GENERAL NOTES:

I. GENERAL

1. MATERIALS AND WORKMANSHIP TO CONFORM WITH THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE, WITH TITLE 24 AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

- 2. THESE GENERAL NOTES SUPPLEMENT THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THE PLANS AND SPECIFICATIONS, CONTACT THE RESIDENT ENGINEER.
- 3. VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY RESIDENT ENGINEER OF DISCREPANCIES.
- 4. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR SITE SLABS AND WALLS.
- 5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE RESIDENT ENGINEER.
- 6. DETAILS ON SHEETS TITLED "TYPICAL DETAILS" APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED. SUCH DETAILS ARE NOT NOTED AT EACH LOCATION THAT THEY OCCUR.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND FOR CHECKING DIMENSIONS. NOTIFY THE RESIDENT ENGINEER OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.
- 8. DO NOT SCALE THE DRAWINGS.
- 9. INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE. BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE ARCHITECT. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE RESIDENT
- 10. REFER TO ARCHITECTURAL DRAWINGS FOR EDGE OF SLAB DIMENSIONS OF FLOOR AND ROOF OPENINGS. COORDINATE THE SIZE AND LOCATION OF OPENINGS ASSOCIATED WITH, BUT NOT LIMITED TO, ELECTRICAL, MECHANICAL AND PLUMBING TRADES. SUBMIT FINAL SIZING AND LOCATION REQUIREMENTS OF OPENINGS TO THE ARCHITECT FOR REVIEW.
- 11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST DAMAGE BY HAZARDS INCONNECTION WITH THIS WORK.
- 12. SEE ARCHITECTURAL DRAWING FOR SEISMIC JOINT COVERS. SEE DETAIL 8/S1402 AND PLANS FOR REQUIRED JOINT MOVEMENT.
- 13. SEE ARCHITECTURAL DRAWINGS FOR EDGE OF SLAB DIMENSIONS.

II. CONSTRUCTION MEANS AND METHODS ENGINEERING (SHORING)

- 1. CONTRACTOR TO PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES INCLUDE BUT ARE NOT LIMITED TO BRACING, UNDERPINNING, AND SHORING FOR LOADS DURING CONSTRUCTION. RETAIN CALIFORNIA REGISTERED CIVIL ENGINEER WHOM IS PROPERLY QUALIFIED TO DESIGN BRACING, UNDERPINNING, SHORING, ETC.
- PRIOR TO CONSTRUCTION SUBMIT SHORING DRAWINGS AND CALCULATIONS STAMPED AND SIGNED BY A CALIFORNIA REGISTERED CIVIL ENGINEER. IN ADDITION, SUBMIT A MONITORING PLAN, SEQUENCING, AND ANY LOADS TO BE IMPOSED ON THE STRUCTURE.
- MAINTAIN EXISTING GRADE A MINIMUM OF 20 FEET FROM THE EDGE OF EXISTING BUILDING FOUNDATIONS BEFORE STARTING EXCAVATIONS. EXCAVATION TO HAVE A MAX SLOPE OF 2H:1V.
- 4. VISITS TO THE SITE BY THE STRUCTURAL ENIGNEER OF RECORD WILL NOT INCLUDE OBSERVATION OF THE CONSTRUCTION MEANS AND METHODS SHORING.

III. FOUNDATION AND SITE WORK

- 1. THE DESIGN OF THE FOUNDATION SYSTEM IS BASED UPON THE CRITERIA AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL INVESTIGATION REPORT ENTITLED "GEOLOGICAL AND GEOTECHNICAL INVESTIGATION COMMUNITY LIVING CENTER EXPANSION VETERANS AFFAIR MEDICAL CENTER FRESNO CA. AND DATED MARCH 4, 2013"
- 2. GROUNDWATER ELEVATION IS ESTIMATED IN THE GEOTECHNICAL REPORT. PROVIDE SITE DE-WATERING AS REQUIRED.
- LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
- 4. REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
- 5. NOTIFY THE RESIDENT ENGINEER IF ANY BURIED STRUCTURES NOT INDICATED ARE FOUND.
- 6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, UNDERPINNING AND PROTECTION OF EXISTING CONSTRUCTION.
- 7. REMOVE LOOSE SOIL AND STANDING WATER FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING CONCRETE.
- 8. EXCAVATIONS FOR FOUNDATIONS MUST BE ACCEPTED BY THE VA'S GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE VA'S GEOTECHNICAL ENGINEER WHEN EXCAVATIONS ARE READY FOR INSPECTION.
- 9. PLACE BACKFILL BEHIND RETAINING WALLS AFTER CONCRETE HAS ATTAINED FULL DESIGN STRENGTH. BRACE BUILDING AND PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHED FLOORS AND SLABS ON GRADE ARE COMPLETE AND HAVE ATTAINED FULL DESIGN
- 10. MECHANICALLY COMPACT EXCAVATION BACKFILLS IN LAYERS PER THE SPECIFICATIONS AND

THE GEOTECHNICAL REPORT. IV. FORMWORK

1. PROVIDE POUR POCKETS IN FORMS AND UNDER EXISTING STRUCTURAL MEMBERS AS REQUIRED TO PREVENT AIR POCKETS AND/OR "HONEYCOMB" UNDER OR AROUND THE EXISTING MEMBERS. CONCRETE CAST WITH AIR POCKETS AND/OR "HONEYCOMB" UNDER OR AROUND THE MEMBERS IS NOT ACCEPTABLE.

2. REMOVE FORMS AND SHORES IN ACCORDANCE WITH THE FOLLOWING:

LOCATION	REMOVE FORMS AND SHO

LOCATION	NO SOONER THAN
BOTTOM FORMS AND SHORES FOR MILDLY REINFORCED SLABS, BEAMS AND GIRDERS	3 DAYS AND MIN. 75% F'c
SIDE FORM FOR BEAMS AND GIRDERS	24 HOURS
COLUMNS AND WALLS	24 HOURS
FOOTINGS, PILE CAPS, AND GRADE BEAMS	24 HOURS

3. PROVIDE CURING WHERE FORMS ARE REMOVED IN LESS THAN 7 DAYS. INCLUDING BUT NOT LIMITED TO WALLS, COLUMNS, AND UNDERSIDE OF ELEVATED SLABS.

V. REINFORCING STEEL

1. REINFORCING TO CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

LOCATION	TYPE
ALL REINFORCING STEEL IN SUSPENDED SLAB, WALLS, FOUNDATIONS, AND ALL REINFORCEMENT. REINFORCING STEEL #8 AND LARGER.	ASTM A706, 60 KSI
REINFORCING STEEL #7 AND SMALLER OR IN SLABS ON GRADE, HOUSEKEEPING PADS OR CURBS.	ASTM A615, 60 KSI
WELDED STEEL WIRE FABRIC	ASTM A185, 70 KSI
SMOOTH DOWELS IN SLAB ON GRADE	ASTM A36, 36 KSI

- 2. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS, OR HANGERS
- MECHANICALCOUPLERS: TYPE 2, SEE SPECS FOR ADDITIONAL INFORMATION.
- 4. WELD REINFORCING STEEL ONLY WHERE NOTED AND IN ACCORDANCE WITH AWS D1.4 USING QUALIFIED WELDERS.
- 5. TERMINATE REINFORCING STEEL IN STANDARD HOOKS, UNLESS OTHERWISE SHOWN.
- 6. PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICABLE.
- 7. PROVIDE RENFORCING BAR DOWELS IN FOOTINGS AND OTHER SUPPORTING MEMBERS OF THE SAME SIZE AND SPACING AS VERTICAL REINFORCING, U.O.N. LAP SPLICE AS INDICATED ON TYPCAL DETAILS.

