A B B R E V I A T I O N S

WVTR

Wood

Work Point

Water Vapor Transmission Rate

Kips per Square Inch

ADDL. AESS	Additional Architecturally Exposed	K.S.I. LAM.
AGGR.	Structural Steel Agaregate	L.V.L. LBS.
ALT. A B	Alternate Anchor Bolt	LT.
ANC.	Anchor	LG.
ARCH.	Architect	L.L.H. L.L.V.
ARCH'L ASS'Y	Architectural Assembly	м.в. M.I.W.
AVG. BM.	Average Beam	MFR. MK
BRG. BFI	Bearing Below	MAT'L MAX
BET.	Between	MECH.
BLKG.	Blocking	MEZZ.
BIM. B.O.	Bottom Bottom Of	M.L. MIN.
B.O.D. B.N.	Bottom of Deck Boundary Nailina	MISC. MULT.
B.S., B/S	Both Sides Building	N.F. NS
C.B.C.	California Building Code	(N)
CANT. C.B.	Cantilever Carriage Bolt	NUM. N.I.C.
CLG. CEN.	Ceiling Center	nts #
€, C.L. c.c.	Centerline Center to Center	o.c. OPNG.
C.G. CHNL.	Center of Gravity Channel	OPP. O H
CLR.	Clear	0.S.B.
C.P.	Complete Penetration	0.D.
CONC. CMU	Concrete Concrete Masonry Units	o/ PR.
CONN. C.J.	Connection Construction Joint or	PTN. PSL
CONT	Control Joint Continuous	PARL., PP
C.N.	Continuous Edge Nailing	PEN.
C.M.J.	Control Masonry Joint	
CONST. C/S	Construction Countersink	PLY P.C.F.
D.L. D.B.A.	Dead Load Deformed Bar Anchor	P.S.F. P.S.I.
DET.	Detail	P.A.F.
DIA., Ø	Diameter	PREFAB
DIM. DO	Ditto	Р.Ј.F. Р.Т.
DBL. D.F.	Double Douglas Fir	PROJ.
DWG. D.J.	Drawing Dowel Joint	P.L. RAD.
EA.	Each	RWD.
E.S.	Each Side	REINF.
E.W. E.N.	Each Way Edge Nailing	R.C. REQ'D
ELECT. EL.	Electrical Elevation	REV. RMT
EMBED. ENGR.	Embedment Engineer	SCHED. SECT.
EQ.	Equal Equipment	S.A.D.
EXCAV.	Excavate	S.T.S.
(E) EXP.	Existing Expansion	S.W. SHT.
E.J. EXT.	Expansion Joint Exterior	SIM. S.J.
FAB. F O	Fabrication Face of	S.O.G. S.B.
F.O.C.	Face of Concrete	SPEC's
F.O.S.	Face of Stud	S.F.
F.O.W. F.S.	Face of Wall Far Side	STGR. STD.
FT. F.N.	Feet Field Nailing or	STL. STFNR.
FIG.	Face Nail	STRUCT. SYM.
FIN.	Finish Finish	THK.
FLR.	Floor	THRU
F.D. FTG.	Footing	TOL.
F.E.F. FDN.	Forced—Entry Fastners Foundation	T and I T and (
FRMG. GA.	Framing Gage or Gauge	Т.О. Т.О.В.
GALV.	Galvanize	T.O.C.
GR.	Grade	T.O.M.
GB GRND.	Grade Beam Ground	T.O.S. T.O.W.
GYP. BD. HGR.	Gypsum Board Hanger	TRMR. TS
H.S.A. HDR.	Headed Stud Anchor Header	TYP. U.N.O.
HGT.	Height Hem-Fir	U.B.C.
H.S.B.	High Strength Bolt	VERT.
noo HORIZ.	Horizontal	VOL.
H IN.	Horizontal Reinf. Inches	W.P.J. WT.
INCL. INCL'D	Include Included	W.S. WWF
INFO.	Information Inside Diameter	WWM
INT.		w/
i.u.C. I.J.	international Building Code Isolation Joint	w/o WD.
JT. JST.	Joint Joist	WP WVTR
K.D. KING	Kiln Dried King Stud	
K	Kip (1,000 lbs)	

