

DESIGN LOADS AND GENERAL NOTES

DESIGN LOADS		2003 IBC
1. BUILDING CODE		2003 IBC
2. ROOF DEAD LOADS		16 PSF (MAX) 6 PSF (MIN)
3. ROOF LIVE LOADS		20 PSF (MIN) (OR SNOW LOAD)
4. SNOW		
A. GROUND SNOW LOAD, P _g		20 PSF
5. WIND		
A. BASIC WIND SPEED (3-SEC GUST)		90 MPH
B. COMPONENT WALL DESIGN PRESSURE		
1. INTERIOR ZONE		15.1 PSF
2. END ZONE		17.9 PSF
C. WIDTH OF END ZONE, e		11.6 FT
6. SEISMIC		
A. MAPPED SPECTRAL RESPONSE ACCELERATION, S _s		33.9%
B. MAPPED SPECTRAL RESPONSE ACCELERATION, S ₁		11.8%

- GENERAL**
- STEEL FRAMING IS NON-Self SUPPORTING AND REQUIRES INTERACTION WITH OTHER ELEMENTS NOT CLASSIFIED AS STRUCTURAL STEEL TO PROVIDE THE REQUIRED STABILITY AND RESISTANCE TO LATERAL FORCES. THE STEEL FRAMING AND ALL CONCRETE AND CMU WALLS SHALL BE TEMPORARILY BRACED UNTIL ALL STEEL BRACING, FLOOR AND ROOF DECKS, AND CONCRETE AND CMU WALLS HAVE BEEN INSTALLED AND ALL CONNECTIONS BETWEEN THESE ELEMENTS HAVE BEEN MADE. FOUNDATION WALLS SHALL HAVE TEMPORARY BRACING BEFORE BACKFILL IS PLACED AGAINST THEM. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED.
 - THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL AND PLUMBING WORK SHALL BE COORDINATED WITH THE APPROPRIATE CONTRACTOR(S). PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER. PENETRATIONS SHALL BE THROUGH FOUNDATION STEMWALL OR 6" CLEAR BELOW FOOTING. STEP FOOTING AS REQUIRED PER DETAILS.
 - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE TEMPORARY SUPPORT AND STABILITY OF EXISTING STRUCTURE DURING ALL PHASES OF CONSTRUCTION.
 - EXISTING PORTION OF PLANS ARE FROM LIMITED FIELD OBSERVATIONS AND ORIGINAL DESIGN DRAWINGS. ALL EXISTING MATERIAL, DIMENSIONS, ELEVATIONS, AND GENERAL CONDITIONS OF THE BUILDING SHALL BE VERIFIED BEFORE PURCHASE OF MATERIAL AND CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER OF RECORD OF DISCREPANCIES BETWEEN PLANS AND FIELD CONDITIONS IMMEDIATELY BEFORE OR CONCURRENT WITH THE EXCAVATION FOR THE FOUNDATIONS ADJACENT TO THE EXISTING BUILDING, PROVIDE ADEQUATE SUPPORT TO THE SUBBASE AND SUBGRADE OF THE EXISTING SLAB AND FOUNDATIONS TO PREVENT UNDERMINING.
 - CONTRACTOR IS RESPONSIBLE FOR STRUCTURAL INTEGRITY AND STABILITY OF EXISTING STRUCTURE DURING DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROJECT STATE TO DESIGN TEMPORARY SHORING.
 - VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION OF STRUCTURAL ITEMS. IF ANY DISCREPANCIES ARE FOUND BETWEEN WHAT IS SHOWN ON THE PLANS AND WHAT EXISTS IN THE FIELD, CONTACT THE WALL-REMODEL MANAGER TO DETERMINE WHAT SHOULD BE DONE TO MATCH EXISTING CONDITIONS AS REQUIRED. BEGINNING OF STEEL FABRICATION MEANS ACCEPTANCE OF EXISTING CONDITIONS.

- REINFORCED CONCRETE**
- MINIMUM COMPRESSIVE STRENGTH (F_c) AT THE END OF 28 DAYS SHALL BE 3,000 PSI, EXCEPT EXTERIOR CONCRETE WHICH SHALL BE 3,500 PSI. FOR ALL OTHER CONCRETE PROPERTIES, REF SPECIFICATIONS SECTION 03300.
 - REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A-615, LATEST REVISION. BARS SHALL BE GRADE 60. REINFORCING BARS SHALL BE SPLICED A MINIMUM OF 48 BAR DIAMETERS OR 24 INCHES WHICHEVER IS GREATER, UNO.
 - REF ACI 318 LATEST EDITION FOR CONCRETE COVER, ACI 315 LATEST EDITION FOR DETAILING PRACTICES AND FABRICATION, AND ACI 301 LATEST EDITION FOR STANDARD PRACTICE FOR MIXING AND PLACING REINFORCED CONCRETE.

