GENERAL NOTES

- PROVIDE CHAMFERS AS SPECIFIED AND AS DETAILED ON THE AR-CHITECTURAL DRAWINGS
- 2. SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL SLAB DEPRESSIONS. VERIFY ALL SLAB DEPRESSIONS WITH THE ARCHITECT.
- 3. PRINCIPAL OPENINGS ARE SHOWN ON THE DRAWINGS. SEE ARCHITEC-TURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN.
- 4. THREE (3) BLUE LINE PRINTS AND ONE (1) SEPIA OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE FABRICATION OF ANY STRUCTURAL STEEL, STEEL JOIST, JOIST GIRDERS, METAL DECK, MISCELLANEOUS METAL, TILT-UP CONCRETE PANELS OR CONCRETE REINFORCEMENT.

DESIGN LOADING NOTES

ROOF ______ 20 PSF - LIVE LOAD MEZZANINE _____ 50 PSF - LIVE LOAD STAIRS, CORRIDORS ______ 100 PSF - LIVE LOAD PARTITIONS ______ 20 PSF - DEAD LOAD BASIC WIND SPEED _____ 10 MPH EXPOSURE C DEPTH TO FROST LINE _____ 0'-6

- 1. THE APPLICABLE CODE SHALL BE THE 1991 EDITION OF THE UNIFORM BUILDING CODE.
- 2. THE ROOF FRAMING SHOWN ON THIS JOB HAS BEEN DESIGNED FOR THE MECHANICAL WEIGHTS AT THE LOCATIONS SHOWN, IF ANY ADDITIONAL LOAD IS TO BE SUPPORTED BY THE ROOF STRUCTURE, THE ENGINEER SHALL BE NOTIFIED IN WRITING AND SHALL BE FURNISHED WEIGHTS AND LOCATIONS OF SUCH EQUIPMENT BEFORE INSTALLATION.

FOUNDATION NOTES

- 1. FOUNDATION INFORMATION FOR THIS PROJECT IS BASED ON A SOIL REPORT PREPARED BY MAXIM ENGINEERS, INC., P.I.R. NO. 294-760, DATED AUGUST 22, 1994 AND AN ADDENDUM LETTER DATED MARCH 13,
- 2. DRILLED PIERS ARE TO BE FOUNDED IN THE GRAY AUSTIN CHALK LIMESTONE AND AS DIRECTED BY THE SOILS ENGINEER.
- 3. THE BOTTOM OF ALL DRILLED PIERS SHALL BE SMOOTH, DRY AND FREE OF ALL LOOSE MATERIAL BEFORE POURING CONCRETE.
- 4. DRILLED PIERS ARE DESIGNED FOR AN END BEARING VALUE OF 45,000 POUNDS PER SQUARE FOOT AND A SIDE SKIN FRICTION VALUE OF 4,500 POUNDS PER SQUARE FOOT, BEARING IN THE GRAY AUSTIN CHALK LIMESTONE.
- 5. DRILLED PIERS SHALL BE CONCRETED WITHIN EIGHT (8) HOURS OF DRILLING.
- 6. THE CONTRACTOR SHALL VERIFY THE DEPTH OF THE PIER PRIOR TO CUTTING PIER REINFORCING CAGES. PIER STEEL SHALL BE DELIVERED TO THE JOB SITE IN STANDARD 60 FOOT LENGTHS AND CUT AS REQUIRED
- 1. THE CONTRACTOR SHALL MAKE ACCURATE MEASUREMENTS OF THE DEPTH OF THE BEARING STRATA AND THE DISTANCE OF PENETRATION INTO THE BEARING STRATA. A PIER LOG SHALL BE SUBMITTED TO THE ENGINEER OF RECORD INDICATING DEPTH OF PIERS AND THE DEPTH OF PENETRATION.
- 8. REINFORCING STEEL SHOP DRAWINGS SHALL INDICATE PLACING DRAW-INGS FOR TEMPLATES TO SET DOWELS. REINFORCING CASES SHALL BE ADEQUATELY SUPPORTED TO PROVIDE CLEARANCES INDICATED ON THE DRAWINGS.
- 9. CASING MAY BE REQUIRED FOR ALL PIERS.

