STRUCTURAL DESIGN CRITERIA

GENERAL NOTES

- VERIFY ALL DIMENSIONS BEFORE STARTING WORK. THE A/E AND CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES FOUND.
- SPECIFIC DETAILS AND NOTES TAKE PRECEDENCE OVER STANDARD DETAILS AND NOTES. WHERE CONFLICTS EXIST BETWEEN THE DRAWINGS THE SPECIFICATIONS AND THE GENERAL STRUCTURAL NOTES, SPECIFIC **DETAILS SHALL GOVERN.**
- VERIFY THE COORDINATION OF ALL TRADES AND REPORT ANY CONFLICTS IMMEDIATELY TO THE A/E AND THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE.
- OPENINGS FOR CONDUIT, PIPE BANKS, ETC., NOT SHOWN ON STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE A/E PRIOR TO INSTALLATION. ADDITIONAL STRUCTURAL REINFORCEMENT AND CLOSURES FOR FLOOR AND WALL SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE GOVERNMENT.
- DETAILS ENTITLED OR NOTED AS TYPICAL SHALL APPLY NOT ONLY WHERE SPECIFICALLY INDICATED OR REFERENCED, BUT WHERE THE NATURE OF THE CONSTRUCTION REQUIRES THEIR USE.
- INFORM THE A/E AND THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF SUCH DEVIATION BY THE A/E's REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE A/E AND THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE A/E HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC **DEVIATION.**
- DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- NO OPENING SHALL BE MADE IN ANY STRUCTURAL MEMBERS WITHOUT WRITTEN APPROVAL OF THE E.O.R.
- NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE A/E.
- OPENINGS LESS THAN 10 INCHES ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR SUCH OPENINGS
- THE STRUCTURE, INCLUDING, BUT NOT LIMITED TO, STEEL MOMENT FRAMES, CAST-IN-PLACE CONCRETE SLABS, AND STEEL ROOF DECK DIAPHRAGM, IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES SHALL BE DESIGNED AND FURNISHED BY CONTRACTOR.

FOUNDATION EXCAVATION AND **BACKFILL**

- THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED FOR THIS PROJECT BY AMEL TECHNOLOGIES, INC. **DATED JUNE 2015**
- ALLOWBLE SOIL BEARING PRESSURE FOR SHALLOW FOUNDATIONS EQUALS 3000 PSF.
- REMOVE FILL MATERIALS WITHIN BUILDING FOOTPRINT AND TO 10 FEET OUTSIDE THE BUILDING FOOTPRINT. BACKFILL WITH STRUCTURAL FILL PER SOIL REPORT RECOMMENDATIONS. SLAB-ON-GRADE SHALL BE OVER 6" MINIMUM THICK DRAINAGE LAYER (AASHTO SP-57 STONE)
- IN AREAS WHERE BEDROCK IS ENCOUNTERED AT THE PROPOSED FOUNDATION BEARING ELEVATION. THE AREA SHALL BE UNDERCUT 12 INCHES. THE 12 INCHES UNDERCUT SHALL BE REPLACED WITH AASHTO #57 STONE UP TO THE PROPOSED FOUNDATION BOTTOM ELEVATION.
- PROVIDE SOILS SPECIAL INSPECTION PER IBC. SEE SPECIAL INSPECTION NOTES THIS SHEET. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL.
- CONTRACTOR SHALL PROVIDE MEANS TO ADEQUATELY DRAIN ALL EXTRANEOUS WATER FROM THE SITE TO ENSURE A DRY FOUNDATION BASE.

SPECIAL INSPECTION

PER UFC 1-200-01 (2-17.1), THE CONTRACTOR "SHALL RETAIN THIRD PARTY QUALITY ASSURANCES AGENCIES TO CONDUCT THE SPECIAL INSPECTIONS REQUIRED BY THE IBC. THE INSPECTING AGENCY SHALL PROVIDE REPORTS OF THE SPECIAL INSPECTIONS DIRECTLY TO THE GOVERNMENT." THE INSPECTING AGENCY SHALL ALSO SUBMIT COPIES OF THESE REPORTS TO THE GENERAL CONTRACTOR (WITHIN TWO DAYS FOLLOWING INSPECTION) AND THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE.

