>4" EDGE/12" FIELD</td> <td>5/8" DIA AT 28" o/c</td> <td>4" o/c</td> <td>2-1/2" o/c</td> <td>12" o/c</td> <td>10" o/c</td> </tr> <tr> <td>SWM1</td> <td>29 GAGE FABRAL GRANDRIB B CLADDING</td> <td>YES, BETWEEN GIRTS ON OUTER POSTS</td> <td>SEE ATTACHMENT INFORMATION</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>SWM2</td> <td>29 GAGE FABRAL GRANDRIB B CLADDING</td> <td>YES, BETWEEN GIRTS ON OUTER POSTS</td> <td>SEE ATTACHMENT INFORMATION</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>WHERE SHEAR WALLS ARE DESIGNATED ON BOTH SIDES OF A SINGLE WALL, REDUCE # OF ATTACHMENTS BELOW BY 50%.</p> <p>NOTES:</p> <ol style="list-style-type: none"> REFER TO GENERAL NOTES FOR WOOD SPECIFICS. ANCHOR BOLTS LISTED ARE BASED ON SIMPSON TITEN HD ANCHORS w/ A MINIMUM EMBEDMENT INTO CONCRETE OF 4". SUBSTITUTIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO USE. SHEAR WALL SHEATHING SHALL BE NOT LESS THAN 4x8" SHEETS EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING. FRAMING MEMBERS OR BLOCKING SHALL BE PROVIDED AT THE EDGES OF ALL PANELS WHERE NOTED IN THE TABLE ABOVE. NAILS ARE TO BE LOCATED AT LEAST 3/8" FROM PANEL EDGES. WOOD STRUCTURAL PANELS SHALL CONFORM TO REQUIREMENTS FOR ITS TYPE IN DOC P51. ALL NAILS TO BE A MINIMUM 8d COMMON NAILS OR GALVANIZED NAILS AND HAVE A MINIMUM PENETRATION OF 1-1/2". GUN NAILS OF EQUIVALENT SIZES MAY BE USED. GUN NAILS MUST HAVE FULL ROUND HEADS. DRYWALL SCREWS SHALL BE NO. 6 1-1/4" TYPE S OR TYPE W AND CONFORM TO ASTM C1102. ANCHORS IN CONTACT w/ PRESERVATIVE TREATED WOOD SHALL BE MECHANICALLY GALVANIZED (ASTM B685, GLASS 55, TYPE 1). HOT DIPPED GALVANIZED OR STAINLESS STEEL. ANCHOR BOLTS SHALL HAVE A STEEL PLATE WASHER NOT LESS THAN 0.229"x3"x3" IN SIZE. HOLES IN WASHER MAY BE SLOTTED DIAGONALLY w/ A WIDTH UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A LENGTH NOT TO EXCEED 1-3/4" PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE ANCHOR AND PLATE WASHER. FOR WOOD SHEATHED SHEAR WALLS, PLATE WASHER SHALL EXTEND TO W/IN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON SIDE SHEATHED FOR SHEAR RESISTANCE. 4" o/c WIDE PIECES OF GYPSUM SHEATHING MAY BE APPLIED PARALLEL OR PERPENDICULAR TO STUDS. 2'-0" WIDE PIECES MUST BE INSTALLED PERPENDICULAR TO THE STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396. WATER RESISTANT GYPSUM BACKING SHALL CONFORM TO ASTM C 1396. GYPSUM SHALL BE INSTALLED IN ACCORDANCE TO ASTM C 840. END JOINTS OF ADJACENT COURSES OF GYPSUM SHEATHING SHALL NOT OCCUR OVER THE SAME STUD. EACH END OF SHEAR WALL SHALL HAVE A MINIMUM (2)x6 END POSTS. REFER TO HOLDDOWN SCHEDULE FOR ANY ADDITIONAL REQUIREMENTS. 	MARK	SHEATHING	BLOCKING	FASTENER SPACING	ANCHOR BOLTS	SOLE PLATE	RM w/ TIE	RM w/ A35	RM w/ LTPS	SWW4	15/32" APA RATED SHEATHING	YES	4" EDGE/12" FIELD	5/8" DIA AT 28" o/c	4" o/c	2-1/2" o/c	12" o/c	10" o/c	SWM1	29 GAGE FABRAL GRANDRIB B CLADDING	YES, BETWEEN GIRTS ON OUTER POSTS	SEE ATTACHMENT INFORMATION	N/A	N/A	N/A	N/A	N/A	SWM2	29 GAGE FABRAL GRANDRIB B CLADDING	YES, BETWEEN GIRTS ON OUTER POSTS	SEE ATTACHMENT INFORMATION	N/A	N/A	N/A	N/A	N/A	<h3>SWM1 ATTACHMENT INFORMATION</h3> <p>1. SWM1 EXTERIOR WALLS ARE SHEATHED WITH 29 GAGE FABRAL GRANDRIB B METAL SHEATHING ON THE EXTERIOR FACE. AT THE WALL EDGES ATTACH SHEATHING TO FRAMING WITH #10x1" AT 8" o/c. AT TOP AND BOTTOM OF WALL EDGE, ATTACH SHEATHING TO FRAMING WITH A #10x1" ON BOTH SIDES OF MAJOR RISBS (INCLUDING AT LAP JOINT). IN THE FIELD ATTACH SHEATHING TO FRAMING NEXT TO ALL MAJOR RISBS WITH A #10x1" AT 24" o/c. IN THE FIELD AT LAP JOINTS, ATTACH SHEATHING TO FRAMING WITH #12x4" AT 8" o/c AND A #10x1" NEXT TO ALL MAJOR RISBS (INCLUDING AT LAP JOINTS) AT 24" o/c. SHEETS ARE LAID PERPENDICULAR TO ALL FRAMING MEMBERS.</p> <p>2. PROVIDE 6x6 BLOCKING BETWEEN ALL POST BASES. FASTEN BLOCKING TO POSTS WITH SIMPSON A35 CLIP EACH END.</p> <p>3. PROVIDE 2x4 BLOCKING BETWEEN WIND GIRTS ON OUTER POSTS. FASTEN WITH (4) 3 1/2" x 0.162" RING SHANK NAILS IN EACH GIRT END AND IN EACH POST-GIRT LAP.</p> <h3>SWM2 ATTACHMENT INFORMATION</h3> <p>1. SWM2 EXTERIOR WALLS ARE SHEATHED WITH 29 GAGE FABRAL GRANDRIB B METAL SHEATHING ON THE EXTERIOR FACE. AT THE WALL EDGES ATTACH SHEATHING TO FRAMING WITH #10x1" AT 8" o/c. AT TOP AND BOTTOM OF WALL EDGE, ATTACH SHEATHING TO FRAMING WITH A #10x1" ON BOTH SIDES OF MAJOR RISBS (INCLUDING AT LAP JOINT). IN THE FIELD ATTACH SHEATHING TO FRAMING NEXT TO ALL MAJOR RISBS WITH A #10x1" AT 24" o/c. 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DO NOT BACKFILL AGAINST ANY ELEMENT UNTIL THE DESIGN STRENGTH OF THE ELEMENT HAS BEEN ACHIEVED. SUBGRADE PREPARATION SHALL CONSIST OF EXCAVATION TO REQUIRED FOOTING DEPTH. FOUNDATIONS SHALL EXTEND TO COMPETENT BEARING MATERIAL CONFORMING TO THE NET ALLOWABLE SOIL BEARING CAPACITY NOTED, WHERE UNSUITABLE SOIL IS ENCOUNTERED, REFER TO THE REFERENCED GEOTECHNICAL REPORT OR CONTACT THE STRUCTURAL ENGINEER FOR FURTHER DIRECTION. AT A MINIMUM, ALL FILL BELOW FOOTINGS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY (ASTM D-1557, MODIFIED PROCTOR) AND PLACED IN UNIFORM LIFTS. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION OR STRICTER REQUIREMENTS. SHOP DRAWINGS FOR REINFORCEMENT DETAILING, FABRICATING, BENDING AND PLACING OF CONCRETE REINFORCEMENT SHALL CONFORM TO ACI 318 AND CRSI MANUAL OF STANDARD PRACTICE. BAR SCHEDULES, STIRRUP SPACING, BENT BAR DIAGRAMS, AND ARRANGEMENT OF REINFORCEMENT SHALL BE SHOWN. CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A618 (GRADE 60). ALL SPLICES IN CONCRETE REINFORCEMENT SHALL BE CLASS B LAP SPLICES UNLESS NOTED OTHERWISE. ADJACENT SPLICES SHALL BE STAGGERED A MINIMUM OF 3'-0" UNLESS DETAILED OTHERWISE. REFER TO LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE. PROVIDE CORNER BARS AT ALL CORNERS AND WALL INTERSECTIONS. SLAB ON-GRADE CONTROL JOINTS SHALL BE PLACED AS INDICATED ON STRUCTURAL DRAWINGS. SAW CUTTING SHALL BE PERFORMED AS SOON AS CUT WILL NOT RAVEL THE JOINT. 1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED WHERE SLABS ABUT ALL VERTICAL SURFACES. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. WELDED WIRE FABRIC SHALL BE LAPPED ONE WIRE SPACE PLUS 2" FOR PLAIN WIRE AND 8" FOR DEFORMED WIRE. SMOOTH FACED FORMS SHALL BE USED FOR ALL CONCRETE EXPOSED TO VIEW.
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NEGATIVE ZONE 4	-21.4 PSF	-18.9 PSF	-18.4 PSF																																																																																																																																																																																																																																																																																											
NEGATIVE ZONE 5	-26.4 PSF	-20.5 PSF	-18.4 PSF																																																																																																																																																																																																																																																																																											
POSITIVE ZONE 4 AND 5	19.7 PSF	16.8 PSF	16.0 PSF																																																																																																																																																																																																																																																																																											
DESIGN INFORMATION	DESIGN INFORMATION																																																																																																																																																																																																																																																																																													
SEISMIC IMPORTANCE FACTOR	I = 1.0																																																																																																																																																																																																																																																																																													
OCCUPANCY CATEGORY	I																																																																																																																																																																																																																																																																																													
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SPECTRAL RESPONSE COEFFICIENT (SHORT)	SDS = 0.11																																																																																																																																																																																																																																																																																													
SPECTRAL RESPONSE COEFFICIENT (LONG)	SDI = 0.082																																																																																																																																																																																																																																																																																													
