PERMIT

CITY OF NAPOLEON - BUILDING DEPARTMENT

255 West Riverview Avenue, Napoleon, Ohio 43545 - 419-592-4010

Permit No. 01945 Issued 4-2-90 (date)

Job Location 935 Harmony ~~Greg~~ Gary Wrls (address)

Lot 24 Brickyard Subdivision (sub-div or legal discript)

Issued By Eldon Huber (building official)

Owner Four Seasons Homes 599-0836 (name / tel.)

Address PO Box 413

Agent Four Seasons HOmes 599-0836 (builder-eng.-etc. / tel.)

Address PO Box 413

Description of Use Residence

Residential 1 (no. dwelling units)

Commercial ____ Industrial ____

New X Add'n. ____ Alter ____ Remodel ____

Mixed Occupancy ____

Change of Occupancy ____

Estimated Cost $ 65,000.00

FEES	BASE	PLUS	TOTAL
[X] BUILDING	9.00	158.00	167.00
Underground			225.00
[X] ELECTRICAL	15.00	48.00	63.00
[X] PLUMBING	9.00	27.00	36.00
[X] MECHANICAL	18.00	2.00	20.00
[X] DEMOLITION			
[ ] ZONING	5.00		5.00
[X] SIGN			
[ ] WATER TAP	375.00		375.00
SEW. INSP.			
SEWER TAP	60.00		60.00
TEMP. WATER	5.00		5.00
TEMP. ELECT.	10.00		10.00
20 Copies @ .25			5.00
ADDITIONAL PLAN REVIEW Struct. ____ hrs ____			
ADDITIONAL PLAN REVIEW Elect. ____ hrs ____			
TOTAL FEES			971.00
LESS MIN. FEES PAID ____ (date)			____
BALANCE DUE			

ZONING INFORMATION

district	lot dimensions	area	front yd	side yds	rear yd
A	72 X 100	7200	30'	L-8' R-17'	29

max hgt	no pkg spaces	no ldg spaces	max cover	petition or appeal req'd	date appr
35'	2-min		35%	None required	

WORK INFORMATION:

Size: Length 40'9" Width 51'5" Stories 1 Garage Fl. Area 400 Ground Floor Area 1225

Height ____ Building Volume (for demo. permit) ____ cu. ft.

Electrical: 150 AMP U.C. Service and 16 new circuits (brief description)

Plumbing: New 2-bath, kitchen and laundry (brief description)

Mechanical: 100,000 Natural gas fired furnace (brief description)

Sign: ____ (type) Dimensions ____ Sign Area ____

Additional Information: New construction

PAID

APR 16 1990

CITY OF NAPOLEON

Date ____ Applicant Signature Daniel Brubaker (owner-agent)

White-Building Department Yellow-Applicant Pink-Electrical Inspector Green-Clerk-Treasurer Gold-County Auditor

INSPECTION RECORD

	UNDERGROUND			ROUGH-IN						FINAL		
	Type	Date	By	Type	Date	By	Type	Date	By	Type	Date	By
PLUMBING	Building Drains			Drainage, Waste & Vent Piping	6/22	EH	Indirect Waste			Drainage, Waste & Vent Piping	~~7/20~~	~~BD~~
	Water Piping									Backflow Prevention		
	Building Sewer			Water Piping	6/22	EH	Condensate Lines			Water Heater	~~7/20~~	~~BD~~
	Sewer Connection									FINAL APPROVAL	~~7/20~~	~~BD~~
MECHANICAL	Refrigerant Piping			Refrigerant Piping			Chimney(s)			Grease Exhaust System		
				Duct Furnace(s)			Fire Dampers			Air Cond. Unit(s)		
	Ducts/ Plenums			Ducts/ Plenums			☐ Radiant Htr(s) ☐ Unit Htr(s)			Refrigeration Equipment		
				Duct Insulation			Pool Heater			Furnace(s)	9/20	BD
				Combustion Products Vents			Ventilation ☐ Supply ☐ Exhst.			FINAL APPROVAL	9/20 ~~7/20~~	BD ~~BD~~
ELECTRICAL	Conduits & or Cable			Conduits/ Cable			☐ Range ☐ Dryer			Temp Service Temp Lighting		
	Grounding & or Bonding			Rough Wiring			☐ Generator(s) ☐ Motors			Fixtures Lampholders		
	Floor Ducts Raceways			Service Panel Switchboard			☐ Water Htr ☐ Welder			Signs		
	Service Conduit			Busways Ducts			☐ Heaters ☐ Heat Cable			Electric Mtr. Clearance		
	Temporary Power Pole			Subpanels			☐ Duct Htr(s) ☐ Furnace(s)			FINAL APPROVAL	9/20 ~~7/20~~	BD ~~BD~~
BUILDING	Location, Set-backs, Esmt(s)		EH	Exterior Wall Construction		EH	Roof Covering Roof Drainage	6/22	EH	Smoke Detector		
	Excavation		EH				Exterior Lath			Demolition (sewer cap)		
	Footings & Reinforcing						☐ Interior Lath ☐ Wallboard					
	Floor Slab			Interior Wall Construction		EH	Fire Wall(s)			Building or Structure		
	Foundation Walls		EH	Columns & Supports			Fireplace Chimney					
	Sub-soil Drain			Crawl Space ☒ Vent ☒ Access		EH	Attic ☒ Vent ☒ Access	6/22	EH			
	Piles			Floor System(s)	*	EH				FINAL APPROVAL BLDG. DEPT.	~~7/20~~	~~BD~~
				Roof System			Special Insp Reports Rec'd			Certificate of Occupancy Issued	10/10	BD

PAID

INSPECTIONS, CORRECTIONS, ETC.			INSPECTIONS, CORRECTIONS, ETC.		
Secio Bulk Brand Jn 1871	5/9	EH			

CITY OF NAPOLEON

RESIDENTIAL PLAN CORRECTION SHEET

CITY OF NAPOLEON
255 West Riverview Ave.
Napoleon, Ohio 43545
419/592-4010

ADDENDUM TO Permit No. 01945 - (1)
Owner FOUR SEASONS HOMES
Contractor FOUR SEASONS HOMES
Location 935 HARMONY

Please note the items checked below and incorporate them into your plans as indicated: ☐ PERMIT NOT YET ISSUED, CORRECT PLANS AND RE-SUBMIT. ☒ PERMIT ISSUED, INCORPORATE ITEMS DURING CONSTRUCTION.

	GENERAL
	Provide approved smoke detector(s) as req'd.
X	Provide ½" gypsum wallboard between dwelling and garage, on garage side.
X	Provide min. 1 3/8" solid wood door from garage to dwelling. (or equal)
	Submit fully dimensioned plot plan.
	Provide min. of 1-3'0" x 6'8" exit door.
X	Provide min. 22" x 30" attic access opening.
X	Provide min. 18" x 24" crawl space access opening.
	Provide approved sheathing or flashing behind masonry veneer.
	Provide min. 15# underlayment on roof.
	Provide adequate fireplace hearth.
	Install factory built fireplaces/stoves according to manufacturers instructions.
	Terminate chimney 2' above roof or 2' above highest point of building within 10' of chimney.
	LIGHT AND VENTILATION
X	Provide mechanical exhaust or window in bathroom _____.
	Provide min. 720 Sq. In. net free area attic ventilation.
X	Provide min. 116 Sq. In. net free area crawl space ventilation. W/ VAPOR BARR + 1-VENT 3' FR EA CORNER
	FOUNDATION
	Min. depth of foundation below finished grade is 32".
	Min. size of footer _____" x _____".
X	Provide anchor bolts ½" @ 6' o.c. 1' from each corner. Embedded 7" in concrete and 15" in masonry.
	Show size of basement columns.
	FRAMING
	Show size of wood girder in _____.
	Provide design data for structural member in _____.
	Floor joists undersized in _____.
X	Provide double joists under parallel bearing partitions.
X	Provide 1" x 4" let in corner bracing, approved sheathing, or equal.
	Show size of headers for openings over 4' wide _____.
	Show size of members supporting porch roof.
	Provide double top plate for all bearing partitions and exterior walls.
	Provide design data for prefab wood truss.
	Ceiling joists undersized in _____.
	Roof rafters undersized in _____.
	PLUMBING AND MECHANICAL
X	Terminate all exhaust systems to outside air.
X	Insulate ducts in unheated areas.
X	Provide backflow prevention device on all hose bibs.
X	Terminate pressure and temperature relief valve drain in an approved manner.
	Provide dishwasher drain with approved air gap device.
	METAL VENEERS
	Contact City Utilities Dept. to remove conductors and/or meter.
	Provide approved system of grounding and bonding.
	ELECTRICAL
	Show location of service entrance panel and service equipment panel.
X	G. F. C. I. req'd. on temporary electric.
X	Outdoor, bathroom and garage recepticles shall be protected by G. F. C. I. + KITCHEN
X	Maximum number of recepticles permitted on a G. F. C. I. circuit shall be 10 for 20 A. circuits and 7 for 15A. circuits.
X	Refrigerators, microwaves, washers, disposal, furnace and air conditioners shall be on separate circuits.

INSPECTIONS

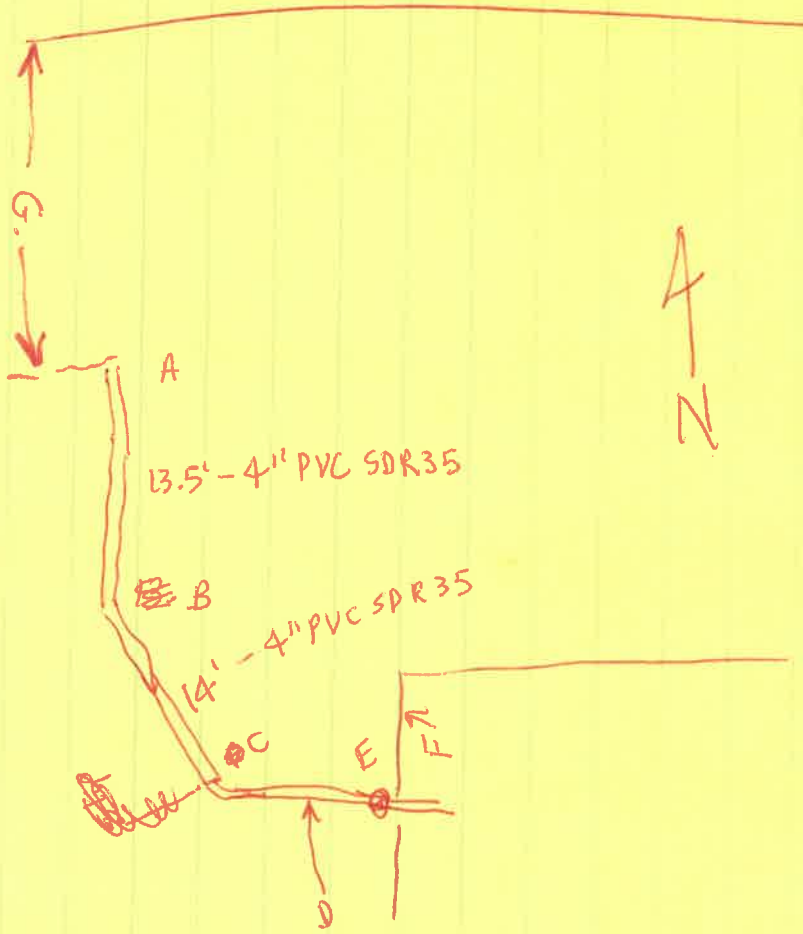
The following indicated inspections are required. The owner or his agent shall contact the City Building Dept. at least 24 hrs. prior to the time the inspection is to be made.

X	Footers and Setbacks.	X	Building sewer.
X	Foundation.	X	HVAC rough-in.
X	Plumbing rough-in.	X	Final Building
X	Plumbing final.		other,
X	Electrical service.	X	BUILDING FRAMING
X	Electrical rough-in.		
X	Electrical final		

Additional Corrections. BEDROOM EXIT WINDOWS MIN. HT. SILL 24", WD. 20" AREA 5.7 SQ. FT., PROVIDE 2 - 1½" x 18" ANCHOR BOLTS PER CRAWL SPACE PIER TO ATTACH THE GIRDER

The approval of plans and specifications does not permit the violation of any section of the Building Code or other City Ordinance. This addendum is attached to Permit No. 01945 and made a part there-of. DATE APPROVED OR DISAPPROVED 4-2-90 Checked by ELDON HOSER
Plan Examiner.

935 Harmony Dr ← Harmony Drive →



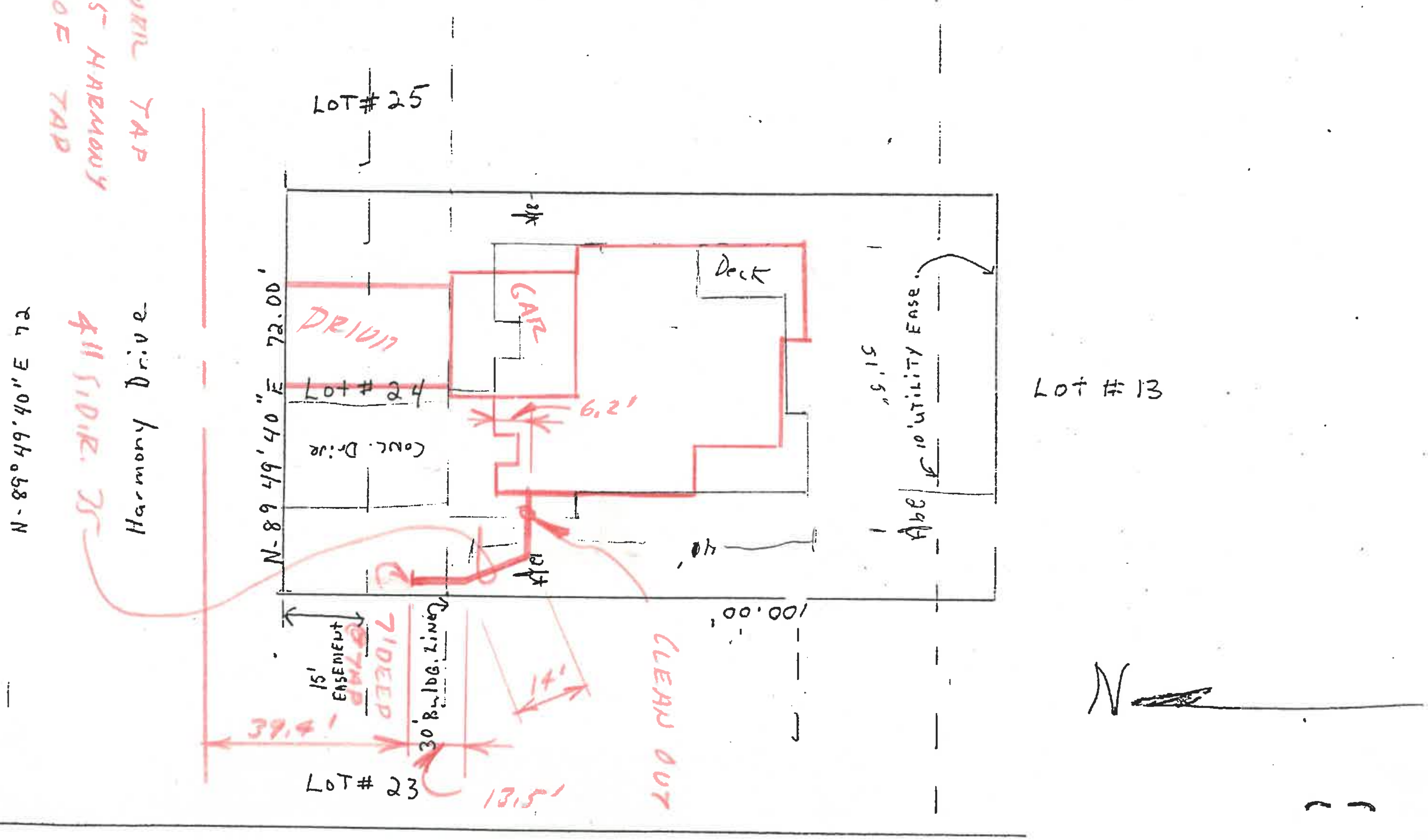
by ROF & Sonny
19 April 90

A = 7' to the top of Sewer
B = 45° Elbow @ 3.3' Cover
C = 45° Adaptor with slip joint
D = PVC Sch 40
C = 3.5' below top block wall to top of Pipe
B = 45° PVC SDR 35
D = 45" From wall to ℄ Elbow
E = 4" Vertical Cleanout
F = 6'2" From Corner of House to ℄ Cleanout
G. = 39.4' From ℄ of Street to ~~top~~