- MASONRY**
- HOLLOW CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C90, GRADE N, TYPE II. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F_m) SHALL BE 1,500 PSI.
 - MORTAR SHALL MEET THE PROPERTY SPECIFICATIONS OF ASTM C 270 TYPE "S" MORTAR. MASONRY CEMENT SHALL NOT BE USED FOR MORTAR.
 - GROUT SHALL MEET ASTM SPECIFICATION C476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI.
 - GROUT SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4" DIAMETER HEAD.
 - CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.
 - CONCRETE MASONRY BELOW FINISHED FLOOR SHALL BE NORMAL WEIGHT UNITS AND SHALL HAVE ALL CELLS FULLY GROUTED. CONCRETE MASONRY ABOVE FINISHED FLOOR SHALL BE LIGHT WEIGHT OR NORMAL WEIGHT AND IS TO BE GROUTED ONLY AT REINFORCED CELLS AND BOND BEAMS, UNO.
 - WALLS SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED BY THE ROOF.
 - MASONRY CONSTRUCTION REQUIRES SPECIAL INSPECTION. REF SPECIFICATIONS SECTION 04220 FOR REQUIREMENTS.
 - CONSTRUCTION MATERIALS AND METHODS SHALL MEET THE REQUIREMENTS OF THE GOVERNING BUILDING CODE. STRUCTURAL DESIGN IS BASED ON F_m = 1,500 PSI INSPECTED MASONRY.
 - REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A-615, LATEST REVISION. BARS SHALL BE GRADE 60.

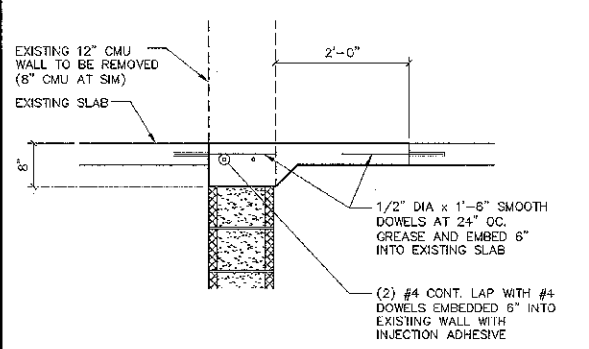
- STRUCTURAL STEEL**
- STRUCTURAL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRENGTH AND SPECIFICATIONS:

	YIELD	ASTM SPEC
A. WIDE FLANGE STEEL SHAPES:	50 KSI	A992
B. STRUCTURAL STEEL TUBING:	48 KSI	A500 GRADE B
C. STRUCTURAL STEEL PIPE:	36 KSI	A53 TYPE E, GRADE B
D. BARS, PLATES, CHANNELS, AND ANCHOR BOLTS:	36 KSI	A36
E. ANCHOR RODS:	36 KSI	A36
F. HEADED STUD ANCHORS:	50 KSI	A106 (GRADE DESIGNATIONS 1010 TO 1020 INCLUSIVE)
G. ANGLE STEEL SHAPES:	36 KSI	A36
 - WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE, LATEST REVISION. ELECTRODES SHALL BE 70KSI LO HYDROGEN.
 - THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF CONNECTIONS THAT ARE NOT DESIGNED OR FULLY DETAILED ON THE CONTRACT DOCUMENTS.
 - PROVIDE 1.5X3/4" (LIV) FIELD-FABRICATED FRAME BETWEEN JOISTS AT OPENINGS IN ROOF GREATER THAN 10'X10', UNO (INCLUDING ROOF DRAIN OPENINGS).

