Columbia County Building Permit Application

For Office Use Only Application # 0712-46 Date Received 12/14/07 By GT Permit # 26529

Zoning Official ajs Date 12/17/07 Flood Zone N/A FEMA Map # _____ Zoning RSF-2

Land Use RLD Elevation _____ MFE _____ River _____ Plans Examiner OKSTH Date 12-17-07

Comments _____

☑ NOC ☑ EH ☑ Deed or PA ☑ Site Plan ☐ State Road Info ☐ Parent Parcel # _____ ☐ Dev Permit # _____

☐ Unincorporated area ☐ Incorporated area ☐ Town of Fort White Compliance letter ☐ In Floodway

Fax 352-472-6855

Name Authorized Person Signing Permit Larry Cole Phone 352-472-6850

Address 25370 NW 8th Place Newberry, FL 32669

Owners Name Carol Gordon Phone 386-758-0067

911 Address 122 SW Ridgeview Pl. Lake City, FL

Contractors Name Carl R. Helms Timberlake Aluminum Const. Phone 352-472-6850

Address 25370 NW 8th Place Newberry FL 32669

Fee Simple Owner Name & Address N/A

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address Lawrence Bennett PO Box 219368 S. Daytona, FL 32121

Mortgage Lenders Name & Address N/A

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – Progressive Energy

Property ID Number 33-3S-16-02934-018-HX Estimated Cost of Construction $17225.00

Subdivision Name Cypress Lake Lot 1 Block B Unit ____ Phase ____

Driving Directions ~~Head (N) on NE Hernando Ave toward NE Justice St Ave; turn (L) at NE Madison St (L) at N Marion Ave/US-441; (R) at W Duval St/US-90; (L) at SW Sweetbreeze Dr.; (R) at SW~~ Ridgeview Pl., 1st lot on left.

Type of Construction Screen enclosure over existing pool Number of Existing Dwellings on Property 1

Total Acreage 1.137 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 50'+ Side 50'+ Side 100'+ Rear 100'+

Total Building Height 12' Number of Stories 1 Heated Floor Area 0 Roof Pitch N/A

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING SERVICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Notary Signature

Contractor Signature

Contractor's License Number LARRY H COLE SCC056716

Competency Card Number

STATE OF FLORIDA
COUNTY OF COLUMBIA

NOTARY STAMP/SEAL: MY COMMISSION # DD677975 EXPIRES May 23, 2011 (407) 398-0153 FloridaNotaryService.com

Sworn to (or affirmed) and subscribed before me

this 8 day of December 2007.

Personally known ✓ or Produced Identification _____

Notary Signature

(Revised Oct. 2007)

Columbia County Property Appraiser

DB Last Updated: 11/15/2007

2008 Proposed Values

Tax Record | Property Card | Interactive GIS Map | Print

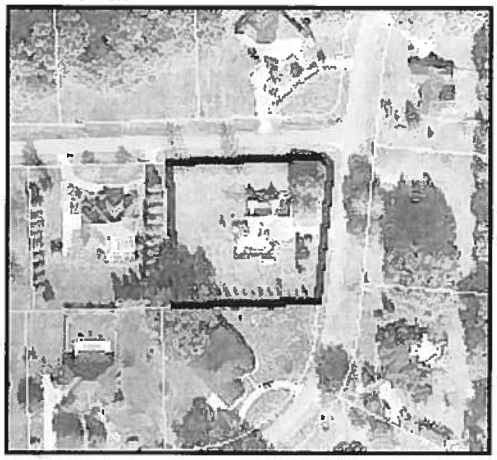
Parcel: 33-3S-16-02434-018

<< Prev Search Result: 4 of 18 Next >>

Owner & Property Info

Owner's Name	GORDON CAROLYN ANN		
Site Address	RIDGEVIEW		
Mailing Address	118 BOLIVAR ST CHATTAHOOCHEE, FL 32324		
Use Desc. (code)	SINGLE FAM (000100)		
Neighborhood	33316.02	**Tax District**	2
UD Codes	MKTA06	**Market Area**	06
Total Land Area	1.137 ACRES		
Description	LOT 1 BLOCK B CYPRESS LAKE S/D ORB 650-825 & 680-584 & 740-1309, WD 1127-2465		

GIS Aerial



Property & Assessment Values

Mkt Land Value	cnt: (1)	$42,500.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (1)	$115,462.00
XFOB Value	cnt: (6)	$14,686.00
Total Appraised Value		$172,648.00

Just Value	$172,648.00
Class Value	$0.00
Assessed Value	$172,648.00
Exempt Value	$0.00
Total Taxable Value	$172,648.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
8/6/2007	1127/2465	WD	I	Q		$225,000.00
7/31/1990	740/1309	WD	I	Q		$87,000.00
3/31/1989	680/584	WD	I	Q		$98,500.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	SINGLE FAM (000100)	1988	Vinyl Side (31)	1832	2468	$115,462.00
	Note: All S.F. calculations are based on exterior building dimensions.					

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0166	CONC,PAVMT	0	$1,030.00	1.000	0 x 0 x 0	(.00)
0180	FPLC 1STRY	0	$2,300.00	1.000	0 x 0 x 0	(.00)
0258	PATIO	0	$300.00	1.000	0 x 0 x 0	(.00)
0280	POOL R/CON	1993	$9,331.00	648.000	36 x 18 x 0	(.00)
0294	SHED WOOD/	1993	$1,125.00	200.000	10 x 20 x 0	AP (25.00)

NOTICE OF COMMENCEMENT
STATE OF FLORIDA COUNTY OF Columbia **CITY OF** ~~Lake City~~ Fort White AS

THE UNDERSIGNED hereby gives notice that improvement(s) will be made to certain real property, and in accordance with Chapter713, Florida Statutes, the following information is provided in this Notice of Commencement.

DESCRIPTION OF PROPERTY:
LOT 5 BLOCK — SECTION Phase I TOWNSHIP — RANGE —
TAX PARCEL # 27 6S 16 03951-105
SUBDIVISION: Foxwood
PLATBOOK: MAP PAGE#
(911) STREETADDRESS: 250 S.W. Vargus Way
Fort White FL 32038

GENERAL DESCRIPTION OF IMPROVEMENT:
TO CONSTRUCT: Screen Enclosure

OWNER INFORMATION:
OWNER(S)NAME: George Mortensen
ADDRESS: ~~Lake City~~ 250 SW Vargus Way PHONE 516 318 6487
CITY: ~~Lake City~~ Ft White STATE FL ZIP 32038
INTEREST IN THE PROPERTY: Owner
FEE SIMPLE TITLEHOLDER NAME: N/A
FEE SIMPLE TITLEHOLDER ADDRESS:(IF OTHER THAN OWNER)

CONTRACTOR NAME: Timberlake Aluminum
Address: 25370 W 8th Pl Newberry FL
BONDING COMPANY: N/AADDRESS: N/A PHONE NUMBER N/A
CITY: N/A STATE N/A ZIP CODE : N/A
LENDER NAME: None
ADDRESS :n/a PHONE N/A
CITY:N/A STATE N/A _Zip: N/A

Inst:200712027499 Date:12/14/2007 Time:10:38 AM
DC,P.DeWitt Cason,Columbia County Page 1 of 1

Prepared by: Peeler Pools, Inc. (Raymond Peeler)
Return to : Peeler Pools, Inc. 9878 S. US Hwy 441 Lake City, Fl 32025

Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1) (a) 7., Florida Statutes.
NAME: None ADDRESS: N/A
In addition to himself, Owner designates: Raymond Peeler of Peeler Pools, Inc.
9878 S US Hwy 441 Lake City, Fl 32025
to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) (b), Florida Statutes.

Expiration date is 1 year from date of recording unless a different date is specified.

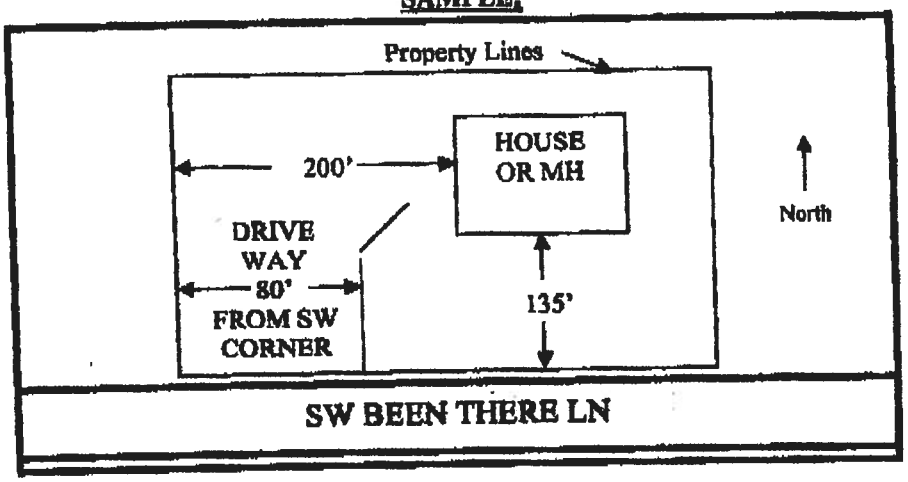
SIGNATURE OF OWNER George Mortensen
SWORN to and subscribed before me this 10th day of September year of 2007
Notary Public _____ My commission expires _____
Signature: Mary Peserillo

Mary Peserillo
Notary Public, State of New York
Qualified in Suffolk County
No. 01PE6056614
Commission Expires February 26, 20__

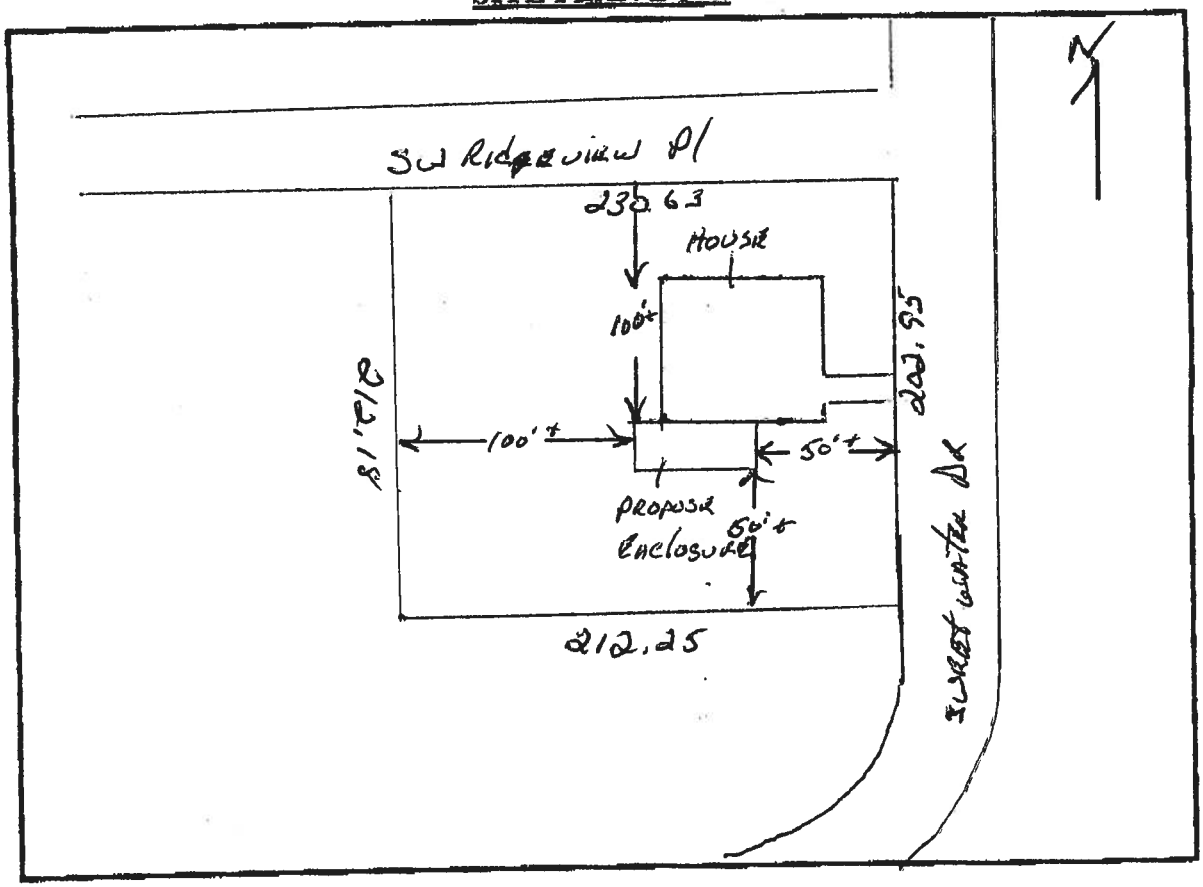
***WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART 1, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOURPAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.**

1. A PLAT, PLAN, OR DRAWING SHOWING THE PROPERTY LINES OF THE PARCEL.
2. LOCATION OF PLANNED RESIDENT OR BUSINESS STRUCTURE ON THE PROPERTY WITH DISTANCES FROM AT LEAST TWO OF THE PROPERTY LINES TO THE STRUCTURE (SEE SAMPLE BELOW).
3. LOCATION OF THE ACCESS POINT (DRIVEWAY, ETC.) ON THE ROADWAY FROM WHICH LOCATION IS TO BE ADDRESSED WITH A DISTANCE FROM A PARALLEL PROPERTY LINE AND OR PROPERTY CORNER (SEE SAMPLE BELOW).
4. TRAVEL OF THE DRIVEWAY FROM THE ACCESS POINT TO THE STRUCTURE (SEE SAMPLE BELOW).

