PLAN LEGEND

SYMBOL	DESCRIPTION	REMARKS
X Y	SECTION CUT SHOWN ON PLANS	X=SECTION OR DETAIL NUMBER Y=SHEET REFERENCE
X Y	DETAIL CALLOUT SHOWN ON PLANS	X=SECTION OR DETAIL NUMBER Y=SHEET REFERENCE

ABBREVIATIONS

A.B.C.	AGGREGATE BASE COURSE	GLB (GLULAM)	GLUED-LAMINATED BEAM
A/C	AIR CONDITIONER	I.F.W.	INSIDE FACE OF WALL
A.F.F.	ABOVE FINISHED FLOOR	HORIZ	HORIZONTAL
ALT.	ALTERNATE	K(KIP)	1000 POUNDS
A.B.	ANCHOR BOLT	L.L.	LIVE LOAD
@	AT (MEASUREMENT)	LBS (#)	POUNDS
BM	BEAM	LLH	LONG LEG HORIZONTAL
B.F.F	BELOW FINISHED FLOOR	LLV	LONG LEG VERTICAL
B.O.B.	BOTTOM OF BEAM	LDH	LONG DIMENSION HORIZONTAL
B.O.D.	BOTTOM OF DECK	LDV	LONG DIMENSION VERTICAL
B.O.F.	BOTTOM OF FOOTING	MFR(S)	MANUFACTURER(S)
BRG	BEARING	MAS C.J.	MASONRY CONTROL JOINT
C.I.P.	CAST IN PLACE	MECH'L	MECHANICAL
C.L.	CENTERLINE	N/A	NOT APPLICABLE
C.L.B.	CENTERLINE OF BEAM	N.T.S.	NOT TO SCALE
C.L.C.	CENTERLINE OF COLUMN	O.C.	ON CENTER
C.L.F.	CENTERLINE OF FOOTING	O.F.W.	OUTSIDE FACE OF WALL
C.L.W.	CENTERLINE OF WALL	OPP	OPPOSITE
CLR	CLEAR	P.C.	PRECAST CONCRETE
CONC	CONCRETE	PLF	POUNDS PER LINEAR FOOT
CONC C.J.	CONCRETE CONTROL JOINT	PREFAB	PREFABRICATED
CONC S.J.	CONCRETE SAWCUT JOINT	PSF	POUNDS PER SQUARE FOOT
C.M.U.	CONCRETE MASONRY UNIT	PSI	POUNDS PER SQUARE INCH
CONN	CONNECTION	REINF	REINFORCING
CONT	CONTINUOUS	SLH	SHORT LEG HORIZONTAL
D.L.	DEAD LOAD	SLV	SHORT LEG VERTICAL
ø OR DIA.	DIAMETER	SIM	SIMILAR
DN	DOWN	SQ.	SQUARE
DWG(S)	DRAWING(S)	STD	STANDARD
E.O.S.	EDGE OF SLAB	T.L.	TOTAL LOAD
ELEV	ELEVATION	T.O.B.	TOP OF BEAM
EQ	EQUAL	T.O.D.	TOP OF DECK
EQUIP	EQUIPMENT	T.O.F.	TOP OF FOOTING
EXP. BOLT	EXPANSION BOLT	T.O.L.	TOP OF LEDGER
EXP. JT (E.J.)	EXPANSION JOINT	T.O.M.	TOP OF MASONRY
E.W.	EACH WAY	T.O.P.	TOP OF PLATE
F.F.	FINISHED FLOOR	T.O.S.	TOP OF STEEL
F.O.M.	FACE OF MEMBER	T.O.W.	TOP OF WALL
F.O.S.	FACE OF STEEL	TYP	TYPICAL
F.O.W.	FACE OF WALL	U.N.O.	UNLESS NOTED OTHERWISE
GA	GAGE	VERT	VERTICAL
GALV	GALVANIZED	W.W.F.	WELDED WIRE FABRIC
G.S.N.	GENERAL STRUCTURAL NOTES	W/	WITH
		W/O	WITHOUT

GENERAL STRUCTURAL NOTES:

A. APPLICABLE DESIGN CODES:

1. ALL WORK SHALL BE IN CONFORMANCE WITH THE INDIANA BUILDING CODE (IBC 2003). ALL PRE-ENGINEERED METAL BUILDINGS SHALL CONFORM TO THE REQUIREMENTS OF THE METAL BUILDING MANUFACTURER'S ASSOCIATION "DESIGN PRACTICES MANUAL", (LATEST EDITION).

