



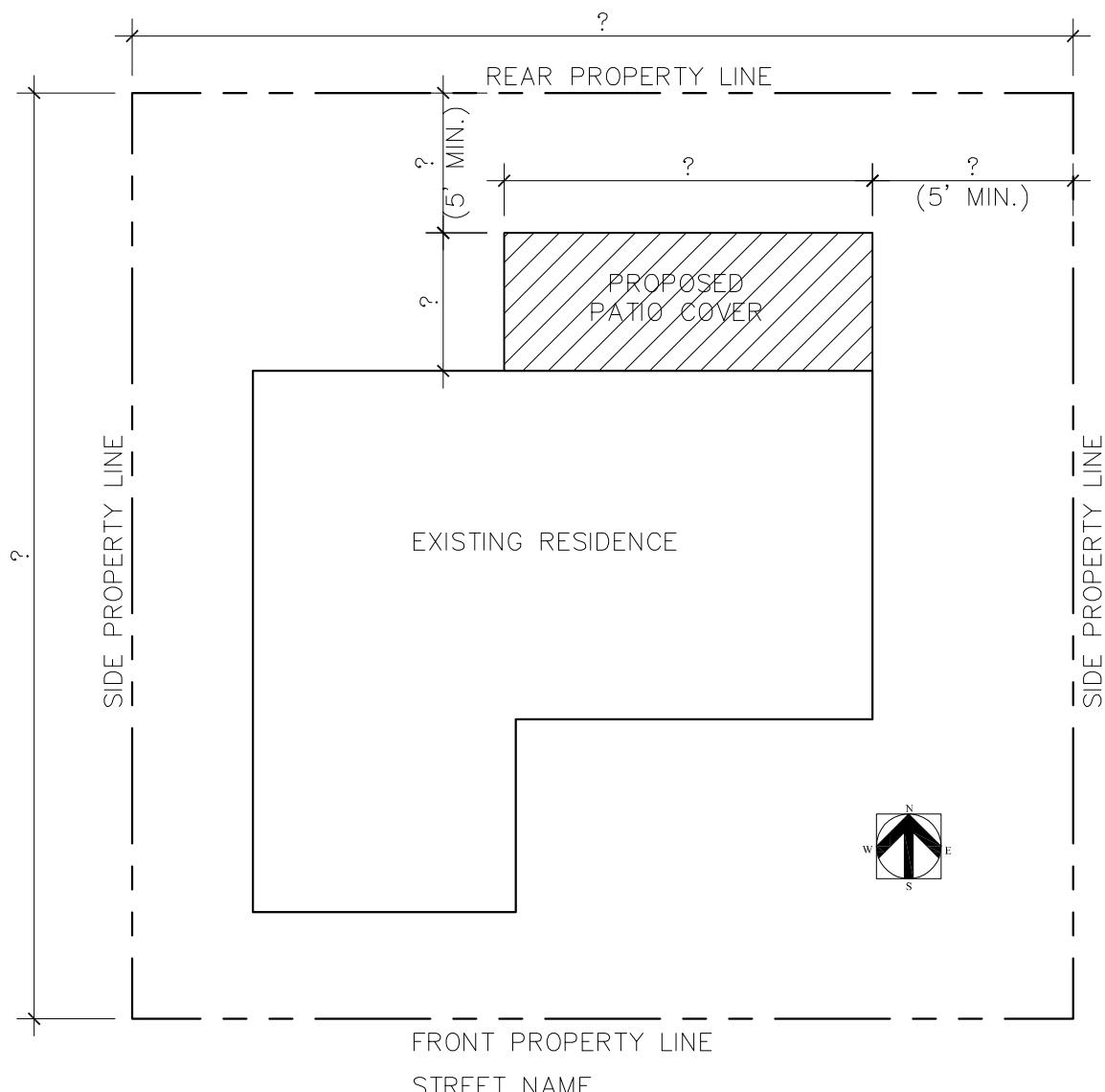
City of Milpitas
Office of Building Safety
DESIGN GUIDELINE
FOR
OPEN PATIO COVER



