STRUCTURAL COVER SHEET JEFFERSON ELEMENTARY SCHOOL ADDITION AND REMODEL 600 N. FILLMORE STREET JEROME, ID

	ABBREV	IATIONS		GE	ENEI
AB. ACI	Anchor Bolt American Concrete Institute	LW.	Light Weight	1.	The any o
ACT. ADD. ADD'L.	Acoustic Ceiling Tile Addition Additional	MFR. M. MATL.	Manufacturer Bending Moment Material	2.	Sum
FF. GGR. IA	Above Finish Floor Aggregate American Institute of Architects	MAX. MB. MECH.	Maximum Machine Bolt Mechanical	2.	coor
SC SI _T.	American Institute of Steel Construction American Iron and Steel Institute Alternate	MED. MEZZ. MIN.	Medium Mezzanine Minimum	3.	Warı circu
 NSI PA	Aluminum American National Standards Institute American Plywood Association	MISC. MIX. MK.	Miscellaneous Mixture Mark		impli
PPROX. RCH.	Approximate Architect or Architectural	ML MULT.	MicroLam Multiple	4.	Struc discr
STM /G. VS	American Society for Testing and Material Average American Welding Society	N NF.	North Near Face	5.	Cons
DTT. D.	Bottom Board	NO. or # NOM. NTS.	Number Nominal Not to Scale		notes
DG. KG.	Building Blocking	NS.	Near Side On Center	6.	Do n
OD. or BO DECK PL. RG.	Bottom of Deck Base Plate Bearing	OC. OD. OPP.	Outside Diameter Opposite	7.	Note
G.	Channel Center of Gravity	ORIG. OSB OVS.	Original Oriented Strand Board Oversized		proje string
F. OORD. FS	Cubic Foot Coordinate	OWSJ	Open Web Steel Joist	8.	Typi
FS J. JP.	Cold Formed Steel Control Joint Complete Joint Penetration	PAF. PAR. PCF.	Powder Actuated Fastener Parallel Pounds Per Cubic Foot		cont whe
L. LR. OL.	Center Line Clear Column	PEMB PEN. PERM.	Pre-Manufactured Building Penetration Permanent		Engi note
DNC. DNN.	Concrete Connection	PERP. PL.	Perpendicular Plate		indic the S
DNST. DNT. 1U	Construction Continuous Concrete Masonry Units	PP. PROJ. PSF.	Partial Pen. Project Pounds Per Square Foot	9.	The
Y. IAG.	Cubic Yard Diagonal	PSI. P-T P.T.	Pounds Per Square Inch Post Tension, Post Tensioned Pressure Treated		the n and ا
A. M.	Diagonal Diameter Dimensions	QTR.	Quarter		erec
F-L WG.	Douglas Fir-Larch Drawing	RAD. or R. REC.	Radius Recommendation(s)		inclu
ι. }.	East Each Evenneine Belt	REG. REF. REINF.	Reference Reinforce, Reinforced,		force
EC.	Expansion Bolt Expansion Joint Electric or Electrical	REQD. REV.	Reinforcement or Reinforcing Required Revise or Revision	10.	Obse inspe
. or ELEV. IG.	Elevation or Elevator Engineer	RM. RO.	Room Rough Opening		detai the p
DD. or EO DECK DR N.	Edge of Deck Engineer of Record Edge Nail (Nailing)	S SCHED.	South Schedule		Obse verifi
Q. QUIP. ST.	Equal Equipment Estimate	SF. SHTG. SIM.	Strut Force Sheathing Similar	11.	Notif
IST. / (E) T.	Existing Exterior	SK. SPECS.	Sketch Specifications		open mem
\В.).	Fabrication Floor Drain	SQ. SS. SSLT.	Square Stainless Steel Short Slotted Holes Transverse	12.	Prod
	Far Face Finish Floor	STD. STIR.	to Direction of Load Standard Stirrup	12.	the a alterr
R. D.	Foundation Far Side	STR. STRUCT. SYM.	Structural Symmetrical		evalu
. or ' G.	Feet or Foot Footing	T&G T AND B	Tongue and Groove Top and Bottom		jurisc
ALV. C. EN.	Galvanize General Contractor	TAN. THK.	Tangent Thick	13.	Cont burie
3. or GRD.	General (Notes) Glu Lam Beam Grade	THRU TJI. TO.	Through Trus Joist I-Joist Top Of		the S
RND.	Ground Hold-down	TOC or TO CONC. TOF or TO FTG. TOL	Top of Concrete Top of Footing Tolerance	14.	Cons mate
RIZ.	Horizontal	TOM or TO MASONRY TOS or TO STL.	Top of Masonry Top of Steel		braci
or "	Inside Diameter Inside Face Inches	TOW or TO WALL TRANSV. TYP.	Top of Wall Transverse Typical	15.	See locat
CL.	Include or Included Joint	UNO.	Unless Noted Otherwise		slope open
IT. D.	Joint Kip (1,000 lbs.)	VERT. V.I.F.	Vertical Verify in the Field		draw
<	Knockout	VOL. W	Volume West	16.	See ı wall,
	Laminated Pound Angle	W WP. WT.	Wide Flange Work Point Weight		slabs equip
I.E. 3B.	Low Hydrogen Electrode Long Leg Back To Back	X-HVY	Extra Heavy	17.	For n
.H .V DC.	Long Leg Horizontal Long Leg Vertical Locations	X-S YD.	Extra Strong Yard	17.	1613
DNG. /L	Longitudinal Laminated Veneer Lumber	2L	Double Angle		third braci
	0) // / D 0 /			18.	For p Seisr
	SYMBOL	LEGEND			Asso
OPE —	Slope Direction (down / up)	<u>Symbols fo</u> AT	or Concrete per ACI Spacing - Center to Center		
/	Span Direction		Direction in Which Bars		
98'-0"	Miscellaneous Elevation		Extend Limits of Area Covered		
99'-10"	Floor or Steel Elevation		By Bars or Post Tension		
\$	Rigid Connection	Symbols for S	tructural Steel per AISC		
	Masonry (CMU) Wall		— Brace Up Brace Frame		
	Concrete Wall		Brace Frame Brace Down		
<u> </u>			Change (Step) in Elevation		
	Earth		Slip Critical Connection		
	New Construction	SC) 2 - 3	 Number of Bolts per Row 		
	Existing Construction Existing Construction		 Number of Rows 		
\widehat{A}	Beyond		— Revision Cloud and Number		
$\left\langle \begin{array}{c} - \\ - \end{array} \right\rangle$			— Number of Nelson		
\smile	\downarrow \checkmark		Studs required		
vation Reference	Section Cut	W12x19 [10] c=3/4	— Camber size "		
LFRS	Lateral Force Resisting System		 AISC beam designation 		
 Fact	ener Notation		-		
	antity		 Depth of steel joist 		
1 1/4"x3"		14K			
			 Series of steel joist 		
Fas	stener Length stener Diameter Size		Welding symbols per AWS		

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201 N. Maple Grove Ste #100 Boise, Idaho 83704 Phone (208) 342-7168

RAL

Contractor shall verify all dimensions prior to starting construction. The Architect shall be notified of discrepancies or inconsistencies.

nmary of Work: Project consists of new construction as shown on these Contract Documents used in rdination with the Architectural and other discipline's documents. See also note 7.

rranty: The EOR has used the degree of care and skill ordinarily exercised under similar umstances by members of the profession in this locale and no other warranty, either expressed or lied, is made in connection with rendering professional services.

cture noted in the drawings as existing or by others, shall be field verified by the contractor and any repancies noted shall be reported to the Architect/Structural Engineer.

struction documents include but are not limited to: drawings, plan notes, typical details, general es, custom details, specifications, etc. In addition to those prepared by other disciplines.

not scale the drawings for dimensions not shown.

es and details on the drawings shall take precedence over general notes, typical details, and the ect specifications. Where discrepancies between specifications and drawings occur, use the more ngent requirement.

ical details and schedules indicated may not be specifically referenced on the drawings. The tractor is responsible to determine where each typical detail or schedule applies. If locations are found ere no typical detail, typical schedule, or specific detail applies, notify the Architect/Structural ineer. - Drawings indicate general and typical details of construction. Typical details and general es shall apply even if not specifically denoted on plans, uno. Where conditions are not specifically cated similar details of construction shall be used, subject to review and approval by the Architect and <u>Structural Engineer of Record.</u>

contract Structural drawings and specifications represent the finished structure. They <u>do not</u> indicate method of construction. Contractor to provide construction means, methods, techniques, sequences procedures as required. Contractor to provide adequate excavation procedures, shoring, bracing and ction procedures complying with national, state and local safety ordinances. The Contractor shall vide all measures necessary to protect the structure during construction. Such measures shall ude, but not be limited to: bracing and shoring for loads due to hydrostatic, earth, wind or seismic es, construction equipment, temporary loading, etc.

servation visits (site visits) by representatives of Architect/Structural Engineer do not include pection of construction means and methods. Site visits during construction are not continuous nor ailed inspection services which are to be performed by others. Observations are performed solely for purpose of determining if the Contractor understands design intent shown in the contract drawings. servations do not guarantee Contractor's performance and are not to be construed as supervision or fication of construction.

ify the Structural Engineer <u>prior to</u> constructing or fabricating, when drawings by others show nings, pockets, etc., not shown on the structural drawings, but which are located in the structural

ducts that require a report on code compliance shall have an ICC-ES or IAPMO report evaluated for above listed governing building code. Where required by the governing jurisdiction, a submittal as an rnate material and method is required for all reports evaluated to an earlier edition of the IBC. Reports lated to codes other than the above listed code are not permitted, unless allowed by the governing diction.

Itractor shall investigate the site during clearing and earth work operations for filled excavations or ed structures such as cesspools, cisterns, foundations, utilities, etc. If any such structures are found, Structural Engineer shall be notified immediately.

struction materials shall be spread out when placed on framed floors or roofs. The construction erial load shall not exceed the design live load per square foot. Provide adequate shoring and/or cing where structure has not attained design strength.

the architectural drawings for the following: Size and location of door and window openings, size and tion of interior and exterior non-bearing partitions, size and location of concrete curbs, floor drains, bes, depressed areas, changes in level, chamfers, grooves, inserts, size and location of floor and roof nings, floor and roof finishes, stair framing and details, dimensions not shown on the structural wings, ceiling assemblies, exterior wall assemblies, etc.

mechanical, plumbing, and electrical drawings for the following: Pipes, sleeves, hangers, trenches, , floor, and/or roof openings, duct penetration, electrical conduit runs, boxes, outlets in walls and s, concrete inserts for electrical, mechanical or plumbing fixtures, size and location of machine or ipment bases, anchor bolts for mounts, etc., except as shown or noted. See also note 13.

mechanical and electrical equipment anchorage that is to be designed by others, see IBC section 3 and ASCE 7 chapter 13. Use isolators, fasteners and bracing approved by ICC-ES or approved d party capable of transmitting code required lateral loads. Secure suspended equipment with lateral cina.

piping and ductwork bracing to be designed by others, see the latest edition of "Guidelines for smic Restraints of Mechanical Systems" by the Sheet Metal and Air Conditioning Contractors National ociation.

- Shop drawings and material submittals shall be submitted to the Architect and Structural Engineer of Record prior to any fabrication or construction. Electronic submittals shall be made where possible. Ar submittals containing hard copies shall include one reproducible and one copy; reproducible will be marked and returned. Additional copies of reviewed shop drawings are the responsibility of the genera contractor. No modifications or substitution of drawings and specifications will be accepted via shop drawing review. Contractor shall review and stamp shop drawings prior to submission to the Architect/Structural Engineer. Contractor shall review for completeness and compliance with contract documents including addendum's, clarifications, etc. See also note 7.
- Submit shop drawings to the Architect/Structural Engineer as indicated or specified for review prior to fabrication. Review will be for general conformance with design intent conveyed in contract documents

When an engineer is required to sign and stamp shop drawings and calculations, ensure seal indicates engineer as registered in state where project site occurs.

SHOP DRAWINGS

Shop drawings are not a part of contract documents, therefore, Architect's/Structural Engineer's review does not constitute an authorization to deviate from terms and conditions of the contract. See also not

Review of submittals by the structural engineer will include checking for conformance with the design concept and general compliance with the information given in the construction documents. It will not include reviews of the accuracy or completeness of items such as quantities, dimensions, weights or thicknesses, fabrication processes, construction means or methods, coordination with the work of othe trades, or construction safety precautions. Review of a specific item shall not indicate that the structura engineer has reviewed the entire assembly of which the item is a component. The structural engineer shall not be responsible for any deviations from the construction documents not brought to the structur engineer's attention in writing.

Submittals processed by the structural engineer are not change orders

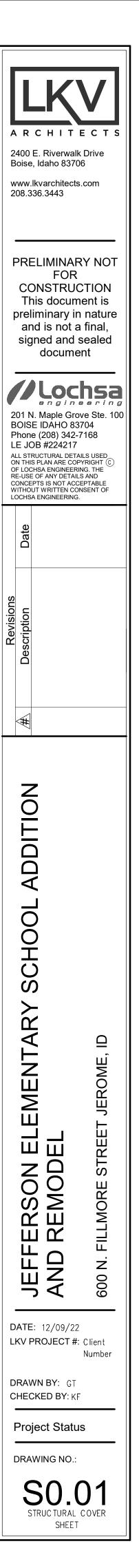
- Shop drawings will be rejected for incompleteness, lack of coordination with other portions of contract documents, lack of calculation (if required), or where modifications or substitutions are indicated without prior review per paragraph A above. Resubmittals shall be clouded and dated for all changes to the submittal. Only clouded portions of resubmittal will be reviewed and Structural Engineer of Record's review stamp applies to only these areas.
- Submit shop drawings and calculations to governing code authority when specifically indicated or requested.
- Maintain a copy of all shop drawings reviewed by the Architect/Structural Engineer at site during construction period.
- Structural Engineer requires 10 working days after receipt of shop drawings and calculations for processing.
- 11. As a minimum shop drawing submittals shall include the following items plus, additional items listed in the project specifications for structural review, but not be limited to:
- Construction sequence description
- Contractor Quality Control testing procedures when required in specifications Concrete mix designs
- Concrete construction joint plans
- Concrete reinforcing bar shop drawings and placing plans Reinforcing bar mill certificates shall be available upon request
- sories material specification, size and loc
- Precast concrete members shown on structural documents Non-shrink grout material specifications and manufacturer's installation recommendations
- Masonry materials and mix designs Masonry reinforcing bar shop drawings and placing plans.
- Masonry veneer out-of-plane anchorage system
- Fabrication shop AISC Certification or statement of equivalent testing and inspection procedures. Structural steel mill certificates shall be available upon request
- Structural steel shop and erection drawings
- Welding Procedure Specifications and certifications
- Metal deck material submittal Metal deck and accessories layout
- Open web steel joist layout, accessories, and calculations
- Glued laminated members (certificates shall be on site and be available upon request) Engineered wood beams (certificates shall be on site and be available upon request)

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Las Vegas, NV 6345 S. Jones Blvd., Ste #100 Las Vegas, NV 89118 Phone (702) 365-9312

Sheet List

DWG # DRAWING TITLE		ORIGINAL	DEV/ #		
DWG#	DRAWING HILL	SUBMITTAL REV. # REV. DATI			
S0.01	STRUCTURAL COVER SHEET	12/09/22			
S0.02	STRUCTURAL DESIGN NOTES	12/09/22			
S0.03	STRUCTURAL DESIGN NOTES	12/09/22			
S0.04	STRUCTURAL DESIGN NOTES	12/09/22			
S0.05	SPECIAL INSPECTION TABLES	12/09/22			
S1.10	OVERALL FOUNDATION PLAN	12/09/22			
S1.11	AREA A FOUNDATION PLAN	12/09/22			
S1.12	AREA B FOUNDATION PLAN	12/09/22			
S1.13	AREA C FOUNDATION PLAN	12/09/22			
S1.20	OVERALL ROOF FRAMING PLAN	12/09/22			
S1.21	AREA A ROOF FRAMING PLAN	12/09/22			
S1.22	AREA B ROOF FRAMING PLAN	12/09/22			
S1.23	AREA C ROOF FRAMING PLAN	12/09/22			
S2.01	LOADING AND DECK LAYOUT	12/09/22			
S4.01	SCHEDULES	12/09/22			
S4.02	SCHEDULES - MASONRY PILASTER/LINTEL	12/09/22			
S5.01	GENERAL CONCRETE DETAILS	12/09/22			
S5.02	GENERAL CONCRETE DETAILS	12/09/22			
S5.03	GENERAL SLAB DETAILS	12/09/22			
S5.11	GENERAL MASONRY DETAILS	12/09/22			
S5.21	GENERAL STRUCTURAL STEEL DETAILS	12/09/22			
S5.22	GENERAL STRUCTURAL STEEL DETAILS	12/09/22			
S5.41	GENERAL WOOD FRAMING DETAILS	12/09/22			
S6.01	FOUNDATION DETAILS	12/09/22			
	STEEL FOUNDATION DETAILS	12/09/22			
S6.02					



