

PLEASE REFER TO TOWER DRAWINGS PROVIDED BY VALMONT FOR CONSTRUCTION OF TOWER AND TOWER FOUNDATIONS

PLEASE REFER TO SHELTER DRAWINGS PROVIDED BY THERMOBOND BUILDINGS FOR CONSTRUCTION OF SHELTER

LOADS:

WIND LOAD = 90 MPH WIND SPEED WITH 3 SECOND GUST, EXPOSURE C. WIND IMPORTANCE FACTOR, I = 1.15 OCCUPANCY CATEGORY = IV DESIGN WIND PRESSURE (COMPONENT AND CLADDING) = 18.3 PSF MAPPED SPECTRAL RESPONSE ACCELERATIONS, SS = 27.1%g ; S1 = 7.9%g DESIGN SPECTRAL ACCELERATION PARAMETERS, SDS = 28.5%g ; SD1 = 12.6%g SEISMIC DESIGN CATEGORY = C, SEISMIC IMPORTANCE FACTOR = 1.0 SOIL SITE CLASS = D.

- A. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, TOOLS, TRANSPORTATION AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN. B. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT, WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, EXISTING FIELD CONDITIONS AND CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER. C. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK AND ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS. D. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, SUBCONTRACTORS AND THEIR PRODUCT, PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT TO MEET ALL CITY OF MESA SPECIFICATIONS AND STANDARDS. E. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR CITY ORDINANCES TAKE PRECEDENCE. F. ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL OR UTILITY COMPANY SPECIFICATIONS, AS WELL AS LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. G. GENERAL CONTRACTOR SHALL KEEP A COMPLETE FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS, SPECIFICATIONS AND ADDENDUM'S OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT AT ALL TIMES. THIS SET SHOULD BE KEPT UPDATED ON A DAILY BASES. H. THE STRUCTURAL COMPONENTS OF THIS PROJECT SITE/FACILITY ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE. I. DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK. J. SEAL ANY PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT AS REQUIRED BY CITY FIRE CODE. K. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION. L. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY. M. CONTRACTOR SHALL SEE TO IT THAT GENERAL WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH AS WELL AS REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY ON A DAILY BASIS. N. THE ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) CITY OF MESA OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL. O. FOR CODE COMPLIANCE INFORMATION, CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE CITIES/COUNTY CURRENT CODES. P. PRIOR TO PLACEMENT OF TOWER FOUNDATION/ANCHOR BOLTS THE CONTRACTOR SHALL VERIFY THAT THE AZIMUTH AND DIMENSIONS SHOWN ON THE PLANS MATCH ACTUAL FIELD CONDITIONS.

CODE COMPLIANCE:

CODE: ALL WORK DONE UNDER THIS CONTRACT SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE OR LOCAL CITY AND COUNTY BUILDING CODES, WHICHEVER APPLIES.

PRECEDENCE: UNLESS OTHERWISE SHOWN OR SPECIFIED, THE FOLLOWING GENERAL NOTES SHALL APPLY. INFORMATION ON THESE DRAWINGS SHALL HAVE THE FOLLOWING PRECEDENCE:

- A. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS. B. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. C. MATERIAL NOTES AND SPECIFICATIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE SPECIFICATIONS. 1. GENERAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS. 2. SHORING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ALL TEMPORARY BRACING AND SHORING TO INSURE THE SAFETY OF THE WORK UNTIL IT IS IN IT'S COMPLETED FORM. THIS INCLUDES UNDERPINNING EXISTING FOOTING WHERE APPLICABLE. 3. SAFETY: THESE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN OR OTHER PERSONS DURING CONSTRUCTION PER OSHA AND OTHER APPLICABLE SAFETY REGULATIONS, INCLUDING ALL SHORING, BRACING AND UNDERPINNING. 4. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY CITY OF MESA OF ANY CONFLICTS FOUND BY THE CONTRACTOR IN WRITING OF ANY CONSTRUCTION ISSUES OR DEVIATIONS. THIS WOULD INCLUDE BUT NOT LIMITED TO GRADING, CURRENT SITE CONDITIONS, AS-BUILT INFORMATION AND/OR ANY UNSAFE SITE ISSUES.