B. DESIGN LOADS:

1. DEAD LOADS

1.1 WEIGHT OF BUILDING SYSTEM (PER MANUFACTURERED METAL BUILDING MANUFACTURER) AND ROOF TOP UNITS (AS PURCHASED)
1.2 COLLATERAL LOADS: ALLOW 5 PSF

2. LIVE LOADS

2.1 GROUND FLOOR: 100 PSF
2.2 ROOF: 20 PSF

3. SNOW LOADS

3.1. GROUND SNOW LOAD, Pg= 20 PSF
3.2. FLAT-ROOF SNOW LOAD, Pf= 14.0 PSF
3.3. SNOW EXPOSURE FACTOR, Ce= 1.0
3.4. SNOW LOAD THERMAL FACTOR, Ct= 1.0
3.5. SNOW LOAD IMPORTANCE FACTOR, Is= 1.0
3.6. ROOF SLOPE FACTOR, Cs= 1.0

4. DESIGN WIND LOAD FOR STRUCTURAL FRAME

4.1. BASIC WIND SPEED: 90 MPH
4.2. IMPORTANCE FACTOR: Iw= 1.0
BUILDING CATEGORY: II
4.3. EXPOSURE: C
4.4 INTERNAL PRESSURE COEFFICIENT: +/-0.18
4.5. VELOCITY PRESSURE, Qz= 21 PSF
4.6. MAIN WIND-FORCE-RESISTING SYSTEM PRESSURE (WINDWARD PLUS LEEWARD) AT GROUND LEVEL: 25 PSF
H = HEIGHT; 0' < H < 40' 25 PSF

B. DESIGN LOADS, CONTINUED:

5. DESIGN WIND LOAD FOR EXTERIOR COMPONENTS AND CLADDING

5.1. TYPICAL EXTERIOR WALL SURFACE: +/- 30 PSF
5.2. EXTERIOR WALL SURFACE AT CORNERS, WITHIN FIFTEEN FEET OF EACH CORNER OF THE BUILDING: +/- 37 PSF
5.3. TYPICAL ROOF SURFACE: +16 PSF/- 23 PSF.
5.4. ROOF SURFACE WITHIN FIFTEEN FEET OF THE EDGE OF THE ROOF (NOT AT CORNERS): +16 PSF/- 37 PSF.
5.5. ROOF SURFACE AT CORNERS (INTERSECTION OF FIFTEEN FOOT PERIMETER AREAS): +16 PSF/-57 PSF.

6. DESIGN SEISMIC LOAD

6.1 SEISMIC IMPORTANCE FACTOR: Ie= 1.0
SEISMIC USE GROUP: I
6.2 MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss= 0.150, S1= 0.060
6.3 SITE (SOIL) CLASS: D
6.4 SITE COEFFICIENTS, Fa= 1.6, Fv= 2.4
MAX. CONSIDERED SPECTRAL RESPONSE ACCELERATIONS, Sms= 0.240, Sm1= 0.144
SPECTRAL RESPONSE COEFFICIENTS: Sds= 0.160, Sd1= 0.096
6.5 SEISMIC DESIGN CATEGORY: B
6.6 BASIC SEISMIC-FORCE-RESISTING SYSTEM: NORTH-SOUTH: ORDINARY STEEL CONCENTRICALLY BRACED FRAME.
EAST-WEST: ORDINARY STEEL MOMENT FRAME.
6.7 DESIGN BASE SHEAR: TO BE DETERMINED BY METAL BUILDING MANUFACTURER.
6.8 SEISMIC RESPONSE COEFFICIENT: Cs= 0.023
6.9 RESPONSE MODIFICATION FACTOR: NORTH-SOUTH: R=5, EAST-WEST: R=3.5
6.10 ANALYSIS PROCEDURE USED: TO BE DETERMINED BY METAL BUILDING MANUFACTURER.