STRUCTURAL LOADS		CC	NCRETE							
SNOW LOADS: Ground Snow Load Importance Factor	Pg = 30 psf ls = 1.1		'Building Code Requ Structural Concrete	uirements fo	or Structural Concrete'	and the lates	e in accordance with ACI 318-14, st edition of 'Specifications for noted on the project drawings and∖or	9.	The modulus of elasticity of concrete, shall be tested in accordance versions and beams and shall be at least the value given by the equation the specified concrete 28-day strength.	
Exposure Factor	Ce = 1.0		specifications.	-				10.	All concrete shall be ready mix concrete and shall be mixed and deliv	vered in accordance with ASTM C94
Flat Roof Snow Load Thermal Factor	Pf = 23.10 psf Ct = 1.00	2.	designed by a qualit	fied testing la	laboratory and shall be	wet stampe	r for review. All mix designs shall be d by a Civil Engineer licensed in the		or ASTM C685.	
Snow Drifts	As indicated on drawings.			c .	er compliance requirem		318-14 Section 26.4. e minimum, use Type V where the	11.	Dry pack or grout under baseplates, sill plates, etc., see specification required for concrete. Minimum grout strength shall be f'c = 7,000 ps	
WIND LOADS: Basic Wind Speed	Vult = 109 mph		concrete is in conta	ct with soil a	and to a height 12" min	. above the	soil. Concrete that will be exposed to 8. Severe (S2) and Very Severe (S3)	12.	Concrete forms shall be laid out and constructed to provide the spec structural drawings.	ified cambers indicated on the
	Vasd = 85 mph		sulfate exposures a	is identified i	in the project geotechn	ical report, t	he water cement ratio shall not exceed b. Type II cement shall be used at all	13	Submit shop drawings to Architect/Structural Engineer indicating loca	ations of concrete joints for review
Risk Category Exposure	- C		other locations in th						prior to placing concrete. Place joints at locations to minimize effects at points of low stress.	
Internal Pressure Coefficient WIND BASE SHEAR (ASD): Wind X (East-West) X kips	GCpi ± 0.18 Wind Y (North-South) X kips	4.	ignition shall be limi	ted to 2%. T	The addition rate for fly	ash shall be	to ASTM C618 Class F. The loss of limited to 15% of the cement weight. accordance with the above criteria.	14.	Concrete placement shall be in accordance with ACI standard 304 a keys in construction joints unless detailed otherwise. Thoroughly cle wet and remove standing water in construction joints before placing	ean, remove laitance and thoroughly
SEISMIC LOADS:		5. 6.	Do not use concret All concrete expose	U U	ontaining chlorides. - thaw cycles shall con	tain 6% +/- ′	% of entrained air.	15.	slush with a coat of neat cement before placing new concrete. Roughen concrete surface to a full amplitude of 1/4 inch where mase	
Risk Category Importance Factor	- le =1.25	7.					and tests of ASTM C33 and project		where new concrete interfaces with existing concrete.	
Soil Site Class Mapped Spectral Response Acceleration	C		mix design with prov	ven shrinkag	ge characteristics of le	ss than 0.00	Structural Engineer. Provide concrete 05 inches/inch. Lightweight concrete -	16.	If columns and walls are placed with a floor, two hours must elapse be placement and beginning of the floor placement.	between end of column or wall
SS = 0.174 g	S1 = 0.08 g		designs shall be tes not exceed 0.0005 i	sted prior to a	approval, for shrinkage	in accordar	ecifications. Lightweight concrete mix nce with ASTM C157. Shrinkage shall	17.	Clear coverage of concrete over reinforcing bars shall be as follows:	
SOIL FACTOR COEFFICIENTS: Fa = 1.3	Fv = 1.5				ngths & types are as fo	llows.			Location of Concrete	Minimum Concrete Cover
	1 V - 1.5		Locat	tion	Strength,	Туре	EXPOSURE		Concrete cast against and permanently exposed to earth	3"
SPECTRAL RESPONSE COEFFICIENT: SDS = 0.151 g	SD1 = 0.08 g		of Con	crete	psi		CATEGORY/CLASS* F# S# W# C#		Concrete exposed to earth or weather: #6 through #18 bar	2"
SEISMIC DESIGN CRITERIA:			Lean Mix		3000	Hard Ro			#5 bar and smaller	1 1/2"
Seismic Response Coefficient: Seismic Design Category	CS = 0.943		Footings		4000	Hard Ro			Concrete not exposed to weather or in contact with ground, UNO:	
Analysis Procedure	Equivalent Lateral Force (ELF) Procedure		Stem Walls	····· `	3500	Hard Ro			Slabs, Walls, Joist:	
Structural System Response Modification Factor	Ordinary Reinforced Masonry Shear Walls 2.0		Slab on Grade (Lo	,	4000	Hard Ro	rck F0 S0 W1 C1		#14 and #18 bar. #11 bar and smaller.	1 1/2" 3/4"
Tabulated Overstrength Factor	2.5	_		· 	egories and Classes		1		Beams, Columns:	
SEISMIC BASE SHEAR (ASD): Seismic X (East-West) X kips	Seismic Y (North-South) X kips	_	Category	Class		Con	dition		Primary reinforcing, ties stirrups, spirals	1 1/2"
				F0	Concrete not	exposed to f	reezing-and-thawing cycles		Slab on grade:	2" clear from top
ADDITIONAL ITEMS: Building Location	42.729017, -114.507928						· · · · · ·		Precast concrete (Manufactured under plant control conditions):	See ACI 318-14 Table 20.6.1.3.3
Mean Building Height	25 feet		Freezing and	F1			freezing-and-thawing exposure to water		Prestressed concrete coverage:	See ACI 318-14 Table 20.6.1.3.2
REDUNDANCY FACTORS: North/South Direction	rho = 1.0		thawing (F)		Concrete	e exposed to	freezing-and-thawing	18	Prior to concrete placement, all reinforcing bars, anchor bolts and oth	
East/West Direction	rho = 1.0			F2			at exposure to water		secured in position.	
ROOF LIVE LOADS:				F3			and-thawing cycles with frequent	19.	Mechanical pipes or electrical conduit shall not pass through concret specifically detailed.	te columns or beams unless
Roof Live Load	20 psf (reducible)				exposure to w	ater and ex	posure to deicing chemicals	20.	Unless otherwise indicated in the mechanical or electrical drawings of	or project specifications, mechanical
SCHOOL LIVE LOADS: Concentrated Loads (All Conditions)	1000 lbs	_			Water-soluble sulfat in soil, percent by r		Dissolved sulfate (SO ₄ ²⁻) in water, ppm(2)		pipes and electrical conduits which pass through slab on grade, con floors and walls do not require sleeves. If sleeves are required, the s	leeves shall be installed prior to
Gymnasium, Main Floor and Balconies	100 psf (non-reducible)								placing concrete. Do not cut any reinforcing which may interfere with in concrete is not permitted. Notify the Structural Engineer in advance	
STORAGE LIVE LOADS:				S0	SO4 ²⁻ < 0.1	0	SO4 ²⁻ < 150		structural drawings.	
Light Storage Heavy Storage MISCELLANEOUS LIVE LOADS:	125 psf (non-reducible) 250 psf (non-reducible)		Sulfate (S)	S1	0.10 ≤ SO4 ²⁻ <	0.20	$150 \leq SO_4^{2-} < 1500$ or seawater	21.	With the exception of slabs on grade and concrete on steel deck, the pipes and/or embedded electrical conduits (other than those passing slab thickness and shall be centered between the top and bottom rei otherwise. Concentrations of mechanical pipes and/or electrical conc	through) shall not exceed 1/3 of the nforcing, unless specifically detailed duits shall be avoided except where
Marquees Guardrails/Balcony Rails	75 psf (Except one and two family dwellings) 50 plf or 200lbs.			S2	0.20 ≤ SO4 ²⁻ ≤	2.00	$1500 \le SO_4^{2-} \le 10000$	22.	detailed openings are provided. Conduit and pipe shall be spaced at whichever is larger. For slabs on grade and concrete on steel deck no pipes or conduits	
Mechanical Equipment	Weights Furnished by Manufacturer			S3	SO4 ²⁻ > 2.0	0	SO4 ²⁻ > 10000	23.	The projecting corners of columns, beams, and walls, etc., shall be for	pecifically detailed otherwise.
				W0			Concrete in contact with	24.	otherwise noted on architectural drawings or specifications. Maintain concrete above 50 degrees Fahrenheit and in a moist cond	
			In contact with water (W)				eability is not required	25.	placement unless otherwise accepted by Architect/Structural Engine Any curing compounds used on concrete that is to receive a resilient Finish Applicator before use.	
				W1			and low permeability is required	26.	Contractor to coordinate floor flatness and levelness with architectura manufacturer's requirements.	al drawings and/or equipment
			Corrosion	C0			tected from moisture			
			protection of reinforcement (C)	C1			o moisture but not to urce of chlorides			
				C2	of chlorides	from deicing	ture and an external source chemicals, salt, brackish ray from these sources			
		PC	OST INSTAL	_LED I	MECHANIC		NCHORS		EINFORCING STEEL (FOR CONCR	ETE AND
		1.					engineer unless specifically detailed		ASONRY)	
		2.	C C	ed by the Ar	nchor Manufacturer, ar	nd to the dep	th indicated on the structural drawings	. 1.	All reinforcing steel shall be detailed and placed in accordance with th Reinforced Concrete' (ACI 318) and the Manual of Standard Practice Construction' by CRSI and WCRSI as modified by the project drawin	e for Reinforced Concrete
		3. 4.		nsion type ar		acceptable	or use in uncracked, cracked, and	2.	Deformed reinforcing bars shall conform to the requirements of ASTI grade 60 for deformed weldable bars.	
			seismic concrete ap A. Simpson S B. Hilti Kwik B	oplications: strong-Bolt 2 Bolt TZ – ICC	2 Wedge Anchor – ICC C ESR-4266	ESR-3037		3.	Welding of reinforcing is permitted only where shown on the drawing engineer. Welding of reinforcing bars shall be with low hydrogen elec	trodes in accordance with the
		5.	The following expar		SD2, SD4, SD6 – ICC E nchors are structurally ESR-1385		or use in fully grouted masonry:	4	'Recommended Practices for Welding Reinforcing Steel, Etc.', Ameri IBC table 1704.4.1 all reinforcing to be welded shall conform to ASTM All reinforcing bar bends shall be made cold.	
		6	B. Dewalt Pov	wer-Stud+ S	SD1 – ICC ESR-2966	eptable for u	se in uncracked, cracked, and seismic	4. 5.	All reinforcing bar bends shall be made cold. Lap splices made at locations other than those specifically indicated approval by engineer prior to any fabrication or construction activities	
			concrete applicatior A. Simpson T	ns:	CC ESR-2713	ioi u		6.	Reinforcing dowels between footings and walls or columns shall be the grade as the specified vertical reinforcing, uno.	
			C. ITW RedHe	ead Tapcon	– ICC ESR-2202 F+ – ICC ESR-3889			7.	All reinforcing bars shall be marked so their identification can be mad	le when the final in-place inspection
		7.	pt and hollow plank A. Hilti HDI-P	concrete ap TZ – ICC ES	oplications: SR-4236	eptable for u	use in uncracked, cracked, and seismic	8.	occurs. Welded wire fabric shall conform to ASTM A185.	
			B. Dewalt Min	ni-Undercut +	+ – ICC ESR-3912			9.	Minimum lap of welded wire fabric shall be 6 inches or one full mesh	
		8.			ors are structurally acce C ESR-1056	eptable for u	se in fully grouted masonry:	10.	In addition to all the reinforcing steel indicated on the drawings, the ca allowance of two tons of reinforcing bars to be furnished, fabricated a	

Revit 22

The following screw type anchors are structurally acceptable for use in fully grouted masonry:A.Simpson Titen HD - ICC ESR-1056

B. Hilti KW-EZ - ICC ESR-3056C. DeWalt SCREW-BOLT+ - ICC ESR-4042

Installation and inspection of post installed anchors shall be performed as required by ICC reports and manufacturer's instructions.

In addition to all the reinforcing steel indicated on the drawings, the contractor shall provide for an allowance of two tons of reinforcing bars to be furnished, fabricated and placed during the progression of work as may be directed by the Structural Engineer. Submit shop drawings to structural engineer: Placing drawings that detail fabrications, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for 11.

concrete reinforcement.

	FERRED / DELEGATED STRUCTURAL		_
18 for 1. 1 C94	Components referred to as Deferred Structural Components shall comply with these notes. These elements have not been permitted under the base building application. The contractor will be required to submit the component system documents to the building official for approval. The documents shall be stamped and signed by a structural engineer licensed by the state where the project is located. The deferred structural components shall not be installed until the design and submittal documents have been approved by the building official.		
2. N	Prior to building department submittal, the deferred structural components submittals shall receive cursory review by Structural Engineer of Record for loads imposed on primary structure and general conformance with design concept of the project and general compliance with the information given in the Structural Contract Documents. Review of submittals does not constitute approval or acceptance of	2400 E. Riverwalk Driv Boise, Idaho 83706 www.lkvarchitects.com 208.336.3443	
ed 3.	unauthorized deviation from Contract Documents. Submittals of contractor-designed components shall include the designing structural engineer's stamp and signature, as noted above. The submittal shall be approved by the component vendor prior to review by the Structural Engineer of Record.		
1y 4.	The designing professional is responsible for code conformance and all necessary connections not specifically called out on architectural or structural contract documents.	PRELIMINARY I FOR CONSTRUCTIO	ON
5. 6.	Submittals shall include details of connections to primary structure that indicate magnitude and direction of all loads imposed at point of connection. Design criteria shall be provided with submittal and calculations shall be made available upon request.	This document preliminary in na and is not a fin signed and sea	atur nal,
8.	Refer to other discipline's contract documents for additional deferred components that may require structural design and details. Connections of these elements <u>shall not</u> induce torsion on structural members. Deferred Structural Components shall be manufactured, delivered, handled, stored, and field erected in	document	5
9.	conformance with instructions prepared by the component vendor. The following list includes the items that are defined as Deferred Structural Components. Additional items may be included in the project specifications.	201 N. Maple Grove S BOISE IDAHO 83704 Phone (208) 342-7168 LE JOB #224217	
10.	Deferred structural components:A.Metal or pre-cast stairs and landingsB.Fall restraint systemsC.Handrails, guards, grab bars, and wall mounted shower seatsD.Marquees and canopies unless detailed on Contract DocumentsE.Precast structural membersF.Open web steel joistG.Plywood web joists (if different than specified on drawings)H.Pre-manufactured wood trusses	ALL STRUCTURAL DETAILS US ON THIS PLAN ARE COPYRIGH OF LOCHSA ENGINEERING. TI RE-USE OF ANY DETAILS AND CONCEPTS IS NOT ACCEPTAR WITHOUT WRITTEN CONSENT LOCHSA ENGINEERING.	SHT (C) THE D ABLE
	 I. Pre-manufactured metal buildings J. Metal Grating and/or stair treads K. Window shades and light shelves L. Masonry veneer out-of-plane anchorage system 		
	OXY INSTRUCTIONS FOR ANCHORING REBAR	Revisions scription	
1.	Epoxy shall not be installed without prior approval of engineer unless specifically detailed on the drawings.		
2. 3.	Bars must be deformed or threaded for the full embedment depth in epoxy. Over-drill bar diameter as indicated by the Epoxy Manufacturer, and to the depth indicated on the structural drawings.		
4. 5.	Clean hole per manufacture requirements. Any dirt, rust, and oil on the bars shall be removed.		
6.	During the epoxy mixing and application process, install in strict accordance with ICC Report and the Epoxy Manufacturer's specifications exactly.	ZO	
7. 8.	Vertical holes to be filled from the bottom are to use an epoxy gel. See also note 12. The following epoxy systems are acceptable for use in fully grouted masonry: Hilti HIT-HY 270 – ICC ESR-4143 Simpson SET-XP – IAPMO UESR-0265 Dewalt AC100+ GOLD – ICC ESR-3200	DITIO	
	NOTE: Hilti HIT-HY 270 or Simpson SET-XP may be used for hollow cell masonry assemblies pending engineer of record review and approval of each application and location.	AD	
9.	The following epoxy systems are acceptable for use in uncracked, cracked and seismic concrete applications: Hilti HIT-HY 200 – ICC ESR-3187 Simpson SET-XP – ICC ESR-2508 Dewalt Pure110+ – ICC ESR-3298 Simpson AT-XP – IAPMO UESR-0263 Hilti HIT-RE 500 V3 – ICC ESR-3814 Dewalt AC200+ – ICC ESR-4027	SCHOOL	
10. 11.	Threaded anchor rods shall be ASTM F1554 Grade 55 unless noted otherwise. Use of any other epoxy in a seismic / cracked concrete location will only be considered with an approved third party evaluation report that includes recognition of earthquake resistance in accordance with the current IBC.	ARY	D
12.	Installation of adhesive anchors that are to be under sustained tension loading in horizontal to vertically overhead orientation shall be done by a certified adhesive anchor installer (AAI) as certified through ACIand in accordance with ACI 318-2014 (section 17.8.2.2). Proof of current certification shall be submitted to the engineer for approval prior to commencement of installation.		JEROME, I
13.	Per ACI 318-2014 (Section 17.1.2) adhesive anchors shall be installed in concrete having a minimum age of 21 days at time of anchor installation. For installation sooner than 21 days consult adhesive manufacturer.		
14.	If temperature of base material at time of adhesive installation is at 45 degrees (Fahrenheit) or less, an "acrylic" (cold weather) adhesive is required.		E STREET
	STRUCTIONS TO BIDDERS	RSON	FILLMORE
1. 2.	Under no circumstances shall these drawings be "Final Bid" until the project is fully permitted. All preliminary pricing efforts shall be considered to be estimates only and shall include the necessary contingencies, allowances, alternates, etc. as appropriate to account for modifications and additions that will occur to the drawings during the finalization of the design and permitting.		
3.	The owner or contractor shall utilize the following minimum contingencies for each of the structural element costs to be used at the sole discretion of the structural engineer: Progress Set 7% Minimum	Ц Ч Ц Ц Ц Ц Ц	600 N
	All of the "Final Bid" contingencies not used by the structural engineer shall be refunded to the owner prior to closeout of the project.	DATE: 12/09/22 LKV PROJECT #: Clie Nun	ent mber
4.	Any modifications, deletions or eliminations to the structural bidding and contingency requirements without the consent of the structural engineer, shall automatically indemnify the structural engineer of any costs that may arise during the design and construction of the project.	DRAWN BY: GT	שוי
5.	Where discrepancies occur within the drawings the contractor will either resolve the discrepancies with the architect before bidding or include the greater cost item in the bid and resolve the discrepancy prior to construction.	CHECKED BY: KF Project Status	
6.	This drawing package is being submitted for approval only. Any materials ordered or constructed based on this drawing package prior to final approval from the Architect and Engineer-of-Record is at risk of the framing contractor. Framing contractor is advised to obtain final approved drawing package prior to ordering material and/or construction.	DRAWING NO.:	
7.	In addition to the steel included on the drawings, the contractor shall provide a 5% allowance of steel to	$\parallel S(0 0)$	·)

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Revit 22

Special Conditions: Disclaimer

The owner and contractor must be aware that the following conditions existing within the structure:

To avoid long term damage to the structure, swimming pools and planters placed on elevated slabs must have a premium moisture barrier and drainage system installed so that water does not come in contact with structural members. A testing and maintenance program of the moisture barrier and drainage system should be implemented to insure the integrity of the system for the life of the structure.

This structure will move over it's lifetime due to imposed lateral forces and temperature and shrinkage induced forces. Architectural finishes (ceilings, wallboards, floor tile, etc.) will need to be installed with crack control and or expansion joints as well as other procedures following industry standards to accommodate this movement. Failure to do so could result in cracking of finishes.

FACADE / VENEER SYSTEMS

Provide out-of-plane anchorage for all Facade / Veneer systems. The contractor is to coordinate the appropriate anchorage configuration with the Facade / Veneer system referenced within the construction documents. Such considerations would include, but not be limited to: structural support framing, sheathing, rigid insulation, air gaps, joint layouts, etc.

Anchors are to be sized and spaced as required to resist seismic loads in accordance with ASCE 7, Chapter 13.

Refer to architectural details for any further requirements.

MECHANICAL OPENINGS

General Contractor shall coordinate locations of all mechanical openings, including, but not limited to, trash chutes, plumbing shafts and ventilation shafts. Coordination shall include the Architect of Record (AOR) and all subcontractors, including mechanical subcontractors, and joist and decking suppliers. Coordination shall be completed and approved prior to bid document completion.

SHOTCRETE

All aspects of work pertaining to the shotcrete construction shall be in accordance with IBC section 1908, ACI 506.2 "Specification for Shotcrete" and ACI 506R-16 "Guide to Shotcrete", with modifications as noted on the project drawings and/or specifications.

 \mathbf{H} | Shotcrete mix designs shall be submitted to the Structural Engineer for review. All mix designs shall be \mathbf{G} | designed by a qualified testing laboratory and shall be wet stamped by a Civil Engineer licensed in the \mathbf{H} | State of ___. Base design mix on field experience or trial mixtures as stipulated in ACI RAP-12.

All materials, mixing and application shall comply with ACI 506 R-05 and ACI RAP-12.

Conform to the following shotcrete requirements:					
Compressive strength (fc):	4500 psi				
Aggregate size:	3/8" max.				
Slump:	1" (plus or minus 1/2").				

Shotcrete mixes shall contain fiber additives to be coordinated with the shotcrete applicator and the ready-mix company for the purpose of minimizing drying shrinkage.

The application of shotcrete shall be performed by a company specializing in performing shotcrete work with a minimum of 5 years of documented experience and whose applicators are ACI C660 Certified Nozzlemen.

Shotcrete shall be thoroughly mixed and used within 45 minutes.

Ensure that the temperature of materials and surrounding air are a minimum of 50 degrees F prior to, during and 7 days after completion of work. Suspend shotcrete operations during high winds, rainy weather or excessively hot or cold temperatures when the work cannot be protected.

Surfaces to receive shotcrete shall be roughened to 1/4" amplitude, cleaned and wet. Surfaces receiving shotcrete shall be kept damp for several hours prior to shotcrete application. Bonding agents are not to be used without the approval of the engineer.

Alignment wires shall be used to establish thickness and plane of required surfaces. Install alignment wires at corners and offsets not established by forms.

Provide a minimum of 3 test panels per IBC 1908.10.2 for each mix design and each shooting position to be encountered. The panels shall be of identical thickness, reinforcement and reinforcement placement as required for the shotcrete work. Testing firm may require additional test panels. Coordinate the test panel procedure with the testing firm prior to beginning the work.

Preconstruction tests where required, shall be performed in accordance with IBC 1908.5.

A quality control program sahll be implemented. ACI 506.2 should be used as the basis for the quality control procedures.

Verify the bond of set shotcrete by sounding for voids with a hammer.

Maintain finished surfaces wet for 7 days.