SAMPLE:



SITE PLAN BOX:



Design Check List for Pool Enclosures (Page 1 of 4)

I. Design Statement:

These plans have been designed in accordance with the Aluminum Structures Design Manual by Lawrence E. Bennett and are in compliance with the 2004 Florida Building Code Edition with 2006 Supplements, Chapter 20, ASM35 and The 2005 Aluminum Design Manual Part I-A & II-A; Exposure 'B'☑ or 'C'☐ or 'D'☐; Importance Factor 0.87 for 100 MPH and 0.77 for 110 MPH and higher; Negative I.P.C. 0.00; ___ MPH Wind Zone for 3 second wind gust; Basic Wind Pressure ____; Design pressures are ___ PSF for roofs & ___ PSF for walls. (see page 1ii for wind loads and design pressures) A 300 PLF point load is also considered for screen roof members.

Notes: Wind velocity zones and exposure category is determined by local code. Design pressures and conversion multipliers are on page 1-ii.

II. Host Structure Adequacy Statement:

I have inspected and verify that the host structure is in good repair and attachments made to the structure will be solid.

Carl R. Helms — Phone: 352-472-6850
Contractor / Authorized Rep* Name (please print)

Date: _____
Contractor / Authorized Rep* Signature

Carol Gordon 122 SW Ridgeview Pl. Lake City, FL
Job Name & Address

Note: If the total of beam span & upright height exceeds 50' or upright height exceeds 16', site specific engineering is required.

III. Building Permit Application Package contains the following:	**Yes**	**No**
A. Project name & address on plans	☑	☐
B. Site plan or survey with enclosure location	☑	☐
C. Contractor's / Designer's name, address, phone number, & signature on plans	☑	☐
D. Site exposure form completed	☑	☐
E. Enclosure layout drawing @ 1/8" or 1/10" scale with the following:	☑	☐
1. Plan view with host structure, enclosure length, projection from host structure, and all dimensions	☑	☐
2. Front and side elevation views with all dimensions & heights	☑	☐
Note: All mansard wall drawings shall include mansard panel at the top of the wall.		
3. Beam location (show in plan & elevation view) & size (Table 1.1 & 1.6)	☑	☐

Roof frame member allowable span conversions from 120 MPH wind zone, "B" Exposure to _____ MPH wind zone and / or☐"C" or☐"D" Exposure for load width of _____:

Note: Conversion factors do not apply to members subject to point load (P).

Look up span in appropriate 120 MPH span table and apply the following formula:

Span @ 120 MPH ——— Required Converted Span / Height

0.00 (b or d) x 1.00 (b or d) x 1.00 (b or d) = _____

Wind Zone Multiplier (see page 1ii) ——— Exposure Multiplier (see page 1ii)

4. Upright location (show in plan & elevation view) & size (Table 1.3 & 1.6)	☑	☐
5. Chair rail & girt size, length, & spacing (Table 1.4)	☑	☐
6. Eave rail size, length, spacing and stitching of (Table 1.2)	☑	☐

*** Must have attended Engineer's Continuing Education Class within the past two years.**

Design Check List for Pool Enclosures (Page 2 of 4)

Wall frame member allowable span conversions from 120 MPH wind zone, "B" Exposure to _____ MPH wind zone and / or ☐ "C" or ☐ "D" Exposure for load width of 1.00 :
Look up span in appropriate 120 MPH span table and apply the following formula:

Span / Height @ 120 MPH or ___ MPH → 0.00 (b or d) x 1.00 (b or d) x 1.00 (b or d) = _____ ← Required Converted Span / Height

Wind Zone Multiplier ** ↑ ; Exposure Multiplier (see page 1ii) ↑

	Yes	No
7. Enclosure roof diagonal bracing in plan view	☑	☐
8. Knee braces length, location, & size (Table 1.7)	☑	☐
9. Wall cables or K-bracing sizes shown in wall views	☑	☐
IV. Highlight details from the Aluminum Structures Design Manual:	**Yes**	**No**
A. Beam & purlin tables with size, thickness, spacing, & spans / lengths (Tables 1.1 & 1.2 or 1.9.1 & 1.9.2)	☑	☐
B. Upright & girt tables with size, thickness, spacing, & spans / lengths (Tables 1.3 & 1.4)	☑	☐
C. Table 1.6 with beam & upright combination	☑	☐
D. Connection details to be use such as:		
1. Beam to upright	☑	☐
2. Beam to wall	☑	☐
3. Beam to beam	☑	☐
4. Chair rail, purlins, & knee braces	☑	☐
5. Extruded gutter connections	☑	☐
6. Angle to deck and / or sole plate	☑	☐
7. Anchors go through pavers into concrete	☐	☑
8. Minimum footing and / or knee wall details	☑	☐
9. Cable or K- brace details Section 1	☑	☐

Wall area calculations for cables:
W = wall width, H = wall height, R = rise
W1 = width @ top of mansard, W2 = width @ top of wall

E. Select footing from examples in manual.
Example 1: Flat Roof

Front wall @ eave: _____ (W) ft. x _____ (H) ft. = 0.00 (a) ft.² @ 100% = ... 0.00 ft.²

Largest side wall: _____ (W) ft. x _____ (H) ft. = 0.00 (b) ft.² @ 50% = ... 0.00 ft.²

TOTAL = ... 0.00 ft.²

Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 0 cable pairs

Side wall cable calculation: 0.00 (b) ft.² @ 100% = ... 0.00 ft.²

Side wall area / (233 ft.² / cable for 3/32") = 0 cable(s)
or
Side wall area / (445 ft.² / cable for 1/8") = 0 cable(s)

Design Check List for Pool Enclosures (Page 4 of 4)

Example 4: Mansard Roof

Front wall @ eave: 56.00 (W) ft. x 9.00 (H) ft. = 504.00 (a) ft.² @ 100% = 504.00 ft.²

Front mansard rise: 3.00 (R) ft. x 1/2(44.00 (W1) ft. + 56.00 (W2) ft.) = 150.00 (b) ft.² @ 100% = 150.00 ft.²

Largest side wall: 44.00 (W) ft. x 9.00 (H) = 396.00 (c) ft.² @ 50% = 198.00 ft.²

Largest side mansard rise: 3 (R) ft. x 1/2(18.00 (W1) ft. + 44.00 (W2) ft.) = 93.00 (d) ft.² @ 50% = 46.50 ft.²

TOTAL = 898.50 ft.²

Total area / (233 ft.² / cable for 3/32") = 4 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 2 cable pairs

Side wall cable calculation: 396.00 (c) ft.² + 93.00 (d) ft.² = 489.00 ft.² @ 100% = 489.00 ft.²

Side wall area / (233 ft.² / cable for 3/32") = 2 cable(s)
or
Side wall area / (445 ft.² / cable for 1/8") = 1 cable(s)

Example 5: Dome Roof

Front dome wall @ eave: ____ (W) ft. x ____ (H) ft. = 0.00 (a) ft. @ 100% = 0.00 ft.²

Front dome rise: ____ (R) ft. x 1/2(____ (W) ft.) = 0.00 (b) ft.² @ 100% = 0.00 ft.²

Largest side wall: ____ (W) ft. x ____ (H) = 0.00 (c) ft.² @ 50% = 0.00 ft.²

Largest side dome rise: ____ (R) ft. x ____ (W) ft. = 0.00 (d) ft.² @ 50% = 0.00 ft.²

TOTAL = 0.00 ft.²

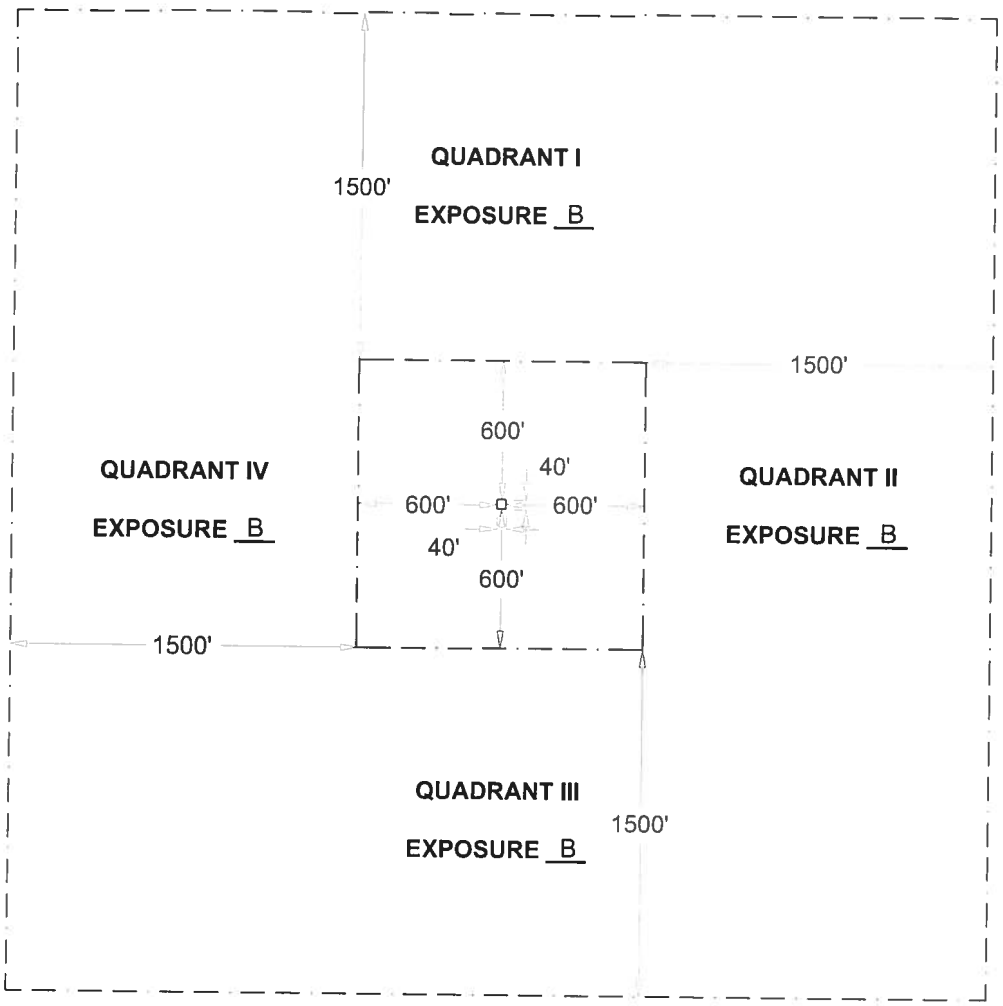
Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 0 cable pairs

Side wall cable calculation: 0.00 (c) ft.² + 0.00 (d) ft.² = 0.00 ft.² @ 100% = 0.00 ft.²

Side wall area / (233 ft.² / cable for 3/32") = 0 cable(s)
or
Side wall area / (445 ft.² / cable for 1/8") = 0 cable(s)

Notes:

SITE EXPOSURE EVALUATION FORM



NOTE: ZONES ARE MEASURED FROM STRUCTURE OUTWARD

SITE

SCALE: 1" = 800'

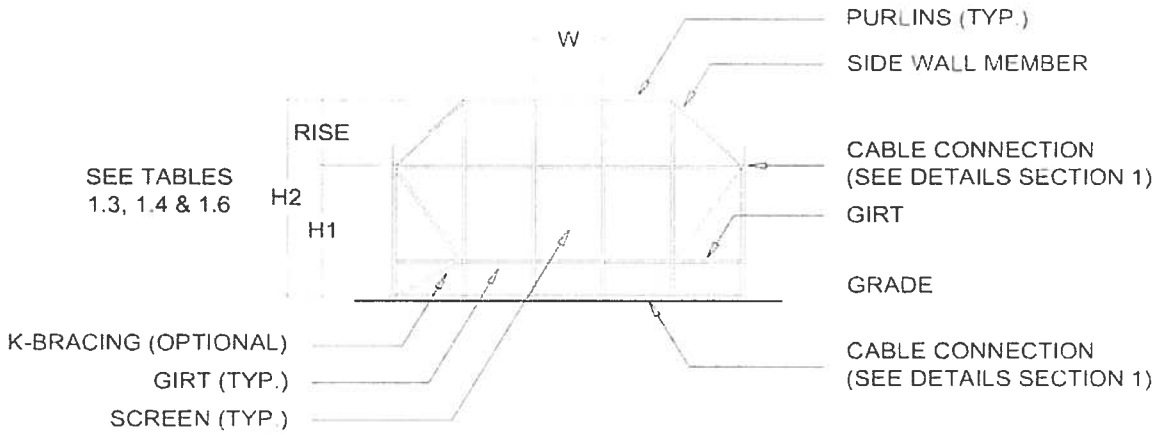
USING THE FOLLOWING CRITERIA, EVALUATE EACH QUADRANT AND MARK IT AS 'B', 'C', OR 'D' EXPOSURE. 'C' OR 'D' EXPOSURE IN ANY QUADRANT MAKE THE SITE THAT EXPOSURE.