THE FOLLOWING STRUCTURAL ELEMENTS OF CONSTRUCTION SHALL REQUIRE SPECIAL INSPECTION PER IBC SECTION 1705:

TYPE OF CONSTRUCTION	IBC SECTION	IBC TABLE	MATERIAL STANDARD	MAT'L STANDARD SECTION
STEEL FABRICATION	1704.2	-	AISC 360	N3
STEEL CONSTRUCTION	1705.2	-	AISC 360	N5
CONCRETE	1705.3	1705.3	-	-
SOILS	1705.6	1705.6	-	_

ABBREVIATIONS A/E ARCHITECT AND ENGINEER OF RECORD ALTERNATE BID ITEM ANEX TOP OF STEEL MIDDLE (COL AB) ARCH. ARCHITECT OR ARCHITECTURAL **DRAWINGS** ALLOWABLE STRENGTH DESIGN BOTTOM B.O.S. **BOTTOM OF STEEL CENTER LINE** CONSTRUCTION JOINT CL **CENTER LINE** CLR. CLEAR COL. COLUMN CONT. CONTINUOUS COORD COORDINATE DIAMETER **DRAWINGS** E.O.R. **ENGINEER OF RECORD ELEV ELEVATION** EQ. **EQUAL** EXP. **EXPANSION** EXT. **EXTERIOR** FND. FOUNDATION **GAGE** GALV. GALVANIZED

H, HI

HORIZ.

L, LO

HIGH

HIGH POINT

HORIZONTAL

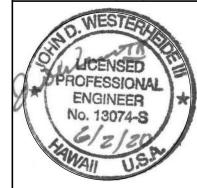
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HOLLOW STRUCTURAL SECTION

	ABBREVIATION
L.P.	LOW POINT
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MAX.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
OPP.	OPPOSITE
P.A.F.	POWDER ACTUATED FASTENERS
PL	PLATE
RECT.	RECTANGULAR
REQ'D	REQUIRED
SIM	SIMILAR
SJ	SAWED JOINT
SP.	SPACES
SYMM.	SYMMETRICAL
T	ТОР
T.O. OR T/	TOP OF
T.O.L.R.S.	TOP OF LOW ROOF STEEL
T.O.S.	TOP OF STEEL
THRU	THROUGH
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
VIF	VERIFY IN FIELD
W.P.	WORK POINT
W/	WITH
W/O	WITH OUT
Ø	DIAMETER

BENHAM

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SPECIAL INSPECTION

SPECIALLY INSPECTED WORK WHICH IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE IS SUBJECT TO REMOVAL.

CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED GEOTECHNICAL ENGINEER TO PERFORM SOIL SPECIAL INSPECTION.

THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE GENERAL CONTRACTOR TO PERFORM THE TYPES OF INSPECTION SPECIFIED.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY, AND THE GENERAL CONTRACTOR DESIGNATED REPRESENTATIVE AT LEAST TWO (2) WORKING DAYS PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. ANY WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL.

PROVIDE SPECIAL INSPECTION FOR ALL POST-INSTALLED ANCHORS. PERIODICALLY INSPECT THE FOLLOWING:

- 7.1. GENERAL COMPLIANCE WITH MANUFACTURER'S INSTRUCTION
- 7.2. PRODUCT NAME AND DESCRIPTION
- 7.3. ADHESIVE EXPIRATION DATE FOR ADHESIVE ANCHORS
- 7.4. HOLE DIAMETER, DEPTH, LOCATION AND EDGE DISTANCE 7.5. CLEANLINESS OF HOLE AND ANCHOR
- 7.6. ANCHOR DIAMETER, LENGTH AND STEEL GRADE
- 7.7. ANCHOR EMBEDMENT AND SPACING
- 7.8. TORQUE REQUIREMENT PER MANUFACTURER'S INSTRUCTION

THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE GENERAL CONTRACTOR TO PERFORM THE TYPES OF INSPECTION SPECIFIED.

SPECIAL INSPECTIONS OF STRUCTURAL STEEL IN THE SEISMIC FORCE-RESISTING SYSTEMS

IN BUILDINGS AND STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY B, C, D, E OR F SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF **AISC 341.**

SPECIAL INSPECTIONS OF STRUCTURAL STEEL ELEMENTS IN THE SEISMIC FORCE-RESISTING SYSTEMS OF BUILDINGS AND STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY B. C. D. E OR F. INCLUDING STRUTS. COLLECTORS AND FOUNDATION ELEMENTS. SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.

NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL IN THE SEISMIC FORCE-RESISTING SYSTEMS IN BUILDINGS AND STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY B, C, D, E OR F SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE **REQUIREMENTS OF AISC 341.**

NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS IN THE SEISMIC FORCE-RESISTING SYSTEMS OF BUILDINGS AND STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY B, C, D, E OR F, INCLUDING STRUTS, COLLECTORS, CHORDS AND FOUNDATION ELEMENTS. SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.