BUILDING PAD PREPARATION AND SLAB-ON-GRADE NOTES

- 1. THE BUILDING PAD AREA SHALL BE STRIPPED OF ALL SURFACE DEBRIS AND ORGANIC MATERIALS. EXCAVATE THE BUILDING PAD DOWN TO THE REQUIRED SUBGRADE ELEVATION (61165'), DISPOSE OF THE STRIPPINGS.
- 2. ALL CLEARED SURFACES SHALL PROOF-ROLLED TO DETECT ANY SOFT SPOTS WHICH SHALL BE TREATED THE SAME AS THE SUBGRADE. THE SUBGRADE SOILS SHALL BE SCARIFIED, WATERED AS REQUIRED AND RECOMPACTED TO BETWEEN 95 AND 105 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR) AT A MOISTURE CONTENT BETWEEN OPTIMUM AND FIVE (5) PERCENT ABOVE THE OPTIMUM MOISTURE VALUE.
- 3. THE SELECT FILL SHALL BE A MINIMUM OF 5'-0 DEEP, AS MEASURED FROM THE BOTTOM OF THE SAND CUSHION TO THE TOP OF THE SUB-GRADE, FURTHERMORE, THE SELECT FILL SHALL HAVE A LIQUID LIMIT OF 30 OR LESS, A PLASTICITY INDEX BETWEEN 4 AND 15 PERCENT AND 15 TO 45 PERCENT PASSING A NO. 200 U.S. SIEVE, FILL MATERIAL SHALL BE SPREAD IN EIGHT (8) INCH LIFTS AND EACH LIFT SHALL BE COMPACTED TO BETWEEN 95 AND 105 PERCENT OF THE MAXIMUM DRY DENSITY ACCORDING TO ASTM D-698 (STANDARD PROCTOR) AT OPTIMUM TO +3 PERCENTAGE POINTS ABOVE THE OPTIMUM MOISTURE CONTENT.

BUILDING PAD PREPARATION AND SLAB-ON-GRADE NOTES, CONT.

- 4. A REPRESENTATIVE OF THE TESTING LABORATORY IS TO BE PRESENT DURING THE SITE PREPARATION FOR THE BUILDING PAD. ALL FILL MATERIAL AND PLACEMENT OF FILL MATERIAL IS SUBJECT TO AP-PROVAL OF THE TESTING LABORATORY.
- 5. THE SLAB SHALL BE SAW CUT AS INDICATED IN THE DRAWINGS PRIOR TO THE CONCRETE REACHING THE POINT THAT SHRINKAGE CRACKS
- 6. THE BUILDING PAD SHALL BE CHECKED JUST PRIOR TO POURING THE FLOOR SLAB FOR THE PROPER MOISTURE - DENSITY RELATIONSHIP. A MAXIMUM OF ONE (1) TEST PER 3000 SQUARE FEET SHALL BE OB-SERVED AND SHOULD THE RESULTS NOT MEET THE LIMITS OF NOTE 2 ABOVE, THE CONTRACTOR SHALL IMMEDIATELY CORRECT THE SITUA-
- 1. THE TILT-UP WALL PANELS THAT RETAIN MORE THAN 4'-0 OF FILL MATERIAL SHALL REMAIN FULLY BRACED AT THE FLOOR LINE UNTIL THE FLOOR SLAB IS CONNECTED TO THE PANEL.

CONCRETE NOTES

- 1. STRUCTURAL CONCRETE SHALL CONFORM TO THE LATEST BUILDING CODE FOR REINFORCED CONCRETE OF THE AMERICAN CONCRETE INSTITUTE (A.C.I. 318).
- 2. CONCRETE IN THE FOLLOWING AREAS SHALL HAVE SAND AND GRAVEL OR CRUSHED STONE AGGREGATES, TYPE I OR III PORTLAND CEMENT. AND THE DESIGNATED MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS. NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33.

