- 1. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2000 INTERNATIONAL BUILDING CODE.
- 2. THE SUBSURFACE INFORMATION AND FOUNDATION DESIGN ARE BASED ON THE REPORT PREPARED BY RONE ENGINEERS, DATED FEBRUARY 5, 2002, REPORT NO. 02-5967, AND ADDENDA DATED AUGUST 16, 2002 AND OCTOBER 17, 2002. METHODS OF CONSTRUCTION FOR FOUNDATION AND OTHER PORTIONS OF THE PROJECT SHALL COMPLY WITH THIS REPORT.

PIER DESIGN CRITERIA: DESIGNATED BEARING STRATA: UNWEATHERED LIMESTONE ALLOWABLE END BEARING: 40.0 KSF

ALLOWABLE SKIN FRICTION:

6.0 KSF (COMPRESSION) 2.3 KSF (TENSION)

3. THE STRUCTURE IS DESIGNED FOR WIND LOADS IN ACCORDANCE WITH THE 2000 INTERNATIONAL BUILDING CODE, USING THE FOLLOWING CRITERIA:

> BASIC WIND SPEED 90 MPH (3-SECOND GUST) EXPOSURE B IMPORTANCE FACTOR 1.00

- 4. REVIEW OF SUBMITTAL INFORMATION SHALL BE FOR GENERAL REQUIREMENTS OF PROJECT, AND SHALL NOT INCLUDE CHECKING OF DETAILED DIMENSIONS OR DETAILED QUANTITIES, NOR REVIEW OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE WORK SITE, OR MEANS AND METHODS OF DOING
- 5. DESIGN SUPERIMPOSED LOADS:

FLOORS

20 PSF LIVE 100 PSF LIVE

B. CONCRETE

- 1. CONCRETE PROPORTIONING, MIXING, TRANSPORTING, PLACING, AND CURING SHALL BE PER ACI 301.
- 2. U.N.O. CONCRETE SURFACES SHALL CONFORM TO TOLERANCE LIMITS PER ACI 117.
- 3. U.N.O. CONCRETE IN THE FOLLOWING AREAS SHALL HAVE SAND AND GRAVEL OR CRUSHED STONE AGGREGATES PER ASTM C33, TYPE I PORTLAND CEMENT, AND THE FOLLOWING DESIGNATED COMPRESSIVE STRENGTH IN 28 DAYS:

4000 PSI (SEE ALSO NOTE B4) 4000 PSI GRADE BEAMS

SLABS-ON-GRADE 4000 PSI (SEE ALSO NOTE B4) ALL OTHER, U.N.O. 4000 PSI

- 4. CONCRETE FOR PIERS SHALL BE PROPORTIONED FOR A SLUMP RANGE OF FIVE TO SEVEN INCHES. CONCRETE FOR SLABS-ON-GRADE SHALL BE PROPORTIONED FOR A SLUMP RANGE OF THREE TO FOUR INCHES, AND A MAXIMUM WATER-TO-CEMENT RATIO OF 0.40.
- 5. CONCRETE PROTECTION FOR REINFORCEMENT, INCLUDING PRIMARY, STIRRUPS, TIES, ETC., SHALL BE AS NOTED BELOW, OR PER ACI 318 FOR CONDITIONS NOT NOTED:

CONCRETE PLACED AGAINST SOIL GRADE BEAMS (FORMED)