C. FOUNDATION DESIGN:

1. FOUNDATION DESIGN IS BASED UPON THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY PROFESSIONAL ENGINEERING ASSOCIATES, INC. NO. 2006030 TK CO, DATED APRIL 20, 2006. ALL FOOTINGS SHALL BEAR AT THE ELEVATIONS SHOWN ON THE PLANS, DETAILS, SECTIONS, AND SCHEDULES. THE NET ALLOWABLE SOIL BEARING PRESSURE IS 3,000 PSF. SUBGRADE PREPARATION FOR ALL FOUNDATIONS, PAVEMENTS, AND SLABS ON GRADE SHALL BE PER THE DRAWINGS, SPECIFICATIONS AND THE GEOTECHNICAL REPORT. THE DESIGN BEARING CAPACITY OF ALL BEARING MATERIALS SHALL BE VERIFIED, BY TESTING AND OBSERVATION, BY OWNER'S LICENSED GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOOTING CONCRETE.

2. IF MATERIAL ENCOUNTERED BELOW FOOTINGS IS CONSIDERED UNSUITABLE BY THE GEOTECHNICAL ENGINEER, OVER EXCAVATE AND REMOVE UNSUITABLE SOIL AS REQUIRED BY THE GEOTECHNICAL ENGINEER PER THE SPECIFICATIONS.

3. PROOFROLL BUILDING "SUB-GRADE" WITH FULLY LOADED SINGLE AXLE DUMP TRUCK. SOIL DEEMED UNSTABLE OR UNSUITABLE BY THE GEOTECHNICAL ENGINEER RESPONSIBLE FOR QUALITY CONTROL DURING CONSTRUCTION SHALL BE REMOVED AND RECOMPACTED OR REPLACED WITH GRANULAR FILL. THE BUILDING "SUB-GRADE" SHALL BE VERIFIED AND APPROVED BY THE GEOTECHNICAL ENGINEER RESPONSIBLE FOR QUALITY CONTROL DURING CONSTRUCTION. THE GEOTECHNICAL ENGINEER RESPONSIBLE FOR QUALITY CONTROL DURING CONSTRUCTION IS SOLELY RESPONSIBLE TO DETERMINE THE ADEQUACY OF THE BUILDING "SUB-GRADE."

4. FILL TO UNDERSIDE OF SLAB ON GRADE, PAVEMENT AND FOUNDATION WITH WELL GRADED CLEAN GRANULAR FILL, MAXIMUM SIZE TWO INCHES AND LESS THAN FIVE PERCENT PASSING NUMBER TWO HUNDRED SIEVE, MDOT CLASS II SAND.

5. "SUB-GRADE" AND FILL SHALL BE PLACED IN UNIFORM LIFTS, APPROPRIATE TO THE MATERIAL AND METHOD OF COMPACTION, COMPACTED TO MINIMUM NINETY-FIVE PERCENT OF MODIFIED PROCTOR (ASTM D-1557). THE INDEPENDENT TESTING AND INSPECTION AGENCY IS THE SOLE PARTY RESPONSIBLE TO DETERMINE THE DEPTH OF THE AFOREMENTIONED UNIFORM LIFT BASED UPON THE SOIL ENCOUNTERED AND THE CONTRACTOR'S METHOD OF COMPACTION.

6. NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

7. DURING WINTER CONSTRUCTION, PROVIDE FROST PROTECTION FOR FOOTING AND AREA WITHIN THREE FEET OF THE FOOTING PERIMETER. PROTECT FOOTINGS IN ORDER TO PREVENT FREEZING AND HEAVING OF THE BEARING STRATUM.

8. FINISHED EXCAVATIONS AND BEARING GRADES SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL INSPECTION AGENCY BEFORE ANY CONCRETE IS PLACED.

9. EXPOSED "SUB-GRADE" SOILS ARE TYPICALLY SENSITIVE TO DISTURBANCE AND STRENGTH DEGRADATION WHEN HIGH MOISTURE CONTENTS ARE PRESENT. CONSTRUCTION TRAFFIC OVER EXPOSED "SUB-GRADES" SHALL BE AVOIDED. PROVIDE PROPER DRAINAGE AND GRADING TO AVOID CREATING LOW AREAS WHERE WATER CAN GATHER ON THE "SUB-GRADES".

10. NO BACKFILLING AGAINST FOUNDATION WALLS AND GRADE BEAMS SHALL BE DONE UNTIL CONCRETE HAS ATTAINED SEVENTY-FIVE PERCENT OF ITS TWENTY-EIGHT DAY STRENGTH. BEFORE BACKFILLING, PROVIDE BRACING FOR WALLS OR WALL BUTTRESSES AND GRADE BEAMS SUSTAINING MORE THAN 2'-0" OF UNBALANCED EARTH PRESSURE. THIS BRACING IS TO REMAIN UNTIL THE PERMANENT RESTRAINTS BECOME EFFECTIVE.