DRILLED PIERS, GRADE BEAMS, SLABS ON GRADE, TILT-UP WALLS, POURED IN PLACE COLUMNS, PILASTERS, SLABS ON PERMANENT METAL DECK _______ 3000 PSI

- 3. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318.
- 4. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS NOTED BELOW. SEE ACI 318 FOR CONDITIONS NOT NOTED.

DRILLED PIERS AND OTHER CONCRETE PLACED AGAINST SOIL _____ 3 INCHES

PILASTERS _____ 15 INCHES

GRADE BEAMS ______ 2 INCHES & TOP 2 INCHES # SIDES 3 INCHES & BOT.

SLAB ON PERMANENT METAL DECK _____ EQUAL DIST, FROM TOP OF CONCRETE TO TOP OF DECK

SLAB ON GRADE ______ 3 INCHES & BOTT.

5. MAXIMUM NOMINAL COARSE AGGREGATE SIZES FOR CONCRETE IN THE FOLLOWING AREAS SHALL BE:

DRILLED PIERS, GRADE BEAMS, COLUMNS PILASTERS, TILT-UP WALLS _____ 15 INCHES OR LESS

SLAB ON GRADE, SLAB ON PERMANENT METAL DECK ______ 3/4 INCHES

6. CONCRETE SLUMPS SHALL BE AS FOLLOWS

SLAB ON PERMANENT METAL DECK . 4 INCHES MAX., 3 INCHES MIN.

ALL OTHER CONCRETE ____ 4 INCHES MAX., 2 INCHES MIN.

- 1. HORIZONTAL OR NEARLY HORIZONTAL JOINTS SHALL BE PREPARED BY ROUGHENING THE SURFACE IN AN APPROVED MANNER SO THAT THE AG-GREGATE IS EXPOSED UNIFORMLY, LEAVING NO LAITANCE, LOOSENED PARTICLES OR DAMAGED CONCRETE.
- 8. ALL GRADE BEAMS SHALL BE FORMED ON SIDES.
- 9. FIBERBOARD VOID FORMS UNDER GRADE BEAMS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER
- 10. CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED AS FOL-LOWS:

3/4 INCH NOMINAL AGGREGATE SIZE _____ 4% TO 8% 1 INCH NOMINAL AGGREGATE SIZE _____ 35% TO 65% 1 1/2 INCH NOMINAL AGGREGATE SIZE ____ 3% TO 6%

USE OF AIR-ENTRAINMENT, AND CORRESPONDING REDUCTION OF THE WATER/CEMENT RATIO, MUST BE NOTED ON THE MIX DESIGN. CON-TRACTOR SHALL SUBMIT MIX DESIGN TO ARCHITECT FOR REVIEW.

11. USE OF ACCELERATING OR SET-RETARDING ADMIXTURES REQUIRES PRIOR APPROVAL OF THE ARCHITECT. USE OF CALCIUM CHLORIDE ON GALVANIZED METAL DECK WILL NOT BE PERMITTED.

REINFORCING STEEL NOTES

- 1. ALL STEEL REINFORCING BARS SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60, ALL REINFORCEMENT SPECIFICALLY NOTED ON THE DRAWINGS AS BEING WELDED SHALL BE DOMESTIC STEEL CONFORMING TO ASTM A615, GRADE 40 OR DOMESTIC STEEL CONFORMING TO ASTM A706.
- 2. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- 3. DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI 315.
- 4. REINFORCING BARS MAY BE SPLICED ONLY AS SHOWN ON THE DRAW-
- 5. WELDED CONSTRUCTION SHALL CONFORM TO THE AMERICAN WELDING SOCIETY 'REINFORCING STEEL WELDING CODE', DI2.1,