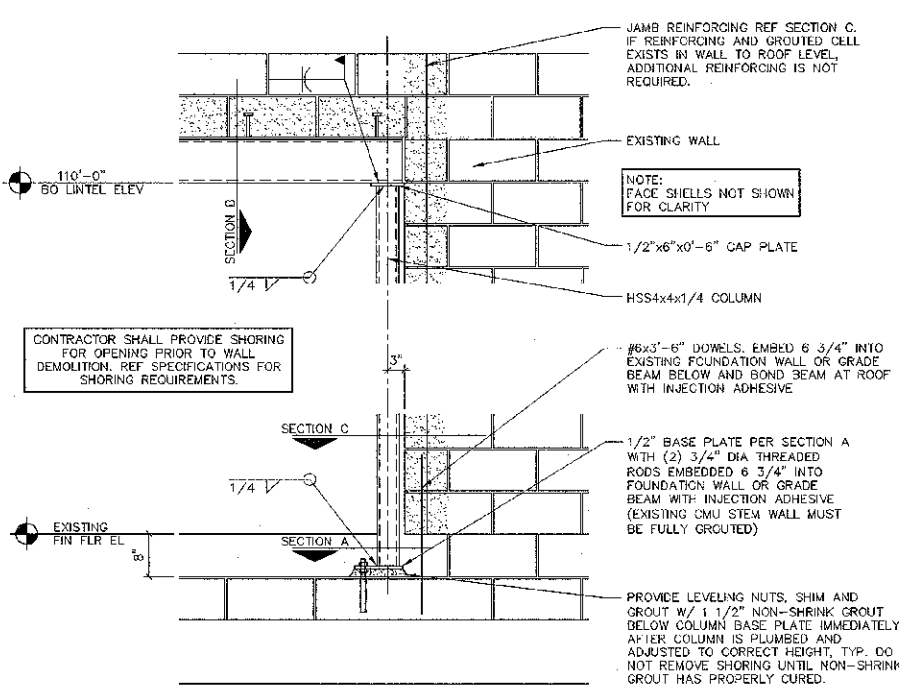
REQUIRED SPECIAL INSPECTIONS

IN ADDITION TO THE REGULAR INSPECTIONS REQUIRED BY SECTION 109, THE FOLLOWING ITEMS WILL ALSO REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1704 OF THE 2003 IBC.

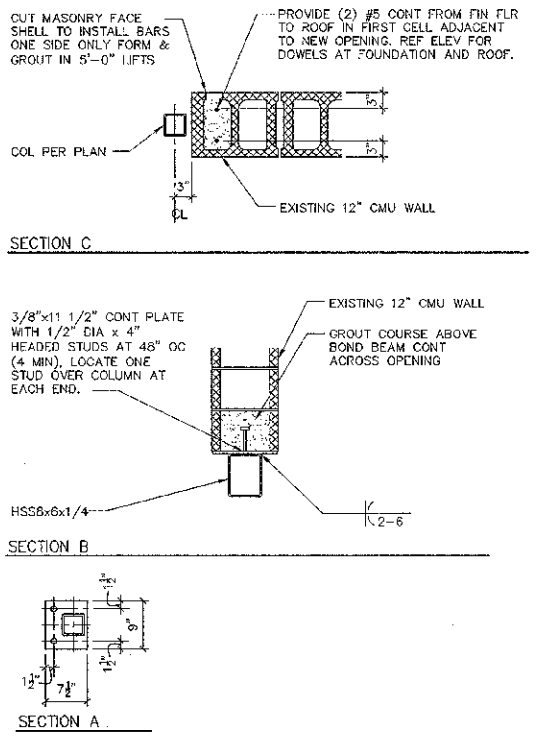
ITEM	SECTION
SOILS	1704.7
CONCRETE CONSTRUCTION	1704.4
STEEL CONSTRUCTION	1704.3
MASONRY CONSTRUCTION	1704.5



