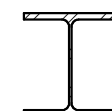
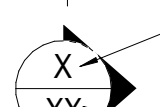
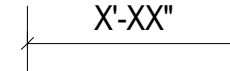
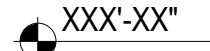


SYMBOLS LEGEND			
SYMBOL	DESCRIPTION		
	GRID LINES		NEW FRAMING
	SECTION OR DETAIL CUT		DIMENSIONS TO NEW STRUCTURE
	SHEET NUMBER		LINES
	ELEVATION CUT		EXISTING LINES (HALFTONE)
	SHEET NUMBER		CURRENT REVISION CLOUD
	ELEVATION CALLOUT		STEP
	DRAWING REVISION NUMBER		SLOPE
			KEY NOTE
			SUBGRADE

NOTES:

1. ITEMS NOT DESIGNED BY M/M ARE SHOWN HALFTONED

A. ITEMS INCLUDE:

- a. EXISTING CONSTRUCTION
- b. PERFORMANCE SPECIFIED AND DEFERRED SUBMITTAL ITEMS (STAIRS, RAILINGS, ETC)

@	At	EJ	Expansion Joint	HLL	Horizontal life line	PL	Plate (Steel)
ACI	American Concrete Institute	EL	Elevation	IN	Inch		
ADDNL	Additional	EMBED	Embedded			QTY	Quantity
APPROX	Approximate	EOR	Engineer-of-Record	JST	Joist	R	Radius
		EQ	Equal			RE: or REF	Refer to (Reference)
		EQ SP	Equally Spaced	k	Kip		
		ES	Each Side				
CIP	Cast-In-Place	EW	Each Way	LB(S)	Pound(s)		
CJP	Complete Joint Penetration	EXP	Expansion Anchor	LL	Live Load	SIM	Similar
CL	Centerline	ANCH		LLH	Long Leg Horizontal	SPECS	Specifications
CLR	Clear			LLV	Long Leg Vertical	SS	Stainless Steel
CMU	Concrete Masonry Unit	FF	Finished Floor	LOC(S)	Location(s) or Locate	STD	Standard
CONC	Concrete	FLR	Floor	Lr	Roof Live Load	STL	Steel
CONT	Continue or Continuous	FND	Foundation			STR	Structural
		FO	Face of	MAX	Maximum		
DIA or Ø	Diameter	FP	Full Penetration or Fire Proofing	MECH	Mechanical	T&B	Top and Bottom
DIM	Dimension	FS	Far Side	MEP	Mech/Elect/Plumb	T/ or T.O.	Top of
DMG	Damage	FT	Foot or Feet	MIN	Minimum	TOC	Top of Concrete
DT	Precast Double Tee	FTG	Footing	MISC	Miscellaneous	TYP	Typical
DTL(S)	Detail(s)			MNFR	Manufacturer		
DWG(S)	Drawing(s)						
		GA	Gage or Gauge	N	North	ULT	Ultimate
(E) or EXIST	Existing	GALV	Galvanized			UNO	Unless Noted Otherwise
EA	Each			OC	On Center		
EC	Epoxy Coated	HAS or HDAS	Headed Anchor Stud	OH	Opposite Hand	VIF	Verify in Field
EE	Each End	HDAR	Headed Anchor Rod	OPP	Opposite	VLL	Vertical Life Line
EF	Each Face	HDG	Hot Dipped Galvanized				
		HVAC	Heating-Ventilating and A/C	PEN	Penetration	W/	With
						W/O	Without
						W/F	Wide Flange

GENERAL NOTES

1) GENERAL:

- 1A) ENGINEER: REFERENCES ON THE STRUCTURAL DRAWINGS TO 'ENGINEER' MEAN THE STRUCTURAL ENGINEER OF RECORD. OTHER ENTITIES ARE SPECIFICALLY NOTED AS 'CONTRACTOR'S ENGINEER', 'MECHANICAL ENGINEER', ETC.
- 1B) THESE NOTES SUPPLEMENT THE SPECIFICATIONS, WHICH SHALL BE REFERENCED FOR ADDITIONAL REQUIREMENTS.
- 1C) UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES AND NOTIFY DESIGN/BUILDER OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.
- 1D) STRUCTURAL ELEMENTS ARE CENTERED ON GRID LINES AND GRID LINE INTERSECTIONS UNLESS DIMENSIONED OTHERWISE.