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BASIC SEISMIC FORCE RESISTING SYSTEM	LIGHT FRAME WALLS WITH SHEAR PANELS																																																																																																																																																																																																																																																																																													
DESIGN BASE SHEAR	0.055W																																																																																																																																																																																																																																																																																													
SEISMIC RESPONSE COEFFICIENT	C _s = 0.055																																																																																																																																																																																																																																																																																													
RESPONSE MODIFICATION FACTOR	2.5																																																																																																																																																																																																																																																																																													
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE ANALYSIS																																																																																																																																																																																																																																																																																													
INFORMATION	DESIGN INFORMATION																																																																																																																																																																																																																																																																																													
SOIL UNIT WEIGHT	145 PCF																																																																																																																																																																																																																																																																																													
ACTIVE EARTH PRESSURE (MOVEMENT)	35 PSF/FT																																																																																																																																																																																																																																																																																													
AT-REST PRESSURE (BRACED)	50 PSF/FT																																																																																																																																																																																																																																																																																													
PASSIVE PRESSURE	300 PSF																																																																																																																																																																																																																																																																																													
COEFFICIENT OF SLIDING FRICTION	0.35																																																																																																																																																																																																																																																																																													
SUBGRADE MODULUS	150 PCF																																																																																																																																																																																																																																																																																													
ALLOWABLE NET BEARING PRESSURE	4,000 (PER REPORT)																																																																																																																																																																																																																																																																																													
REPORT	BASED ON REPORT PREPARED BY BUTLER ENGINEERING, INC. FOR DESCRIPTION OF SOILS. REPORT DATED FEBRUARY 25.																																																																																																																																																																																																																																																																																													
ELEMENT	CONCRETE STRENGTH	MAX AGGREGATE	MAX W/C RATIO	AIR CONTENT	SUMP																																																																																																																																																																																																																																																																																									
FOOTINGS	3,000 PSI	1-1/2"	0.59	NONE	5"																																																																																																																																																																																																																																																																																									
FOUNDATION WALLS/PIERS	4,000 PSI	3/4"	0.50	6% +/-1.5%	4"																																																																																																																																																																																																																																																																																									
SLAB ON GRADE - INTERIOR (4" OR LESS THICKNESS)	3,500 PSI	1"	0.48	NONE	4"																																																																																																																																																																																																																																																																																									
SLAB ON GRADE - INTERIOR (5" OR GREATER THICKNESS)	3,500 PSI	1-1/2"	0.48	NONE	4"																																																																																																																																																																																																																																																																																									
SLAB ON GRADE - EXTERIOR	4,500 PSI	3/4"	0.45	6% +/-1.5%	4"																																																																																																																																																																																																																																																																																									
LEAN CONCRETE	1,000 PSI	1-1/2"	0.55	NONE	6"																																																																																																																																																																																																																																																																																									
WOOD:	STRENGTH																																																																																																																																																																																																																																																																																													
DIMENSIONAL LUMBER:																																																																																																																																																																																																																																																																																														
JOISTS/BEAMS/HEADERS:	SPRUCE PINE FIR NO. 2 OR BETTER																																																																																																																																																																																																																																																																																													
EXTERIOR LUMBER/MUDSILL:	TREATED SOUTHERN PINE NO. 2 OR BETTER																																																																																																																																																																																																																																																																																													
WALL STUDS/PLATES:	SPRUCE PINE FIR NO. 2 OR BETTER																																																																																																																																																																																																																																																																																													
