

OHIO MANUFACTURED HOMES COMMISSION

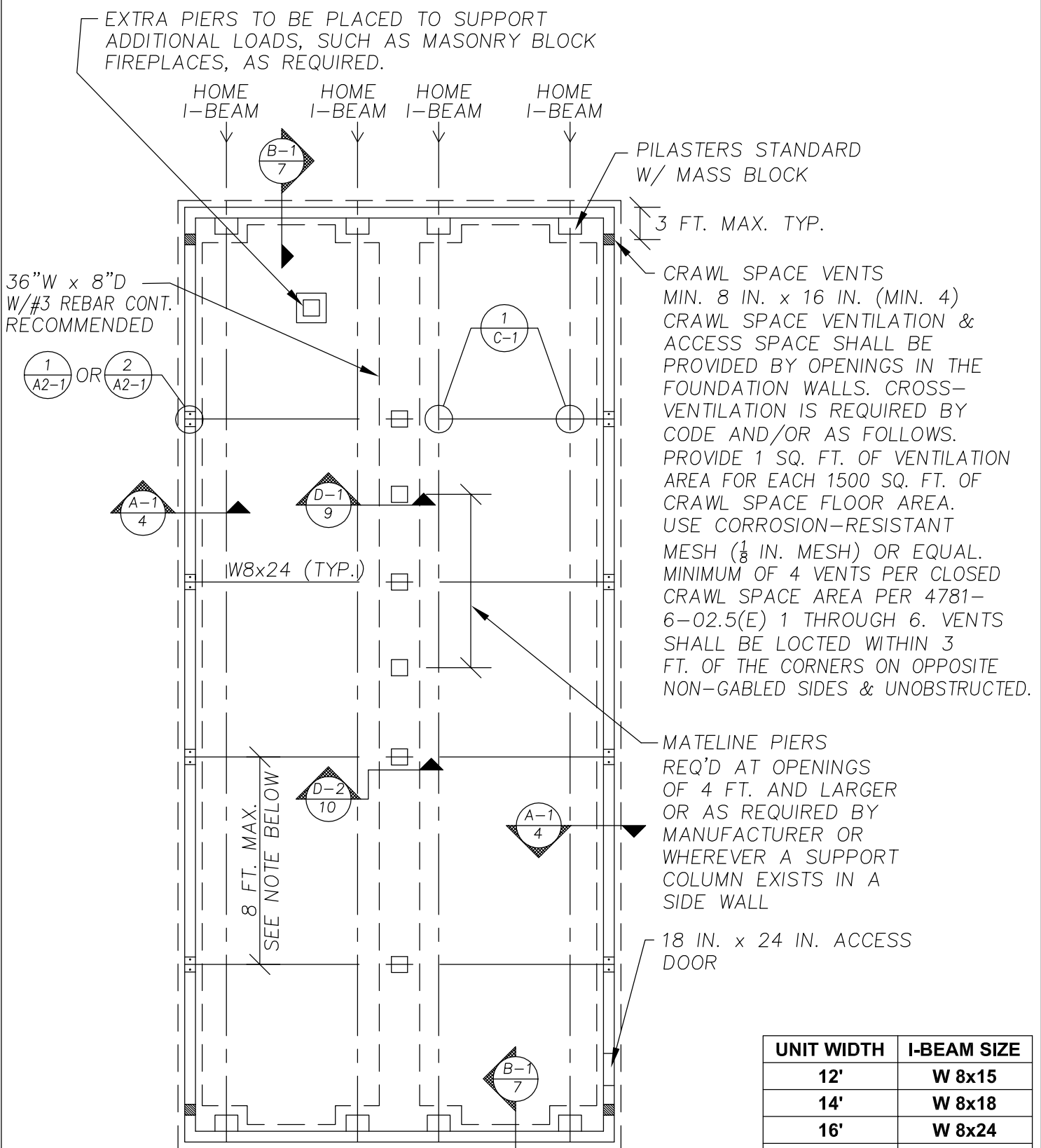
JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB N-1
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM INSTALLATION NOTES	DATE:	1 OF 11
			8/31/07

NOTES:

1. FOUNDATION AND ITS STRUCTURAL ELEMENTS SHALL BE CAPABLE OF ACCOMMODATING ALL SUPERIMPOSED LIVE, DEAD, AND OTHER LOADS IN ACCORDANCE WITH (SEE) APPLICABLE CODES AND ALL LATERAL LOADS IN ACCORDANCE WITH ACCEPTED DESIGN PRACTICES.
2. LOTS SHALL BE PROVIDED WITH ADEQUATE DRAINAGE AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. (MIN SLOPE 6 IN. IN 10 FT.) ALL EXTERIOR FOOTINGS SHALL HAVE FOOTING DRAINS WITH GRAVEL. SEE CODE SECTIONS 4781-6-02.2(C)(8 AND 9) AND 4781-6-02.2 (D)(3)(D)
3. MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND CODES.
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF - 3000 PSI (3500 PSI WHERE SUBJECT TO WEATHERING).
5. ALL FOUNDATION WALLS, COLUMNS, AND PIERS SHALL BE SUPPORTED ON CONTINUOUS SOLID CONCRETE FOOTINGS WHICH SHALL BE OF SUFFICIENT DESIGN TO SUPPORT SAFELY THE LOADS IMPOSED AS DETERMINED FROM THE CHARACTER OF THE SOIL, AND SHALL IN ALL CASES, EXTEND BELOW THE FROST LINE. TOP SURFACE SHALL BE LEVEL AND BOTTOM NOT EXCEEDING 1 IN 40 SLOPE.
6. FOUNDATION WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OHIO MANUFACTURED HOME INSTALLATION STANDARD AND NOT LESS STRINGENT THAN AS SHOWN IN THIS DESIGN.
7. FOUNDATIONS SHALL EXTEND BELOW THE FROST LINE DEPTH. FOOTINGS ON SOIL WITH A LOWER ALLOWABLE SOIL PRESSURE (1000 psf OR LOWER) SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. HOWEVER, WHERE THERE IS EVIDENCE THAT THE GROUNDWATER TABLE CAN RISE TO WITHIN 6 INCHES OF THE FINISHED GRADE AT THE BUILDING PERIMETER, AN APPROVED DRAINAGE SYSTEM MUST BE PROVIDED. TERMITE SHIELDS AND/OR PROTECTION PROVIDED AS PER CODE. FOOTINGS MAY EXCEED THAT SHOWN ON DRAWINGS. IF ANY QUESTIONS, CONTACT THE AUTHORITY HAVING JURISDICTION.
CRAWL SPACE VENTILATION AND ACCESS SPACE SHALL BE PROVIDED BY OPENINGS IN THE FOUNDATION WALLS. CROSS-VENTILATION IS REQUIRED BY CODE AND/OR AS FOLLOWS. PROVIDE 1 SQ. FT. OF VENTILATION AREA FOR EACH 1500 SQ. FT. OF CRAWL SPACE FLOOR AREA. USE CORROSION RESISTANT MESH (1/8 IN. MESH) OR EQUAL. MINIMUM OF 4 VENTS PER CLOSED
8. CRAWL SPACE AREA PER 4781-6-02.5(E) 1 THROUGH 6. VENTS SHALL BE LOCATED WITHIN THREE FEET OF THE CORNERS ON OPPOSITE, NON-GABLED SIDES AND UNOBSTRUCTED.
9. MARRIAGE LINE SUPPORT PIER BLOCKS MAY BE DRY STACKED (DOUBLE STACKED OVER 4 BLOCK HIGH). SURFACE BOND OR MORTAR, WHEN USED, SHALL BE TYPE "S" OR "M".
10. PIERS AT THE MATE LINE SHALL BE NO MORE THAN 8 FEET O.C. OR AT EACH END OF ANY INTERIOR OPENING OF 4'-0" OR GREATER. EACH PIER IS TO BE CONSTRUCTED TO CARRY A VERTICAL DESIGN LOAD OF 8,000 POUNDS.
11. EXTRA PIERS TO BE PLACED TO SUPPORT ADDITIONAL LOADS, SUCH AS MASONRY BLOCK FIREPLACES, AS REQUIRED.
12. MAXIMUM UNBALANCED FILL FOR UNREINFORCED BLOCK IS 4 FT.
13. MASONRY BLOCK PIERS MAY BE SINGLE STACKED UP TO A HEIGHT OF 3 FT.
14. MINIMUM $\frac{3}{8}$ "x 5" LAG SCREWS WITH FLAT WASHERS ARE REQUIRED FOR SINGLE-PLY MATE LINES; MULTI-PLY MATE LINES REQUIRE MINIMUM $\frac{3}{8}$ "x7" LAG SCREWS WITH FLAT WASHERS. LAGS ARE TO BE CENTERED BETWEEN FLOOR JOISTS ON ALTERNATE SIDES WHERE POSSIBLE.
15. PIER AND/OR BEAM LOCATION CAN BE ADJUSTED UP TO 8 INCHES FOR UTILITY DROPS OR OTHER INTERFERENCE - MAINTAIN MAX SPACING.
16. DAMP PROOFING IS REQUIRED ON EXTERIOR WALLS BELOW GRADE SEE CODE SECTION 4781-6-02.2(C)(9)
17. INSIDE GRADE IS SHOWN AT TOP OF INSIDE FOOTING THROUGHOUT. SEE CODE SECTION 4781-6-02.3(E). GRADE MAY BE HIGHER AS LONG AS MIN. CLEARANCE SHALL BE MAINTAINED.
18. ANCHOR STRAPS ARE NOT REQUIRED FOR TRANSVERSE BEAM INSTALLATIONS.

OHIO MANUFACTURED HOMES COMMISSION

JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB F-2a
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - FOUNDATION PLAN	DATE:	2 OF 11
			9/04/07



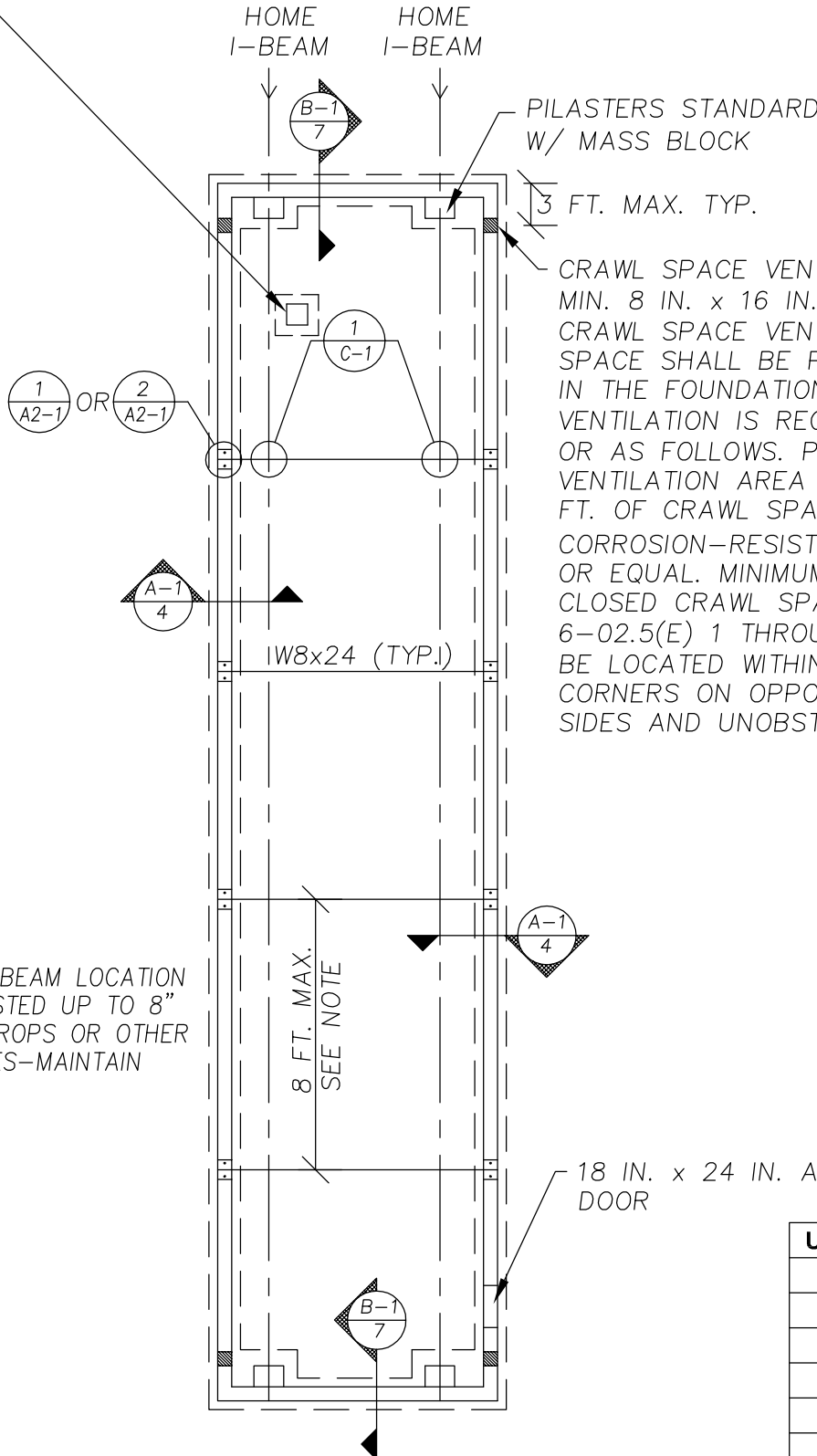
NOTE:
PIER AND/OR BEAM LOCATION CAN BE ADJUSTED UP TO 8" FOR UTILITY DROPS OR OTHER INTERFERENCES—MAINTAIN MAX. SPACING

UNIT WIDTH	I-BEAM SIZE
12'	W 8x15
14'	W 8x18
16'	W 8x24
24'	W 8x15
28'	W 8x18
30'	W 8x21
32'	W 8x24

OHIO MANUFACTURED HOMES COMMISSION

JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB F-2b
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - FOUNDATION PLAN (SINGLE)	DATE:	3 OF 11
			9/04/07

EXTRA PIERS TO BE PLACED TO SUPPORT ADDITIONAL LOADS, SUCH AS MASONRY BLOCK FIREPLACES, AS REQUIRED.