3 INCHES 3 INCHES 3 INCHES (BOTTOM) 2 INCHES (SIDE)

2 INCHES (TOP)

SLABS ON GRADE

2 INCHES (TOP)

- 6. GRADE BEAM SIDES SHALL BE FORMED. NO EARTH FORMS ARE PERMITTED.
- 7. JOINTS NOT SHOWN SHALL BE MADE AND LOCATED TO LEAST IMPAIR STRENGTH AND APPEARANCE OF STRUCTURE, AS APPROVED. NO HORIZONTAL JOINTS SHALL BE PERMITTED IN CONCRETE EXCEPT WHERE THEY NORMALLY OCCUR OR WHERE NOTED. VERTICAL JOINTS SHALL OCCUR NEAR CENTERS OF SPANS AT LOCATIONS APPROVED.
- 8. HORIZONTAL JOINTS BEWTEEN ANY TWO CONCRETE PLACEMENTS SHALL BE PREPARED BY ROUGHENING THE SURFACE OF THE CONCRETE IN AN APPROVED MANNER SO THAT THE AGGREGATE SHALL BE EXPOSED UNIFORMLY LEAVING NO LAITANCE, LOOSENED PARTICLES OR DAMAGED CONCRETE.
- 9. CONFLICTS BETWEEN SCHEDULED AND PLAN OR SECTION DIMENSIONS FOR CAST-IN-PLACE CONCRETE MEMBERS SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER.
- 10. FOR SLABS ON GRADE, THE MAXIMUM SPACING FOR CONTRACTION AND/OR ISOLATION JOINTS SHALL BE 8 FEET. THE MAXIMUM DISTANCE BETWEEN CONSTRUCTION AND/OR ISOLATION JOINTS SHALL BE 80'-0". U.N.O. ISOLATION JOINTS SHALL BE PROVIDED AT COLUMNS. PROVIDE CONCRETE SLAB ON ENGINEERED FILL AS SHOWN ON PLAN. PROVIDE ADEQUATE MEANS OF CHAIRING AND ACCESSORY STEEL AS REQUIRED TO SECURE POSITION.
- 11. TREAT EXPOSED EDGES OF CONCRETE AS INDICATED ON ARCHITECTURAL DRAWINGS.
- 12. PROVIDE VOIDS UNDER GRADE BEAMS AND PIER CAPS BY AN APPROVED METHOD.
- 13. ALL CONCRETE REINFORCEMENT SHALL BE OF DOMESTIC MANUFACTURE AND SHALL CONFORM TO ASTM A615, GRADE 60, U.N.O. HEADED STUDS SHALL COMPLY WITH NOTE C5 BELOW.
- 14. DEFORMED BAR ANCHORS (NOTED DBA ON DOCUMENTS) SHALL BE NELSON D2L OR EQUAL AS APPROVED BY THE ENGINEER, AND SHALL CONFORM TO ASTM A108. DEFORMED BAR ANCHORS SHALL BE AUTOMATICALLY END WELDED PER THE MANUFACTURER'S RECOMMENDATIONS. WHEN APPROVED BY THE ENGINEER PRIOR TO FABRICATION, DEFORMED REINFORCEMENT CONFORMING TO ASTM A706, GRADE 60 MAY BE SUBSTITUTED FOR DEFORMED BAR ANCHORS, PROVIDED THE WELDING REQUIREMENTS OF ANSI/AWS D1.4 ARE SATISFIED.
- 15. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- 16. DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL CONFORM TO ACI 315.
- 17. WHEN PERMITTED, WELDING OF REINFORCEMENT SHALL BE PER ANSI/AWS D1.4.
- 18. REINFORCING BARS MAY BE SPLICED ONLY AS SHOWN ON THE DRAWINGS EXCEPT THAT REINFORCING DESIGNATED AS "CONTINUOUS" MAY BE LAP SPLICED 40 BAR DIAMETERS. LAP SPLICES OF CONTINUOUS REINFORCEMENT IN BEAMS AND TWO-WAY SLABS SHALL BE MADE OVER THE SUPPORT FOR BOTTOM BARS AND AT MID-SPAN FOR TOP BARS.
- 19. ALL SLEEVES, INSERTS, ANCHORS, AND EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK SHALL BE VERIFIED BY CONTRACTOR AND SHALL BE IN PLACE PRIOR TO CONCRETING.

C. STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:

ASTM A992, GRADE 50, W SHAPES ASTM A572, GRADE 50, S, M, HP, AND C SHAPES, U.N.O. ASTM A36, PLATES, ANGLES, AND MISCELLANEOUS FRAMING, U.N.O.

2. ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A501 OR A53.

