MASTER

MARATHON TOWNSHIP BUILDING DEPARTMENT
POLE BARN PLAN REVIEW

ADDRESS of BUILDING _____
Width _____ Length _____ Height _____
Square Foot _____

SIZE OF OPENINGS ON BEARING WALLS
Doors _____
Windows _____

PORCHES OR OTHER ATTACHEMENTS TO BUILDING
Please List _____

FOOTINGS Size _____ Depth _____
POST Size _____ Spacing _____

EXTERIOR FINISH TO BE
Walls _____ Roof _____

ANY MASONRY Yes _____ or No _____ If Yes Where _____

VENTILATION Roof _____ Eave _____

HEADER OR CARRIER SIZE _____

WALL GIRTS SPACING _____

CONCRETE FLOOR Yes _____ No _____

ANY ENGINEERED PRODUCTS OR PLANS Yes _____ No _____

ANY TRADES AT THIS TIME Yes _____ No _____

TRUSS PRINTS MUST BE ON JOB AT TIME OF FINAL INSPECTION

ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL INTO TREATED POSTS AND ALL TREATED MATERIAL

IF GARAGE IS ATTACHED TO HOUSE, MUST HAVE VAPOR BARRIER ON WALLS & ELECTRICAL PERMIT

_____
Signature of Homeowner / Contractor

Marathon Township

4575 Pine St
PO Box 457
Columbiaville MI 48421
810-793-2002

BASIC POLE BARN

Name_____

Permit #:_____

Snow Load:_____

Girt Size:_____

Purlin Size:_____

Pole Spacing:_____

Header Size:_____

Truss Spacing:_____

Truss Support Girt Size:_____

Treated Bottom Girt Size:_____

Pole Size (Treated):_____

Pole Grade Min. Ret. AWPA LP22 0.60# pfc

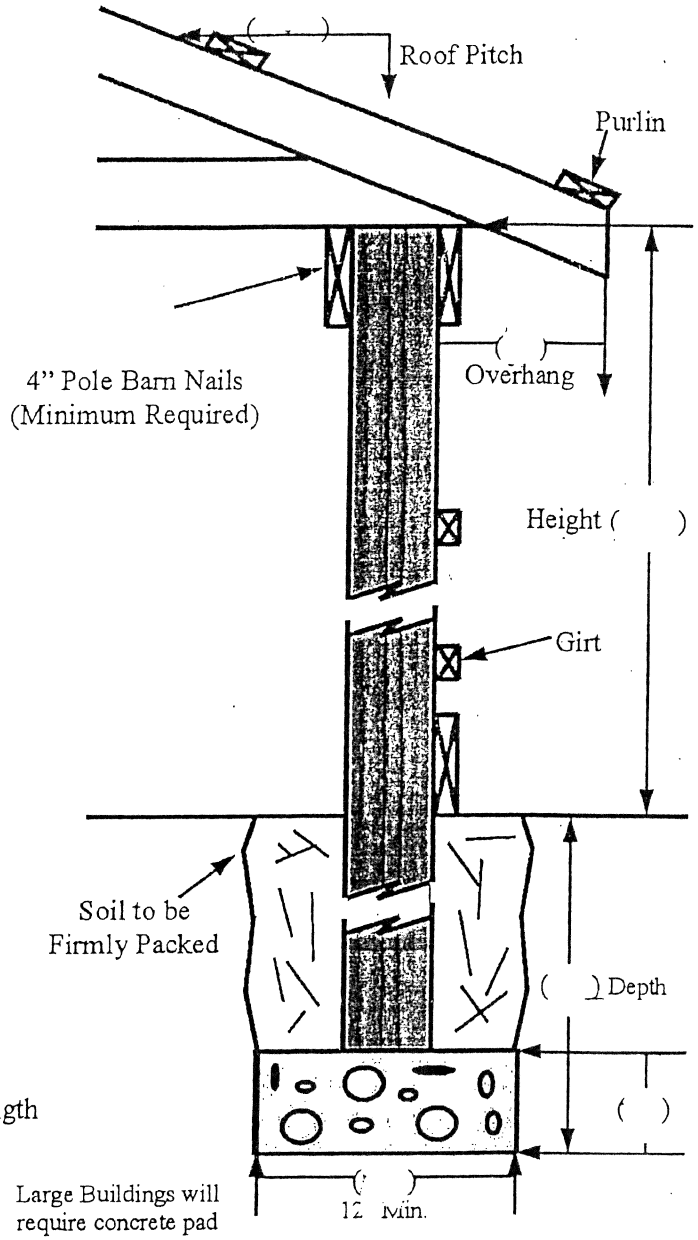
Engineered Truss Drawing Required _____

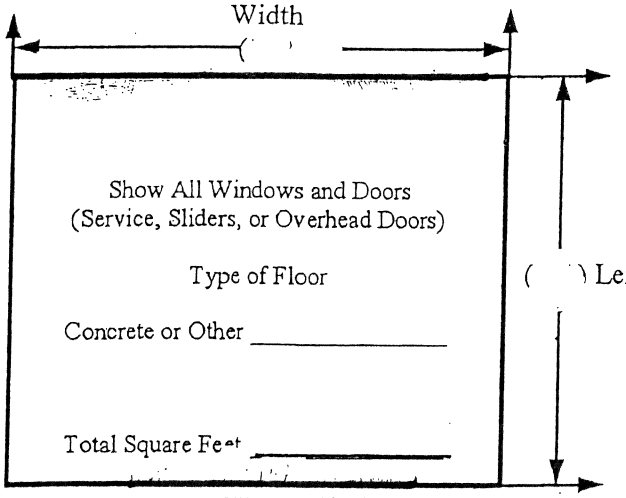
Lateral Bracing to Truss Mfg. Specs. _____