Laminated Laminated Veneer Lumber Pounds Light Live Load Long Long Leg Horizontal Long Leg Vertical Machine Bolt Malleable Iron Washer Manufacturer MK MAT'L Mark Material Maximum MECH. Mechanical Metal MEZZ. Mezzanine Micro-Lam (By TRUS JST.) Minimum Miscellaneous Multiple Near Face Near Side New Nominal Not in Contract Not to Scale Number or Pounds On Center OPNG. Opening 0PP. 0.H. Opposite Opposite Hand 0.S.B. Oriented Strand Board ORIG. O.D. Original Outside Diameter Over Partition Parallam (By TRUS JST.) PARL., P.P. / Parallel Partial Penetration Penetration Perpendicular Plate Plywood P.C.F. Pounds Per Cubic Foot P.S.F. Pounds Per Square Foot Pounds Per Square Inch P.A.F. Powdered Actuated Fastener P.D.F. Power Driven Fastener PREFAB. Prefabricated Premolded Joint Filler Post-Tensioned; Pressure Treated or Preservative Treated Project Property line Radius Redwood Reference Reinforcement Reinforced Concrete REQ'D Required Revision Rosboro Manufactured Timber SCHED. Schedule SECT. Section See Architectural Drawings S.M.D. See Mechanical Drawings Self—Tapping Screw Shear Wall Sheet SIM. S.J. S.O.G. Similar Slab Joint Slab On Grade S.B. SPEC's Solid Block Specifications Square Square Feet Staggered Standard Steel Stiffner STFNR. STRUCT. Structural SYM. Symmetrical Thick THRD. Threaded THRU T.N. Through Toe Nail Tolerance T and B Top and Bottom T and G Tongue and Groove Top of T.O.B. Top of Beam T.O.C. Top of Concrete T.O.F. Top of Footing Т.О.М. Top of Masonry T.O.S. Top of Steel T.O.W. Top of Wall TRMR. Trimmer Tube Steel Typical U.N.O. Unless Noted Otherwise U.B.C. Uniform Building Code Verify in Field VERT. Vertical Vertical Reinf. Volume W.P.J. Weakened Plane Joint Weiaht Welded Stud or Wood Screw Welded Wire Fabric Welded Wire Mesh Wide Flange Beam With Without

DIVISION 01 - Section 01 00 00 GENERAL REQUIREMENTS

- 1. The Contractor shall verify all dimensions and conditions prior to starting construction. The Engineer shall be notified of any discrepancies or inconsistencies.
- 2. Do not scale the Drawings for working dimensions.
- 3. Notes and details on Drawings shall take precedence over General Notes and
- Typical Details. Typical details shall apply to the project Drawings except whe specific details are shown which shall take precedence. 4. All work shall conform to the minimum standards of the following code:
- The 2016 edition of the California Building Code, and any other regulating agencies which have authority over any portion of the work, and those cod and standards listed in these notes and Specifications.
- 5. See Structural Drawings for the following:
- a. Size and location of window and door openings. b. Size and location of concrete curbs, floor drains, and depressed areas.
- c. Size and location of floor and roof openings except as shown. d. Size and location of interior and exterior non-bearing partitions.
- 6. See Mechanical, Plumbing, and Electrical Drawings for the following: a. Electrical conduit runs, boxes, and outlets in walls, size and location o equipment bases.

b. Pipe runs, sleeves, hangers, trenches, and openings. c. Concrete inserts for fixtures.

- 7. Contractor shall investigate site during clearing and earth work operations for filled excavations or buried structures such as cesspools, cisterns, foundatio etc. If any such structures are found, notify Structural Engineer immediately
- 8. The contract Structural Drawings and Specifications represent the finished structure. They do not indicate the method of construction. The Contractor provide all measures necessary to protect the structure during construction. measures shall include, but not be limited to, bracing, shoring for loads du construction equipment, etc. Observation visits to the site by the Structural Engineer shall not include inspection of the above items.
- 9. Openings, pockets, etc. larger than 6 inches shall not be placed in slabs, beams, joists, columns, walls, etc., Unless specifically detailed on the Struct Drawings. Notify the Structural Engineer when drawings by others show open pockets, etc., not shown on the Structural Drawings, but which are located structural members.
- 10. Construction materials shall be spread out if placed on framed floors or roo Load shall not exceed the design live load per square foot. Provide adequation shoring and/or bracing where structure has not attained design strength.
- 11. Shop Drawings submitted to the Structural Engineer for review shall consist the number of sets to be returned plus one. Shop drawing submittals shall bond copies.
- 12. Adhesive anchors shall be Hilti HIT HY150 epoxy per ICBO ER-5193 with AST A-36 threaded rod or approved equal u.n.o.. Expansion anchors shall be Hi kwik bolts II carbon steel per ICBO ER. 4627 u.n.o.. Adhesive or expansion anchors shall not be installed until masonry grout or concrete has cured to design strength. 13. Design loads:
- Dead Load: 15 psf. Live Load: 303 psf. (snow)
- Pedestrian Load: 90 psf Vehicle Load (Construction): 2500 lbs
- AASHTO Design Requirements: Wind Design Data:

1. Horizontal (HWL): 29.2 psf

2. Vertical (VWL): 120 plf

- Earthquake Design Data:
- Seismic Analysis not Required for Simple Span Bridge (AASHTO 4.7.4.2) Min Connection Force (AASHTO 3.10.9) PGA = 0.47