- ALL STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500, GRADE B
- 4. ALL CONNECTION BOLTS FOR STRUCTURAL STEEL MEMBERS SHALL CONFORM TO ASTM A325, U.N.O.
- 5. HEADED STUDS SHALL COMPLY WITH ASTM A108, AND SHALL BE AUTOMATICALLY END WELDED PER THE MANUFACTURER'S RECOMMENDATIONS.
- WELDING OF STRUCTURAL STEEL SHALL BE PER AWS D1.1, LATEST EDITION. E70T4 AND E70T7 ELECTRODES SHALL NOT BE USED FOR ANY WELDING CONDITION.
- 7. FABRICATION OF STRUCTURAL STEEL SHALL BE PER AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AND AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 8. U.N.O. BEAM TO BEAM AND BEAM TO COLUMN SHEAR CONNECTIONS SHALL BE DESIGNED FOR THE SHEAR CAPACITY OF THE CONNECTED BEAM, OR THE REACTION INDICATED ON THE PLAN, WHICHEVER IS GREATER. THE SHEAR CAPACITY SHALL BE DEFINED AS EQUAL TO 1/2 OF THE TABULATED ALLOWABLE UNIFORM LOADS GIVEN IN PART 2, TABLE "ALLOWABLE LOADS ON BEAMS" OF THE AISC MANUAL
- 9. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED IS PROHIBITED WITHOUT SPECIFIC PRIOR APPROVAL.
- 10. ALL STEEL BEAMS SHALL BE ERECTED WITH CAMBER AS INDICATED ON DRAWINGS, AND ALL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.
- 11. STRUCTURAL STEEL SHALL BE PRIMED IN THE FIELD PER DIVISION 9, SECTION PAINTIN

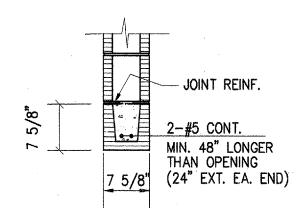
- 1. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C90 GRADE 'N', TYPE I
- 2. 28-DAY GROUT STRENGTH SHALL BE 2500 PSI MINIMUM.
- 3. MORTAR SHALL BE TYPE 'S' OR 'M'.

E. CONCRETE MASONRY UNITS

- 4. PROVIDE STANDARD JOINT REINFORCING AT 16" O.C.
- 5. LAP ALL REINFORCING BARS 60 BAR DIAMETERS.
- 6. DOWELS INTO GRADE BEAMS OR FOOTINGS SHALL MATCH SIZE AND SPACING OF VERTICAL REINFORCING.
- 7. GROUT MINIMUM OF TWO CELLS WITH SCHEDULED VERTICAL REINFORCING IN EACH CELL AT EACH SIDE OF ALL OPENINGS.
- 8. ALL CMU SHALL BE LAID IN RUNNING BOND.

F. CAD FILES

1. THE CAD FILES ON WHICH THESE DRAWINGS ARE BASED WILL NOT BE RELEASED TO THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS WITHOUT A WRITTEN AGREEMENT AND COMPENSATION. SAID AGREEMENT WILL NOT BE EXECUTED WITHOUT THE OWNER'S AND ARCHITECT'S PERMISSIONS. SAID AGREEMENT WILL BE STRICTLY BETWEEN TTE AND THE CONTRACTOR AND/OR HIS SUBCONTRACTORS, AND WILL NOT INVOLVE EITHER THE OWNER OR THE ARCHITECT.

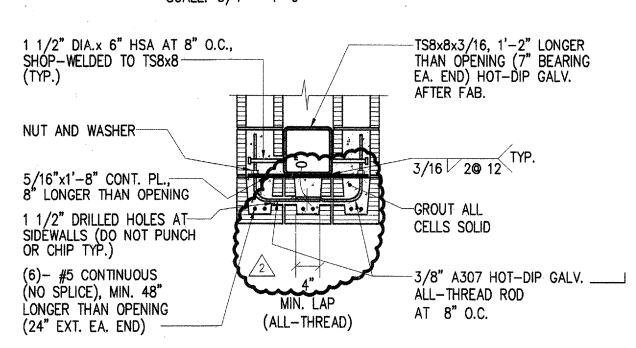


LINTEL NOTES:

LINTELS TO BE FILLED WITH GROUT.