ELEMENTS OF THE SEISMIC FORCE-RESISTING SYSTEM INCLUDE:

- A. SPREAD FOOTING FOUNDATIONS
- **B. STEEL COLUMNS**
- C. STEEL BEAMS

100% FINAL BID SET

DES: HMH DRW: JDF CHK: JDW ⊴ ທ

S o AC AN

PHOTOVOLTA JS EXTERNAL 91-1387 SARATOGA AVENUE
BUILDING 29 PARKING F
AND MISCELLANEOUS

CA-1512-C EDERAL PROJECT NO. 314202

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MISCELLANEOUS

- THE CONTRACTOR SHALL INCLUDE AND PROVIDE THE FOLLOWING SERVICES -
 - A VERIFICATION OF ALL DIMENSIONS, ELEVATIONS, OPENING SIZES, AND MECHANICAL EQUIPMENT WEIGHTS PRIOR TO STARTING WORK AND INCORPORATE THIS INFORMATION INTO THE PROJECT SHOP AND ERECTION DRAWINGS.
 - B VERIFICATION OF ALL DIMENSIONS AND MEMBER SIZES RELATING TO ANY **EXISTING CONSTRUCTION.**
 - C COORDINATE WITH THE OWNER AND REMOVE ALL ABANDONED FOUNDATIONS, UTILITIES. PIPELINES. ETC. THAT MAY INTERFERE WITH THE NEW CONSTRUCTION.
 - D THE GENERAL CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTAL NOTING CHANGES MADE WHICH DO NOT COMPLY WITH DESIGN DRAWINGS. PRIOR WRITTEN APPROVAL FROM THE CONTRACTING OFFICER, STRUCTURAL ENGINEER OF RECORD, AND ARCHITECT SHALL BE REQUIRED FOR ALL DEVIATIONS FROM THE DESIGN DOCUMENTS MADE BY THE CONTRACTOR. REQUEST FOR INFORMATION SHALL NOT BE USED TO INTRODUCE SUBSTITUTIONS, DEVIATIONS, OR CHANGES FROM THE REQUIREMENTS INDICATED BY THE CONSTRUCTION DOCUMENTS.
 - E PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED FOR STABILITY **DURING CONSTRUCTION.**
- PLANS, SECTIONS, AND DETAILS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
- SHOP DRAWINGS SHALL BE ORIGINAL DRAWINGS, PREPARED BY CONTRACTOR, SUBCONTRACTOR, SUPPLIER OR DISTRIBUTOR. REPRODUCTION OF STRUCTURAL CONTRACT DOCUMENTS AS ERECTION PLANS OR DETAILS WILL NOT BE PERMITTED AND WILL BE REJECTED WITHOUT REVIEW.
- CONSTRUCTION DOCUMENTS CONSIST OF THESE DRAWINGS AND A SEPARATE BOOK OF SPECIFICATIONS. THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY, NEITHER IS MEANT TO STAND ALONE FOR ANY PORTION OF THE WORK DESCRIBED HEREIN. ANY CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT/ENGINEER.
- THE DESIGN DOCUMENTS REFLECT THE FINAL COMPLETED STATE OF THE STRUCTURAL SYSTEMS AND ELEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION RELATED ENGINEERING TO INCLUDE BUT NOT BE LIMITED TO CONSTRUCTION MEANS AND METHODS, TEMPORARY SUPPORTS AND BRACING, TEMPORARY USE OF STRUCTURES, PARTIALLY CONSTRUCTED STRUCTURES AND INCOMPLETE STRUCTURES. ALL CONSTRUCTION AND RELATED ENGINEERING SHALL BE IN ACCORDANCE WITH ASCE 37-02 DESIGN LOADS ON STRUCTURES **DURING CONSTRUCTION".**
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SURVEY AND SUBSURFACE INVESTIGATION REPORT BEFORE BEGINNING CONSTRUCTION
- EACH SUBCONTRACTOR IS RESPONSIBLE FOR INSTRUCTIONS DIRECTED TO THE "CONTRACTOR", WHERE APPLICABLE, UNLESS SPECIFICALLY RELIVED OF RESPONSIBILITY BY THE GENERAL CONTRACTOR.
- THE CONTRACTOR SHALL DESIGN AND PROVIDE ALL ITEMS FOR ATTACHING PLUMBING, ELECTRICAL, AND PROCESS EQUIPMENT AND ELEMENTS TO THE BUILDING STRUCTURE TO RESIST ALL LOADS INCLUDING SEISMIC LOADS ATTACHMENT SHALL BE MADE SO AS NOT TO OVERSTRESS THE STRUCTURAL MEMBERS. THE CONTRACTOR SHALL COORDINATE THE ATTACHMENTS AND LOCATIONS OF THE EQUIPMENT AND ELEMENTS AND INCORPORATE THEIR REQUIREMENTS INTO THE STRUCTURAL STEEL SHOP DRAWINGS. THE SHOP DRAWING SUBMITTAL SHALL INCLUDE ATTACHMENT CALCULATIONS AND SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. REFER TO THE PLUMBING AND **ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.**