Fpga = 1.175

As = 0.552EL = 0.331 xDL = 212 lbs

DIVISION 01 - Section 01 11 00 SUMMARY OF WORK

- 1. It shall be the contractors direct responsibility to comply with typical details general notes as delineated or defined on the typical detail drawings of thes contract documents regardless of specific flagging or reference to applicable or detail.
- 2. It shall be the contractor's responsibility to coordinate with all trades regardi utilities passing through and under footings. Structural requirements for these conditions are delineated in typical details.
- 3. Top of footing elevations noted are minimum. see note 2 for additional requirements. 4. Contractor to verify and coordinate all locations and sizes of openings in slo
- slab depressions, and curbs for all related construction prior to floor layout construction. Contractor shall then use appropriate detail(s) or appropriate w section for each applicable condition.
- 5. Drawings are diagrammatic in nature and are not intended to indicate every opening or penetration in roof or other structure. Contractor shall coordinate verify location and size of all such openings and penetrations with related sub-contractors prior to roof or other framing layout or construction. Contr shall then use appropriate typical or referenced detail(s) for each opening of penetration.
- 6. Contractor to verify with appropriate sub-contractors the exact location, weight and intended method of attachment of all items to be suspended from or way attached to any roof framing or other structural member unless such are clearly addressed by the structural construction documents. This informat shall be transmitted in writing to the appropriate framing manufacturer via structural engineer prior to final design or fabrication of structural framing members.
- 7. Contractor to verify dimensions with architect prior to construction. 8. Contractor to verify all existing conditions and dimensions and notify the arch in writing of any discrepancies.
- 9. The contractor and all subcontractors he intends to use (including agents a suppliers) are aware of and acknowledge that close coordination among architectural, mechanical, electrical and structural drawings is required for th following:
 - a. Determination of all column locations and sizes. b. Determination of top of floor, top of steel, wall plate and top of beam
- elevations. c. Verification of all dimensions.
- d. Verify all tops of footings.
- 10. The contractor and all subcontractors he intends to use (including agents a suppliers) shall make consideration for and include Monies for the above in preparation of their bids. This requirement shall supersede any contained in AISC "Manual of Steel Construction".