MASONRY

- All reinforced masonry materials and construction shall conform to the following: International Building Code Chapter 21 Building Code Requirements for Masonry Structures TMS 402 Specification for Masonry Structures TMS 602 ⊢ All masonry block shall conform to ASTM C90 grade N-1, F'm=____ psi min and a minir C I compressive strength of ____ psi, per IBC Section 2105.2 and tested in conformance with **Ш** 2105.2.2.2 Mortar shall be Type S conforming to ASTM C 270 and Articles 2.1 (materials) and 2.6A 602, IBC Section 2105.2 and project specifications. ⊢ Grout shall be fine or coarse grout and shall conform to Article 2.2 (materials) and 2.6B 602, and ASTM C476 or has a compressive strength at 28 days that meets or exceeds □ be less than ____ psi as tested per ASTM C1019. All masonry materials shall be submitted to the Structural Engineer for review, prior to or materials, in accordance with Section 1.5 of the TMS 602. Additionally, all mix designs sh tested/designed by a qualified testing laboratory and stamped by an engineer licensed in project is located. All Masonry block shall be laid in Running Bond as defined in TMS402. Stack Bond is no specifically specified on plans. Refer to architectural drawings for surface and height of type
- Solid grout all masonry below grade, all cells containing reinforcing and all horizontal bond lintels for extents indicated unless noted otherwise on the drawings. In seismic design cat above solid grout all masonry walls.
- Grout shall be placed in accordance with TMS 602 Section 3.5 and Table 7.
- Masonry reinforcing bars shall be per notes under 'Reinforcing Steel'.
- 10. Placement of reinforcing bars, ties and anchors shall conform to TMS 602 Section 3.4 un ⊢ otherwise on drawings. See also sheet S5.11.
- 11. I Reinforcing bars in masonry shall be lapped 72 bar diameters, (db), unless noted otherwi
 See also detail
- 12. Unless noted otherwise on plans, minimum wall reinforcement shall be:
 - A. #5 bar vertical centered in wall at 16 inches on center. Provide (2) #5 continuou all wall ends, corners, intersections and each side of control joints.
 - B. Provide #5 bar each face at jambs of openings in walls.
 C. Provide (2) #5 bars horizontal in a continuous 8 inch deep minimum bond beam a roof lines and provide (2) #5 bar horizontal in a continuous 8 inch deep minimum 48 inches on center between floor and roof lines, above roof lines and at top of page.
 - D. Provide (2) #5 bars continuous at the bottom of a 24 inch deep solid grouted mas above openings in wall and extending 24 inches beyond edges of openings.
 E. Provide #5 bar horizontal in a continuous 8 inch deep minimum bond beam at sil wall and extending 24 inches beyond edges of openings. Unless noted otherwise
 - provide (6) #5 bars, 3 each face in 3 grouted cells centered on beams for beams angle to wall and (6) #5 bars, 3 each face in 3 grouted cells at end of wall for beams wall ends.
- 13. Unless noted otherwise on plans, masonry control joints shall be located such that no stra exceeds 24'-0" and shall not be located within 24 inches of the edge of an opening in the r within 24 inches of a beam bearing location. If masonry control joints are not shown on the contractor shall provide a masonry control joint shop drawing layout for review and accept architect and structural engineer prior to beginning masonry construction.
- 14. Coring openings in masonry construction is not permitted without prior approval from the a structural engineer.
- 15. No pipes or electrical conduit shall pass through masonry lintels unless specifically detail
- 16. Mechanical pipes and electrical conduits which pass through masonry walls do not require unless otherwise indicated in the project specifications, mechanical and/or electrical drawi are required, install sleeves before grouting. Do not cut any reinforcing which may interfere placement. Notify the Structural Engineer in advance of conditions not shown on the structural
- 17. Refer to architectural drawings for the following items: Jointing Plan, Surface and height of pattern, Mortar joint finishing, weep hole spacing and locations, etc.

DECK CONNECTION, MECHANICAL FASTENE

- Connection of steel deck diaphragms shall be as specified on plan, unless approved othe
 Use mechanical deck fasteners in lieu of welds only when specified on plan or when appr engineer prior to installation.
- Fasteners for attachment of steel deck to bar joist and structural steel framing shall be:
 A. Hilti X-HSN 24 (1/8 in. up to and including 3/8 in.) ICC ESR-2197 & ICC ESR-27
- B. Hilti X-ENP-19 L15 (1/4 in. or thicker) ICC ESR-2197 & ICC ESR-2776
- C. Spacing of fasteners shall be as indicated on plans, UNO. Note that additional m fasteners compared to welds might be required.
- The contractor shall arrange for manufacturer's field representative to provide installation products to be used, prior to commencement of work at no additional cost.
- 5. Only trained installers shall fasten the metal deck to the structural steel. A record of train
- on site and be made available to the EOR and inspector as requested.
- 6. The contractor shall submit a pin placement plan to the EOR.
- 7. Sidelap connection type and spacing shall be as indicated on plans.

FALL ARREST / WINDOW WASHING SYSTEM

- Fall arrest and/or window washing systems are considered deferred submittals and shall and certified by others.
- 2. General Contractor shall coordinate fall arrest and/or window washing systems, if require anchorage and connections to roof and/or wall components. Coordination shall include the Record (AOR) and all subcontractors, including joist and decking suppliers, panelizing su arrest/window washing systems suppliers.
- 3. Coordination shall be completed and approved prior to bid document completion.
- General Contractor shall provide shop drawings for fall arrest and/or washing systems for fab.
- 5. Fall arrest and/or window washing equipment supplier is responsible of the design and in components and shall be in compliance with all requirements of the Authority Having Juri

	FO	UNDATION - Boise	<u>}</u>				
	1.	The design of the foundation system the following company:	is based on the (Geotechnical report (and any addenda	a) prepared by		\mathbf{V}
		Company: Report No.	EHM ENGINEE EHM No. 129-1				
n block net BC Section		Dated:	06/24/2014 e Architect's office	e and contractor shall have a copy at	the job site	ARCHI 2400 E. Riverw	
xing) of TMS	2.	The foundation system is designed b				Boise, Idaho 83	
		Soil Bearing Capacity	25	00 psf		www.lkvarchite 208.336.3443	cts.com
ing)of TMS but shall not		Frost Depth Equivalent Fluid Pressure Unconstra	ained -				
ng		Equivalent Fluid Pressure Constrain Passive Pressure		4.5 psf			
e state the	3.	Friction Coefficient	-	services of a Geotechnical Engineer	to norform	PRELIMINA	
<u>owed</u> unless and joint	5.	necessary testing and inspections for the IBC and presumptive soil loads r recommendations of chapter 18 of th	or quality control to noted above are o he IBC and the pro	o ensure that the recommendations o	f chapter 18 of	FO CONSTRI This docu preliminary	UCTION ument is
ms and / D and	4.	The contractor shall provide for prop seepage, etc.	er dewatering of	excavations from surface water, grou	nd water,	and is not signed and	t a final,
Jand	5.			ace drains, shall be installed as direct	ted by the	docun	
	6.	Vapor retarder placed below slab on placement with Geotech and/or Arch		orm to ASTM E 1643 and ASTM E 17 S.	45. Coordinate		chsa
ed wings.	7.	The Contractor shall provide for the	installation and de arth banks and s	esign of all cribbing, sheathing and sh upport any existing structures in acco		201 N. Maple G BOISE IDAHO Phone (208) 34	Grove Ste. 100 83704 42-7168
l bars at	8.	All abandoned utilities, footings, etc.,	, that interfere wit	n the new construction shall be remov g structures be encountered that are		LE JOB #2242 ALL STRUCTURAL D ON THIS PLAN ARE O OF LOCHSA ENGINE RE-USE OF ANY DET CONCEPTS IS NOT A	ETAILS USED COPYRIGHT (C) ERING. THE TAILS AND
	9.	Footings shall be placed and estimation		lepths shown on the drawings. Excav		WITHOUT WRITTEN LOCHSA ENGINEERI	CONSENT OF
floor and beam at ts. lintel		The Contractor shall notify the Geote Geotechnical Engineer shall submit	echnical Engineer a letter of complia echnical Enginee	eer prior to placing the concrete and r when the excavations are ready for i ince to the Owner. Should soil encour r, <u>modified footing elevations or footin</u>	nspection. The ntered at these	Date	
penings in ans ng at an earing at	10.	All excavations shall be properly bac perimeter shall be mechanically com Geotechnical report for requirements	npacted in layers,	ackfill and utility trench backfill within t to the approval of the Geotechnical E ing will not be permitted.	the building Engineer. See	м М	
n ry or , the rom the	11.	The Contractor shall not backfill behind retaining walls before the concrete or masonry walls have reached full design strength. The Contractor shall brace or protect all building and pit walls below grade from lateral loads until attaching floors are completely in place and have reached full design strength. The Contractor shall provide for the design, any required permits and the installation of such bracing and protection.					
ct and	12.	Geotechnical report or by a geotechi	nical engineer. Su al engineer and n	n natural grade or structural fill as dire b-grade will be compacted per the o sub-grade rutting will be allowed at			
plans.	13.	Unless otherwise noted, footings sha	all be centered be	low columns or walls.			
ves, f sleeves sleeve Irawings. , Laying	14.	excavation, shoring, pile drive drive drive drive details are approximate and	ving, or pier drillin I not verified by th	all adjacent underground utilities pric g. Any utility information shown on the structural Engineer of record. Contr und structures during construction.	e plans and		
	15.			v below grade utilities and coordinate ndation at or adjacent to excavations		NOITIO	
S	16.	RETAINING WALLS: A. Grade on either side of cond	crete walls shall r	ot vary by more than 4", uno. Slope o	f backfill shall		
by the		not exceed 12H to 1V, uno.	Backfill behind al cal Report. Provid	l retaining walls with free draining, gra e for subsurface drainage. Design pre	anular fill	ADD	
		Ū.	0	and passive soil pressures, see note			
•al			ng structure is the	backfill is placed prior to the supporti e floor framing and sheathing complet			
cal g for all	SH	OT PINS				SCHG	
all he kont	1.	Shot pin fasteners shall not be instal the drawings.	led without prior a	pproval of engineer unless specifical	ly detailed on		
nall be kept	2.	Installation and special inspection of	fasteners shall b	e performed as required by ICC repor	ts and		~
	3.	manufacturers instructions.		racing applications, unless approved		EMENTARY	ME, IC
	4.	Shot pins in post-tension concrete a		when the supplier can show that conc ge to tendons and tendon anchorage.		⊢	ERO
igned	5.	See plans and details for spacing. Sl edge distance at all concrete elemer	hot pins driven int nts of 3" and minir	o concrete base material shall mainta num fastener spacing shall be 4". For m penetration respectively. Minimum	ain a minimum r interior and		STREET JEROME, ID
luding hitect of s and fall		thickness shall be 3 times the penetr installing shot pins. Shot pins driven all steel elements of 1/2" and minimu penetrate through steel member uno penetration of 1/2". Shot pins driven	ration depth. Cond into steel base m um fastener spaci b. At steel thicker t into solid grouted ne wall and a mini	crete shall attain full design strength p aterial shall maintain a minimum edge ng shall be 1". Length of pin shall be a han 3/4", pins shall have a minimum masonry shall maintain a minimum 4 mum 1" distance from mortar joints. N	prior to e distance at as required to point ," distance	RSON E EMODEI	N. FILLMORE STRE
	1		d for non-tension.	shear only use in solid grouted maso	nry:		
v prior to	6.	Hilti Low Velocity X-U (0.15		R-2269	I	I I -	
ew prior to ion of all on (AHJ).	6. 7.		7" dia.) – ICC ESI d for non-tension,	shear only use in uncracked concrete	e:		600 N. F

DATE: 12/09/22 LKV PROJECT #: Client Number

DRAWN BY: GT CHECKED BY: KF

Project Status

DRAWING NO.:

STRUCTURAL DESIGN NOTES

WOOD GENERAL FRAMING A. All wood framing details not shown otherwise shall be constructed to the minimum standards of section 2308 of the IBC. Coordinate the size and location of all openings with mechanical and architectural drawings. C. Provide double joists under all parallel partitions that extend over more than half the joist length and around all openings in floors or roofs uno. Provide solid blocking at all bearing points. All wood framing in direct contact with concrete or masonry, exposed to weather, or that rest on D. exterior foundation walls and are located within 8" of earth, shall be pressure-treated with an approved preservative, see IBC section 2303.1.9. Cut or drilled sections of treated material shall be treated with an approved preservative per IBC section 2303.1.9. See IBC section 2304.12 for additional requirements Treated Wood shall be selected to prevent corrosion of metal fasteners and hangers. Allow for 1/2" of wood shrinkage/compression at each level (including foundation). Values are E. cumulative for the height of the building. Building systems such as mechanical, electrical, plumbing, fire sprinklers, etc. shall have flexible components that account for the potential wood shrinkage/compression. Architectural finishes shall also account for the potential wood shrinkage/compression. All stud wall top plates shall be double members spliced with 48" minimum lap with minimum of G. (24) 16d nails each end of splice – 48 nails total, unless noted otherwise. Do not notch joists, rafters or beams, except where shown in details. Obtain engineer's approval for any holes or notches not detailed. Holes through sills, plates, studs and double plates in interior, bearing and shear walls shall not exceed 1/3 the plate width. Use bored holes located in the center of the stud or plate. Cross-bridging or solid blocking shall be spaced per the more stringent of the lumber manufacturer's recommendations or the following: Rafters greater than 8 inches in depth = 10 ft. oc. maximum Floor joists greater than 4 inches in depth = 8 ft. oc. maximum Moisture content of wood products shall not exceed 19% by weight. All lumber shall be protected from weather prior to installation. Do not store lumber in direct K. contact with ground. FASTENERS AND HARDWARE Minimum nailing, unless otherwise noted, shall conform to table 2304.10.1 of the 2018 IBC. All nails shall be common, uno. Connections listed are minimum permissible. Details govern over schedule Bolts, anchor rods, and lag screws shall be centered in members, uno. C. Nails shall meet the requirements of ASTM F1667. Where driving of nails would cause splitting, holes for the nails shall be pre-drilled, with a hole diameter equal to 70% of the nail diameter. Where automatic nailing is used, nail heads shall not penetrate plywood sheathing. When multiple members are grouped together, fasten with: (2) rows of 16d nails at 12" oc. Use D. (3) rows of 16d nails at 12" oc. for depths 14" or greater. All bolts in wood shall conform to ASTM A307 bolts and shall be installed in holes bored with a bit 1/16 inch larger than the diameter of the bolt. Oversized or slotted holes are not allowed unless specifically noted on plans. Bolts and nuts seating on wood shall have cut steel washers under heads and nuts. Spoil threads after installation to prevent loosening. Lag screws shall meet the requirements of ANSI / ASME standard B18.2.1. Lead holes for the threaded portion of the shank shall have a diameter equal to 70% of the shank diameter with a depth equal to the screw length. Refer to 2018 NDS Section 12.1.4 for additional lag screw installation requirements. Wood screws shall meet the requirements of ANSI / ASME standard B18.2.1. Lead holes for the G. threaded portion of the shank shall have a diameter equal to 70% of the shank diameter with a depth equal to the screw length. Refer to 2018 NDS Section 12.1.5 for additional wood screw nstallation requirements. Specified hardware shall be Simpson Strong-Tie installed, see manufacturer's recommendations, Н. Sill plate maximum anchor bolt spacing shall be 48 inches on center unless noted otherwise on plans and details. All anchor bolts (other than bolts for hold-downs) shall be 1/2" diameter with a minimum embedment of 9 inches into concrete uno. Anchor bolts for hold-downs shall not be considered as part of required anchor bolts for shear walls. All exterior walls shall be secured with minimum (3) anchor bolts. Interior walls may be driven shot pins according to alternate outlined herein, uno. Anchor bolts shall have 3x3x1/4" thick slotted plate washers under each nut. Edge of plate washer to be within 1/2" of sheathing. At shear walls with sheathing on both faces alternate washer edges. K. Corrosion resistance: a. All nails, bolts, screws and hardware shall be hot-dipped galvanized or stainless where exposed to weather or soil. All nails and screws fastened to pressure-preservative-treated wood (including wood sills) shall be hot-dipped galvanized per ASTM A153 or stainless steel Type 304 or 316. Electrogalvanized fasteners shall not be substituted for hot-dipped galvanized. Sheet metal connectors in contact with pressure-treated wood shall be stainless or galvanized coated per ASTM A653 class G185. Stainless steel or hot-dipped galvanized connectors shall use all fasteners of the same material SOLID SAWN LUMBER A. Solid sawn lumber shall comply with the latest edition of the grading rules of the Western Wood Products Association (WWPA) or the West Coast Lumber Inspection Bureau (WCLIB). All solid sawn lumber shall be stamped with the grade mark of an approved grading agency. Solid sawn lumber shall have the following minimum grades: 2x4 Studs and Blocking DF-L No. 2 2x6 Studs and Blocking DF-L No. Joist, Top Plates, and Blocking DF-L No. 4x Beams and Posts DF-L No. 6x Beams and Posts DF-L No. 1 Interior nonbearing partitions may be DF-L Stud Grade. C. All exposed architectural lumber to be KILN DRIED (KD) uno. Moisture content at time of D. manufacturing 19 percent or less. E. All lumber to be supplied with proper grade stamp to project. GLUED-LAMINATED BEAMS (GLB) GLB shall be Douglas Fir, combination 24F-V4 (1.8E) at simple span beams and 24F-V8 (1.8E) at cantilevered or continuous beams with the following minimum properties: Fb = 2400 psi, Fv = 265 psi, Fc (Perpendicular) = 650 psi All beams shall be fabricated using waterproof exterior type adhesive. Fabrication and handling shall be in accordance with the latest American Institute of Timber C. Construction (AITC) standards and ASTM D3737. D. All beams shall bear the grade stamp and AITC stamp and certificate.

- All beams shall have standard camber uno. on the drawings.
- F. Unless noted on the drawings or specified by the architect, beams shall be 'INDUSTRIAL' appearance grade.
- G. All laminations for 'GLU-LAM' beams shall be 1 1/2 inches thick and the overall size shall be as shown on the drawings. All laminations shall be parallel to the bottom of the beam, unless noted otherwise on the drawings.
- H. Glued Laminated wood shop drawings shall be submitted to the architect for review before fabrication.

ENGINEERED LUMBER All engineered lumber, shall be manufactured and installed in accordance with Truss Joist Engineered wood products by Weyerhueaser or approved equal manufacturing standards as referenced in ESR-1387, and shall have the following minimum properties: E= Fb= Fc (PERP.) Fc (PAR.) Fv= Fimber Strand, Laminated 1,550,000psi 2,325psi 900psi 2,050psi 310psi Strand Lumber (LSL) Parallam, Parallel Strand 2,000,000psi 2,900psi 625psi 2,900psi 290psi information. Lumber (PSL) Microlam, Laminated 2,000,000psi 2,600psi 750psi 2,510psi 285psi Veneer Lumber (LVL) MATERIALS: SHEATHING Plywood for roofs and floors shall be C-C or C-D sheathing conforming to the current version of the Products Standard PS 1-09. Lay plywood with face grain perpendicular to supports. All nailing shall be with common nails and solid 2x blocking shall be placed at all ridges and valleys. All roof and floor sheathing shall be nailed with boundary nailing along the entire length of supporting members used as "Drag" members. A Drag member is a truss or beam designed to transmit a lateral force and/or a diaphragm chord force as indicated on the framing plans.

Provide blocking at panel edges where indicated on plans. All plywood shall be of the following nominal thickness and span/index rating and shall be nailed as follows unless noted otherwise:

 Level
 Thickness
 Span Rating
 Edge Nailing
 Field Nailing

 POOF
 5/8"
 22/46
 24 AT 6" 00
 24 AT 6" 00
 24 AT 6" 00

ROOF	5/8"	32/16	8d AT 6" OC.	8d AT 12" OC.		
FLOOR	1 1/8" T&G	40/20	10d AT 6" OC.	10d AT 12" OC.		
Plywood for shear walls shall be Structural I C-C or C-D, Span Index 24/0 conforming to PS						

1-09. Thickness shall be as called for on the plans and shear wall schedule. Provide blocking at all panel edges. All walls designated as shear walls shall be connected to roof and floor diaphragms with boundary nailing to provide proper shear transfer.

As an alternate to plywood, American Plywood Association (APA) performance rated sheathing may be used with prior approval of the owner and architect. Rated sheathing shall comply with ICC-ES Report ESR-2586, Exposure 1, and shall have a span rating equivalent to or`better than the plywood it replaces. Attachment and thickness (within 1/32") shall be the same as the plywood it replaces. Install per manufacturer recommendations.

Refer to the plans and shear wall schedule for required sheathing and nailing. All walls not called out on plans, provide 7/16" min. APA rated sheathing on exterior surfaces nailed at all panel edges (block unsupported edges), top and bottom plates with 8d common nails at 6" oc. and to all intermediate studs and blocking at 12" oc. Allow 1/8" gap at all APA sheathing panel edges and ends.