EXPOSURE C:
1. OPEN TERRAIN FOR MORE THAN 1,500 FEET IN ANY QUADRANT.
2. ANY 'C' EXPOSURE FOR GREATER THAN 600 FEET IN ANY QUADRANT.
3. NO SHORT TERM CHANGES IN 'B', 2 YEARS BEFORE SITE EVALUATION AND BUILD OUT WITHIN 3 YEARS, SITE WILL BE 'B'.
4. FLAT, OPEN COUNTRY, GRASSLANDS, PONDS AND OCEAN OR SHORELINES IN ANY QUADRANT FOR GREATER THAN 1,500 FEET.

EXPOSURE D: FLAT, UNOBSTRUCTED AREAS THAT ARE 1,500 FT INLAND FROM THE SHORE LINE AND ARE EXPOSED TO WIND FLOWING OVER WATER FOR A DISTANCE OF AT LEAST 1 MILE.

SITE IS EXPOSURE: B EVALUATED BY: Carl R. Helms DATE: _____

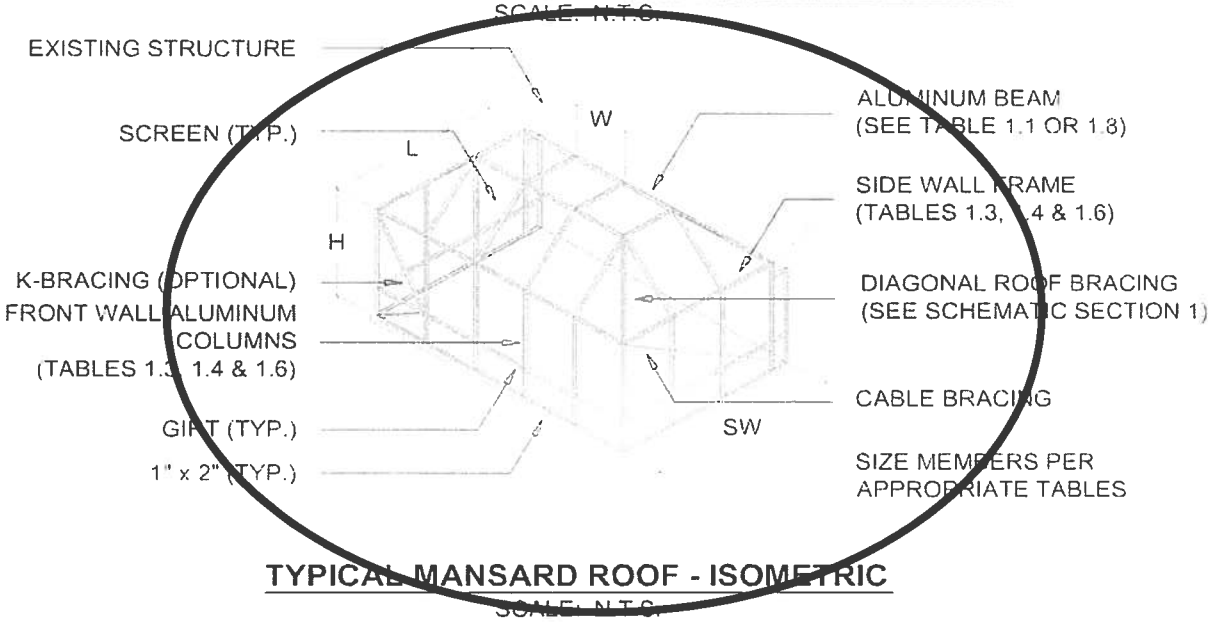
SIGNATURE: Carl R Helms LICENSE #: SCC056710



NOTE: USE H2 FOR CABLE AREA CALCULATION

TYPICAL MANSARD ROOF - FRONT WALL ELEVATION

SCALE: N.T.S.

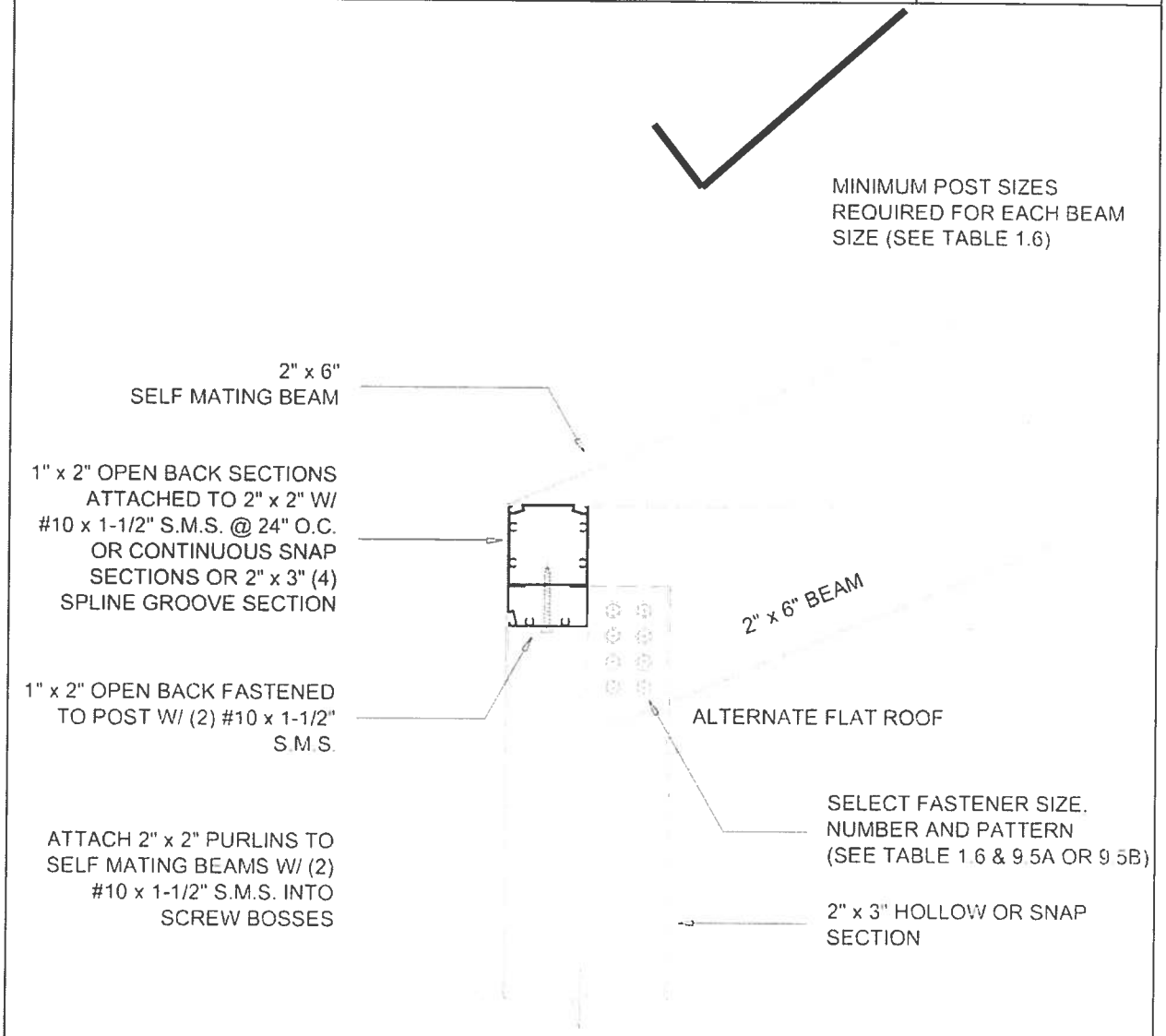


TYPICAL MANSARD ROOF - ISOMETRIC

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

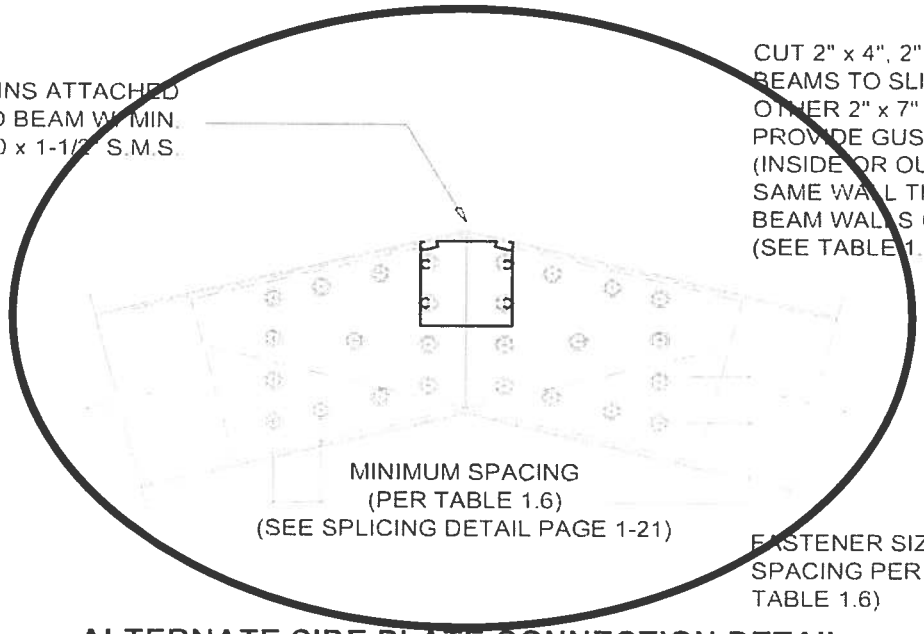
Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214368, South Daytona, Fl 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email: lebpe@bellsouth.net



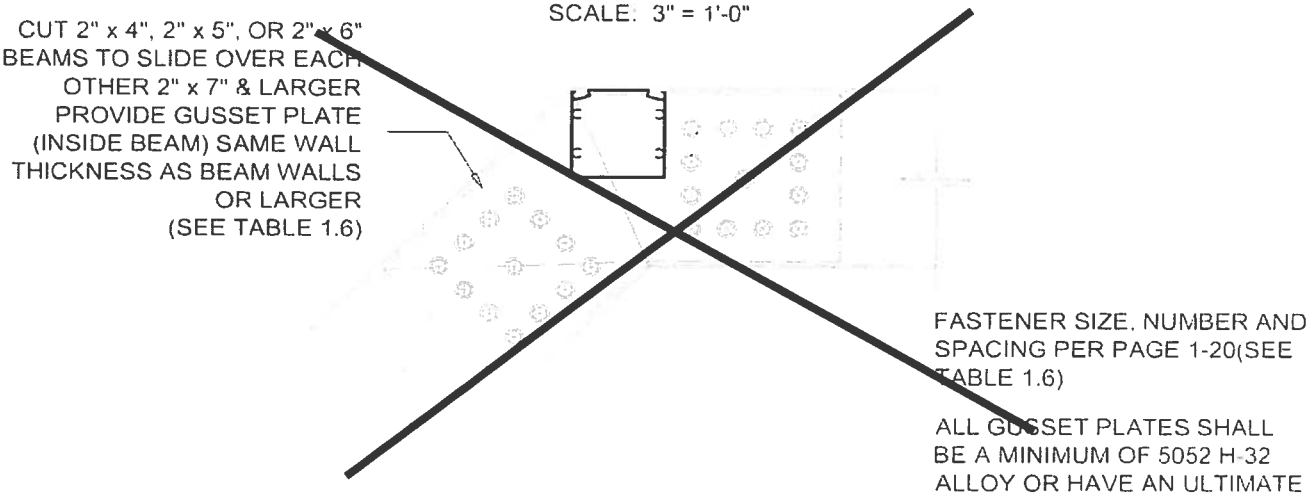
SLOPING BEAM TO UPRIGHT CONNECTION DETAIL (PARTIAL LAP)

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214468, South Daytona, FL 32121
Telephone # (386) 767-4774 Fax # (386) 767-6556
Email: lebpe@bellsouth.net



ALTERNATE SIDE PLATE CONNECTION DETAIL
GUSSET PLATE MOUNTED INTERNALLY
SCALE: 3" = 1'-0"



ALTERNATE SIDE PLATE CONNECTION DETAIL - MANSARD ROOF
GUSSET PLATE MOUNTED INTERNALLY
SCALE: 3" = 1'-0"