VI. CAST-IN-PLACE CONCRETE

- 1. CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE RESIDENT ENGINEER.
- . ROUGHEN CONCRETE SURFACES OF CONSTRUCTION JOINTS TO ¼ INCH AMPLITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES.. SUBMIT JOINT LOCATIONS OR JOINTS NOT SHOWN TO THE RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE WORK.
- 3. AT LOCATIONS WHERE CONCRETE IS CAST AGAINST EXISTING CONCRETE, ROUGHEN CONTACT SURFACES TO 1/4 INCH AMPLITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF ADDITIONAL CONCRETE CURBS AND HOUSEKEEPING PADS NOT SHOWN.
- 5. CONCRETE CLEAR COVER TO REINFORCING BARS IS AS FOLLOWS, UNLESS OTHERWISE NOTED:

LOCATION	CLEAR COVER
CONCRETE PLACED AGAINST EARTH	3 INCHES
FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH EARTH: #6 BARS AND LARGER #5 BARS AND SMALLER SLABS ON GRADE (TOP CLEARANCE)	2 INCHES 1 ½ INCHES 1 ½ INCHES
BEAMS, GIRDERS AND COLUMNS NOT EXPOSED TO WEATHER OR EARTH	1 ½ INCHES
WALL OR SLAB SURFACES NOT EXPOSED TO WEATHER OR EARTH: #5 & SMALLER #6 & #7 #8,#9, #10 & #11 #14 & #18	34 INCH 1 INCH 1 ½ INCHES 2 ½ INCHES

6. CONCRETE TYPES:

CLASS	28-DAY STRENGTH	TYPE	LOCATION	CEMENT	MAX W/C	MAX AGGR
Α	4000 PSI	NWC	GRADE BEAMS, FOUNDATIONS,	I-II	0.45	SIZE 467
В	4000 PSI	NWC	SLABS ON GRADE, PADS, CURBS MISC.	I-II	0.45	SIZE 67
С	4000 PSI	LWC	FILL ON METAL DECK	I-II	0.55	SIZE 67

- 7. LIGHT WT CONC. MAX. DRY UNIT WT=115 PCF. MAX.
- 8. WATER REDUCING OR HIGH RANGE WATER REDUCING ADD MIXTURES SATISFYING ASTM C494 ARE ANTICIPATED.
- 9. NO AIR ENTRAINMENT IS ANTICIPATED.
- 10. CONTINUOUSLY MOIST CURE ARCHITECTURALLY EXPOSED CONCRETE SLABS IN PUBLIC SPACES FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS, OR MOISTURE RETAINING COVERS MAY BE USED. CURING COMPOUNDS ARE ACCEPTABLE AT NON-ARCHITECTURALLY EXPOSED SLABS.
- 11. CONCRETE FILL THICKNESS SHOWN ON THE FRAMING PLANS ARE MINIMAL THICKNESSES. NO ALLOWANCES HAVE BEEN SHOWN FOR ADDITIONAL CONCRETE FILL REQUIRED TO COMPENSATE FOR FRAME, DECK, OR FORMWORK DEFLECTIONS TO MAINTAIN SURFACE TOLERANCES.
- 12. NON-SHRINK GROUT, 7000 PSI MIN. @ 28 DAYS.
- 13. SEE SPECIFICATION SECTION 033000 FOR FLOOR FLATNESS REQUIREMENTS.
- 14. PRIOR TO CONCRETE POUR, ANCHOR BOLT ELEVATION AND LOCATION SHALL BE CERTIFIED BY LICENSED SURVEYOR PER SPEC 051200.

VII. UNIT MASONRY

AT 28 DAYS.

- 1. MINIMUM COMPRESSIVE STRENGTH OF MASONRY, F'M, EQUAL TO 1500 PSI
- 2. MASONRY UNITS: ASTM C-90, GRADE N, TYPE 1, MEDIUM WEIGHT, HOLLOW, LOAD BEARING UNITS. MINIMUM COMPRESSIVE STRENGTH: 1900 PSI.
- 3. MORTAR: ASTM C-270, TYPE S.
- 4. GROUT: ASTM C-476, MINIMUM COMPRESSIVE STRENGTH: 2000 PSI.
- REINFORCING STEEL

LOCATION	TYPE
REINFORCING TO BE WELDED	ASTM A706, GRADE 60
ALL OTHER REINFORCING	ASTM A615, GRADE 60
JOINT REINFORCING	UBC STD 21-10

- 6. CENTER VERTICAL REINFORCING IN WALL UNLESS NOTED OTHERWISE.
- 7. LAY UNITS IN RUNNING BOND AND MAINTAIN VERTICAL CONTINUITY OF CORES OR CELL CAVITIES. USE OPEN END UNITS AT LOCATIONS OF VERTICAL REINFORCING. PLACE HORIZONTAL REINFORCING IN BOND
- 8. FILL ALL CELLS SOLIDLY WITH GROUT. CLEAN CELLS AND BOND BEAMS OF MORTAR PROTRUSIONS AND DEBRIS BEFORE GROUTING.
- 9. DOWELS FROM THE FOUNDATION TO MATCH SIZE AND LOCATION OF VERTICAL REINFORCING IN MASONRY, UNLESS NOTED OTHERWISE.
- 10. PROVIDE VERTICAL CONTROL JOINTS IN THE WALLS AT LOCATIONS SHOWN ON THE DRAWINGS.
- 11. LOW-LIFT GROUTING: LAY UNITS A MAXIMUM OF 2 FEET HIGH BEFORE GROUTING. PLACE GROUT IN A CONTINUOUS PLACEMENT IN GROUT LIFTS NOT EXCEEDING 2 FEET. COMPLETELY GROUT THE FULL HEIGHT OF THE WALL SECTION IN ONE DAY WITH NO INTERRUPTIONS GREATER THAN ONE
- 12. HIGH-LIFT GROUTING: LAY UNITS A MAXIMUM OF 12 FEET HIGH BEFORE GROUTING. PLACE GROUT IN A CONTINUOUS PLACEMENT IN GROUT LIFTS NOT EXCEEDING 6 FEET. COMPLETELY GROUT THE FULL HEIGHT OF THE WALL SECTION IN ONE DAY WITH NO INTERRUPTIONS GREATER THAN ONE HOUR. PROVIDE CLEANOUTS AT EVERY CELL ALONG THE BOTTOM COURSE OF EACH GROUT LIFT. USE SIKA GROUT AID TYPE II OR E-Z MIX ADMIXTURE IN THE GROUT TO REDUCE EARLY WATER LOSS AND PRODUCE AN EXPANSIVE ACTION.