CONCRETE

- ALL CONCRETE SHALL HAVE A MINIMUM DENSITY OF 145 PCF AND A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- 2 BEFORE PLACING CONCRETE, COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTOR FOR BLOCKOUTS AND EMBEDDED ITEMS NOT SHOWN ON STRUCTURAL DRAWINGS.
- EXPOSED EDGES OF CONCRETE ABOVE GRADE SHALL HAVE 3/4" X 45 DEGREE CHAMFERS, **UNLESS NOTED OTHERWISE (U.N.O.)**
- PROVIDE STANDARD HOOKS ON BARS TERMINATING AT A CONCRETE FACE UNLESS NOTED (E.G.: EDGES OF OPENINGS, SLAB EDGES, EXPANSION JOINTS, ENDS OF BEAMS, AND AT TOP, BOTTOM, AND ENDS OF WALLS, ETC.).
- 5 THE CONTRACTOR SHALL FURNISH TO THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE, COMPLETE LEGIBLE COPIES OF ALL CONCRETE POUR TICKETS WITHIN FOUR (4) HOURS OF THE PLACEMENT OF THE CONCRETE THAT WAS RECEIVED. THE POUR TICKETS SHALL CLEARLY IDENTIFY THE CONCRETE SUPPLIER, THE BATCHING DATA, THE TIME OF THE LOADING/DEPARTURE AND THE ACCURATE TIME OF DELIVERY, AND ANY ADDITIONS OF WATER ENROUTE TO OR AT THE JOB SITE. CLEARLY LOCATE ON A PLAN SHEET THE LOCATIONS OF THE CONCRETE WHERE ADDITIONAL WATER HAD BEEN ADDED.
- ALL FOUNDATIONS ARE DESIGNED WITH FORMED SIDES. IF THE CONTRACTOR ELECTS TO USE EARTH FORMED SIDES, 1 1/2" INCHES OF ADDITIONAL CONCRETE THICKNESS SHALL BE ADDED TO EACH EARTH FORMED FACE TO PROVIDE ADEQUATE COVER OVER THE REINFORCING. TOP PORTIONS OF EXTERIOR FOUNDATIONS EXPOSED TO FINAL GRADE SHALL BE FORMED AT LEAST 6" BELOW FINAL GRADE AT NO ADDITIONAL COST TO THE GOVERNMENT. ANY RELATED ADDITIONAL COSTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE WATER CEMENT RATIO FOR ANY STRENGTH CONCRETE SHALL NOT BE MORE THAN 0.45. EXCEPT THAT THE WATER CEMENT RATIO FOR ENTRAINED CONCRETE SHALL NOT BE MORE THAN 0.4.

REINFORCEMENT

- REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615, GR 60, AND DEFORMED WELDED WIRE FABRIC CONFORMING TO ASTM A496 OR A497 AS INDICATED ON DRAWINGS. WELDED WIRE FABRIC SHALL BE SUPPLIED IN MATS NOT ROLLS.
- ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, INSERTS, ETC. SHALL BE WELL SECURED IN PLACE AND INSPECTED BY THE CONTRACTING OFFICER OR DESIGNATED REPRESENTATIVE PRIOR TO PLACING CONCRETE
- ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED, IN ACCORDANCE WITH ACI DETAILING MANUAL AND ALL APPLICABLE CODES.
- ALL REINFORCING SHALL BE SUPPORTED IN FORMS, SPACED WITH NECESSARY ACCESSORIES AND SHALL BE SECURELY WIRED TOGETHER, IN ACCORDANCE WITH ACI 318.
- MINIMUM CONCRETE COVER FOR THE REINFORCEMENT SHALL BE AS DETAILED ON THE DRAWINGS. WHERE THE COVER IS NOT DIMENSIONED. USE THE SAME FOR SIMILAR ITEMS. WHERE NO SIMILAR ITEMS INDICATE THE AMOUNT OF COVER, USE THE FOLLOWING IN CONJUNCTION WITH ACI 318: A. CONCRETE DEPOSITED AGAINST THE EARTH3" B. CONCRETE DEPOSITED AGAINST FORMS AND EXPOSED TO EARTH OR WEATHER 2" C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER SLABS AND WALLS
 - BEAMS AND COLUMNS 1/2"