455 E. Calaveras Blvd.
Milpitas, CA 95035
408-586-3240
www.milpitas.gov

FEBRUARY 2023

BASED ON
2022 CALIFORNIA CODES



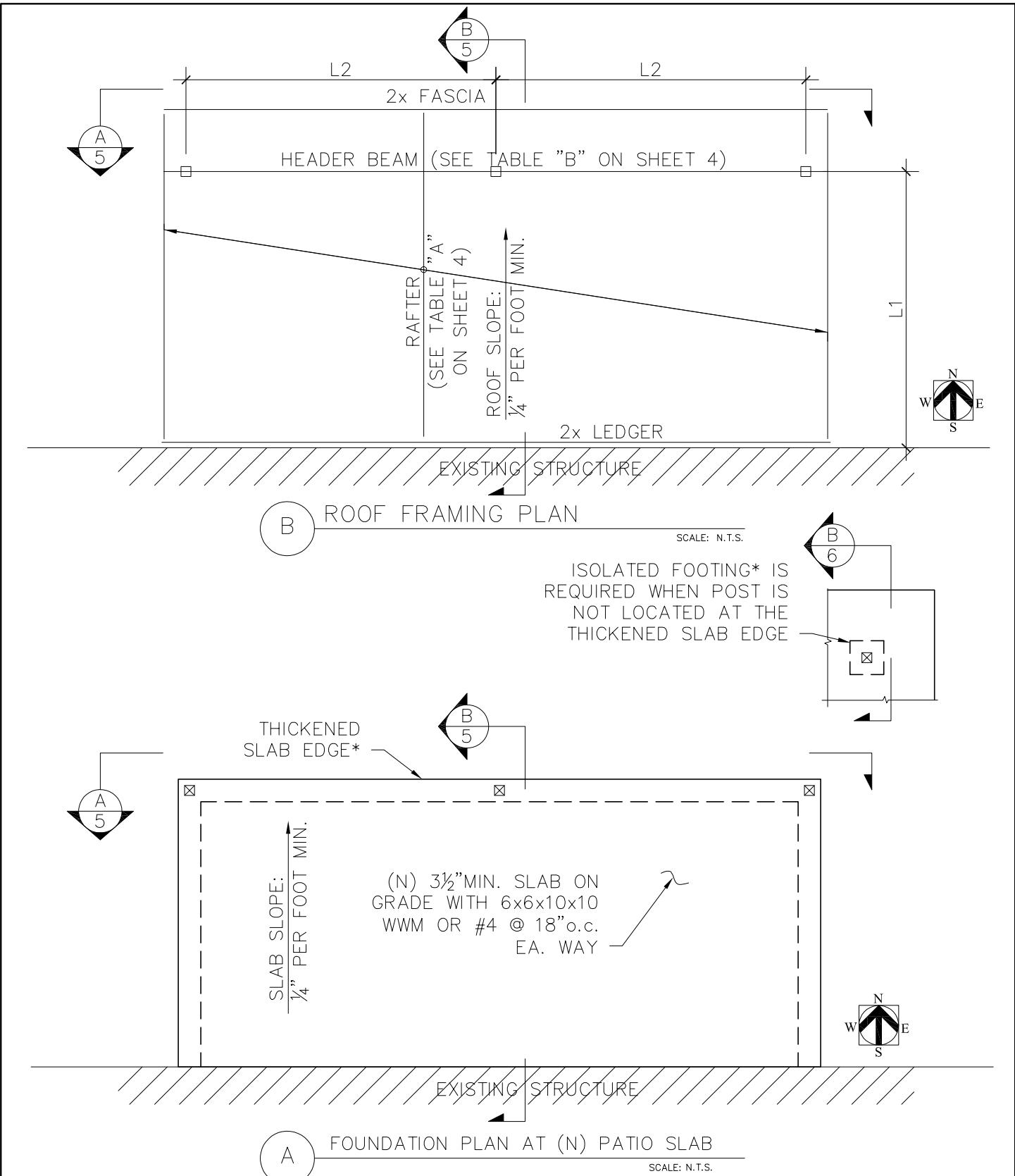
NOTE:

1. PROVIDE PROJECT INFORMATION SUCH AS THE SCOPE OF WORK; ZONING DISTRICT; THE STREET ADDRESS AND THE NAME OF THE LEGAL OWNER OF THE PROPERTY; THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE PERSON WHO PREPARED THE PLANS.
2. PROVIDE FULL SITE PLAN AND SHOW LOT DIMENSIONS AND PROPOSED PATIO COVER DIMENSIONS, AREA, AND DISTANCE TO THE PROPERTY LINES.
3. CHECK WITH THE PLANNING DEPARTMENT (PLANNINGDEPARTMENT@MILPITAS.GOV OR 408-586-3279) FOR PATIO SETBACK REQUIREMENTS.
4. CHECK WITH THE ENGINEERING DEPARTMENT (LANDDEVELOPMENTENGINEERING@MILPITAS.GOV OR 408-586-3300) FOR LOCATION OF ANY EASEMENTS THAT MAY IMPACT THE PROPOSED LOCATION AND HEIGHT.