VIII. STRUCTURAL STEEL

4 CTRUCTURAL CTEEL TO CONFORM TO THE FOLLOWING HAN FOR OTHERWISE NOTES

1. STRUCTURAL STEEL TO CONFORM TO THE FOLLOWING UNLES	SS OTHERWISE NOTED:
SECTIONS	TYPE
ROLLED SHAPES WIDE FLANGES CHANNELS, ANGLES, & OTHER	ASTM A992, GR 50 ASTM A36
PLATES COLUMN BASE PLATES BEAM COVER/SIDE PLATES BEAM SHEAR PLATES COLUMN CONTINUITY PLATES BEAM STIFFENER PLATES OTHER, U.O.N.	ASTM A572, GR 50 ASTM A36 ASTM A36 ASTM A572, GR 50 ASTM A36 ASTM A572, GR 50
STEEL PIPE	ASTM A53 GRADE B
COLD FORMED HOLLOW STRUCTURAL SECTION (HSS)	ASTM A500 GRADE B
STAINLESS STEEL SHAPES, PLATES AND BARS	ASTM A276
BOLTS	ASTM 325X
MACHINE BOLTS	ASTM A307
ANCHOR BOLTS AND RODS	ASTM F1554 GR 55 U.O.N.
THREADED AND HANGER ROD	ASTM A307 OR A36
WELDED SHEAR CONNECTORS	ASTM A108, GRADE 1015 THROUGH 1020
NUTS FOR BOLTS AND MACHINE BOLTS	ASTM A563
HARDENED WASHERS	ASTM F436
UNHARDENED WASHERS	ASTM F844
PLAIN WASHERS	ANSI B18.22.1
BEVELED WASHERS	ANSI B18.23.1

- 2. HOT DIP GALVANIZE IN ACCORDANCE WITH ASTM A123 AND ASTM A153 STRUCTURAL STEEL AND FASTENERS THAT ARE PERMANENTLY EXPOSED TO THE WEATHER. REPAIR GALVANIZING AFTER WELDING IN ACCORDANCE WITH ASTM A780.
- 3. ARC-WELDING ELECTRODES/FILLER METALS TO BE LOW HYDROGEN TYPES E7XTX. E7XTXX OR E70XXX MINIMUM AS APPLICABLE.
- 4. WELDERS TO BE CERTIFIED BY AWS AND THE GOVERNING JURISDICTION.
- 5. WHERE FIELD WELDING IS NOTED, THE DESIGNATION IS GIVEN AS A SUGGESTED CONSTRUCTION PROCEDURE ONLY.
- 6. PROVIDE NATURAL CAMBER UP, UNLESS NOTED OTHERWISE, EXCEPT AT CANTILEVERS. AT CANTILEVERS PROVIDE CAMBER SUCH THAT TIP OF CANTILEVER IS ABOVE FINAL ELEVATION.
- 7. SPLICE MEMBERS ONLY WHERE INDICATED.
- 8. DETAIL, FABRICATE AND ERECT IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL FOR BUILDINGS".

IX. METAL DECKING

- 1. METAL FLOOR AND ROOF DECK TO HAVE MINIMUM SECTION PROPERTIES SHOWN ON SHEET "TYPICAL METAL DECK DETAILS."
- 2. METAL DECK TO MEET ASTM A653
- 3. FLOOR AND ROOF DECK TO BE GALVANIZED IN ACCORDANCE WITH ASTM A653 COATING CLASS G60. REPAIR DAMAGED COATING.
- 4. WHERE POSSIBLE, LAYOUT METAL DECK TO SPAN AT LEAST THREE SPANS CONTINUOUSLY. TERMINATE ENDS OVER SUPPORTS EXCEPT AT OPENINGS OR BUILDING EDGES WHERE METAL DECKS MAY BE CANTILEVERED AS SHOWN.
- 5. PROVIDE MINIMUM STUDS SHOWN IN 11/S601 U.O.N.
- 6. SEE SPECIFICATION SECTION 033000 FOR FLOOR FLATNESS REQUIREMENTS.

X. MECHANICAL AND ADHESIVE ANCHORS

- 1. ALL MECHANICAL ANCHORS ARE TO HAVE ICC APPROVAL FOR USE IN CRACKED CONCRETE UNDER SEISMIC LOADS.
- 2 EXPANSION ANCHORS: HILTI KB-TZ (ICC ESR-1917), ITW REDHEAD TRUBOLT+ (ICC ESR-2427), POWERS POWER-STUD+ (ICC ESR-2502), OR SIMPSON STRONG BOLT 2 (ICC
- 3 CONCRETE SCREW ANCHORS: POWERS WEDGE-BOLT (ICC ESR-2526), OR SIMPSON TITEN HD (ICC ESR-2713).
- 4 ADHESIVE ANCHORS: HILTI HIT RE-500-SD (ICC ESR-2322), POWERS PE1000+ (ICC ESR-2583), OR SIMPSON SET-XP (ICC ESR-2508)
- 5 INSTALL AND TEST ANCHORS IN ACCORDANCE WITH THE LATEST ICC-ESR REPORT.
- PROVIDE STAINLESS STEEL FASTENERS FOR EXTERIOR USE OR WHEN PERMANENTLY EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER LOCATIONS, UNLESS OTHERWISE NOTED.
- 7. ADHESIVE ANCHORS SHALL BE ASTM A36 THREADED RODS. REINFORCING DOWELS SHALL BE ASTM A615 GRADE 60 REINFORCING STEEL. UNLESS OTHERWISE NOTED.
- 8. EXPANSION AND SCREW ANCHOR MINIMUM EMBEDMENTS UNLESS OTHERWISE

ANCHOR	MIN
DIA.	EMBED
(SIZE)	(INCH)
1/4"	2"
3/8"	2 ½"
1/2" *	2 ½"
5/8" *	3 ¼"
3/4"	4 ¼"

UNLESS OTHERWISE NOTED:

- * MINIMUM EMBEDMENT MUST BE INCREASED FOR SIMPSON TITEN HD ANCHOR. USE 3 1/4" FOR 1/2" DIAMETER AND 5 1/2" FOR 5/8" DIAMETER SCREWS.
- 9. ADHESIVE ANCHOR MINIMUM EMBEDMENT DEPTH AND TEST LOADS IN CONCRETE,

ANC	HOR/BAR SIZE	MIN. EMBEDMENT	TENSION LOAD
3/8"		4"	3,000 LBS.
1/2"		5"	6,000 LBS.
5/8"		6"	8,000 LBS.
3/4"		7"	12,000 LBS.
7/8"		9"	15,000 LBS.
NO.	3	4"	3,000 LBS.
NO.	4	5"	6,000 LBS.
NO.	5	6"	8,000 LBS.
NO.	6	7"	12,000 LBS.
NO.	7	9"	15,000 LBS.

- 10. TEST ANCHORS IN THE PRESENCE OF THE SPECIAL INSPECTOR.
- 11. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
- 12. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING.
- 13. TEST QUANTITY OF EXPANSION AND ADHESIVE ANCHORS FOR EACH SIZE AND TYPE

10	AS NOTED BELOW:	TVE THOUGHOUGH ON ENGINEETHE
	APPLICATION	QUANTITY
	EXPANSION AND SCREW ANCHORS	50%
	EXPANSION ANCHORS AFTER TEST FAILURE OF ONE ANCHOR	100% OF 20 PREVIOUS
	ADHESIVE ANCHORS	25%
	ADHESIVE ANCHORS W/ GREATER THAN 10% FAILURE AFTER TESTING OF THE FIRST 100 ANCHORS	100%
	ADHESIVE ANCHORS W/ LESS THAN 5% FAILURE AFTER TESTING OF THE FIRST 100 ANCHORS	10%

- 14. APPLY THE TEST LOAD TO EXPANSION ANCHORS PER EITHER THE HYDRAULIC RAM METHOD OR THE TORQUE WRENCH METHOD. APPLY THE TEST LOAD TO SCREW ANCHORS PER THE TORQUE WRENCH METHOD APPLY THE TEST LOAD TO ADHESIVE ANCHORS PER THE HYDRAULIC RAM METHOD.
- 15. THE FOLLOWING CRITERIA APPLY FOR THE TESTING AND ACCEPTANCE OF INSTALLED ANCHORS:
- A. HYDRAULIC RAM METHOD: MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST, E.G.AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT.
- B. TORQUE WRENCH METHOD: ATTAIN THE SPECIFIED TORQUE WITHIN 1/2 TURN OF

XI. STRUCTURAL TESTS, INSPECTIONS, AND OBSERVATIONS

- 1. AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE PAID BY THE CONTRACTOR AND APPROVED BY THE VA TO PERFORM THE TESTS AND INSPECTION REQUIRED BY SPEC 014529. PROVIDE ACCESS AND FURNISH SAMPLES TO THE AGENCY AS REQUIRED BY THE CONTRACT DOCUMENTS.
- 2. IF INITIAL TESTS OR INSPECTIONS MADE BY THE TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS, AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
- 3. TESTING LAB SHALL BE PAID BY CONTRACTOR.