Roof Materials:_____

Siding Materials:_____

Floor Depth:_____

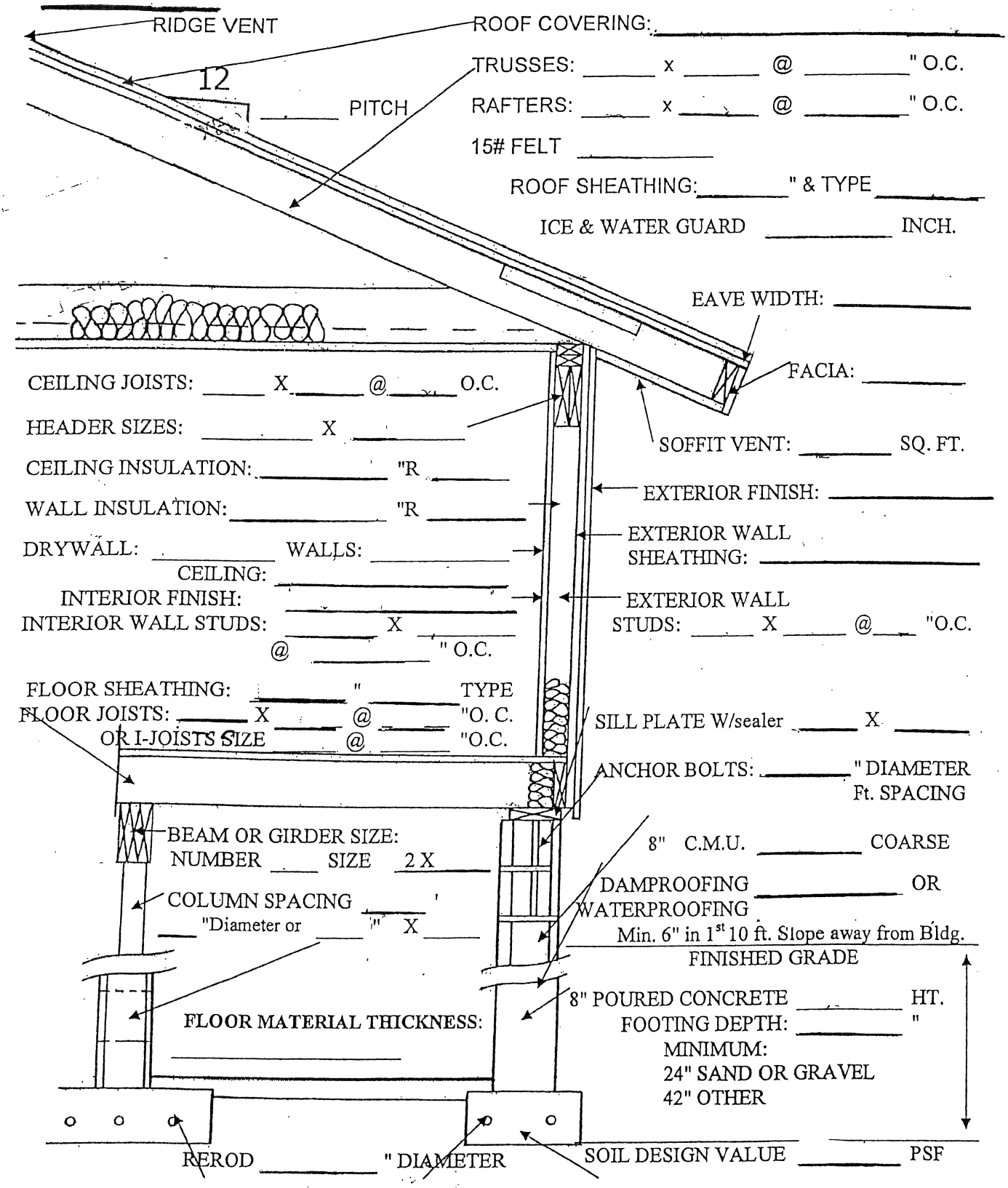




