

SITE PLAN
214 CHURCH RD.
KING OF PRUSSIA

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RESURFACE
 EXISTING 20'
 DRIVEWAY w/
 MACADAM

RESURFACE
 EXISTING 20'
 DRIVEWAY
 PATTERNED
 CONCRETE

CHURCH ROAD

NOTE:
THIS STRUCTURE IS IN COMPLIANCE WITH THE 2009 INTERNATIONAL BUILDING CODE AND 2009 INTERNATIONAL RESIDENTIAL CODE. LOADS ARE IN ACCORDANCE WITH ASCE/SEI 7-05.

WIND SPEED (3 SECOND WIND GUST)	120 MPH		130 MPH	
IMPORTANCE FACTOR	WIND	0.77	0.77	
	SNOW	0.8	0.8	
	SEISMIC	1.0	1.0	
BUILDING CATEGORY	I		I	
EXPOSURE	C		C	
INTERNAL PRESSURE COEFFICIENT	±0.55		±0.55	
COMPONENT AND CLADDING PRESSURE	WALLS	+32.2/-40.5 PSF	+37.8/-47.5 PSF	
	ROOF	+21.8/-65.4 PSF	+25.6/-76.8 PSF	
STRUCTURE TYPE	OPEN or ENCLOSED		OPEN or ENCLOSED	
GROUND SNOW LOAD	20 PSF		30 / 40 / 50 PSF	
SEISMIC DESIGN CATEGORY	D2		D2	

TABLE 1
FRAME SPACING BASED ON WIND SPEED AND SNOW LOAD

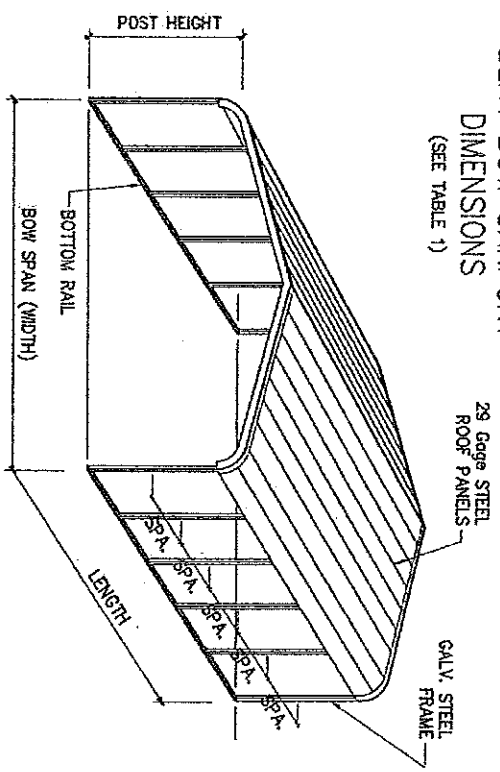
BOW SPAN	POST HEIGHT	120 / 20		130 / 30		130 / 40		130 / 50	
		GAGE	SPACING	GAGE	SPACING	GAGE	SPACING	GAGE	SPACING
12'	8'-0"	14	14	14	14	14	14	14	14
	12'-0"	12	12	12	12	12	12	12	12
	8'-0"	14	14	14	14	14	14	14	14
16'	12'-0"	12	12	12	12	12	12	12	12
	8'-0"	14	14	14	14	14	14	14	14
	12'-0"	12	12	12	12	12	12	12	12
18'	8'-0"	14	14	14	14	14	14	14	14
	12'-0"	12	12	12	12	12	12	12	12
	8'-0"	14	14	14	14	14	14	14	14
20'	12'-0"	12	12	12	12	12	12	12	12
	8'-0"	14	14	14	14	14	14	14	14
	12'-0"	12	12	12	12	12	12	12	12
22'	12'-0"	12	12	12	12	12	12	12	12
	8'-0"	14	14	14	14	14	14	14	14
	12'-0"	12	12	12	12	12	12	12	12
24'	8'-0"	14	14	14	14	14	14	14	14
	12'-0"	12	12	12	12	12	12	12	12
	8'-0"	14	14	14	14	14	14	14	14