11. CONCRETE FOR FOOTINGS AND GRADE BEAMS MAY BE PLACED AT CONTRACTOR'S OPTION INTO UNFORMED TRENCHES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MINIMIZE SLOUGHING OF SIDEWALLS. WHERE SLOUGHING OCCURS, REMOVE SLOUGHED SOIL AND/OR OVER EXCAVATE. CUT TRENCH FOOTING SIDES IN VERTICAL MANNER TO NOT ALLOW TRENCH FOOTING TO "MUSHROOM OUT" NEAR THE TOP.

D. CAST-IN-PLACE CONCRETE:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ALL CONCRETE SHALL HAVE BETWEEN 5% AND 7% AIR ENTRAINMENT U.N.O. ALL CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 3 INCHES PLUS OR MINUS 1 INCH. ALL CONCRETE REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED PER CRSI AND ACI STANDARDS INCLUDING CONCRETE COVER AND REINFORCING SUPPORT REQUIREMENTS.

2. CONCRETE BAR REINFORCEMENT SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 (60,000 PSI YIELD). CONCRETE BAR REINFORCEMENT FOR WELDED REINFORCEMENT CONNECTIONS SHALL CONFORM TO ASTM A706. ALL ASTM STANDARDS SHALL BE LATEST EDITION.

3. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED PER CRSI AND ACI STANDARDS INCLUDING CONCRETE COVER AND REINFORCING SUPPORT REQUIREMENTS. ALL REINFORCING BARS, INCLUDING CORNER BARS AND DOWELS, SHALL BE LAPPED PER ACI CLASS B TENSION SPLICES. LAPS IN WELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP, MEASURED BETWEEN THE OUTERMOST CROSS WIRES OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES. NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE. ALL CONCRETE SLABS-ON-GRADE SHALL HAVE CONSTRUCTION/CONTROL JOINTS LOCATED AS SHOWN ON THE PLANS. SEE TYPICAL DETAILS FOR CONSTRUCTION AND CONTROL JOINT INFORMATION. SAWCUTTING SHALL START IMMEDIATELY AS THE CONCRETE WILL ALLOW WITHOUT RAVELING ALONG THE SAWCUT TO MINIMIZE DRYING SHRINKAGE CRACKS.

D. CAST-IN-PLACE CONCRETE, CONTINUED:

4. MIX DESIGNS OR MIX PROPORTIONS WILL BE REVIEWED IN ACCORDANCE WITH INDUSTRY STANDARD. THE ACCEPTABILITY OF THE FINISHED PRODUCT IS BASED SOLELY UPON THE THE COMPRESSIVE STRENGTH RESULTS. CONCRETE WITH INADEQUATE STRENGTH OR OTHER SPECIFIED PROPERTIES MAY NEED TO BE REMOVED AND REPLACED AT NO COST TO THE OWNER.

5. POZZOLANIC MATERIAL, SUCH AS FLY ASH AND GROUND, GRANULATED BLAST FURNACE SLAG (GGBFS), MAY NOT BE ADDED TO ANY CONCRETE THAT MAY BE EXPOSED TO VIEW WITHOUT THE APPROVAL OF THE ARCHITECT. THIS APPROVAL MAY REQUIRE A MOCK-UP. FLY ASH AND GGBFS, WHILE NOT IS NOT REQUIRED. IF IT IS DESIRED TO BE USED IN CONCRETE FOR THE PROJECT, THE FOLLOWING REQUIREMENTS APPLY:

5.1. PROVIDE FLY ASH PER ASTM C618, TYPE C OR F. VERIFY THERE IS NO POTENTIAL ALKALI INTERACTION WITH PROPOSED AGGREGATES. IF POTENTIAL EXISTS, DO NOT USE FLY ASH OR USE A NON-REACTIVE AGGREGATE.
5.2. PROVIDE GROUND, GRANULATED BLAST FURNACE SLAG PER ASTM C989, GRADE 100 OR BETTER.
5.3. CONCRETE SHALL NOT CONTAIN MORE THAN TWENTY-FIVE PERCENT FLY ASH, BY WEIGHT, FOR TOTAL CEMENT AND POZZOLANIC MATERIAL.
5.4. CONCRETE SHALL NOT CONTAIN MORE THAN TWENTY-FIVE PERCENT GGBFS, BY WEIGHT, FOR TOTAL CEMENT AND POZZOLANIC MATERIAL.
5.5. THE COMBINED AMOUNT OF FLY ASH AND GGBFS MAY NOT EXCEED FORTY PERCENT.