PLATED WOOD TRUSSES A. Superimposed Design criteria Loads (unless noted otherwise):

ROOF:	
WIND LOAD (UPLIFT)	= xx psf
DEAD LOAD TOP CHORD	= xx psf
DEAD LOAD BOTTOM CHORD	= xx psf
LIVE LOAD	= xx psf
SNOW LOAD	= xx psf
FLOOR:	

 LIVE LOAD
 = xx psf

 DEAD LOAD
 = xx psf

 Prefabricated wood trusses shall be designed to support self weight plus live load and superimposed dead loads including all mechanical units, point loads "P" in pounds, chord force "CF" in pounds, lateral force "V" in pounds per foot, and uplift forces "U" in pounds, as specified on the framing plans. Bridging size and spacing shall be specified by the truss manufacturer unless otherwise noted.

All wood truss designs shall comply with Chapter 23 and Section 2303.4 of the IBC. No truss member shall be stamped stud, utility, construction, or #3 grade.

All light metal plate connections shall comply with the latest edition of Truss Plate Institute, Inc. TPI 1 "National Design Standard for Metal Plate Connected Wood Truss Construction". Plate shall be flush with wood, but the wood shall not be crushed. All gusset plates shall extend at least 2 1/2" onto each member at each joint.

Lumber at plates shall be a complete section with no knots or excessive wane. No joint shall have more than 1/16" average gap between bearing surfaces.

All trusses are to be engineered by a truss manufacturer. Shop drawings and calculations shall be supplied for each truss and wet sealed by an engineer licensed in the appropriate state per the appropriate discipline. Submit shop drawings and calculations to the Engineer of Record for review.

Shop drawings shall include the following information: a. The allowable loads in poundaria for it

- a. The allowable loads in pounds per effective nail for the lumber and plates used as allowed by ICC-ES and ICC-ES Report Number
- b. A statement that the min. plate size is 15 sq. in.
- Duration factors or stress reduction factors used in the design of the lumber and plates
 Top and bottom chord design loads in psf.
- e. Size, thickness, and exact location by Dim. of all plates
- f. The lumber species and grades used.g. The name and trademark of the plate manufacturer. The truss fabricator and the project
- name and address

G.

C.

h. Computed mid-span deflection (total load)

i. Any special details required at bearing points.

For all flat bottom chord trusses, size plate for 125 percent of member forces or use a stress reduction factor of 0.8 for plate values. No stress increase for duration of loading or for any other factor shall be used to increase plate values. Only one plate per panel point per truss side will be allowed. Each chord section shall extend through two panel points prior to being spliced.

Handle and install trusses according to Truss Plate Institute and Structural Building Components Association Publication: "BCSI (Building Component Safety Information) Guide to Good Practice for Handling, Installing, Restraining and Bracing of Metal Plate Connected Wood Trusses."

Install pre-engineered wood trusses in accordance with the manufacturer's recommendations and specifications. Do not cur or modify trusses without the manufacturer's written authorization.

PLYWOOD I-JOISTS A. Prefabricated plywood web I-Joists/Purlins (TJI Series or equal) shall be designed, fabricated, and erected in accordance with the latest edition of ICC-ES ESR1153.

Connections and bearing material to be designed and furnished by joist fabricator.

Contractor shall submit shop drawings with design calculations stamped and signed by an engineer licensed by the state where the project is located and per the appropriate discipline for review prior to manufacturing.

Additional members shall be supplied as required to support mechanical equipment. Where bridging interferes with mechanical or other installations, remove bridging after deck is in place and replace with additional manufacturer-supplied horizontal strut bracing at top and bottom chords.

Superimposed Design criteria Loads (unless	noted otherwise):			
Roof:				
Wind Load (Uplift) X				
Dead Load Top Chord X				
Dead Load Bottom Chord				
Live Load				
Snow Load XX				
Floor:				
Dead Load	XXpsf			
Live Load	XXpsf			

Prefabricated open web trusses (REDBUILT or equal) shall be designed, fabricated, and erected in accordance with the latest edition of ICC-ES ESR1774.

Connections and bearing material to be designed and furnished by joist fabricator.

contractor shall submit shop drawings with design calculations stamped and signed by an engineer licensed th the state where the project is located and per the appropriate discipline for review prior to manufacturing.

Additional members shall be supplied as required to support mechanical equipment. Where bridging interferes with mechanical or other installations, remove bridging after deck is in place and replace with additional manufaturer-supplied horizontal strut bracing at top and bottom chords.

STRUCTURAL STEEL

- Submit shop drawings to structural engineer indicating fabrication of structural steel components. Include details of cuts, connections, splices, camber, holes and other pertinent data. Include embedment drawings. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length and type of each weld. Indicate type, size and length of bolts distinguish between shop and field bolts. Identify retensioned and slip-critical high strength bolted connections.
- Designing, detailing, fabrication, and erection of structural steel shall be in accordance with the American Institute of Steel Construction (latest edition and supplements). See general notes for additional information.
- Structural steel not exposed to weather shall be left unpainted unless noted otherwise in the architectural drawings and/or specifications.
- A. Structural Steel Shapes Shall Conform to the following:Structural steel "W" shapes shall comply to ASTM Standard A992.
 B. Angles, plates "M" and "S" shapes, channels and bars shall comply to ASTM Standard A36,
- unless noted otherwise.
- C. Steel pipe shall comply to ASTM Standard A53 grade B (Fy = 35 ksi).
- D. Rectangular and square Hollow Structural Sections (HSS) shall comply to ASTM Standard A500 grade B (Fy = 46 ksi).
- E. Round Hollow Structural Sections (HSS) shall comply to ASTM Standard A500 grade B (Fy = 42 ksi).
- F. Raise Pattern floor plates shall comply to ASTM A786.
- G. Steel grating by the manufacturer, supplier, or contractor designed for loads and deflections as required by the adopted code and as indicated, unless noted otherwise. As a minimum, grating is to be designed for a 300# point load, a uniform live load of 100 psf and a maximum deflection of L/360 or 1/4". Submit style and layout for approval.
- WELDING: A. All weldin
- A. All welding shall comply to the American Welding Society Standard (AWS D1.1 and AWS D1.8). All welded joints shall be detailed as indicated by the prequalified joint details in the Structural Welding Code.
- B. Weld lengths called for on plans are the net effective length required. Weld size shall be AISC minimum unless a larger size is noted. All welds shall use minimum E70XX electrodes.
- C. Welding tests and inspections, see specifications.
- D. Filler material covered in ANSI/AWS D1.1 TABLE 3.1.

BOLTING:

- A. Anchor bolts and rods shall conform to ASTM F1554, grade 55 unless noted otherwise.
- B. Bolts shall conform to ASTM A325-N TYPE 1 less than 1 1/2" dia. uno., see also note 'G' below.
- C. Weather or Corrosion Resistance bolts are required to conform to A325-N Type 3.
- D. Nuts shall conform to ASTM A563.
- E. Washers shall conform to ASTM F436. Washers used in load transfer or subject to direct tension shall conform to ASTM F844.
- F. Threaded rods shall comply to ASTM A36 uno.
- G. Except as subsequently noted, high strength bolts need not be tightened beyond the snug-tight condition, as defined in section 8.1 of the specifications for structural joints using ASTM A325 or A490 Bolts. For connections subject to direct tension, connections for braced frames, and other connections shown or noted on the plans as SC (slip critical) or fully tensioned, bolts shall be tightened by one of the methods described in section 8.2 and to the minimum tension specified in section 8.2, Table 8.1.
- H. Bolt holes in steel shall be 1/16 inch larger than nominal size of bolt used, except anchor bolt holes which may be 1/8" larger or as noted on drawings.
- ANCHOR STUDS, SHEAR STUDS, AND DEFORMED ANCHORS: A. Shall be manufactured by Nelson Stud Welding Co. or equal.
- B. Headed studs (shear and anchor) shall be made of material conforming to ASTM A108.
- C. Deformed anchors shall be made of material conforming to ASTM A496.
- D. Studs and anchors shall be welded according to manufacturer's recommendations. Manual arc (stick) welding of headed studs and/or deformed anchors is not allowed: Paragraphs 7.5.5 to 7.5.5.6 of AWS D1.1, are deleted.
- STEEL DECK:
- Deck shall be cold rolled steel factory primer painted uno., and conforming to ASTM A 1008 grade 33 minimum (minimum yield of 38ksi), with the profile, depth, and uncoated thickness as indicated on the drawings. All metal accessories are to have the same thickness as the decking, uno.
- B. Minimum bearing of steel deck on supports shall be 2 inches. All 3" deep steel deck shall have minimum bearing of 3". Sheets shall be attached to all supporting steel members as indicated or drawings and in accordance with manufacturer's recommendations.
- C. Minimum deck connection shall be 7-1/2" puddle welds per sheet and 3/16" button punch or welds at 12" oc. uno. See plans for additional information.
- D. See architectural, mechanical, electrical, etc., for sizes and locations of deck openings and for deck openings smaller than 12" not shown on the structural drawings. See general details for framing requirements at deck openings. Openings larger than 12" shall not be placed in deck unless specifically shown on the structural drawings.
- E. <u>DO NOT</u> hang loads from metal deck. Provide engineered structural system to hang all loads from steel joists or beams. This includes but is not limited to metal stud soffit or ceiling framing, mechanical or plumbing equipment, etc.
- F. Steel deck manufacturers shall submit shop drawings for approval.
- G. Steel deck units with concrete fill shall be continuous over three or more spans. If steel deck units with concrete fill span less than 3 spans, the deck units shall be shored, uno. steel roof deck units shall be continuous over two or more spans, uno.
- H. All exterior exposed or high moisture area decks are to be galvanized. Galvanized deck to be zinc coated steel per ASTM A653, grade 33 minimum (minimum yield of 38 ksi) and ASTM A653, G60 with the profile, depth and uncoated thickness as indicated on the drawings. All metal accessories are to have the same thickness as the decking, uno. Upon completion of erection, all welds on galvanized steel deck areas shall be de-slagged, cleaned and touched-up with a zinc rich primer.

DESIGN CODES 2018

All design and construction shall conform to the 2018 International Building Code and local jurisdictional amendments per state, county, city. etc.

References to ASTM and other standards shall refer to the latest edition designated by IBC Chapter 35. Refer to the specifications for information in addition to that covered by these structural notes and drawings. The following standards were used for design.

Building Code Requirements for Structural Concrete	ACI 318-14
Specifications For Structural Steel Buildings	AISC 360-16
Minimum Design Loads For Buildings And Other Structures	ASCE 7-16
National Design Specifications For Wood Construction	NDS-18
Building Code Requirements For Masonry Structures	TMS 402-16

	OPEN \ A.		form to SJI CJ-1.0, SJI K-1.1, SJI LH/DLH-1.1 & SJI JG-1.1 (SJI) and as adopted by the International Building Code		
	В.	Steel joist fabricator shall submit sho	p drawings and calculations sealed by an engineer licensed priate discipline for EOR records prior to project closeout.		
	C.	Steel joist fabricator shall design and recommendations. As a minimum co As a minimum all joists 60 feet and lo	provide joist bridging as required by current SJI and AISC ntractor is responsible for end bay bridging for wind uplift. onger must have bolted bridging in place prior to slackening nate all other erection bridging requirements as required by		
	D.	Steel joist fabricator shall design joist and joist girder bearings to resist a horizontal force acting parallel to the joist. The force shall be the greater of: The strut force (SF) shown on plan or the seismic anchorage force Fp (per ASCE 7-10 section 12.11.2.). See notes E and F below.			
ENG. TO EDIT	E.		d for the seismic or wind Axial collector forces (tension or strut Force. Strut forces shown on plans are UNFACTORED th per ASCE 7-10 12.10.2.1.		
DNG.	F.	Steel joists shall be designed using th UNFACTORED and <u>DO/DO NOT</u> inc	ne following minimum load criteria (All loads shown are clude overstrength factor per ASCE 7-10 12.11.2.2.2):		
_		Dead Load	For joist with bare steel deck - 73% of Dead Load indicated on plans shall be applied to the top chord. For joist with concrete over steel deck - 85% of Dead Load indicated on plans shall be applied to the top chord.		
		Dead Load	For joist with bare steel deck - 27% of Dead Load indicated on plans shall be applied to the bottom chord. For joist with concrete over steel deck - 15% of Dead Load indicated on plans shall be		
		Live / Snow Loads Uplift (Net Ultimate Uplift)	 applied to the bottom chord. 100% of Live / Snow Load indicated on plans shall be applied to the top chord. For joist with bare steel deck - 16 psf net uplift load shall be applied to the top chord. (Non - Reducible) 		
	G.		700# ditional concentrated or uniform load design requirements		
	H.		een walls platforms, etc.). ember on joists from point of load to nearest panel point on ads are not applied directly at panel points. See general		
	I.	Joist bearings are shown flat in the de	etails. Adjust for slope as required. Provide continuous 68 I members are not flat with respect to decking.		
	J.	All OSHA requirements and standard	ls for Open Web/Bar Joists shall be followed. Such e limited to; bolted erection connections, bottom chord		
	К.		bad deflection shall be 1/360 of the span length.		
4.5	L.	supported deck directly attaching to b	aring walls, flat beams, etc. where the drawings show the both the joists and other bearing elements.		
10.	FIREPF A.	ROOFING: The application of the fireproofing to the steel members and steel deck is the responsibility of the contractor. The contractor must enforce the requirements of the manufacturer and not impose any additional loads, including construction live loads, during the application and curing of the fireproofing.			
F	В.	Structural framing members have be	en designed to accommodate a maximum of plf of fire eer if proposed fireproofing system exceeds this value.		
EDIT	C.		igned to accommodate a maximum of psf of fire proofing.		
	D.		cations and thickness, refer to the Architectural drawings.		
11.	E. ARCHII A.	ECTURALLY EXPOSED STRUCTUR Architecturally exposed structural ste	or decking where fireproofing is to be applied. RAL STEEL el (AESS) shall be fabricated in accordance with the		
	В.	requirements of AISC Section 10. All welded joints shall ground smooth	uno.		
	C.	See Architectural drawings for addition mockup for review prior to commenci	onal requirements if no requirements are shown provide ing fabrication.		
12.	be finisł In the e	ned, fabricated and installed during the vent the allowance is not completely e	gs, the contractor shall provide a 5% allowance of steel to progression as may be directed by the structural engineer. xhausted, <u>the contractor should be prepared to issue a</u> f the allowance.		
		the owner for the remaining portion o			