GENERAL CONSTRUCTION NOTES

Q. PAINTING AND FINISHES:

PRODUCT LINE - SHERWIN WILLIAMS

Table with 2 columns: Material/Finish and Product Line. Includes items like COAXIAL JUMPER CABLES, RAW STEEL, GALVANIZED METAL, STAINLESS STEEL, PRE-PRIMED STEEL, ALUMINUM/COPPER, CONCRETE MASONRY (CMU NEW), CONCRETE-STUCCO EXISTING STUCCO, WOOD, and NOTES.

- 1. ANY CHANGES IN THE INFORMATION ABOVE MUST BE APPROVED BY THE CITY OF MESA CONSTRUCTION MANAGER. 2. ALL COLORS AND TEXTURES MUST BE VERIFIED WITH THE ZONING APPLICATION WHEN APPLICABLE.

R. CONCRETE

- 1. STRENGTH: CONCRETE FOR THE PROJECT SHALL HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AT AGE OF 28 DAYS. USE 4000 PSI GRADE CONCRETE UNLESS NOTED OTHERWISE.

Table with 5 columns: LOCATION, STRENGTH, WEIGHT, SLUMP, ADMIXTURE. Includes rows for SLAB ON GRADE, CMU WALL FOUNDATION, TOWER FOUNDATION, and CAISSONS - SLABS 5" THICK & GREATER.

- 2. INSPECTION: FOR ALL CONCRETE WORK OF GRADE 3000 PSI OR HIGHER TESTING SHALL INCLUDE SLUMP, AIR ENTRAINMENT, TEMPERATURE AND TEST CYLINDERS. A TOTAL OF FOUR CYLINDERS SHALL BE TAKEN DURING EACH POUR OR FOR EACH 50 YARDS IF OVER 50 YARDS. THE FIRST CYLINDERS SHALL BE BROKEN AT 3 DAYS, A SECOND AT 7 DAYS AND A THIRD AT 28 DAYS. THE FOURTH SHALL BE KEPT FOR FUTURE USE IF NECESSARY. 3. REBAR GRADES: REINFORCING STEEL SHALL BE CLEAN DEFORMED BARS CONFORMING TO ASTM A615 (GRADE 60) FOR ALL BARS 4. CEMENT: SHALL BE TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150 5. AGGREGATE: USED IN THE CONCRETE SHALL CONFORM TO ASTM C-33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. THE MAXIMUM SIZE AGGREGATE IN CONCRETE WORK SHALL BE FOLLOWING: A. CAISSONS - SLABS 5" THICK & GREATER..... 3/4"ASTM 6467 6. WATER: SHALL BE CLEAN AND FREE FROM DELETERIOUS AMOUNTS OF ACIDS, ALKALIS, ORGANIC MATERIAL AND SHALL BE SUITABLE FOR HUMAN CONSUMPTION. 7. MIXING: PREPARATION OF CONCRETE SHALL CONFORM TO ASTM C-94 NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY A TESTING AGENCY. 8. SEGREGATION OF AGGREGATES: CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS, COLUMNS, CAISSON AND DROP CAPITALS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE HOPPERS, CHUTES, TRUNKS OF PUMP HOSE SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 5 FEET. 9. SPLICES: SPLICES OF REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 DIAMETERS AND SECURELY WIRED TOGETHER. SPLICES OF ADJACENT REINFORCING BARS SHALL BE STAGGERED WHEREVER POSSIBLE. 10. REBAR CLEARANCE: MINIMUM COVERAGE FOR BEAMS, WALLS, GIRDS, AND COLUMNS SHALL BE TO FACE OF STIRRUPS OR TIES, UNLESS OTHERWISE NOTED, CONCRETE COVERAGE FOR REINFORCING BARS TO FACE OR BAR SHALL BE AS FOLLOWS: A. CONCRETE IN CONTACT WITH EARTH, UNFORMED 3" B. CONCRETE IN CONTACT WITH EARTH, FORMED 2" C. WALL, EXTERIOR FACE 1 - 1/2" D. WALL, INTERIOR FACE 1" E. STRUCTURAL SLABS 3/4" F. BEAMS, WALLS, AND COLUMNS 1 - 1/2" 11. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND UNDER-FLOOR DUCTS, ETC. 12. FLY ASH - IF PERMITTED BY OWNER THEN IT SHALL BE LIMITED TO 20% OF CEMENTITIOUS MATERIALS AND SHALL HAVE A REPLACEMENT FACTOR OF 1.2 RELATIVE TO CEMENT REPLACED.