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OPEN PATIO COVER
SAMPLE PLOT PLAN

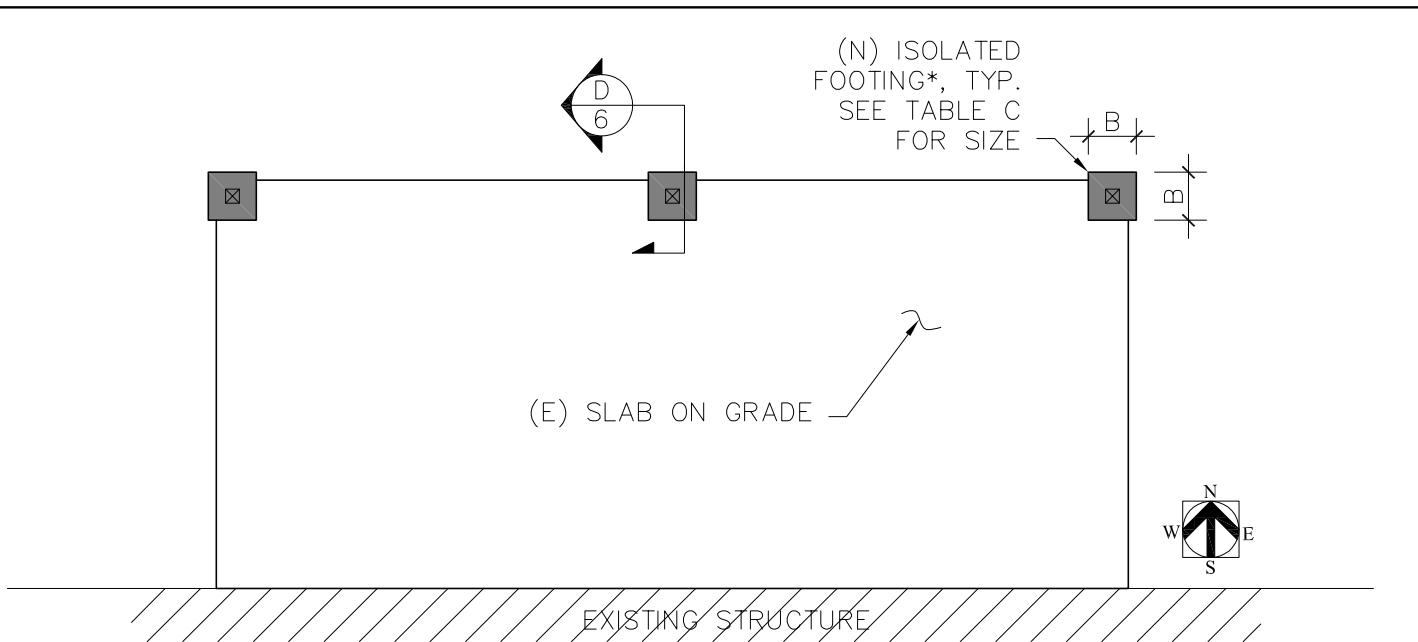
SHEET
1
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City of Milpitas
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OPEN PATIO COVER
SAMPLE FOUNDATION AND FRAMING PLANS