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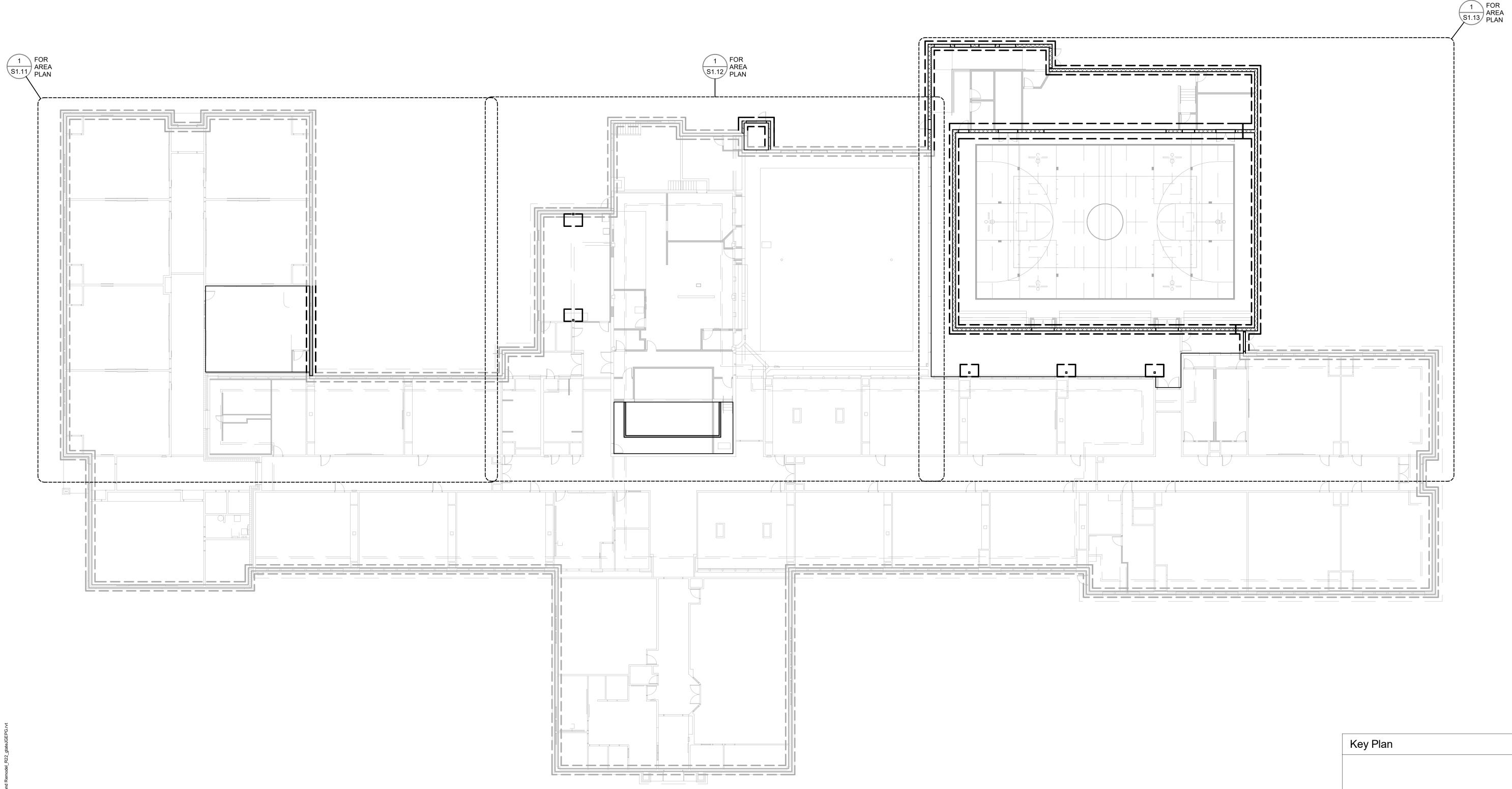
IBC 2018 -		IBC 2018 -		IBC 2018 -		IBC 2018 -	
Section		nspection Type	BC 2018 - Description	Section	IBC 2018 - Task	Inspection Type	BC 2018 - Description
	Perform these tasks for each weld, fastener, or bolted connection and noted verification				STRUCTURAL - STEEL - OTHER INSPECTIONS		
	Observe these items on a random basis during the course of			OTHER STEE	LINSPECTIONS - Verify the following are in compliance with IB	C 1705.2.1, AIS	
	each work day to insure that applicable requirements of the code are being met. Operations need not be delayer pending these inspections at contractor's risk			1	Anchor rods and other embedments supporting structural steel	Perform	Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement of concrete
Document	Document, with a report that the work has been performed			2	Fabricated steel or erected steel frame	Observe	Verify compliance with the details shown on the construction documents, such as braces, stiffeners, member locations, and proper application of joint
	in accordance with the contract documents. This is in addition to any other reports required in the Special			3	Reduced beam sections (RBS) where / if occurs	Document	 details at each connection Contour and finish Dimensional tolerances
Continuous	Inspection guide specifications The full-time observation of work requiring special inspection			4	Protected zones	Document	No holes or unapproved attachments made by fabricator or erector
	by an approved special inspector who is in the area where the work is being performed			5	H-piles where / if occurs	Document	No holes or unapproved attachments made by the responsible contractor
Periodic	The part-time or intermittent observations of work requiring special inspection by an approved special inspector who is				STRUCTURAL - COLD-FORMED METAL DECK -		
	present in the area where the work has been or is being performed and at the completion of the work			METAL DECK	PLACEMENT SECTION INSPECTION PRIOR TO DECK PLACEMENT - Verify the follo	wing are in comp	liance with IBC 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.1
				1	Verify compliance of materials (deck and all deck accessories) with construction documents, including profiles,	Perform	
	STRUCTURAL - STEEL - WELDING SECTION TION PRIOR TO WELDING - Verify the following are in complian	acc with IPC 1		2	material properties, and base metal thickness Document acceptance or rejection of deck and deck	Document	
	Verify that the welding procedures specifications (WPS) is available	Perform	705.2.1, AISC 500-10. Table C-N5.4-1	Z	accessories	Document	
	Verify manufacturer certifications for welding consumables	Perform		METAL DECK			ance with IBC 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.2
	are available Verify material identification	Perform	Type and Grade	3	Verify compliance of deck and all deck accessories installation with the construction documents	Perform	
4	Welder identification system Fit-up of groove welds (including joint geometry)	Perform Observe	 Joint preparation • Dimensions (alignment, root opening, root face, bevel) 	4	Verify deck materials are represented by the mill certifications that comply with the construction documents	Perform	
0		0000110	 Cleanliness (condition of steel surfaces) Tacking (tack weld quality and location) Backing type and fit (if applicable) 	5	documnet acceptance or rejection of installation of deck and deck accessories	Document	
6	Configuration and finish of access holes	Observe					
7	Fit-up of fillet welds	Observe	 Dimensions (alignment, gabs at root) Cleanliness (condition of steel surfaces) Tacking (tack weld quality and location) 	METAL DECK 6	Welding procedure specification (WPS) available	g are in complian Perform	ace with IBC1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.3
TEEL INSPEC	TION DURING WELDING - Verify the following are in complianc	e with IBC 170	05.2.1, AISC 360-16: Table C-N5.4-2	7	Manufactures certification for welding consumables available	Document	
8	Use of qualified welders	Perform	Welding by welders, welding operators, and tack welders who are qualified in conformance with requirements	8	Material identification (type / grade) Check welding equipment	Document Document	
9	Control and handling of welding consumables No welding over racked tack welds	Observe Observe	Packaging Electrode atmospheric exposure control				
11	Environmental conditions	Observe	Wind speed within limits Precipitation and temperature		STRUCTURAL - COLD-FORMED METAL DECK -		
12	Welding procedures specification followed	Observe	• Settings on welding equipment • Travel speed • Selected welding materials • Shielding gas type / flow rate • Preheat applied • Interpass	METAL DECK	WELDING SECTION INSPECTION DURING WELDING - Verify the following are in c	•	BC 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.4
			temperature maintained (min. / max.) • Proper position (F, V, H, OH) • Intermix of filler metals avoided	1 2	Use of qualified welders Control and handling of welding consumables	Observe Observe	
13	Welding techniques	Observe	● Interpass and final cleaning ● Each pass within profile limitations ● Each pass meets quality requirements	3	Environmental conditions (wind speed, moisture, temperature)	Observe	
TEEL INSPEC	TION AFTER WELDING - Verify the following are in compliance	with IBC 1705	5.2.1, AISC 360-16: Table C-N5.4-3	4	WPS followed	Observe	
14 15	Welds Cleaned Size, length, and location of all welds	Observe Perform	Size, length, and location of all welds conform to the requirement of the	METAL DECK	INSPECTION AFTER WELDING - Verify the following are in co	· ·	C 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.5
16	Welds meet visual acceptance criteria	Perform and	detail drawings ● Crack prohibition ● Weld / base-metal fusion ● Crater cross section ●	5	Verify size and location of welds, including support, side-lap, and perimeter welds	Perform	
17	Arc strikes	Document Perform	Weld profiles Weld size Undercut	6 7	Welds meet visual acceptance criteria Verify repair activities	Perform Perform	
18	k-area	Perform	When welding of doubler plates, continuity plates, or stiffeners has been performed in the k-area visually inspect the web k-area for cracks	8	Document acceptance or rejection of welds	Document	
19	Backing removed, weld tabs removed and finished, and fillet welds added where required	Perform			STRUCTURAL - COLD-FORMED METAL DECK -		
20	•	Perform and Document		METAL DECK	FASTENING SECTION	e following are in	compliance with IBC 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.6
21	Document acceptance or rejection of welded joint or member	Perform		1	Manufacturer installation instructions available for mechanical fasteners	Observe	
				2	Proper tools available for fastener installation	Observe	
	STRUCTURAL - STEEL - BOLTING SECTION			METAL DECK	-		compliance with IBC 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.7
	TION TASKS PRIOR TO BOLTING - Verify the following are in c Manufacturer's certifications available for faster materials	ompliance wit	h IBC 1705.2.2, AISC 360-16: Table C-N5.6-1	3	Fasteners are positioned as requiredFasteners are installed in accordance with manufacturer's	Observe Observe	
2	Fasteners marked in accordance with ASTM requirements Proper fasteners selected for joint detail (grade, type, bolt	Observe Observe			instructions		
	length if threads are to be excluded from shear plane) Proper bolting procedure selected for joint detail	Observe		METAL DECK	INSPECTION BEFORE MECHANICAL FASTENING - Verify th Check spacing, type, and installation of support fasteners	e following are in Perform	compliance with IBC 1705.2.2.1.1, SDI QA/QC-2017, Appendix 1, Table 1.8
	Connection elements, including appropriate faying surface condition and hole preparation, if specified, meet applicable	Observe		6	Check spacing, type, and installation of side-lap fasteners Check spacing, type, and installation of perimeter fasteners	Perform Perform	
6	Proper storage provided for bolts, nuts, washers, and other	Observe		8	Verify repair activities	Perform	
0	fastener components	Observe		9	Document acceptance or rejection of mechanical fasteners	Document	
	TION TASKS DURING BOLTING - Verify the following are in col Fastener assemblies of suitable condition, placed in all	npliance with l Observe	IBC 1705.2.1, AISC 360-16: Table C-N5.6-2		STRUCTURAL - OPEN-WEB STEEL JOISTS SECTION		
	holes and washers (if required) are positioned as required	-		OPEN-WEB S	TEEL JOIST AND GIRDERS - Verify the following are in compli- Installation of open-web steel joists and joist girders	ance with SJI spe Periodic	 ecification Section 2207.1 and IBC Table 1705.2.3 End connections - welded or bolted Bridging - horizontal and diagonal
ŏ	Joint brought to the snug-tight condition prior to pretensioning operation	Observe					
9	Fastener component not turned by the wrench prevented from rotating	Observe			STRUCTURAL - CONCRETE CONSTRUCTION SECTION	following	
	Bolts are pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid	Observe		2	Reinforcing bar welding	Periodic	compliance with IBC Table 1705.3 (ACI 318 references noted in IBC Table) (a) Verify weldability of reinforcing bars other than ASTM A 706, (b) Inspect
	point toward the free edges					Continuous	
	TION TASKS AFTER BOLTING - Verify the following are in com Document acceptance or rejection of all bolted connections	pliance with IB Document	3C 1705.2.1, AISC 360-16: Table C-N5.6-3	3	Inspect anchors cast in concrete	Periodic	Verify prior to paving concrete that cast in place anchors and post installed drilled anchors have proper embedment, spacing, and edge distance
				4	Inspect anchors post-installed in hardened concrete members	and Document	(a) Adhesive anchors installed in horizontally or upward inclined orientations to resist sustained tension loads, (b) Mechanical anchors and adhesive anchors not defined in 4a
	STRUCTURAL - STEEL - NON-DESTRUCTIVE TESTING	in compliance	with IBC 1705 2 1 AISC 360-16: Section N5 5	5	Verify use of required mix design	Periodic Periodic	Verify that all mixes used comply with the approved construction documents
1	Use of qualified non-destructive testing personnel	Perform	Visual weld inspection and non-destructive testing (NDT) shall be conducted	6	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and	Continuous	At the time fresh concrete is sampled to fabricate specimens for strength test, verify these tests are performed by qualified technicians
2	CJP groove welds	Observe	by personnel qualified in accordance with AWS D1.8 clause 7.2 [NOTE: EOR must delete this row if section D (SEISMIC PROVISIONS	7	determine the temperature of the concrete Inspect concrete and shotcrete placement for proper	Continuous	Verify proper application techniques are used during concrete conveyance
			SECTION) is checked] Dye penetrant testing (DT) and ultrasonic testing (UT) shall be performed on 20% of CJP groove welds for materials greater than 5/16" (9mm) thick. Testing rate must be increased to 100% if greater		application techniques		and depositing avoids segregation or contamination. Verify that concrete is properly consolidated
		<u></u>	than 5/16" (8mm) thick. Testing rate must be increased to 100% if greater than 5% of welds tested have unacceptable defects	8	Verify maintenance of specified curing temperature and technique	Periodic	Inspect curing, cold weather protection, and hot weather protection procedures
3	Welded joints subject to fatigue	Observe	Dye penetrant testing (DT) and ultrasonic testing (UT) shall be performed on 100% of welded joint identified on contract drawings and being subject to fatigue	10 11	Inspect erection of precast concrete members Verify in-situ concrete strength prior to stressing of tendons	Periodic Periodic	
4	Weld tab removal sites	Observe	fatigue At the end of welds where weld tabs have been removed, magnetic particle		in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs		
			testing shall be performed on the same beam-to-column joints receiving (UT)	12	Inspect formwork for shape, location, and dimensions of the concrete member being formed	Periodic	
					ONSTRUCTION,- Verify the following are in compliance with IB Inspect reinforcement, including prestressing tendons, and	C Table 1705.3 (Periodic	ACI 318 references noted in IBC Table)
	STRUCTURAL - STEEL - AISC 341 REQUIREMENTS (SEISMIC PROVISIONS) SECTION				verify placement		and size; that it is free of oil, dirt, and unacceptable rust; that it is located and spaced properly; that hooks, bends, ties, stirrups, and supplemental
	TIVE TESTING OF WELDED JOINTS - Verify the following are [NOTE: EOR may uncheck this section for projects not	in compliance	with IBC 1705.2.1, AISC 341-16: Section J6.2				reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the
	assigned in accordance with AISC 341 (Seismic Provisions) or for projects designed according to AISC 341, but using an						manufacturer's instruction and/ or evaluation report
	R value equal to 3] CJP groove welds	Observe	Dye penetrant testing (DT) and ultrasonic testing (UT) shall be performed on				
	Beam cope and access hole	Observe	100% of CJP groove welds for materials greater than 5/16" (8mm) At welded splices and connections, thermally cut surfaces of beam copes				
		-	and access holes shall be tested using magnetic particle testing (MT) or dye penetrant testing (DT), when the flange thickness exceeds 1 1/2" for rolled				
3	K-area NDT (AISC 341)	Perform	shapes, or when the web thickness exceeds 1 1/2" for built up shapesWhere welding of doubler plates continuity plates or stiffeners has been				
			performed in the k-area, the web shall be tested for cracks using magnetic particle testing (MY). The MT inspection area shall include the k-area base				
			metal with 3" of the weld. The MT shall be performed no sooner than 48 ours following completion of the welding				
4	Placement of reinforcing or contouring fillet welds	Document					

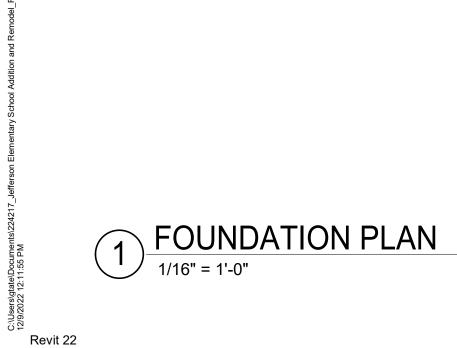
Section	
	STRUCTURA (ALL RISK CA
	STRUCTION
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1b	Prior to constr
	where specific
1c	During constru Stability Index
	delivered to th
2a	Proportions of
2b	Grade and siz
2c	Grade, type, a bolts, and pres
2d	Prestressing t
2e	Properties of t
2f	Sample panel
3a	Grout space
3b	Placement of
3c	Placement of
3d	Proportions of bonded tendo
4a	Materials and
4b	Placement of
4c	Size and locat
4d	Type, size, an anchorage of
	other construc
4e	Welding of rei
4f	Preparation co cold weather (
	weather (temp
4g	Application an
4h	Placement of tendons is in c
4i	Placement of
	bed mortar joi
5	Observe prep and/or prisms
6	Inspect ancho
	STRUCTURA
	ITEMS SECT
	RUCTION - Ve
1	High-load diap
2	Metal-plate co greater
	greater
	STRUCTURA
	WIND SECTION
DOD CONSTR	RUCTION SEIS
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	greater than 4
	than 110 mph category is A
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	STRUCTURA
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	GEOTECHNI
ILS INSPECT	ION - Verify th Materials belo
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2	Excavations a
3	reached prope perform class
4	Verify use of p
	during placem
5	Prior to placer verify that site

IBC 2018 -Section

2018 IBC SPECI		ECTION TABLES	
IBC 2018 - Task	IBC 2018 - Inspection Type	IBC 2018 - Description	
- MASONRY CONSTRUCTION SECTION			ARCHITECTS
,	of construction wi	th IBC 1705.4 (TMS 602-16 Specification Table 3 & 4 Quality Assurance	2400 E. Riverwalk Drive Boise, Idaho 83706
ction, verification of compliance of submittals ction, verification of f'm and f'ACC, except	Perform Perform		www.lkvarchitects.com 208.336.3443
Illy exempted by the code otion, verification of slump flow and Visual VSI) when self-consolidated grout is project site	Perform		200.000.000
site-prepared mortar of prestressing tendons and anchorages d size of reinforcement, connectors, anchor ressing tendons and anchorages	Periodic Periodic Periodic		PRELIMINARY NOT FOR
chniques in bed mortar for AAC masonry	Periodic Continuous Periodic	Continuous for the first 5000 square feet only (465 square meters). Periodic thereafter	CONSTRUCTION This document is
construction	Periodic		preliminary in nature and is not a final,
restressing tendons and anchorages einforcement connectors and anchor bolts	Periodic Periodic		signed and sealed document
site-prepared grout and prestressing grout fo			
rocedures with the approved submittals nasonry units and mortar joints construction on of structural members	Periodic Periodic		
location of anchors, including other details on asonry to structural members, frames, and	Periodic of Periodic		201 N. Maple Grove Ste. 100 BOISE IDAHO 83704 Phone (208) 342-7168
on forcement	Continuous		LE JOB #224217 ALL STRUCTURAL DETAILS USED ON THIS PLAN ARE COPYRIGHT ©
nstruction, and protection of masonry during emperature below 40°F (4.4°C)) or hot erature above 90°F (32.2°C))	Periodic		OF LOCHSA ENGINEERING. THE RE-USE OF ANY DETAILS AND CONCEPTS IS NOT ACCEPTABLE WITHOUT WRITTEN CONSENT OF
measurement of prestressing force rout and prestressing grout for bonded	Continuous Continuous		LOCHSA ENGINEERING.
ompliance AC masonry units and construction of thin ts	Continuous Periodic	Continuous for the first 5000 square feet (465 square meters) of AAC masonry. Periodic thereafter	Date
ration of grout specimens, mortar specimens	, Periodic	-	
s post-installed in masonry members	 Continuous and Document Periodic 	(a) Adhesive anchors installed in horizontally or upward inclined orientations to resist sustained tension loads (b) Mechanical anchors and adhesive anchors	<u>က</u>
			evisions
- WOOD CONSTRUCTION - SPECIALTY DN iy the following are in compliance with IBC 17	705 5		E SCI R
aragms where applicable	Observe	Verify thickness and grade of sheathing, size of framing members at panel edges, nail diameter and length, the number of fastener lines, and that the	
nected wood trusses spanning 60 feet or	Observe	fastener spacing is per approved contract documents Verify that the temporary installation restraint/ bracing and the permanent individual truss member restraint/ bracing are installed in accordance with the approved truss submittal package	
- WOOD CONSTRUCTION - SEISMIC AND N MIC AND WIND - Verify the following are in c		C 1705.11.2	
nay uncheck this section where sheathing rs (both shear wall and roof) are consistently	,		
on center, or if the design wind speed is less 49 meters/sec) AND the seismic design r B]	3		NOITIC
anchoring and other fastening of elements d/ seismic force-resisting system	Observe	Includes connectors for: Shear wall sheathing, roof/ floor sheathing, drag strut/ collectors, braces, hold-downs, roof and floor framing connections to	
		exterior walls	
- ISOLATION AND ENERGY DISSIPATION			
SIPATION SYSTEM - Verify the following are I installation	in compliance wit	Verify that fabrication and installation of isolator units and energy dissipation	SCHOOI
		devices conform to manufacturers recommendations and approved construction documents	
AL - SOILS INSPECTION SECTION			SC SC
following are in compliance with IBC Table 1 v shallow foundations are adequate to	Periodic		
sign bearing capacity e extended to proper depth and have material	Periodic		
cation and testing of compacted fill materials oper materials, densities and lift thicknesses			⊢ ⊢
nt and compaction of compacted fill ent of compacted fill, inspect subgrade and has been prepared properly	Periodic	During fill placement, the special inspector shall verify that proper materials and procedures are used in accordance with the provisions of the approved	EMENTARY ET JEROME, ID
		geotechnical report	
QUALITY	ASSURA	NCE AND SPECIAL INSPECTION	N ELE DEL street
A. Sp		accordance with the requirements of IBC section 1704, 1705, and structural	
	-	e with the requirements of IBC section 1705.12 shall be required for: sting systems shown in elevation	MC SC
		force resisting systems denoted by SFRS on plan or detail.	Ш Ж Щ [−]
D. NO	DTE: Existing seis	mic force resisting systems denoted on plan or detail by SFRS shall require	FFERSO ID REMC N. FILLMORE
str	uctural observatio	n performed by a qualified third party, inspection and testing agency in	
ac	cordance with IBC	section 1709.1, any deficiencies or discrepancies from that shown on the hall be reported to the engineer of record.	
со	nforming to the red	ncy of special inspection, structural testing and subsequent reporting quirements of IBC section 1704 and 1705 shall be submitted by the g agencies to the architect/structural engineer for approval.	DATE: 12/09/22 LKV PROJECT #: Client Number
dra	awings shall be pe	ns and subsequent reporting of general conformance to the structural rformed periodically by the engineer in responsible charge at his/her pecifically required by the building official.	DRAWN BY: GT
A. Te go	verning code auth	al Construction Retained by owner and satisfactory to Architect/Structural Engineer and ority to perform required tests and inspections of this contract and applicable	CHECKED BY: KF ————————————————————————————————————
B. Ma		: Submit laboratory test reports certifying materials are of identifiable tested	DRAWING NO.:
co tes co lat	de authority. If lab sts as directed by a sts related to tests	ng laboratory, Architect/Structural Engineer and, upon request, to governing oratory test reports cannot be made available, testing laboratory will perform Architect/Structural Engineer. Contractor shall pay testing laboratory for and inspections of unidentifiable materials or materials furnished without s, materials found deficient after initial tests and inspections, or materials aterials.	SOLD5 SPECIAL INSPECTION
	ecial inspection in	accordance with the requirements of IBC section 1704 and 1705 shall be licated on special inspection tables on sheet S0.0	TABLES

C.	Special inspection in accordance with the requirements of IBC section 1704 and 1705 shall be
	required for items indicated on special inspection tables on sheet S0.0





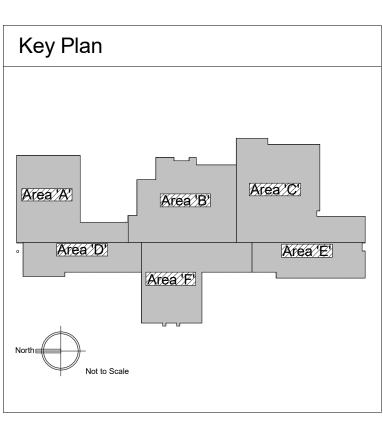
OVERALL PLAN NOTES

1. For structural design notes, see sheets starting at S0.01.

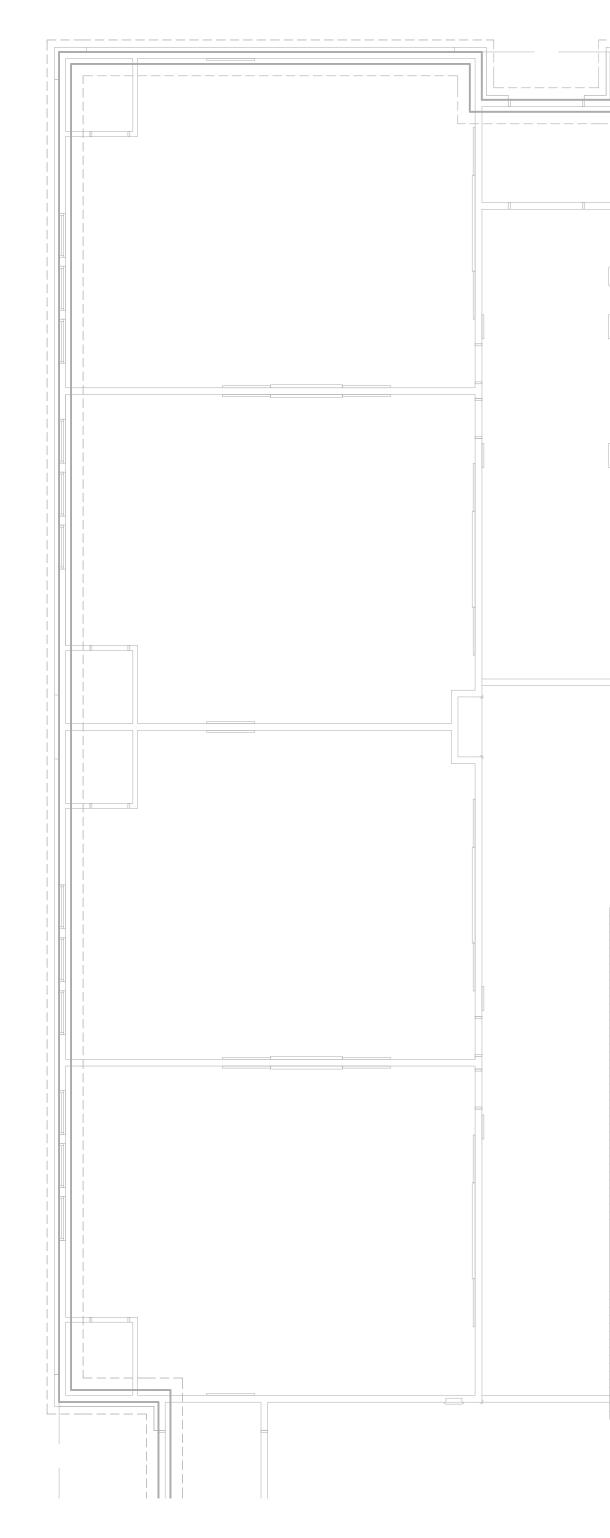
2. Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal.

. Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work.

4. For additional information not shown, see plans.



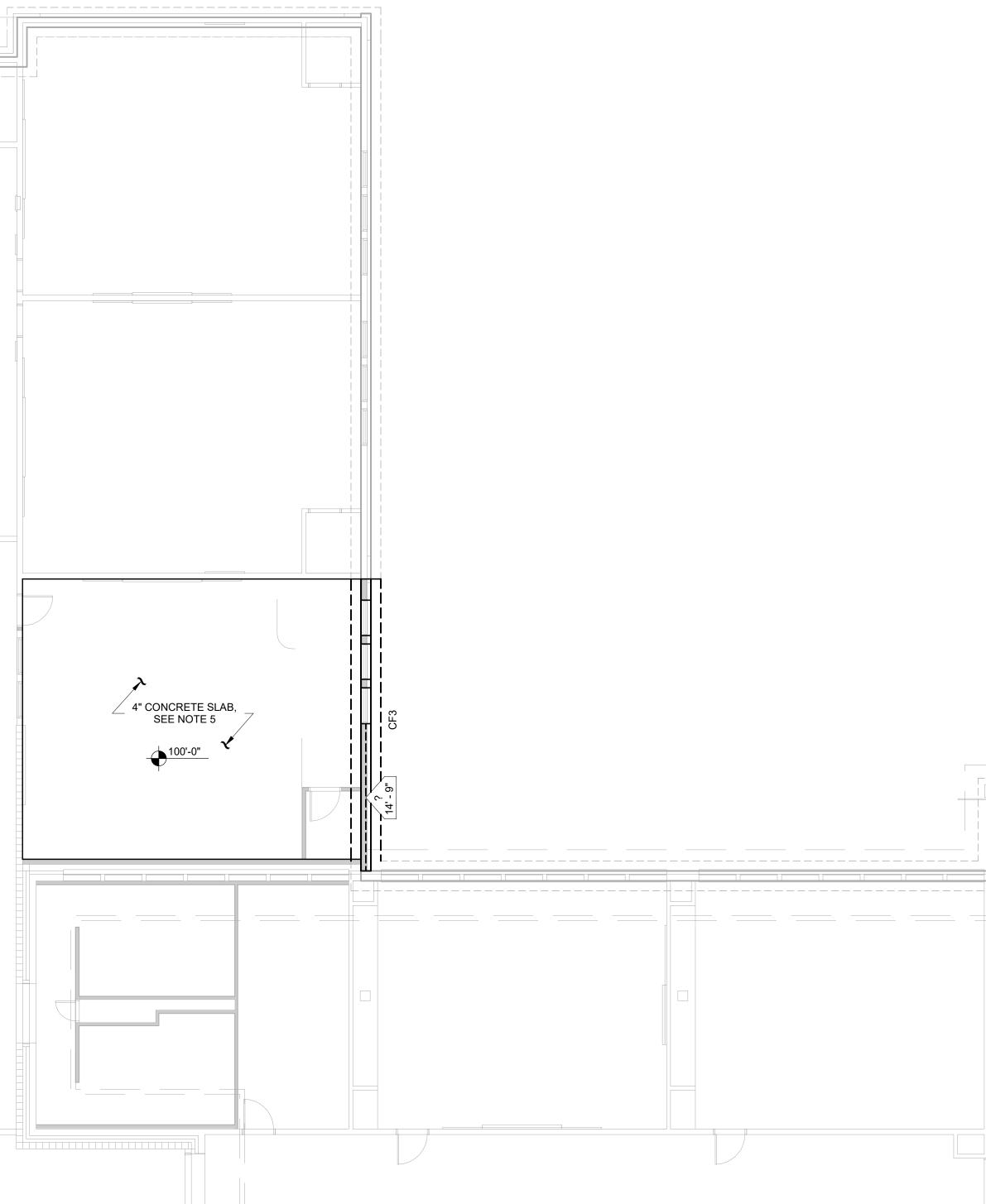
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1 AREA A FOUNDATION PLAN

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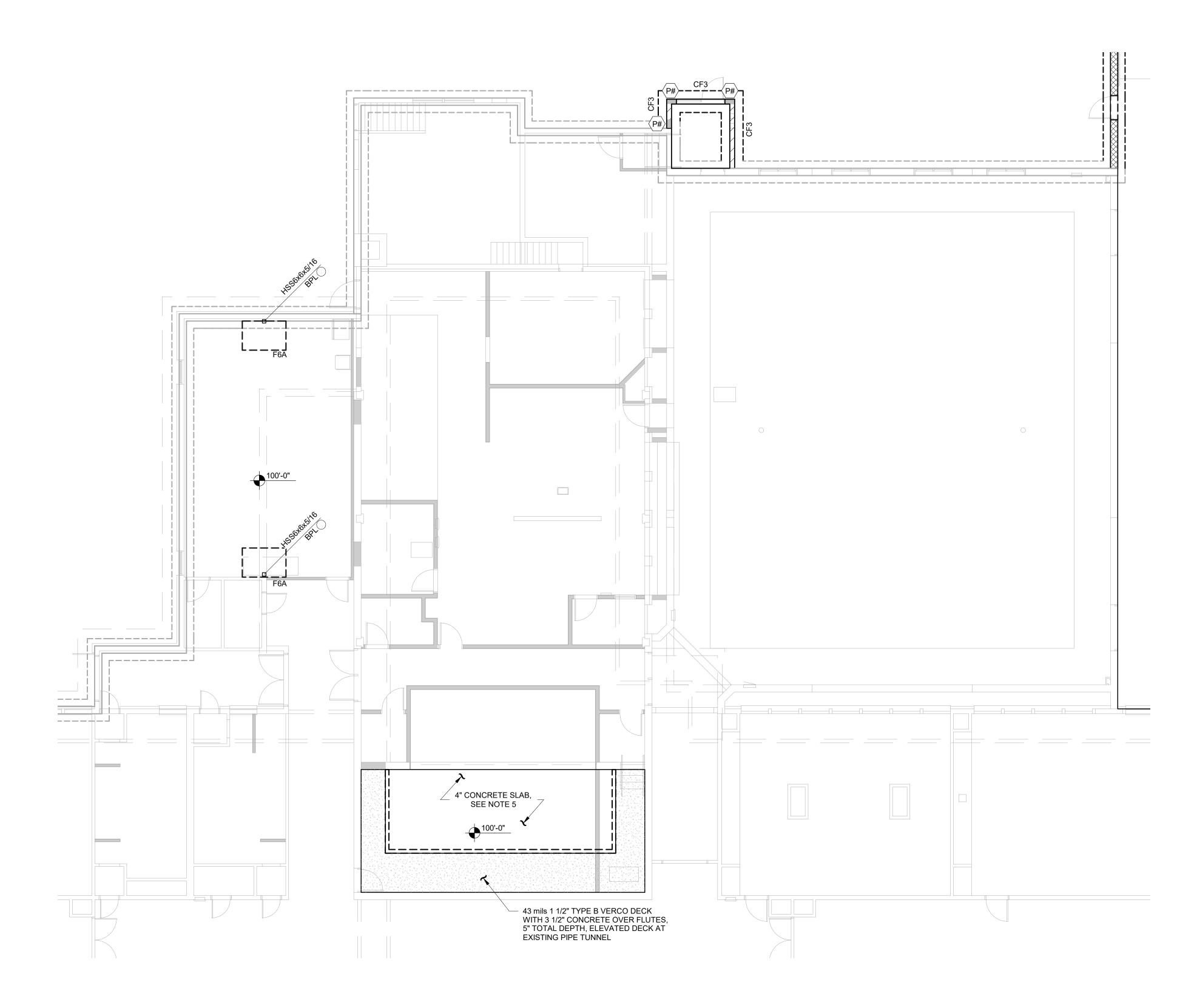
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FO	UNDATI	ON PLAN NOTES		-	
1.	For structural o	lesign notes, see sheets starting at S0.01.		IIK	$ \cap $
2.		ackgrounds are shown for reference only. The dimensions shown apply to ents only. For dimensions not shown, see architect of record submittal.		ARCHI	TE
3.		Il field verify existing structural conditions. If any discrepancies are found, I contact the Architect and Structural Engineer before performing alteration		2400 E. River Boise, Idaho 8	rwalk Dr
4.	Top of concrete	e floor reference elevation = 100'-0" typical uno thusX' - X"		www.lkvarchit 208.336.3443	
5.	Slab on grade	shall be 4" thick concrete with 4x4 W2.9xW2.9 welded wire fabric, placed op of concrete. See architectural drawings for slab depressions, slopes, etc.		200.000.0440	l
6.	Top of exterior 99'-4" max., typ	footing shall be elevation 98'-0" max. and top of interior footing shall be			
7.	Contractor to c	oordinate slab on grade control joints with $1/S5.03$.		PRELIMIN	NARY OR
8.	See Geo-Tech	report for underslab and footing requirements.		CONSTR	
9.	For general co	ncrete/foundation details, see sheets S5.01 and S5.02.		This doo preliminar	
10.	F# and CF#	Denotes footing type, see 6 / S4.01 .		and is no	
11.		oordinate placement of utilities thru or adjacent to the footings or stem il 1 / S5.02 or the footings may be stepped per 2 / S5.02 at contractors		signed an docu	nd sea ument
12.	S S	Indicates step(s) in footing, see 2 / S5.02 .		//Lo	ch
13.	BPL (#)	Denotes base plate type, see 1 / S4.01 .		201 N. Maple	inee Grove
14.	● HD#	Denotes wood hold-down, see 3 / S4.02 for wood hold-down schedule.		BOISE IDAHO Phone (208) 3 LE JOB #224	O 83704 342-716
15.	$ \begin{array}{c} \begin{array}{c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array} \right) \begin{array}{c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array} \right) \begin{array}{c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array} \right) \begin{array}{c} & & & \\ & & $	Denotes recess, sloped or elevated floor elevations, coordinate size and location with arch.		ALL STRUCTURAL ON THIS PLAN ARI OF LOCHSA ENGIN RE-USE OF ANY D	. DETAILS E COPYRIC NEERING.
16.		 12" HI-R Masonry wall f'm = 2000 psi #5 vertical at 16" oc., centered (2) #5 horizontal at 48" oc. in bond beam. Provide additional reinforcing at wall openings, ends, corners and intersections per detail sheet S5.11, special inspection is required. See sheet S5.11 for masonry typ. details. Solid grout all cells. All masonry bearing walls are to be considered LFRS. 	•	CONCEPTS IS NOT WITHOUT WRITTE LOCHSA ENGINEE	EN CONSE
17.	CJ	Denotes masonry control joint location, see 3 / S5.11 for construction. Coordinate with architectural for locations.		suc	
18.		vated concrete pad or curb construction, see 5 / S5.02 or 6 / S5.02. e, location, and thickness with equipment supplier.		Revisions Description	
19.	0' - 7" ?	Denotes wood shear wall, see 7 / S4.01. For construction Information, see 10 / S5.41. All wood shear walls are to be considered <u>LFRS</u> . Contractor to field coordinate actual wall lengths and hold-down locations with architectural drawings.		Des	
20.	For all structura floor or roof ab	al walls and shear walls not shown on this plan, see the framing plan at the ove.		#	
21.		Denotes pillaster, see 1 / S4.02.			
				Z	
22.		8" masonry wall f'm = 2000 psi #5 vertical at 24" oc., centered (2) #5 horizontal at 48" oc. in bond beam. Provide additional reinforcing at wall openings, ends, corners and intersections per detail sheet S5.11, special inspection is required. See sheet S5.11 for masonry typ. details. Solid grout all cells. All masonry bearing walls are to be considered LFRS.		ol addition	

Key Plan	
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Area'D'	Pr — DF
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1 AREA B FOUNDATION PLAN

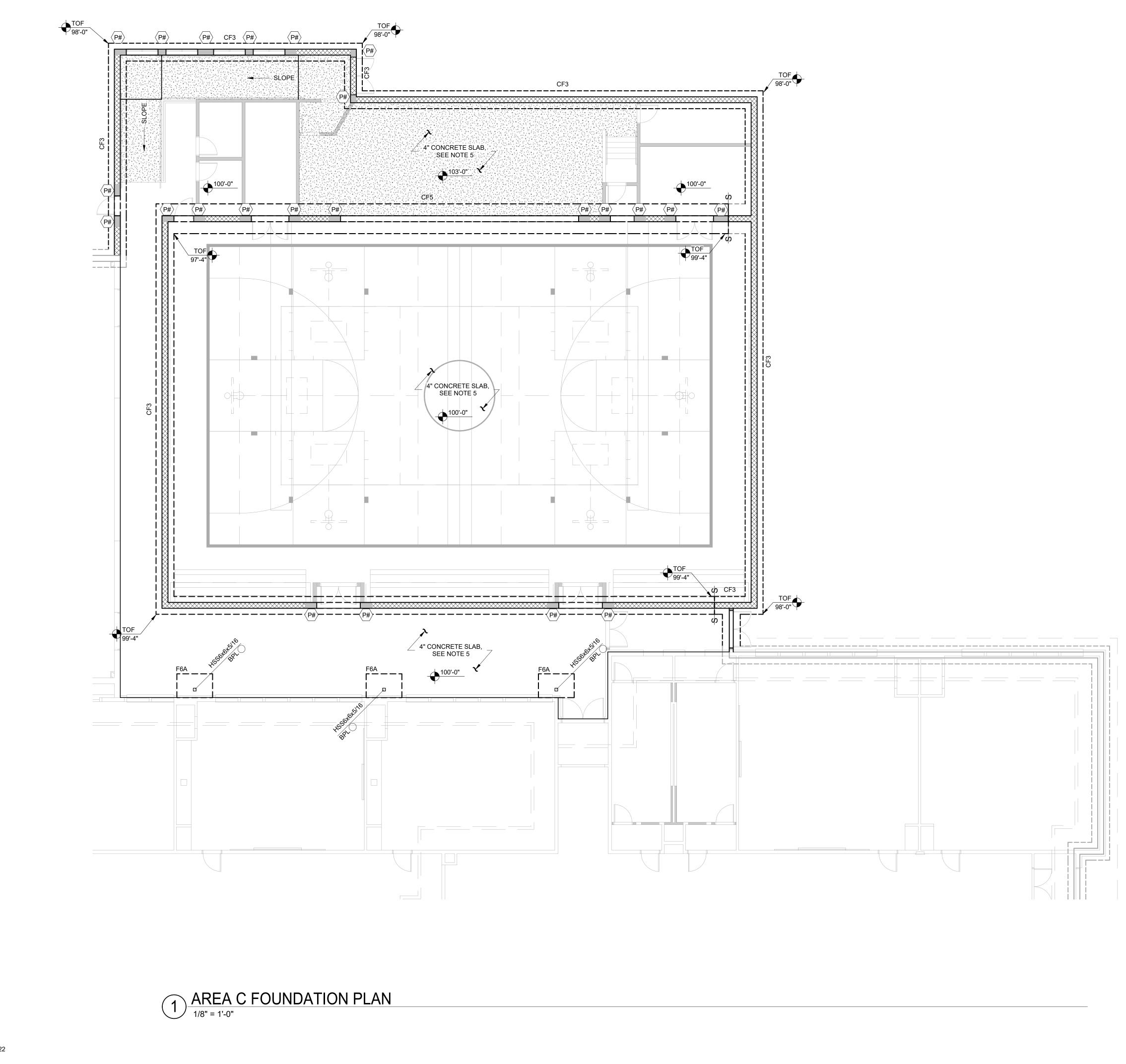
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1.	For structural c	lesign notes, see sheets starting at S0.01.		LKVI
2.		ackgrounds are shown for reference only. The dimensions shown apply to ents only. For dimensions not shown, see architect of record submittal.		A R C H I T E C T S
3.		Il field verify existing structural conditions. If any discrepancies are found, I contact the Architect and Structural Engineer before performing alteration	2	2400 E. Riverwalk Drive 3oise, Idaho 83706
4.	Top of concrete	e floor reference elevation = 100'-0" typical uno thus.		vww.lkvarchitects.com 208.336.3443
5.		shall be 4" thick concrete with 4x4 W2.9xW2.9 welded wire fabric, placed op of concrete. See architectural drawings for slab depressions, slopes, etc.		
6.	Top of exterior 99'-4" max., typ			
7.	Contractor to c	$\nabla X' - X''$ oordinate slab on grade control joints with 1 / S5.03.		PRELIMINARY NOT FOR
8.	See Geo-Tech	report for underslab and footing requirements.		CONSTRUCTION
9.	For general co	ncrete/foundation details, see sheets S5.01 and S5.02.		This document is preliminary in nature
10.	F# and CF#	Denotes footing type, see 6 / S4.01 .		and is not a final,
11.		oordinate placement of utilities thru or adjacent to the footings or stem il 1 / S5.02 or the footings may be stepped per 2 / S5.02 at contractors		signed and sealed document
12.	S S	Indicates step(s) in footing, see 2 / S5.02 .		//Lochsa
13.	BPL (#)	Denotes base plate type, see 1 / S4.01 .		engineering 201 N. Maple Grove Ste. 100
14.	● HD#	Denotes wood hold-down, see 3 / S4.02 for wood hold-down schedule.	E	30ISE IDAHO 83704 Phone (208) 342-7168 -E JOB #224217
15.	$ \begin{array}{c} -\frac{1}{2} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum$	Denotes recess, sloped or elevated floor elevations, coordinate size and location with arch.		ALL STRUCTURAL DETAILS USED ON THIS PLAN ARE COPYRIGHT (C) OF LOCHSA ENGINEERING. THE RE-USE OF ANY DETAILS AND
16.		 12" HI-R Masonry wall f'm = 2000 psi #5 vertical at 16" oc., centered (2) #5 horizontal at 48" oc. in bond beam. Provide additional reinforcing at wall openings, ends, corners and intersections per detail sheet S5.11, special inspection is required. See sheet S5.11 for masonry typ. details. Solid grout all cells. All masonry bearing walls are to be considered LFRS. 	V	CONCEPTS IS NOT ACCEPTABLE VITHOUT WRITTEN CONSENT OF OCHSA ENGINEERING.
17.	C	Denotes masonry control joint location, see 3 / S5.11 for construction. Coordinate with architectural for locations.	SUS	
18.		vated concrete pad or curb construction, see 5 / S5.02 or 6 / S5.02. e, location, and thickness with equipment supplier.	Revisions	Description
19.	0' - 7" ?	Denotes wood shear wall, see 7 / S4.01. For construction Information, see 10 / S5.41. All wood shear walls are to be considered <u>LFRS</u> . Contractor to field coordinate actual wall lengths and hold-down locations with architectural drawings.		Des
20.	For all structura floor or roof ab	al walls and shear walls not shown on this plan, see the framing plan at the ove.		Ħ
21.	(P#)	Denotes pillaster, see 1 / S4.02 .		
22.		8" masonry wall f'm = 2000 psi #5 vertical at 24" oc., centered (2) #5 horizontal at 48" oc. in bond beam. Provide additional reinforcing at wall openings, ends, corners and intersections per detail sheet S5.11, special inspection is required. See sheet S5.11 for masonry typ. details. Solid grout all cells. All masonry bearing walls are to be considered LFRS.		- ADDITION
L				C