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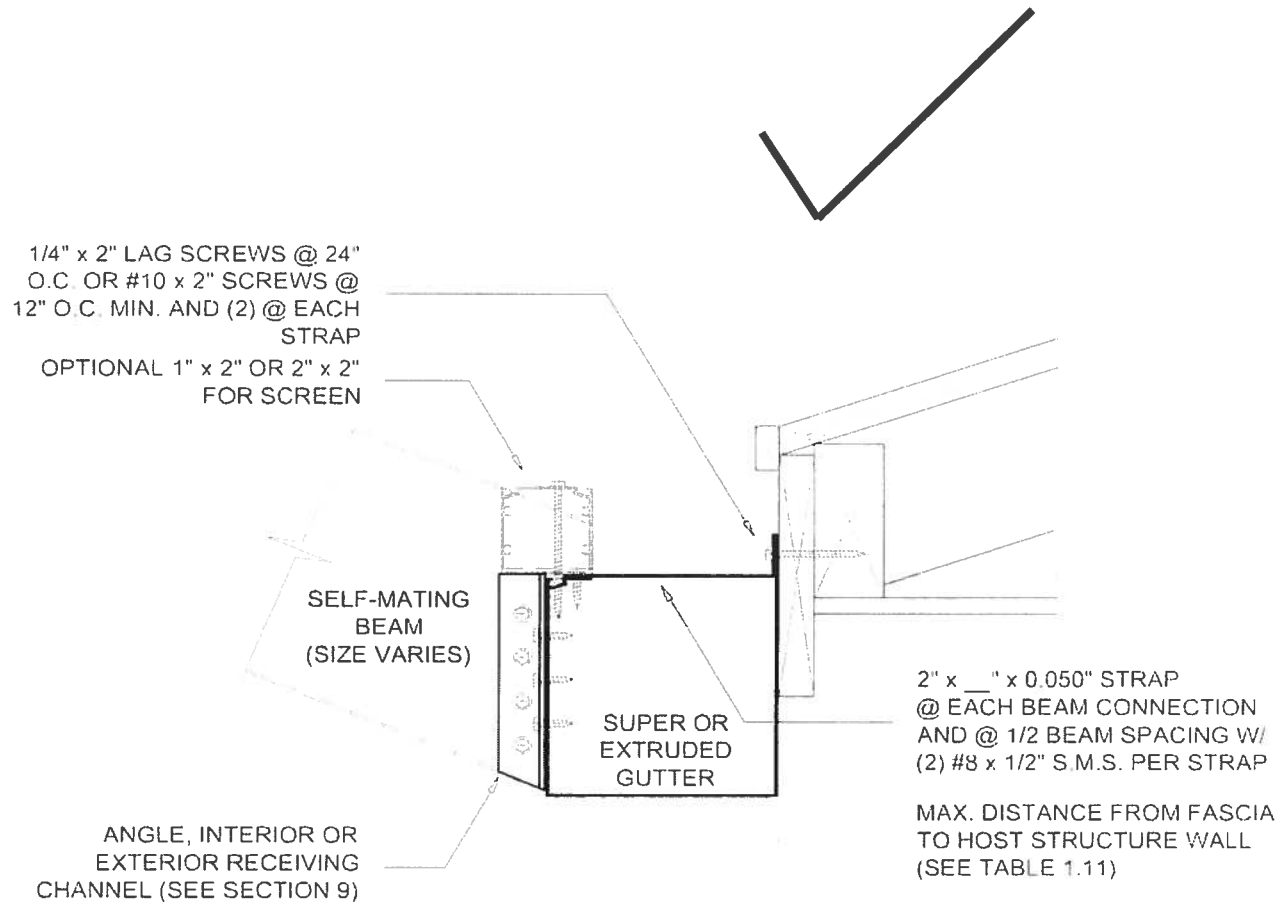

ALTERNATE SELF MATING BEAM CONNECTION TO SUPER OR EXTRUDED GUTTER

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214358, South Daytona, FL 32121
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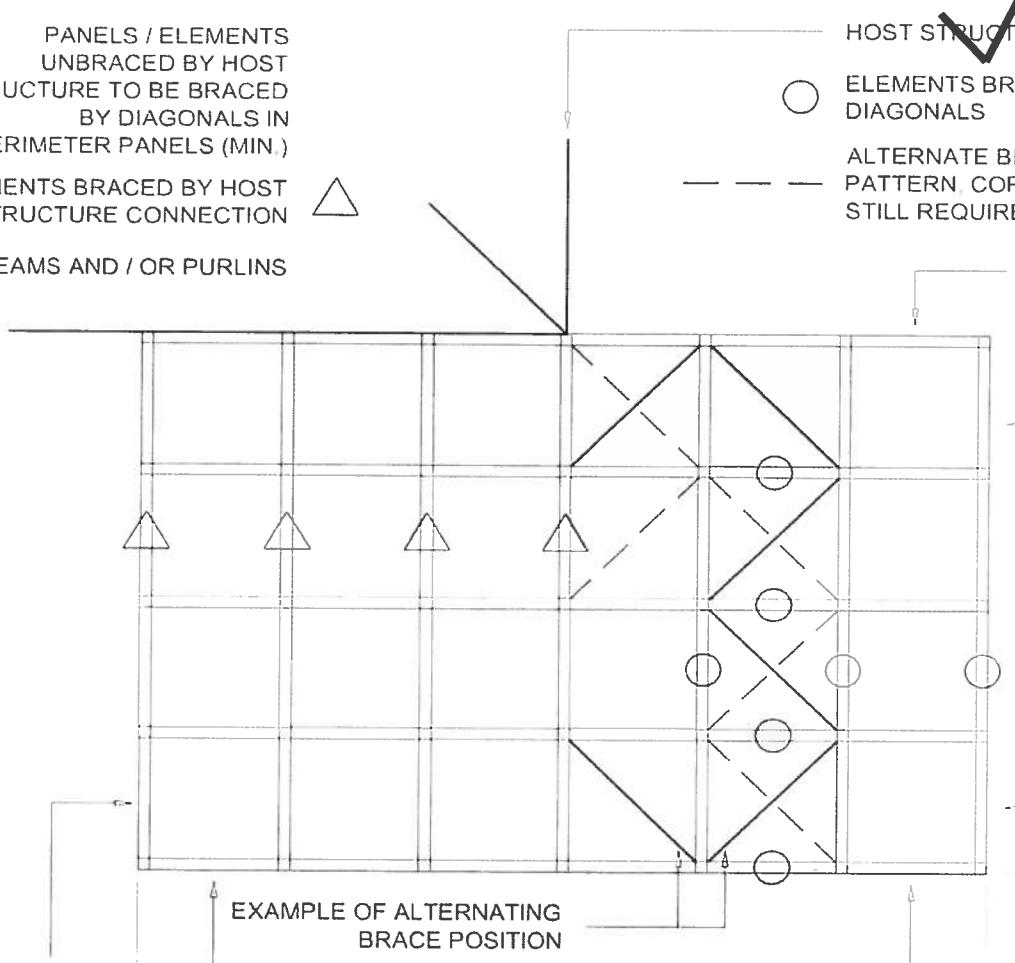
Email: lebpe@bellsouth.net

SECTION 1	SCREENED ENCLOSURES



EACH DIAGONAL TO BE FASTENED EACH END W/ (2) EACH #10 S.M.S. (MIN.)

ADDITIONAL ROOF BRACING IS REQUIRED FOR ALL SIDE WALLS LARGER THAN 4 PANELS. NUMBER OF PANELS SHOULD BE EVEN TO PERMIT POSITION OF BRACES ALTERNATING

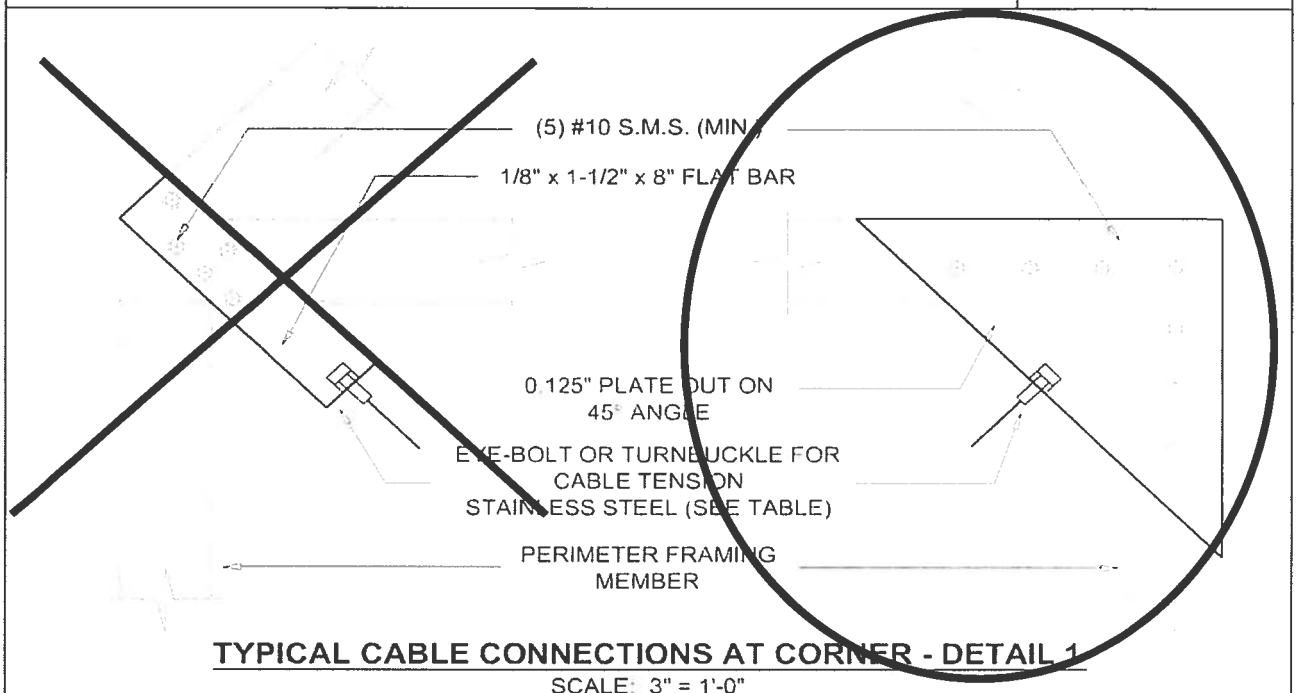
2 x 2 (MIN) ROOF DIAGONAL, MEET WALL AT WALL BRACING AT CORNERS (TYP.)

(POOL ENCLOSURE SCREEN ROOF MAY BE FLAT, GABLE, MANSARD, DOME, OR HIP)

POOL ENCLOSURE DIAGONAL BRACING - SCHEMATIC PLAN VIEW

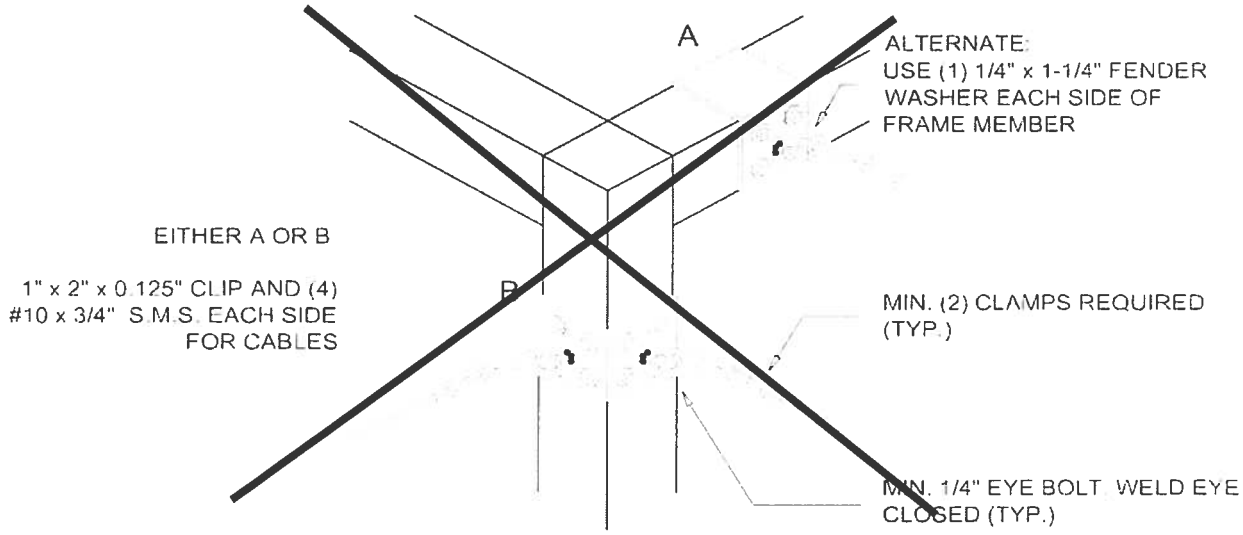
SCALE: 3/8" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P O Box 214368, South Daytona FL 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email: lebpe@bellsouth.net



TYPICAL CABLE CONNECTIONS AT CORNER - DETAIL 1

SCALE: 3" = 1'-0"



ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A

SCALE: 3" = 1'-0"