XII. DESIGN CRITERIA

1. APPLICABLE CODES / DESIGN STANDARDS:

VA STRUCTURAL DESIGN MANUAL FOR HOSPITAL PROJECTS VA PROGRAM GUIDE PG-18-1. MASTER CONSTRUCTION SPECIFICATIONS VA PROGRAM GUIDE PG-18-3, DESIGN AND CONSTRUCTION PROCEDURES VA PROGRAM GUIDE PG-18-15, A/E/ SUBMISSION INSTRUCTIONS, VOLUME B VA HANDBOOK H-18-8, SEISMIC DESIGN REQUIREMENTS, FEBRUARY 2011 DEPARTMENT OF DEFENSE 2010 UNIFIED FACILITIES CRITERIA (UFC)

ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES 2010 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION STEEL BUILDINGS 2010 AMERICAN INSTITUE OF STEEL CONSTRUCTION (AISC) SEISMIC PROVISIONS 2014 AMERICAN CONCRETE INSTITUTE (ACI) 318

2. FOUNDATIONS HAVE BEEN DESIGNED WITH THE FOLLOWING CRITERIA:

ALLOWABLE NET SOIL PRESSURE FOR DL + LL = 2000 PSF ALLOWABLE NET SOIL PRESSURE FOR DL + LL + EQ = 2600 PSF

GRAVITY LOADS:

A. DEAD LOADS - VARY BASED ON ACTUAL BUILDING AND EQUIPMENT

B. LIVE LOADS: FLOOR ROOF 20 PSF

OPERATING WEIGHTS

4. SNOW LOADS = 0 PSF

5. FLOOD LOADS = 0 LBS 6. SEISMIC DESIGN: RESPONSE SPECTRUM

WHERE:R = 5.5 FOR SPECIAL CMU WALL.

= 2.5 = 1.25 = 0.634 = 0.257 SDS = 0.551= 0.264 SITE CLASS = C OCCUPANCY CATEGORY = ||| SEISMIC DESIGN CATEGORY = D

INELASTIC INTERSTORY DRIFT LIMIT = 0.01 X STORY HT.

7. WIND DESIGN: BASIC WIND SPEED = 115 MPH WIND EXPOSURE = B

- 8. EQUIPMENT AND UTILITY LINES SUPPORTED BY STRUCTURAL FRAMING ARE TO BE CONCENTRICALLY CONNECTED TO THE FRAMING MEMBERS. BRACING TO THE BOTTOM 2/3 OF BEAMS IS PROHIBITED.
- 9. EQUIPMENT. ARCHITECTURAL ELEMENTS, AND DISTRIBUTION SYSTEMS ARE TO BE ANCHORED AND BRACED PER SPECIFICATION 130541.

10. DESIGN TEAM JAMES O MALLEY SENIOR PRINCIPAL ROBERT GRAFF PROJECT MANAGER ANDREW MA DESIGNER JUN SANCHEZ SENIOR CAD SPECIALIST MIGUEL MARASIGAN SENIOR CAD SPECIALIST

> 100% CONSTRUCTION DOCUMENTS NOVEMBER 19, 2015

Project Number

Building Number

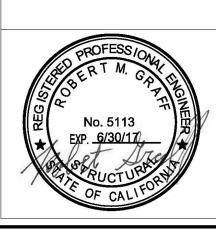
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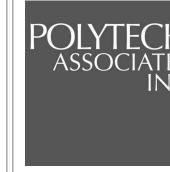
CONSULTANTS: **DEGENKOLB ENGINEERS** 235 Montgomery Street, Suite 500 San Francisco, CA 94104

415.392.6952 Phone

415.981.3157 Fax

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ARCHITECT

POLYTECH ASSOCIATES INC. 235 Pine Street, 17th Floor San Francisco, CA 94104 FAX (415) 397-1517