LAMINATED VENEER LUMBER (LVL):																																																																																																																																																																																																																																																																																														
FRAMING:	2.0 E 2,600 psi F _b																																																																																																																																																																																																																																																																																													
LAMINATED STRAND LUMBER (LSL):																																																																																																																																																																																																																																																																																														
STUD:	1.55 E																																																																																																																																																																																																																																																																																													
PLATE:	2,170 psi F _c PARALLEL 1.3 E 670 psi F _c PERPENDICULAR																																																																																																																																																																																																																																																																																													
PARALLEL STRAND LUMBER (PSL):																																																																																																																																																																																																																																																																																														
POST:	1.8 E																																																																																																																																																																																																																																																																																													
LUMBER POSTS:																																																																																																																																																																																																																																																																																														
EXTERIOR:	SPRUCE PINE FIR NO.1/NO.2 OR BETTER																																																																																																																																																																																																																																																																																													
INTERIOR:	SPRUCE PINE FIR NO.1/NO.2 OR BETTER																																																																																																																																																																																																																																																																																													
MARK	MEMBER SIZE	COMMENTS																																																																																																																																																																																																																																																																																												
H12	2x12	ATTACH TO (4) 2x6 POST WITH SIMPSON HH4																																																																																																																																																																																																																																																																																												
H18	1-3/4"x18" LVL	ATTACH TO (4) 2x6 POST WITH SIMPSON HUC0612-S05																																																																																																																																																																																																																																																																																												
MARK	SIZE	VERTICAL REINFORCEMENT	TIES	COMMENTS																																																																																																																																																																																																																																																																																										
P20R	20" DIA																																																																																																																																																																																																																																																																																													
P26R	26" DIA																																																																																																																																																																																																																																																																																													
MARK	SIZE	VERTICAL REINFORCEMENT	TIES	COMMENTS																																																																																																																																																																																																																																																																																										
P20R	20" DIA																																																																																																																																																																																																																																																																																													
P26R	26" DIA																																																																																																																																																																																																																																																																																													
MARK	SHEATHING	BLOCKING	FASTENER SPACING	ANCHOR BOLTS	SOLE PLATE	RM w/ TIE	RM w/ A35	RM w/ LTPS																																																																																																																																																																																																																																																																																						
SWW4	15/32" APA RATED SHEATHING	YES	4" EDGE/12" FIELD	5/8" DIA AT 28" o/c	4" o/c	2-1/2" o/c	12" o/c	10" o/c																																																																																																																																																																																																																																																																																						
SWM1	29 GAGE FABRAL GRANDRIB B CLADDING	YES, BETWEEN GIRTS ON OUTER POSTS	SEE ATTACHMENT INFORMATION	N/A	N/A	N/A	N/A	N/A																																																																																																																																																																																																																																																																																						
SWM2	29 GAGE FABRAL GRANDRIB B CLADDING	YES, BETWEEN GIRTS ON OUTER POSTS	SEE ATTACHMENT INFORMATION	N/A	N/A	N/A	N/A	N/A																																																																																																																																																																																																																																																																																						
<h3>FOUNDATIONS</h3> <ul style="list-style-type: none"> ALL ACTIVITIES CONCERNING PREPARATION AND VERIFICATION OF THE BEARING STRATUM FOR SLAB ON-GRADES AND FOUNDATIONS SHALL BE SUPERVISED AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER. ALL EXTERIOR FOUNDATIONS SHALL BEAR BELOW THE LOCAL FROST LINE. FOUNDATIONS ARE NOT TO BE PLACED ON FROZEN SUBGRADE. WALLS, GRADE BEAMS AND SIMILAR ELEMENTS SHALL BE BACKFILLED UNIFORMLY ON BOTH SIDES OF ELEMENTS. BELOW GRADE WALLS SHALL BE ADEQUATELY BRACED UNTIL FINAL FLOOR STRUCTURE, INCLUDING SLAB ON-GRADE IS IN PLACE. BRACING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DO NOT BACKFILL AGAINST ANY ELEMENT UNTIL THE DESIGN STRENGTH OF THE ELEMENT HAS BEEN ACHIEVED. SUBGRADE PREPARATION SHALL CONSIST OF EXCAVATION TO REQUIRED FOOTING DEPTH. FOUNDATIONS SHALL EXTEND TO COMPETENT BEARING MATERIAL CONFORMING TO THE NET ALLOWABLE SOIL BEARING CAPACITY NOTED, WHERE UNSUITABLE SOIL IS ENCOUNTER																																																																																																																																																																																																																																																																																														