CRAWL SPACE VENTS
MIN. 8 IN. x 16 IN. (MIN. 4)
CRAWL SPACE VENTILATION AND ACCESS SPACE SHALL BE PROVIDED BY OPENINGS IN THE FOUNDATION WALLS. CROSS-VENTILATION IS REQUIRED BY CODE AND/OR AS FOLLOWS. PROVIDE 1 SQ. FT. OF VENTILATION AREA FOR EACH 1500 SQ. FT. OF CRAWL SPACE FLOOR AREA. USE CORROSION-RESISTANT MESH ($\frac{1}{8}$ " MESH) OR EQUAL. MINIMUM OF 4 VENTS PER CLOSED CRAWL SPACE AREA PER 4781-6-02.5(E) 1 THROUGH 6. VENTS SHALL BE LOCATED WITHIN 3 FEET OF THE CORNERS ON OPPOSITE, NON-GABLED SIDES AND UNOBSTRUCTED.

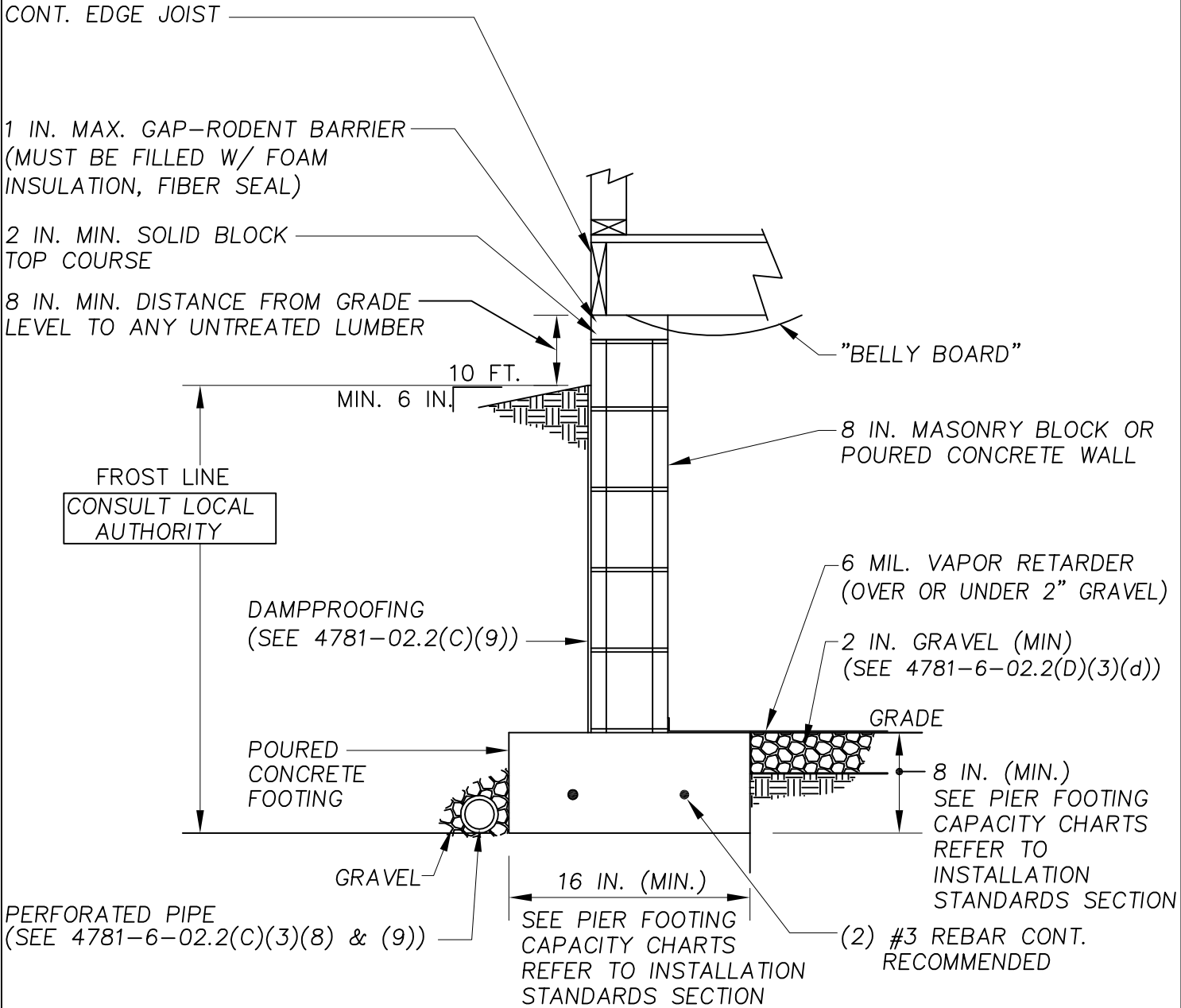
NOTE:
PIER AND/OR BEAM LOCATION CAN BE ADJUSTED UP TO 8" FOR UTILITY DROPS OR OTHER INTERFERENCES—MAINTAIN MAX. SPACING

18 IN. x 24 IN. ACCESS DOOR

UNIT WIDTH	I-BEAM SIZE
12'	W 8x15
14'	W 8x18
16'	W 8x24
24'	W 8x15
28'	W 8x18
30'	W 8x21
32'	W 8x24