DIVISION 01 - Section 01 45 00 SPECIAL INSPECTIONS AND DEFERRED SI SEE SHEET SO.2 FOR SPECIAL INSPECTION NOTES

G	Е	Ν	E	R	A	L	Ν	0	Т	Ε	S
	DIVISIO	ON 01 -	- Section	01 82 13	FOUND	ATION PERFO	RMANCE REQU	IREMENTS		DIVISION	06 - Section 06 11 00 WOOD FRAMING
	1	. Four H& 107	ndation de :K an NV5 775 Pic uckee, CA	sign base Compan neer Trai 96161	ed on so y il, #213	oils report b	y the followir	ig company	:	1.	Framing lumber shall be Alaskan Yellow Cedar 20F-V12 or better, with 19% unless otherwise noted. Railing and decking shall be Douglas Fir no unless otherwise noted. Posts and beams 6 x and larger shall be Dougl
d en	2	(53 Job 2. Foot	30) 587-5 5 No. 421 ings are 6	5156 Fax 75.03 designed	: (530) DATE: based o	587–5196 6/1/18 n an allowal	ble soil beari	ng pressure	2	2.	All bolts shall conform to ASTM A-307. Bolt holes shall be $1/16$ in. The bolt size. Retighten all nuts prior to closing in. All bolts shall have threads projecting beyond the nut, rolled threads (upset) are not permit Standard cut washers shall be used under bolt heads and nuts against
) des		of 2 shal 3. Cont	2500 psf l be 24 in tractor sho	vith 1/3 iches bel all provide water ar	increase ow adjac e for pre	e for short- cent exterior oper de-wat	term loads. A finish Grade ering of exco	All footings avations		0.	or malleable iron washers for all bolts designed to act in tension. See Heavy plate washer sizes shall be as follows:
	4	4. Cont shec eart 5. Excc	tractor sho othing and h banks. ovations fo	shoring r footing	e for de required s shall l	sign and ins to safely a be approved	stallation of a adequated by the Soils	all cribbing, y retain the Engineer	9		1/2 in. bolt
	6	prior soils Engi S. All (r to placir s Engineer neer to si excavation:	g the co when ins ubmit lett	oncrete of spection er of co e proper	and reinforci of excavation ompliance to ly backfilled	ng. Contracto on is ready. the owner. Do not plac	or to notify Soils		4.	1 in. bolt
or	_	behi strei walls com shal	nd retainir ngth. Cont s below G pletely in I provide	ng walls ractor sh ade from place an or design	before c nall brace n Lateral d have n, permi	oncrete has e or protect Loads until attained full ts and insta	attained full all building attaching flo strength. Co llation of suc	design and pit oors are ntractor ch bracing.		5.	approval for any holes or notches not detailed. Nailed connections shall conform to the minimum nailing schedule of ta California Building Code, except as otherwise noted. All nails for hardwa wire nails unless manufacturer specifically allows other nail types. Where splitting, holes for the nails shall be pre-drilled. All framing can be cor
ns, /.	8	on [B. Foot be r	Drawings. Drawings. ing backfi mechanica	l and uti ly compo	ility trendicted in	ch backfill w layers, to tl	vithin building he approval o	area shall of the Soils	I	6. 7.	Unless noted otherwise, pre-manufactured framing connectors called for be Simpson Strong-Tie connectors, or approved equal. All GluLam Beams specified shall have the following minimum design str
shall Such e to	g	Engi 9. All c cons	neer. Floo abandoned struction s	ding will footings hall be r	not be , utilities emoved.	permitted. , etc., that	interfere with	new		8.	width and depth as shown on plan: $fb=2000$ psi, $fv=265$ psi, $e=1$ Do <u>NOT</u> notch beams, joists, and studs, (U.N.O.)
decks,	DIVISION	03 –	Section 03	00 00	CONCRE	<u>re</u>				DIVISI	ON 06 – Section 06 18 00 GLUED-LAMINATED CONSTRUCTION
ural ings, in of. te	1. 2.	All pha 'Buildin 'Specifi editions Reinford	ses of work g Code Req cations for s, with mod ced concret	pertaining uirements Structural fications a design is	to the c for Reinfo Concrete s noted i by the	concrete const prced Concrete for Buildings' n the Drawings 'Ultimate Stren	ruction shall co ' (ACI 318) and (ACI 301) lates s or Specification igth Design met tion Jaboratory	onform to the d the st approved ons. thod'.	l by	1. 2.	General: Provide structural glued-laminated timber that complies with A research/evaluation reports acceptable to authorities having jurisdiction. Glued laminated wood beams shall be Alaskan Yellow Cedar or approver resistant, combination 20F-V12 AC/AC for simple spans and 20F-V captilevered spans with E=1.5x10^6 psi, all with exterior alu
of be	0.	the Str	ructural Eng Proposed m uffixed on e	neer. x designs ach submit	shall be ted copy	no more than the original s	1 (one) year of	old, and have ewing Enginee	r.	3. 4.	All members to have aitc or apa-ews stamp. All laminations for 'Glu-Lam' beams shall be 1 1/2 inches thick and noted. All laminations shall be parallel to the bottom edge of the beam otherwise
STM Ilti S		b. E d c. E o	he reviewing Each mix de lesignate loo Each mix de lir entrainme	g Engineer esign shall eation of u esign shall ent, type o	shall be indicate f ise for ea include th f aggrega	registered in t the project na ich proposed r ne slump, befo ite, type of ce	me and addres mix design. pre and after a ement, and adm	vada. s. Contractor dding plastici nixtures to be	shall zer,	5. 6. 7	For additional requirements see Specifications. 'Glu-Lam' beam sizes shown on plans are net sizes. Provide additional required for shaped ridges, hips, valley members, beam seats, etc. See requirements not noted. Manufacture 'Glu-Lam' as required for moisture content, used in arid of
		d. A e. N f. W	All exposed No calcium Vater cemer Slab on ara	at grade o chloride sh t ratio for	concrete s nall be us footings	shall have air ed. and walls sha er cement rat	entrainment. Il not exceed C).55.	sture	8.	Simpson hardware shall be Zmax Hot Dipped Galvanized.
		y, c h. (w	cured per A Concrete ma v/ architect	Cl 318 Sec by have a	. 5.11 re maximum	quirements. of 15% fly a	sh subsitition fo	or cement ve	rify	<u>DIVISI(</u> 1. 2.	<u>ON 31 - Section 31 62 16 HELICAL PIER</u> Hot dip galvanized per ASTM A153-(latest revision). Lead and extension section lengths and helix spacings are nominal.