6. CLEAR CONCRETE COVERAGES SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

6.1. UNFORMED SURFACES IN CONTACT WITH GROUND (FOOTING BOTTOMS): THREE INCHES.
6.2. FLAT SLABS: TWO INCHES.
6.3. FORMED SURFACES IN CONTACT WITH GROUND OR EXPOSED TO THE WEATHER (PIERS, WALLS, PITS, ETC.): UP TO #5's, ONE AND ONE-HALF INCH, #6's AND LARGER, TWO INCHES.
6.4. COLUMN (OR PILASTERS) AND BEAMS (TO STIRRUPS OR TIES): ONE AND ONE-HALF INCHES.
6.5. ALL OTHER, IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318.

7. MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS, EXCEPT AS NOTED FOR CONCRETE SLAB ON GRADE.

8. WALLS, PIERS, AND COLUMNS SHALL BE DOWELED TO FOOTINGS. WALL FOOTINGS AND CONCRETE COLUMN DOWELS SHALL BE SAME SIZE AS WALL AND COLUMN VERTICALS.

9. CONTINUOUS WALL FOOTINGS, BEAMS, SLABS AND COLUMNS SHALL BE PLACED MONOLITHICALLY EXCEPT WHERE OTHERWISE SHOWN. NO HORIZONTAL CONSTRUCTION JOINTS ARE TO BE MADE, UNLESS SHOWN OR OTHERWISE NOTED.

10. PROVIDE A SHEAR KEY ONE-THIRD OF THE DEPTH OF STRUCTURAL MEMBER AT CONSTRUCTION JOINTS. SEE TYPICAL DETAILS FOR ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS.

11. CORNER BARS SHALL BE PROVIDED AT ALL INTERSECTIONS OF CONTINUOUS FOOTINGS, GRADE BEAMS, AND WALLS TO MATCH TYPICAL HORIZONTAL REINFORCING IN SIZE AND SPACING. EXTEND ALL BARS TO FAR SIDE OF INTERSECTING FOOTING, GRADE BEAM, OR WALL. ALL REINFORCING BARS, INCLUDING CORNER BARS AND DOWELS, SHALL BE LAPPED PER ACI CLASS B TENSION SPLICES. LAPS IN WELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP, MEASURED BETWEEN THE OUTERMOST CROSS WIRES OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES. NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE. ALL CONCRETE SLABS-ON-GRADE SHALL HAVE CONSTRUCTION/CONTROL JOINTS LOCATED AS SHOWN ON THE PLANS. SEE TYPICAL DETAILS FOR CONSTRUCTION AND CONTROL JOINT INFORMATION. SAWCUTTING SHALL START IMMEDIATELY AS THE CONCRETE WILL ALLOW WITHOUT RAVELING ALONG THE SAWCUT TO MINIMIZE DRYING SHRINKAGE CRACKS.

E. GROUT AT BASEPLATES:

1. GROUT SHALL BE 5000 PSI NON-METALLIC, NON-SHRINK GROUT, FIVE STAR OR EQUIVALENT. INSTALL GROUT UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, GROUT UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

F. GENERAL:

1. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS.)

2. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS, AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

3. STRUCTURAL DRAWINGS SHOW SOME ARCHITECTURAL INFORMATION WHICH IS SHOWN FOR REFERENCE ONLY. ANY DISSIMILARITY WITH FINAL ARCHITECTURAL DRAWINGS SHALL BE ASSUMED UNINTENTIONAL, HOWEVER, THE CONTRACTOR SHOULD VERIFY INTENT WITH ARCHITECT PRIOR TO STARTING ANY WORK. SOME INFORMATION IN STRUCTURAL SECTIONS IS NOT DRAWN TO SCALE.

4 ALL WORK SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL CODES.

5. THE STRUCTURAL DRAWINGS SHOW A PORTION OF THE WORK TO BE PERFORMED BY THE CONTRACTOR. SUPPLEMENTARY REQUIREMENTS FOR STRUCTURAL STEEL, CONCRETE, ETC. MAY BE FOUND WITHIN THE DRAWINGS OF OTHER DISCIPLINES AND REMAINS THE RESPONSIBILITY OF THE CONTRACTOR.