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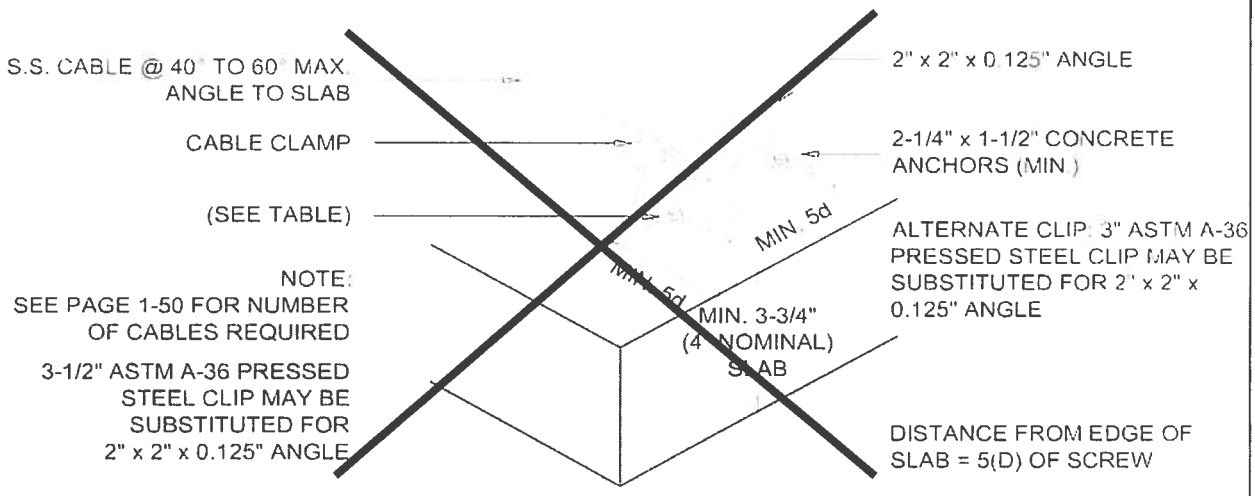
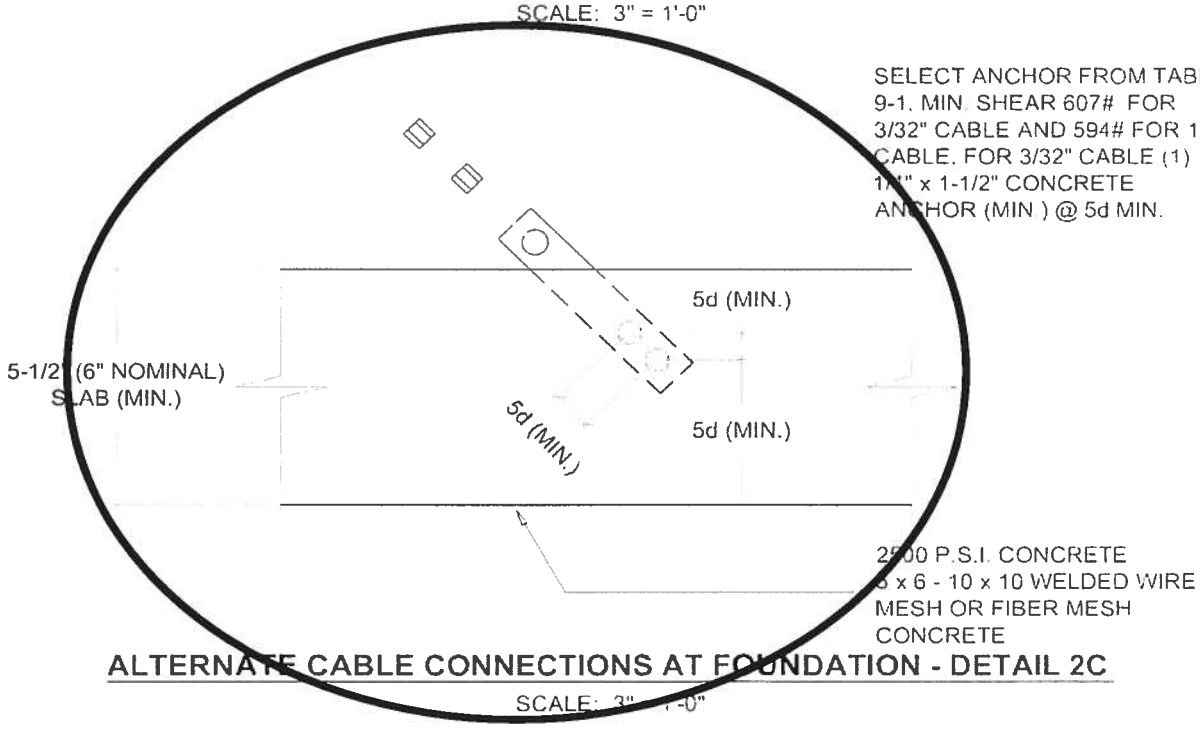


ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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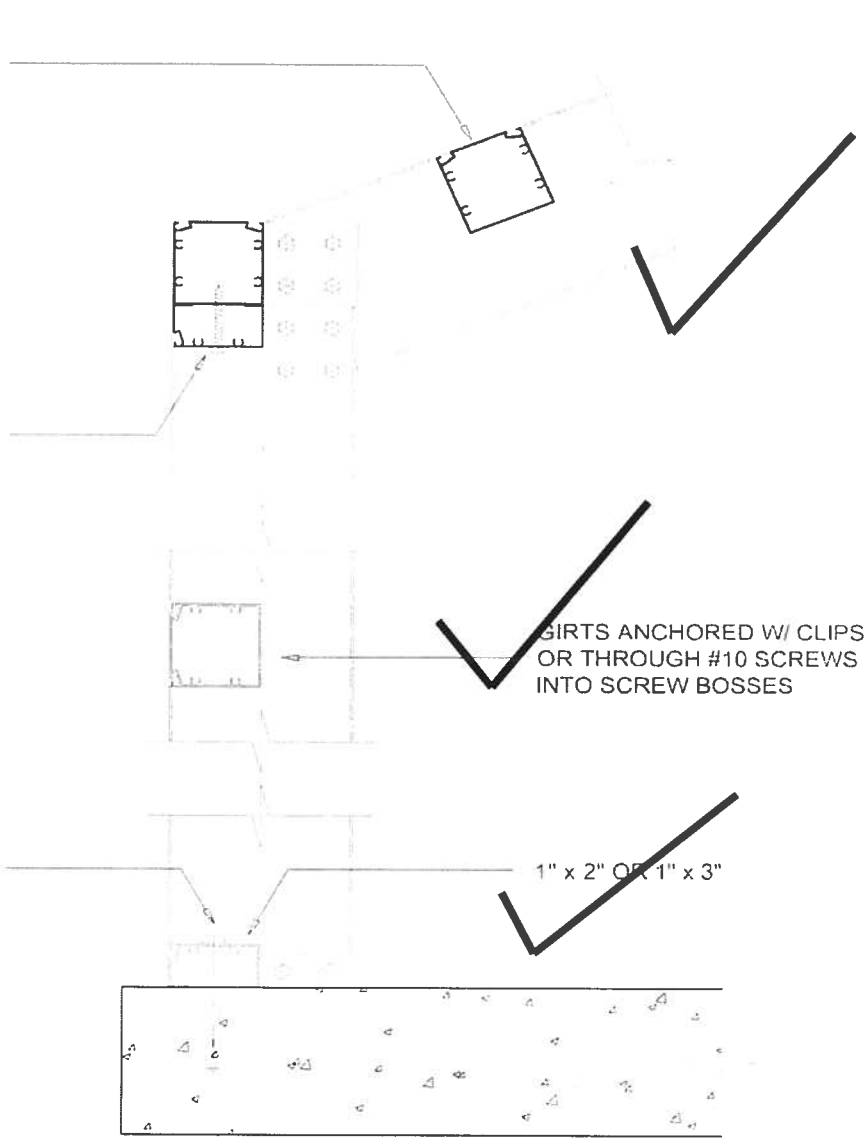
SECTION 1	SCREENED ENCLOSURES



PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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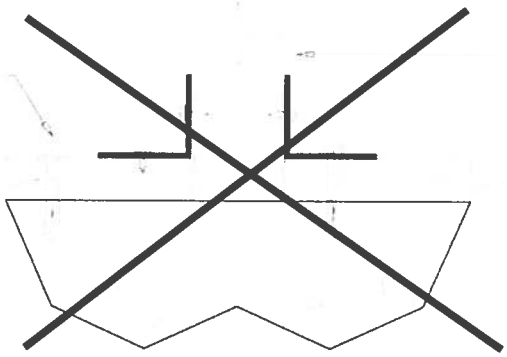
1" x 2" EXTRUSION ANCHOR TO CONCRETE W/ CONCRETE ANCHORS OR THRU PRIMARY ANGLE 6" MAX. EACH SIDE OF EACH POST AND @ 24" O.C. MAX. SELECT CONCRETE ANCHORS FROM SECTION 9

MIN. 3-1/2" SLAB 2500 P.S.I. CONCRETE 6 x 6 - 10 x 10 WELDED WIRE MESH OR FIBER MESH CONCRETE



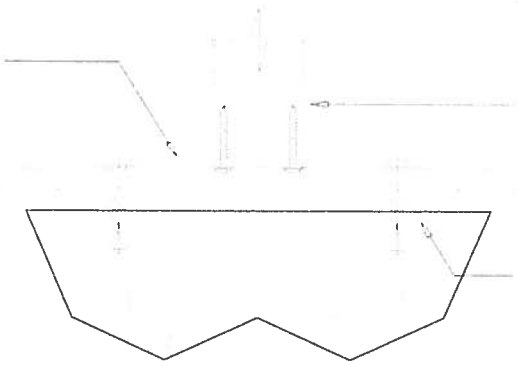
POST SIZE 2" x 4" MAX

SIDE WALL POST TO PLATE TO CONCRETE DETAIL

SCALE: 3" = 1'-0"

1" x 2" EXTRUSION ANCHOR TO CONC. W/ CONC. ANCH. 6" MAX. EA. SIDE OF EA. POST AND @ 24" O.C. MAX. SELECT CONCRETE ANCHORS FROM SECTION 9

MIN. 3-1/2" SLAB 2500 P.S.I. CONC. 6 x 6 - 10 x 10 W.W.M. OR FIBER MESH CONC.



2" x 2", 2" x 3" OR 2" x 4" HOLLOW SECTION (SEE TABLES)

MIN. (3) #10 x 1-1/2" S.M.S. INTO SCREW BOSSES

MASONRY ANCHOR @ 6" EA. SIDE OF POST AND @ 24" O.C. MAX. SELECT CONCRETE ANCHORS FROM SECTION 9

SIDE WALL HOLLOW POST TO BASE DETAIL

SCALE: 3" = 1'-0"

POOL ENCLOSURE UPRIGHT TO DECK ANCHOR REQUIREMENTS

General Notes and Specifications:

1. The uplift load on a pool enclosure upright is calculated as 1/2 the beam span x the beam spacing x the screen load of 7# / Sq. Ft.
   EXAMPLE:
   FOR A 2" x 6" BEAM WITH A SPAN OF 23' AND A BEAM & UPRIGHT SPACING OF 7' USE: 1/2 x 17'-11" x 7' x 10# / Sq. Ft. = 627.2# UPLIFT
2. Table 1.6 of this manual uses the worst case loads for all cases.
3. In all cases there must be a primary anchor within 6" of each side of the upright.
4. For attachment to wood deck (min. 2" nominal thickness) use wood anchors with details shown above (min. 1-3/8" embedment).

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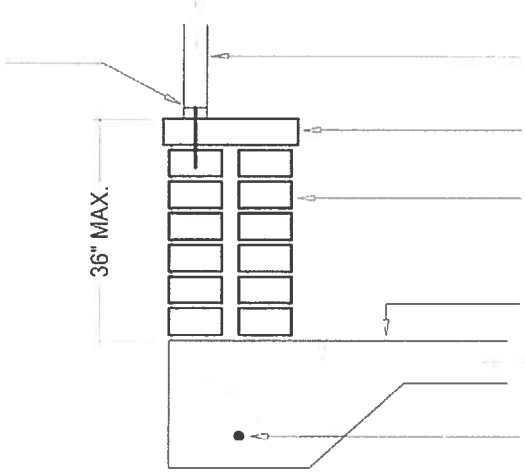
1/4" x 6" RAWL TAPPER THROUGH 1" x 2" AND ROWLOCK INTO FIRST COURSE OF BRICKS

ALTERNATE CONNECTION OF SCREENED ENCLOSURE FOR BRICK OR OTHER NON-STRUCTURAL KNEE WALL 1" WIDE x 0.063" THICK STRAP @ EACH POST FROM POST TO FOOTING W/ (2) #10 x 3/4" S.M.S. STRAP TO POST AND (1) 1/4" x 1-3/4" CONCRETE ANCHOR TO SLAB OR FOOTING



ALUMINUM FRAME SCREEN WALL

CAP BRICK

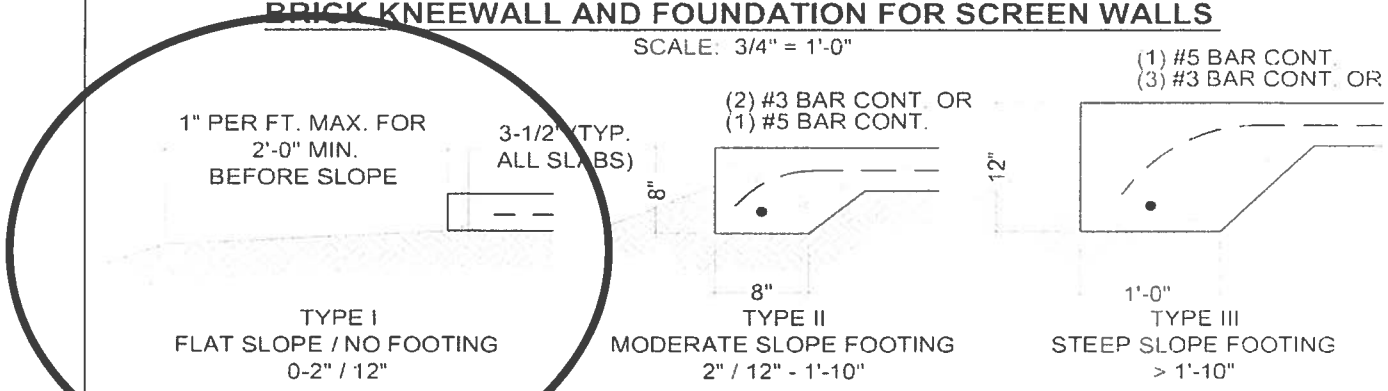
BRICK KNEEWALL TYPE 'S' MORTAR REQUIRED FOR LOAD BEARING BRICK WALL

4" (NOMINAL) PATIO CONCRETE SLAB (SEE NOTES CONCERNING FIBER MESH)

(3) #3Ø BARS OR (1) #5Ø BAR W/ 2-1/2" COVER (TYP.)

BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS

SCALE: 3/4" = 1'-0"



TYPE I
FLAT SLOPE / NO FOOTING
0-2" / 12"

TYPE II
MODERATE SLOPE FOOTING
2" / 12" - 1'-10"

TYPE III
STEEP SLOPE FOOTING
> 1'-10"

Notes for all foundation types:

1. The foundations shown are based on a minimum soil bearing pressure of 1,500 PSF. Bearing capacity of soil shall be verified prior to placing slab by field soil test (soil penetrometer) or a soil testing lab.
2. The slab / foundation shall be cleared of debris, roots and compacted prior to placement of concrete.
3. No footing is required except when addressing erosion until the slab width in the direction of the primary beams exceeds the span per table on page 1-69, then a type II slab is required under the load bearing wall only unless the side wall exceeds 16' in height or the enclosure is in a "C" exposure catagory in which case a type II footing is required.
4. Monolithic slabs and footings shall be minimum 2,500 psi concrete with 6 x 6 - 10 x 10 welded wire mesh or crack control fiber mesh; Fibermesh® Mesh, InForce™ e3™ (Formerly Fibermesh MD) per manufacturer's specification may be used in lieu of wire mesh. All slabs / footings shall be allowed to cure for 7 days before installing anchors.
5. If local codes require a minimum footing use Type II footing or footing section required by local code. Local codes govern.

SLAB-FOOTING DETAILS

SCALE: 3/4" = 1'-0"

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Table 1.1 120 Allowable Spans for Primary Screen Roof Frame Members

Aluminum Alloy 6063 T-6

For Wind Zones up to 120 M.P.H., Exposure "B" and Latitudes Below 30°-30'-00" North (Jacksonville, FL)
Uniform Load = 4 #/SF, a Point Load of 300 #/SF over (1) linear ft. is also considered

Hollow Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044"	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb
2" x 2" x 0.050"	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.090"	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb
2" x 3" x 0.045"	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb
2" x 4" x 0.050"	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb
2" x 5" x 0.062"	20'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-4"	Ud	19'-4"	Ud	18'-6"	Ud	17'-9"	Ud

Self Mating Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 4" x 0.044 x 0.100"	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd
2" x 5" x 0.050" x 0.100"	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	15'-9"	Ud	15'-1"	Ud
2" x 6" x 0.050" x 0.120"	20'-4"	Pd	20'-4"	Pd	20'-4"	Pd	20'-3"	Ud	19'-3"	Ud	18'-5"	Ud	17'-8"	Ud
2" x 7" x 0.055" x 0.120"	24'-9"	Pd	24'-9"	Pd	24'-6"	Ud	23'-1"	Ud	21'-11"	Ud	20'-11"	Ud	20'-2"	Ud
2" x 8" x 0.072" x 0.224"	34'-2"	Pd	32'-9"	Ud	30'-5"	Ud	28'-7"	Ud	27'-2"	Ud	25'-11"	Ud	24'-11"	Ud
2" x 9" x 0.072" x 0.224"	39'-3"	Pd	35'-11"	Ud	33'-4"	Ud	31'-5"	Ud	29'-10"	Ud	28'-6"	Ud	27'-5"	Ud
2" x 9" x 0.082" x 0.310"	42'-5"	Ud	38'-7"	Ud	35'-10"	Ud	33'-8"	Ud	31'-11"	Ud	30'-7"	Ud	29'-5"	Ud
2" x 10" x 0.092" x 0.369"	49'-3"	Ud	44'-9"	Ud	41'-7"	Ud	39'-1"	Ud	37'-2"	Ud	35'-6"	Ud	34'-2"	Ud

Snap Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044"	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd
2" x 3" x 0.045"	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd
2" x 4" x 0.045"	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd
2" x 6" x 0.062"	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd	21'-5"	Ud	20'-5"	Ud	19'-6"	Ud	18'-9"	Ud
2" x 7" x 0.062"	26'-8"	Pd	26'-8"	Pd	25'-9"	Ud	24'-3"	Ud	23'-0"	Ud	22'-0"	Ud	21'-2"	Ud

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040"
2. The structures designed using this section shall be limited to a maximum combined span and upright height of 50' and a maximum upright height of 16'. Structures larger than these limits shall have site specific engineering.
3. Span is measured from center of beam and upright connection to fascia or wall connection.
4. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
5. Tables are based on a maximum wall height of 16' including a 4' max. mansard or gable. Other conditions may offer better spans w/ enclosure site specific engineering.
6. Spans may be interpolated.
7. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

Example: Max. 'L' for 2" x 4" x 0.050" hollow section with 'W' = 5'-0" = 9'-1"

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Table 1.2 120 Allowable Spans for Secondary Screen Roof Frame Members

Aluminum Alloy 6063 T-6

For Wind Zones up to 120 M.P.H., Exposure "B", and Latitudes Below 30°-30'-00" North (Jacksonville, FL)

Uniform Load = 4 #/SF, a Point Load of 300 #/SF over (1) linear ft. is also considered

A. Sections Fastened To Beams With Clips

Hollow Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044"	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb
2" x 2" x 0.050"	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.090"	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd
3" x 2" x 0.045"	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb
3" x 2" x 0.070"	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd
2" x 3" x 0.045"	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd
2" x 4" x 0.050"	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb
2" x 5" x 0.062"	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd

Snap Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb
2" x 3" x 0.045"	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd
2" x 4" x 0.045"	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd

B. Sections Fastened Through Beam Webs Into Screw Bosses

Hollow Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 3" x 0.050"	11'-5"	Pb	11'-5"	Pb	11'-5"	Pb	11'-4"	Ud	10'-11"	Ud	10'-8"	Ud	10'-3"	Ud
2" x 4" x 0.050"	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb
2" x 5" x 0.062"	22'-4"	Pd	22'-4"	Pd	22'-4"	Pd	21'-7"	Ud	20'-11"	Ud	20'-4"	Ud	19'-7"	Ud

Snap Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044"	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Span is measured from center of beam and upright connection to fascia or wall connection.
3. Tables are based on a maximum wall height of 16' including a 4' max. mansard or gable. Other conditions may offer better spans w/ enclosure site specific engineering.
4. Spans may be interpolated.
5. 2" x 4" & 2" x 5" Hollow Girts shall be connected w/ an internal or external 1-1/2" x 1-1/2" x 0.044" angle.
6. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

CHECK TABLE 1.6 FOR MINIMUM UPRIGHT SIZE FOR BEAMS.

Example: Max. 'L' for 2" x 4" x 0.050" hollow section fastened to beam with clips with 'W' = 5'-0" = 9'-1"

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Table 1.3 110 Allowable Post / Upright Heights for Primary Screen Wall Frame Members

Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 #/sq. ft.

Hollow Sections	Tributary Load Width 'W' = Upright Spacing																	
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" / bending (b), deflection (d)																	
2" x 2" x 0.044"	7'-5"	d	6'-5"	b	5'-8"	b	5'-1"	b	4'-8"	b	4'-3"	b	3'-11"	b				
2" x 2" x 0.050"	7'-10"	d	7'-1"	b	6'-3"	b	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b				
2" x 2" x 0.090"	8'-11"	d	8'-2"	d	7'-10"	d	7'-1"	b	6'-7"	b	6'-1"	b	5'-9"	b				
2" x 3" x 0.045"	8'-4"	d	7'-7"	d	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b				
2" x 4" x 0.050"	11'-2"	b	9'-7"	b	8'-6"	b	7'-9"	b	7'-1"	b	6'-7"	b	6'-1"	b				
2" x 5" x 0.062"	17'-3"	b	14'-10"	b	13'-2"	b	11'-11"	b	11'-0"	b	10'-3"	b	9'-7"	b				

Self Mating Sections	Tributary Load Width 'W' = Upright Spacing																	
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" / bending (b), deflection (d)																	
2" x 4" x 0.044 x 0.100"	11'-11"	d	10'-10"	d	10'-0"	d	9'-5"	b	8'-8"	b	8'-0"	b	7'-6"	b				
2" x 5" x 0.050" x 0.100"	14'-9"	d	13'-5"	d	12'-5"	d	11'-7"	b	10'-8"	b	9'-11"	b	9'-4"	b				
2" x 6" x 0.050" x 0.120"	17'-3"	d	15'-8"	d	14'-4"	b	13'-1"	b	12'-0"	b	11'-3"	b	10'-6"	b				
2" x 7" x 0.055" x 0.120"	19'-8"	d	17'-6"	b	15'-7"	b	14'-2"	b	13'-1"	b	12'-2"	b	11'-5"	b				
2" x 8" x 0.072" x 0.224"	24'-4"	d	22'-1"	d	20'-6"	d	19'-4"	d	18'-4"	d	17'-6"	d	16'-10"	d				
2" x 9" x 0.072" x 0.224"	26'-8"	d	24'-3"	d	22'-6"	d	21'-2"	d	20'-1"	d	19'-3"	d	18'-2"	b				
2" x 9" x 0.082" x 0.310"	28'-8"	d	26'-0"	d	24'-2"	d	22'-9"	d	21'-7"	d	20'-8"	d	19'-10"	d				
2" x 10" x 0.092" x 0.369"	33'-3"	d	30'-3"	d	28'-1"	d	26'-5"	d	25'-1"	d	23'-11"	d	23'-1"	d				

Snap Sections	Tributary Load Width 'W'= Upright Spacing																	
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" / bending (b), deflection (d)																	
2" x 2" x 0.044"	6'-7"	d	5'-11"	d	5'-7"	d	5'-3"	d	4'-10"	b	4'-5"	b	4'-1"	b				
2" x 3" x 0.045"	8'-10"	d	8'-1"	d	7'-6"	d	6'-11"	b	6'-3"	b	5'-9"	b	5'-3"	b				
2" x 4" x 0.045"	11'-2"	d	10'-2"	d	9'-2"	b	8'-2"	b	7'-5"	b	6'-9"	b	6'-2"	b				
2" x 6" x 0.062"	18'-3"	d	16'-7"	d	15'-5"	d	14'-6"	d	13'-9"	d	13'-2"	d	12'-8"	d				
2" x 7" x 0.062"	20'-7"	d	18'-9"	d	17'-5"	d	16'-4"	d	15'-7"	d	14'-10"	d	14'-2"	b				

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width 'W' select upright length 'H'.
3. Above heights do not include length of knee brace. Add vertical distance from upright to center of brace to beam connection to the above spans for total beam spans.
4. Site specific engineering required for pool enclosures over 30' in mean roof height.
5. Height is to be measured from center of beam and upright connection to fascia or wall connection.
6. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height are designed to be residential guardrails provided they are attached with min. (3) #10 x 1-1/2" S.M.S. into the screw bosses and do not exceed 8'-0" in span.
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
8. Spans may be interpolated.
9. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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Table 1.4 110 Allowable Post / Girt / Chair Rail Spans, Header Spans & Upright Heights for Secondary Screen Wall Frame Members

Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 # / sq. ft.