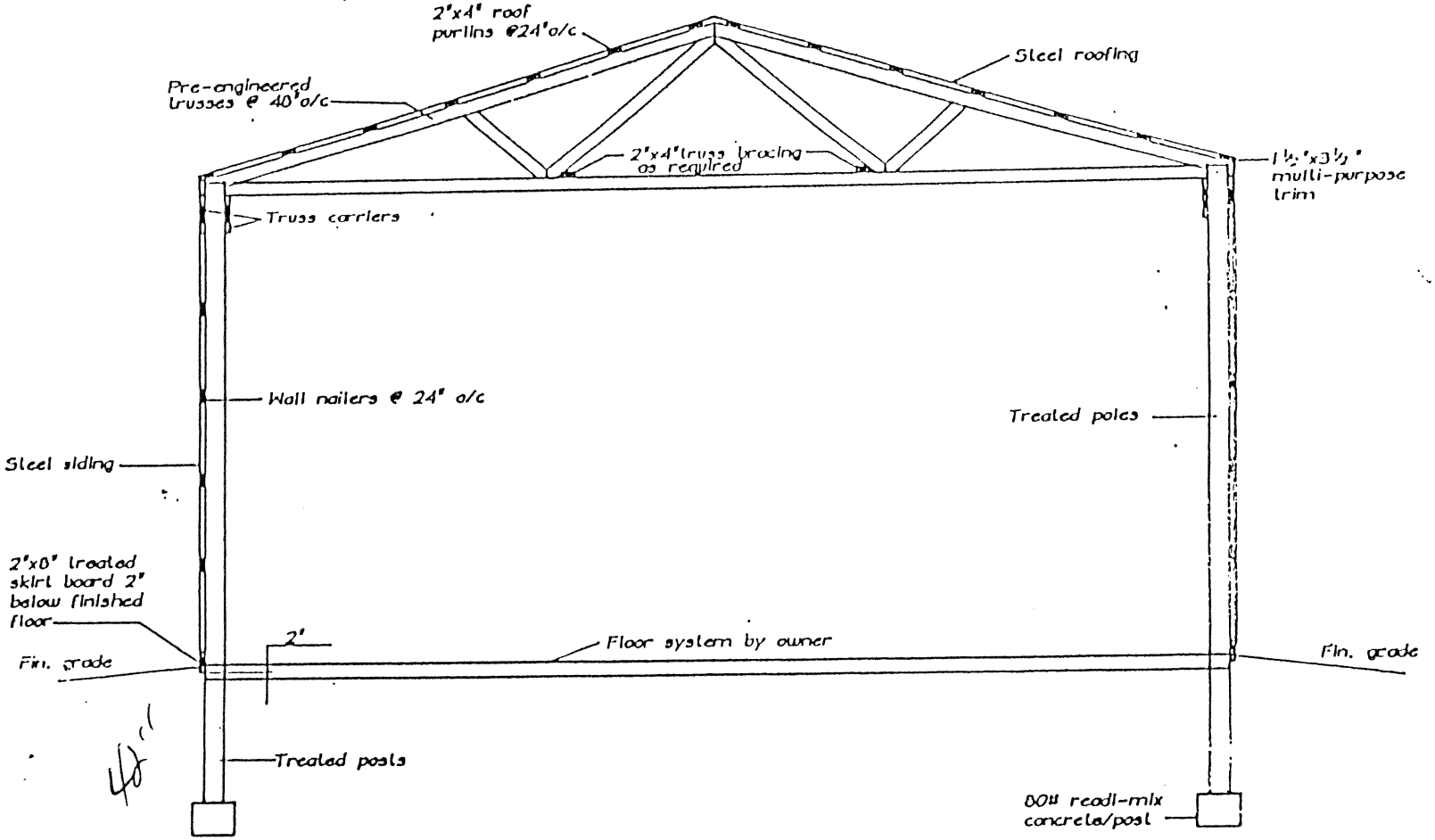
Large Buildings will require concrete pad larger than 12"x6" See Chart Below

