# **GENERAL NOTES**

- PRIOR TO CONSTRUCTION, VERIFY STRUCTURAL ELEVATION AND DIMENSIONS WITH OTHER PROJECT DRAWINGS AND COORDINATE LOCATIONS OF OPENING AND SLEEVES THROUGHOUT THE STRUCTURE, SLAB DEPRESSIONS, FLOOR DRAINS, INSERTS AND OTHER RELATED ITEMS. BEFORE BEGINNING CONSTRUCTION, NOTIFY THE ARCHITECT OF DISCREPANCIES OR CONFLICTS FOUND IN THE DRAWINGS AND/OR FIELD DIMENSIONS. THE ENGINEER SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE OR PROCEDURES FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACTOR, SCHOTH NEW
- GENERAL CONTRACTOR SHALL CHECK WORK IN ACCOUNT IN ACCOUNT IN ECONTRACTOR SHALL CHECK WORK AND VERIFY ALL DIMENSIONS, GRADE CONDITIONS, (BOTH NEW AND EXISTING) REPORTING ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY PHASE OF THE WORK AS HE WILL BE RESPONSIBLE FOR ALL WORK FITTING AS INTENDED BY THE DRAWINGS AND SPECIFICATIONS.
- EXISTING STRUCTURES ARE SHOWN ON THE DRAWINGS FOR CLARITY ONLY. VERIFY ALL DIMENSIONS, ELEVATIONS AND TYPE OF CONSTRUCTION OF THOSE STRUCTURES AND NOTIFY THE ARCHITECT 5. BEFORE BEGINNING NEW CONSTRUCTION OF ANY INTERFERENCES AND/OR DISCREPANCIES THAT MIGHT
- EXIST. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND EXCEPT WHERE SPECIFICALLY SHOWN DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES AND SEQUENCE. THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE. DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONES ARE MADE, THE CONTRACTOR MUST PROVIDE TEMPORARY BRACING TO BRACE THE STRUCTURE IN ALL DIRECTIONS. ALL DETAILS ARE TYPICAL, INCORPORATED INTO PROJECT AT APPROPRIATE LOCATIONS, WHETHER SPECIFICALLY INDICATED OR NOT. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE
- IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.

- TH & SILVE SUMLAR WORK.
   ALL CONSTRUCTION, INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE PROVISIONS OF THE 2021 IBC AND STANDARDS REFERENCED THEREIN.
   ALL ASTM STANDARDS LISTED HEREIN, SHALL BE AS REFERENCED IN THE LATEST ISSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
   FRAME FOR OPENINGS THROUGH FLOOR, ROOFS AND WALLS AS PER DETAILS. DO NOT INTERRUPT FRAMING MEMBERS FOR OPENINGS EXCEPT WHERE SO INDICATED ON DRAWINGS.
   SEE MECHANICAL DRAWINGS FOR EXACT LOCATION AND SIZES OF SMALL MECHANICAL OPENINGS, SLEEVES, ETC. NOT SHOWN ON THE STRUCTURAL DRAWINGS.
   REFER TO ARCHITECTURAL DRAWINGS FOR ALL FINISHES, DIMENSIONS OF SLAB DROP CHAMFERS, ETC. THE CONTRACTOR SHALL PROVIDE AND MAILTAIN ADEQUATE ERECTION SHORING AND RACING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION.

## DESIGN CRITERIA

CONSTRUCTION.

WIND LOADS FOR e=20% WITHOUT WINDSCREEN ASCE 7-16 (3-SEC GUST) = 146 MPH STRUCTURE CLASSIFICATION CATEGORY II EXPOSURE CATEGORY D

WIND LOADS FOR e=100% WITH WINDSCREEN ASCE 7-16 (3-SEC GUST) = 90 MPH STRUCTURE CLASSIFICATION CATEGORY II EXPOSURE CATEGORY D

CONCRETE FOR PIER 4000 PSI WITH MAXIMUM AGGREGATE SIZE 1".

- APPLICABLE CODES 2.
  - INTERNATIONAL BUILDING CODE 2021 WITH LATEST TEXAS REVISIONS INTERMANDAL BUILDING CODE 2021 WITH DALEST FLASS REVISIONS ACC 7-16, MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES ACI 318-14, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE ASC STEEL CONSTRUCTION MANUAL, 14TH EDITION STRUCTURAL WELDING CODE, AWS D1.1, D1.2, D1.3, D1.4, LATEST EDITIONS