DEVELOPMENT OF REINFORCEMENT AND LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI 318

- **UNLESS NOTED OTHERWISE.**
- MECHANICAL SPLICES SHALL BE IN ACCORDANCE WITH ACI 318 AND DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRESS OF THE BAR.

STRUCTURAL STEEL

STEEL SHALL CONFORM TO THE FOLLOWING GRADES:

A. ALL W SHAPES A992 (Fy=50 KSI

A36 (Fy=36 KSI) B. ALL ANGLE, CHANNEL C. ALL BASE PLATES, CONN. PLATES A36 (Fy=36 KSI)

A53 GR. B (Fy=35 KSI) D. STRUCTURAL PIPE E. STRUCTURAL HSS A500 GR. B (Fy=46 KSI)

- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE", FOURTEENTH EDITION
- UNLESS NOTED OTHERWISE, THE MINIMUM PLATE THICKNESS SHALL BE 3/8"; BOLT DIAMETER SHALL BE 3/4"; MINIMUM WELD SHALL BE 3/16".

WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL

- **BOLTED CONNECTIONS SHALL BE BEARING TYPE USING A325N BOLTS, UNLESS** NOTED OTHERWISE. OVERSIZED HOLES AND LONG-SLOTTED HOLES ARE NOT ALLOWED, UNLESS SHOWN ON THE DRAWINGS.
- WELDING CODE." ALL WELDS SHALL DEVELOP FULL STRENGTH OF THE WEAKER MEMBER, UNLESS SPECIFICALLY DETAILED OR LOADS ARE INDICATED ON DRAWINGS. WELDING ELECTRODES SHALL BE E70XX A. COLUMN-TO-BASE PLATE CONNECTION WELD IS CONSIDERED DEMAND CRITICAL AND SHALL BE MADE WITH FILLER MATERIAL THAT MEETS THE REQUIREMENTS OF AWS D1.8/D1.8M CLAUSE 6.3 FOR SEISMIC MAIN FORCE RESISTING SYSTEMS. B. DEMAND CRITICAL WELD FILLER MATERIAL SHALL ALSO RECEIVE HEAT INPUT **ENVELOPE TESTING THAT ACHIEVE MECHANICAL PROPERTIES IN THE WELD METAL**
- GIVEN IN AWS D1.8/D1,8M. SPLICING OF STEEL MEMBERS, UNLESS SHOWN ON DRAWINGS, IS PROHIBITED
- NO CHANGE IN SIZE OR POSITION OF THE STRUCTURAL ELEMENTS SHALL BE MADE AND HOLES, SLOTS, CUTS, ETC. ARE NOT PERMITTED THROUGH ANY MEMBER UNLESS THEY ARE DETAILED ON THE APPROVED SHOP DRAWINGS, AND THEY CAN BE HANDLED PRIOR TO THE SHOP DRAWING PROCESS AS PER PROCEDURES NOTED IN DIVISION 1 IN SPECIFICATION FOR GENERAL REQUIREMENTS.
- NO FINAL BOLTING OR WELDING SHALL BE MADE UNTIL THE STRUCTURE HAS BEEN PROPERLY ALIGNED.
- FABRICATE ALL BEAMS WITH THE MILL CAMBER UP.
- NO BEAM CONNECTION SHALL HAVE LESS THAN TWO (2) BOLTS OR AN EQUIVALENT WELD.
- CORROSION PROTECTION: PAINTING OF STRUCTURAL STEEL (OR GALVANIZING WHERE APPLICABLE) IS REQUIRED FOR ANY EXPOSED STEEL, SEE SPECIFICATIONS.