Building Width		20'	24'	26'	28'	30'	32'	34'	36'	40'
8' post spacing	Hole Diameter	12"	14"	16"	17"	17"	18"	18"	19"	20"
	Concrete Thickness	6"	7"	8"	8.5"	8.5"	9"	9"	9.5"	10"
10' post spacing	Hole Diameter	16"	17"	18"	18.5"	19"	20"	20.5"	21"	22"
	Concrete Thickness	8"	8.5"	9"	9.25"	9.5"	10"	10.25"	10.5"	11"

TRENCH FOOTING



SPECIFICATIONS SHEET/CROSS-SECTION
ADDITIONAL INFORMATION MAYBE REQUIRED!



STANDARD PACKAGE

TYPICAL SECTION

No Scale

Marathon Township-Building Dept.
4575 Pine St.
Columbiaville, MI 48421

FOOTING SIZES FOR POLE BUILDINGS: THIS IS FOR 3000# PER SQUARE FOOT SOIL CAPACITY

WIDTH OF BUILDING	POLE SPACING FOR SINGLE STORY BUILDING						
	4 FEET	6 FEET	8 FEET	10 FEET	12 FEET	14 FEET	16 FEET
16 FEET	6"X12"	6"X12"	6"X14"	6"X14"	8"X16"	8"X18"	8"X18"
20 FEET	6"X12"	6"X12"	6"X14"	8"X16"	8"X18"	10"X20"	10"X20"
24 FEET	6"X12"	8"X16"	8"X16"	8"X18"	10"X20"	10"X22"	10"X22"
28 FEET	6"X12"	8"X16"	8"X18"	10"X20"	10"X22"	10"X22"	12"X24"
32 FEET	6"X12"	8"X16"	8"X18"	10"X20"	10"X22"	12"X24"	12"X26"
36 FEET	6"X12"	8"X18"	10"X20"	10"X22"	12"X24"	12"X26"	12"X28"
40 FEET	6"X14"	8"X18"	10"X20"	12"X24"	12"X26"	12"X28"	12"X28"
44 FEET	8"X16"	8"X18"	10"X22"	12"X24"	12"X26"	12"X28"	14"X30"
48 FEET	8"X16"	10"X20"	10"X22"	12"X26"	12"X28"	14"X30"	14"X32"
52 FEET	8"X16"	10"X20"	12"X24"	12"X26"	12"X28"	14"X30"	14"X32"
56 FEET	8"X18"	10"X22"	12"X24"	12"X28"	14"X30"	14"X32"	16"X34"
60 FEET	8"X18"	10"X22"	12"X26"	12"X28"	14"X30"	16"X34"	16"X36"
64 FEET	8"X18"	10"X22"	12"X26"	12"X28"	14"X32"	16"X34"	16"X36"

FOOTING CONCRETE:

FOOTING SIZE	APPROXIMATE NUMBER OF REDI-MIX BAGS OF CONCRETE*	
	80# BAGS	50# BAGS
6"X12"	¼ BAG	1 BAG
6"X14"	1 BAG	1½ BAGS
8"X16"	1¾ BAGS	2¾ BAGS
8"X18"	2 BAGS	3 BAGS
10"X20"	2¾ BAGS	4¼ BAGS
10"X22"	3¼ BAGS	5¼ BAGS
12"X24"	4¾ BAGS	7¼ BAGS
12"X26"	5¾ BAGS	9 BAGS
12"X28"	6¾ BAGS	10¼ BAGS
14"X30"	8¼ BAGS	14 BAGS
14"X32"	10 BAGS	15¾ BAGS
16"X34"	12¾ BAGS	20¾ BAGS
16"X36"	14¼ BAGS	23 BAGS