# SHOP DRAWINGS AND SUBMITTALS

- SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL ITEMS AND SUBMITTED FOR REVIEW BY THE ENGINEER. CONTRACT DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS. ALL ITEMS DEVIATING FROM THE CONTRACT DRAWINGS OR FROM PREVIOUSLY SUBMITTED SHOP
- ALL TEMS DEVATING FROM THE CONTRACT DRAWINGS OR FROM FREVIOUSLE SUBMITTED STOF DRAWINGS SHALL BE CLOUDED. THE CONTRACTOR SHALL REVIEW SHOP DRAWINGS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND SHALL CERTIFY THAT HE HAS DONE SO BY A STAMP NOTING THAT THE DRAWINGS HAVE BEEN "APROVED" AND WHICH BEARS THE SIGNATURE (OR INITIALS) OF AN AUTHORIZED REPRESENTATIVE OF THE CONTRACTOR AND THE DATE. SUBMITTALS WHICH DO NOT REFLECT THE CONTRACTORS APPROVAL, SIGNATURE AND DATE WILL BE RETURNED WITHOUT REVIEW. THE CONTRACTOR SHALL BE RETURNED WITHOUT REVIEW.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELAYS CAUSED BY REJECTION OF INADEQUATE SHOP 3. DRAWINGS
- WHERE REVIEW AND RETURN OF SHOP DRAWINGS IS REQUIRED OR REQUESTED, THE ENGINEER WILL REVIEW EACH SUBMITTAL AND, WHERE POSSIBLE, RETURN WITHIN 2 WEEKS OF RECEIPT. 4. 5.
- CORRECTIONS OR COMMENTS ON SHOP DRAWINGS OR MANUFACTURER'S DATA SHEETS DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE PLANS AND
- RELIEVE THE CONTRACTOR FROM COMPLANCE WITH REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. THE ENGINEER'S REVIEW IS FOR GENERAL CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRECTING ALL QUANTITES AND DIMENSIONS, SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION AND COORDINATING HIS WORK WITH THAT OF ALL OTHER CONTRACTORS. GENERAL CONTRACTOR SHALL SUBMIT TWO MAXIMUM COPIES. ENGINEER WILL REVIEW, COMMENT AND RETAIN ONE COPY OF EACH SUBMITTIAL AND TRANSFER COMMENTS ONTO THE REMAINING COPIES FOR DISTRIBUTION TO ARCHITECT, OWNER AND CONTRACTOR AND CONTRACTOR SUBMITTED WILL NOT HAVE COMMENTS TRANSFERRED TO THEM. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND DISTRIBUTING ENGINEERS COMMENTS TO THEIR SUBCONTRACTORS. 6.

### STRUCTURAL STEEL NOTES

- ALL HOT ROLLED STEEL SHALL CONFORM TO ASTM A6.
- ACT IN INCLED SHELL SHELL CONTOUN TO ASIM AD. ASTM SPECIFICATION AND GRADES SHALL BE CLEARLY MARKED ON EACH MEMBER. ALL FABRICATION AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AISC "MANUAL OF STEEL 3. CONSTRUCTION", LATEST EDITION.
- ALL STRUCTURAL STEEL DETAILS AND CONNECTIONS SHALL CONFORM TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". UNLESS NOTED OTHERWISE STEEL MEMBERS SHALL BE: 4. 5.

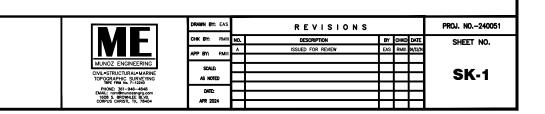
  - W-SHAPES SHALL CONFORM TO ASTM A992. ASTM A572 GRADE 50 MAY BE SUBSTITUTED A. FOR A992.
  - FOR A992.
    B. CHANNELS SHALL CONFORM TO ASTM (i) A36 (ii) A572, GRADE 50.
    C. ANGLES SHALL CONFORM TO ASTM A36.
    D. ROUND HOLLOW STRUCTURAL SHAPE MEMBERS SHALL CONFORM TO ASTM A500, GRADE B Fy=42 ksi OR GRADE C, Fy=46 ksi.
    E. SQUARE OR RECTANGULAR HOLLOW STRUCTURAL SHAPE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B, Fy=46ksi.
    F. STRUCTURAL STEEL PLATE SHALL CONFORM TO ASTM A36 OR ATSM A572 GRADE 50.
    G. ANY OTHER STEEL SHALL CONFORM TO ASTM A992 OR ASTM A572-50.
    CONTRACTOR SHALL PROVIDE NECESSARY BRACING DURING STEEL ERECTION.