**SHEET
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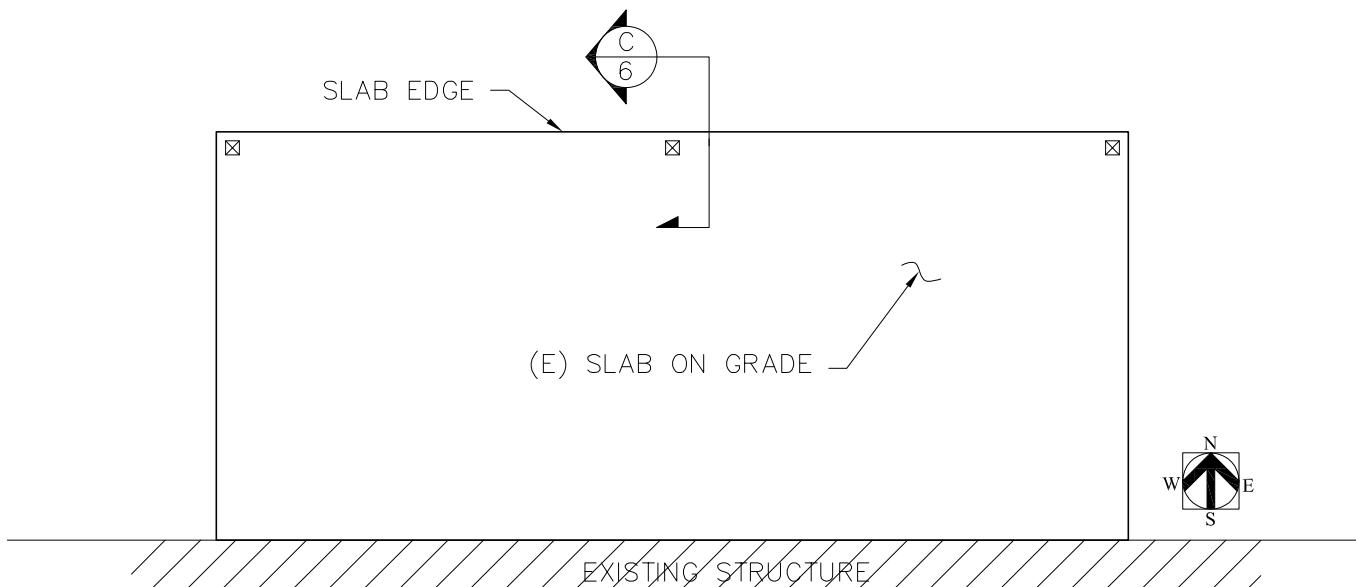


* (N) FOOTING REQUIRED WHEN ANY ONE OF THE CONDITIONS IN DET. A OCCUR

B FOUNDATION PLAN AT (E) PATIO SLAB
CASE 2: (N) FOOTING REQUIRED SCALE: N.T.S.

CONDITIONS FOR USING (E) SLAB FOR COLUMN SUPPORT:

1. MIN. $3\frac{1}{2}$ " SLAB THK.
2. SLAB IN GOOD CONDITIONS
3. COLUMN LOAD DOES NOT EXCEED 750 LB (~ 25 SQ FT TRIB. AREA)



A FOUNDATION PLAN AT (E) PATIO SLAB
CASE 1: NO FOOTING REQUIRED SCALE: N.T.S.

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OPEN PATIO COVER
SAMPLE FOUNDATION PLAN AT (E) SLAB

**SHEET
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TABLE "A"		
RAFTER SPANS "L1" (DOUGLAS FIR LARCH #2 OR BETTER)		
SIZE	SPACING	SPAN
2x4	12" o.c.	7'-0"
	16" o.c.	6'-3"
	24" o.c.	5'-6"
	32" o.c.*	7'-3"*
2x6	12" o.c.	11'-0"
	16" o.c.	10'-0"
	24" o.c.	8'-9"
	32" o.c.*	11'-6"*
2x8	12" o.c.	14'-6"
	16" o.c.	13'-3"
	24" o.c.	11'-6"
	32" o.c.*	15'-0"*
2x10	12" o.c.	18'-6"
	16" o.c.	16'-9"
	24" o.c.	14'-9"
	32" o.c.*	19'-3"*
2-2x4 OR 4x4	24" o.c.	7'-3"
	32" o.c.*	9'-6"*
2-2x6 OR 4x6	24" o.c.	11'-6"
	32" o.c.*	15'-3"*
2-2x8 OR 4x8	24" o.c.	15'-3"
	32" o.c.*	20'-0"*
	48" o.c.*	17'-6"*

* SPACING AND SPAN DENOTED BY ASTERISKS ARE FOR LATTICE TYPE PATIO COVER ONLY.