NOTE: CORNER BRACE REQUIRED FOR ALL 10' & 12' POSTS * OR TS 2 1/2 x 2 1/2 AND FOR ALL 20'-24' SPANS

TS 2 1/2 x 2 1/2 - 14 GAGE STEEL TUBING MAY BE SUBSTITUTED FOR TS 2 1/2 x 2 1/2 - 12 GAGE STEEL TUBING OR VICE VERSA. THE ASSOCIATED CONNECTION MATERIALS AND BRACING MUST BE ADJUSTED ACCORDINGLY TO ACCOMMODATE THE CHANGE IN SIZE.

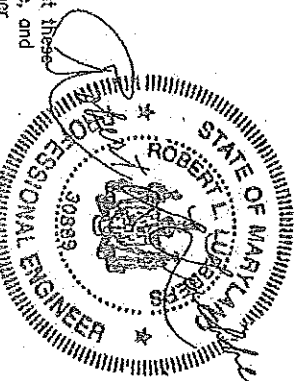
December 2, 2010

BENT BOW CARPORT DIMENSIONS (SEE TABLE 1)



NOTES:
METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B-2. METAL PLATE CONNECTORS, SCREWS, BOLTS, AND NAILS EXPOSED TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

ALL STEEL TUBING SHALL HAVE A MINIMUM YIELD STRENGTH (Fy) OF 65 KSI OR BETTER.
ALL FASTENERS ARE CASE HARDENED STEEL. HEX SELF-TAPPING SCREWS 3/8"-14 FOR FRAMING, #12-14 FOR TOP AND TRIM, ROOF DECK SCREWS SHALL HAVE RUBBER WASHERS. FASTEN METAL ROOF AND SIDE PANELS WITH SELF DRILLING FASTENERS AT 8" O.C. MAX.
ALL FIELD CONNECTIONS SHALL BE 3/4"x1" SELF DRILLING SCREWS, UNLESS NOTED OTHERWISE.
ALL SHOP CONNECTIONS SHALL BE WELDED.
THE OWNER IS RESPONSIBLE FOR COMPLYING WITH LOCAL BUILDING CODE REQUIREMENTS.



Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 30989, Expiration Date: October 1st, 2012.