STRUCTURAL STEEL NOTES

- . STRUCTURAL STEEL SHALL CONFORM TO THE A.I.S.C. SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS:, LATEST EDITION.
- 2. WELDED CONSTRUCTION SHALL CONFORM TO THE AMERICAN WELDING SOCIETY 'STRUCTURAL WELDING CODE'. ELECTRODES FOR FIELD AND SHOP WELDS SHALL BE ETØXX.
- 3. BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIRE-MENTS OF THE 'SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS' APPROVED BY THE RESEARCH COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS OF THE ENGINEERING FOUNDATION. UNLESS NOTED OTHERWISE, CONNECTION BOLTS SHALL CONFORM TO ASTM A325.
- 4. IN GENERAL, IT IS THE INTENT OF THESE PLANS AND SPECIFICA. TIONS THAT ALL SHOP CONNECTIONS BE WELDED OR BOLTED AND ALL FIELD CONNECTIONS BE BOLTED EXCEPT WHERE NOTED ON THE DRAW-INGS OTHERWISE.
- 5. ALL STRUCTURAL STEEL DETAILS AND CONNECTIONS SHALL CONFORM TO THE STANDARDS OF THE ALS.C.
- 6. ALL STEEL BEAM CONNECTIONS SHALL BE DESIGNED FOR THE END REACTION SHOWN ON THE STRUCTURAL DRAWINGS, IN NO CASE SHALL CONNECTION CAPACITY BE LESS THAN 6 KIPS.
- 7. BOLTED CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE SELECTED FROM THE A.I.S.C. MANUAL
- 8. ALL STRUCTURAL STEEL SHAPES, PLATES, ETC., SHALL CONFORM TO ASTM A36, UNLESS NOTED OTHERWISE,
- 9. ALL STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500, GRADE 'B', (Fy = 460 KSI).
- 10. ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
- 11. STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS.
- 12. ALL STEEL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.
- 13. VERIFY THE EXACT SIZE AND LOCATION OF ALL ROOF OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF MATERIALS.
- 14. TEMPORARY CONSTRUCTION BRACING OF THE STRUCTURAL STEEL FRAME SHALL REMAIN IN PLACE UNTIL AFTER THE CONCRETE FLOORS AND METAL ROOF DECKS HAVE BEEN COMPLETED.
- 15. AFTER INSPECTION AND APPROVAL OF ALL STRUCTURAL STEEL, AND BEFORE LEAVING THE SHOP, THOROUGHLY CLEAN STEEL OF ALL LOOSE SCALE, RUST, SPOTTY SLAG OR FLUX DEPOSIT, OIL, DIRT, AND OTHER FOREIGN MATTER APPLY ONE (1) SHOP COAT OF GREY PRIMER TO ALL SURFACES OF STEEL THAT DO NOT RECEIVE SPRAY-ON FIRE PROOFING. AFTER ERECTION, TOUCH UP FIELD CONNECTIONS AND ABRADED PLACES WITH THE SAME TYPE PAINT FOR THE SHOP COAT. PROVIDED THE STEEL IS NOT TO BE SPRAYED WITH FIRE PROOFING.

TILT-UP CONCRETE PANEL NOTES

- 1. CONCRETE AND REINFORCEMENT SHALL MEET ALL REQUIREMENTS IN GENERAL NOTES
- 2. PROPER CHAIRS OR BOLSTERS SHALL BE USED TO SUPPORT REIN-FORCEMENT AT LOCATIONS NOTED BELOW.
- 3. FOR 7 1/4" THICK PANELS (SEE PLAN FOR LOCATION): UNLESS NOTED OTHERWISE, THE CENTER OF THE VERTICAL REIN-FORCEMENT SHALL BE LOCATED AT THE CENTER OF THE CONCRETE PANEL AND HORIZONTAL REINFORCEMENT SHALL BE LOCATED ON THE INSIDE FACE. TYPICAL PANEL REINFORCEMENT SHALL CONSIST OF *4 # 12' O.C. HORIZONTAL AND "4 # 12' O.C. VERTICAL.

FOR 8 1/2' THICK PANELS (SEE PLAN FOR LOCATION): TYPICAL PANEL REINFORCEMENT SHALL CONSIST OF *4 # 12' O.C. HORIZONTAL AND #4 # 10' O.C. VERTICAL, CENTERED.