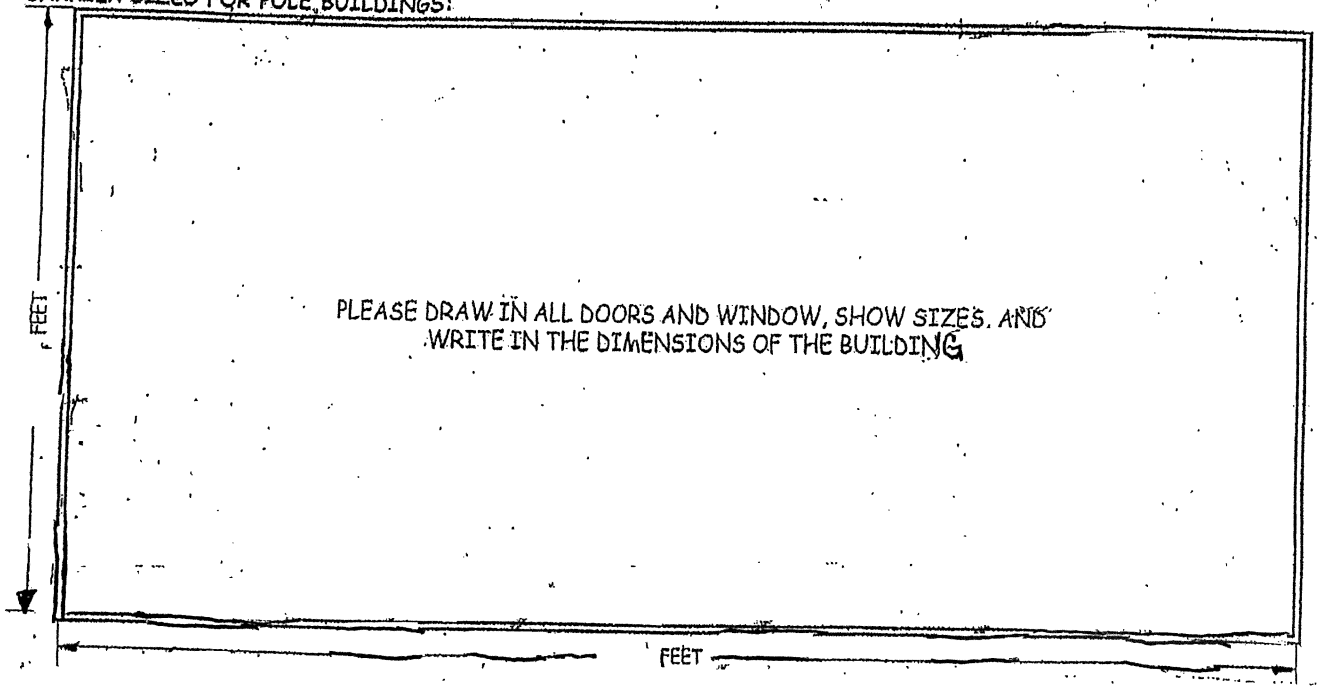
*Above numbers are rounded to nearest ¼ bag. 1¼ - 80 pound bags or 2¾ - 50 pound bags equal approximately 1 cubic foot of mixed concrete based on information provided by QUIKRETE® Concrete Supply Company.

CARRIER SIZES FOR POLE BUILDINGS: THIS IS FOR SPRUCE-PINE-FIR #2 OR BETTER

WIDTH OF BUILDING	POLE SPACING FOR SINGLE STORY BUILDING						
	4 FEET	6 FEET	8 FEET	10 FEET	12 FEET	14 FEET	16 FEET
16 FEET	2-2"X4"	2-2"X6"	2-2"X8"	2-2"X10"	2-2"X12"[A]	3-2"X12"[C]	3-2"X12"[C]
20 FEET	2-2"X6"	2-2"X8"	2-2"X8"	2-2"X10"	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"
24 FEET	2-2"X6"	2-2"X8"	2-2"X10"	2-2"X10"	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"
28 FEET	2-2"X8"	2-2"X10"	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"		
32 FEET	2-2"X8"	2-2"X12"[A]	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"		
36 FEET	2-2"X8"	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"	4-2"X12"		
40 FEET	2-2"X10"	3-2"X10"[B]	3-2"X12"[C]	4-2"X12"			
44 FEET	2-2"X10"	3-2"X10"[B]	4-2"X10"	4-2"X12"			
48 FEET	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"	MUST BE ENGINEERED			
52 FEET	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"				
56 FEET	2-2"X12"[A]	3-2"X12"[C]	4-2"X12"				
60 FEET	3-2"X10"[B]	4-2"X10"					
64 FEET	3-2"X10"[B]	4-2"X10"					