OHIO MANUFACTURED HOMES COMMISSION

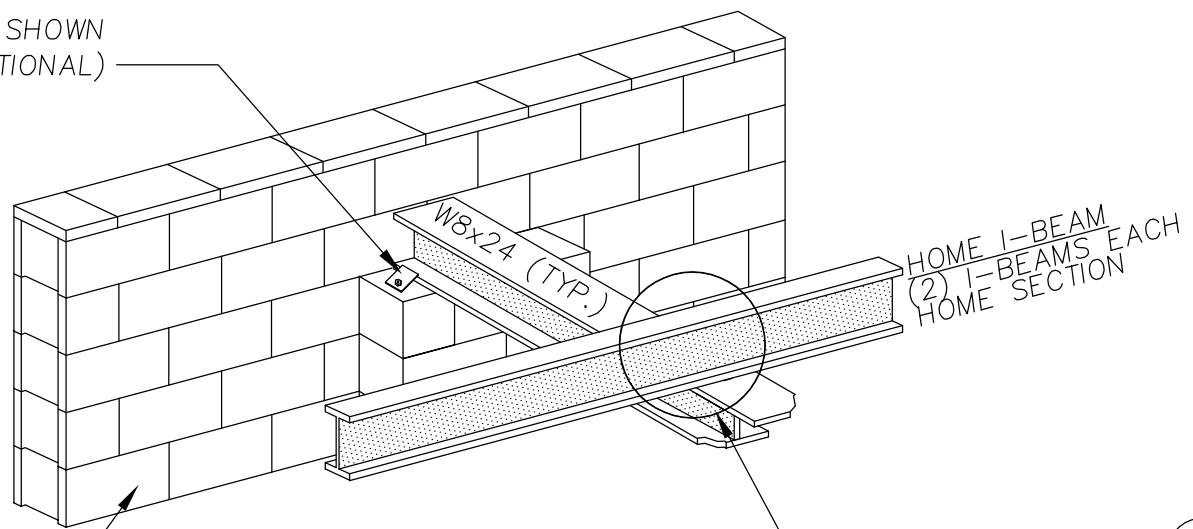
JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB A-1
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - FOUNDATION AT SIDEWALL		4 OF 11
DATE:	9/04/07		



OHIO MANUFACTURED HOMES COMMISSION

JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB A2-1
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - PILASTER OPTION	DATE:	5 OF 11
			9/04/07

DETAIL 2 SHOWN
(3, 4 OPTIONAL)



FOUNDATION WALL

SEE SHEET C-1 FOR CONNECTION OPTIONS

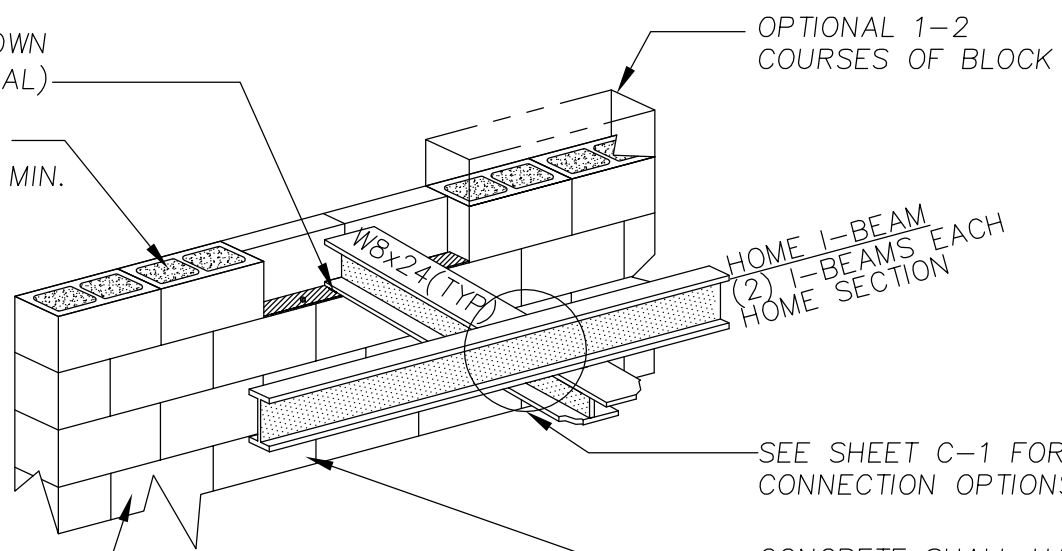
C-1
8

PILASTER OPTION
(UN-FILLED MASONRY WALL)

DETAIL "1"

DETAIL 4 SHOWN
(2, 3 OPTIONAL)

GROUT FILLED BLOCK 2'-8" MIN. EACH SIDE OF BEAM



FOUNDATION WALL

SEE SHEET C-1 FOR CONNECTION OPTIONS

C-1
8

CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 PSI (3500 PSI WHERE SUBJECT TO WEATHERING)

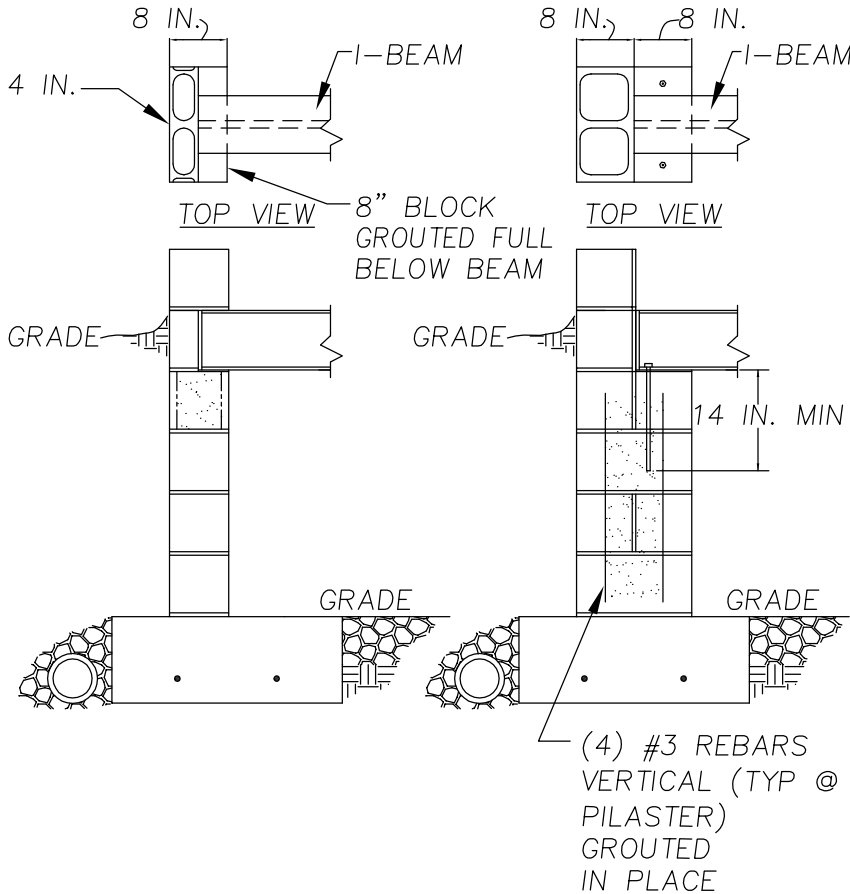
BEAM POCKET
(SOLID FILLED MASONRY OR CONCRETE WALL)