Key Plan	║ ╙
	DATE LKV P
Area'A' Area'C'	DRAW CHEC
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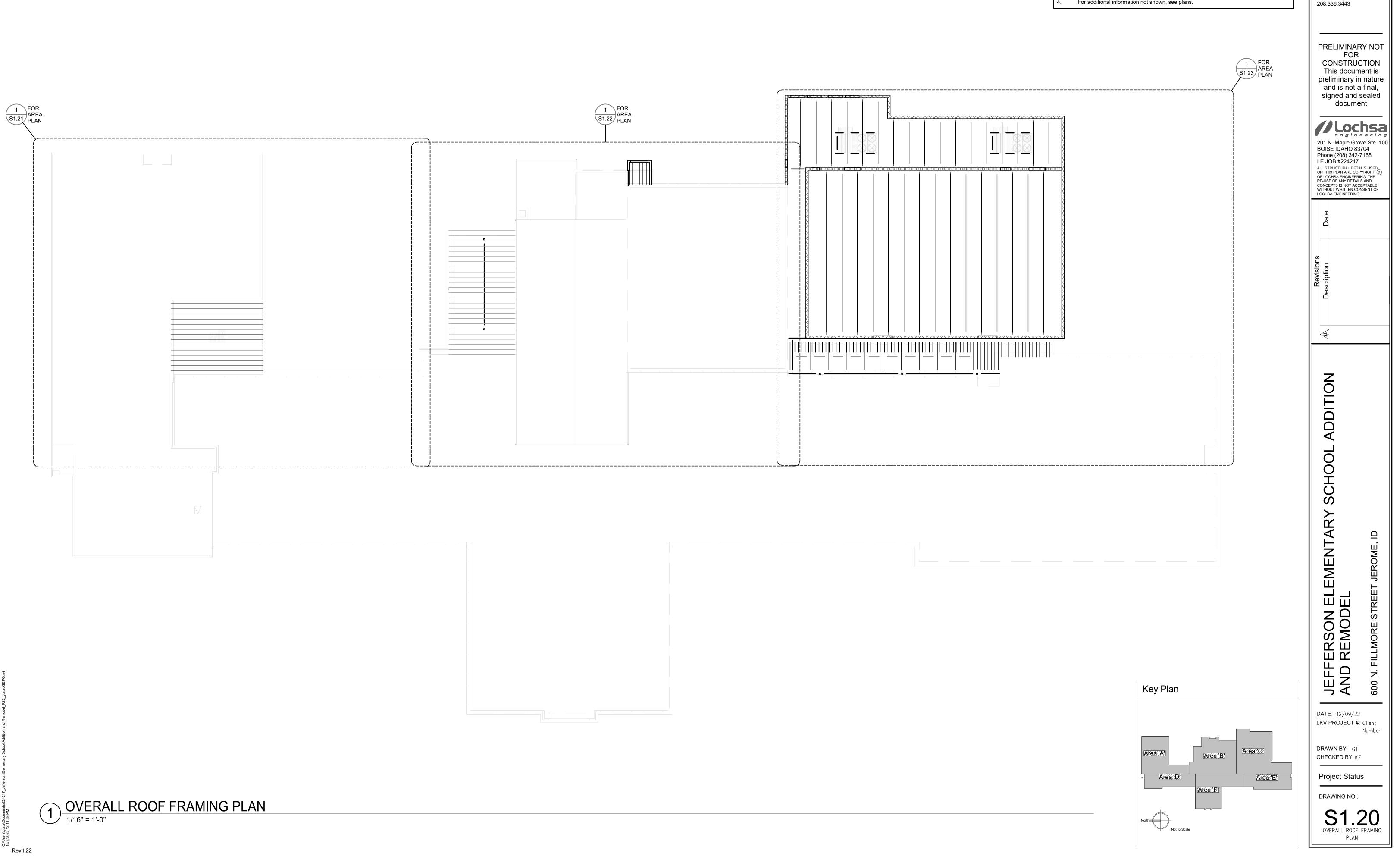




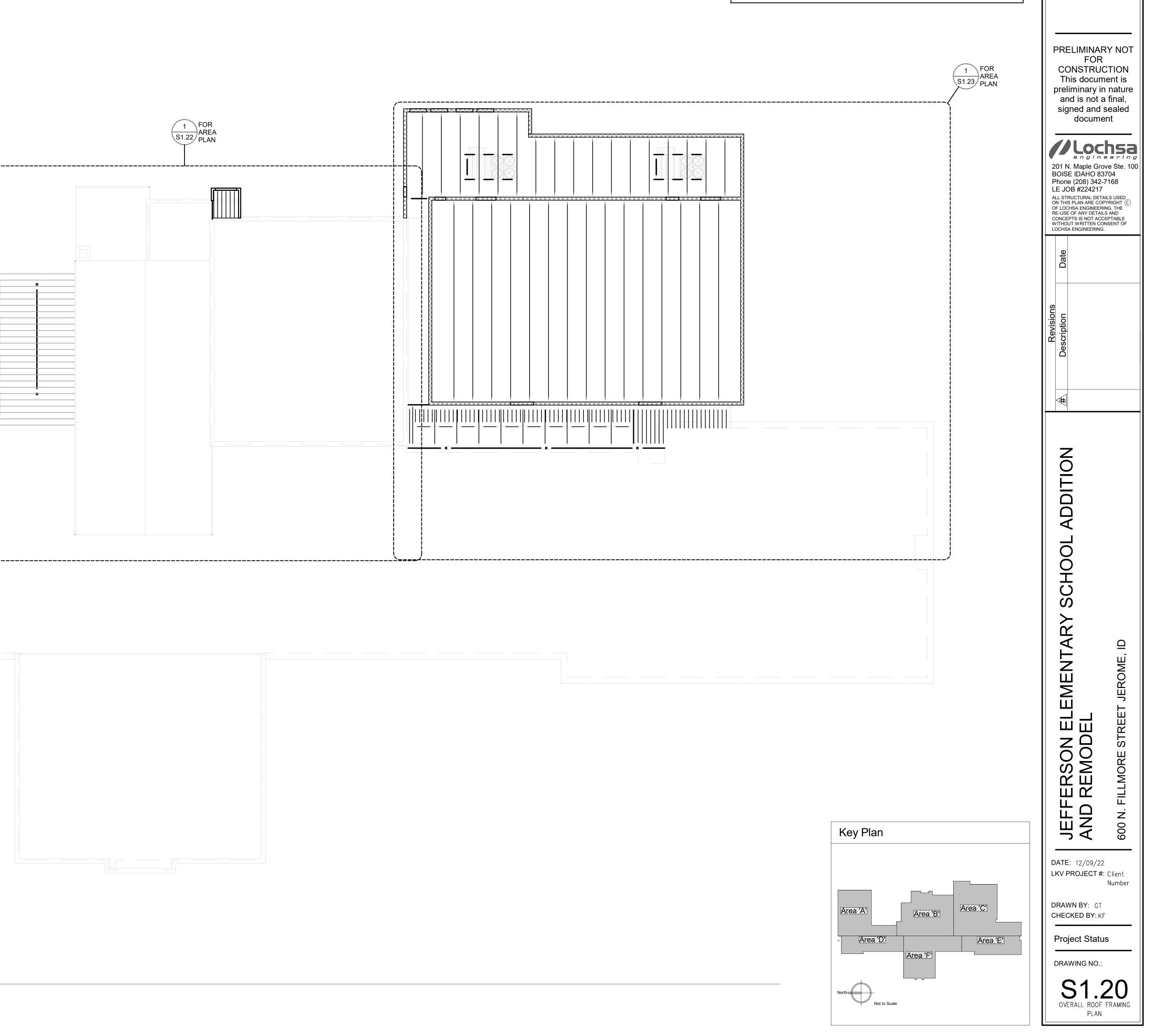
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2.		ackgrounds are shown for reference only. The dimensions shown apply to ents only. For dimensions not shown, see architect of record submittal.			RC	ніте
3.		Il field verify existing structural conditions. If any discrepancies are found, Il contact the Architect and Structural Engineer before performing alteration		2	400 E.	. Riverwalk [daho 83706
4.	Top of concrete	e floor reference elevation = 100'-0" typical uno thusX' - X"				varchitects.c 5.3443
5.	Slab on grade	shall be 4" thick concrete with 4x4 W2.9xW2.9 welded wire fabric, placed op of concrete. See architectural drawings for slab depressions, slopes, etc.				
6.	Top of exterior 99'-4" max., typ					
7.	Contractor to c	Ψ X' - X" oordinate slab on grade control joints with 1 / S5.03.		F	PREL	
8.	See Geo-Tech	report for underslab and footing requirements.			CON	FOR NSTRUC
9.	For general co	ncrete/foundation details, see sheets S5.01 and S5.02.				s docume
10.	F# and CF#	Denotes footing type, see 6 / S4.01 .				ninary in ı I is not a f
11.		oordinate placement of utilities thru or adjacent to the footings or stem il 1 / S5.02 or the footings may be stepped per 2 / S5.02 at contractors			•	ed and se documen
12.	S S	Indicates step(s) in footing, see 2 / S5.02 .				Loct
13.	BPL (#)	Denotes base plate type, see 1 / S4.01 .		2		engine Maple Grove
14.	• HD#	Denotes wood hold-down, see 3 / S4.02 for wood hold-down schedule.		B P	OISE	IDAHO 8370 (208) 342-71 3 #224217
15.		Denotes recess, sloped or elevated floor elevations, coordinate size and location with arch.		AI O O	ll stru n this p f lochs	CTURAL DETAILS PLAN ARE COPYF SA ENGINEERING F ANY DETAILS /
16.		 12" HI-R Masonry wall f'm = 2000 psi #5 vertical at 16" oc., centered (2) #5 horizontal at 48" oc. in bond beam. Provide additional reinforcing at wall openings, ends, corners and intersections per detail sheet S5.11, special inspection is required. See sheet S5.11 for masonry typ. details. Solid grout all cells. All masonry bearing walls are to be considered LFRS. 		W	ITHOUT	'S IS NOT ACCEP WRITTEN CONS ENGINEERING.
17.	cl	Denotes masonry control joint location, see 3 / S5.11 for construction. Coordinate with architectural for locations.		Suc	_	
18.		vated concrete pad or curb construction, see 5 / S5.02 or 6 / S5.02. e, location, and thickness with equipment supplier.		Revisions	escription	
19.	0' - 7" ?	Denotes wood shear wall, see 7 / S4.01. For construction Information, see 10 / S5.41. All wood shear walls are to be considered LFRS. Contractor to field coordinate actual wall lengths and hold-down locations with architectural drawings.			Des	
20.	For all structura floor or roof ab	al walls and shear walls not shown on this plan, see the framing plan at the ove.			#	
21.	(P#)	Denotes pillaster, see 1 / S4.02 .				
22.		8" masonry wall f'm = 2000 psi #5 vertical at 24" oc., centered (2) #5 horizontal at 48" oc. in bond beam. Provide additional reinforcing at wall openings, ends, corners and intersections per detail sheet S5.11, special inspection is required. See sheet S5.11 for masonry typ. details. Solid grout all cells. All masonry bearing walls are to be considered LFRS.			ADDITION	
					Z	

Key Plan			-
Area'A'	Area'B'	Area'C'	DA LK DF CH P D
North Not to Scal	e		











For structural design notes, see sheets starting at S0.01.

Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal.

ARCHITECTS

2400 E. Riverwalk Drive Boise, Idaho 83706

www.lkvarchitects.com

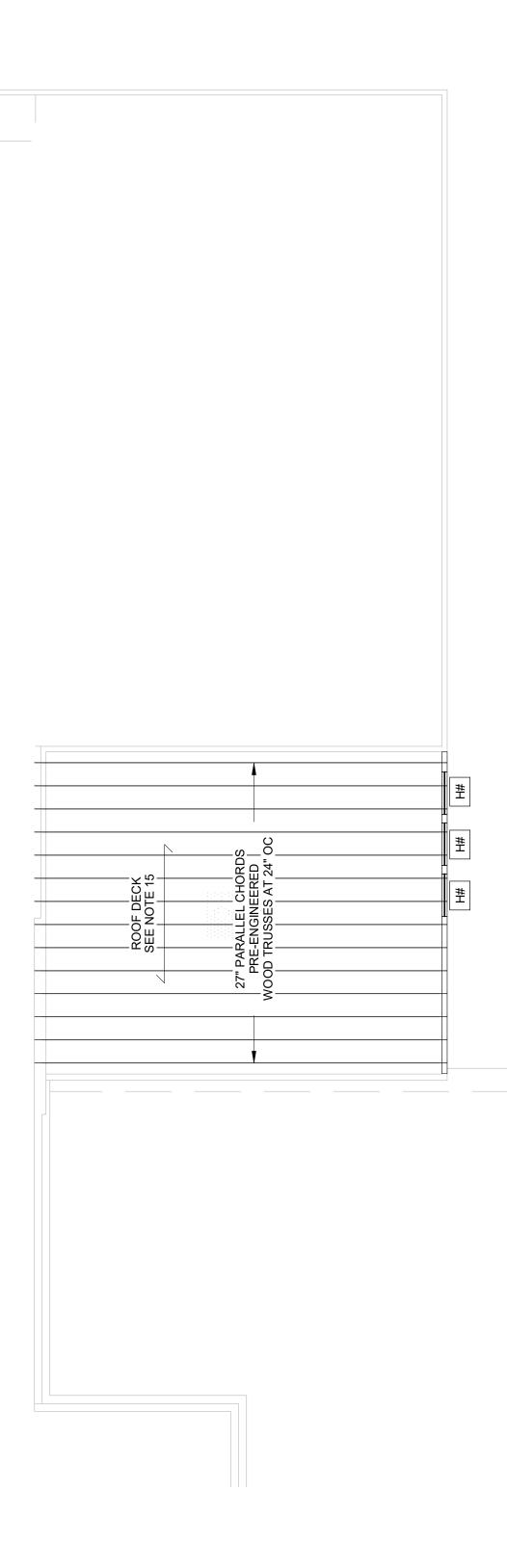
Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work.

For additional information not shown, see plans.





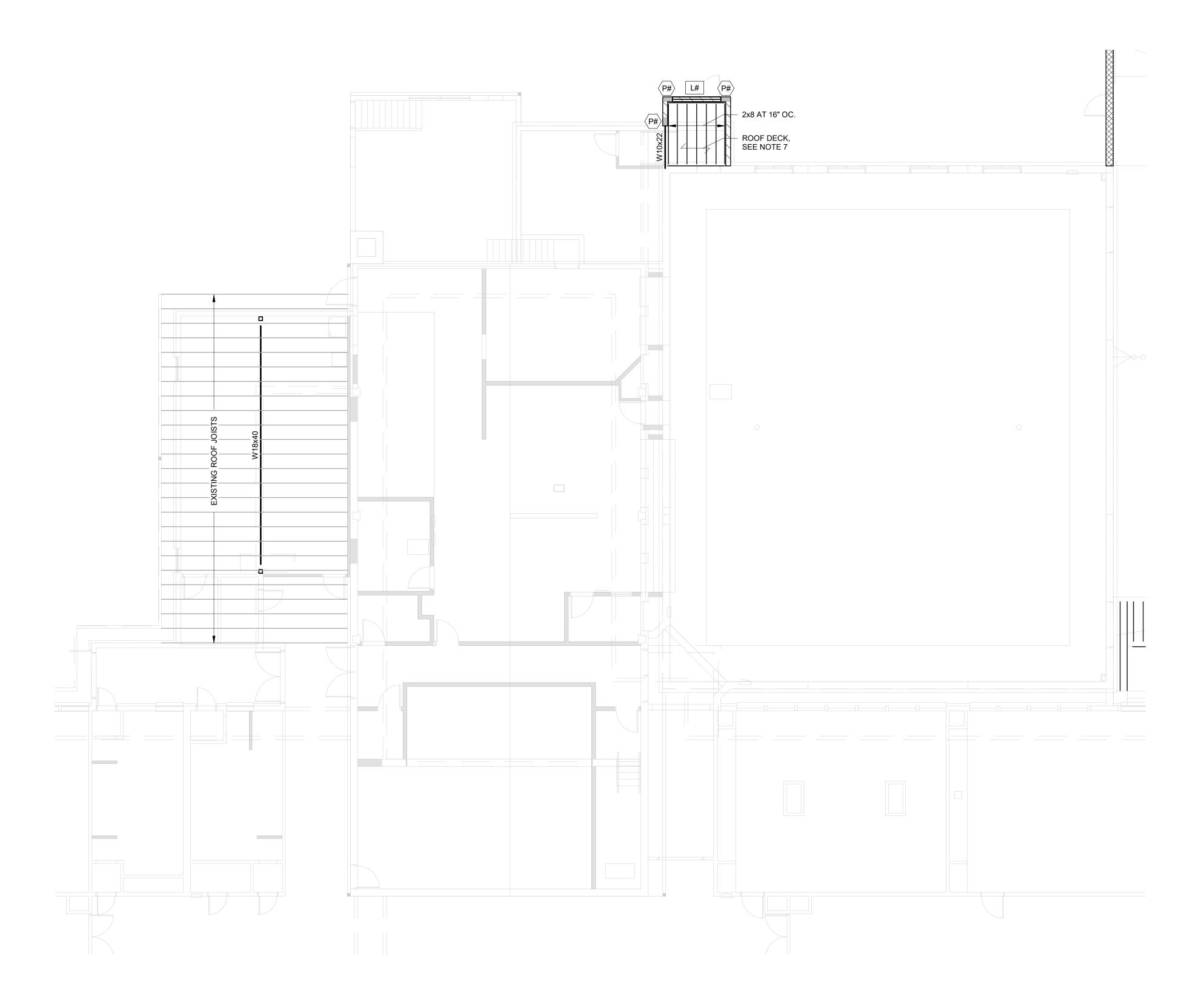
ন্থ Revit 22



RC	OOF FRAMING PLAN NOTES	
1.	For structural design notes, see sheets starting at S0.01.	
2.	Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal.	ARCHI
3.	Field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work.	2400 E. River Boise, Idaho 8
4.	For general framing details, see sheets S5.01 thru S5.42.	www.lkvarchit
5.	000# Roof supported mechanical unit with operating weight. Provide framing under mechanical unit curb. Coordinate exact location, size and number of deck penetrations with mechanical. For additional information, see 2 / S5.21.	208.336.3443
6.	Field coordinate roof openings and support framing locations. For typical deck reinforcing at deck penetrations, see 2 / S5.21.	PRELIMIN
7.	For steel deck schedule and loading plan see S2.01.	FC CONSTF
8.	For beam to beam or beam to column connection, see 1 / S5.21 and - / unless specifically detailed.	This doc preliminar
9.	BOD Denotes bottom of deck elevation. Work point is a projection up from grid or the center of framing/wall below.	and is no signed ar docu
10.	L# Denotes masonry lintel, see schedule on S4.02.	///.
11.	Joist bridging to be designed by joist manufacturer per SJI. For additional information, see 4 / S5.22 and 2 / S5.22.	201 N. Maple BOISE IDAHO
12.	H# Denotes header, see schedule on 5 / S4.01 .	Phone (208) 3 LE JOB #2242 ALL STRUCTURAL ON THIS PLAN ARE OF LOCHSA ENGIN
13.	In addition to all loads indicated on plans, the joist manufacturer shall design all floor and roof joists for a 500 pound concentrated dead load at any location along the length of top chord, and a 250 pound concentrated dead load at any location along the length of bottom chord. The added load indicated above do not need to act simultaneously.	RE-USE OF ANY DI CONCEPTS IS NOT WITHOUT WRITTE LOCHSA ENGINEE
14.	Joist manufacturer to apply 1/2" natural camber on first joist from wall.	ate
15.	Roof Deck 19/32" APA T&G sheathing 40/20 Nailing patterns: 10d at 6" oc., all panel edges. 10d at 12" oc., at intermediate supports stagger panel joints. For more information see	
		visions

Key Plan	
	DATE:
	LKV PI
Area'B' Area'C' - Area'D' Area'E'	DRAW CHECI Proje
Area F	DRAV
North	
Not to Scale	ARE