Drawing Title

GENERAL NOTES

Approved: Project Director

Location FRESNO,CA 93703

Drawing Number 2615 EAST CLINTON AVE Checked Drawn RG JQS

EXPAND COMMUNITY LIVING CENTER

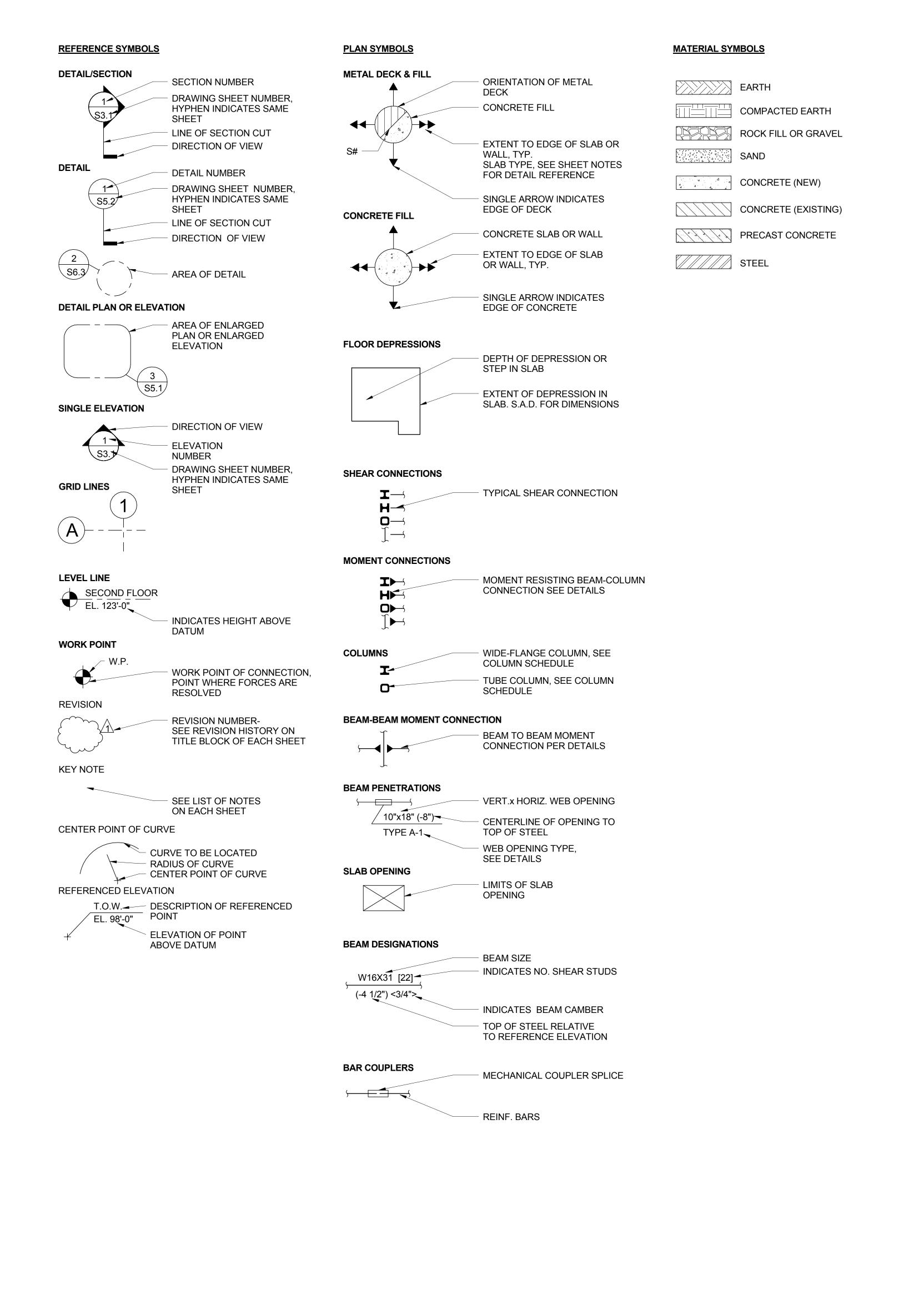
Department of Veterans Affairs

Office of

Construction

and Facilities

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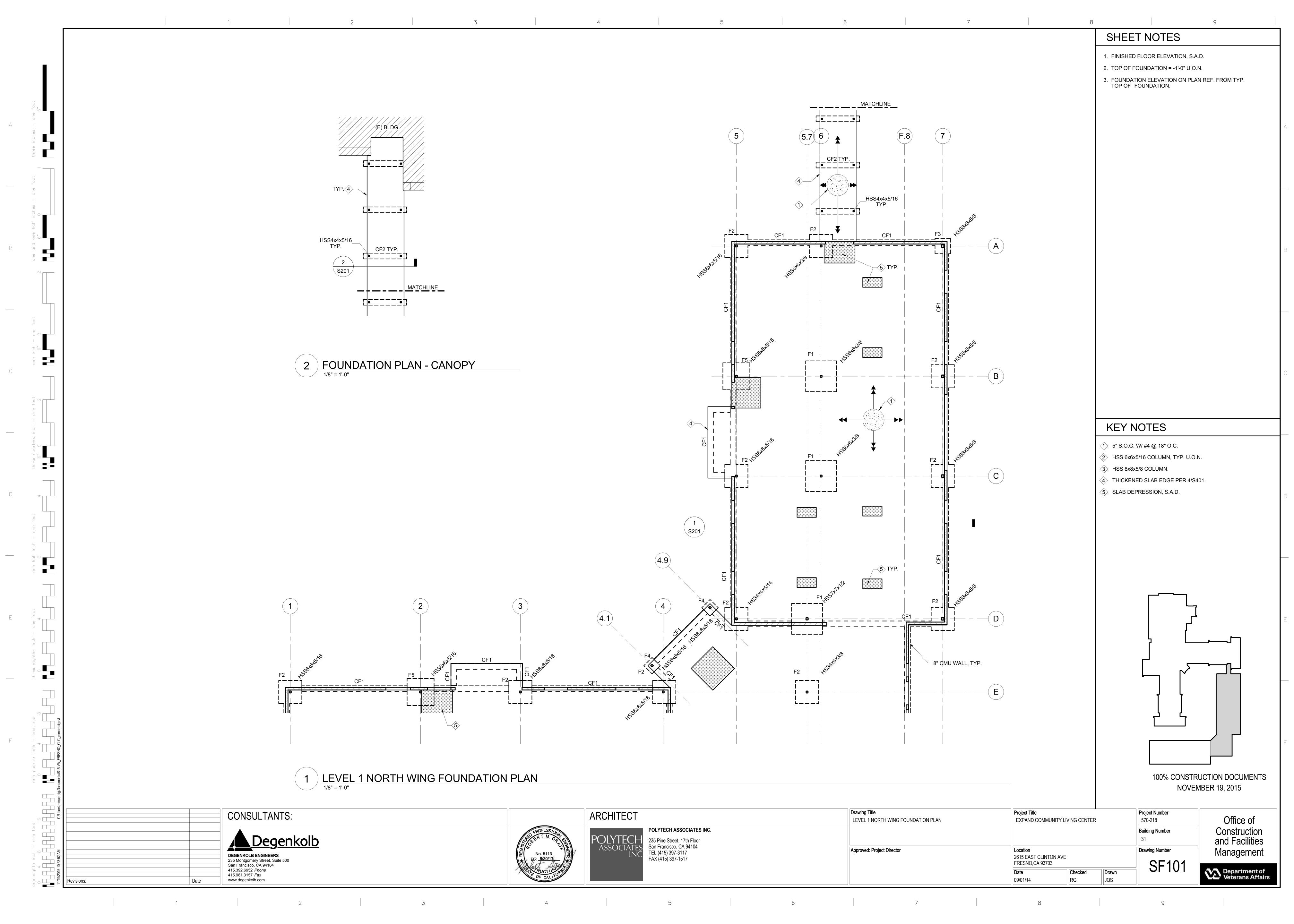