6. THESE NOTES ARE COMPLEMENTARY TO THE SPECIFICATIONS AND SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS.

H. DOCK EDGE CHANNEL:

1. C8x11.5 EDGE CHANNEL SHALL BE JOINTED AT THE LOCATIONS SHOWN ON THE PLANS. CHANNEL SHALL BE CONTINUOUS BETWEEN THE DESIGNATED BREAK LOCATIONS SHOWN ON THE PLANS. BREAK LOCATIONS SHALL ALIGN WITH THE GRADE BEAM CHAMFER STRIP, SEE DETAIL B4/DS 40. THE EDGE CHANNEL SHALL BE SECURELY HELD IN PLACE DURING THE GRADE BEAM POUR WITH BOLTS OR OTHER FASTENERS TO PRODUCE A LEVEL, EVEN AND FLUSH ALIGNMENT. WIRE TIES SHALL NOT BE CONSIDERED AN ADEQUATE METHOD OF SECURING THE EDGE CHANNEL. THE FASTENER HOLES SHALL BE WELDED CLOSED AND GROUND SMOOTH AFTER THE GRADE BEAM PLACEMENT BUT BEFORE THE SLAB PLACEMENT.

H. STRUCTURAL STEEL:

1. SHOP DETAILS, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AISC "SPECIFICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", AND AISC "DETAILING FOR STEEL CONSTRUCTION".

2. STRUCTURAL STEEL SHALL CONFORM TO THE YIELD STRENGTH (FY) LISTED BELOW:

2.1. WIDE FLANGE SHAPES, ASTM A992, 50 KSI
2.2. RECTANGULAR HOLLOW STRUCTURAL SHAPES, ASTM A500, 46 KSI
2.3. ALL OTHER PLATES AND SHAPES, ASTM A36, 36 KSI

3. ANCHOR RODS SHALL CONFROM TO ASTM F1554, UON.

4. BOLTS SHALL CONFORM TO ASTM A325, UON. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC., SHALL BE INSTALLED WITH STEEL WASHERS AT SLOTTED HOLES IN STEEL SECTIONS. ALL HIGH STRENGTH BOLTING SHALL BE INSPECTED BY OWNER'S INDEPENDENT TESTING LABORATORY.

5. CONNECTION BOLTS FOR GIRT AND PURLIN CONNECTIONS MAY BE ASTM A307.

6. ALL EXPANSIVE ANCHORAGES SHALL BE PER RAMSET/REDHEAD DYNABOLT SLEEVE ANCHOR (I.C.B.O.ER. 1372) OR APPROVED EQUAL.

7. ALL EPOXY ANCHORAGES SHALL BE PER HILTI 'HIT HY 150' SYSTEM (I.C.B.O. ER. 5193) OR APPROVED EQUAL.

5. ANCHOR BOLTS, BASE PLATES OR BEARING PLATES SHALL BE LOCATED AND BUILT INTO CONNECTING WORK, PRE-SET BY TEMPLATES OR SIMILAR METHOD. PLATES SHALL BE SET IN FULL BEDS OF NON-SHRINK GROUT ASTM C1107.

6. REFERENCES TO HEADED STUDS (OR CONCRETE ANCHORS) SHALL BE FOR ITEMS SUCH AS THE NELSON STUD WELDING COMPANY, INC.'s H4L OR S3L, ASTM A108, ATTACHED PER MANUFACTURERS REQUIREMENTS BY AUTOMATIC WELDING OF STUDS OR ANCHORS WHICH SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING" AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS. SUCH REFERENCES SHALL INCLUDE REFERENCES MADE UPON SHOP DRAWINGS.

7. ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. CERTIFICATES SHALL BE THOSE ISSUED BY AN ACCEPTED TESTING AGENCY. ALL WELDING SHALL BE DONE WITH APPROPRIATE E70 SERIES LOW HYDROGEN ELECTRODES COMPATIBLE WITH THE NEW AND EXISTING STEEL, UON, AND SHALL CONFORM TO THE REQUIREMENTS OF THE "CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY. ALL WELDING SHALL BE PERFORMED PER THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY STANDARD. ALL COMPLETE PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.