DETAIL "2"

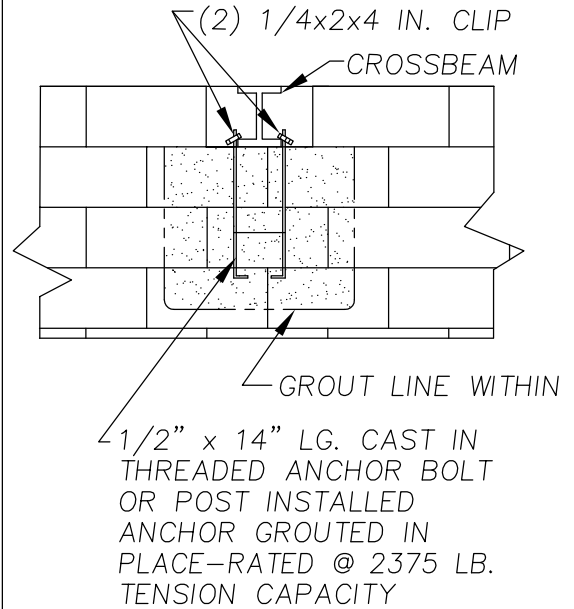
OHIO MANUFACTURED HOMES COMMISSION

JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB A2-2
CHECKED:	D.E.Z.	SHEET:	
DATE:	9/04/07		6 OF 11

TITLE: **TRANSVERSE I-BEAM-BEAM POCKET OPTION(GROUTED WALL)**

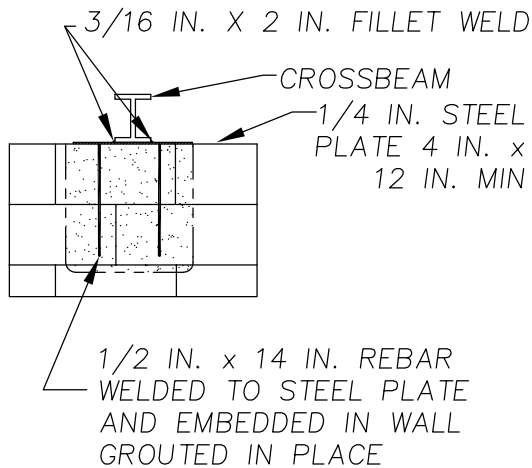


DETAIL "1"



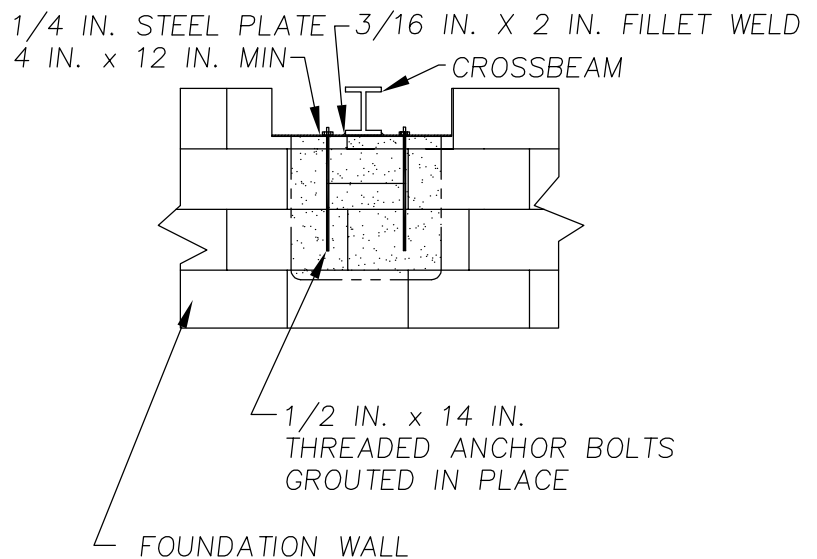
ANCHOR PLATE
FOUNDATION WALL
(MASONRY BLOCK OR
CONCRETE, SOLID
FILLED AT I-BEAM
LOCATIONS)

DETAIL "2"



ALTERNATE ANCHOR PLATE

DETAIL "3"