Where Contractor Connected to Tap made before at this point goes from 6" to 4" with a gasket toward Street and a glued joint toward the house

SITE PLAN FOR
FOUR SEASON HOMES
LOT #24 PHASE I BRICKYARD
SUBDIVISION, CITY OF NAPOLEON, HENRY CO. OHIO

ALSO SEE SEWER TAP
PLAN FOR 945 HARMONY
FOR BALLANCE OF TAP



SEWER TAPPING PERMIT
Issued by
The City of Napoleon Engineering Dept.
255 West Riverview Ave. Napoleon, Ohio 43545 Ph. 592-4010

Entry No. _____

Permit No. S.A.-133 Issued 4-3-90 Build. Permit No. 01995

Job Location 935 Harmony Drive

Lot 24 BRICKYARD
sub div. or legal disc.

Issued By _____

Owner Four Seasons Homes Ph. 595-0270

Address P.O. Box 413

Agent FOUR SEASONS HOMES Ph. 592-0271

Address P.O. BOX 413

X Permit Fee $ 60.02

___ Street Bond $ _____

___ Date Paid _____

for office use only

WORK INFORMATION

Sanitary Sewer Tap X (yes) ____ (no) Size of Tap 4" Size and Type of Sewer _____ Street to be Opened ____ (yes) X (no)

Storm Sewer Tap X (yes) ____ (no) Size of Tap 9" Size and Type of Sewer A.D.S. Street to be Opened ____ (yes) X (no)

Street opening Agreement Approval Date _____ Opening Bond Fee (Set by Engineer) _____

READ AND SIGN BELOW; The undersigned hereby agrees complete the work described above and to make use of said sewers only as allowed by and in strict accordance with all applicable provisions of The Napoleon Engineering Dept. Rules and Regulations, The Napoleon Standard Specification for Water Main, Sanitary Sewer and Storm Sewer Construction and other Pertinent Sections of the Napoleon Code of Ordinances.

Date April 2, 1990 Signature of Applicant Daniel Burbaker
Permit not valid without signature

INSPECTION RECORD ---------- to be completed by the Field Inspector

Date Inspection is made 4-19-90 Size and Type of Sewer 4" SIDR 35

Location SEE PLAN Depth SEE PLAN Type of Test WOND Additional Information _____

Date 4-19-90 Inspected By SONNY HELDORF & R.O.F.
signature of inspector

Sketch Of Installation on Back or Attached

No. 335

CERTIFICATE OF OCCUPANCY

THE CITY OF NAPOLEON

ENGINEERING DEPARTMENT

DIVISION OF INSPECTION

This is to certify that the Building or Land as herein described complies with all the building and health laws and ordinances and with the provisions of the Zoning Ordinance.

Location of Occupancy 935 Harmony Drive Occupancy Single Family

Owner of Property Gary Weis Address 935 Harmony Dr.

Issued to Same Address

Zoning A-Residential district. Bldg. Permit No. 1975

Substantial qualifications of occupancy all final inspections complete and approved.

This certificate is issued by the City Building Inspector, as provided by law, and is to certify that construction is completed substantially in conformity with the approved plans and permission is hereby granted to occupy such building in compliance wth such legal use and occupancy as authorized under the provisions of the ordinances of the City of Napoleon.

Issued this tenth day of October 19 91

This is a valuable record for owner or lessee and should be so preserved.

Signed Brent M Zimmerman
City Building Inspector

APPLICATION
for
RESIDENTIAL BUILDING, ELECTRICAL, PLUMBING, MECHANICAL, PERMITS and DEMOLITION PERMIT
from the
CITY OF NAPOLEON - BUILDING DEPARTMENT
255 West Riverview Ave. Napoleon, Ohio 43545 Ph. 419-592-4010

Entry No. _____

Permit No. 01945 Issued 4-2-99

Job Location 935 HARMONY

Lot 24 Brickyard Sub-Div
sub-div. or legal disc.

Issued By FH
building official

Owner Four Seasons Homes Ph 599-0336

Address P.O. Box 413 Napoleon

Agent FOUR SEASONS HOMES Ph 599-0336

Address P.O. BOX 413 NAP

Description of Use Resident E

Residential 1
no. dwelling units

Commercial _____ Industrial _____

New X Add'n. _____ Alter _____ Remodel _____

Mixed Occupancy _____

Change of Occupancy _____

Estimated Cost $ 65,000

-ZONING INFORMATION

district	lot dimensions	area	front yd	side yds.	rear yd
A	72 x 100	7200 S.F	30'	L-8' R-17'	28'

max hgt	no pkg spaces	no ldg spaces	max cover	petition or appeal req'd.	date appr
35'	2-MIN		35%	NONE REQ.	

Ck.	Permits Req.	Fees Base	Fees Plus	Total
X	Building	9.00	158.00	167.00
X	Electrical UNDERGROUND	15.00	48.00	225.00 / 63.00
X	Plumbing	9.00	27.00	36.00
X	Mechanical	18.00	2.00	20.00
	Demolition			
X	Zoning	5.00		5.00
	Sign			
X	Water tap	375.00		375.00
X	Sewer Tap	60.00		60.00
X	Temp. Water	5.00		5.00
X	Temp. Elec.	10.00		10.00
	Additional plan review struc.	20 COPIES @ .25	hrs	5.00
	Elect.		hrs	
	Total Fees			971.00
	Less Min. Fees Pd.			
	Balance Due			

WORK INFORMATION:
BUILDING: Garage Fl. Area 400 Basement Fl. Area 0 Second Floor Area 0

Size: Length 40' 9" Width 51' 5" Stories 1 Ground Floor Area ~~1983~~ 1225

Height _____ Building Volume (for demo. permit) _____ cu. ft.

Description of Work: New Construction

Continue on Back Side for Electrical, Plumbing and Mechanical and other Information;

ELECTRICAL: Electrical Contractor Four Seasons Homes Pn. _____

Address P.O. Box 413 Estimated Cost $ 3000 —

Type of work: New X Service change ____ Rewiring ____ Additional Wiring ____ Temp. Elec. Req. ____ yes ____ no

Size of service 150 Amp Underground X Overhead ____ No. of new circuits 16

Description of work: ~~New~~ 150 AMP U.G. SERV & 16 CIRCUITS

PLUMBING: Plumbing Contractor Four Seasons Homes Pn. _____

Address P.O. Box 413 Estimated Cost $ _____

Water Tap Req. X yes ____ no Size 1" Type of Pipe Plastic Water Dist. Pipe _____ type

San. Sewer Tap Req. X yes ____ no Size _____ Type of Pipe _____ Dr.Waste Vt.Pipe _____ type

St. Sewer Tap Req. X yes ____ no Size _____ Type of Pipe PVC Street to be Opened ____ yes ____ no

Main Building Drain Size _____ Main Vent Pipe Size _____ List Number of Plumbing Fixtures Below

Water Closets 2 Bathtubs 2 Showers ____ Lavatories 2 Kitchen Sinks 1 Disposal 1 Dishwasher 1 Clothes Washer ____

Floor Drains 0 Other Fixtures: Type _____ No. ____

Description of Work: New 2 - BATH KITCHEN & LAUNDRY

MECHANICAL: Mechanical Contractor Dameer Pn. _____

Address _____ Estimated Cost _____

Heating System: Forced Air X Gravity ____ Hot Water ____ Steam ____ Unit Heaters ____ Radiant ____ Baseboard ____

Type of Fuel: Electric ____ Natural Gas X Propane ____ Wood ____ Coal ____ Solar ____ Geothermal ____ Other _____

No. of Heat.Zones ____ Hot Water: (One Pipe ____ Two Pipe ____ Series Loop ____) Electric Heat: (No of Circuits ____) No. of Furnaces 1

No. of Hot Air Runs 10 No. of Hot Water Radiators ____ Total Heat Loss _____ Rated Capacity of Furnace/Boiler X 100,000 BTU

Location of Heating Units: Crawl Space ____ Floor Level ____ Attic ____ Suspended ____ Roof ____ Outside ____ Other GARAGE

Description of Work ~~New~~ 100,000 NAT. GAS FIRED FURNACE

DRAWINGS REQUIRED: All Applications must be Accompanied by Two Complete sets of Drawings Including SITE PLAN, FOUNDATION PLAN, FLOOR PLANS, STRUCTURAL FRAMING PLANS, EXTERIOR ELEVATIONS, SECTIONS and DETAILS, STAIR DETAILS, ELECTRICAL LAYOUT, PLUMBING ISOMETRIC, HEATING LAYOUT ETC. All plans shall be DRAWN TO SCALE. Show all existing structures on the site plan also, show Electric Panel and Furnace Locations.

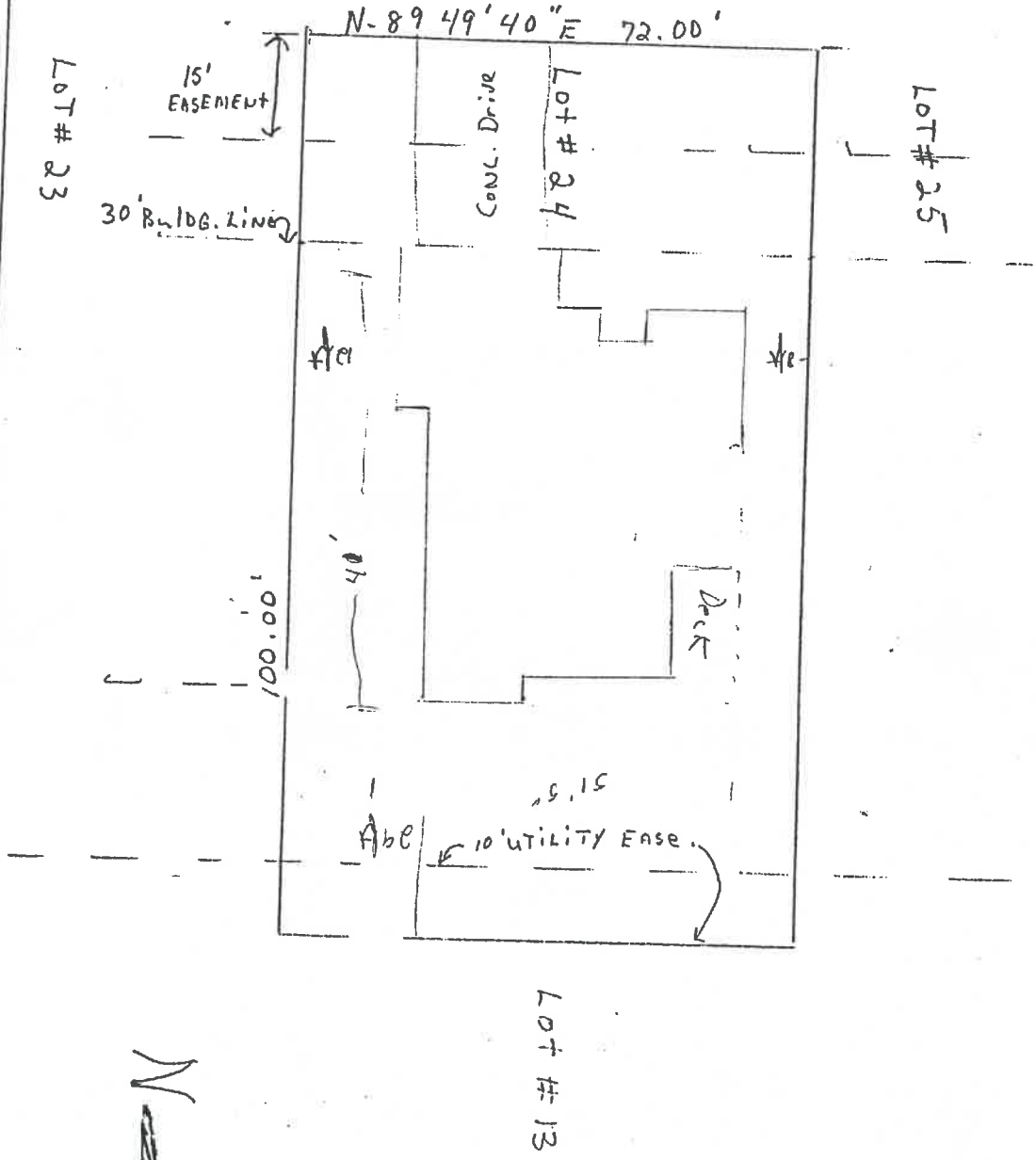
READ AND SIGN BELOW; The undersigned hereby makes application for a permit for all work described herein, and agrees to complete the work in strict accordance with all applicable provisions of the current edition of the C.A.B.O. Building Code, the Napoleon Building and Zoning Codes, the Napoleon Engineering Dept. Rules and Regulations, Standard Specifications and other Pertinent Sections of the Napoleon Code of Ordinances.