	4.	i. A Schedu	n approved le of Struct	curing cor ural concre	npound co ete 28-do	ompatible with by strengths a	the stain finisi nd types:	h can be use	ed.	3. 4.	Nominal spacing between helix plates is three times the diameter of the Shaft material-hot rolled round-cornered-square (rcs) solid steel bars minimum yield strength=90 ksi.
		LOCATIC Footing Concret	DN IN STRU(s: e retaining	CTURE S walls:	STRENGTH 3500 4000	PSI Nor Nor	TYPE mal Wt. 145 ± mal Wt. 145 ±	5 pcf 5 pcf		5.	Heix material-not rolled low alloy steel sheet, strip, or plate per ASIM 80. Minimum yield strength=80 ksi. for 8" helices, $1/2$ " thick. for all a thick. Coupling bolts: $7/8$ ' diameter x $3-1/2$ ' long hex head per ASTM A193
	5.	Portlan cement admixtu concret	d cement s c/c-y and r ures that do te exposed	nall confor naximum 3 not prom to weather	m to AST 3" slump note shrinl	M C—150, type with water (slu kage). Provide	e II. Use minim ump may be in 6% ± 1% air	um 6 sacks creased with entrainment i	n	7. 8. 9.	Manufacturer to have in effect industry recognized written quality contro- manufacturing processes. All welding to be done by welders certified under section 5 of the AWS See ICC evaluation service inc., evaluation report NO., ESR-2794 for no allowable strength values and/or conditions of use concerning informati
and se	6.	Maximu forms, a. / c	im aggregat 3/4 distan Aggregate fo of ASTM C-3	e size sha ce between r hard roc 33 and pro	II conform reinforci ck concret oject Spec	n with the follong bars, 1/3 are shall confor difications. Exco	owing: 1/5 dist thickness of slo m to all requir eptions may be	ance between ab. ements and t used only w	ests ith	Per Boo	drawing, r H&K Soils Report: ardwalk Helical Pier Support — Chance Helical Pier or equivale
e note	7	p	ermission o	f the Struc	ctural Eng	ineer.				Dep	pth of Pier (feet bgs) 10
ding se	7. 8. 9. 10.	specifie Dry pac Concret Placem	ed cambers ck under bo te mixing o ent of conc	shown on se plates, perations, o rete shall	the Draw sill plates etc., shall conform	ings. s, etc., see Sp conform to A to ACI-318 re	oecifications. STM C-94. quirements.	tea to provid	e the	Nur Dep Dep Pier	mber of Helices 2 pth (feet)/Diameter of Helix 1 6.5/14° pth (feet)/Diameter of Helix 2 10/12° er Batter 10°±4°
iabs, or vall	12.	column Clear c a. (or wall po coverage of Concrete po	ur and beg concrete c ured direct	ginning of over outer ly against	floor pour. reinforcing bo earth, 3 in.	ars shall be as clear to reinfor	follows: cing.	01	—CI —H4 —To —UI	chance SS175 or larger diameter shaft lelical Pier material should be suitable for placement in wet e orque strength•rating-10,500 ft-lb ltimate capacity <compression)-105 kip<="" td=""></compression)-105>
e and ractor		b. 5 c. f d. 5	Structural sl Formed cone Slabs on Gr	abs: 1 in crete with ade: cent	. clear (to earth bac er in slab	op to bottom) kfill: 2 in. cl	ear.	-		−Lle −Pe −Nc	e based on a torque factor (kt)-10 er icc-es ac358 section 3132 ominal tension strength (coupling bolt)-100 kip
ight,	13.	All rein positior	forcing bars n prior to p	, anchor b lacing cond	oolts and crete.	other concrete	e inserts shall	be well secur	ed in	<u>BEARII</u>	ING PAD
in any item(s) ation	14.	Provide not cul except on the	sleeves for t any reinfo as shown. Drawings.	plumbing rcing which Notify the	and elec may co Structural	trical openings nflict. Coring i Engineer in d	in concrete be n concrete is r advance of con	efore placing. 10t permitted ditions not sł	Do Iown	Pro Plai	ovide elastomeric bearing pad at girder bearing locations to a thermal expansion. iin elastomer bearing pads and laminated steel bearing pads the applicable requirements of ASTM D4014. Laminated fabr
	15. 16. 17	Conduit Project chamfe	t shall not ing corners er, unless of	be placed of beams, herwise no	in slabs o walls, co oted on Ar	or walls unless olumns, etc., s rchitectural Dro	s specifically de hall be formed awings.	tailed otherwi with a 1/2 tile finish sho	se. in.	Ste	shall conform to the applicable requirements of AASHTO M25 eel reinforced elastomeric bearing pads material requirements
chitect Ind	17.	approve Place of hot and	ed by the t and protect d cold expo	le manufa concrete i sure condi	cturer bef n complia tions.	ore use. nce with ACI	305 and 306, r	respectively, c	uring	- - -	Steel reinforced elastomeric bearing pad (grade 4) Durometer hardness (shore a) of 60 Shear modulus at 73°f of 175 psi
he	DIVISION	03 –	Section 03	21 00	REINFOR	<u>CING STEEL</u>					
1	1.	All rein Code R the 'Mo edition)	forcing stee equirements anual of Sto by the C.F cations.	shall be for Reinfo ndard Prac .S.I. and t	detailed c orced Con ctice for I he W.C.R.S	and placed in crete' (ACI 31) Reinforced Cor S.I., as modifie	conformance wi 8 latest approvincrete Construct ed by the proje	ith the 'Buildi ed edition), c cion' (latest ect Drawings	ng nd and		
ınd	2.	Deforme dowels which r	ed reinforcir and reinfor may be Grad	g bars sh ing bars i le 40, unle	all be AST n non str ess noted	IM A-615 Grad Tuctural concre otherwise. Us	de 60 except t ite such as sla e A706 reinforc	ies, stirrups, bs on grade, ing bars that	slab : are		
the	3.	required Welding 'Recom Society,	of reinforc of reinforc mended Pro AWS-D1.4.	y. ng shall b ctices for See Spec	e with lov Welding R ifications.	w hydrogen ele Reinforcing Stee	ectrodes in con el, etc.', Americ	formance with an Welding	1		
UBMITIALS	4. 5. 6.	All rein Welded Minimur half w	forcing bar wire fabric n lap of we nich ever is	bends sha shall confo lded wire greater	ll be mad orm to AS fabric sho	le cold. STM A-185. Ill be 6 inches	s or one full m	esh and one			
	7. 8.	Reinford Dowels spacing	cing splices between for or number	shall be n otings and as the ve	nade only walls or ertical reir	where indicat columns shall nforcing, respe	ed on the draw be the same o ctively.	vings. grade, size av	nd		