2. CMU LINTELS SHALL BEAR A MINIMUM OF 8" AT EACH END, UNLESS NOTED OTHERWISE.

CMU WALL LINTEL SCALE: 3/4" = 1'-0"



LINTEL NOTES:

I. LINTELS TO BE FILLED WITH GROUT. 2. CMU LINTELS SHALL BEAR A MINIMUM OF 8" AT EACH END, UNLESS NOTED OTHERWISE.

BEARING PLATE BP1

<u>PLAN</u>

CUT CMU TIGHT TO

1/4" WEB CLOUSURE -

4 FULLY-GROUTED VERTICAL

CELLS TO FDN. (REINF. PER

01/THIS DWG.) AT EACH

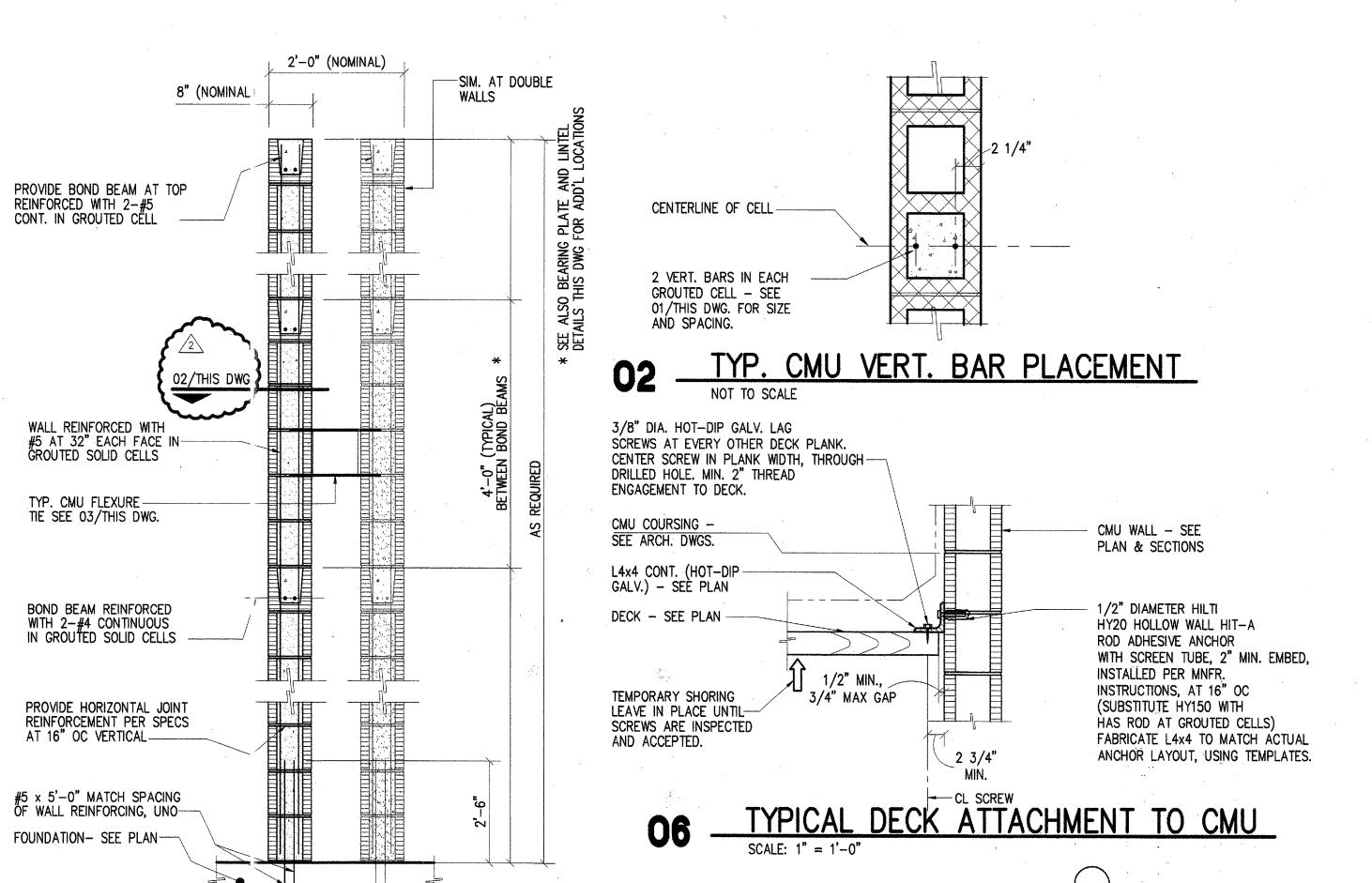
PLATES EACH SIDE

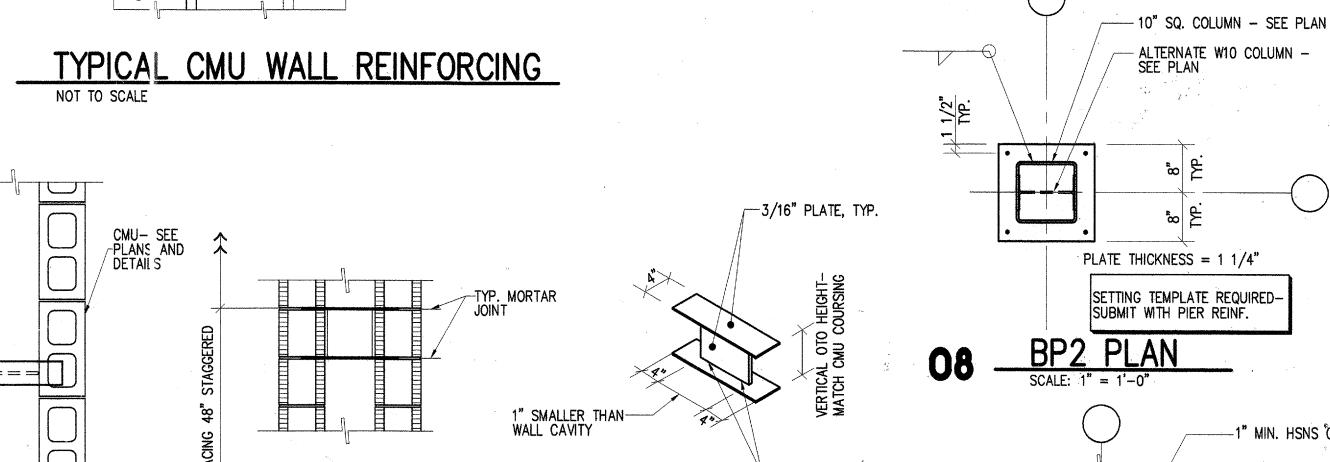
OF WEB (TYP.)

BEARING PLATE

STEEL AND SEAL -

PER ARCH'L DOCUMENTS (TYP.)





HOT-DIP GALVANIZED

ISOMETRIC

AFTER FABRICATION

SECTION