Date _____ Signature of Applicant Greg Hamm

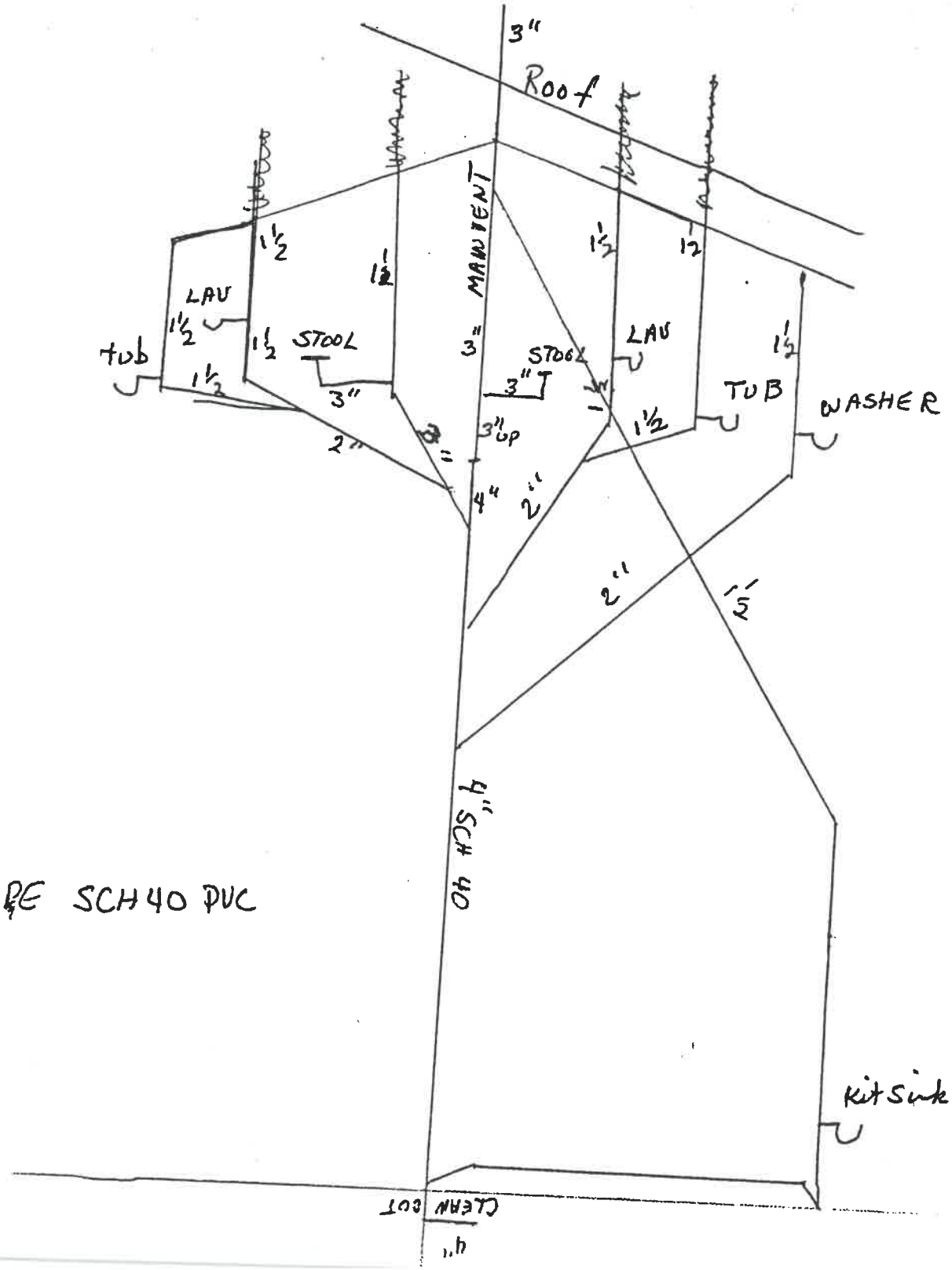
Application not valid without signature

N-89°49'40"E 72

Harmony Drive

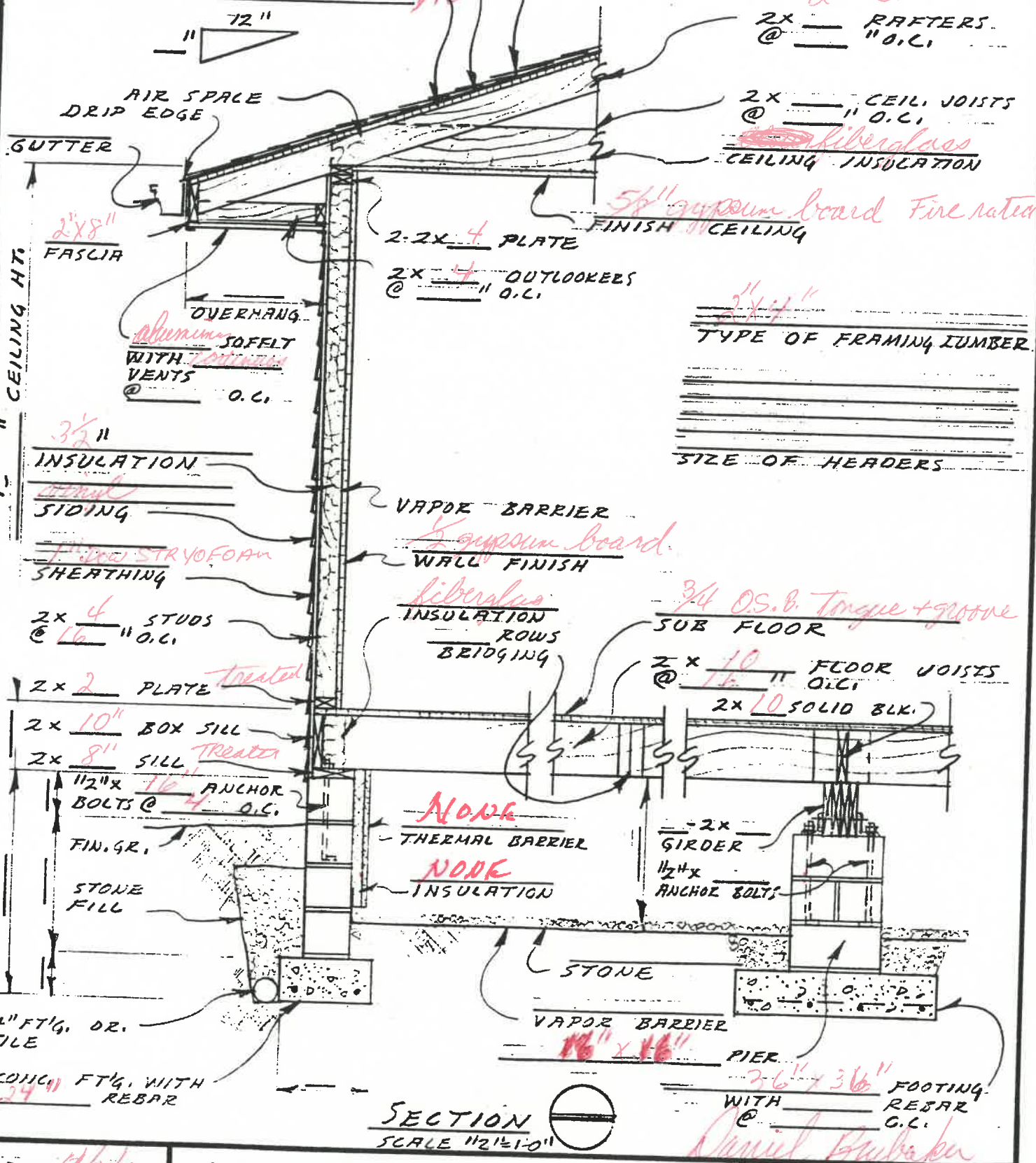


SITE PLAN FOR
FOUR SEASON HOMES
LOT #24 PHASE II BRICKYARD
SUBDIVISION, CITY OF NAPOLEON, HENRY CO. OHIO



ALL PIPE SCH 40 PVC

NAPOLEON BUILDING DEPARTMENT (SAMPLE DRAWING)



SECTION
SCALE 1 1/2" = 1'-0"

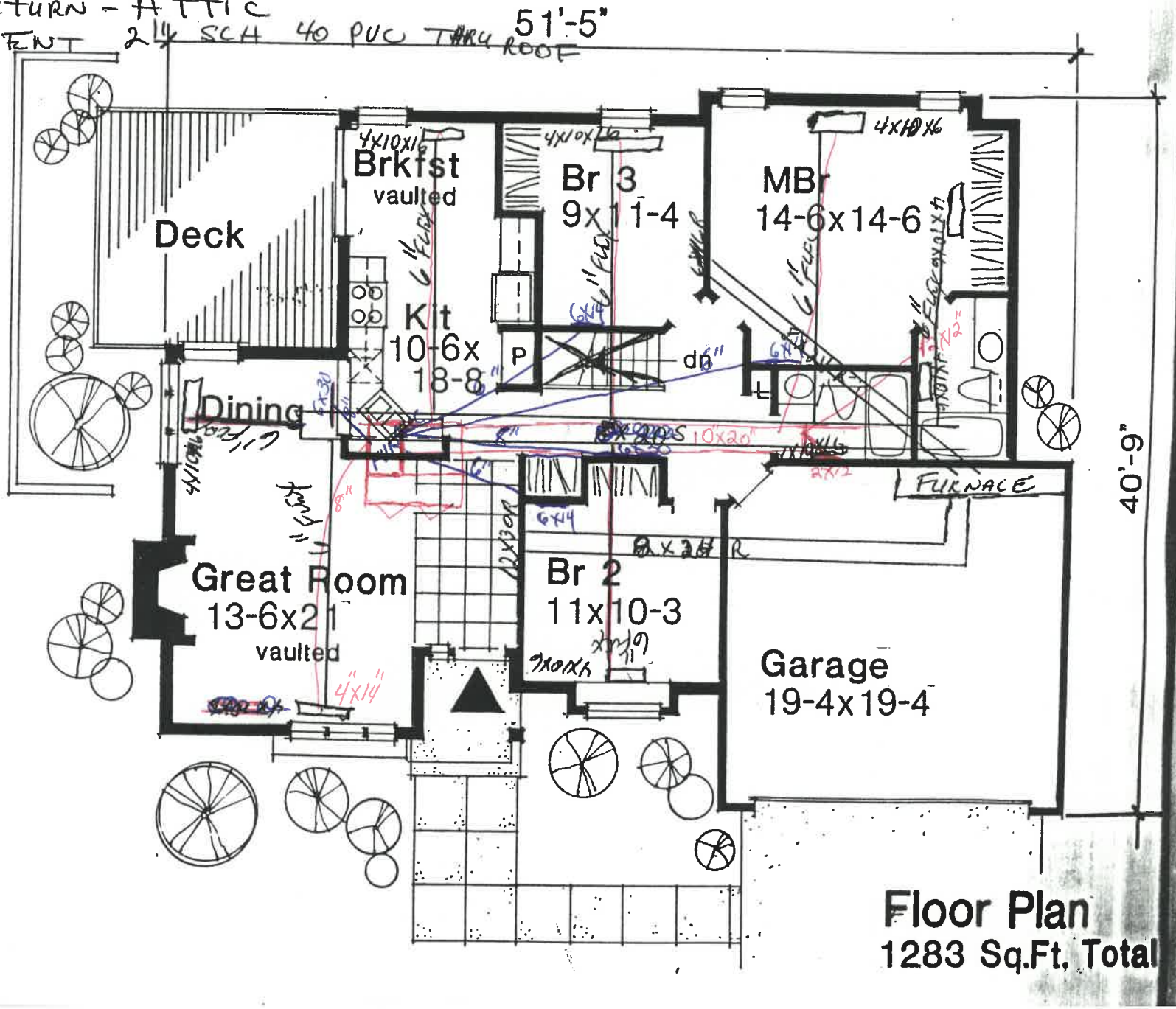
DATE 4/2/90	WALL SECTION @ CRAWL SPACE	DWG. No OF

Daniel Barker

Four Seasons P.O. Box 413 Napoleon 599-0826

4-11-89 5/4

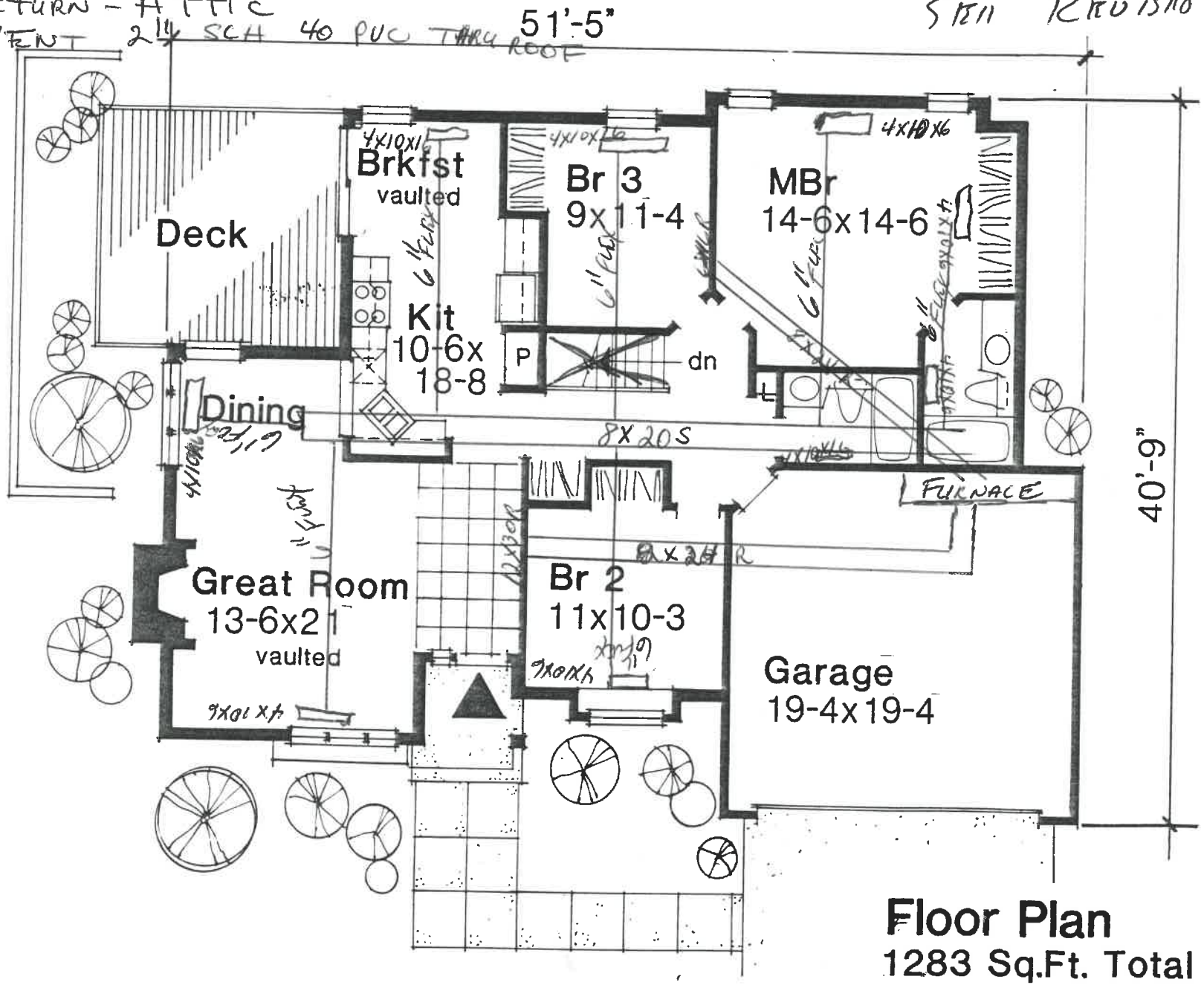
FURNACE - HEDF ~~100~~ 60 ~~CLARK~~ TRANE DOWN FLOW HI EFFEC.
DUCT - FIBLERGLAS DUCTBOARD
RUNS - INSULATED FLEX DUCT
SUPPLY - CRAWL SPACE
RETURN - ATTIC
VENT 2" SCH 40 PVC THRU ROOF