I. PRE-ENGINEERED METAL BUILDING DESIGN CRITERIA:

1. THE MANUFACTURED METAL BUILDING MANUFACTURER SHALL BE RESPONSIBLE FOR THE ENTIRE DESIGN OF THE STEEL SUPERSTRUCTURE, ROOF, DECK, FASCIAS, SUPPORT, BRACING, WALL PANELS, LATERAL ANALYSIS AND ALL RELATED WORK.

2. THE ENTIRE SUPERSTRUCTURE INCLUDING THE ROOF DECK, SHALL BE DESIGNED IN ACCORDANCE WITH THE BUILDING CODE. WIND UPLIFT PRESSURES FOR ENCLOSED AND UNENCLOSED BUILDING AREAS SHALL BE CONSIDERED IN ACCORDANCE WITH SAID CODE. THE MANUFACTURED BUILDING SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS SUPERIMPOSED DEAD, LIVE, SNOW, WIND, THERMAL OR SEISMIC LOADING, WHICHEVER COMBINATION PRODUCES THE MOST SEVERE CONDITION, IN ACCORDANCE WITH THE LATEST RECOMMENDATIONS OF THE METAL BUILDING MANUFACTURERS ASSOCIATION AND THE BUILDING CODE.

3. CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS FOR REVIEW PRIOR TO MANUFACTURE. CALCULATIONS AND SHOP DRAWINGS SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE WHICH THE PROJECT IS CONSTRUCTED. SHOP DRAWINGS SHALL SHOW ALL INFORMATION INCLUDING, BUT NOT LIMITED TO, FOUNDATION REACTIONS, DIMENSIONS, MEMBER SIZES AND PROPERTIES, FRAMING PLANS, SECTIONS AND ALL PERTINENT DETAILS. CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED FOR BUILDING OFFICIAL REVIEW AND APPROVAL PRIOR TO FABRICATION.

4. STEEL PURLIN TYPE AND SPACING AND STEEL DECK SELECTION SHALL BE THE OPTION OF THE MANUFACTURED BUILDING MANUFACTURER WITH APPROVAL OF THE ARCHITECT.

5. MANUFACTURED BUILDING MANUFACTURER SHALL DESIGN AND SUPPLY ALL REQUIRED SUBFRAMING FOR APPURTENANT STRUCTURES, OPENINGS, INCLUDING FRAMING TO SUPPORT THE WEIGHT OF MECHANICAL EQUIPMENT AND ROOF PENETRATION BOOT SEALS.

6. MAIN BUILDING FRAMES SHALL BE DESIGNED WITH PINNED BASES. LONGITUDINAL LATERAL LOADS SHALL BE RESISTED BY PORTAL FRAMES. PORTAL FRAMES SHALL BE LOCATED SO AS TO NOT INTERFERE WITH ANY DOOR OR WINDOW OPENINGS.

7. METAL BUILDING MANUFACTURER SHALL COORDINATE WITH CONTRACTOR FOR ROOF TOP UNIT TYPE, SIZE AND WEIGHT. ROOF CURBS SHALL BE COORDINATED WITH ROOF TOP UNIT TYPE, SIZE AND WEIGHT.

8. THE FOUNDATIONS HAVE BEEN DESIGNED TO RESIST LOADS FROM A MANUFACTURED METAL BUILDING BASED UPON PRELIMINARY INFORMATION. PRIOR TO ANY WORK, THE GENERAL CONTRACTOR SHALL SUBMIT A SEALED AND SIGNED SUMMARY OF THE DESIGN FORCES (AS A SHOP DRAWING) THEIR CHOSEN MANUFACTURED METAL BUILDING WILL EXERT ON THE FOUNDATION. IF IT IS NECESSARY TO REVISE THE FOUNDATIONS, AESTRUCTURES WILL INDICATE THIS FACT ON THE SHOP DRAWINGS AND SUBMIT THE REVISED FOUNDATION TO THE ARCHITECT FOR DISTRIBUTION.

DATE	REV	DESCRIPTION	BY
06/15/06	1	ADDENDUM NO 1	MV
05/24/06	1	BID/PERMIT SET	MV
05/17/06		NINETY-FIVE PERCENT REVIEW	MV

BID PERMIT SET

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PROJECT NO:JHN-2006-05

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SHEET: STRUCTURAL NOTES, LEGENDS, AND ABBREVIATIONS

NUMBER: GS 01