NEWMART BUILDERS
BENT-BOW CARPORTS

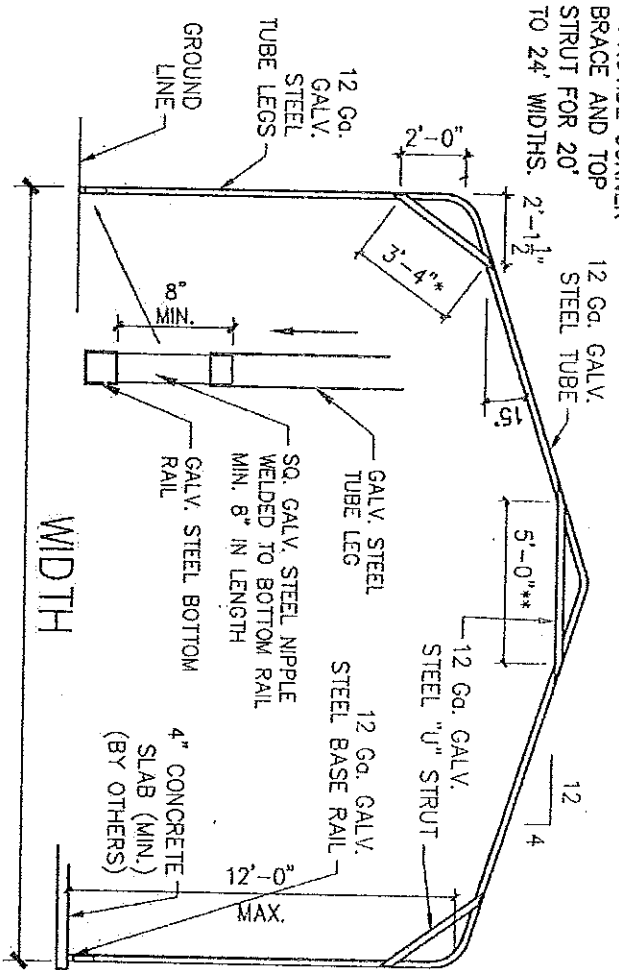
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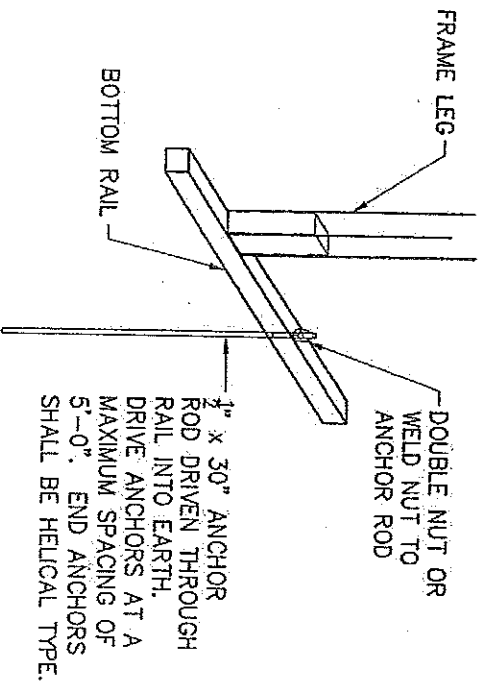
SHEET 1 OF 5

BENT BOW CARPORT

*PROVIDE CORNER BRACE FOR 10' TO 12' POSTS.
 **PROVIDE CORNER BRACE AND TOP STRUT FOR 20' TO 24' WIDTHS.

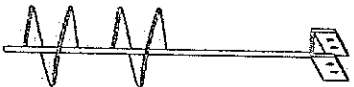


GROUND ANCHOR DETAIL



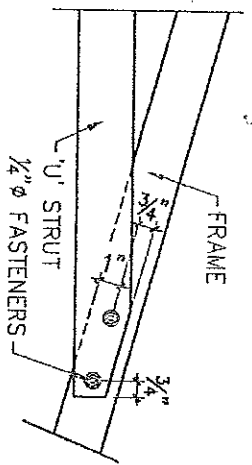
DOUBLE NUT OR WELD NUT TO ANCHOR ROD
 1/2" x 30" ANCHOR ROD DRIVEN THROUGH RAIL INTO EARTH.
 DRIVE ANCHORS AT A MAXIMUM SPACING OF 5'-0". END ANCHORS SHALL BE HELICAL TYPE.

HELICAL ANCHOR DETAIL

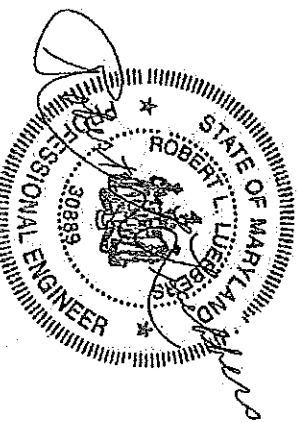
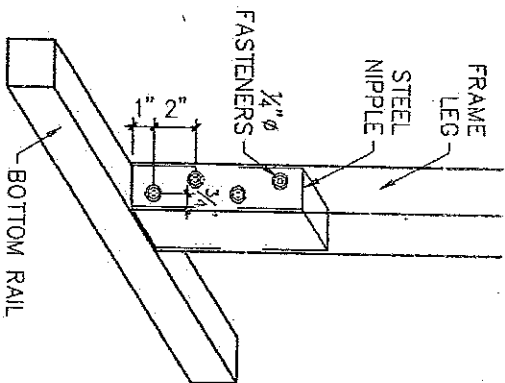