A. Sections As Horizontals Fastened To Posts With Clips

Hollow Sections	Tributary Load Width 'W' = Upright Spacing																	
	3'-0"		4'-0"		5'-0"		[redacted]		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" or Span "L" / bending (b), deflection (d)																	
2" x 2" x 0.044"	7'-5"	d	6'-5"	b	5'-8"	b	5'-1"	b	4'-8"	b	4'-3"	b	3'-11"	b				
2" x 2" x 0.050"	7'-10"	d	7'-1"	b	6'-3"	b	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b				
2" x 2" x 0.090"	8'-11"	d	8'-2"	d	7'-10"	d	7'-1"	b	6'-7"	b	6'-1"	b	5'-9"	b				
3" x 2" x 0.045"	8'-4"	d	7'-4"	b	6'-6"	b	5'-10"	b	5'-4"	b	4'-11"	b	4'-7"	b				
3" x 2" x 0.070"	9'-5"	d	8'-6"	d	7'-9"	b	7'-0"	b	6'-5"	b	5'-11"	b	5'-7"	b				
2" x 3" x 0.045"	8'-4"	d	7'-7"	d	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b				
2" x 4" x 0.050"	11'-2"	b	9'-7"	b	8'-6"	b	7'-9"	b	7'-1"	b	6'-7"	b	6'-1"	b				
2" x 5" x 0.062"	17'-3"	b	14'-10"	b	13'-2"	b	11'-11"	b	11'-0"	b	10'-3"	b	9'-7"	b				

Snap Sections	Tributary Load Width 'W'= Upright Spacing																	
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" or Span "L" / bending (b), deflection (d)																	
2" x 2" x 0.044"	6'-7"	d	5'-11"	d	5'-7"	d	5'-3"	d	4'-10"	b	4'-5"	b	4'-1"	b				

B. Sections As Horizontals Fastened To Posts Through Side Into Screw Bosses

Hollow Sections	Tributary Load Width 'W' = Upright Spacing																	
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" or Span "L" / bending (b), deflection (d)																	
2" x 2" x 0.044"	8'-4"	b	7'-2"	b	6'-4"	b	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b				
3" x 2" x 0.045"	9'-7"	b	8'-3"	b	7'-3"	b	6'-6"	b	5'-11"	b	5'-6"	b	5'-1"	b				
3" x 2" x 0.070"	11'-5"	b	9'-10"	b	8'-8"	b	7'-10"	b	7'-2"	b	6'-8"	b	6'-3"	b				
2" x 3" x 0.045"	11'-2"	d	9'-9"	b	8'-8"	b	7'-10"	b	7'-2"	b	6'-8"	b	6'-2"	b				
2" x 4" x 0.050"	12'-6"	b	10'-9"	b	9'-6"	b	8'-7"	b	7'-11"	b	7'-4"	b	6'-10"	b				
2" x 5" x 0.062"	19'-3"	b	16'-7"	b	14'-9"	b	13'-5"	b	12'-4"	b	11'-6"	b	10'-9"	b				

Snap Sections	Tributary Load Width 'W'= Upright Spacing																	
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"					
	Allowable Height "H" or Span "L" / bending (b), deflection (d)																	
2" x 2" x 0.044"	8'-10"	d	7'-8"	b	6'-9"	b	6'-0"	b	5'-5"	b	4'-11"	b	4'-7"	b				

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040"
2. Using screen panel width 'W' select girt lengths.
3. Site specific engineering required for pool enclosures over 30' in mean roof height.
4. Span/height is to be measured from center of beam and upright connection to fascia or wall connection.
5. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height are designed to be residential guardrails provided they are attached with min. (3) #10 x 1-1/2" s.m.s. into the screw bosses and do not exceed 8'-0" o.c.
6. Girt spacing shall not exceed 6'-8".
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120".
8. 2" x 4" & 2" x 5" hollow girts shall be connected w/ an internal or external 1-1/2" x 1-1/2" x 0.044" angle.
9. Spans/heights may be interpolated.
10. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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Table 1.6 Minimum Upright Sizes and Number of Screws for Connection of Roof Beams To Wall Uprights or Beam Splicing

Beam/Upright or Post	Upright or Post/Beam	Minimum Purlin, Girt & Knee Brace Size	Notes	Minimum Number of Screws*			Beam Stitching Screw at 24" OC
				#8 x ½"	#10 x ½"	#12 x ½"	
2 x 4 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#10
2 x 5 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#8
2 x 6 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	10	8	6	#10
2 x 7 SMB	2 x 4 SMB or H	2" x 3" x 0.044"	Full Lap	14	12	10	#12
2 x 8 SMB	2 x 5 SMB or H	2" x 3" x 0.044"	Full Lap	16	14	12	#14
2 x 9 SMB	2 x 6 SMB	2" x 3" x 0.045"	Full Lap	18	16	14	#14**
2 x 9 SMB *	2 x 7 SMB	2" x 4" x 0.050"	Full Lap	20	18	16	#14**
2 x 10 SMB	2 x 8 SMB	2" x 5" x 0.050"	Full Lap	20	18	16	#14**

Screw Size	Minimum Distance and Spacing of Screws		Gusset Plate Thickness	
	Edge To Center	Center To Center	Beam Size	Thickness
#8	5/16"	5/8"	2" x 7" x 0.055" x 0.120"	0.063"
#10	3/8"	3/4"	2" x 8" x 0.072" x 0.224"	0.125"
#12	1/2"	1"	2" x 9" x 0.072" x 0.224"	0.125"
#14 or 1/4"	3/4"	1-1/2"	2" x 9" x 0.082" x 0..306"	0.190"
5/16"	7/8"	1-3/4"	2" x 10" x 0.092" x 0.369"	0.250"
3/8"	1"	2"		

* 0.082" wall thickness, 0.310" flange thickness

** (1) Stitching screw at 16" O.C. max.

Connection Example:

2" x 7" beam & 2" x 5" at beam & gusset plate. (14) #8 x 1/2" sms & upright & gusset plate
(14) #8 x 1/2" sms ea. side of beam & upright.

Note:

1. Connection of 2" x 6" to 2" x 4" shall use a full lap cut or 1/16" gusset plate
2. For beam splice connections the number of screws shown is the total for each splice with 1/2 the screws on each side of the cut
3. The number of screws is based on the maximum allowable moment of the beam.
4. The number of deck anchors is based on RAWL R Tapper allowable load data for 2,500 psi concrete and / or equal anchors may be used. The number shown is the total use 1/2 per side.
5. Hollow splice connections can be made provided the connection is approved by the engineer.
6. If a larger than minimum upright is used the number of screws is the same for each splice with 1/2 the screws on each side of the cut.
7. The side wall upright shall have a minimum beam size as shown above, ie., a 2" x 4" upright shall have a 2" x 3" beam.
8. For minimum girt size read upright size as a beam and purlin size is minimum girt size. (i.e. 2" x 5" x 0.072" x 0.224" s.m.b. w/ 2" x 6" x 0.050 x 0.120" s.m.b. upright requires a 2" x 3" x 0.045" girt / chair rail.)

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Table 1.10 120 **Allowable Spans for 5" Super Gutter and Self Mating Beam**
Screened Enclosure One Side/Solid Roof Other Side
Aluminum Alloy 6063 T-6

For Areas in Wind Zones of 120 M.P.H. Exposure "B", or Less and Latitudes Below 30°-30'-00" North
Uniform Load on Screen = 4 #/SF, Solid Roof = 27.4 #/SF, 300# Point Load is Considered over (1) LF of Beam

Single Self-Mating Beams	Tributary Load Width													
	10'-0"		12'-0"		14'-0"		16'-0"		18'-0"		20'-0"		22'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b) or deflection (d)													
2" x 6" x 0.050" x 0.120"	10'-9"	Ub	10'-6"	Ub	10'-3"	Ub	10'-1"	Ub	9'-11"	Ub	9'-8"	Ub	9'-6"	Ub
2" x 7" x 0.055" x 0.120"	11'-0"	Ub	10'-9"	Ub	10'-6"	Ub	10'-4"	Ub	10'-2"	Ub	9'-11"	Ub	9'-9"	Ub
2" x 8" x 0.072" x 0.224"	15'-7"	Ub	15'-2"	Ub	14'-11"	Ub	14'-7"	Ub	14'-4"	Ub	14'-0"	Ub	13'-9"	Ub
2" x 9" x 0.072" x 0.224"	16'-3"	Ub	15'-10"	Ub	15'-6"	Ub	15'-3"	Ub	14'-11"	Ub	14'-8"	Ub	14'-5"	Ub
2" x 9" x 0.082" x 0.306"	18'-9"	Ub	18'-4"	Ub	17'-11"	Ub	17'-7"	Ub	17'-3"	Ub	16'-11"	Ub	16'-7"	Ub
2" x 10" x 0.092" x 0.369"	22'-6"	Ub	22'-0"	Ub	21'-7"	Ub	21'-1"	Ub	20'-9"	Ub	20'-4"	Ub	19'-11"	Ub

Note:
1. If the solid panel is greater or less than 10'-0", then the 1/2 the allowable screen roof beam span shall be adjusted by the factor of +/- 2 x 1/2 (the solid roof panel span difference between the actual and 10'-0"). The adjustment to the allowable screen roof panel width is applied as a plus if the solid roof panel is larger than 10'-0" and minus if the solid roof panel is smaller than 10'-0".
2. For span of "L" of beam; use screen panel width "W" from drawing.
3. Load span = 1/2 of screen beam length + 1/2 of solid roof span .
4. Spans may be interpolated.
5. For minimum beam to upright sizes use Table 2.3
6. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

Example: The Maximum 'L' for a 2" x 6" x 0.050" x 0.120" Single Self-Mating Beam with Tributary Load Width = 22'-0" is 17'-0 "

Table 1.10 130 **Allowable Spans for 5" Super Gutter and Self Mating Beam**
Screened Enclosure One Side/Solid Roof Other Side
Aluminum Alloy 6063 T-6

For Areas in Wind Zons of 130 M.P.H. or Less, Exposure "B" and Latitudes Below 30°-30'-00" North
Uniform Load on Screen = 5 #/SF, Solid Roof = 32.2 #/SF, 300# Point Load is Considered over (1) LF of Beam

Single Self-Mating Beams	Tributary Load Width													
	10'-0"		12'-0"		14'-0"		16'-0"		18'-0"		20'-0"		22'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b) or deflection (d)													
2" x 6" x 0.050" x 0.120"	9'-10"	Ub	9'-7"	Ub	9'-5"	Ub	9'-2"	Ub	9'-0"	Ub	8'-10"	Ub	8'-8"	Ub
2" x 7" x 0.055" x 0.120"	10'-1"	Ub	9'-10"	Ub	9'-8"	Ub	9'-5"	Ub	9'-3"	Ub	9'-1"	Ub	8'-11"	Ub
2" x 8" x 0.072" x 0.224"	14'-3"	Ub	13'-11"	Ub	13'-7"	Ub	13'-4"	Ub	13'-1"	Ub	12'-10"	Ub	12'-7"	Ub
2" x 9" x 0.072" x 0.224"	14'-10"	Ub	14'-6"	Ub	14'-2"	Ub	13'-11"	Ub	13'-7"	Ub	13'-4"	Ub	13'-1"	Ub
2" x 9" x 0.082" x 0.306"	17'-2"	Ub	16'-9"	Ub	16'-5"	Ub	16'-1"	Ub	15'-9"	Ub	15'-5"	Ub	15'-2"	Ub
2" x 10" x 0.092" x 0.369"	20'-7"	Ub	20'-2"	Ub	19'-8"	Ub	19'-3"	Ub	18'-11"	Ub	18'-6"	Ub	18'-2"	Ub

Note:
1. If the solid panel is greater or less than 10'-0", then the 1/2 the allowable screen roof beam span shall be adjusted by the factor of +/- 2 x 1/2 (the solid roof panel span difference between the actual and 10'-0"). The adjustment to the allowable screen roof panel width is applied as a plus if the solid roof panel is larger than 10'-0" and minus if the solid roof panel is smaller than 10'-0".
2. For span of "L" of beam; use screen panel width "W" from drawing.
3. Load span = 1/2 of screen beam length + 1/2 of solid roof span .
4. Spans may be interpolated.
5. For minimum beam to upright sizes use Table 2.3
6. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

Example: The Maximum 'L' for a 2" x 6" x 0.050" x 0.120" Single Self-Mating Beam with Tributary Load Width = 22'-0" is 17'-0"

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Table 3A.1.1-110 Allowable Edge Beam Spans - Hollow Extrusions for Screen, Acrylic or Vinyl Rooms

For 3 second wind gust at 110 MPH velocity; using design load of 11.0 #/SF (47.1 #/SF for Max. Cantilever)

Aluminum Alloy 6063 T-6

2" x 2" x 0.044"

Load Width (ft.)	Max. Span 'L' / (bending 'b' or deflection 'd')			
	1 & 2 Span	3 Span	4 Span	Max. Cantilever
5	5'-4" d	6'-7" d	6'-9" d	0'-11" d
6	5'-0" d	6'-2" d	6'-4" d	0'-11" d
7	4'-9" d	5'-11" d	5'-11" b	0'-10" d
8	4'-7" d	5'-8" d	5'-7" b	0'-10" d
9	4'-5" d	5'-5" d	5'-3" b	0'-10" d
10	4'-3" d	5'-2" b	4'-11" b	0'-9" d
11	4'-1" d	4'-11" b	4'-9" b	0'-9" d
12	3'-11" d	4'-8" b	4'-7" b	0'-9" d

2" x 2" x 0.055"

Load Width (ft.)	Max. Span 'L' / (bending 'b' or deflection 'd')			
	1 & 2 Span	3 Span	4 Span	Max. Cantilever
5	5'-8" d	6'-11" d	7'-1" d	1'-0" d
6	5'-4" d	6'-7" d	6'-8" d	0'-11" d
7	5'-1" d	6'-3" d	6'-4" d	0'-11" d
8	4'-10" d	5'-11" d	6'-1" b	0'-11" d
9	4'-8" d	5'-9" d	5'-9" b	0'-10" d
10	4'-6" d	5'-6" d	5'-5" b	0'-10" d
11	4'-4" d	5'-4" d	5'-2" b	0'-10" d
12	4'-3" d	5'-2" b	4'-11" b	0'-9" d

3" x 2" x 0.045"

Load Width (ft.)	Max. Span 'L' / (bending 'b' or deflection 'd')			
	1 & 2 Span	3 Span	4 Span	Max. Cantilever
5	6'-0" d	7'-5" d	7'-7" d	1'-1" d
6	5'-8" d	7'-0" d	7'-2" d	1'-0" d
7	5'-5" d	6'-8" d	6'-10" d	0'-11" d
8	5'-2" d	6'-4" d	6'-5" b	0'-11" d
9	4'-11" d	6'-2" d	6'-1" b	0'-11" d
10	4'-9" d	5'-11" d	5'-9" b	0'-10" d
11	4'-8" d	5'-8" b	5'-6" b	0'-10" d
12	4'-6" d	5'-5" b	5'-3" b	0'-10" d