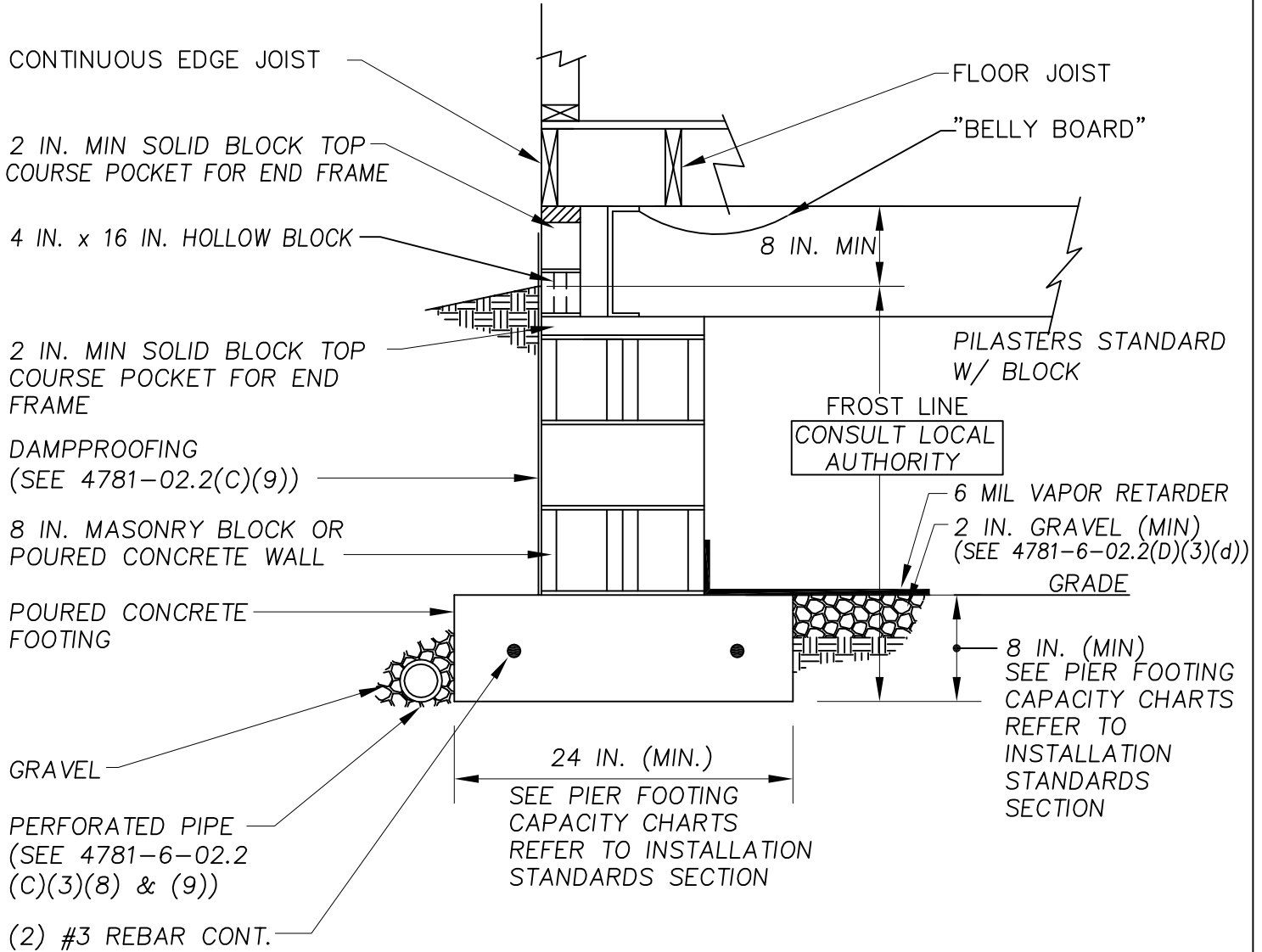


ANCHOR PLATE

DETAIL "4"

OHIO MANUFACTURED HOMES COMMISSION

JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB B-1
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - FOUNDATION AT ENDWALL		7 OF 11
DATE:	9/04/07		



OHIO MANUFACTURED HOMES COMMISSION

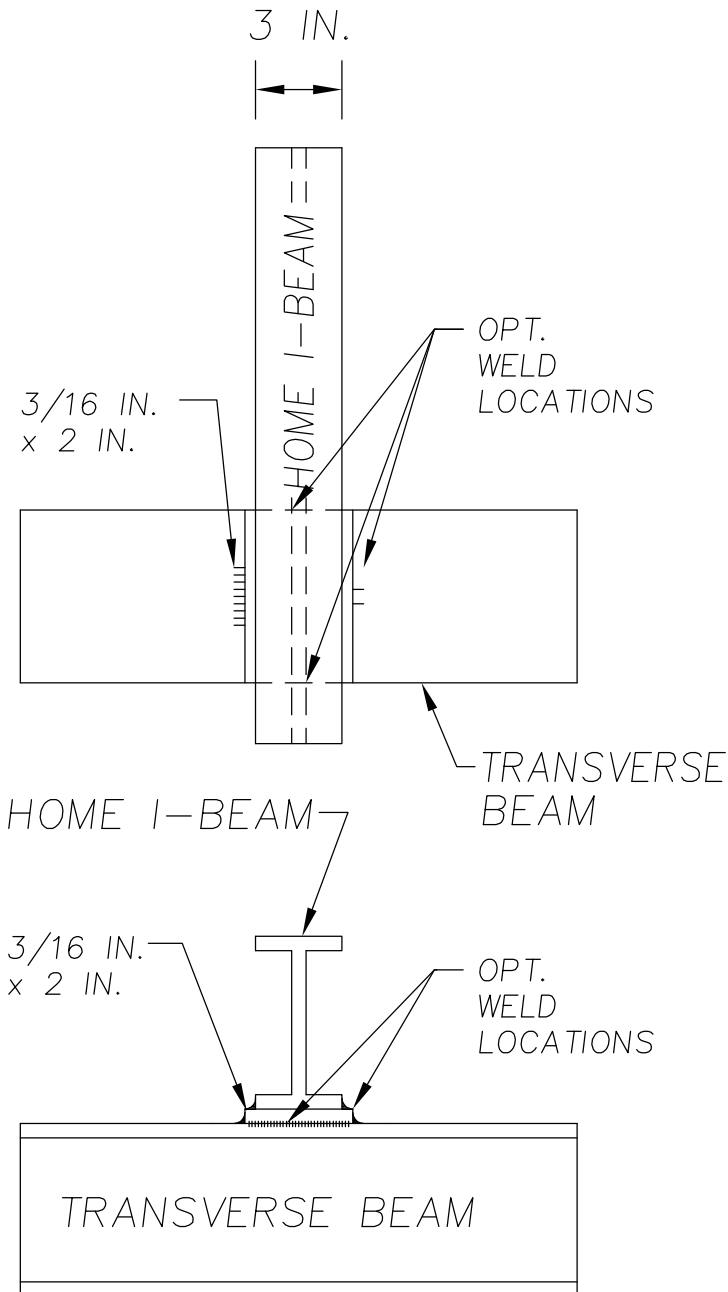
JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB C-1
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - I-BEAM CONNECTIONS		8 OF 11
DATE:	9/04/07		

OPTION #1

3/16 IN. x 2 IN. FILLET WELD
MAINRAIL TO CROSSBEAM

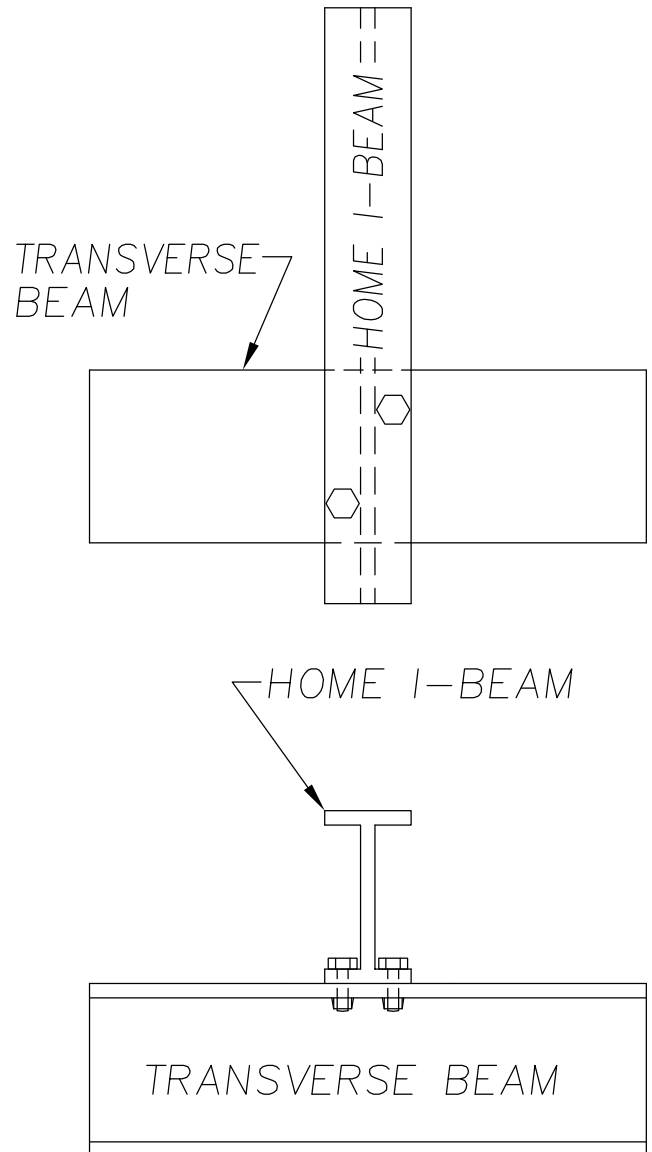
FOR EACH CONNECTION THE 2 IN. WELD
LENGTH MAY BE A CUMULATIVE TOTAL
OF 2 IN. EXTERIOR SHOWN

SHIMS (AS REQUIRED)- STEEL (4 IN. x
6 IN. MIN.) WELDED INTO PLACE



OPTION #2

EACH CONNECTION MAY BE MADE
WITH (2) 1/2 IN. GRADE-8 BOLT
OR A-307 BOLT BEAM TO BEAM.