"MINUTE MAN" #650 DHS OR EQUAL, SCREW DOWN TYPE ANCHOR ATTACHED TO BOTTOM RAIL ACCORDING TO MANUFACTURERS RECOMMENDATIONS. (MAXIMUM ALLOWABLE LOAD IS 3150 LBS PER ANCHOR)
 PROVIDE MIN. 2 HELICAL ANCHORS EACH SIDE NEAR ENDS OF BOTTOM RAIL TO ACHIEVE 130 MPH WIND GUST RATING. USE GROUND ANCHORS ON EACH SIDE SPACED EVENLY BETWEEN HELICAL ANCHORS.

STRUT OR BRACE CONNECTION

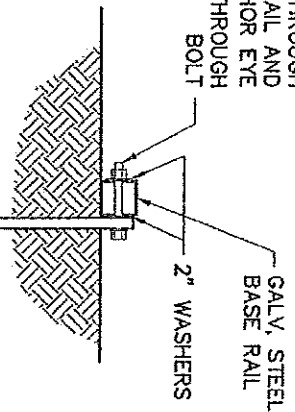


FRAME CONNECTION



2/04/2011

DRILL $\frac{3}{8}$ " HOLE THROUGH THE BASE RAIL AND SECURE TO ANCHOR EYE WITH 2" DIAMETER THROUGH BOLT



SOIL CLASSIFICATIONS *
SOIL CLASS SOIL DESCRIPTION

- 2 Very dense &/or cemented sands, coarse gravel and cobbles, caliche, preloaded silts, and clays.
- 3 Medium dense coarse sands, sandy gravels, very stiff silts, and clays.
- 4 Loose to medium dense sands, firm to stiff clays and silts alluvial fill and very loose to medium dense sands, firm to stiff clays and silts, alluvial fill.

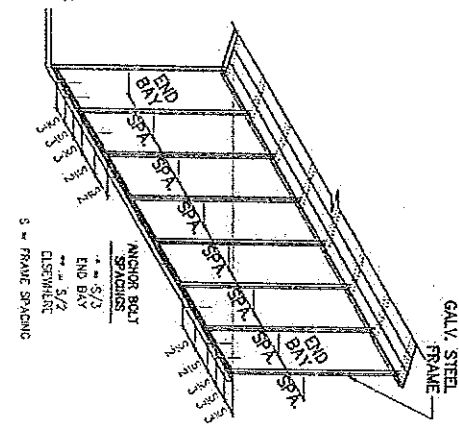
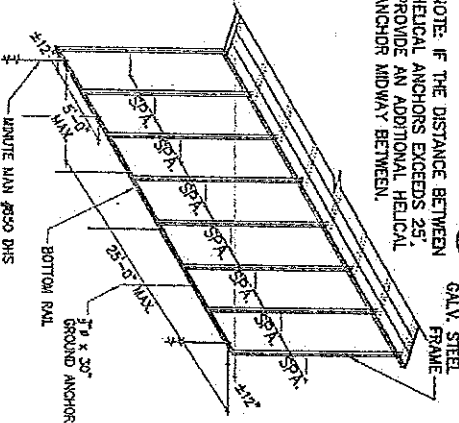
THE HELICAL ANCHOR SHALL BE APPROVED FOR USE IN SOIL CLASSIFICATIONS 2, 3, AND 4.