NOTES:

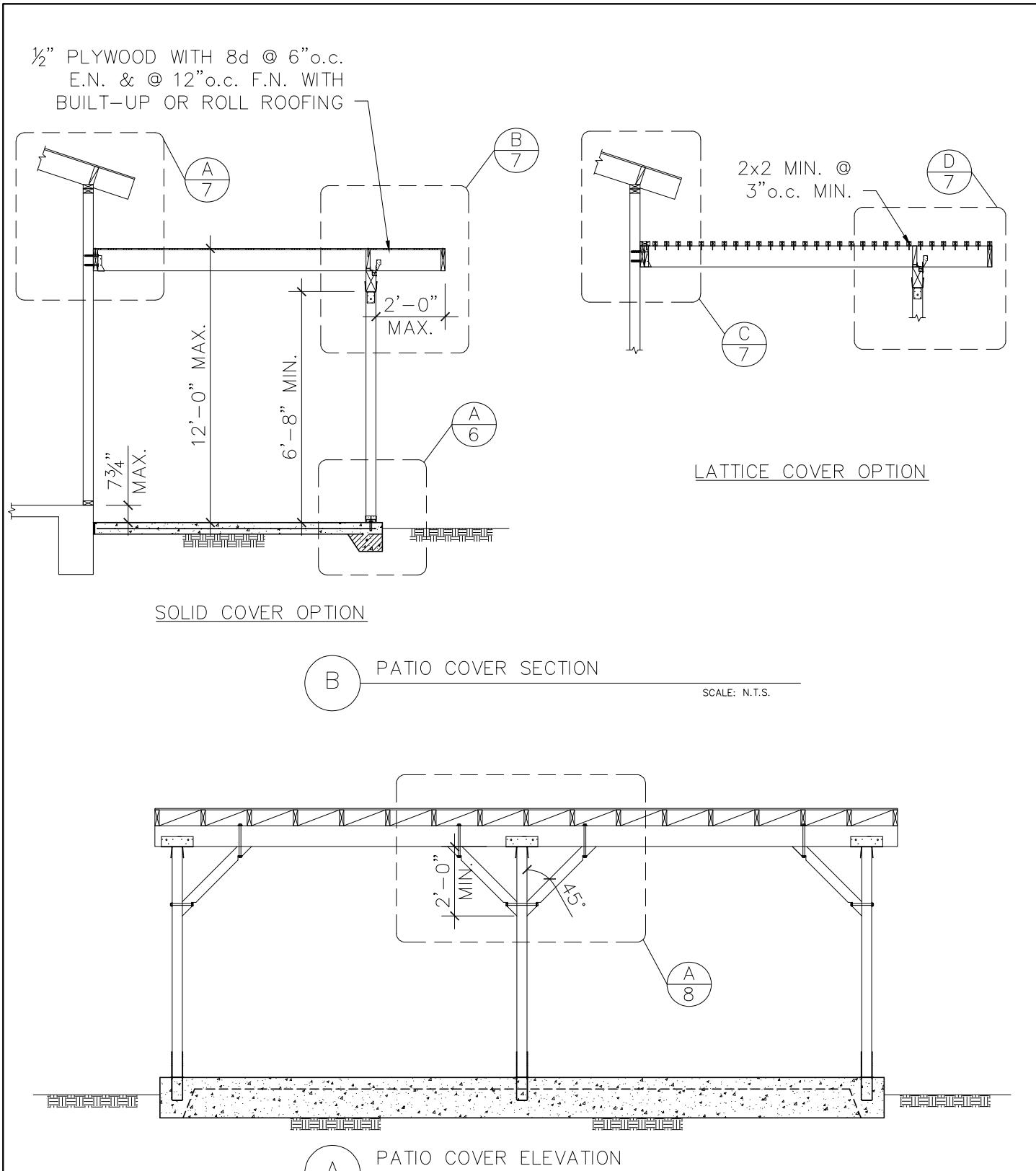
1. LAG SCREWS MUST FULLY ENGAGE A WOOD STUD OR RIM JOIST AND BE PROVIDED WITH APPROPRIATE WASHERS.
2. THESE TABLES ARE APPLICABLE TO OPEN PATIO COVER ONLY, NOT FOR ENCLOSED PATIO ENCLOSURE.
3. PATIO COVER IN HILLSIDE AREAS SHALL BE DESIGNED BY CALIFORNIA LICENSED ARCHITECT OR ENGINEER.
4. ALL WEATHER EXPOSED WOOD MEMBERS SHALL BE NATURALLY DURABLE OR PRESSURE TREATED.
5. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL.
6. WOOD POSTS, RAFTERS AND BEAMS SHALL BE DOUGLAS FIR LARCH NO. 2 OR BETTER.
7. CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500psi MIN. AND REINFORCEMENT YIELD STRENGTH SHALL BE 40ksi MIN.
8. ALL METAL CONNECTORS AND HARDWARE SHALL MEET AN APPROVED STANDARD FOR ITS INTENDED USE AND BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
9. THE INFORMATION PROVIDED IN THIS DESIGN GUIDE CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS. BY USING THIS DESIGN GUIDE, THE CONTRACTOR/OWNER ACCEPTS THE FULL RESPONSIBILITY OF RISK. ALTERNATE DESIGN MAY BE USED WHEN PROVIDED WITH WET STAMPED AND SIGNED STRUCTURAL CALCULATIONS & DETAILS BY A CALIFORNIA LICENSED ENGINEER OR ARCHITECT.