BENHAM

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HIS WORK WAS PREPARED BY ME OR

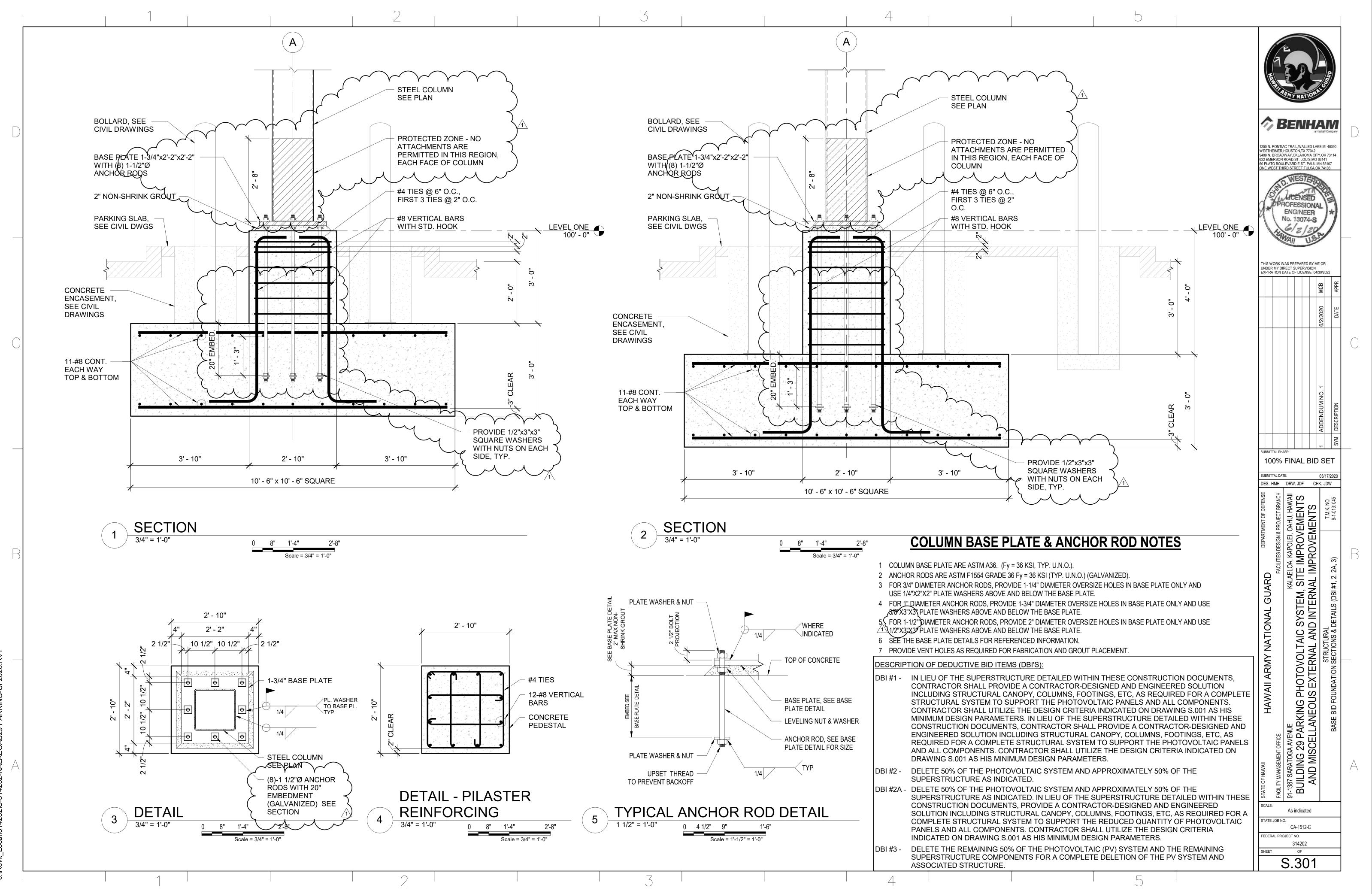
SUBMITTAL PHASE: 100% FINAL BID SET

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DEPARTMENT OF DEFENSE	PROJECT BRANCH	DAHU, HAWAII EMENTS	JENTS	T.M.K. NO. 9-1-013: 045
HAWAII ARMY NATIONAL GUARD DEPART	DFFICE FACILITIES DESIGN & PROJECT BRANCH	AVENUE RALAELOA, KAPOLEI, OAHU, HAWAII 99 PARKING PHOTOVOLTAIC SYSTEM. SITE IMPROVEMENTS	CELLANEOUS EXTERNAL AND INTERNAL IMPROVEMENTS	STRUCTURAL BASE BID DBI #1 GENERAL STRUCTURAL NOTES

CA-1512-C FEDERAL PROJECT NO.

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