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CHECKED:	D.E.Z.	SHEET:	
DATE:		8/31/07	
TITLE: TRANSVERSE I-BEAM -MATELINE PIER(COLUMN & POINT LOAD)		9 OF 11	

MINIMUM 3/8"x5" LG. LAG SCREWS WITH FLAT WASHERS ARE REQUIRED FOR SINGLE-PLY MATE LINES; MULTI-PLY MATE LINES REQUIRE 3/8"x7" LG. LAG SCREWS WITH FLAT WASHERS. LAGS TO BE CENTERED AT EACH FLOOR JOIST SPACE ON ALTERNATE SIDES WHERE POSSIBLE

SHIM NOTE:
GAP AT TOP OF PIER MAY BE SHIMMED WITH HARDWOOD PLATE (NOT EXCEEDING 2.5 IN. THICKNESS AND WEDGES (IN PAIRS) NOT EXCEEDING 1 IN. THICKNESS. WEDGES SHALL BE AT LEAST 4 IN. WIDE AND 6 IN. LONG. (SNUG FIT)

16 IN. x 16 IN. PIER (OVER 4 BLOCK HIGH)* (7 1/2 IN. BLOCK)

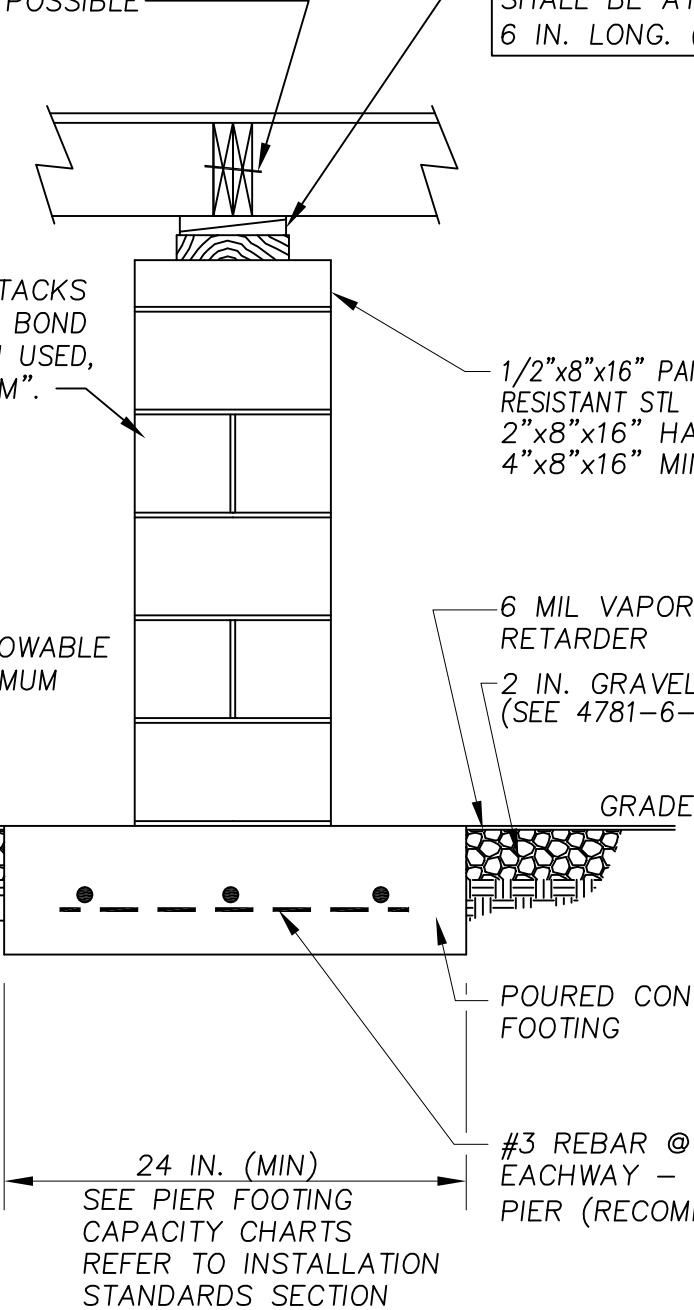
BLOCKS SHALL BE DRY STACKS WITH OR WITHOUT SURFACE BOND OR MORTAR. MORTAR, WHEN USED, SHALL BE TYPE "S" OR "M".

1/2"x8"x16" PAINTED CORROSION-RESISTANT STL CAP, OR 2"x8"x16" HARDWOOD CAPS, OR 4"x8"x16" MIN. SOLID CONCRETE CAP

* SINGLE SET BLOCK ALLOWABLE FOR 4 BLOCK HIGH MAXIMUM

6 MIL VAPOR RETARDER
2 IN. GRAVEL (MIN) (SEE 4781-6-02.2(D)(3)(d))

8 IN. (MIN) SEE PIER FOOTING CAPACITY CHARTS REFER TO INSTALLATION STANDARDS SECTION



POURED CONCRETE FOOTING

#3 REBAR @ 12" O.C. EACHWAY - ISOLATED PIER (RECOMMENDED)

24 IN. (MIN) SEE PIER FOOTING CAPACITY CHARTS REFER TO INSTALLATION STANDARDS SECTION

OHIO MANUFACTURED HOMES COMMISSION

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DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB D-2
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - TRANSVERSE BEAM SUPPORT		10 OF 11
DATE:	9/04/07		

BLOCKING REQUIRED
SEE SHEET 11 FOR
OPTIONS

I-BEAM

16 IN. x 16 IN. PIER
(OVER 4 BLOCK HIGH)*
(7 1/2 IN. BLOCK)

BLOCKS SHALL BE DRY STACKS
WITH OR WITHOUT SURFACE BOND
OR MORTAR. MORTAR, WHEN USED,
SHALL BE TYPE "S" OR "M".