- CONTRACTOR SHALL PROVIDE NECESSARY BRACING DURING STEEL ERECTION. STRUCTURAL STEEL SHALL BE NEW DOMESTIC STEEL AND SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS. ALL STEEL BEAMS SHALL BE FRECTED WITH NATURAL CAMBER UP. SUBMITTAL: PROVIDE DRAWINGS SHOWING DETAILS FOR FABRICATION AND SHOP ASSEMBLY OF MEMBERS, ERECTION PLANS AND DETAILS. INCLUDE DETAILS OF CONNECTIONS, CAMBER, WELD PROFILES AND SYZES AND SPACING. SHOP AND ERECTION DRAWINGS SHALL NOT BE MADE USING REPRODUCTIONS OF THE CONTRACT DRAWINGS. BOLTS SHALL BE "SNUG TIGHT" UNO. SHORT SLOTTED HOLES SHALL BE PERMITTED PROVIDED WASHERS ARE INSTALLED IN ACCORDANCE WITH AISC REQUIREMENTS. WASHERS SHALL BE HARDENED WHERE A325 BOLTS ARE UTILIZED. ALL EXTERIOR STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANIZED. ALL STRUCTURAL STEEL WHERE GALVANIZING HAS BEEN BURNED OFF OR OTHERWISE DAMAGED DURING TRANSPORTATION OR ERECTION SHALL BE REPARED COATING WITH "GALVACON" IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. 10.
- 12. 13.
- ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- ALL GALVANIZING SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR ZINC COATING (HOT DIP) ASTM DESIGNATION A-123, A-153, A-383 AND A-386 LATEST REVISIONS. (MINIMUM 2 0Z PER 15. SQUARE FOOT UNLESS SPECIFIED OTHERWISE). RETHREAD NUTS AFTER GALVANIZING IN ACCORDANCE WITH ASTM A-563.

#### STRUCTURAL STEEL CONNECTIONS

- ALL MAJOR CONNECTIONS SUCH AS BEAM TO BEAM, BEAM TO COLUMN, BRACING, ETC. SHALL BE WITH 3/4" DIAMETER A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE. BOLTS LESS THAN
- WITH 5/4 DIAMETER SHALL CONFORM TO ASTM A-307. UNFINISHED THREADED FASTENERS SHALL CONFORM TO ASTM A-307, GRADE A BOLTS LESS THAN SIA" DIAMETER SHALL CONFORM TO ASTM A-307, GRADE A BOLTS AND NUTS WITH HEXAGONAL HEADS. UNFINISHED THREADED FASTENERS SHALL BE USED ONLY FOR BOLTED CONNECTIONS OF SECONDARY FRAMING MEMBERS TO PRIMARY MEMBERS, FOR TEMPORARY BRACING TO FACILITATE ERECTION, AND FOR ANCHORAGE TO CONCRETE OR MASONRY CONSTRUCTION.
- WELDED CONSTRUCTION SHALL CONFORM TO AWS D-1.1, "STRUCTURAL WELDING CODE" LATEST EDITION. WELDING PROCESSES AND OPERATORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS STANDARD QUALIFICATIONS PROCEDURES
- 4.
- SHALDARD GORLINGSTRADED DONE WITH ETOXX ELECTRODES PER AWS AND ASC. ALL WELDED CONNECTIONS SHALL DE DONE WITH ETOXX ELECTRODES PER AWS AND ASC. ALL WELDED ALL CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED UNLESS NOTED OTHERWISE. ALL CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED UNLESS NOTED OTHERWISE. JOINTS SHALL BE SEAL WELDED, ALL FIELD WELDS SHALL BE CLEANED AND PAINTED AFTER 5. COMPLETION.
- ALL SHOP JOINTS SHALL BE SEAL WELDED IN ADDITION TO STRENGTH WELDS.
- ALL GUSSET PLATES SHALL BE 3/8" MINIMUM THICKNESS, UNLESS NOTED OTHERWISE. MINIMUM WELD SIZE SHALL BE 1/4" FILLET (UNO) ALL AROUND MEMBER (UNO). ANY HOLES REQUIRED FOR FIELD ERECTION SHALL BE DRILLED OR PUNCHED. NO BURNING SHALL BE 9.
- PERMITTED UNLESS APPROVED BY ENGINEER. ALL BEAM CONNECTIONS SHALL BE STANDARD AISC CLIP DOUBLE ANGLE CONNECTIONS WITH A MINIMUM CAPACITY OF 50% OF THE CAPACITY OF THE BEAM WITH UNIFORM LOAD UNLESS NOTED 10. OTHERWISE.
- ALL CLIP ANGLES ARE TO BE MINIMUM 5/16" THICKNESS, UNO. 11.
- The minimum number of Rows of Bolts shall be 1/6 of the beam depth with any fraction be rounded to the next higher number. 12.





BASEBALL BATTERS EYE WIND SCREEN

TAMUCC