CONCRETE FOUNDATION LEGEND

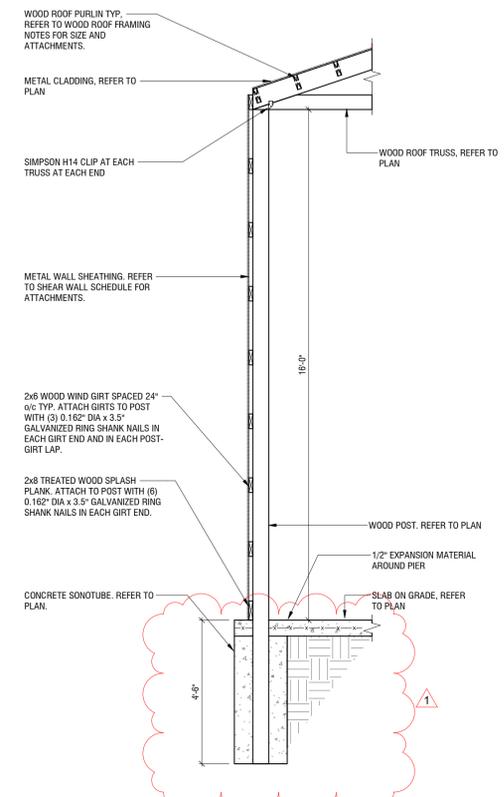


CONCRETE FOUNDATION PLAN NOTES

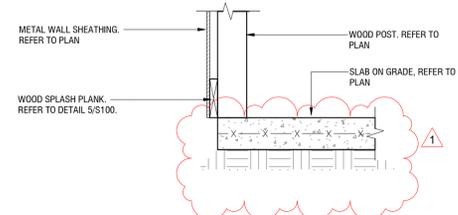
- REFER TO GENERAL NOTES FOR ADDITIONAL STRUCTURAL NOTES AND FOUNDATION REQUIREMENTS.
- ELEVATION 100'-0" ON STRUCTURAL PLANS CORRESPONDS TO FINISHED FLOOR ELEVATION ON CIVIL PLANS.
- VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL PLANS. COORDINATE DISCREPANCIES w/ ARCHITECT AND STRUCTURAL ENGINEER.
- ALL FOOTINGS AND SLABS TO BEAR ON COMPETENT NATIVE SOILS AND/OR STRUCTURAL FILL. REFER TO GEOTECHNICAL REPORT FOR SUBGRADE PREPARATION, STRUCTURAL FILL, FOOTING DRAINS AND OTHER REQUIREMENTS.
- VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO ANY DRILLING OR EXCAVATION.
- COORDINATE AND VERIFY LOCATION OF ALL UNDERGROUND WORK PRIOR TO POURING CONCRETE SLAB.
- CONTRACTOR TO BE AWARE OF POSSIBLE NEED OF OVER EXCAVATION OF POOR SOILS. SOIL BEARING CAPACITY IS TO BE FIELD VERIFIED BY GEOTECHNICAL ENGINEER PRIOR TO POURING ANY FOUNDATIONS. REFER TO GEOTECHNICAL REPORT FOR AREA DEFINITION.

CONCRETE FOUNDATION PLAN KEYED NOTES

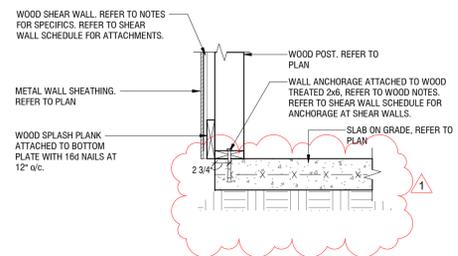
KEY NOTE	DESCRIPTION
CG1	EXISTING 20" DIA SONOTUBE FOUNDATION CAN REMAIN SINCE A MINIMUM NET ALLOWABLE SOIL BEARING PRESSURE OF 4000 PSF WAS MEASURED AND DOCUMENTED BY A GEOTECHNICAL ENGINEER. REPORT REFERRED TO IN STRUCTURAL NOTES.
CG2	ATTACH (4) 2#6 TO EACH OTHER WITH (2) ROWS SIMPSON SDW 22600 SCREWS AT 7" o/c. MAINTAIN 1 1/2" EDGE DISTANCE AND 3 1/2" END DISTANCE.



