SPECIAL INSPECTION (CONT.)

DESIGN CRITERIA		
CODE: MBC 2012 THE STRUCTURE IS DESIGNED FOR THE FOLLOWING LIVE LOADS, IN ADDITION TO THE LATERAL LOADS, SUPER-IMPOSED DEAD LOADS, & SELF WEIGHT OF THE STRUCTURE. WHERE APPLICABLE LIVE LOADS ARE REDUCED IN ACCORDANCE WITH THE PROVISIONS OF THE BUILDING CODE. A. AMERICAN CONCRETE INSTITUTE BUILDING CODE (ACI-318). B. MANUAL OF STEEL CONSTRUCTION BY AMERICAN INSTITUTE OF STEEL CONSTRUCTION (LATEST EDITION). C. LATEST MASONRY STANDARDS JOINT COMMITTEE (MSJC) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402/ACI 530/ASCE 5) AND SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602/ACI 530.1/ASCE 6)		
		CODE REFERENCE
BUILDING OCCUPANCY CATEGORY	II	MBC-Table 1604.5 ASCE Table 1.5-1

FLOOR LIVE LOADS		
		CODE REFERENCE
MEZZANINE	125 PSF (LIGHT STORAGE)	ASCE Table 4-1

SNOW LOADS/ROOF LIVE LOADS		
SNOW CRITERIA		CODE REFERENCE
	Pg = 25 PSF	MBC FIG. 1608.2 ASCE Fig. 7-1
FLAT ROOF SNOW LOAD	Pf = 20 PSF (MINIMUM)	ASCE Sec. 7.3
EXPOSURE FACTOR	Ce = 1.0	ASCE Table 7-2
IMPORTANCE FACTOR	I = 1.0	ASCE Table 1.5-2
THERMAL FACTOR	Ct = 1.1	ASCE Table 7-3
ROOF LIVE LOADS	Lr = 20 PSF	ASCE Table 4-1
NOTE: SNOW LOADS ADJACENT VERTICAL PROJECTIONS, ON LOWER ROOFS, ADJACENT TO HIGH ROOFS, OR SLOPED ROOFS ARE INCREASED FOR THE EFFECT OR DRIFTING		

WIND LOADS		
WIND CRITERIA		CODE REFERENCE
BASIC WIND SPEED (3 SEC. GUST)	V = 115 MPH	ASCE FIG. 26.5-1A, 26.5-1B, 26.5-1C
RISK FACTOR	II	ASCE Table 1.5-1
EXPOSURE CATEGORY	C	ASCE Sec. 26.7.3
INTERNAL PRESSURE COEFFICIENT	± 0.55 (PARTIALLY ENCLOSED)	ASCE TABLE 26.11-1
MWFRS ANALYSIS PROCEDURE	DIRECTIONAL PROCEDURE	ASCE CHAP. 27
COMPONENTS AND CLADDING	± 33 PSF MINIMUM AND PER CODE REQUIREMENTS BASED ON ABOVE INFORMATION	

SEISMIC LOADS		
SEISMIC CRITERIA		CODE REFERENCE
SEISMIC IMPORTANCE FACTOR	I = 1.0	ASCE Table 1.5-2
-0.2 SEC MAPPED SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING) Ss	Ss = .091	ASCE Sec. 11.4
-1.0 SEC MAPPED SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING) S1	S1 = .046	ASCE Sec. 11.4
SOIL SITE CLASS	D	ASCE Sec. 11.4.2
SEISMIC DESIGN CATEGORY	B	ASCE Sec. 11.6
SEISMIC FORCE RESISTING SYSTEM	INTERMEDIATE REINFORED MASONRY SHEAR WALLS	ASCE Table 12.2-1
RESPONSE MODIFICATION FACTOR	R = 3.5	ASCE Table 12.2-1
DEFLECTION AMPLIFICATION FACTOR	Cd = 2.25	ASCE Table 12.2-1
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE	ASCE Sec. 12.8

SPECIAL INSPECTION (CONT.)

TABLE 1705.2.2
REQUIRED VERIFICATION AND
INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	NOT APPLICABLE	REFERENCED STANDARD
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X	-	APPLICABLE ASTM MATERIAL STANDARDS
b. MANUFACTURER'S CERTIFIED TEST REPORTS.	-	X	-	-
2. INSPECTION OF WELDING:				
a. COLD-FORMED STEEL DECK:				
1) FLOOR AND ROOF DECK WELDS.	-	X	-	AWS D1.3
b. REINFORCING STEEL:				
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	-	X	-	AWS D1.4 ACI 318: SECTION 3.5.2
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	X	-	-	
3) SHEAR REINFORCEMENT.	X	-	-	
4) OTHER REINFORCING STEEL.	-	X	-	

TABLE 1705.3
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	NOT APPLICABLE	REFERENCED STANDARD(a)	MBC REFERENCED
1. INSPECTION OF REINFORCING STEEL INCLUDING PRESTRESSING TENDONS AND PLACEMENT.	-	X	-	ACI 318: 3.5, 7.1-7.7	1910.4
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2b	-	-	-	AWS D1.4 ACI 318: 3.5.2	-
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED	X	-	-	ACI 318 8.1.3,21.1.8	1908.5 1909.1
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. (b)	-	X	-	ACI 318 3.8.6,8.1.3,21.1.8	1909.1
5. VERIFYING USE OF REQUIRED DESIGN MIX.	-	X	-	ACI 318: CH.4,5.2-5.4	1904.2, 1910.2,1910.3
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	-	ASTM C 172 ASTM C 31 ACI 318: 5.6,5.8	1910.10
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	-	ACI 318: 5.9,5.10	1910.6, 1910.7,1910.8
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	-	ACI 318: 5.11-5.13	1910.9
9. INSPECTION OF PRESTRESSED CONCRETE					
a. APPLICATION OF PRESTRESSING FORCES	X	-	-	ACI 318: 18.20 ACI 318: 18.18.4	-
b. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC FORCE RESISTING SYSTEM.	X	-	-		
10. ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	-	ACI 318: CH.16	-
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POSTTENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS BEAMS AND STRUCTURAL SLABS.	-	X	-	ACI 318: 6.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	-	ACI 318: 6.1.1	-

FOR SI: 1 INCH = 25.4 MM

(a) WHERE APPLICABLE, SEE ALSO SECTION 1705.11, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.

(b) SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 355.2 OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

TABLE 1705.6
REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	NOT APPLICABLE
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X	
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X	

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CHRISTOPHER ENRIGHT ARCHITECTS
A PROFESSIONAL CORPORATION
628 E. Parent Avenue
Suite 106
Royal Oak, MI 48067
248.258.6485 (O)
248.330.9395 (C)
cenright@enrightarchitects.com

Consultant

Shymanski & Associates, L.L.C.
STRUCTURAL ENGINEERS
33426 Five Mile Rd
Livonia, Michigan 48154
ph. 734.855.4810 fx. 734.855.4809
email@sastructuralengineers.com

Project

Belle Tire
Northville Twp. MI
Meijer Outlot #54

39931 8 Mile Road
Northville Township, MI 48167

Sheet

General Notes

Issued for

Owner Review: February 12, 2016
Site Plan / Special Land Use: February 26, 2016
Final Site Plan: May 25, 2016
REVISED Final Site Plan: July 22, 2016
BIDDING / PERMIT: February 16, 2017

Project Number

15-540

Sheet Number

S200A