RAFTER SPAN	TABLE "B"		FOOTING SIZE	THRU' BOLTS	LEDGER LAG SCREW			
	HEADER SIZE & SPANS "L2" (DOUGLAS FIR LARCH #2 OR BETTER)							
	HEADER							
	SPAN	SIZE						
UP TO 12'-0"	7'-6"	2-2x6 OR 4X6	12"SQ. x 12"DP.	(2)-1/2"Ø @ 1 1/2" o.c.	(2)-3/8"Ø x 4 1/2" LONG @ 16" o.c.			
	10'-0"	2-2x8 OR 4X8	14"SQ. x 12"DP.	(2)-5/8"Ø @ 2 1/2" o.c.				
	12'-9"	2-2x10 OR 4X10	16"SQ. x 12"DP.	(2)-5/8"Ø @ 3 1/2" o.c.				
	15'-3"	2-2x12 OR 4X12	16"SQ. x 12"DP.	(2)-3/4"Ø @ 4 1/2" o.c.				
12'-1" TO 20-0"	6'-0"	2-2x6 OR 4X6	14"SQ. x 12"DP.	(2)-1/2"Ø @ 1 1/2" o.c.	(2)-3/8"Ø x 4 1/2" LONG @ 16" o.c.			
	7'-9"	2-2x8 OR 4X8	16"SQ. x 12"DP.	(2)-5/8"Ø @ 2 1/2" o.c.				
	10'-3"	2-2x10 OR 4X10	18"SQ. x 12"DP.	(3)-1/2"Ø @ 2 1/2" o.c.				
	11'-9"	2-2x12 OR 4X12	18"SQ. x 12"DP.	(3)-5/8"Ø @ 3" o.c.				

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City of Milpitas
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OPEN PATIO COVER
SAMPLE SPAN TABLE

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City of Milpitas
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OPEN PATIO COVER
SAMPLE SECTIONS AND ELEVATION

**SHEET
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OF 8 SHEETS

AB COLUMN BASE
(OR EQUAL)

(E) SLAB

1" MIN. STANDOFF
OR P.T. POST
1/2"Ø EPOXY
ANCHOR W/ 2 3/4"
MIN. EMBED.

3 1/2" MIN.
V.I.F.

NOTE: SEE SHEET 3 FOR
REQUIREMENTS TO USE (E) SLAB

AB COLUMN BASE
(OR EQUAL)

(E) SLAB

3" MIN.
#4 EPOXY
DOWELS,
3 SIDES

(SEE TABLE "C")

1" MIN. STANDOFF
OR P.T. POST

1/2"Ø CAST IN
PLACE OR EPOXY
ANCHOR W/ 2 3/4"
EMBED. MIN.

2-#4
EA. WAY

ISOLATED FOOTING
NOT REQ. IF COL.
LOAD DOES NOT
EXCEED 750LB

(C) (N) POST TO (E) SLAB DETAIL

SCALE: N.T.S.

(D) (N) ISOLATED FOOTING AT
(E) SLAB DETAIL

SCALE: N.T.S.

(N) SLAB WITH
6x6x10x10 WWM OR
#4 @ 18"o.c. EA.
WAY AT MID DEPTH

1-#4 CONT.
AT CENTER

AB COLUMN BASE
(OR EQUAL)

1" MIN. STANDOFF
OR P.T. POST

1/2"Ø CAST IN PLACE
OR EPOXY ANCHOR
W/ 2 3/4" MIN. EMBED.