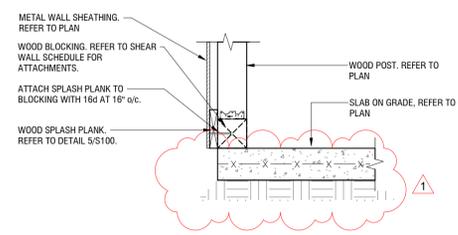
5 WALL SECTION
S100 3/8" = 1'-0"



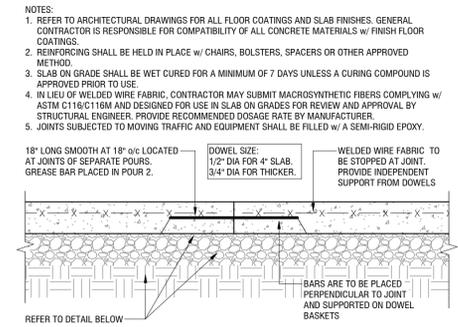
4 THICKENED SLAB AT SWM2
S100 3/4" = 1'-0"



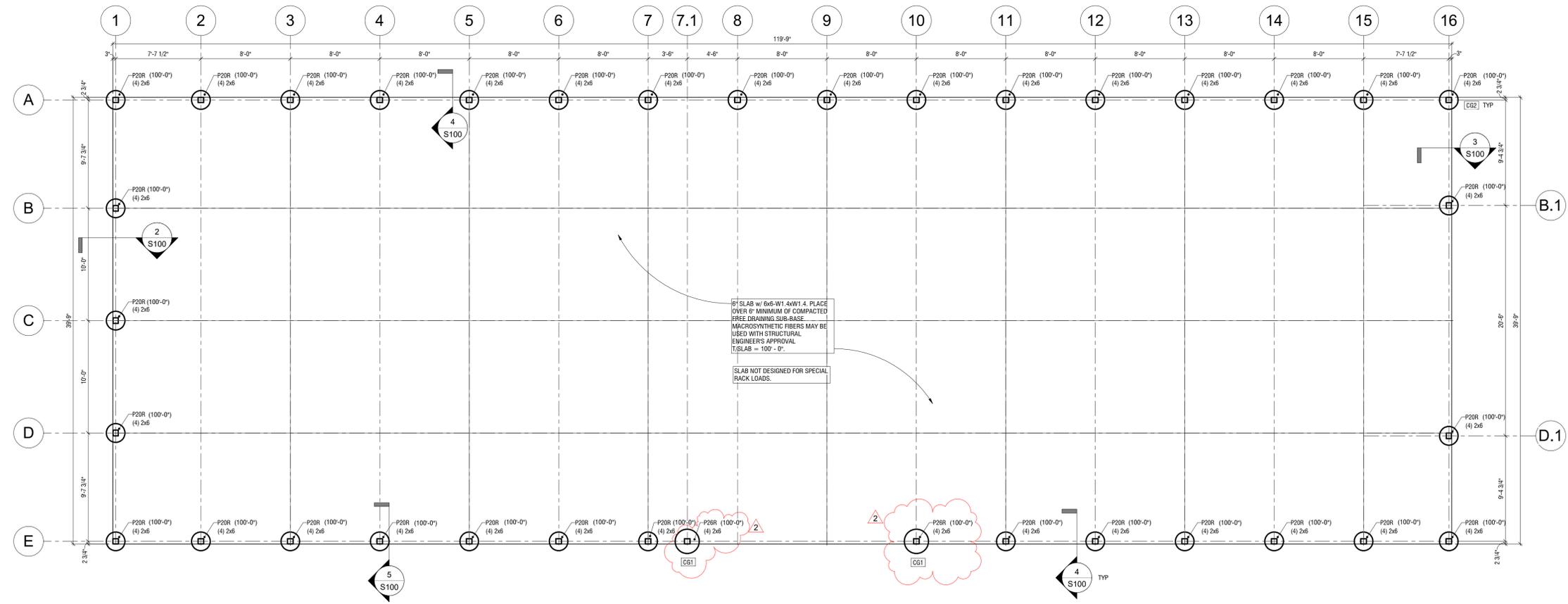
3 THICKENED SLAB AT WOOD SHEAR WALL
S100 3/4" = 1'-0"



2 THICKENED SLAB AT SWM1
S100 3/4" = 1'-0"



CONSTRUCTION JOINT



PROJECT INFORMATION:

20171 GREAT LAKES COMPONENTS

203 W CENTRALIA ST
ELKHORN, WISCONSIN
53214

DRAWING ISSUANCE:

CONSTRUCTION DOCUMENTS

REVISIONS

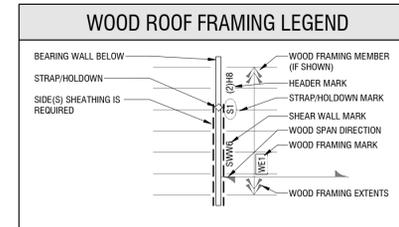
#	DATE	DESCRIPTION
1	FEB 12 2020	Revision 1
2	MAR 1 2021	Revision 2