Floor Plan
1283 Sq.Ft. Total

FURNACE - HEDF 100 CLARE DOWN FLOW HI EFFEC.
DUCT - FIBLERGLAS DUCTBOARD
RUNS - INSULATED FLEX DUCT
SUPPLY - CRAWL SPACE
RETURN - ATTIC
VENT 2" SCH 40 PVC THRU ROOF

VOID
STILL REVISING COD



Floor Plan
1283 Sq.Ft. Total

QUOTE WOLOHAN DEFIANCE #59521 (NM) A STARK TRUSS COMPANY 1556 PERRY DR. SW CANTON OHIO 44706 OH

7 F3-19F
SCALE= 4/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL01 GNQ20	3.0X	5.0	3.75	
2	IN11 GNQ20	1.0X	4.0		
3	PK12 GNQ20	5.0X	5.0	2.00	
4	IN11 GNQ20	1.0X	4.0		
5	HL01 GNQ20	3.0X	5.0	3.75	
6	IN02 GNQ20	5.0X	5.0		
7	IN02 GNQ20	5.0X	5.0		

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

MEMBR FR-TO	FORCE (LBS)	CHORDS HOR DISP FT-IN-SX	SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	WEBS MEMBR FR-TO	WEBS FORCE (LBS)
1- 2	2063C	5- 0- 0	9.000	70.0	0.0	2- 7	340C
2- 3	2063C	5- 0- 0	9.000	70.0	0.0	3- 7	1283T
3- 4	2063C	5- 0- 0	-9.000	70.0	0.0	3- 6	1283T
4- 5	2063C	5- 0- 0	-9.000	70.0	0.0	4- 6	340C
5- 6	1650T	5- 0- 0	0.000	60.0	10.0		
6- 7	938T	10- 0- 0	0.000	120.0	10.0		
7- 1	1650T	5- 0- 0	0.000	60.0	10.0		

MAX. PURLIN SPACE= 0.0 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.
*** PLYWOOD SHEATHING REQUIRED ON TOP CHORD ***

NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

CONC LOAD JT	LBS
1	70
5	70

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.2 KD15 SO. PINE
3- 5	2X 4	NO.2 KD15 SO. PINE
5- 1	2X 8	NO.1 KD15 SO. PINE
ALL WEBS	2X 4	NO.3 S.P.F.

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA

TOP CH. LL= 25 PSF
DL= 10 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 65 PSF

SPACING= 24 IN. C/C

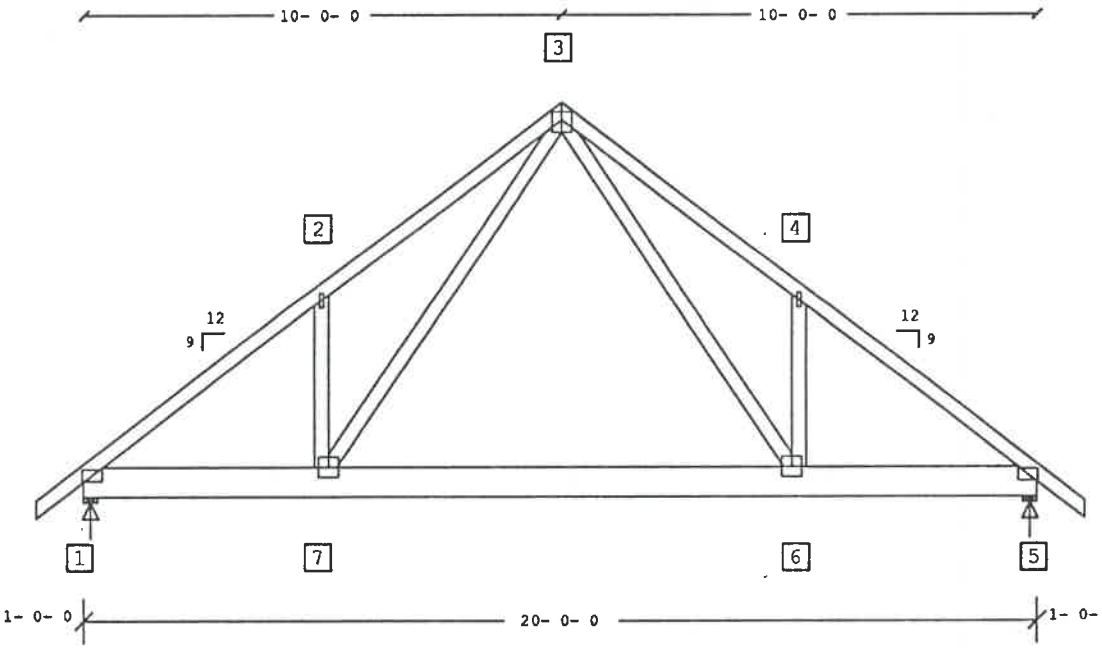
INPUT DEFL. L/360

INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 15 BCH LS= 15

NAIL VALUES(PSI) GROSS

	CHORDS MAX	CHORDS MIN	WEBS MAX	WEBS MIN
GNQ20	228	180	190	140

LEFT OVERHANG = 1- 0- 0
RIGHT OVERHANG= 1- 0- 0



9C-5060-1

-1AA
0.61
0.61
0.65
W

JT	GROSS REACT	BRG IN-SX
1	1670	3- 8
5	1670	3- 8

CAMBER= 0-1/8
OWH= 8- 0 P

Handling & Erection	Miscellaneous Information	Bracing Information	Connector Hardware	Lumber
Careless handling of components shall not be permitted. Temporary and permanent bracing for holding component plumb and for resisting lateral forces shall be designed and installed by others. No loads are to be applied to the component until after all bracing and fastenings are complete. At no time shall loads greater than design loads be applied to the component. Care must be exercised to install component at proper bearing points, right side up, and properly braced. Read all notes hereon and obtain any design assistance indicated. Gang Nail Systems, Inc. exercises no control and accepts no responsibility for the fabrication, handling, shipment and installation of components.	This data sheet and the information hereon is the property of Gang-Nail Systems, Inc. and is not to be copied in whole or in part or used for unauthorized exploitation of the items disclosed herein or in any other way disclosed or used for furnishing information to others The use of this component shall be specified by the designer of the complete structure. Obtain all necessary code compliances, approvals and instructions from the designer of the complete structure before using this component. If the design criteria listed above does not meet local building code requirements, DO NOT USE THIS DESIGN. When this drawing is signed and sealed, Gang-Nail Systems, Inc. is approving only the structural design of the unit shown on the basis of data provided by the customer and shown on this drawing.	All lateral bracing specified is for bracing individual web members and must be installed. Web braces where required are to be equally spaced along web length. Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials. Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.	Connector plates are manufactured in accordance with TPI. Plates must be installed on both faces of the lumber with teeth fully embedded. Plates must be of the size, gauge and capacity shown. Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symmetrically about joints unless other dimensions are shown.	Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified **Design Criteria** The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

STATE OF OHIO
STANLEY E. KOEHLINGER
E-040411
REGISTERED
FEB 7,1990
PROFESSIONAL ENGINEER

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

11
FEB 7,1990 F3-19F

WARNING- VERIFY YOUR INPUT TO AVOID DESIGN AND FABRICATION MISTAKES.
YOU ARE SOLELY RESPONSIBLE FOR ERRORS RESULTING FROM WRONG INPUT

REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

LUMBER HAS BEEN UPGRADED DUE TO DEFLECTION.

13 7
REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM) A
FEB 7,1990 F3-19F

SPAN (OUT TO OUT) 20.000
NO. OF JOINTS 7
LOC. OF REACTIONS 1 5
SHORT TERM INCREASE TCH 1.15 BCH 1.15 WEBS 1.15 PLATES 1.15

TOP CHORD LOAD SHARE = 15 BOTTOM CHORD LOAD SHARE = 15

PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.

TRUSS GEOMETRY AND LOAD DATA

JT	HOR.DISP. FT	VER.DISP. SLOPE/12	VERTICAL UNIF.LD. PLF	VERTICAL CONC.LD. LBS
1	5.0000	9.0000	-70.00	-70.00
2	5.0000	9.0000	-70.00	0.00
3	5.0000	-9.0000	-70.00	0.00
4	5.0000	-9.0000	-70.00	0.00
5	-5.0000	0.0000	-60.00	-70.00
6	-10.0000	0.0000	-120.00	0.00
7	-5.0000	0.0000	-60.00	0.00

TOTAL POSITIVE DISPLACEMENT= 20.00

NO. OF WEBS= 4
2- 7 3- 7 3- 6 4- 6

GROSS REACTIONS(LBS):
RV- 1= 1670.0 RV- 5= 1670.0
RH- 1= 0.0

MEM	FORCE LBS	WID IN.	DEP IN.	FB PSI	FC:FT PSI	Q	P/AF	VM/ZF	HM/ZF	CSI	LAT. BRC
TOP CHORD MEMBERS											
1- 2	-2063.	1.50	3.50	2013	1323	0.90	0.30	0.32	0.00	0.61	0.0
2- 3	-2063.	1.50	3.50	2013	1323	0.90	0.30	0.32	0.00	0.61	0.0
3- 4	-2063.	1.50	3.50	2013	1323	0.90	0.30	0.32	0.00	0.61	0.0
4- 5	-2063.	1.50	3.50	2013	1323	0.90	0.30	0.32	0.00	0.61	0.0
BOT CHORD MEMBERS											
5- 6	1650.	1.50	7.25	2128	966	1.00	0.16	0.26	0.00	0.42	10.0
6- 7	938.	1.50	7.25	2128	966	1.00	0.09	0.52	0.00	0.61	10.0
7- 1	1650.	1.50	7.25	2128	966	1.00	0.16	0.26	0.00	0.42	10.0
WEB MEMBERS											
2- 7	-340.	1.50	3.50	633	445	0.00	0.15	0.00	0.00	0.15	3.8
3- 7	1283.	1.50	3.50	633	374	0.00	0.65	0.00	0.00	0.65	9.0
3- 6	1283.	1.50	3.50	633	374	0.00	0.65	0.00	0.00	0.65	9.0
4- 6	-340.	1.50	3.50	633	445	0.00	0.15	0.00	0.00	0.15	3.8

DEFLECTION AT 6 = -0.0995 INCHES
DEFLECTION BETWEEN 6- 7 = -0.2758 INCHES

EXPLANATIONS:
P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI = COMBINED STRESS INTERACTION EQUATION IS THE ADDITION OF P/AF + VM/ZF + HM/ZF
LAT. = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRING LATERAL
BRC SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS WHEREVER APPLICABLE.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.2 KD15 SO. PINE
3- 5	2X 4	NO.2 KD15 SO. PINE
5- 1	2X 8	NO.1 KD15 SO. PINE
ALL WEBS	2X 4	NO.3 S.P.F.

QUOTE WOLOHAN DEFIANCE #59521 (NM) B STARK TRUSS COMPANY 1556 PERRY DR. SW CANTON OHIO 44706
OH

7 F3-19F
SCALE= 3/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL78 GNQ20	4.0X	12.0	1.00	3.00(4- 1)
1	HL51 GNQ20	3.0X	5.0		16.00(4- 1)
1	HL51 GNQ20	3.0X	5.0		42.25(4- 1)
2	PK11 GNQ20	6.0X	6.0	2.00	
3	HL78 GNQ20	4.0X	12.0	1.00	3.00(3- 4)
3	HL51 GNQ20	3.0X	5.0		16.00(3- 4)
3	HL51 GNQ20	3.0X	5.0		42.25(3- 4)
4	CS11 GNQ20	6.0X	6.0	3.00	

CHORDS	MEMBR FR-TO	FORCE (LBS)	HOR DISP FT-IN-SX	SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	WEBS MEMBR FR-TO	WEBS FORCE (LBS)
	1- 2	2636C	5- 3-12	9.000	80.0	0.0	2- 4	2761T
	2- 3	2636C	5- 3-12	-9.000	80.0	0.0		
	3- 4	2441T	5- 3-12	-7.000	60.0	10.0		
	4- 1	2441T	5- 3-12	7.000	60.0	10.0		

MAX. PURLIN SPACE= 0.0 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.
*** PLYWOOD SHEATHING REQUIRED ON TOP CHORD ***

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

ALLOW FOR HORIZONTAL DISPLACEMENT AT ONE OF THE SUPPORTS
0.487"

NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 2	2X 4	NO.2 KD15 SO. PINE
2- 3	2X 4	NO.2 KD15 SO. PINE
3- 4	2X 4	NO.2 KD15 SO. PINE
4- 1	2X 4	NO.2 KD15 SO. PINE
REINFORCING MEMBERS		
4- 1	2X 4	NO.2 KD15 SO. PINE
3- 4	2X 4	NO.2 KD15 SO. PINE
ALL WEBS	2X 4	NO.2 KD15 SO. PINE

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA

TOP CH. LL= 25 PSF
DL= 15 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 70 PSF