*SINGLE SET BLOCK ALLOWABLE
FOR 4 BLOCK HIGH MAXIMUM

8 IN. (MIN)
SEE PIER
FOOTING
CAPACITY
CHARTS
REFER TO
INSTALLATION
STANDARDS
SECTION

GRADE

24 IN. (MIN)
SEE PIER FOOTING
CAPACITY CHARTS
REFER TO INSTALLATION
STANDARDS SECTION

SHIM NOTE:
GAP AT TOP OF PIER MAY BE
SHIMMED WITH HARDWOOD PLATE
(NOT EXCEEDING 2.5 IN. THICKNESS
AND WEDGES (IN PAIRS) NOT
EXCEEDING 1 IN. THICKNESS. WEDGES
SHALL BE AT LEAST 4 IN. WIDE AND
6 IN. LONG (SNUG FIT). SHIMS TO BE
INSTALLED PERPENDICULAR TO
TRANSVERSE BEAM

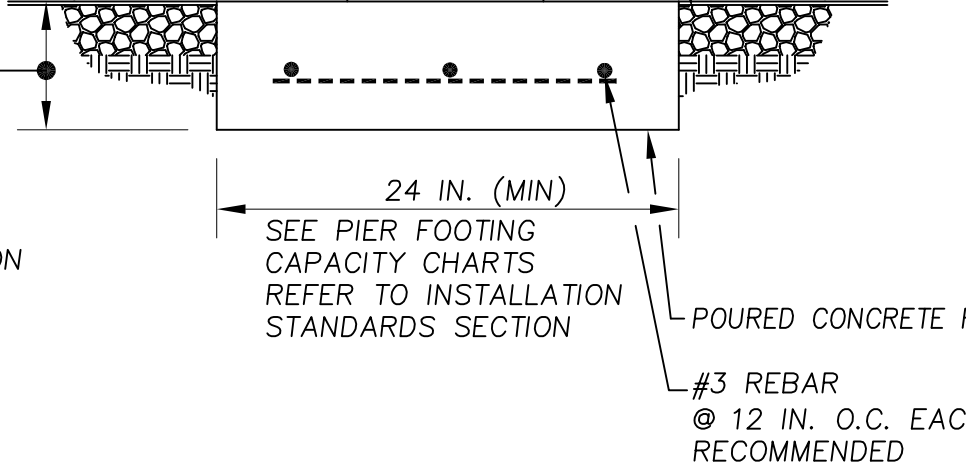
1/2"x8"x16" PAINTED CORROSION-
RESISTANT STL CAP, OR
2"x8"x16" HARDWOOD CAPS, OR
4"x8"x16" MIN. SOLID CONCRETE CAP

2 IN. GRAVEL (MIN)
(SEE 4781-6-02.2(D)(3)(d))

6 MIL VAPOR
RETARDER

POURED CONCRETE FOOTING

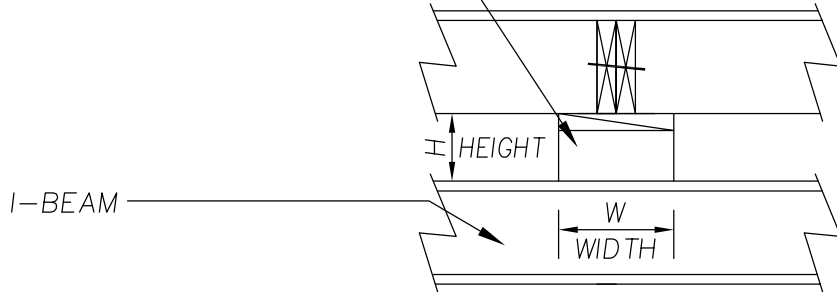
#3 REBAR
@ 12 IN. O.C. EACHWAY
RECOMMENDED



OHIO MANUFACTURED HOMES COMMISSION

JOB #:	2006-0616	SCALE:	NTS
DRAWN:	G.A.I./S.E.T.	DWG. NO.:	TB D-3
CHECKED:	D.E.Z.	SHEET:	
TITLE:	TRANSVERSE I-BEAM - SUPPORT OPTIONS		11 OF 11
DATE:	9/04/07		

WOOD OR SOLID
MASONRY BLOCKING



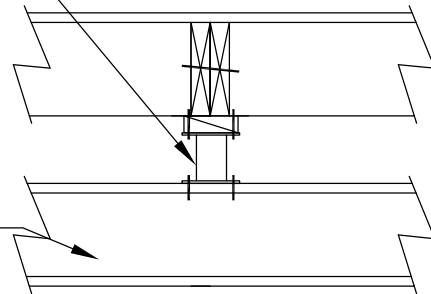
'W' (WIDTH) MUST BE
GREATER THAN 'H' (HEIGHT)

OPTION 1: SOLID WOOD

MIN. 3" x 1/4" WALL
TUBE STEEL
(ROUND OR SQUARE)
ADJUSTABLE

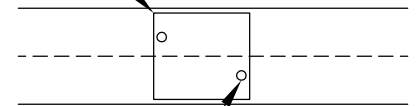
MATERIAL
A53 GRADE B ROUND
A500 GRADE B SQUARE

I-BEAM



1/4" PLATE

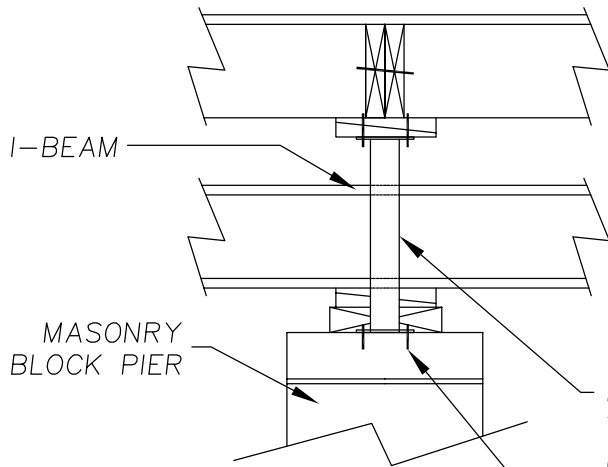
ATTACH TOP
& BOTTOM
WELDED OR
BOLTED TO
I-BEAM



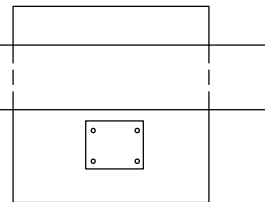
5/16" MIN. ~
BOLTS OR
LAGS x 2-1/2"

OPTION 2: TUBE STEEL

MATELINE OPENINGS LARGER THAN 12'



TRANSVERSE
BEAM



MIN. 3" x 1/4" WALL
TUBE STEEL (ADJUSTABLE)
(ROUND OR SQUARE)

3/16" x 2" MASONRY SCREWS

OPTION 3: ADJACENT