MAR 1 2021

PROJECT NUMBER 20171 PROJECT MANAGER PDR

FOUNDATION PLAN

S100

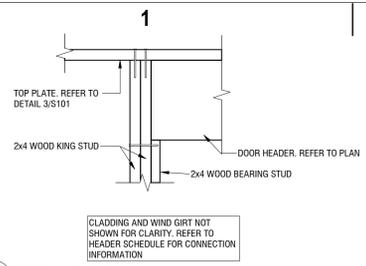


WOOD ROOF FRAMING PLAN NOTES

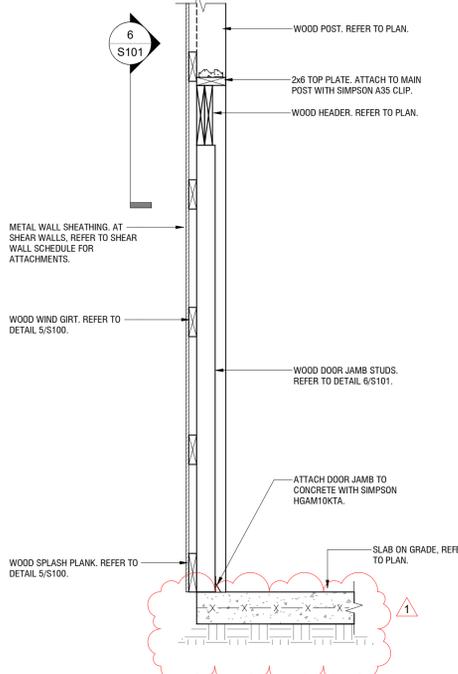
- REFER TO ARCHITECTURAL PLANS FOR ROOF TRUSS BEARING LOCATION.
- PROVIDE 29 GAGE FABRIL GRANDRIB 3 METAL ROOF SHEATHING. AT ROOF DIAPHRAGM EDGES ATTACH SHEATHING TO FRAMING WITH A #10x1" AT 8" o/c. AT TOP AND BOTTOM OF ROOF DIAPHRAGM, ATTACH SHEATHING TO FRAMING WITH A #10x1" ON BOTH SIDES OF MAJOR RIBS (INCLUDING AT LAP JOINT). IN THE FIELD ATTACH SHEATHING TO FRAMING NEXT TO ALL MAJOR RIBS WITH A #10x1" AT 24" o/c. IN THE FIELD AT LAP JOINTS, ATTACH SHEATHING TO FRAMING WITH #12x14" AT 8" o/c AND A #10x1" NEXT TO ALL MAJOR RIBS (INCLUDING AT LAP JOINTS) AT 24" o/c.
- REFER TO GENERAL NOTES AND SNOW DRIFT PLANS FOR ROOF LOADS.
- REFER TO TYPICAL DETAILS FOR GABLE END WALL BRACING.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING SIZE OF OPENINGS w/ TRUSS FABRICATOR IF THEY DO NOT FIT BETWEEN TRUSSES.
- SHEAR WALLS ARE DESIGNATED AS "SWG4." REFER TO SHEAR WALL SCHEDULE FOR ATTACHMENTS.
- HEADERS ARE DESIGNATED "H6." REFER TO HEADER SCHEDULE. NUMBER OF PILES ARE DESIGNATED IN PARENTHESIS. HEADERS OCCUR IN WALL FRAMING UNLESS NOTED OTHERWISE.
- STRONGBACK BRACING FOR TRUSSES SHALL BE PROVIDED FOR THE FULL-LENGTH OF BUILDING. REFER TO TRUSS ERECTION DRAWINGS.

WOOD ROOF FRAMING PLAN KEYED NOTES

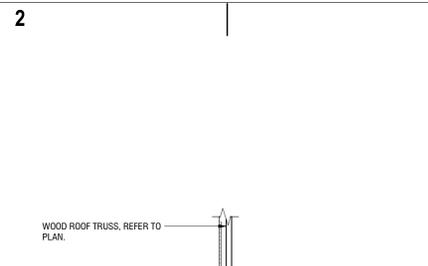
KEYNOTE	DESCRIPTION
WR1	ROOF TRUSSES AT 8'-0" o/c MAX. TRUSS DESIGN BY SUPPLIER. REFER TO GENERAL NOTES FOR CRITERIA.
WR2	2x6 PURLINS. REFER TO PLAN FOR SPACING. EACH PURLIN TO BE FULLY RECESSED AND ATTACHED TO ROOF TRUSS WITH SIMPSON PF268 (AT MIDDLE TRUSSES) OR PF268 (AT EDGE TRUSS) HANGERS.
WR4	RUN 3'-4" LONG SIMPSON CS14 STRAP CENTERED ON WOOD TRUSS ACROSS TOP OF PURLINS. ATTACH TO PURLINS WITH (36) 8d NAILS.
WR5	RUN 2'-8" LONG SIMPSON CS16 STRAP CENTERED ON WOOD TRUSS ACROSS TOP OF PURLINS. ATTACH TO PURLINS WITH (26) 8d NAILS.
WR6	RUN 1'-8" LONG SIMPSON CS20 STRAP CENTERED ON WOOD TRUSS ACROSS TOP OF PURLINS. ATTACH TO PURLINS WITH (16) 8d NAILS.
WR7	RUN 1'-7" LONG SIMPSON CS20 STRAP ACROSS TOP OF PURLIN AND FACE OF TRUSS. ATTACH WITH (6) 8d NAILS INTO TRUSS AND (8) 8d NAILS INTO PURLIN. REFER TO DETAIL 4/S101.
WR8	ATTACH TOP OF COLUMN TO PURLIN WITH (2) 2x6 BRACES SIMILAR TO 1/S101. TOE NAIL TO PURLIN WITH (3) 16d NAILS FOR EACH BRACE.