* Taken from HUD "Standard for Installation of Mobile Homes"

GROUND ANCHOR
2" x 30" WITH
2 - 4" HELIX
AND
2" EYE BOLT
OR OTHER
APPROVED
HELICAL ANCHOR
(THE MAXIMUM
ALLOWABLE
LOAD IS
3,150 LBS
PER ANCHOR)

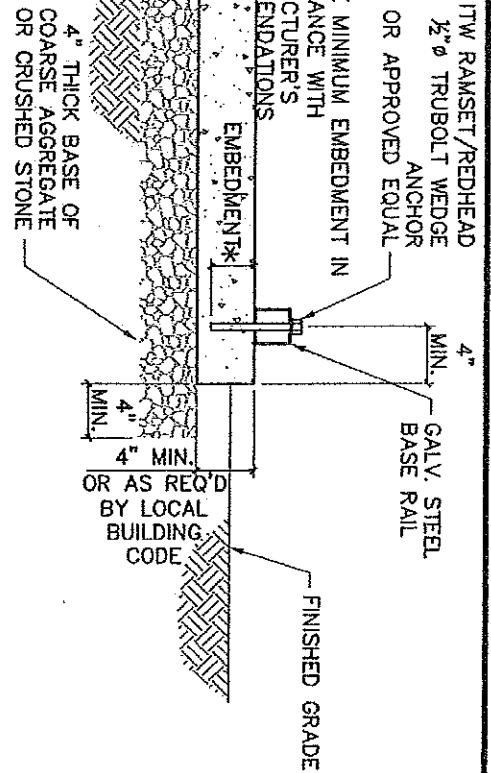
1 SOIL BASE RAIL ANCHOR DETAIL

NOTE: IF THE DISTANCE BETWEEN HELICAL ANCHORS EXCEEDS 25', PROVIDE AN ADDITIONAL HELICAL ANCHOR MIDWAY BETWEEN.



HELICAL GROUND ANCHORS

ANCHOR BOLTS



2 CONCRETE BASE RAIL ANCHORAGE

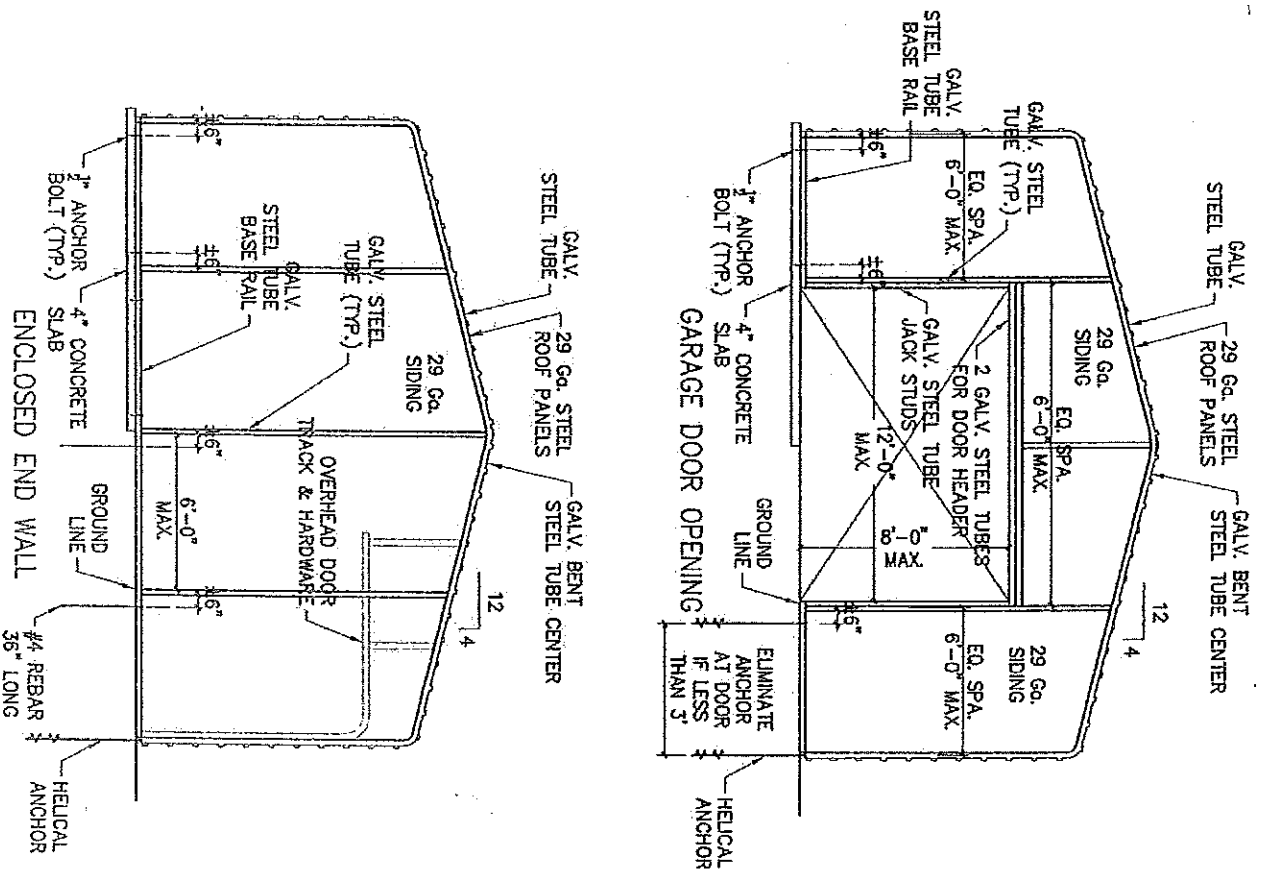
NOTES:

LIGHT GAGE METAL FRAME CARPORTS ARE VERY LIGHTWEIGHT AND FLEXIBLE STRUCTURES. THE BOTTOM RAIL IS USUALLY PLACED EITHER DIRECTLY ON LEVEL GROUND AND SECURED WITH GROUND ANCHORS, OR IS PLACED ON A 4" CONCRETE SLAB OVER A 4" LAYER OF STONE AND SECURED TO THE SLAB WITH 1" ANCHOR BOLTS. EXTENDING THE FOUNDATION TO FROST DEPTH TO PREVENT HEAVING IS GENERALLY NOT REQUIRED. HOWEVER, THE OWNER IS RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE LOCAL BUILDING CODE WHICH MAY BE MORE RESTRICTIVE.

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH (F'c) OF 2500 PSI AT 28 DAYS.

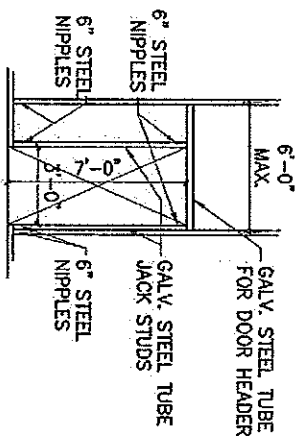


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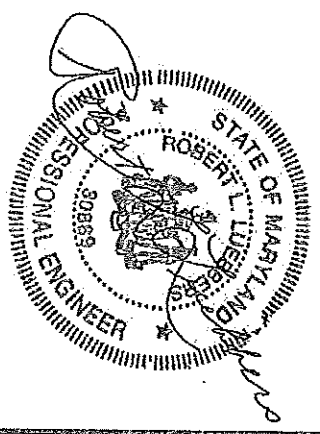