9. All bars shall be marked so their identification can be made when the final

11. All reinforcing bars to be tied in place before pouring concrete or grout.

10. Splice reinforcing per detail 5/S0.2 for both concrete and masonry. Splice all

in-place inspection is made.

reinforcing bars 2'-0" minimum.

12. Do not splice reinforcing steel in middle third of walls.

moisture content < no. 2 Grade or better, glas Fir No. 1 Grade,	S0.1 S0.2	SHEET INDEX GENERAL NOTES GENERAL NOTES (CONTINUED)/ TYPICAL DETAILS	LINCHPIN NaineEFranci 630.563.6341 h 630.563.6341
naximum larger than e a minimum of 3 hitted. t wood lloo beging plate	S1.1	BRIDGE SITE PLAN	
t wood. Use heavy plate Drawings for location.	S1.2	BRIDGE SECTION	CORE STRL 650 S R www
	S1.3	BRIDGE FOUNDATION/FRAMING PLAN	
	S2.0	BOARDWALK SITE PLAN	PROFESSION
Obtain Engineer's	S2.1	BOARDWALK ENLARGED SECTION "A"	Start Concernent
ware shall be common e driving of nails cause	S2.2	BOARDWALK ENLARGED SECTION "B"	* a sucture *
ompleted with 16d or on the Drawings shall	S2.3	BOARDWALK ENLARGED SECTION "C"	Pt The OF CAL IFOR
trengths: 1,500,000	S2.4 S2.5	BOARDWALK ENLARGED SECTION "D" BOARDWALK SECTIONS/PARTIAL FRAMING PLAN	REVISIONS
AITC/ANSI A190.1 or n. ed natural decay -V13 AC/AC for ue.			
of the width shown or 1m, unless noted			
al laminations as be details for condition.			
the lower helix. s per ASTM A29J M A656, or A1018 grade other helices, 3/8" 3 grade B7			
rol for all materials and			
nominal, design, and tion presented on this			These Drawings have been prepared by Forbes Linchoin Structural Engineering Inc.
lent:			They are not suitable for use on other projects, in other locations, or by any other individuals without the written approval and participation of Forbes Linchpin Structural Engineering Inc Reproduction is prohibited.
environment			DNNER TRAIL ICOOP TRAIL INNER E, CA
accomodate			
shall conform to pric bearing pads 51.			TAHOE NATU NATU SOU TAHO TRU
			DESIGNED BY D.G.
			DRAFTED BY T.E.S. CLIENT INFORMATION TAHOE DONNER ASSOCIATION 11500
			NORTHWOODS BLVD TRUCKEE, CA 96161
			PROJECT# 2079 ISSUE DATE 12/10/18
			SCALE AS NOTED
			GENERAL NOTES
			S0.1

10 OF 20

S 4 BAR 4 MIN D= D= BAR TI 4 WIN 0 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +	TANDA 6 BA 8 BA OFFSE ES & 0	RD HU R Ø FC T STIRF	COKS CR #3 CR #9 6 CUPS 6 CUPS 90 90 135	TO # TO #	BAR Ø	, MIN	×		\$/.
SIZE OF REINF.	#3	#4	#5	#6	#7	#8	#9	#10	
CONCRETE	24"	30"	46"	65"	89"	 117"	148"	188"	
CMU – SINGLE CURT	AIN O	F REII	NFORC	EMEN	Т				
TYPICAL	24"	24"	30"	36"	42"	48"	_	_	
w/ SPLICE AT MID SPAN / HEIGHT	27"	36"	45"	54"	63"	72"	_	_	
CMU – DOUBLE CUR	TAIN (OF RE	INFOR	CEME	NT				
TYPICAL	24"	31"	39"	47"	55"	63"	_	_	
w/ SPLICE AT MID SPAN / HEIGHT	35"	47"	59"	70"	82"	94"	_	_	

REBAR CONFIG. AND LAPS

C-000-104/N.T.S.