3" x 2" x 0.070"

Load Width (ft.)	Max. Span 'L' / (bending 'b' or deflection 'd')			
	1 & 2 Span	3 Span	4 Span	Max. Cantilever
5	6'-9" d	8'-5" d	8'-7" d	1'-3" d
6	6'-5" d	7'-11" d	8'-0" d	1'-2" d
7	6'-1" d	7'-6" d	7'-8" d	1'-1" d
8	5'-10" d	7'-2" d	7'-4" d	1'-1" d
9	5'-7" d	6'-11" d	7'-0" d	1'-0" d
10	5'-5" d	6'-8" d	6'-9" b	0'-11" d
11	5'-3" d	6'-5" d	6'-5" b	0'-11" d
12	5'-1" d	6'-3" d	6'-2" b	0'-11" d

2" x 3" x 0.045"

Load Width (ft.)	Max. Span 'L' / (bending 'b' or deflection 'd')			
	1 & 2 Span	3 Span	4 Span	Max. Cantilever
5	7'-6" d	9'-3" d	9'-5" d	1'-4" d
6	7'-0" d	8'-8" d	8'-8" b	1'-3" d
7	6'-8" d	8'-3" d	8'-1" b	1'-3" d
8	6'-5" d	7'-9" b	7'-6" b	1'-2" d
9	6'-2" d	7'-4" b	7'-1" b	1'-1" d
10	5'-11" d	6'-11" b	6'-9" b	1'-1" d
11	5'-9" d	6'-8" b	6'-5" b	1'-1" d
12	5'-7" d	6'-4" b	6'-2" b	1'-0" d

2" x 4" x 0.050"

Load Width (ft.)	Max. Span 'L' / (bending 'b' or deflection 'd')			
	1 & 2 Span	3 Span	4 Span	Max. Cantilever
5	9'-8" d	11'-11" d	12'-2" b	1'-9" d
6	9'-1" d	11'-3" d	11'-1" b	1'-8" d
7	8'-8" d	10'-8" b	10'-3" b	1'-7" d
8	8'-3" d	9'-11" b	9'-7" b	1'-6" d
9	7'-11" d	9'-5" b	9'-1" b	1'-5" d
10	7'-8" d	8'-11" b	8'-7" b	1'-5" d
11	7'-5" d	8'-6" b	8'-2" b	1'-4" d
12	7'-3" d	8'-1" b	7'-10" b	1'-4" d

Notes:

1. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
2. Spans may be interpolated.

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Table 3A.3 Schedule of Post to Beam Size

Aluminum Alloy 6063 T-6

Beam Size	Minimum Post Size	Alternate Post Size	# Thru-Bolts @ L=D+½" 1/4"ø	# Thru-Bolts @ L=D+½" 3/8"ø	Minimum Knee Brace*	Min. # Knee Brace Screws	Min. Stiching Screws @ 24" o.c.
2" x 4" x 0.050" Hollow	3" x 3" x 0.060"	2" x 3" x 0.050"***	2	-	2" x 3" x 0.050"	(3) #8	#8
Self Mating Beams							
2" x 4" x 0.040" x 0.100"	3" x 3" x 0.060"	2" x 3" x 0.050"***	2	-	2" x 3" x 0.050"	(3) #8	#8
2" x 4" x 0.040" x 0.100"	3" x 3" x 0.060"	2" x 3" x 0.050"***	2	-	2" x 3" x 0.050"	(3) #10	#10
2" x 5" x 0.050" x 0.100"	3" x 3" x 0.060"	2" x 3" x 0.050"	2	-	2" x 3" x 0.050"	(3) #10	#10
2" x 6" x 0.050" x 0.120"	3" x 3" x 0.060"	2" x 3" x 0.050"	2	2	2" x 3" x 0.050"	(3) #10	#10
2" x 7" x 0.055" x 0.120"	3" x 3" x 0.060"	2" x 3" x 0.050"	2	2	2" x 3" x 0.050"	(3) #10	#10
2" x 7" x 0.055" w/ Insert	3" x 3" x 0.093"	2" x 3" x 0.050"	3	2	2" x 4" x 0.050"	(3) #12	#12
2" x 8" x 0.072" x 0.224"	3" x 3" x 0.093"	2" x 4" x 0.050"	3	2	2" x 5" x 0.050" x 0.100"	(3) #14	#14**
2" x 9" x 0.072" x 0.224"	3" x 3" x 0.093"	2" x 5" x 0.050" x 0.100"	3	3	2" x 6" x 0.050" x 0.120"	(4) #14	#14**
2" x 9" x 0.082" x 0.306"	3" x 3" x 0.125"	2" x 6" x 0.050" x 0.120"	4	3	2" x 7" x 0.055" x 0.120"	(6) #14	#14**
2" x 10" x 0.092" x 0.369"	2" x 4" x 0.038" X 0.100"	2" x 7" x 0.055" x 0.120"	5	4			
Double Self Mating Beams							#12
(2) 2" x 8" x 0.072" x 0.224"	2" x 5" x 0.050" x 0.100"	4" x 4" x 0.125"	6	4	2" x 4" x 0.044" x 0.100"	(8) #12	#14**
(2) 2" x 9" x 0.072" x 0.224"	2" x 6" x 0.050" x 0.120"	4" x 4" x 0.125"	6	4	2" x 6" x 0.050" x 0.120"	(8) #14	#14**
(2) 2" x 9" x 0.082" x 0.306"	2" x 7" x 0.055" x 0.120"	4" x 4" x 0.125"	8	6	2" x 6" x 0.050" x 0.120"	(8) #14	#14**
(2) 2" x 9" x 0.092" x 0.369"	2" x 8" x 0.072" x 0.224"	4" x 4" x 0.125"	10	8	2" x 7" x 0.055" x 0.120"	(10) #14	
(2) 2" x 10" x 0.092" x 0.369"							

The minimum number of thru bolts is (2)

* Minimum post / beam may be used as minimum knee brace

** Decrease spacing to 16" o.c.

*** or 2" x 3" x 0.045"

Knee Brace	Min. Length	Max Length
2" x 2" x 0.044"	1'-4"	2'-0"
2" x 2" x 0.055"	1'-4"	2'-0"
2" x 2" x 0.093"	1'-4"	2'-0"
2" x 3" x 0.050"	1'-6"	2'-6"
2" x 4" x 0.050"	1'-6"	3'-0"

Lawrence E. Bennett, P.E. FL # 16644

CIVIL & STRUCTURAL ENGINEERING

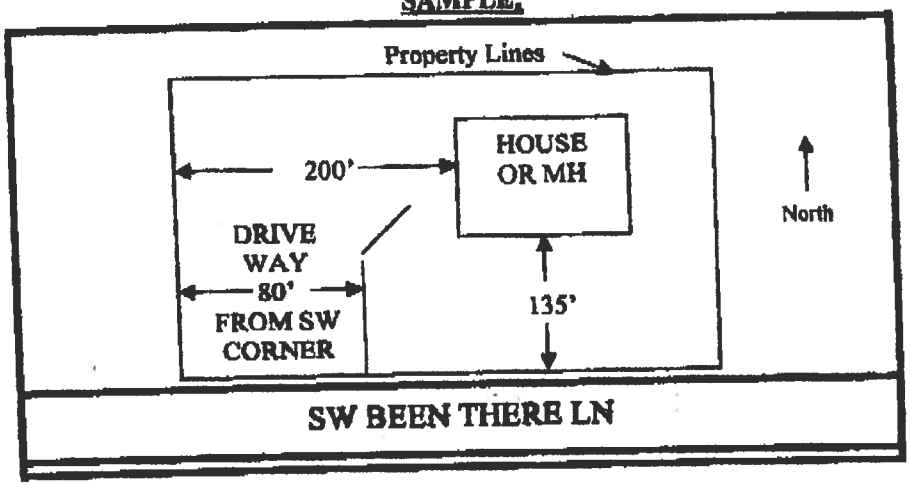
P.O. Box 214368, South Daytona, Fl 32121

Telephone #: (386) 767-4774 Fax #: (386) 767-6556

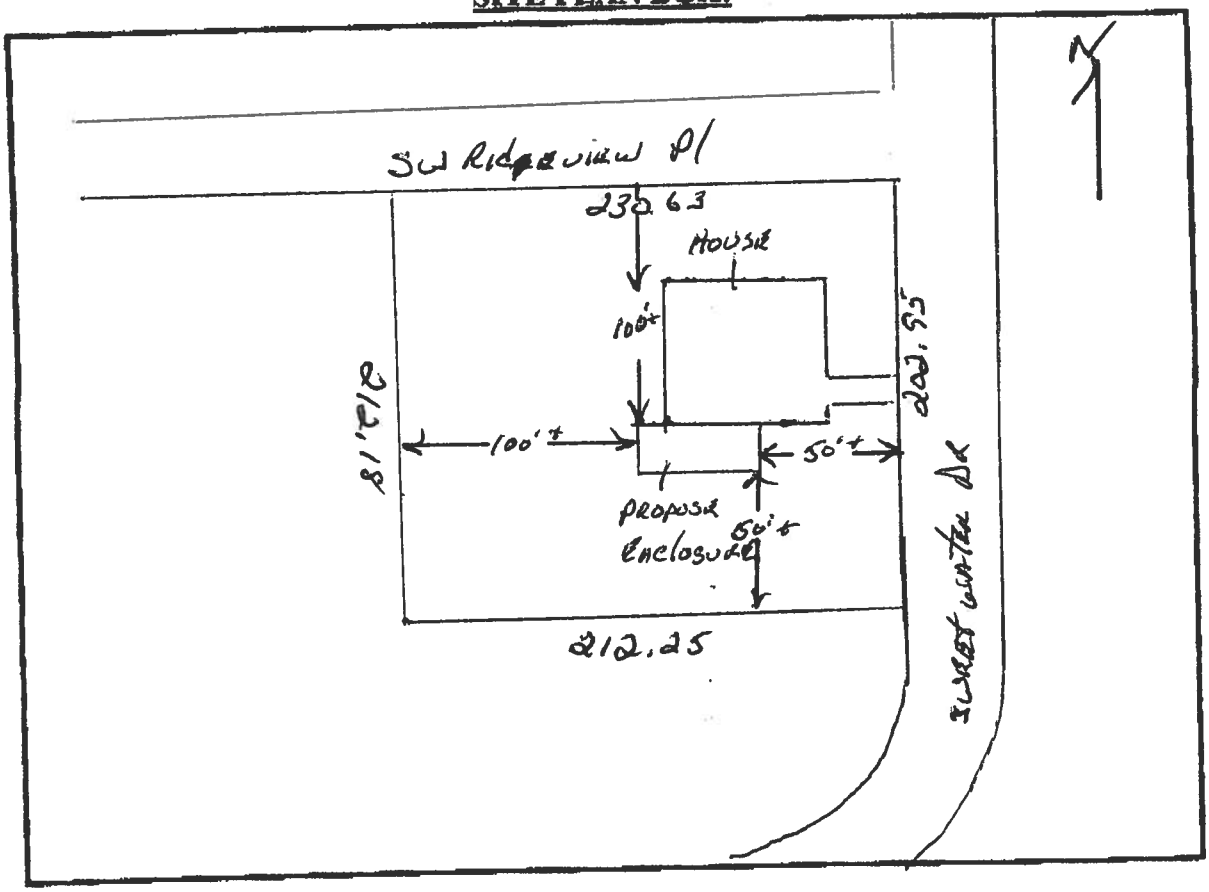
Email: lebpe@bellsouth.net

1. A PLAT, PLAN, OR DRAWING SHOWING THE PROPERTY LINES OF THE PARCEL.
2. LOCATION OF PLANNED RESIDENT OR BUSINESS STRUCTURE ON THE PROPERTY WITH DISTANCES FROM AT LEAST TWO OF THE PROPERTY LINES TO THE STRUCTURE (SEE SAMPLE BELOW).
3. LOCATION OF THE ACCESS POINT (DRIVEWAY, ETC.) ON THE ROADWAY FROM WHICH LOCATION IS TO BE ADDRESSED WITH A DISTANCE FROM A PARALLEL PROPERTY LINE AND OR PROPERTY CORNER (SEE SAMPLE BELOW).
4. TRAVEL OF THE DRIVEWAY FROM THE ACCESS POINT TO THE STRUCTURE (SEE SAMPLE BELOW).

SAMPLE:



SITE PLAN BOX:



MEMO

Attention: County Building Departments

RE: Permit Materials

I hereby authorize the following persons to receive applicable information for permits in Columbia County for Timberlake Aluminum Construction, Inc.

License Holder: Carl R. Helms

License Number: SCC056710

Business Address: 25370 NW 8th Place Newberry, FL 32669

Business number: 352-472- 6850 Business Fax: 352-472-6855

Authorized personnel:

1. Craig Timberlake 2. Larry Cole

Effective Dates: From: 10/24/07 To: 8/31/08

Signature of License Holder:

SWORN to and subscribed before me this 15 day of November 2007.

Notary Public, State at Large

RAYMOND M. DREWNOWSKI
Comm# DD0681685
Expires 6/4/2011
Florida Notary Assn., Inc

Notary Seal