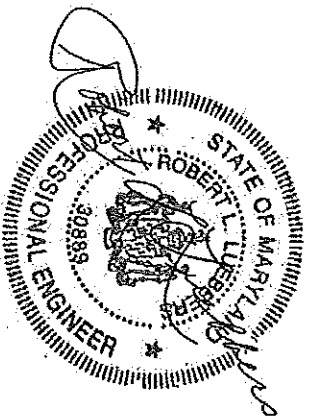
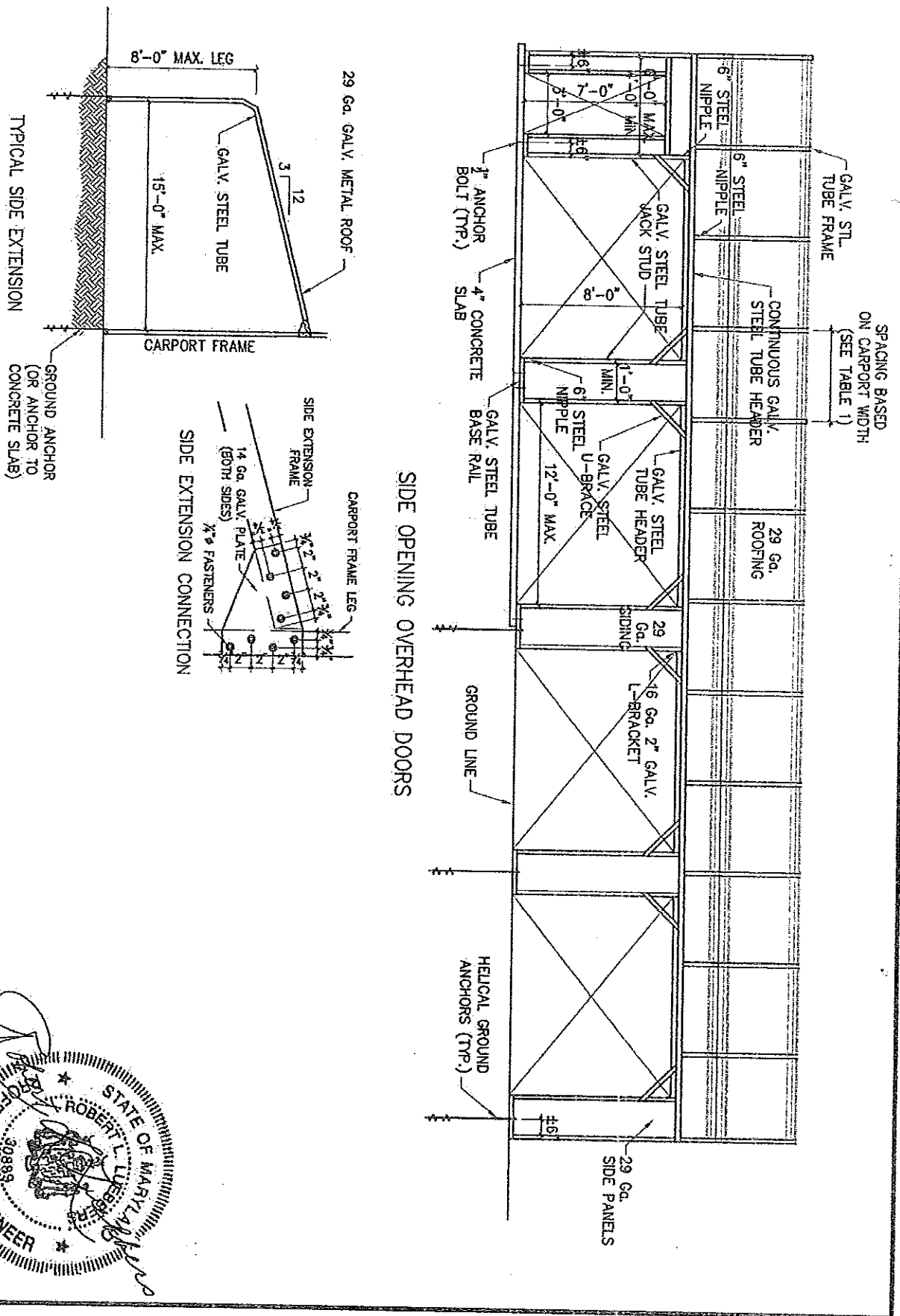
CARPORIT WIDTH	MAX. DOOR WIDTH
12'	8'
18'	10'
20'	12'
22'	12'
24'	12'

MAX. DOOR WIDTH FOR SIDE OPENING IS 12'



STANDARD DOOR OPENING





2/04/2011