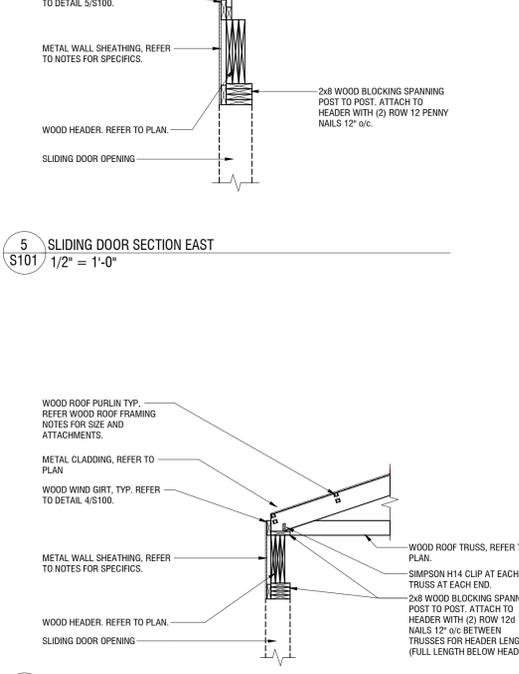
6 DOOR HEADER DETAIL
S101 1/2" = 1'-0"



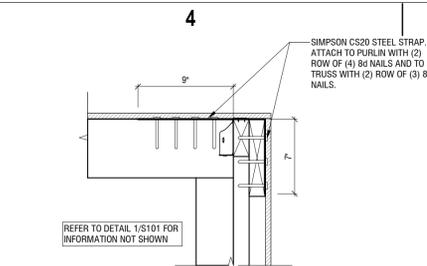
3 DOOR HEADER
S101 3/4" = 1'-0"



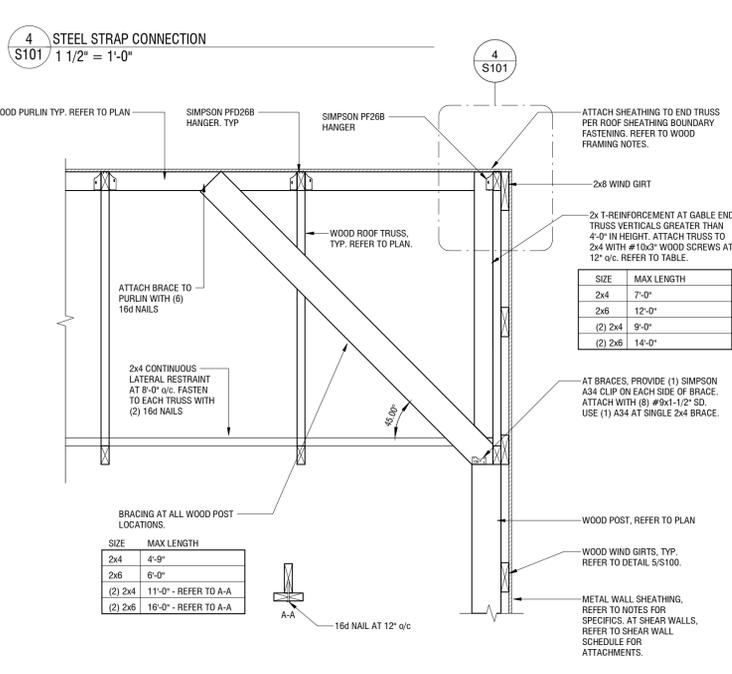
5 SLIDING DOOR SECTION EAST
S101 1/2" = 1'-0"



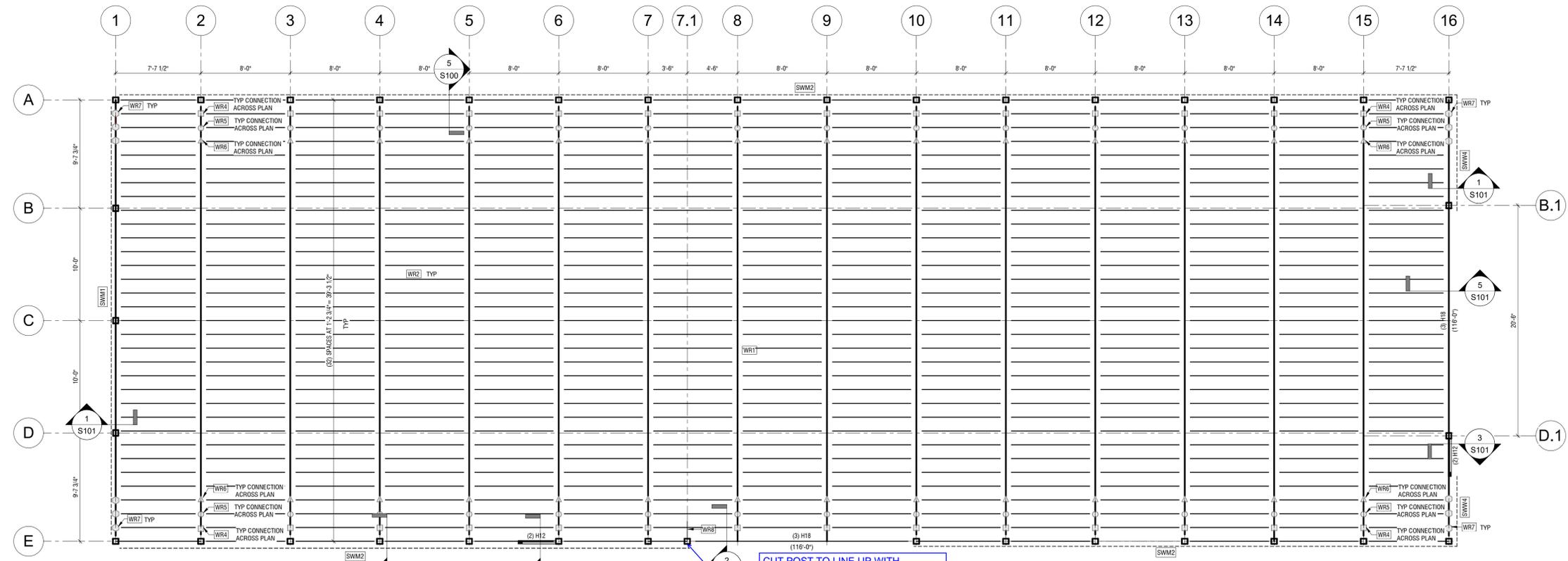
2 SLIDING DOOR SECTION SOUTH
S101 3/8" = 1'-0"