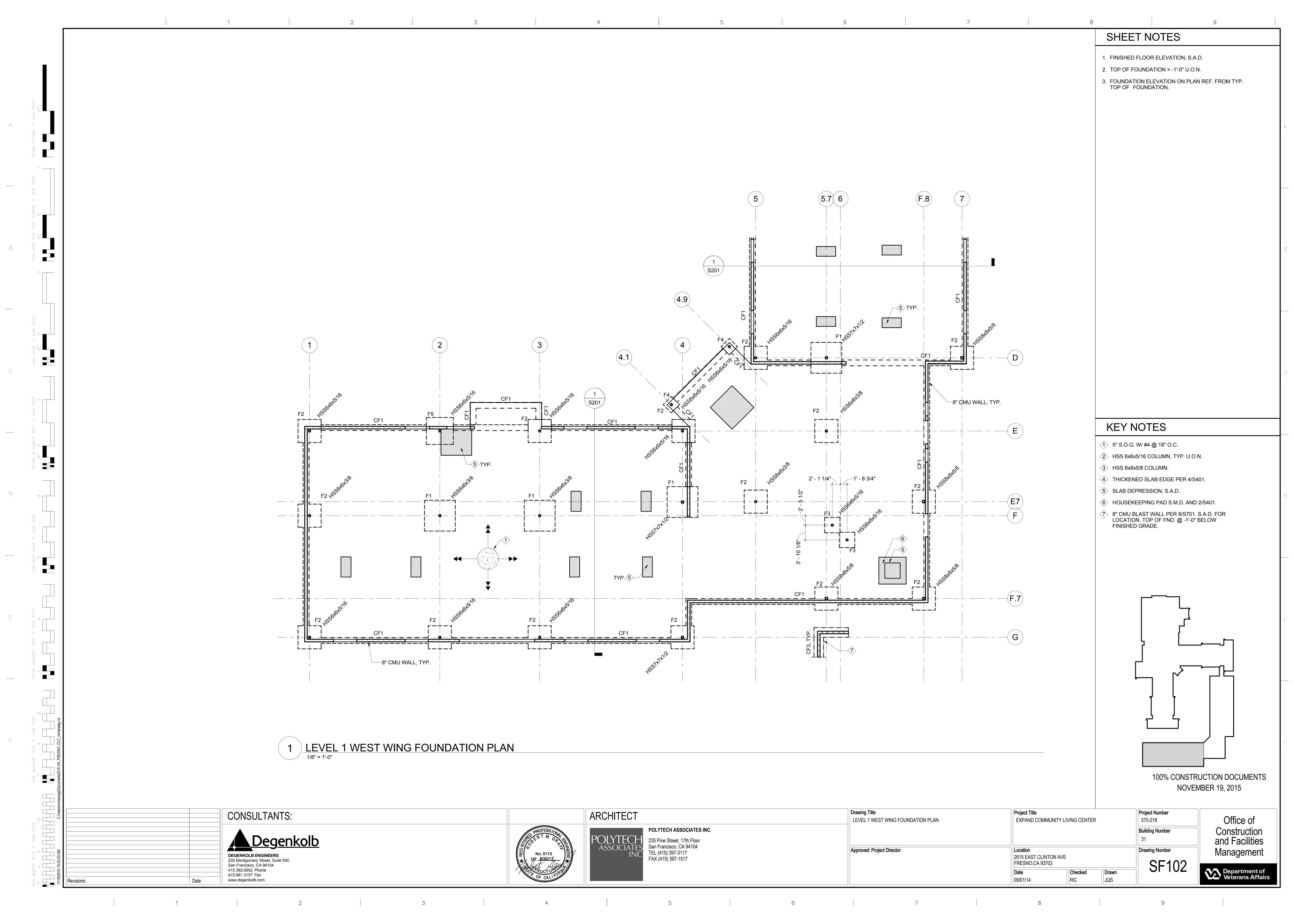
ABBREVIATIONS

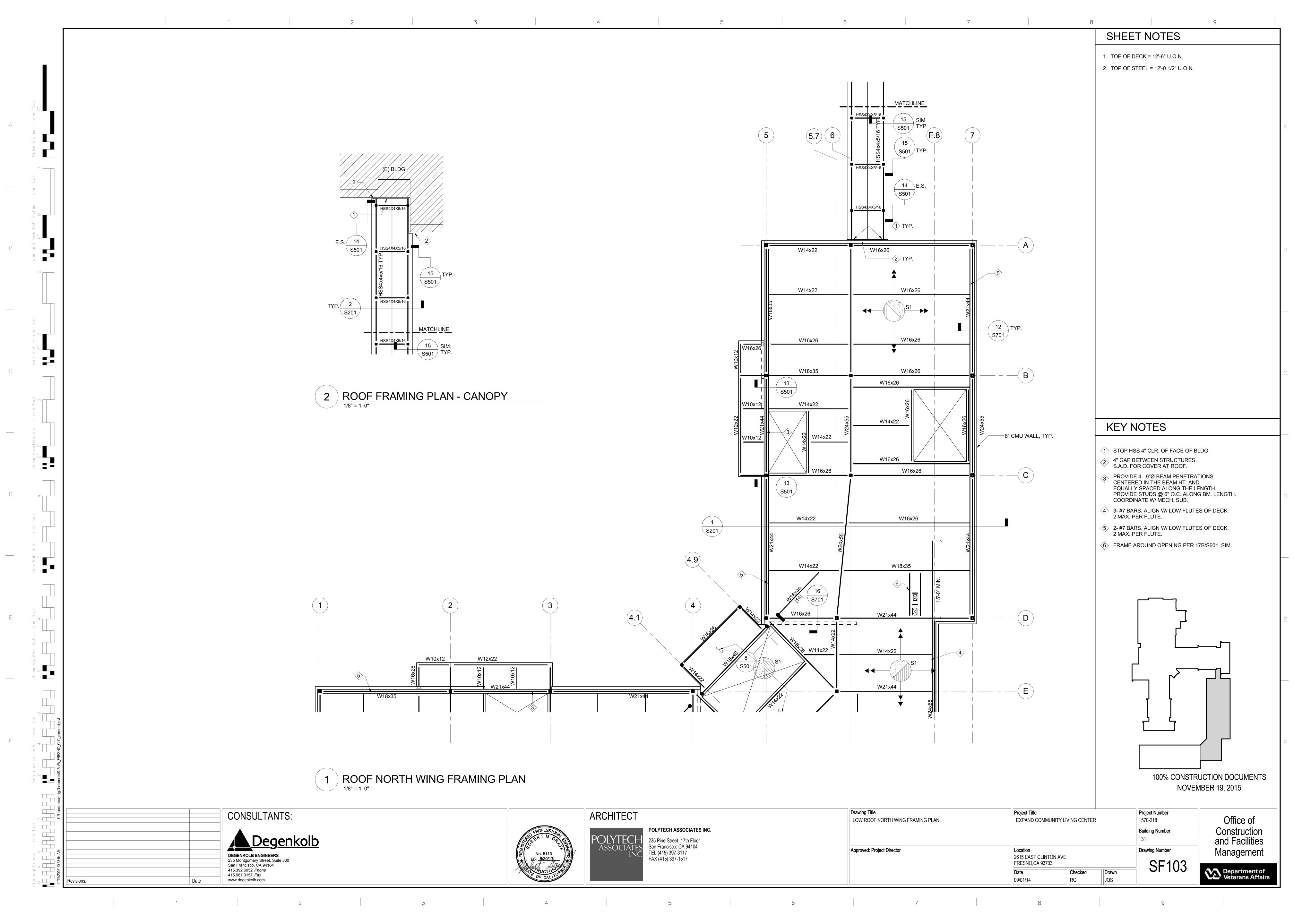
(E) #	EXISTING NUMBER	ID INFO	INSIDE DIAMETER/DIMENSION INFORMATION
& @	AND AT	JST, JSTS	JOIST, JOISTS
ø ld ldh	DIAMETER DEVELOPMENT LENGTH HOOK DEVELOPMENT LENGTH	JT KO	JOINT KNOCK-OUT
ls	LAP SPLICE LENGTH	L	ANGLE
AA ABV	ADHESIVE ANCHOR ABOVE	LP LEV	LOW POINT LEVEL
ADD'L ADJ	ADDITIONAL ADJACENT	LLH LLV	LONG LEG HORIZONTAL LONG LEG VERTICAL
AGGR ALUM	AGGREGATE ALUMINUM	LOC LONGIT	LOCATION LONGITUDINAL
ALT ANSI APPROX	ALTERNATE AMERICAN NATIONAL STANDARDS INSTITUTE APPROXIMATE	LT LWC	LIGHT LIGHTWEIGHT CONCRETE
AR ARCH	ANCHOR ROD ARCHITECTURAL / ARCHITECT	MAX MB	MAXIMUM MACHINE BOLT
ASTM ASPH	AMERICAN SOCIETY for TESTING and MATERIALS ASPHALT	MEZZ MECH	MEZZANINE MECHANICAL
AC AWG	ASPHALT CONCRETE AMERICAN WIRE GAUGE	MEP MFR	MECHANICAL, ELECTRICAL, PLUMBING DOCUMENTS MANUFACTURER
BF BLDG	BOTH FACES BUILDING	MIN MISC MTL	MINIMUM MISCELLANEOUS METAL
BLK, BLKG BM, BMS	BLOCK or BLOCKING BEAM, BEAMS	MTD	MOUNTED
BN BO	BOUNDARY NAILING BOTTOM OF	NF NIC	NEAR FACE NOT IN CONTRACT
BOF BOT	BOTTOM OF FOOTING BOTTOM	NOM NS	NOMINAL (DIAMETER) NEAR SIDE
BRG BSMT	BEARING BASEMENT	NTS NWC	NOT TO SCALE NORMAL WEIGHT CONCRETE
BRBF BS BTWN	BUCKLING RESTRAINED BRACE FRAME BOTH SIDES BETWEEN	OC OD	ON CENTER OUTSIDE DIAMETER/DIMENSION
BW	BOTH WAYS	OPH OPNG	OPPOSITE HAND OPENING
C CIP	CHANNEL CAST IN PLACE	OPP	OPPOSITE
CJ CJP	CONSTRUCTION JOINT COMPLETE JOINT PENETRATION	PC, PCS PCC	PIECE, PIECES PRECAST CONCRETE
CLG CL	CEILING CENTERLINE	PERP PJP	PERPENDICULAR PARTIAL JOINT PENETRATION
CLR CMU COL	CLEAR CONCRETE MASONRY UNIT COLUMN	PL PLYWD PTN	PLATE PLYWOOD PARTITION
CONC CONN	CONCRETE CONNECTION	RO	ROUGH OPENING
CONSTR CONT	CONSTRUCTION CONTINUOUS	R REBAR	RADIUS REINFORCING BAR
CSK CTR	COUNTERSINK CENTER	REF REINF	REFERENCE REINFORCED or REINFORCING