S. EXISTING CONSTRUCTION

- 1. THESE PLANS, ELEVATIONS, SECTIONS, AND DETAILS ARE BASED UPON FIELD OBSERVATIONS AND A REVIEW OF EXISTING DRAWINGS AVAILABLE. EXACT DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR AS NECESSARY FOR FABRICATION. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE PROJECT ENGINEER FOR TELESAN NETWORK SERVICES.

T. FOUNDATIONS:

REFER TO DRAFT GEOTECHNICAL REPORT BY WESTERN TECHNOLOGIES INC., DATED 4/10/2010. IN ACCORDANCE WITH THE ABOVE REPORT BOTTOM OF WALL FOOTING TO BE 1.5' MINIMUM BELOW LOWEST ADJACENT FINISHED GRADE. FINISHED GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET FOR PERIMETER FOOTINGS. DESIGN SOIL BEARING VALUE FOR WALL FOOTING = 1500 PSF FOR ALL OTHER REQUIREMENTS AND FOR FOUNDATION BASE PREPARATION REFER SOILS REPORT.

U. MASONRY:

HOLLOW CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE 1, F'M = 1,500 PSI, RUNNING BOND, MORTAR TYPE S, 1,800 PSI. GROUT 2,000 PSI. MECHANICALLY VIBRATE GROUT IN VERTICAL SPACES IMMEDIATELY AFTER POURING AND AGAIN ABOUT 5 MINUTES LATER. PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 24'-0". CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS WITHIN 24" OF CONCENTRATED POINTS OF BEARING OR JAMBS OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID. LAP SPLICES SHALL BE AS FOLLOWS:

Table with 3 columns: BAR PLACEMENT, #4, #5, #6. Includes rows for SINGLE BAR PER CELL CENTERED (INCHES) and DOUBLE BAR PER CELL OR SINGLE BAR AT EDGE (INCHES).

V. STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE ASTM A992 (FY = 50 KSI). ALL CHANNELS, ANGLES, AND PLATES SHALL BE ASTM A36 (FY = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (FY = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (FY = 35 KSI). (NOTE: ALL PLATE IN MOMENT CONNECTIONS, BRACED FRAMES AND WHERE OTHERWISE NOTED SHALL BE FY = 50 KSI STEEL). ALL TUBE STEEL SHALL BE ASTM A500 (FY = 46 KSI). ALL BOLTS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL CONSTRUCTION PER LATEST AISC HANDBOOK: ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL SECTIONS. ALL HIGH STRENGTH BOLTING SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY. 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 DONE BY E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. FOR GRADE 60 REINFORCING BARS, USE E90 SERIES. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS. THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS; THE CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. ALL FULL (COMPLETE) PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY. WHEN STRUCTURAL STEEL IS FURNISHED TO A SPECIFIED MINIMUM YIELD POINT GREATER THAN 36 KSI, THE ASTM OR OTHER SPECIFICATION DESIGNATION SHALL BE INCLUDED NEAR THE ERECTION MARK ON EACH SHIPPING ASSEMBLY OR IMPORTANT CONSTRUCTION COMPONENT, OVER ANY SHOP COAT OF PAINT, PRIOR TO SHIPMENT FROM THE FABRICATOR'S PLANT.

ASTM STANDARDS

ASTM A153 FOR BOLTS AND NUTS ASTM A123 FOR STEEL SHAPES

W. EXPANSION BOLTS:

CONTRACTOR TO USE STAINLESS STEEL KWIK BOLT TZ TYPE EXPANSION ANCHOR PROVIDED BY HILTI WHICH HAS ICC-ESR REPORT OR APPROVED EQUAL ALTERNATE PRODUCT.

FOR MINIMUM BOLT EMBEDMENT LENGTH SEE DETAIL. CONTRACTOR SHALL SUBMIT MANUFACTURER'S SIZE AND STRENGTH DATA TO ENGINEER PRIOR TO CONSTRUCTION. INSTALL ALL BOLTS AS OUTLINED IN MANUFACTURER'S SPECIFICATIONS, UTILIZING PROPER SIZE AND TYPE OF DRILL, CLEANING HOLE, DRIVING AND TIGHTENING BOLT.