- 4. WHERE A NUMBER OF BARS ARE SHOWN, THEY SHALL BE EQUALLY
- 5. ALL PANELS SHALL REMAIN BRACED UNTIL SHEAR CONNECTIONS, BAR JOIST AND ROOF DECK ARE INSTALLED
- 6. LIFTING INSERTS, BRACE INSERTS AND ADDITIONAL REINFORCING DUE TO THE LIFTING OF ALL PANELS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- 1. SUBMIT ALL SHOP DRAWINGS TO THE ENGINEER FOR FINAL APPROVAL
- 8. REFERENCE ARCHITECTURAL DRAWINGS FOR ALL FINISHES.

STEEL JOIST AND JOIST GIRDER NOTES

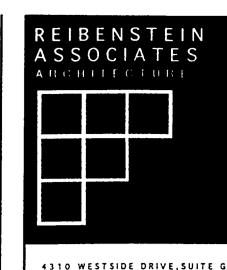
- 1. STEEL JOIST AND JOIST GIRDER MANUFACTURER SHALL BE A MEMBER OF THE STEEL JOIST INSTITUTE.
- 2. STEEL JOIST AND JOIST GIRDER SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS.
- 3. ALL HANGERS TO SUPPORT MECHANICAL EQUIPMENT, ETC., TO BE SUPPORTED BY THE BOTTOM CHORD OF STEEL JOISTS SHALL BE LO-CATED AT THE PANEL POINTS OF THE JOISTS.
- 4. JOIST BRIDGING SHALL BE FURNISHED AND INSTALLED TO MEET THE DESIGN AND SPACING REQUIREMENTS OF THE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS FOR OPEN WEB JOIST. USE HORIZONTAL BRIDGING ON SHORT SPAN JOIST.
- 5. AFTER INSPECTION AND APPROVAL OF ALL JOISTS AND BEFORE LEAVING THE SHOP, THOROUGHLY CLEAN STEEL OF ALL LOOSE SCALE, RUST, SPOTTY SLAG OR FLUX DEPOSIT, OIL, DIRT, AND OTHER FOREIGN MATTER APPLY ONE (1) SHOP COAT OF GREY PRIMER TO ALL SURFACES. AFTER ERECTION, TOUCH UP FIELD CONNECTIONS AND ABRADED PLACES WITH THE SAME TYPE PAINT FOR THE SHOP COAT.

METAL FLOOR DECK NOTES

- SLABS ON STEEL JOISTS SHALL BE CONCRETE PLACED ON CORRUGATED. GALVANIZED METAL DECK AS SPECIFIED. STEEL DECK SHALL BE CONTINUOUS OVER THREE (3) OR MORE SPANS, REINFORCING SHALL BE WELDED WIRE FABRIC LAPPED AT ONE MESH SPLICES. PROVIDE FABRIC IN FLAT SHEETS.
- PUDDLE WELDS SHALL BE 5/8 INCHES DIAMETER FULL FUSION (MINIMUM), ALL WELDS SHALL BE MADE WITH AWS, E60 ELECTRODES AND METAL AROUND WELDS SHALL BE COMPLETELY INTACT AFTER WELDING.

METAL ROOF DECK NOTES

- ROOF DECK OVER OPEN WEB STEEL JOISTS SHALL BE CORRUGATED AND PAINTED METAL DECK AS SHOWN ON THE DRAWINGS. WELD DECK TO SUPPORTING MEMBERS ACCORDING TO MANUFACTURER'S RECOMMENDA-TIONS. STEEL DECK SHALL HAVE A MINIMUM DESIGN DIAPHRAGM. SHEAR CAPACITY OF 2200 PLF.
- 2. PUDDLE WELDS SHALL BE 5/8 INCHES DIAMETER FULL FUSION (MINIMUM). ALL WELDS SHALL BE MADE WITH AWS, E60 ELECTRODES AND METAL AROUND WELDS SHALL BE COMPLETELY INTACT AFTER WELDING.



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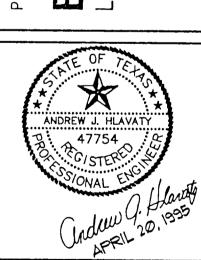
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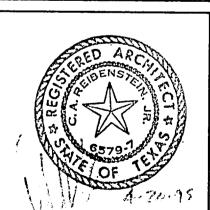
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