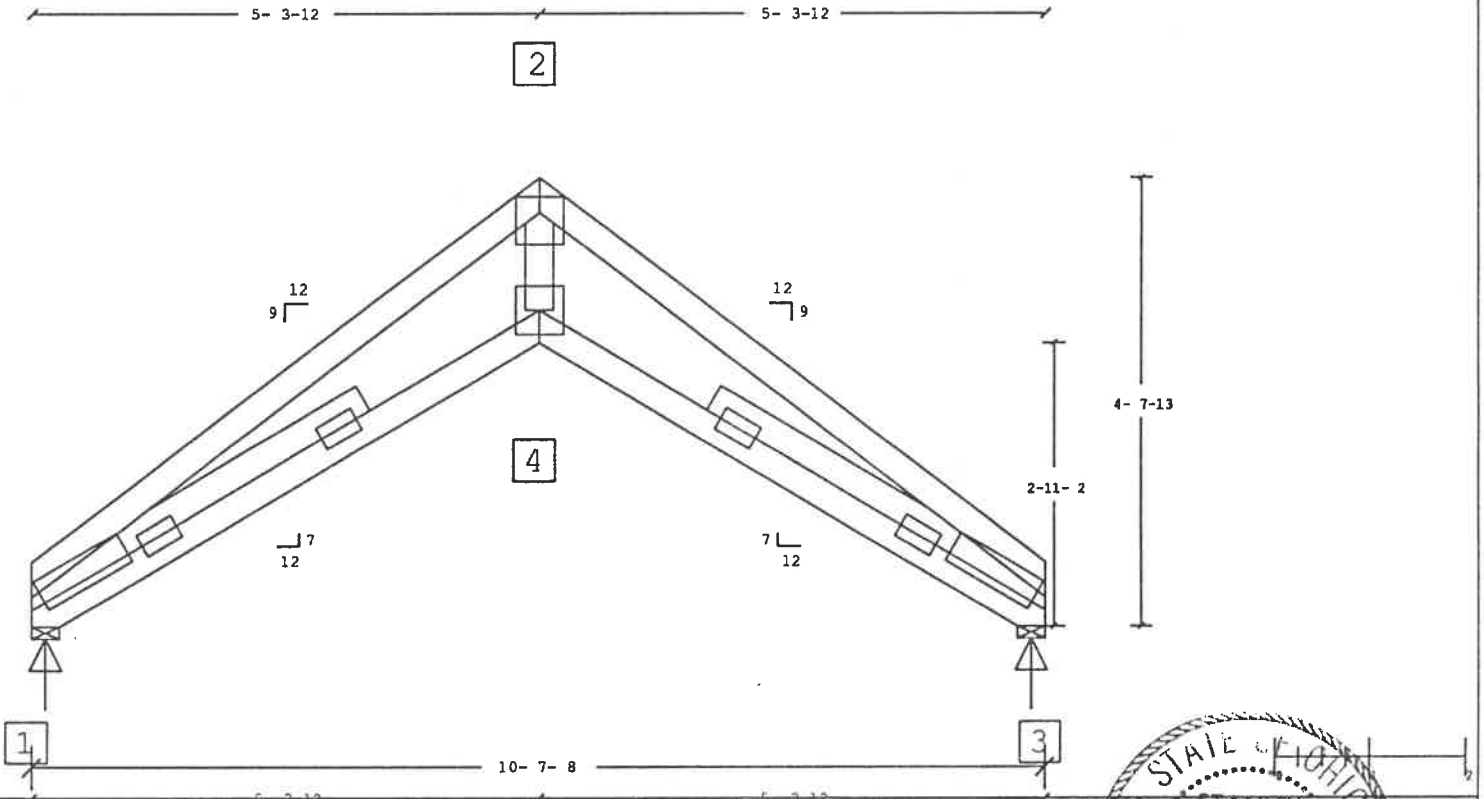
SPACING= 24 IN. C/C

INPUT DEFL. L/360

INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 15 BCH LS= 15

NAIL VALUES(PSI) GROSS

	CHORDS MAX	CHORDS MIN	WEBS MAX	WEBS MIN
GNQ20	228	180	228	180



90-5060-2

14AA
0.98
0.82
0.51
W

JT	GROSS REACT	BRG IN-SX
1	744	3- 8
3	744	3- 8

OWH= 8- 0 P

Handling & Erection

Careless handling of components shall not be permitted. Temporary and permanent bracing for holding component plumb and for resisting lateral forces shall be designed and installed by others. No loads are to be applied to the component until after all bracing and fastenings are complete. At no time shall loads greater than design loads be applied to the component.

Care must be exercised to install component at proper bearing points, right side up, and properly braced. Read all notes hereon and obtain any design assistance indicated.

Gang-Nail Systems, Inc. exercises no control and accepts no responsibility for the fabrication, handling, shipment and installation of components.

Miscellaneous Information

This data sheet and the information hereon is the property of Gang-Nail Systems, Inc. and is not to be copied in whole or in part or used for unauthorized exploitation of the items disclosed herein or in any other way disclosed or used for furnishing information to others

The use of this component shall be specified by the designer of the complete structure.

Obtain all necessary code compliances, approvals and instructions from the designer of the complete structure before using this component.

If the design criteria listed above does not meet local building code requirements, DO NOT USE THIS DESIGN.

When this drawing is signed and sealed, Gang-Nail Systems, Inc. is approving only the structural design of the unit shown on the basis of data provided by the customer and shown on this drawing.

Bracing Information

All lateral bracing specified is for bracing individual web members and must be installed.

Web braces where required are to be equally spaced along web length.

Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials.

Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.

Connector Hardware

Connector plates are manufactured in accordance with TPI.

Plates must be installed on both faces of the lumber with teeth fully embedded.

Plates must be of the size, gauge and capacity shown.

Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symetrically about joints unless other dimensions are shown.

Lumber

Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified

Design Criteria

The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

STATE OF OHIO
STANLEY E. KOEHLINGER
E-040411
REGISTERED
FEB 7,1990
PROFESSIONAL ENGINEER

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

11
FEB 7,1990 F3-19F

WARNING- VERIFY YOUR INPUT TO AVOID DESIGN AND FABRICATION MISTAKES.
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REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

13 7
REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM) B
FEB 7,1990 F3-19F

SPAN (OUT TO OUT) 10.625
NO. OF JOINTS 4
LOC. OF REACTIONS 1 3
SHORT TERM INCREASE TCH 1.15 BCH 1.15 WEBS 1.15 PLATES 1.15

TOP CHORD LOAD SHARE = 15 BOTTOM CHORD LOAD SHARE = 15

PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.

TRUSS GEOMETRY AND LOAD DATA

JT	HOR.DISP. FT	VER.DISP. SLOPE/12	VERTICAL UNIF.LD. PLF
1	5.3125	9.0000	-80.00
2	5.3125	-9.0000	-80.00
3	-5.3125	-7.0000	-60.00
4	-5.3125	7.0000	-60.00

TOTAL POSITIVE DISPLACEMENT= 10.63

NO. OF WEBS= 1
2- 4

GROSS REACTIONS(LBS):
RV- 1= 743.7 RV- 3= 743.7
RH- 1= 0.0

MEM	FORCE LBS	WID IN.	DEP IN.	FB PSI	FC:FT PSI	Q	P/AF	VM/ZF	HM/ZF	CSI	LAT. BRC
TOP CHORD MEMBERS											
1- 2	-2636.	1.50	3.50	1679	1133	0.90	0.44	0.53	0.00	0.98	0.0
2- 3	-2636.	1.50	3.50	1679	1133	0.90	0.44	0.53	0.00	0.98	0.0
BOT CHORD MEMBERS											
3- 4	2441.	1.50	3.50	2013	1035	1.00	0.45	0.37	0.00	0.82	10.0
4- 1	2441.	1.50	3.50	2013	1035	1.00	0.45	0.37	0.00	0.82	10.0
WEB MEMBERS											
2- 4	2761.	1.50	3.50	1783	1035	0.00	0.51	0.00	0.00	0.51	0.9

DEFLECTION AT 4 = -0.3727 INCHES

EXPLANATIONS:
P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE
ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS
AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS
AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI = COMBINED STRESS INTERACTION EQUATION IS THE ADDITION OF
P/AF + VM/ZF + HM/ZF
LAT. = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRING LATERAL
BRC SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED
BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS
WHEREVER APPLICABLE.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 2	2X 4	NO.2 KD15 SO. PINE
2- 3	2X 4	NO.2 KD15 SO. PINE
3- 4	2X 4	NO.2 KD15 SO. PINE
4- 1	2X 4	NO.2 KD15 SO. PINE
ALL WEBS	2X 4	NO.2 KD15 SO. PINE

QUOTE WOLOHAN DEFIANCE #59521 (NM) D STARK TRUSS COMPANY 1556 PERRY DR. SW CANTON OHIO 44706
OH

7 F3-19F
SCALE= 4/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL78 GNQ20	4.0X	12.0	1.00	3.00(5- 1)
1	HL51 GNQ20	3.0X	5.0		16.00(5- 1)
1	HL51 GNQ20	3.0X	5.0		35.50(5- 1)
2	IN02 GNQ20	3.0X	8.0		
3	CR11 GNQ20	1.0X	4.0		
4	CR02 GNQ20	4.0X	5.0		
5	IN11 GNQ20	1.0X	4.0		

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

CHORDS						WEBS		
MEMBR FR-TO	FORCE (LBS)	HOR DISP FT-IN-SX	SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	MEMBR FR-TO	FORCE (LBS)
1- 2	2470C	4- 6-14	9.000	70.0	0.0	2- 5	281T
2- 3	0	5- 4-10	9.000	70.0	0.0	2- 4	2161C
3- 4	177C	0- 0- 0	-19.917 D	70.0	6.0		
4- 5	2288T	5- 4-10	7.000	60.0	10.0		
5- 1	2288T	4- 6-14	7.000	60.0	10.0		

CONC LOAD JT	LBS
1	70

MAX. PURLIN SPACE= 0.0 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.
*** PLYWOOD SHEATHING REQUIRED ON TOP CHORD ***

NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.2 KD15 SO. PINE
3- 4	2X 4	NO.3 S.P.F.
4- 1	2X 4	NO.2 KD15 SO. PINE
REINFORCING MEMBERS		
5- 1	2X 4	NO.2 KD15 SO. PINE
WEBS 2- 5	2X 4	NO.3 S.P.F.
WEBS 2- 4	2X 6	MSR1650F-1.5E S.P.F.

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA

TOP CH. LL= 25 PSF
DL= 10 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 65 PSF

SPACING= 24 IN. C/C

INPUT DEFL. L/360

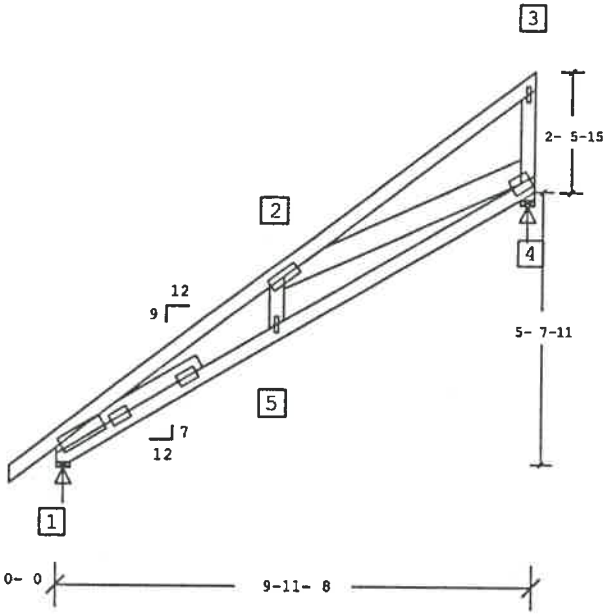
INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 15 BCH LS= 15

NAIL VALUES(PSI) GROSS

	CHORDS		WEBS	
	MAX	MIN	MAX	MIN
GNQ20	228	140	190	140

LEFT OVERHANG = 1- 0- 0

90-5060-4



JT	GROSS REACT	BRG IN-SX
1	717	3- 8
4	647	3- 8

CAMBER= 0-1/8
OWH-L= 8- 0 P

35AA
0.00
0.75
0.59
W

0 1 2

STATE OF OHIO
STANLEY E. KOEHLINGER
E-040411
FEB 7,1990
REGISTERED PROFESSIONAL ENGINEER

Handling & Erection

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Bracing Information

All lateral bracing specified is for bracing individual web members and must be installed.

Web braces where required are to be equally spaced along web length.

Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials.

Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.

Connector Hardware

Connector plates are manufactured in accordance with TPI.

Plates must be installed on both faces of the lumber with teeth fully embedded.

Plates must be of the size, gauge and capacity shown.

Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symetrically about joints unless other dimensions are shown.

Lumber

Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified

Design Criteria

The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

11
FEB 7,1990 F3-19F

WARNING- VERIFY YOUR INPUT TO AVOID DESIGN AND FABRICATION MISTAKES.
YOU ARE SOLELY RESPONSIBLE FOR ERRORS RESULTING FROM WRONG INPUT

REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

13 7
REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM) D
FEB 7,1990 F3-19F

SPAN (OUT TO OUT) 9.958
NO. OF JOINTS 5
LOC. OF REACTIONS 1 4
SHORT TERM INCREASE TCH 1.15 BCH 1.15 WEBS 1.15 PLATES 1.15

TOP CHORD LOAD SHARE = 15 BOTTOM CHORD LOAD SHARE = 15

PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.

TRUSS GEOMETRY AND LOAD DATA

JT	HOR.DISP. FT	VER.DISP. SLOPE/12	VERTICAL UNIF.LD. PLF	VERTICAL CONC.LD. LBS
1	4.5755	9.0000	-70.00	-70.00
2	5.3828	9.0000	-70.00	0.00
3	0.0000	-19.9167	-70.00	0.00
4	-5.3828	7.0000	-60.00	0.00
5	-4.5755	7.0000	-60.00	0.00

TOTAL POSITIVE DISPLACEMENT= 9.96

NO. OF WEBS= 2
2- 5 2- 4

GROSS REACTIONS(LBS):
RV- 1= 717.3 RV- 4= 647.3
RH- 1= 0.0

MEM	FORCE LBS	WID IN.	DEP IN.	FB PSI	FC:FT PSI	Q	P/AF	VM/ZF	HM/ZF	CSI	LAT. BRC
TOP CHORD MEMBERS											
1- 2	-2470.	1.50	3.50	1740	1173	0.90	0.40	0.40	0.00	0.80	0.0
2- 3	0.	1.50	3.50	2013	1035	0.90	0.00	0.34	0.00	0.34	0.0
3- 4	-177.	1.50	3.50	748	489	0.00	0.07	0.00	0.00	0.07	6.0
BOT CHORD MEMBERS											
4- 5	2288.	1.50	3.50	2013	1035	1.00	0.42	0.34	0.00	0.76	10.0
5- 1	2288.	1.50	3.50	2013	1035	1.00	0.42	0.34	0.00	0.76	10.0
WEB MEMBERS											
2- 5	281.	1.50	3.50	633	374	0.00	0.14	0.00	0.00	0.14	0.8
2- 4	-2161.	1.50	5.50	1898	442	0.00	0.59	0.00	0.00	0.59	5.9

DEFLECTION AT 5 = -0.2841 INCHES

EXPLANATIONS:

P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI = COMBINED STRESS INTERACTION EQUATION IS THE ADDITION OF P/AF + VM/ZF + HM/ZF
LAT. BRC = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRED LATERAL SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS WHEREVER APPLICABLE.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.2 KD15 SO. PINE
3- 4	2X 4	NO.3 S.P.F.
4- 1	2X 4	NO.2 KD15 SO. PINE
WEBS	2X 4	NO.3 S.P.F.
2- 5		
WEBS	2X 6	MSR1650F-1.5E S.P.F.
2- 4		

QUOTE WOLOHAN DEFIANCE #59521 (NM) E STARK TRUSS COMPANY 1556 PERRY DR. SW CANTON OHIO 44706
OH

7 F3-19F
SCALE= 3/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL21 GNQ20	5.0X16.0			0.00(1- 2)
2	IN02 GNQ20	4.0X 7.0			
3	PK11 GNQ2010	0.0X10.0	2.50		
4	IN02 GNQ20	4.0X 7.0			
5	HL31 GNQ20	6.0X 6.0	0.75	0.50(5- 6)	
5	HL31 GNQ20	6.0X 6.0	4.50	7.00(5- 6)	
6	IN11 GNQ20	4.0X14.0			
7	IN03 GNQ2012	0.0X12.0	7.00		
8	IN11 GNQ20	4.0X14.0			

SPLICES
2- 3 SP10 GNQ20 4.0X 5.0
6- 7 SP10 GNQ20 8.0X 9.0

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

ADEQUATE WOOD TRUSS BEARING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER

DESIGNED FOR VERTICAL LOADS ONLY. LATERAL STABILITY OF GIRDER TRUSS TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT

MEMBR FR-TO	FORCE (LBS)	CHORDS HOR DISP FT-IN-SX	CHORDS SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	WEBS MEMBR FR-TO	WEBS FORCE (LBS)
1- 2	16809C	8- 6- 9	7.000	70.0	5.5	2- 8	5173T
2- 3	11382C	7- 9- 7	7.000	70.0	6.0	2- 7	5566C
3- 4	11382C	7- 9- 7	-7.000	70.0	6.0	3- 7	10934T
4- 5	16809C	8- 6- 9	-7.000	70.0	5.5	4- 7	5566C
5- 6	14519T	8- 6- 9	0.000	645.0	10.0	4- 6	5173T
6- 7	14519T	7- 9- 7	0.000	645.0	10.0		
7- 8	14519T	7- 9- 7	0.000	645.0	10.0		
8- 1	14519T	8- 6- 9	0.000	645.0	10.0		

CONC LOAD JT	LBS
1	93

+++ DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY +++
+++ THEN NAILED TOGETHER WITH 10D COMMON WIRE NAILS +++
+++ STAGGERED THROUGHOUT BOTH FACES AS PER NAILING PATTERN +++

MAX. PURLIN SPACE= 5.5 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.

NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 6	MSR1650F-1.5E S.P.F.
3- 5	2X 6	MSR1650F-1.5E S.P.F.
5- 1	2X10	MSR 2250F-1.9E SO.P.
WEBS	2X 4	NO.2 KD15 SO. PINE
2- 8 2- 7 4- 7 4- 6		
WEBS	2X 6	MSR1650F-1.5E S.P.F.
3- 7		

MULTI-MEMBER NAILING PATTERN

CHORDS	#ROWS	SPACING(IN.)
TOP	1	12.0
BOT	1	4.0
WEBS	1	12.0

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA

TOP CH. LL= 25 PSF
DL= 10 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 65 PSF

SPACING= 24 IN. C/C
SPAN CARRIED=20- 3- 8(BB)

INPUT DEFL. L/360

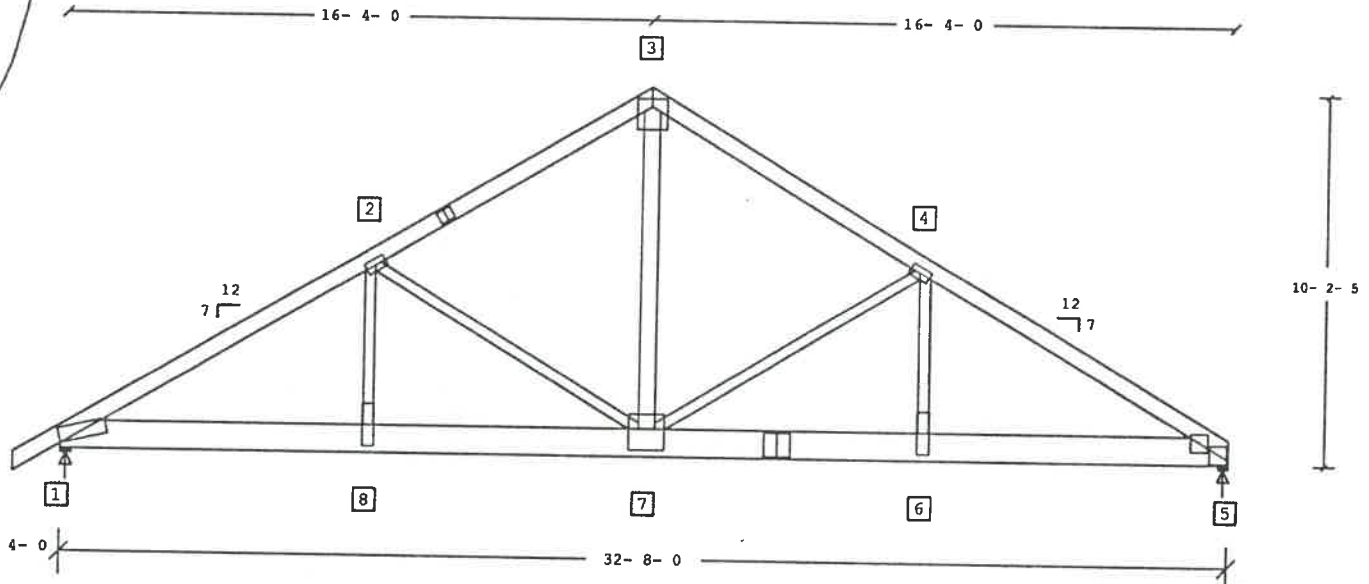
INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 0 BCH LS= 0

NAIL VALUES(PSI) GROSS

	CHORDS MAX	CHORDS MIN	WEBS MAX	WEBS MIN
GNQ20	228	140	228	140

LEFT OVERHANG = 1- 4- 0

90-5060-5



JT	GROSS REACT	INPUT BRG IN-SX	REQRD BRG IN-SX
1	11772	3- 8	6-15
5	11678	3- 8	6-14

CAMBER= 0-1/8
OWH= 8- 0 P

5AAE
0.85
0.82
0.97
W

0 1 2

Handling & Erection

Careless handling of components shall not be permitted. Temporary and permanent bracing for holding component plumb and for resisting lateral forces shall be designed and installed by others. No loads are to be applied to the component until after all bracing and fastenings are complete. At no time shall loads greater than design loads be applied to the component.

Care must be exercised to install component at proper bearing points, right side up, and properly braced. Read all notes hereon and obtain any design assistance indicated.

Gang-Nail Systems, Inc. exercises no control and accepts no responsibility for the fabrication, handling, shipment and installation of components.

Miscellaneous Information

This data sheet and the information hereon is the property of Gang-Nail Systems, Inc. and is not to be copied in whole or in part or used for unauthorized exploitation of the items disclosed herein or in any other way disclosed or used for furnishing information to others.

The use of this component shall be specified by the designer of the complete structure.

Obtain all necessary code compliances, approvals and instructions from the designer of the complete structure before using this component.

If the design criteria listed above does not meet local building code requirements, DO NOT USE THIS DESIGN.

When this drawing is signed and sealed, Gang-Nail Systems, Inc. is approving only the structural design of the unit shown on the basis of data provided by the customer and shown on this drawing.

Bracing Information

All lateral bracing specified is for bracing individual web members and must be installed.

Web braces where required are to be equally spaced along web length.

Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials.

Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.

Connector Hardware

Connector plates are manufactured in accordance with TPI.

Plates must be installed on both faces of the lumber with teeth fully embedded.

Plates must be of the size, gauge and capacity shown.

Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symetrically about joints unless other dimensions are shown.

Lumber

Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified

Design Criteria

The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

STATE OF OHIO
STANLEY E. KOEHLINGER
E-040411
REGISTERED
PROFESSIONAL ENGINEER

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

11
FEB 7,1990 F3-19F

WARNING- VERIFY YOUR INPUT TO AVOID DESIGN AND FABRICATION MISTAKES.
YOU ARE SOLELY RESPONSIBLE FOR ERRORS RESULTING FROM WRONG INPUT

REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

13 7
REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM) E
FEB 7,1990 F3-19F

SPAN (OUT TO OUT) 32.667
NO. OF JOINTS 8
LOC. OF REACTIONS 1 5
SHORT TERM INCREASE TCH 1.15 BCH 1.15 WEBS 1.15 PLATES 1.15

TOP CHORD LOAD SHARE = 0 BOTTOM CHORD LOAD SHARE = 0

PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.

TRUSS GEOMETRY AND LOAD DATA

JT	HOR.DISP. FT	VER.DISP. SLOPE/12	VERTICAL UNIF.LD. PLF	VERTICAL CONC.LD. LBS
1	8.5454	7.0000	-70.00	-93.33
2	7.7880	7.0000	-70.00	0.00
3	7.7880	-7.0000	-70.00	0.00
4	8.5454	-7.0000	-70.00	0.00
5	-8.5454	0.0000	-645.00	0.00
6	-7.7880	0.0000	-645.00	0.00
7	-7.7880	0.0000	-645.00	0.00
8	-8.5454	0.0000	-645.00	0.00

TOTAL POSITIVE DISPLACEMENT= 32.67

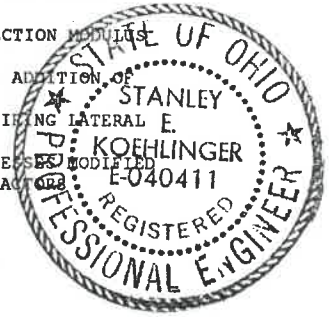
NO. OF WEBS= 5
2- 8 2- 7 3- 7 4- 7 4- 6

GROSS REACTIONS(LBS):
RV- 1= 11771.7 RV- 5= 11678.3
RH- 1= 0.0

MEM	FORCE LBS	WID IN.	DEP IN.	FB PSI	FC:FT PSI	Q	P/AF	VM/ZF	HM/ZF	CSI	LAT. BRC
TOP CHORD MEMBERS											
1- 2	-16809.	3.00	5.50	1605	1451	0.74	0.70	0.15	0.00	0.85	5.5
2- 3	-11382.	3.00	5.50	1898	1518	0.90	0.45	0.17	0.00	0.63	6.0
3- 4	-11382.	3.00	5.50	1898	1518	0.90	0.45	0.17	0.00	0.63	6.0
4- 5	-16809.	3.00	5.50	1605	1451	0.74	0.70	0.15	0.00	0.85	5.5
BOT CHORD MEMBERS											
5- 6	14519.	3.00	9.25	2588	2013	1.00	0.26	0.56	0.00	0.82	10.0
6- 7	14519.	3.00	9.25	2588	2013	1.00	0.26	0.56	0.00	0.82	10.0
7- 8	14519.	3.00	9.25	2588	2013	1.00	0.26	0.56	0.00	0.82	10.0
8- 1	14519.	3.00	9.25	2588	2013	1.00	0.26	0.56	0.00	0.82	10.0
WEB MEMBERS											
2- 8	5173.	3.00	3.50	1783	1035	0.00	0.48	0.00	0.00	0.48	5.0
2- 7	-5566.	3.00	3.50	1783	548	0.00	0.97	0.00	0.00	0.97	9.2
3- 7	10934.	3.00	5.50	1898	1173	0.00	0.56	0.00	0.00	0.56	9.5
4- 7	-5566.	3.00	3.50	1783	548	0.00	0.97	0.00	0.00	0.97	9.2
4- 6	5173.	3.00	3.50	1783	1035	0.00	0.48	0.00	0.00	0.48	5.0

DEFLECTION AT 7 = -0.4091 INCHES
DEFLECTION BETWEEN 6- 7 = -0.4799 INCHES

EXPLANATIONS:
P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI = COMBINED STRESS INTERACTION EQUATION IS THE ADDITION OF P/AF + VM/ZF + HM/ZF
LAT. BRC = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRING LATERAL SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS WHEREVER APPLICABLE.



CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 6	MSR1650F-1.5E S.P.F.
3- 5	2X 6	MSR1650F-1.5E S.P.F.
5- 1	2X10	MSR 2250F-1.9E SO.P.
WEBS	2X 4	NO.2 KD15 SO. PINE
2- 8 2- 7 4- 7 4- 6		
WEBS	2X 6	MSR1650F-1.5E S.P.F.
3- 7		

QUOTE WOLOHAN DEFIANCE #59521 (NM) F STARK TRUSS COMPANY 1556 PERRY DR. SW CANTON OHIO 44706
OH

7 F3-19F
SCALE= 4/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL78 GNQ20	4.0X	5.0	1.00	
1	HL51 GNQ20	3.0X	5.0		7.00(5- 1)
1	HL51 GNQ20	3.0X	5.0		45.50(5- 1)
2	IN02 GNQ20	3.0X	4.0		
3	CR11 GNQ20	1.0X	4.0		
4	CR02 GNQ20	3.0X	4.0		
5	IN11 GNQ20	1.0X	4.0		

SPLICES
2- 3 SP10 GNQ20 2.5X 4.0

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

MEMBR FR-TO	FORCE (LBS)	CHORDS HOR DISP FT-IN-SX	CHORDS SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	WEBS MEMBR FR-TO	WEBS FORCE (LBS)
1- 2	816C	6- 6-10	7.000	70.0	0.0	2- 5	377T
2- 3	0	6- 7- 6	7.000	70.0	0.0	2- 4	814C
3- 4	221C	0- 0- 0	-92.167 D	70.0	6.0		
4- 5	704T	6- 7- 6	0.000	60.0	10.0		
5- 1	704T	6- 6-10	0.000	60.0	10.0		

MAX. PURLIN SPACE= 0.0 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.
*** PLYWOOD SHEATHING REQUIRED ON TOP CHORD ***
THE FOLLOWING BRACING APPLIES ONLY WHEN MEMBER(S) ARE NOT SHEATHED:
1-1X4 LAT. BRACE REQD. AT 1/2 LEN. WEBS 3- 4

NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

CONC LOAD JT	LBS
1	93

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.2 KD15 SO. PINE
3- 4	2X 4	NO.3 S.P.F.
4- 1	2X 4	NO.2 KD15 SO. PINE
REINFORCING MEMBERS		
5- 1	2X 4	NO.2 KD15 SO. PINE
WEBS 2- 5	2X 4	NO.3 S.P.F.
WEBS 2- 4	2X 4	NO.2 KD15 SO. PINE

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA

TOP CH. LL= 25 PSF
DL= 10 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 65 PSF

SPACING= 24 IN. C/C

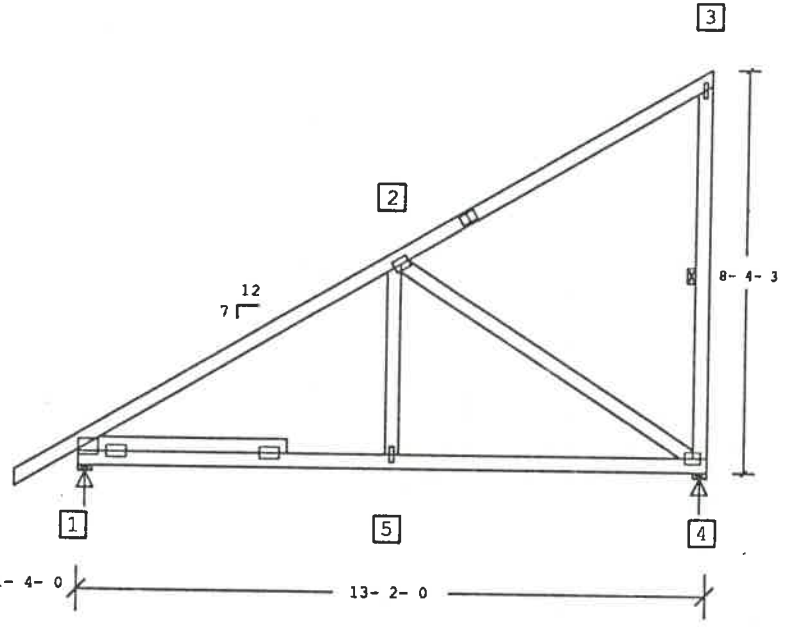
INPUT DEFL. L/360

INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 15 BCH LS= 15

NAIL VALUES(PSI) GROSS

	CHORDS MAX	CHORDS MIN	WEBS MAX	WEBS MIN
GNQ20	228	140	228	140

LEFT OVERHANG = 1- 4- 0



JT	GROSS REACT	BRG IN-SX
1	949	3- 8
4	856	3- 8

CAMBER= 0-0/8
OWH-L= 8- 0 P

35AA
0.79
0.73
0.77
W

Handling & Erection	Miscellaneous Information	Bracing Information	Connector Hardware	Lumber	Design Criteria
Careless handling of components shall not be permitted. Temporary and permanent bracing for holding component plumb and for resisting lateral forces shall be designed and installed by others. No loads are to be applied to the component until after all bracing and fastenings are complete. At no time shall loads greater than design loads be applied to the component. Care must be exercised to install component at proper bearing points, right side up, and properly braced. Read all notes hereon and obtain any design assistance indicated. Gang-Nail Systems, Inc. exercises no control and accepts no responsibility for the fabrication, handling, shipment and installation of components.	This data sheet and the information hereon is the property of Gang-Nail Systems, Inc. and is not to be copied in whole or in part or used for unauthorized exploitation of the items disclosed herein or in any other way disclosed or used for furnishing information to others The use of this component shall be specified by the designer of the complete structure. Obtain all necessary code compliances, approvals and instructions from the designer of the complete structure before using this component. If the design criteria listed above does not meet local building code requirements, DO NOT USE THIS DESIGN. When this drawing is signed and sealed, Gang-Nail Systems, Inc. is approving only the structural design of the unit shown on the basis of data provided by the customer and shown on this drawing.	All lateral bracing specified is for bracing individual web members and must be installed. Web braces where required are to be equally spaced along web length. Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials. Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.	Connector plates are manufactured in accordance with TPI. Plates must be installed on both faces of the lumber with teeth fully embedded. Plates must be of the size, gauge and capacity shown. Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symetrically about joints unless other dimensions are shown.	Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified	The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