SPECIAL INSPECTIO	ON SCHEI	OULE	
TYPE	CONTINUOUS INSPECTION	PERIODIC INSPECTION	REQUIRED OF THIS PROJECT
CONCRETE			
TAKING OF SPECIMENS AND PLACEMENT OF CONCRETE WHERE CALCULATED DESIGN f,c GREATER THAN 2500 psi.		\checkmark	\checkmark
DURING PLACEMENT OF REINFORCING STEEL		\checkmark	\checkmark
STRESSING OF POST-TENSIONING TENDONS			
HIGH STRENGTH GROUT AND MOMENT FRAME ANCHOR ROD PLACEMENT			
INSTALLATION OF DAYTON SUPERIOR BARLOCK REBAR COUPLERS			
ALL EPOXY-SET ANCHORS			
STEEL			
WELDING			
COMPLETE JOINT PENETRATION WELDS			
PERIODIC INSPECTION OF FILLET WELDS			
WELDED STUDS			
FLOOR AND ROOF DECK WELDING			
HIGH-STRENGTH BOLTING (SEE NOTES, SECTION 5)			
STRUCTURAL MASONRY			
DURING PREPARATION AND TAKING OF ANY REQUIRED TEST SPECIMENS			
AT START OF LAYING UNITS, AFTER PLACEMENT OF REINFORCING STEEL, GROUT SPACE PRIOR TO EACH GROUTING OPERATION AND DURING ALL GROUTING OPERATION			
SIMPSON TITEN HD ANCHORS			
AFTER INSTALLATION OF ALL SHEAR WALL AND DIAPHRAGM SHEATHING WITH NAIL SPACING OF 4" o.c. OR LESS			
AFTER INSTALLATION OF A NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS INCLUDING DRAG STRUTS, STRAPS, BRACES AND HOLDOWNS			
HELICAL PIERS	\checkmark		

* SPECIAL INSPECTION NEED NOT BE PRESENT CONTINUOUSLY DURING PLACING OF REINFORCING STEEL PROVIDED THE INSPECTOR HAS INSPECTED FOR CONFORMANCE TO PLANS PRIOR TO CLOSING OF FORMS OR DELIVERY OF CONCRETE TO THE JOB SITE.

<u>NOTES</u>

- WITH CBC SECTION 17043 AND AWS D1.1 CHAPTER 6.
- 1B. COMPLETE PENETRATION WELDS
- 1B2, NON-DISTRUCTIVE TESTING REQUIRED FOR ALL COMPLETE PENETRATION WELDS. 1C REINFORCING STEEL
- BE WELDED SHALL BE A706.
- SECTION 1704.4 AND TABLE 1704.4
- DRAG STRUTS, BRACES AND HOLDOWNS.

EXCEPTION FASTING OF WOOD SHEATHING USED FOR WOOD SHEAR WALLS, SHEAR PANELS AND DIAPHRAGMS WHERE THE FASTENER SPACING IS GREATER THAN 4" o.c.

PERIODIC MONITORING MONITORING OF BOLTS INSTALLATION FOR PRE-TENSIONING IS PERMITTED TO BE PERFORMED ON PERIODIC BASSIS WHEN USING THE TURN-OF-NUT METHOD WITH MATCH-MARKING TECHNIQUES, THE DIRECT TENSION INDICATOR METHOD OR THE ALTERNATE DESIGN FASTENER (TWIST -OFF BOLTS) METHOD. JOINTS DESIGNATED AS SNUG TIGHT NEED BE INSPECTED ONLY ON PERIODIC BASSIS.

CONTINUOUS MONITORING MONITORING OF BOLT INSTALLATION FOR PRE-TENSIONING USING THE CALIBRATED WRENCH METHOD OR TURN-OF-NUT METHOD WITHOUT MATCH-MARKING SHALL BE PERFORMED ON CONTINUOUS BASSIS.

1. WELDING (PER CBC 2016, SECTION 17043.M AWS D1.1 AND AISC 341-10) SPECIAL INSPECTION SHALL BE IN ACCORDANCE

1A. PERIODIC INSPECTION OF ALL FILLET WELDS OF ALL FIELD WELDING

1B1. CONTINUOUS INSPECTION REQUIRED FOR ALL FIELD AND SHOP COMPLETE PENETRATION WELDS.

1C1. CONTINUOUS INSPECTION PER CBC AWS D1.4, ACI 318-10 352, ACI 530-10 2.1.10.72 AND 333.4 (B) OF ALL WELD REINFORCING STEEL FOR CONCRETE MOMENT FRAMES AND MASONRY SPLICES. ALL REINFORCING STEEL TO 1C2. PERIODIC INSPECTION PER CBC AWS D1.4 ACI 318-10 352. OF ALL OTHER WELDING OF REINFORCING STEEL NOT IN ITEM 1 ABOVE ALL REINFORCING STEEL TO BE WELDED SHALL BE A706.