3 1/2" MIN.
8" MIN.
8" MIN.
THICKENED EDGE
NOT REQ. IF COL.
LOAD DOES NOT
EXCEED 750LB

AB COLUMN BASE
(OR EQUAL)

1" MIN. STANDOFF
OR P.T. POST

1/2"Ø CAST IN
PLACE OR EPOXY
ANCHOR W/
2 3/4" MIN. EMBED.

2-#4
EA. WAY

ISOLATED FOOTING
NOT REQ. IF COL.
LOAD DOES NOT
EXCEED 750LB

A

(N) PATIO SLAB THICKENED
EDGE DETAIL

SCALE: N.T.S.

B

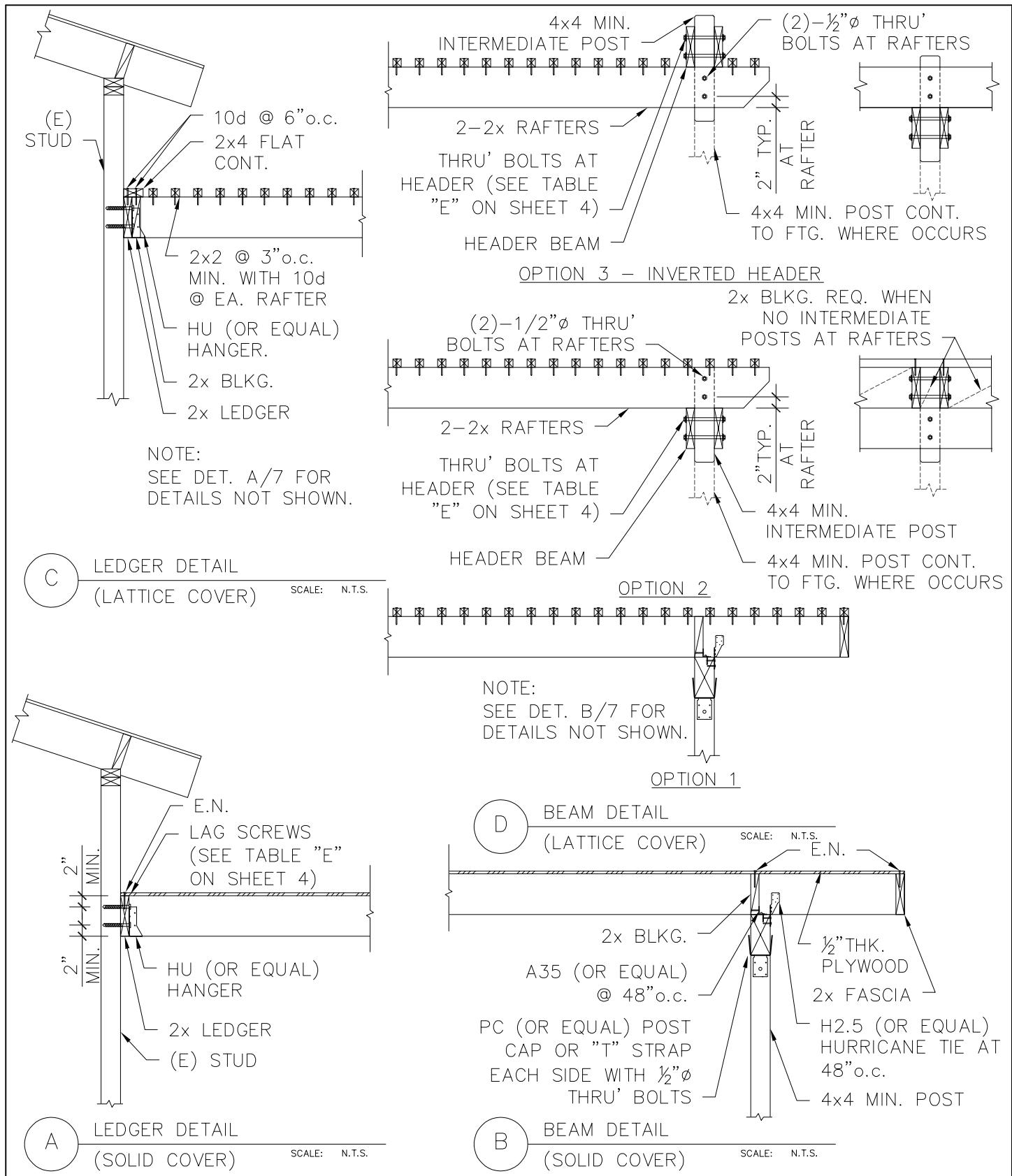
(N) ISOLATED FOOTING IN
(N) PATIO SLAB

SCALE: N.T.S.