X. EPOXY ANCHORS IN MASONRY:

INJECTABLE ADHESIVE SHALL BE USED FOR INSTALLATION OF REINFORCING STEEL DOWELS OR THREADED ANCHOR RODS AND INSERTS INTO NEW OR EXISTING CONCRETE OR SOLID GROUTED CONCRETE MASONRY UNITS WHERE SPECIFIED ON PLANS. ADHESIVE SHALL BE FURNISHED IN SIDE BY SIDE PACKS WHICH KEEP COMPONENT A AND COMPONENT B SEPARATE. USE ONLY INJECTION TOOLS AND STATIC MIXING NOZZLES RECOMMENDED BY MANUFACTURER. MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED. INJECTION ADHESIVE SHALL BE FORMULATED TO INCLUDE RESIN, HARDENER, CEMENT AND WATER TO PROVIDE OPTIMAL CURING SPEED AS WELL AS HIGH STRENGTH AND STIFFNESS. MAXIMUM RECOMMENDED CURING TIME AT 68 DEGREES FAHRENHEIT SHALL BE 45 MINUTES. CLEAN HOLE THOROUGHLY WITH A WIRE BRUSH AND COMPRESSED AIR PRIOR TO PLACEMENT OF ADHESIVE.

INJECTION ADHESIVE SHALL BE HIT HY-150, AS FURNISHED BY HILTI, INC., TULSA, OK, WITH APPROVED ICC-ESR REPORT OR BETTER.

NOTE: ADHESIVE ANCHORS ARE NOT APPROVED FOR USE IN FIRE - RATED CONSTRUCTION. CONTACT THE STRUCTURAL ENGINEER FOR ALTERNATE ANCHORS.

Y. EARTHWORK:

STRUCTURAL FILL:

ALL FILL PLACED TO SUPPORT SLABS ON GRADE, BEHIND PERMANENT WALLS, AND AROUND ALL DRAINS SHALL CONSIST OF WELL GRADED, GRANULAR MATERIAL PER THE SPECIFICATIONS. SOILS FOR STRUCTURAL FILL AS RECOMMENDED IN THE GEOTECHNICAL REPORT. STRUCTURAL FILL SHALL BE PLACED ON SOUND NATIVE MATERIAL. PROOF-ROLL CUT AREAS WHICH PROVIDE SUPPORT FOR PERMANENT STRUCTURES. AREAS WHICH ARE EXCESSIVELY YIELDING, AS DETERMINED BY THE CONTINUOUS OBSERVATION OF THE GEOTECHNICAL ENGINEER, SHALL BE OVEREXCAVATED AND REPLACED WITH STRUCTURAL FILL. STRUCTURAL FILL SHALL BE PLACED PER THE SPECIFICATION.

LATERAL PRESSURE ON SUBGRADE WALLS:

THE DESIGN PRESSURES FOR SUBGRADE WALLS ARE BASED ON A "DRAINED" CONDITION. SEE ALL ENGINEERING DRAWINGS FOR SUBGRADE DRAINAGE SYSTEM. SEE GEOTECHNICAL REPORT FOR COMPACTION REQUIREMENTS AT SUBGRADE WALLS. SUBGRADE WALLS AND SUPPORTING SLABS SHALL HAVE ATTAINED THEIR FULL CONCRETE STRENGTH BEFORE PLACING ANY BACKFILL. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACES FOR WALLS IF BACKFILL IS PLACED BEFORE WALLS AND SLABS ACHIEVE FULL CONCRETE STRENGTH.

Z. SHOP DRAWINGS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON HIS REVIEW.

VERIFY ALL DIMENSIONS WITH ARCHITECT AND ALL FINISHED GRADE WITH CIVIL DRAWINGS.

ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE CLOUDED BY MANUFACTURER OR FABRICATOR. ANY OF THE FOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY.

THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.

THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY.

REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

Professional Engineer Seal for Sandeep Anand Mane, State of Arizona, License No. 41949, Expires 3/31/11. Includes contact information for TeleSpan Engineering Department, City of Mesa, Thompson Peak Communication Tower, General Construction Notes, Drawing 2 of 33, and Catalog Number A-139257.