2. CONCRETE (PER CBC 2016, SECTION 19015 AND ACI 318-10) SPECIAL INSPECTION SHALL BE IN ACCORDANCE WITH CBC

3A. SPECIAL INSPECTION ON CONCRETE PLACED FOR ELEVATED SLAB AT SECOND FLOOR 3B. SPECIAL INSPECTION ON FOOTINGS AND SLAB -ONOGRADE IS NOT REQUIRED.

3. STRUCTURAL WOOD FOR SEISMIC RESISTANCE (PER CBC 2016. SECTION 1707.3) PERIODIC SPECIAL INSPECTION FOR NAILING, BOLTING.ANCHORING AND OTHER FASTENER COMPONENTS WITHIN THE SEISMIC-FORCE-RESISTING SYSTEM, INCLUDING

4. HIGH-STRENGTH BOLTING (PER CBC 2016, SECTION 1704.3.3 AND AISC 360, SECTION M2.5) WHILE THE WORK IS IN PROGRESS, THE SPECIAL INSPECTOR SHALL DETERMINE THAT THE REQUIREMENTS FOR BOLTS, NUTS, WASHERS AND PAINT, BOLT PARTS AND INSTALLATION AND TIGHTENING IN SUCH STANDARDS ARE MET. FOR BOLTS REQUIRING PRE-TENSIONING, THE SPECIAL INSPECTOR SHALL OBSERVE THE PRE-INSTALLATION TESTING AND CALIBRATION PROCEDURES WHEN SUCH PROCEDURES ARE REQUIRED BY THE INSTALLATION METHOD OR BY PROJECT PLANS OR SPECIFICATION, DETERMINE THAT ALL PILES OF CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED AND MONITOR THE INSTALLATION OF BOLT TO VERIFY THAT THE SELECTED PROCEDURE FOR INSTALLATION IS PROPERLY USED TO TIGHTEN BOLTS. FOR JOINTS REQUIRED TO BE TIGHTENED ONLY TO THE SNUG-TIGHT CONDITION, THE SPECIAL INSPECTOR NEED ONLY VERIFY THAT THE CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED

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LEGEND

SHADED HATCH INDICATE NEW BRIDGE

DASHED LINE INDICATES EXISTING PATH TO BE ABANDONED (FIELD VERIFY)

100 YR FLOOD PLANE /W.S.E

SILT FENCE AS REQUIRED FOR EXTENT OF WORK VERIFY AND COORDINATE LOCATION w/ CIVIL DRAWING

NOTES

- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND COORDINATE AND VERIFY ALL DIMENSIONS WITH THE DRAWINGS. CONTACT ENGINEER WITH DISCREPANCIES BEFORE CONSTRUCTION OCCURS.
- THE 100 YEAR FLOOD PLANE WATER SURFACE ELEVATION (WSE) IN THE AREA OF BRIDGE IS 6379'-6'
- FREEBOARD ELEVATION ABOVE WSE TO BOTTOM OF STRUCTURE 1'-0"
- 4. MAXIMUM ELEVATION ABOVE GROUND SURFACE TO TOP OF WALKING SURFACE: $7'-8\frac{1}{2}"$



/(NORTH)



13 OF 20

BOARDWALK SITE PLAN N.T.S.

S2.0 15 OF 20

LEGEND

SHADED HATCH INDICATE NEW BOARDWALK

DASHED LINE INDICATES EXISTING PATH/BOARDWALK TO BE ABANDONED (FIELD VERIFY)

100 YR FLOOD PLANE /W.S.E

SILT FENCE AS REQUIRED FOR EXTENT OF WORK VERIFY AND COORDINATE LOCATION w/ CIVIL DRAWING

MATCH LINE SEE SHEET S2.2

 \bowtie FORBI OROFESS 100 REVISIONS These Drawings have been prepared by Forbes Linchpin Structural Engineering Inc.. They are not suitable for use on other projects, in other locations, or by any other individuals without the written approval and participation of Forbes Linchpin Structural Engineering Inc.. Reproduction is prohibited. TAHOE DONNER NATURE TRAIL NATURE LOOP SOUTH TRAIL TAHOE DONNER TRUCKEE, CA DESIGNED BY D.G. DRAFTED BY T.E.S. CLIENT INFORMATION TAHOE DONNER ASSOCIATION 11509 NORTHWOODS BLVD TRUCKEE, CA 96161 PROJECT# 2079 ISSUE DATE 12/10/18 SCALE AS NOTED BOARDWALK ENLARGED SECTION "A" S2.1 16 OF 20