[A] 3-2"X10" MAY BE USED INSTEAD OF 2-2"X12"
[B] 4-2"X8" MAY BE USED INSTEAD OF 3-2"X10"
[C] 4-2"X10" MAY BE USED INSTEAD OF 3-2"X12"

CARRIER SIZES FOR POLE BUILDINGS:



SETTING THE POLES

1. Place the poles in the holes and let them lean toward the inside of the building.

2. Replace the string lines. Using a carpenter's level, plumb the outside edges of all the corner poles. Remember to keep the poles 1½ inches from the string line. Fill the holes ⅓ full of dirt and tamp with a 2x4, making sure you keep the pole plumb (see detail at right).

3. Drive ground stakes (not provided) inside the building opposite the poles. Brace the poles with 2x4's from the stakes to the top of the poles. Braces should be placed so they do not interfere with the installation of the wall nailers (see detail below).

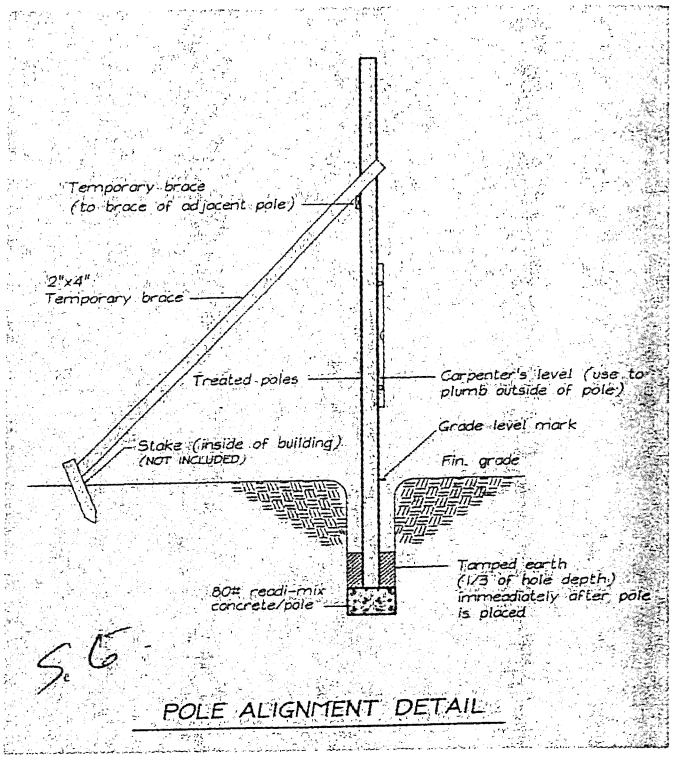
   NOTE: Since 2x4 temporary braces are needed later to complete the construction of your post frame structure, avoid cutting or excessive nailing.

4. Plumb and follow the same procedure for all the intermediate poles.

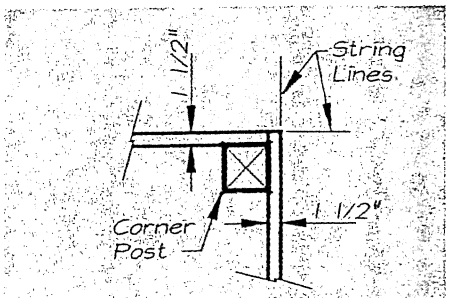
   NOTE: The spacing from the center of the corner pole to the center of the first intermediate pole will be different than the spacing from the center to center of two intermediate poles because of the 1½ inch width of the wall nailer.

5. Finish filling and compacting dirt around all the poles. Check and maintain plumb while filling the holes.

6. At this point you need to determine the inside finished floor height. This can be accomplished with a transit, carpenter's level, or line level. Mark this height on the outside of all the poles.



POLE ALIGNMENT DETAIL



POLE SETTING DETAIL

POLE BRACING DETAIL