STATE OF OHIO
STANLEY L. KOEHLINGER
E-040411
REGISTERED
FEB 27 1990
PROFESSIONAL ENGINEER

0 1 2

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

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11
 FEB  7,1990 F3-19F

 WARNING- VERIFY YOUR INPUT TO AVOID DESIGN AND FABRICATION MISTAKES.
-YOU ARE SOLELY RESPONSIBLE FOR ERRORS RESULTING FROM WRONG INPUT

 REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

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 ALL RIGHTS RESERVED.  AUTOTRUSS


13 7
 REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)       F
 FEB  7,1990 F3-19F


 SPAN (OUT TO OUT)     13.167
 NO. OF JOINTS          5
 LOC. OF REACTIONS      1   4
 SHORT TERM INCREASE   TCH 1.15   BCH 1.15   WEBS 1.15   PLATES 1.15

 TOP CHORD LOAD SHARE = 15  BOTTOM CHORD LOAD SHARE = 15

 ***PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.***

 TRUSS GEOMETRY AND LOAD DATA
 JT     HOR.DISP.      VER.DISP.    VERTICAL  VERTICAL
          FT           SLOPE/12     UNIF.LD.  CONC.LD.
                                      PLF       LBS
  1       6.5513         7.0000     -70.00    -93.33
  2       6.6153         7.0000     -70.00      0.00
  3       0.0000       -92.1667     -70.00      0.00
  4      -6.6153         0.0000     -60.00      0.00
  5      -6.5513         0.0000     -60.00      0.00

 TOTAL POSITIVE DISPLACEMENT=   13.17

 NO. OF WEBS=   2
  2- 5   2- 4

 GROSS REACTIONS(LBS):
 RV- 1=   949.2   RV- 4=   855.8
 RH- 1=     0.0


  MEM      FORCE  WID   DEP   FB   FC:FT  Q    P/AF VM/ZF HM/ZF  CSI  LAT.
           LBS    IN.   IN.   PSI   PSI                              BRC
 TOP CHORD MEMBERS
  1- 2    -816.  1.50  3.50 1879 1007  0.90 0.15  0.64 0.00  0.79   0.0
  2- 3       0.  1.50  3.50 2013 1035  0.90 0.00  0.60 0.00  0.60   0.0
  3- 4    -221.  1.50  3.50  718  425  1.00 0.10  0.00 0.00  0.10   6.0
 BOT CHORD MEMBERS
  4- 5     704.  1.50  3.50 2013 1035  1.00 0.13  0.61 0.00  0.73  10.0
  5- 1     704.  1.50  3.50 2013 1035  1.00 0.13  0.61 0.00  0.73  10.0
 WEB MEMBERS
  2- 5     377.  1.50  3.50  633  374  0.00 0.19  0.00 0.00  0.19   3.8
  2- 4    -814.  1.50  3.50 1783  201  0.00 0.77  0.00 0.00  0.77   7.6

 DEFLECTION AT  5 = -0.0333 INCHES
 DEFLECTION BETWEEN  4- 5 = -0.1855 INCHES
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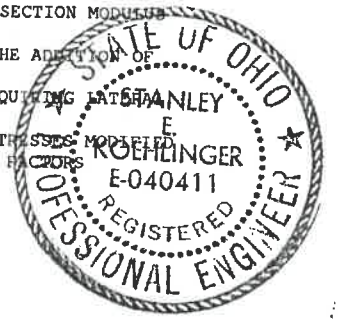
EXPLANATIONS:
P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE
       ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS
       AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS
       AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI  = COMBINED STRESS INTERACTION EQUATION IS THE ADDITION OF
       P/AF + VM/ZF + HM/ZF
LAT. = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRING LATERAL
BRC    SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED
BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS
WHEREVER APPLICABLE.


CHORDS     SIZE      LUMBER  DESCRIPTION
 1- 3      2X 4      NO.2 KD15 SO. PINE
 3- 4      2X 4      NO.3 S.P.F.
 4- 1      2X 4      NO.2 KD15 SO. PINE