4 STEEL STRAP CONNECTION
S101 1 1/2" = 1'-0"



1 GABLE END WALL BRACING
S101 3/4" = 1'-0"



CUT POST TO LINE UP WITH BOTTOM OF HEADER. HAVE HEADER BEAR ON TOP OF THE ENTIRE WIDTH OF THE POST. ATTACH HEADER TO POST WITH SIMPSON ECC066SDS2.5 COLUMN CAP. HAVE STRAPS ROTATED 90 DEGREES. ATTACH CAP TO BOTH POST AND HEADER WITH (14) 1 1/4"x2 1/2" SDS SCREWS EACH.



PROJECT INFORMATION:

20171 GREAT LAKES COMPONENTS

203 W CENTRALIA ST
ELKHORN, WISCONSIN
53214

DRAWING ISSUANCE:

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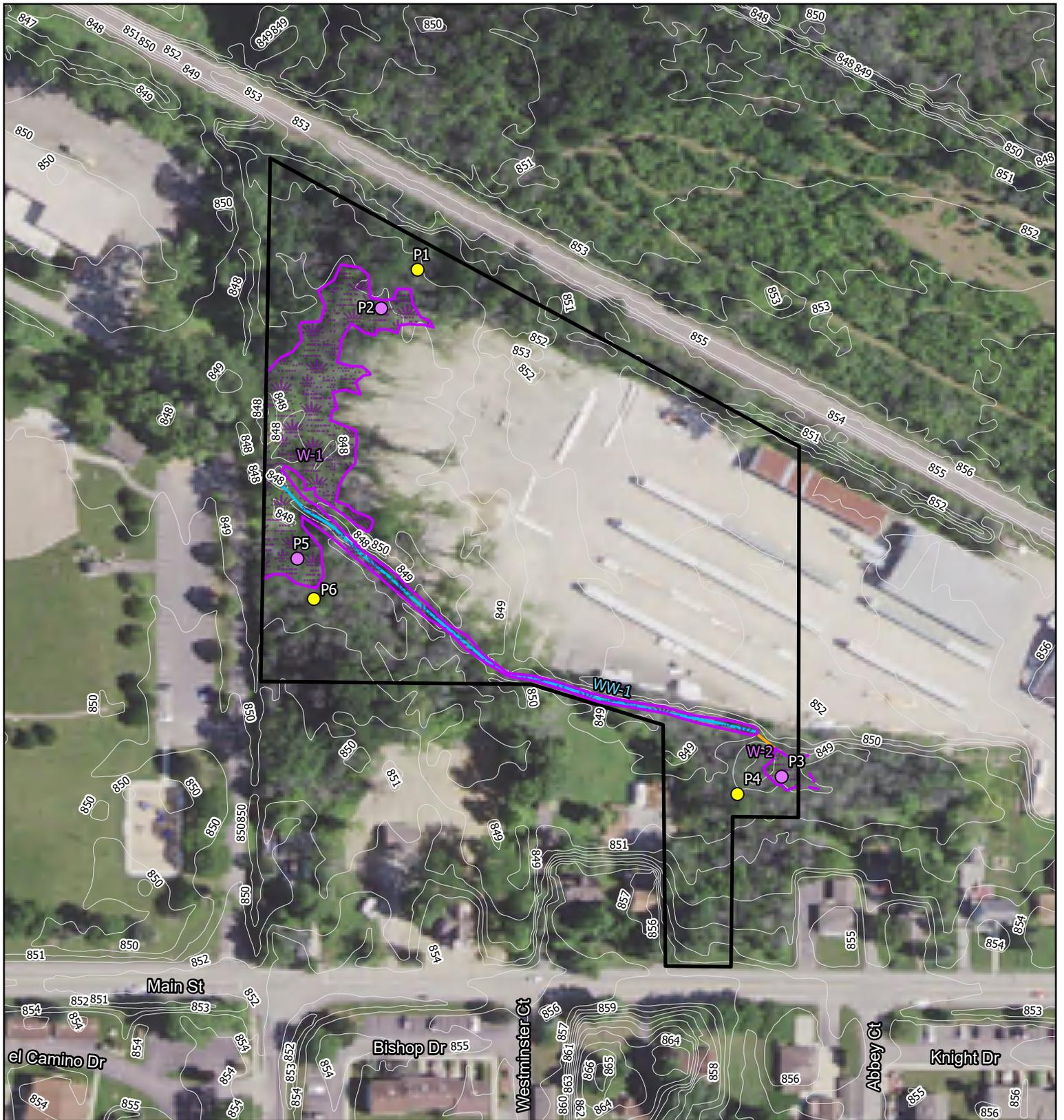
#	DATE	DESCRIPTION
1	FEB 12 2020	Revision 1

MAR 1 2021

PROJECT NUMBER 20171 PROJECT MANAGER PDR

ROOF FRAMING PLAN

S101



- Study Area (7.02 ac)
 - Field Delineated Wetlands (0.80 ac)
 - Off-site Wetland Boundary
 - Culvert
 - Washington Co 1' Contours
 - Waterway
- Sample Points**
- Upland
 - Wetland



Heartland
ECOLOGICAL GROUP INC

Figure 6. Field Map
 Germantown Property
 Project #20210553
 T9N, R20E, S22
 V Germantown,
 Washington Co
 2020 NAIP
 Washington Co, HEG