d DBL	PENNY (NAIL SIZE) DOUBLE	REQ'D REV RFG	REQUIRED REVISION ROOFING
DK, DKG DEMO	DECK or DECKING DEMOLITION	RSJ	ROLLED STEEL JOIST
DET, DETS DIAG	DETAIL, DETAILS DIAGONAL	SAD SCHED	SEE ARCHITECTURAL DOCUMENTS/DRAWINGS SCHEDULE
DIM, DIMS DIST	DIMENSION, DIMENSIONS DISTANCE	SECT SHT	SECTION SHEET
DN DO	DOWN DITTO	SHTG SIM	SHEATHING SIMILAR
DP DWL, DWLS DWG, DWGS	DEEP DOWEL, DOWELS DRAWING, DRAWINGS	SL SMF SMS	SLOPE SPECIAL MOMENT FRAME SHEET METAL SCREW
EA	EACH	SOG	SLAB ON GRADE SPECIFICATIONS
EBF EF	ECCENTRIC BRACE FRAME EACH FACE	SPSW SQ	SPECIAL PLATE SHEAR WALL SQUARE
EJ EL	EXPANSION JOINT ELEVATION	SS STAG	STAINLESS STEEL STAGGER or STAGGERED
ELEC ELEV EMBED	ELECTRICAL ELEVATOR EMBEDMENT	STD STIF STIR	STANDARD STIFFENER
EN EOS	EDGE NAILING EDGE OF SLAB	STL STRUCT	STIRRUP or STIRRUPS STEEL STRUCTURAL
EQ EQUIP	EQUAL EQUIPMENT	SUB SUSP	SUBSTITUTE SUSPENDED
ES EW	EACH SIDE EACH WAY	SYMM	SYMMETRICAL
EXCAV EXP EXT	EXCAVATION EXPANSION EXTERIOR	T&B T&G THK	TOP and BOTTOM TONGUE and GROOVE THICK
FF	FAR FACE	THRD THRU	THREADED THROUGH
FDN FIN	FOUNDATION FINISH	TO TOC	TOP OF TOP OF CONCRETE
FLG FLR, FLRS	FLANGE FLOOR, FLOORS	TOS TR TYP	TOP OF STEEL TREAD TYPICAL
FN F0 FOC	FIELD NAILING FACE OF FACE OF CONCRETE	UON	UNLESS OTHERWISE NOTED
FOS FP	FACE OF STUDS FIREPROOFING	URM	UNREINFORCED MASONRY
FS FT FTG, FTGS	FAR SIDE FOOT OR FEET FOOTING, FOOTINGS	VENT VERT, (V) VIF	VENTILATE VERTICAL VERIFY IN FIELD
GA	GAGE	W or WF	WIDE FLANGE
GALV GLB	GALVANIZED GLU-LAM BEAM	W/ W/O	WITH WITHOUT
GRND <i>GR</i>	GROUND GRADE	WD WP	WOOD WORK POINT
HDG HDR	HOT DIPPED GALVANIZED HEADER	WT WWM	WEIGHT/TEE SECTION WELDED WIRE MESH
HP HSB	HIGH POINT HIGH STRENGTH BOLTS	X HVY XX HVY	EXTRA HEAVY DOUBLE EXTRA HEAVY
HSS HT	HOLLOW STRUCTURAL SECTION HEIGHT	X STR XX STR	EXTRA STRONG DOUBLE EXTRA STRONG
HK, HKS HORIZ, (H)	HOOKS HORIZONTAL		
			100% CONSTRU