WEBS       2X 4      NO.3 S.P.F.
 2- 5
WEBS       2X 4      NO.2 KD15 SO. PINE
 2- 4
```



QUOTE WOLOHAN DEFIANCE #59521 (NM) G STARK TRUSS COMPANY 1556 PERRY DR. SW CANTON OHIO 44706
OH

7 F3-19F
SCALE= 4/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL01 GNQ20	4.0X	5.0	2.50	0.00(6- 1)
2	IN11 GNQ20	1.0X	4.0		
3	PK12 GNQ20	4.0X	6.0		
4	CR11 GNQ20	1.0X	4.0		
5	CR02 GNQ20	4.0X	4.0		
6	IN02 GNQ20	4.0X	4.0		

SPLICES
2- 3 SP10 GNQ20 2.5X 4.0

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

MEMBR FR-TO	FORCE (LBS)	CHORDS HOR DISP FT-IN-SX	CHORDS SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	WEBS MEMBR FR-TO	WEBS FORCE (LBS)
1- 2	1249C	8- 3- 5	7.000	70.0	0.0	2- 6	479C
2- 3	980C	8- 0-11	7.000	70.0	0.0	3- 6	1132T
3- 4	0	3- 2- 0	-7.000	70.0	0.0	3- 5	921C
4- 5	108C	0- 0- 0	-92.167 D	0.0	6.0		
5- 6	290T	8- 6- 7	0.000	60.0	10.0		
6- 1	1079T	10-11- 9	0.000	60.0	10.0		

CONC JT	LOAD LBS
1	93

MAX. PURLIN SPACE= 0.0 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.
*** PLYWOOD SHEATHING REQUIRED ON TOP CHORD ***
1-1X4 LAT. BRACE REQD. AT 1/2 LEN. WEBS 3- 5
THE FOLLOWING BRACING APPLIES ONLY WHEN MEMBER(S) ARE NOT SHEATHED:
1-1X4 LAT. BRACE REQD. AT 1/2 LEN. WEBS 4- 5

NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.1 KD15 SO. PINE
3- 4	2X 4	NO.1 KD15 SO. PINE
4- 5	2X 4	NO.3 S.P.F.
5- 1	2X 6	MSR1650F-1.5E S.P.F.
ALL WEBS	2X 4	NO.3 S.P.F.

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA

TOP CH. LL= 25 PSF
DL= 10 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 65 PSF

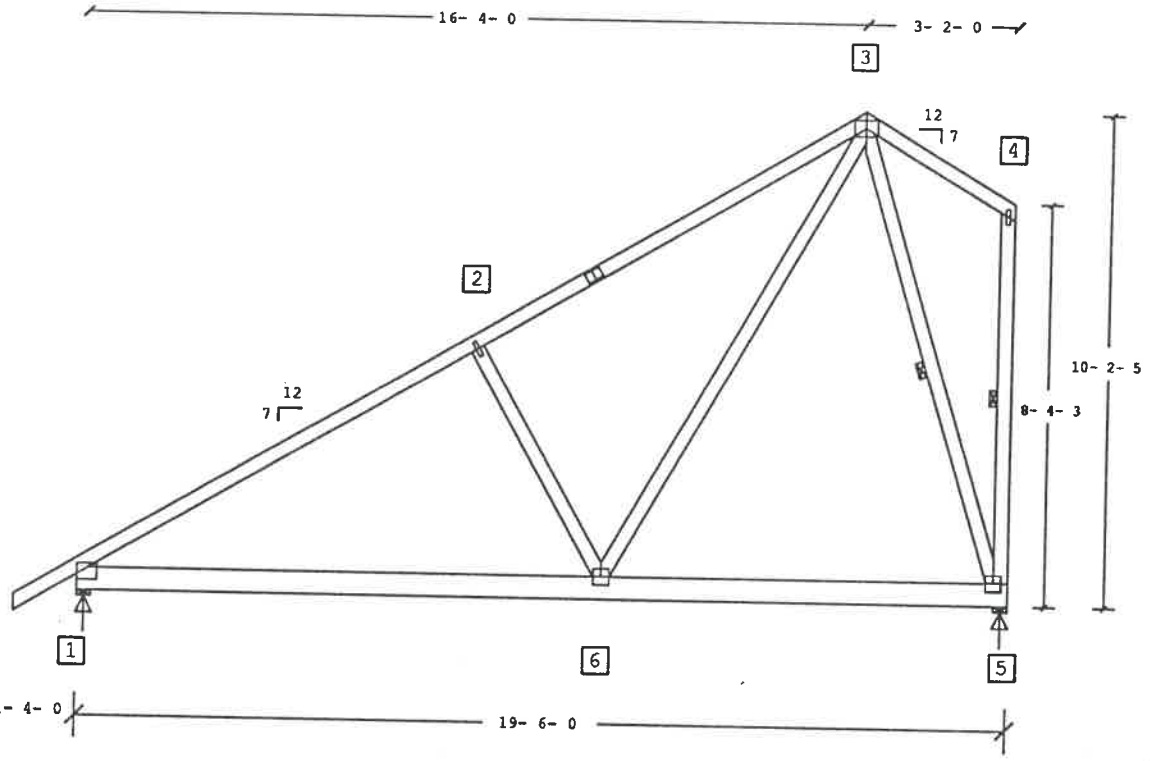
SPACING= 24 IN. C/C

INPUT DEFL. L/360

INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 15 BCH LS= 15

NAIL VALUES(PSI) GROSS	CHORDS MAX	CHORDS MIN	WEBS MAX	WEBS MIN
GNQ20	228	140	190	140

LEFT OVERHANG = 1- 4- 0



90-5060-7

JT	GROSS REACT	BRG IN-SX
1	1361	3- 8
5	1268	3- 8

CAMBER= 0-1/8
OWH= 8- 0 P

4AD
0.89
0.61
0.79
W

Handling & Erection	Miscellaneous Information	Bracing Information	Connector Hardware	Lumber	Design Criteria
Careless handling of components shall not be permitted. Temporary and permanent bracing for holding component plumb and for resisting lateral forces shall be designed and installed by others. No loads are to be applied to the component until after all bracing and fastenings are complete. At no time shall loads greater than design loads be applied to the component. Care must be exercised to install component at proper bearing points, right side up, and properly braced. Read all notes hereon and obtain any design assistance indicated. Gang-Nail Systems, Inc. exercises no control and accepts no responsibility for the fabrication, handling, shipment and installation of components.	This data sheet and the information hereon is the property of Gang-Nail Systems, Inc. and is not to be copied in whole or in part or used for unauthorized exploitation of the items disclosed herein or in any other way disclosed or used for furnishing information to others. The use of this component shall be specified by the designer of the complete structure. Obtain all necessary code compliances, approvals and instructions from the designer of the complete structure before using this component. If the design criteria listed above does not meet local building code requirements, DO NOT USE THIS DESIGN. When this drawing is signed and sealed, Gang-Nail Systems, Inc. is approving only the structural design of the unit shown on the basis of data provided by the customer and shown on this drawing.	All lateral bracing specified is for bracing individual web members and must be installed. Web braces where required are to be equally spaced along web length. Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials. Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.	Connector plates are manufactured in accordance with TPI. Plates must be installed on both faces of the lumber with teeth fully embedded. Plates must be of the size, gauge and capacity shown. Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symetrically about joints unless other dimensions are shown.	Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified	The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

STATE OF OHIO
STANLEY E. KOEHLINGER
E-040411
REGISTERED
PROFESSIONAL ENGINEER

11
FEB 7,1990 F3-19F

WARNING- VERIFY YOUR INPUT TO AVOID DESIGN AND FABRICATION MISTAKES.
YOU ARE SOLELY RESPONSIBLE FOR ERRORS RESULTING FROM WRONG INPUT

REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

13 7
REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM) G
FEB 7,1990 F3-19F

SPAN (OUT TO OUT) 19.500
NO. OF JOINTS 6
LOC. OF REACTIONS 1 5
SHORT TERM INCREASE TCH 1.15 BCH 1.15 WEBS 1.15 PLATES 1.15

TOP CHORD LOAD SHARE = 15 BOTTOM CHORD LOAD SHARE = 15

PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.

TRUSS GEOMETRY AND LOAD DATA

JT	HOR.DISP. FT	VER.DISP. SLOPE/12	VERTICAL UNIF.LD. PLF	VERTICAL CONC.LD. LBS
1	8.2775	7.0000	-70.00	-93.33
2	8.0558	7.0000	-70.00	0.00
3	3.1667	-7.0000	-70.00	0.00
4	0.0000	-92.1667	0.00	0.00
5	-8.5372	0.0000	-60.00	0.00
6	-10.9628	0.0000	-60.00	0.00

TOTAL POSITIVE DISPLACEMENT= 19.50

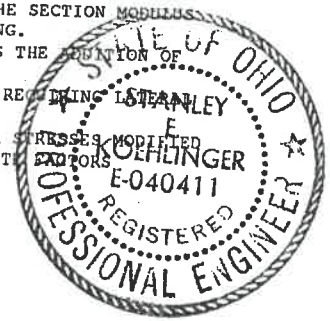
NO. OF WEBS= 3
2- 6 3- 6 3- 5

GROSS REACTIONS(LBS):
RV- 1= 1360.8 RV- 5= 1267.5
RH- 1= 0.0

MEM	FORCE LBS	WID IN.	DEP IN.	FB PSI	FC:FT PSI	Q	P/AF	VM/ZF	HM/ZF	CSI	LAT. BRC
TOP CHORD MEMBERS											
1- 2	-1249.	1.50	3.50	2415	1668	0.90	0.14	0.75	0.00	0.89	0.0
2- 3	-980.	1.50	3.50	2415	1668	0.90	0.11	0.75	0.00	0.86	0.0
3- 4	0.	1.50	3.50	2415	1208	0.95	0.00	0.13	0.00	0.13	0.0
4- 5	-108.	1.50	3.50	735	437	0.95	0.05	0.00	0.00	0.05	6.0
BOT CHORD MEMBERS											
5- 6	290.	1.50	5.50	2185	1173	1.00	0.03	0.50	0.00	0.53	10.0
6- 1	1079.	1.50	5.50	2185	1173	1.00	0.11	0.50	0.00	0.61	10.0
WEB MEMBERS											
2- 6	-479.	1.50	3.50	633	288	0.00	0.32	0.00	0.00	0.32	5.5
3- 6	1132.	1.50	3.50	633	374	0.00	0.58	0.00	0.00	0.58	10.9
3- 5	-921.	1.50	3.50	633	223	0.00	0.79	0.00	0.00	0.79	5.0

DEFLECTION AT 6 = -0.0720 INCHES
DEFLECTION BETWEEN 1- 6 = -0.3861 INCHES

EXPLANATIONS:
P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI = COMBINED STRESS INTERACTION EQUATION IS THE EQUATION OF P/AF + VM/ZF + HM/ZF
LAT. = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRING LATERAL
BRC SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS WHEREVER APPLICABLE.



CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 4	NO.1 KD15 SO. PINE
3- 4	2X 4	NO.1 KD15 SO. PINE
4- 5	2X 4	NO.3 S.P.F.
5- 1	2X 6	MSR1650F-1.5E S.P.F.
ALL WEBS	2X 4	NO.3 S.P.F.

QUOTE WOLOHAN DEFIANCE #59521 (NM)   C   STARK TRUSS COMPANY 1556 PERRY DR. SW   CANTON OHIO   44706
OH

7 F3-19F
SCALE= 4/16

JT	TYPE	W	LEN	Y	X (MEMBER)
1	HL04	GNQ20	4.0X16.0	2.00	
2	IN02	GNQ20	4.0X 5.0		
3	PK11	GNQ2010.	0X10.0	2.50	
3	PK00	GNQ20	2.0X 3.0		
4	IN02	GNQ20	4.0X 5.0		
5	HL04	GNQ20	4.0X16.0	2.00	
6	IN11	GNQ20	1.0X 4.0		
7	CS13	GNQ2010.	0X10.0	5.00	
8	IN11	GNQ20	1.0X 4.0		

DESIGN SPECS. FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, TPI,1985

ALLOW FOR HORIZONTAL DISPLACEMENT AT ONE OF THE SUPPORTS
1.242"

CHORDS MEMBR FR-TO	FORCE (LBS)	HOR DISP FT-IN-SX	SLOPE/12 DEPTH IN	LOAD (PLF)	MAXIMUM UNBRAC. LENGTH	WEBS MEMBR FR-TO	FORCE (LBS)
1- 2	7123C	5- 3- 0	9.000	70.0	3.5	2- 8	296T
2- 3	4804C	4-10-12	9.000	70.0	4.2	2- 7	2001C
3- 4	4804C	4-10-12	-9.000	70.0	4.2	3- 7	5432T
4- 5	7123C	5- 3- 0	-9.000	70.0	3.5	4- 7	2001C
5- 6	6597T	5- 3- 0	-7.000	60.0	10.0	4- 6	296T
6- 7	6597T	4-10-12	-7.000	60.0	10.0		
7- 8	6597T	4-10-12	7.000	60.0	10.0		
8- 1	6597T	5- 3- 0	7.000	60.0	10.0		

MAX. PURLIN SPACE= 3.5 FT. , MAX. UNBRACED BOT.CH. LEN.= 10.0 FT.

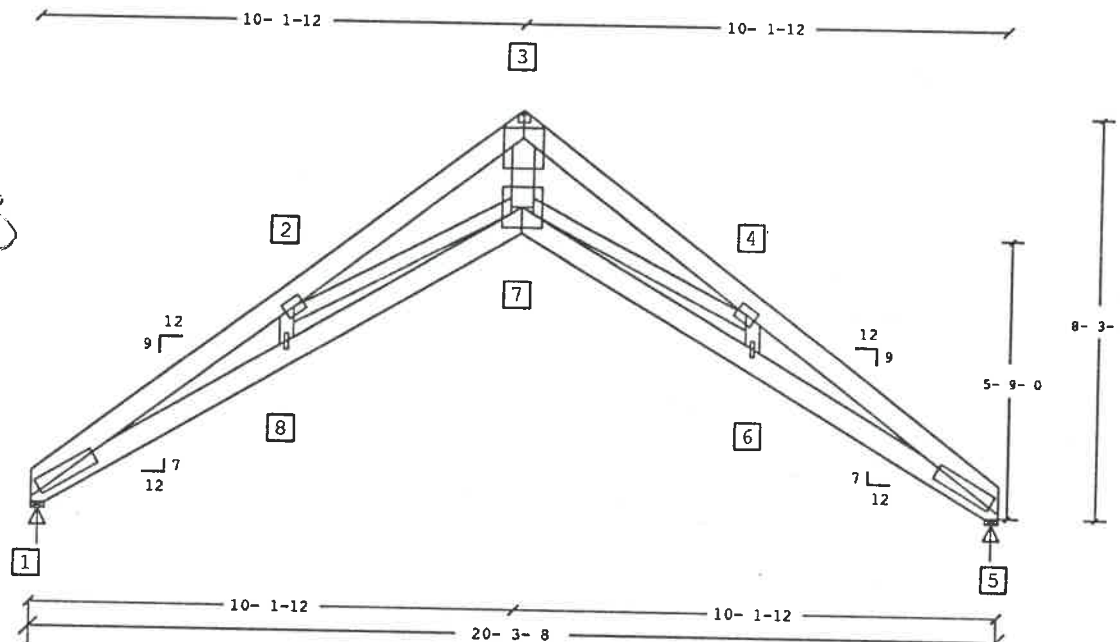
NOTE: LATERAL BRACES AND PURLINS INDICATED FOR TRUSS MEMBERS ARE REQUIRED TO REDUCE BUCKLING LENGTH OF MEMBER, AND SHOULD BE NAILED TO TRUSS MEMBERS WITH MINIMUM OF 2-10D COMMON WIRE NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING. BY OTHERS.

	SIZE	LUMBER DESCRIPTION
CHORDS		
1- 3	2X 6	MSR2100F-1.8E S.P.F.
3- 5	2X 6	MSR2100F-1.8E S.P.F.
5- 7	2X 6	MSR 2250F-1.9E SO.P.
7- 1	2X 6	MSR 2250F-1.9E SO.P.
WEBS 2- 8 4- 6	2X 4	NO.3 S.P.F.
WEBS 2- 7 4- 7	2X 4	NO.2 KD15 SO. PINE
WEBS 3- 7	2X 6	MSR1650F-1.5E S.P.F.

THIS TRUSS IS DESIGNED TO SUPPORT VERTICAL LOADS AS DETERMINED BY OTHERS AND SHOWN ON INPUT LISTING. VERIFICATION OF LOADING, DEFLECTION LIMITATIONS, FRAMING METHODS, WIND BRACING OR OTHER LATERAL BRACING THAT IS ALWAYS REQUIRED, IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT OR ENGINEER.

DESIGN CRITERIA
TOP CH. LL= 25 PSF
DL= 10 PSF
BOT CH. LL= 20 PSF
DL= 10 PSF
TOTAL LOAD= 65 PSF
SPACING= 24 IN. C/C
INPUT DEFL. L/360
INCREASES(PER CENT)
LUMBER= 15 NAIL= 15
TCH LS= 15 BCH LS= 15
NAIL VALUES(PSI) GROSS
	CHORDS MAX	CHORDS MIN	WEBS MAX	WEBS MIN
GNQ20	228	140	228	140

96-5060-3



16AA
0.57
0.49
0.91
N

JT	GROSS REACT	BRG IN-SX
1	1319	3- 8
5	1319	3- 8

OWH= 8- 0 P

Handling & Erection

Careless handling of components shall not be permitted. Temporary and permanent bracing for holding component plumb and for resisting lateral forces shall be designed and installed by others. No loads are to be applied to the component until after all bracing and fastenings are complete. At no time shall loads greater than design loads be applied to the component.

Care must be exercised to install component at proper bearing points, right side up, and properly braced. Read all notes hereon and obtain any design assistance indicated.

Gang-Nail Systems, Inc. exercises no control and accepts no responsibility for the fabrication, handling, shipment and installation of components.

Miscellaneous Information

This data sheet and the information hereon is the property of Gang-Nail Systems, Inc. and is not to be copied in whole or in part or used for unauthorized exploitation of the items disclosed herein or in any other way disclosed or used for furnishing information to others

The use of this component shall be specified by the designer of the complete structure.

Obtain all necessary code compliances, approvals and instructions from the designer of the complete structure before using this component.

If the design criteria listed above does not meet local building code requirements, DO NOT USE THIS DESIGN.

When this drawing is signed and sealed, Gang-Nail Systems, Inc. is approving only the structural design of the unit shown on the basis of data provided by the customer and shown on this drawing.

Bracing Information

All lateral bracing specified is for bracing individual web members and must be installed.

Web braces where required are to be equally spaced along web length.

Chord members are assumed to be laterally restrained by sheathing, purlins or ceiling materials.

Restraint of lateral bracing and additional bracing for the overall structure is to be provided by the designer of the complete structure.

Connector Hardware

Connector plates are manufactured in accordance with TPI.

Plates must be installed on both faces of the lumber with teeth fully embedded.

Plates must be of the size, gauge and capacity shown.

Refer to the AutoTruss joint detail sheet for definitions of joint types and plate locations. Position plates symetrically about joints unless other dimensions are shown.

Lumber

Lumber must bear a grade mark from an approved inspection bureau and must be of the size and species shown and equal to or better than the grade specified

Design Criteria

The design and the materials specified are in substantial conformity with the latest revision of NDS, AITC and TPI.

STATE OF OHIO
STANLEY
E.
KOEHLINGER
E-040411
FEB 7,1990
REGISTERED
PROFESSIONAL ENGINEER

0 1 2

IMPORTANT: READ ALL NOTES ON THIS DRAWING!

11
FEB 7,1990 F3-19F

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REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM)

LUMBER HAS BEEN UPGRADED DUE TO DEFLECTION.

13 7
REQUEST NO. CALCONLY QUOTE WOLOHAN DEFIANCE #59521 (NM) C
FEB 7,1990 F3-19F

SPAN (OUT TO OUT) 20.292
NO. OF JOINTS 8
LOC. OF REACTIONS 1 5
SHORT TERM INCREASE TCH 1.15 BCH 1.15 WEBS 1.15 PLATES 1.15

TOP CHORD LOAD SHARE = 15 BOTTOM CHORD LOAD SHARE = 15

PLYWOOD SHEATHING USED ON TOP CHORD WHERE APPLICABLE.

TRUSS GEOMETRY AND LOAD DATA

JT	HOR.DISP. FT	VER.DISP. SLOPE/12	VERTICAL UNIF.LD. PLF
1	5.2481	9.0000	-70.00
2	4.8977	9.0000	-70.00
3	4.8977	-9.0000	-70.00
4	5.2481	-9.0000	-70.00
5	-5.2481	-7.0000	-60.00
6	-4.8977	-7.0000	-60.00
7	-4.8977	7.0000	-60.00
8	-5.2481	7.0000	-60.00

TOTAL POSITIVE DISPLACEMENT= 20.29

NO. OF WEBS= 5
2- 8 2- 7 3- 7 4- 7 4- 6

GROSS REACTIONS(LBS):
RV- 1= 1319.0 RV- 5= 1319.0
RH- 1= 0.1

MEM	FORCE LBS	WID IN.	DEP IN.	FB PSI	FC:FT PSI	Q	P/AF	VM/ZF	HM/ZF	CSI	LAT. BRC
TOP CHORD MEMBERS											
1- 2	-7123.	1.50	5.50	2641	1903	0.95	0.45	0.12	0.00	0.57	3.5
2- 3	-4804.	1.50	5.50	2680	1903	0.95	0.31	0.11	0.00	0.42	4.2
3- 4	-4804.	1.50	5.50	2680	1903	0.95	0.31	0.11	0.00	0.42	4.2
4- 5	-7123.	1.50	5.50	2641	1903	0.95	0.45	0.12	0.00	0.57	3.5
BOT CHORD MEMBERS											
5- 6	6597.	1.50	5.50	2990	2013	1.00	0.40	0.10	0.00	0.49	10.0
6- 7	6597.	1.50	5.50	2990	2013	1.00	0.40	0.10	0.00	0.49	10.0
7- 8	6597.	1.50	5.50	2990	2013	1.00	0.40	0.10	0.00	0.49	10.0
8- 1	6597.	1.50	5.50	2990	2013	1.00	0.40	0.10	0.00	0.49	10.0
WEB MEMBERS											
2- 8	296.	1.50	3.50	633	374	0.00	0.15	0.00	0.00	0.15	0.9
2- 7	-2001.	1.50	3.50	1783	420	0.00	0.91	0.00	0.00	0.91	5.3
3- 7	5432.	1.50	5.50	1898	1173	0.00	0.56	0.00	0.00	0.56	1.7
4- 7	-2001.	1.50	3.50	1783	420	0.00	0.91	0.00	0.00	0.91	5.3
4- 6	296.	1.50	3.50	633	374	0.00	0.15	0.00	0.00	0.15	0.9

DEFLECTION AT 7 = -0.9406 INCHES

EXPLANATIONS:
P/AF = AXIAL FORCE DIVIDED BY THE CROSS-SECTIONAL AREA AND THE ALLOWABLE UNIT STRESS IN TENSION OR COMPRESSION.
VM/ZF= VERTICAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
HM/ZF= HORIZONTAL BENDING MOMENT DIVIDED BY THE SECTION MODULUS AND THE ALLOWABLE UNIT STRESS IN BENDING.
CSI = COMBINED STRESS INTERACTION EQUATION IS THE ADDITION OF P/AF + VM/ZF + HM/ZF
LAT. BRC = MAXIMUM DISTANCE ALLOWABLE(FT) WITHOUT REQUIRING LATERAL SUPPORT.
STRESSES SHOWN (FB FT FC) ARE ALLOWABLE LUMBER STRESSES MODIFIED BY THE SHORT TERM INCREASE AND OTHER APPROPRIATE FACTORS WHEREVER APPLICABLE.

CHORDS	SIZE	LUMBER DESCRIPTION
1- 3	2X 6	MSR2100F-1.8E S.P.F.
3- 5	2X 6	MSR2100F-1.8E S.P.F.
5- 7	2X 6	MSR 2250F-1.9E SO.P.
7- 1	2X 6	MSR 2250F-1.9E SO.P.
WEBS 2- 8 4- 6	2X 4	NO.3 S.P.F.
WEBS 2- 7 4- 7	2X 4	NO.2 KD15 SO. PINE
WEBS 3- 7	2X 6	MSR1650F-1.5E S.P.F.

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