LINTEL ABOVE,

SEE PLAN

MIN. 48" LENGTH

(SEE 04/THIS DWG.)

-STEEL FRAMING VARIES-

1/2"x20" (EW)x13" (NS)

BOND BEAM CONTINUOUS AT

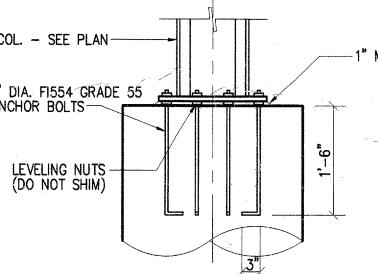
THIS COURSE- SEE 01/THIS DWG.

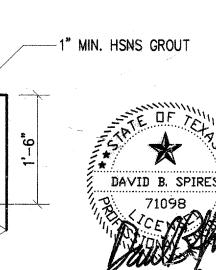
BEARING PLATE W/(4)-

3/4"x7" HSA IN FULLY GROUTED BEDDING

-1" MIN. HSNS "GROUT LEVELING NUTS (DO NOT SHIM) 3/16 2" GRADE 55 ANCHOR BOLTS-

<u>TYP. CMU FLEXURE TIE DETAIL</u> TYP. 1" DIA. FI554 GRADE 55 ANCHOR BOLTS-PLATE THICKNESS = 1 1/4" SETTING TEMPLATE REQUIRED SUBMIT WITH PIER REINF.





GENERAL NOTES, CMU DETAILS STO

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