2) USE OF DRAWINGS:

- 2A) DO NOT SCALE DRAWINGS.
- 2B) DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
- 2C) DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.
- 2D) WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS:
 - CONTACT THE ARCHITECT PRIOR TO PROCEEDING WITH CONSTRUCTION

3) COORDINATION:

- 3A) STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.
- 3B) COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.
- 3C) SEE ARCHITECTURAL PLANS FOR INTERIOR PARTITIONS. PARTITION FRAMING SHALL BE CONNECTED TO THE PRIMARY STRUCTURE IN SUCH A WAY SO AS TO ALLOW FOR VERTICAL LIVE LOAD DEFLECTIONS OF SPAN/90 AT ROOF FRAMING. DO NOT MAKE RIGID VERTICAL AND HORIZONTAL CONNECTIONS TO THE PRIMARY STRUCTURE IN THE PLANE OF THE PARTITION.

4) SUBMITTALS AND SUBSTITUTIONS:

- 4A) SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
 - IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED AND DESIGNED BY MARTIN/MARTIN, INC. PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR MAKING THE CHANGE.
 - CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS
 - ALL SHOP DRAWINGS SHALL REFERENCE THE STRUCTURAL DRAWING NUMBER AND DETAIL USED TO PREPARE THE SUBMITTAL
 - SUBMIT A STATEMENT OF RESPONSIBILITY FOR CONSTRUCTION OF THE LATERAL LOAD RESISTING SYSTEM IDENTIFIED IN THE DESIGN CRITERIA IN ACCORDANCE WITH IBC 2021 SECTION 1704
- 4B) SUBSTITUTIONS: APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS
- 4C) NONCONFORMANCE: NOTIFY OF CONDITIONS NOT CONSTRUCTED PER THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH CORRECTIVE WORK. SUBMIT PROPOSED REPAIR TO THE ARCHITECT FOR ACCEPTANCE. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR DESIGNING THE REPAIR.
- 4D) ALL SHOP DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC FORMAT ONLY.

DESIGN CRITERIA

1) CODES AND STANDARDS:

1A) GENERAL DESIGN

- INTERNATIONAL BUILDING CODE 2021

2) SEISMIC LOADS - EQUIPMENT PLATFORM

- SEISMIC DESIGN CATEGORY = C

- RISK CATEGORY = II

- EARTHQUAKE IMPORTANCE FACTOR, $I_e = 1.00$

- MAPPED SPECTRAL RESPONSE ACCELERATION, $S_s = 0.16\text{ g}$

- MAPPED SPECTRAL RESPONSE ACCELERATION, $S_1 = 0.09\text{ g}$

- DESIGN SPECTRAL RESPONSE COEFFICIENT, $S_{ds} = 0.170$

- DESIGN SPECTRAL RESPONSE COEFFICIENT, $S_{d1} = 0.146$

- SOIL SITE CLASS = D

- STRUCTURAL SEISMIC LATERAL SYSTEM: LIGHT FRAME WALLS WITH SHEAR PANELS

- RESPONSE MODIFICATION FACTOR, $R = 2$

- SEISMIC RESPONSE COEFFICIENT, $C_s = 0.085$

- SYSTEM OVERSTRENGTH FACTOR, $\Omega = 2$

- DESIGN BASE SHEAR NORMAL TO BUILDING LENGTH = $3k$

- DESIGN BASE SHEAR PARALLEL TO BUILDING LENGTH = $3k$

- SEISMIC ANALYSIS PROCEDURE: EQUIVALENT LATERAL-FORCE ANALYSIS

3) SEISMIC LOADS - SPRUNG STRUCTURE

- STRUCTURAL SEISMIC LATERAL SYSTEM

- RESPONSE MODIFICATION FACTOR, $R = 3.5$

- SEISMIC RESPONSE COEFFICIENT, $C_s = 0.048$

- SYSTEM OVERSTRENGTH FACTOR, $\Omega = 2.5$

- DESIGN BASE SHEAR NORMAL TO BUILDING LENGTH = $10k$

- DESIGN BASE SHEAR PARALLEL TO BUILDING LENGTH = $10k$

4) WIND LOADS

- RISK CATEGORY = II

- BASIC ULTIMATE WIND SPEED, $V_{ult} = 107\text{ mph}$

- BASIC NOMINAL WIND SPEED, $V_{asd} = 82.9\text{ mph}$

- EXPOSURE CATEGORY = C

- INTERNAL PRESSURE COEFFICIENT, $G_{Cpi} = +/-0.18$

- TOPOGRAPHIC FACTOR, $K_{zt} = 1.00$

- GROUND ELEVATION FACTOR, $K_e = 1.00$

5) DESIGN WIND PRESSURE FOR COMPONENTS AND CLADDING AND ELEMENTS DESIGNED BY THE CONTRACTOR

5A) LISTED COMPONENT AND CLADDING WIND PRESSURES ARE INCLUDED FOR REFERENCE ONLY. FINAL CALCULATIONS SHALL BE COMPLETED BY CONTRACTOR