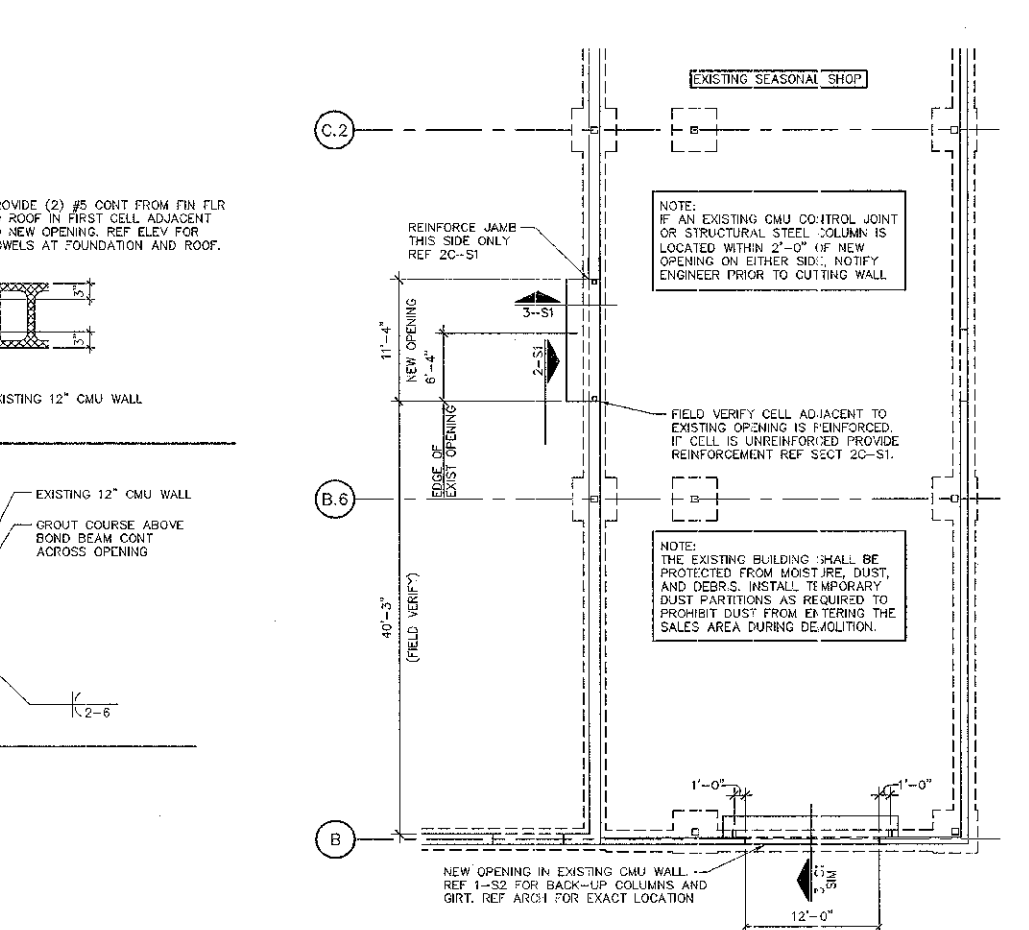
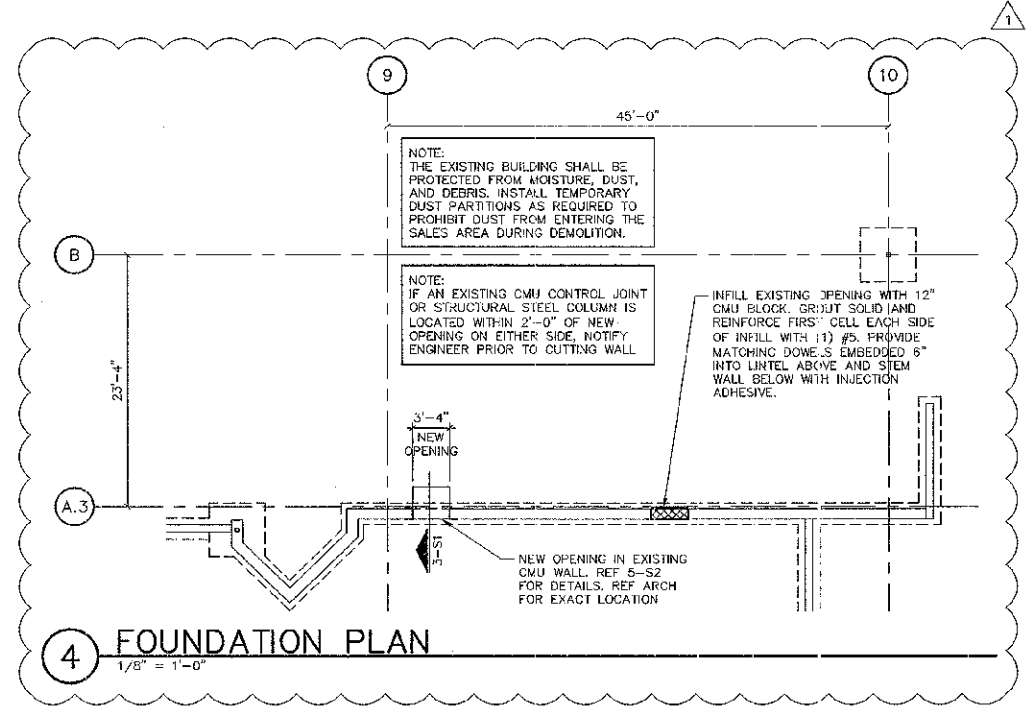
3 SLAB AT EXTERIOR OPENING
3/4" = 1'-0"



2 ELEVATION AT NEW OPENING IN EXISTING INTERIOR WALL
3/4" = 1'-0"



1 FOUNDATION PLAN
1/8" = 1'-0"



1 FOUNDATION PLAN
1/8" = 1'-0"

wallace

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STIPULATION FOR REUSE
THIS DRAWING WAS PREPARED FOR THE PROJECT AND IS NOT TO BE REUSED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF WALLACE ENGINEERING. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

WAL*MART
GENERAL REMODEL
MOUNT AIRY, NORTH CAROLINA
STORE NO. 1039
JOB NUMBER: 2006-0825

ISSUE BLOCK

NO.	DATE	DESCRIPTION
1	03/02/07	PLAN REV #1

CHECKED BY: TBJ
DRAWN BY: MCS
DOCUMENT DATE: 12-14-06
PROTO: 188
PROTO CYCLE: 01-20-06

FOUNDATION PLAN
GENERAL NOTES AND DETAILS

SHEET: S1