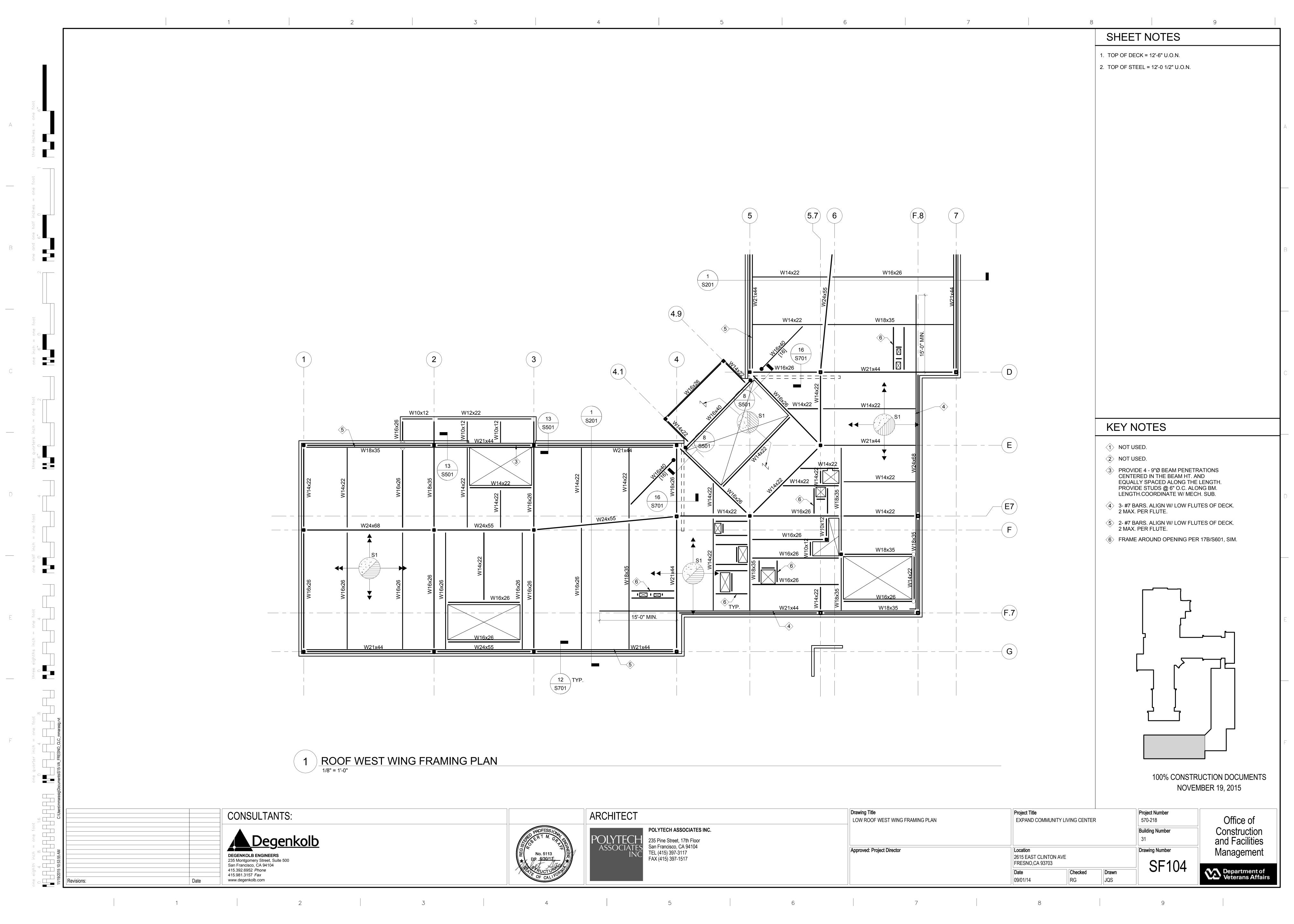
100% CONSTRUCTION DOCUMENTS NOVEMBER 19, 2015

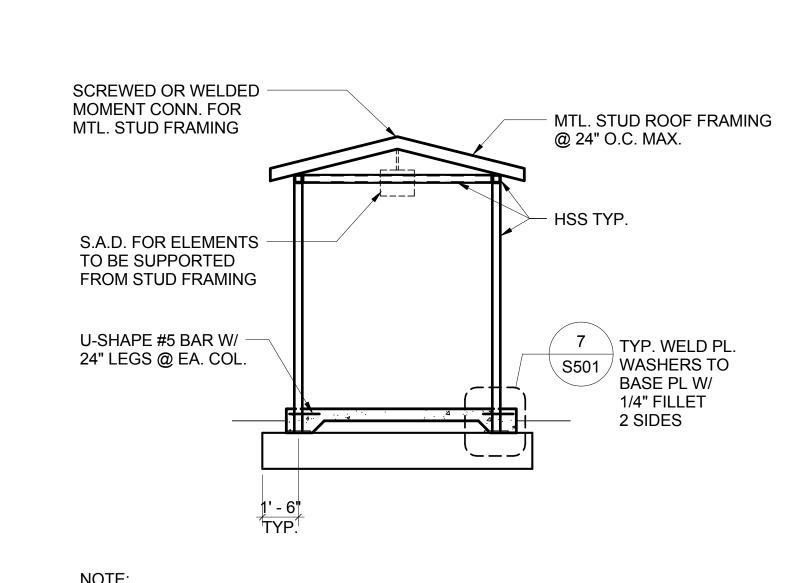
Drawing Title Project Title Project Number ARCHITECT CONSULTANTS: Office of SYMBOLS AND ABBREVIATIONS EXPAND COMMUNITY LIVING CENTER 570-218 Construction and Facilities POLYTECH ASSOCIATES INC. **Building Number** 235 Pine Street, 17th Floor San Francisco, CA 94104 TEL (415) 397-3117 FAX (415) 397-1517 Approved: Project Director **Drawing Number** Location Management **DEGENKOLB ENGINEERS**235 Montgomery Street, Suite 500
San Francisco, CA 94104 2615 EAST CLINTON AVE FRESNO,CA 93703 SS002 Department of Veterans Affairs 415.392.6952 Phone Checked Drawn 415.981.3157 Fax JQS RG www.degenkolb.com





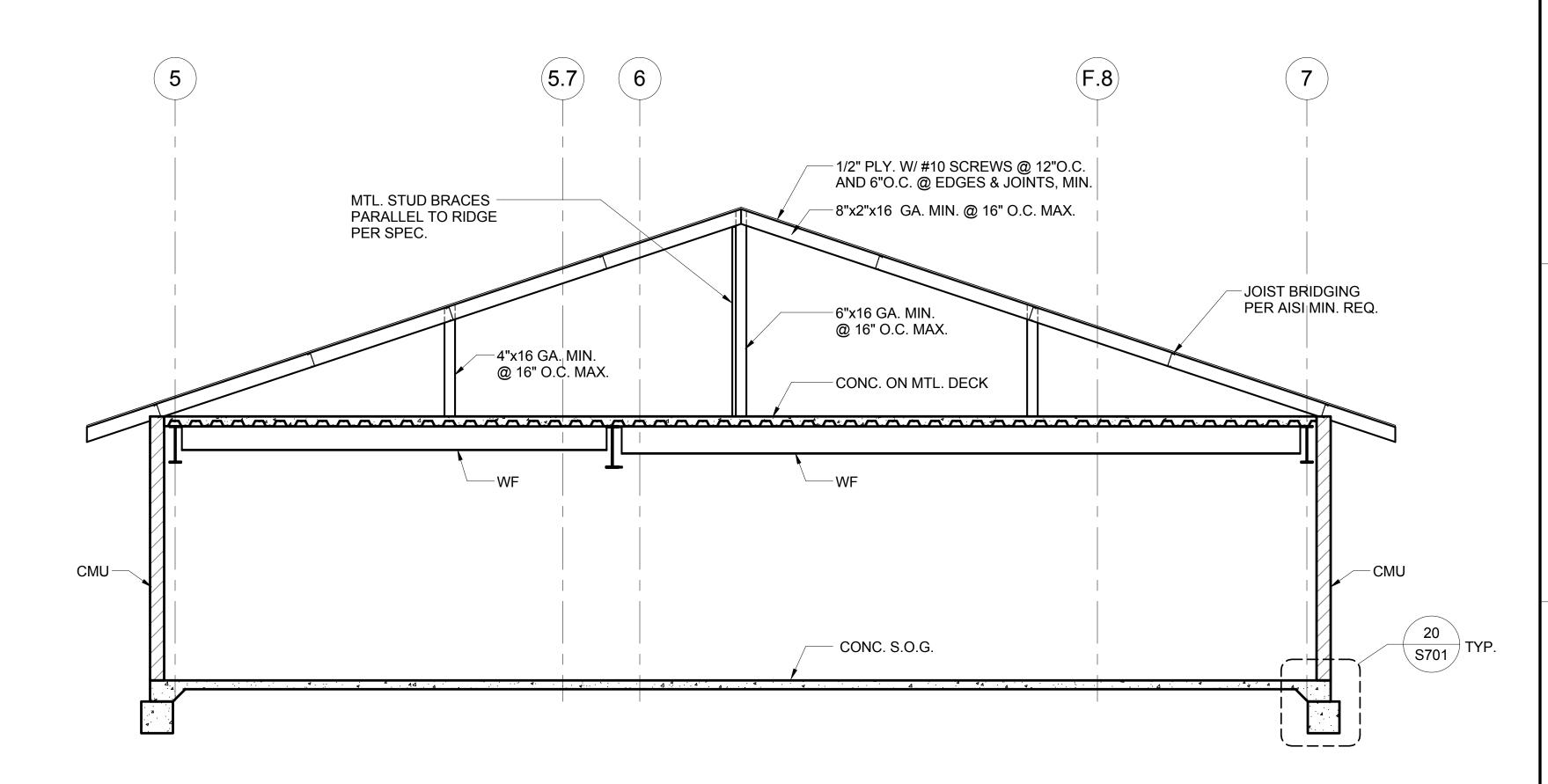






NOTE: METAL STUD ROOF FRAMING IS DESIGN BUILD PER SPECIFICATION 54000.





NOTE:
METAL STUD ROOF FRAMING IS DESIGN BUILD PER SPECIFICATION 54000.

1 TYPICAL ROOF SECTION

1/4" = 1'-0"

100% CONSTRUCTION DOCUMENTS NOVEMBER 19, 2015

C:\Users	CONSULTANTS:	ARCHITECT	Drawing Title BUILDING SECTIONS	Project Title EXPAND COMMUNITY LIVING CENTER	Project Number 570-218	Office of
	<u>Degenkolb</u>	POLYTECH ASSOCIATES INC. 235 Pine Street, 17th Floor San Francisco, CA 94104 The ASSOCIATES San Francisco CA 94104			Building Number 31	Construction and Facilities
10:53:42 AM	DEGENKOLB ENGINEERS 235 Montgomery Street, Suite 500 San Francisco, CA 94104	W No. 5113	Approved: Project Director	Location 2615 EAST CLINTON AVE FRESNO,CA 93703	Drawing Number S201	Management
Revisions:	415.392.6952 <i>Phone</i> 415.981.3157 <i>Fax</i> Date www.degenkolb.com	FAX (415) 397-1517		DateCheckedDrawn09/01/14RGJQS	3201	Department of Veterans Affairs

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