5B) PRESSURES LISTED BELOW ARE ULTIMATE

5C) WIND ZONES SHALL BE AS DEFINED IN ASCE 7-16

5D) COMPONENT AND CLADDING SURFACE PRESSURES (PSF)

- WALLS PRESSURES

WALLS AREA	10 SF	100 SF	200 SF	500 SF
WALLS INTERIOR NEG ZONE 4	-26.6	-23.0	-21.9	-20.4
WALLS CORNER NEG ZONE 5	-32.7	-25.5	-23.3	-20.4
WALLS POSITIVE ZONES 4 & 5	24.5	20.9	19.8	18.4

- ROOF PRESSURES

ROOF AREA	10 SF	100 SF	500 SF
NEGATIVE ZONE 1	-42.7	-33.3	-26.8
NEGATIVE ZONE 1'	-24.5	-24.5	-16.6
NEGATIVE ZONE 2	-56.3	-44.3	-35.9
NEGATIVE ZONE 3	-76.7	-52.7	-35.9
POSITIVE ALL ZONES	16.0	16.0	16.0

6) SNOW LOADS

6A) DRIFTING, SLIDING AND UNBALANCED SNOW

- GROUND SNOW LOAD = 15.0 psf

- SNOW EXPOSURE FACTOR, $C_e = 1.00$

- SNOW LOAD IMPORTANCE FACTOR, $I_s = 1.0$

- THERMAL FACTOR, $C_t = 1.000$

- UNIFORM ROOF SNOW LOAD = 15.0 psf

- FLAT ROOF SNOW LOAD = 10.5 psf

PREFABRICATED BUILDING NOTES

1) GENERAL:

- 1A) SUPERSTRUCTURE SHALL BE A PREFABRICATED BUILDING SYSTEM DESIGNED, MANUFACTURED, AND INSTALLED BY "SPRUNG INSTANT STRUCTURES LTD." THIS DEFERRED SUBMITTAL IS NOT DESIGNED BY MARTIN/MARTIN. REFERENCE THE DEFERRED SUBMITTAL NOTES FOR ADDITIONAL INFORMATION.
- 1B) THE PREFABRICATED STRUCTURE SHALL BE DESIGNED TO MEET ALL APPLICABLE CODES AND DESIGN CRITERIA LISTED IN THE STRUCTURAL DRAWINGS AND IN THE SPECIFICATIONS.
- 1C) DRAWINGS AND CALCULATIONS FOR PREFABRICATED BUILDING SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF ARKANSAS.
- 1D) COLUMN, FOUNDATION AND FRAME LOCATIONS ARE TO REMAIN AS SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS.
- 1E) FINAL COLUMN REACTIONS PER PREFABRICATED BUILDING MANUFACTURER ARE TO BE PROVIDED PRIOR TO FOUNDATION CONSTRUCTION. REVISIONS TO FOUNDATIONS MAY BE REQUIRED BASED ON THE FINAL COLUMN REACTIONS. CONTRACTOR TO MAKE ALLOWANCE FOR THIS REVISION IN THE CONSTRUCTION SCHEDULE AND PRICING.
- 1F) CONNECT PREFABRICATED BUILDING FRAMING TO FOUNDATIONS WITH A PINNED CONNECTION. MOMENT CONNECTIONS TO FOUNDATIONS ARE NOT PERMITTED UNLESS NOTED ON THE DRAWINGS OR APPROVED BY THE ENGINEER IN WRITING PRIOR TO SUBMITTAL OF DRAWINGS OR CALCULATIONS.
- 1G) CONTRACTOR SHALL COORDINATE WITH ALL DISCIPLINES AND TRADES TO DETERMINE ALL POINT LOAD LOCATIONS AND MAGNITUDES LARGER THAN 100 LBS AND PROVIDE TO PREFABRICATED BUILDING SUPPLIER FOR DESIGN OF ENTIRE PREFABRICATED BUILDING SYSTEM. SUCH POINT LOADS MAY INCLUDE MECHANICAL DUCT WORK, MECHANICAL PIPING, FANS, PLUMBING, LARGE ELECTRICAL CONDUITS, CABLE TRAYS, FIRE SPRINKLER LINES, ARCHITECTURAL SOFFITS, ETC.

2) SERVICEABILITY:

- 2A) PREFABRICATED BUILDING SHALL COMPLY WITH THE FOLLOWING DRIFT AND DEFLECTION LIMITS:
 - PRIMARY FRAME SNOW LOAD DEFLECTION = $L/90$
 - PRIMARY FRAME TOTAL LOAD DEFLECTION = $L/60$
 - MAXIMUM WIND DRIFT (SERVICE LEVEL WITH WIND LOAD = $0.42 \times \text{MWFRS PRESSURE}$) = $H/100$
 - MAXIMUM SEISMIC DRIFT (ULTIMATE LEVEL WITH AMPLIFICATION PER CODE) = $H/50$

3) FOUNDATION ANCHORS:

3A) FOUNDATION ANCHOR LAYOUT AND DESIGN SHALL BE PROVIDED BY PREFABRICATED BUILDING SUPPLIER. CONTRACTOR SHALL COORDINATE ANCHORS WITH CONCRETE THICKNESS AND REINFORCEMENT LAYOUT.