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Office of Building Safety
OPEN PATIO COVER
SAMPLE DETAILS

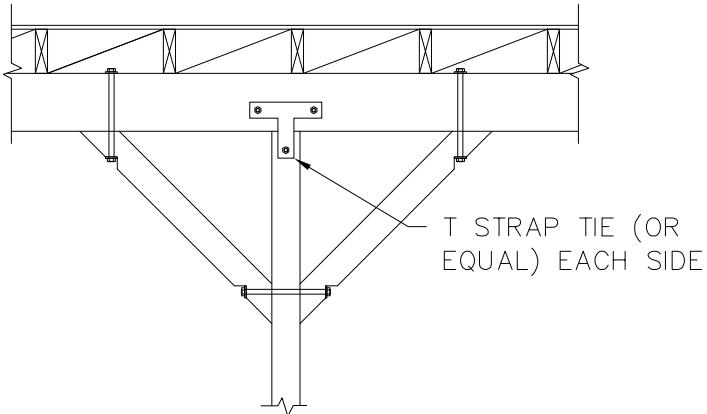
**SHEET
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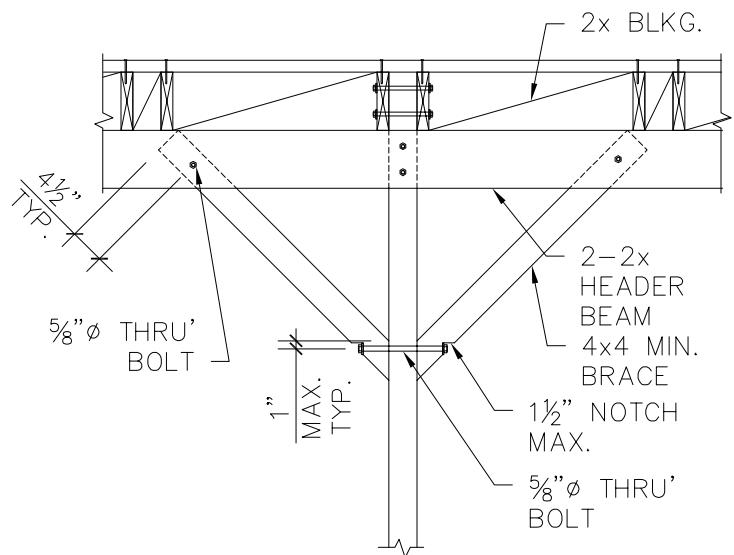
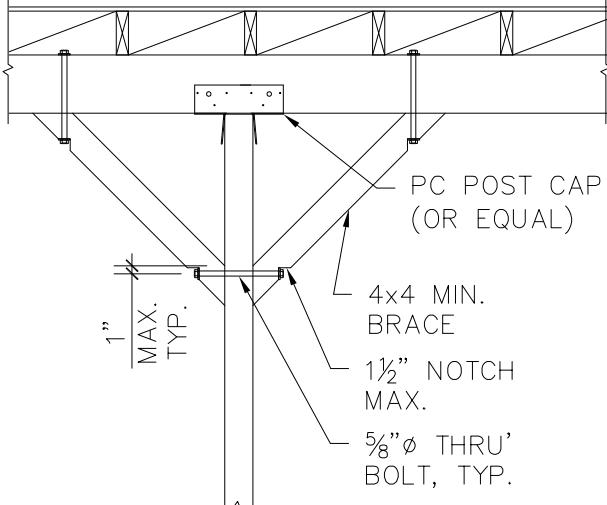
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OPEN PATIO COVER
SAMPLE DETAILS

SHEET
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T STRAP TIE OPTION



ALTERNATIVE OPTION



SCALE: N.T.S.

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OPEN PATIO COVER
SAMPLE DETAILS

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