STRUCTURAL DRAWING LIST

SHEET LIST	
SHEET NUMBER	SHEET NAME
S0.00	GENERAL NOTES
S0.01	GENERAL NOTES
S0.02	QUALITY CONTROL
S1.0	FOUNDATION PLAN
S1.1	EQUIPMENT PLATFORM FRAMING PLAN
S3.0	FOUNDATION DETAILS
S3.10	SOG DETAILS
S5.0	STEEL FRAME DETAILS
S5.40	CF FRAMING DETAILS
S5.41	CF FRAMING DETAILS

STRUCTURAL STEEL NOTES

1) CONNECTIONS:

1A) PROVIDE CONNECTIONS AS SHOWN IN THE DETAILS HEREIN. REFER TO SPECIFICATION FOR ALTERNATIVES AND CONNECTIONS NOT SHOWN.

2) STEEL MATERIALS:

2A) SEE 'STEEL MATERIAL TABLE'

3) WELDING REQUIREMENTS:

3A) WELDERS: HAVE IN POSSESSION CURRENT EVIDENCE OF PASSING THE APPROPRIATE AWS. QUALIFICATION TESTS.

3B) MINIMUM WELDS: AISC SPECIFICATION, NOT LESS THAN 3/16" FILLET, CONTINUOUS UNLESS OTHERWISE NOTED.

3C) WELD SIZES AND LENGTHS CALLED FOR ON THE DRAWINGS ARE THE NET EFFECTIVE REQUIRED. INCREASE WELD SIZE IF GAPS EXIST AT THE FAYING SURFACE.

3D) WELD SIZES SHALL BE AS SHOWN UNLESS A GREATER SIZE IS REQUIRED BY ANSI/AISC 360-05 TABLES J2.3 AND J2.4.

3E) ALL GROOVE WELDS SHALL BE COMPLETE PENETRATION UNLESS NOTED.

3F) FIELD WELDING SYMBOLS INDICATE SEQUENCE CONSIDERED DURING DESIGN. THE CONTRACTOR SHALL REQUEST APPROVAL FROM THE ENGINEER TO MODIFY WELD INSTALLATION LOCATION INDICATED ON THE DOCUMENTS:

- FROM SHOP TO FIELD

- FROM FIELD TO SHOP

3G) DEFORMED ANCHOR STUDS (DAS) AND HEADED ANCHOR STUDS (HAS / HDAS) SHALL BE SHOP OR FIELD WELDED AT CONTRACTOR'S OPTION UNLESS NOTED OTHERWISE

4) STRUCTURAL STEEL INSTALLATION:

4A) UNLESS INDICATED OTHERWISE, SNUG TIGHTEN ALL JOINTS AS DEFINED BY AISC

5) STRUCTURAL COLD FORMED METAL FRAMING:

5A) REFER TO DETAILS FOR MINIMUM CONNECTIONS AND OTHER REQUIREMENTS. DO NOT IMPOSE FORCES ON THE BUILDING STRUCTURE IN DIRECTIONS OR AT LOCATIONS OTHER THAN THAT SHOWN ON THE STRUCTURAL DRAWINGS.

STEEL MATERIAL TABLE				
STEEL ELEMENT	ASTM/TYPE	Fy (KSI)	Fu (KSI)	COMMENTS
BOLTS	F3125 - TYPE A325 OR F1852	-	120	BOLTS ARE 3/4"Ø UNO, USE TENSION-CONTROLLED WHERE POSSIBLE
COLD-FORMED STUDS, 33 AND 43 MIL	A1003	33	-	-
COLD-FORMED STUDS, 54 MILL AND HEAVIER	A1003	50	-	-
OTHER SHAPES	A36	36	58	A572 WITH Fy=50 KSI AND Fu=65 KSI ACCEPTABLE AT CONTRACTOR'S OPTION
PLATES	A36	36	58	-
HSS	A500 GR C	50	62	-
WELDING ELECTRODES, THICKNESS OF THINNER PART > 0.1 INCHES (12 GA)	E70	-	-	PER AWS
WELDING ELECTRODES, THICKNESS OF THINNER PART ≤ 0.1 INCHES (12 GA)	E70	-	-	PER AWS

ISOMETRIC

PREFABRICATED BUILDING NOT SHOWN FOR CLARITY