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A R C H I T E C T S 2400 E. Riverwalk Drive						
Boise, Idaho 83706 www.lkvarchitects.com 208.336.3443						
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DATE: 12/09/22 LKV PROJECT #: Client Number						
DRAWN BY: GT						
CHECKED BY: KF						
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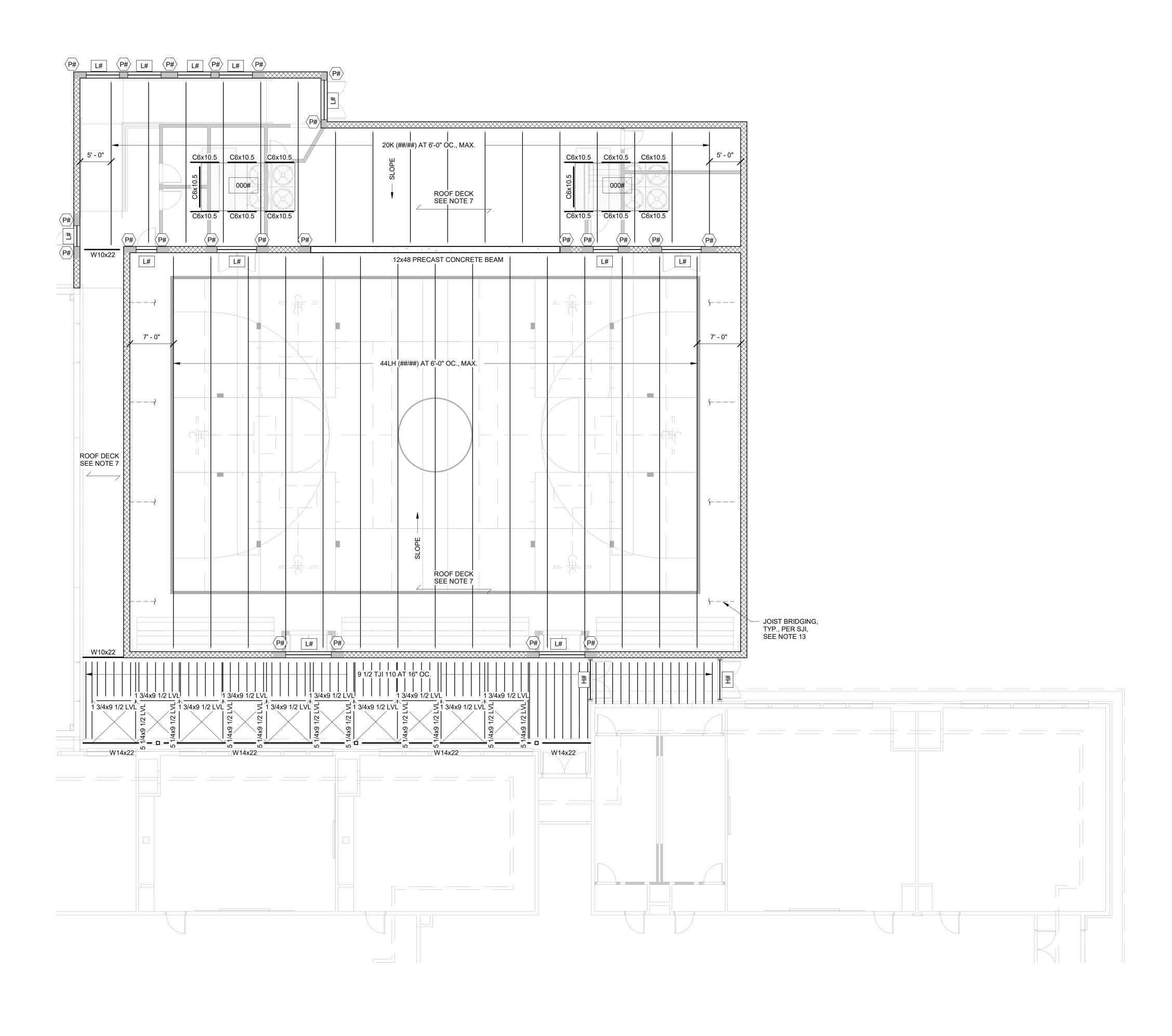
Revit 22

RC	OF FRAMING PLAN NOTES	
1.	For structural design notes, see sheets starting at S0.01.	
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3.	Field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work.	2400 E. Riverwalk Drive Boise, Idaho 83706
4.	For general framing details, see sheets S5.01 thru S5.42.	www.lkvarchitects.com
5.	000# Roof supported mechanical unit with operating weight. Provide framing under mechanical unit curb. Coordinate exact location, size and number of deck penetrations with mechanical. For additional information, see 2 / S5.21.	208.336.3443
6.	Field coordinate roof openings and support framing locations. For typical deck reinforcing at deck penetrations, see 2 / S5.21.	PRELIMINARY NOT
7.	For steel deck schedule and loading plan see S2.01.	FOR CONSTRUCTION
8.	For beam to beam or beam to column connection, see 1 / S5.21 and - / unless specifically detailed.	This document is preliminary in nature
9.	BOD $X' - X''$ Denotes bottom of deck elevation. Work point is a projection up from grid or the center of framing/wall below.	and is not a final, signed and sealed document
10.	Denotes masonry lintel, see schedule on S4.02.	//Lochsa
11.	Joist bridging to be designed by joist manufacturer per SJI. For additional information, see 4 / S5.22 and 2 / S5.22.	201 N. Maple Grove Ste. 100 BOISE IDAHO 83704
12.	H# Denotes header, see schedule on 5 / S4.01 .	Phone (208) 342-7168 LE JOB #224217 ALL STRUCTURAL DETAILS USED ON THIS PLAN ARE COPYRIGHT (C)
13.	In addition to all loads indicated on plans, the joist manufacturer shall design all floor and roof joists for a 500 pound concentrated dead load at any location along the length of top chord, and a 250 pound concentrated dead load at any location along the length of bottom chord. The added load indicated above do not need to act simultaneously.	OF LOCHSA ENGINEERING. THE RE-USE OF ANY DETAILS AND CONCEPTS IS NOT ACCEPTABLE WITHOUT WRITTEN CONSENT OF LOCHSA ENGINEERING.
14.	Joist manufacturer to apply 1/2" natural camber on first joist from wall.	Date
15.	Roof Deck 19/32" APA T&G sheathing 40/20 Nailing patterns: 10d at 6" oc., all panel edges. 10d at 12" oc., at intermediate supports stagger panel joints.	
	For more information see	Revisions cription

|⊲#

ADDITION

Key Plan	JEFFERSON ELEMENTARY SCHOOL AND REMODEL 600 N. FILLMORE STREET JEROME, ID
	DATE: 12/09/22 LKV PROJECT #: Client Number
Area'A' Area'C'	DRAWN BY: GT CHECKED BY: KF
- Area'E'	Project Status
Area F	DRAWING NO.:
North Not to Scale	S1.22 AREA B ROOF FRAMING PLAN



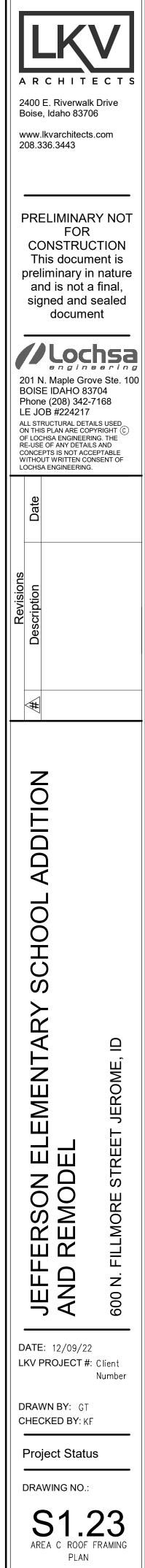
1 AREA C ROOF FRAMING PLAN

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Revit 22

RC	OF FRAMING PLAN NOTES	
1.	For structural design notes, see sheets starting at S0.01.	
2.	Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal.	ARCHI
3.	Field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work.	2400 E. Riverv Boise, Idaho 8
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5.	000# Roof supported mechanical unit with operating weight. Provide framing under mechanical unit curb. Coordinate exact location, size and number of deck penetrations with mechanical. For additional information, see 2 / S5.21.	208.336.3443
6.	Field coordinate roof openings and support framing locations. For typical deck reinforcing at deck penetrations, see 2 / S5.21.	PRELIMIN
7.	For steel deck schedule and loading plan see S2.01.	FC CONSTR
8.	For beam to beam or beam to column connection, see 1 / S5.21 and - / unless specifically detailed.	This docu preliminary
9.	BOD Denotes bottom of deck elevation. Work point is a projection up from grid or the center of framing/wall below.	and is no signed an docu
10.	L# Denotes masonry lintel, see schedule on S4.02.	//Lo
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12.	H# Denotes header, see schedule on 5 / S4.01 .	Phone (208) 34 LE JOB #2242 ALL STRUCTURAL I ON THIS PLAN ARE OF LOCHSA ENGINI
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L		visions otion

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Key Plan	L
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- Area'D' Area'E'	Pro
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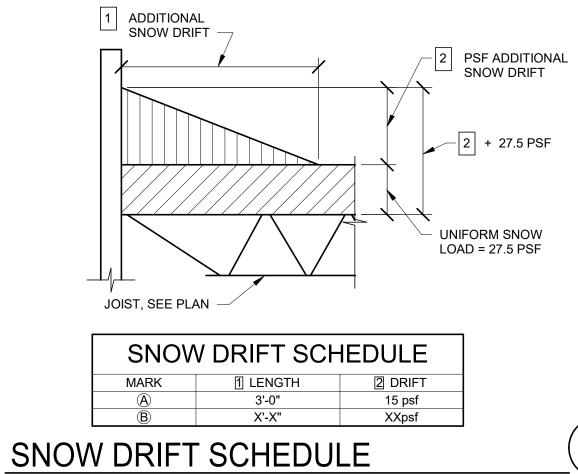


ENGINEER TO EDIT

	STEEL DECK SCHEDULE									
TYPE	DESCRIPTION	mils	SIDE LAP CONNECTION	CONNECTION TO SUPPORTING MEMBERS PERP. TO FLUTES	CONNECTION TO SUPPORTING MEMBERS PARALLEL TO FLUTES	CONCRETE THICKNESS OVER FLUTES	TOTAL SLAB THICKNESS	REINFORCING, UNO.	SHORING REQUIRED WHERE SINGLE SPANS EXCEED	COMMENTS SEE NOTE 7
DK1	1 1/2" TYPE B VERCO	43	BUTTON PUNCH AT 24" OC.	(4) 1/2" DIA. PUDDLE WELDS PER SHEET	1/2" DIA. PUDDLE WELDS AT 18" OC.	4"	5 1/2"	6x6 W2.9xW2.9	8'-0"	TYP. FLOOR
DK2	1 1/2" TYPE HSB36 VERCO	43	BUTTON PUNCH AT 12" OC.	(7) 1/2" DIA. PUDDLE WELDS PER SHEET	1/2" DIA. PUDDLE WELDS AT 12" OC.	-	-	-	-	TYP. ROOF
2. I 3. S										

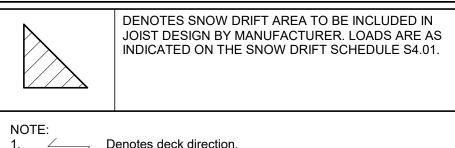
STEEL DECK SCHEDULE NO SCALE





1 NO SCALE

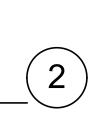
LOAD LEGEND SCHEDULE

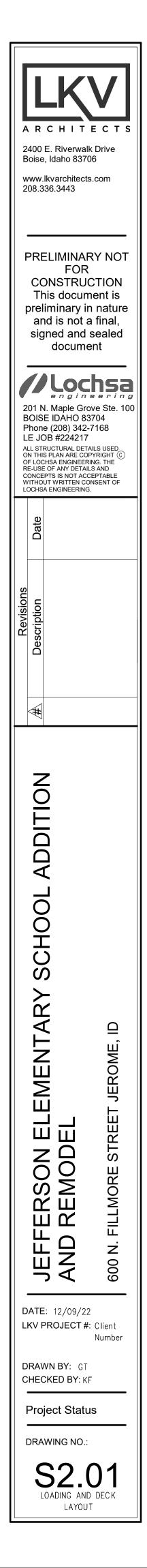


1. *Constant* Denotes deck direction.

2 + 27.5 PSF

- UNIFORM SNOW LOAD = 27.5 PSF

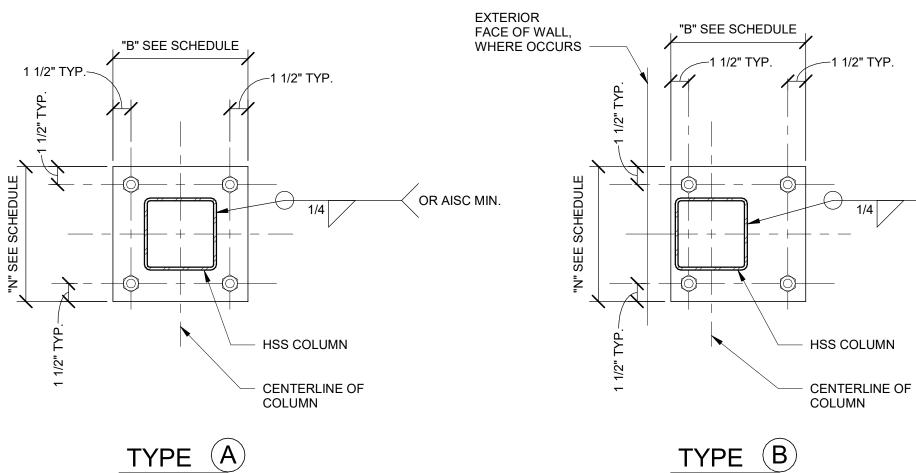




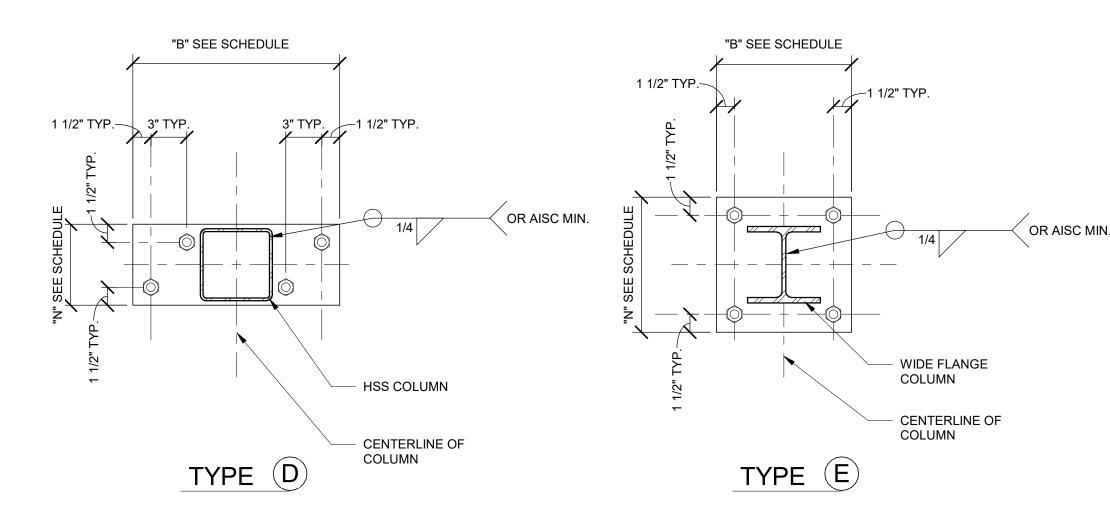
	BASE PLATE SCHEDULE							
BPL#	THICKNESS	DIM 'B'	DIM 'N'	ANCHOR BOLT	TYPE	REMARKS		
1	3/4"	12"	12"	(4) 3/4" DIA. x 9" EMBED.	-	-		
2	3/4"	12"	12"	(4) 3/4" DIA. x 9" EMBED.	-	-		
3	3/4"	12"	12"	(4) 3/4" DIA. x 9" EMBED.	-	-		
4	3/4"	12"	12"	(4) 3/4" DIA. x 9" EMBED.	-	-		
						-		

NOTES: For grout thickness see schedule on 2/S4.01.

Anchor bolt detail, see 3 / S4.01 typ. For bolt grade, see steel notes on sheet S0.03. For anchor bolt hole size, see steel notes on S0.03. For anchor bolt sizes with plate washers, see 4 / S4.01.

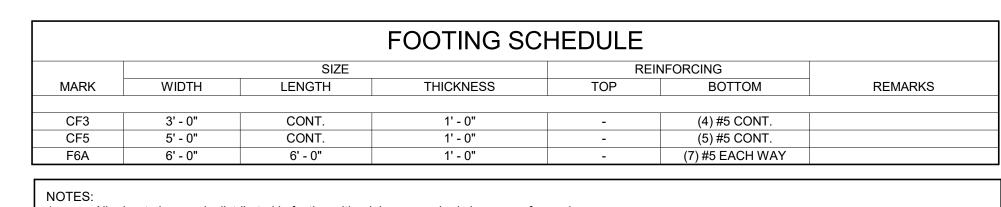








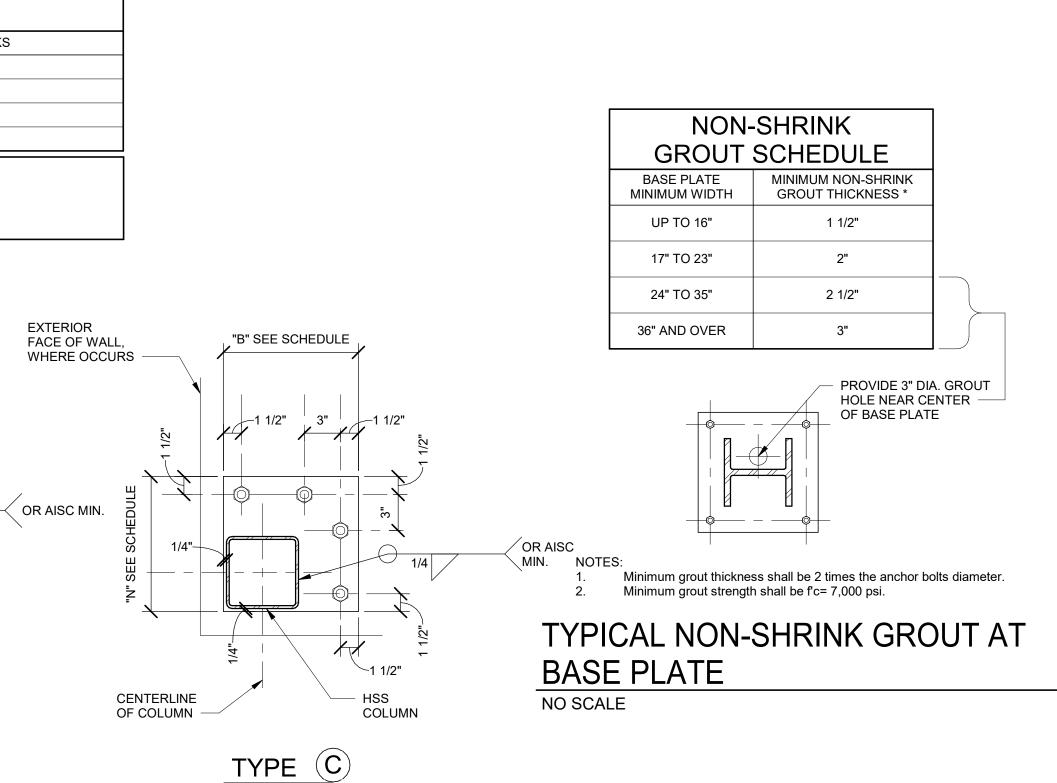
NO SCALE



All rebar to be evenly distributed in footing with minimum required clearances from edges. Footing intersections and corners, see 4/S4.01 . 1. 2.

FOOTING SCHEDULE NO SCALE

Revit 22



ANCHOR ROD HOLE DIAMETER WITH PLATE WASHER							
ANCHOR ROD DIAMETER, IN. HOLE DIAMETER, IN. PLATE WASHER DIAMETER, IN. MIN. PLATE WASHER THICKNESS, IN.							
3/4	1/4						
NOTES: 1. Plate washers are required at contractor's option. For hole diameter with standard washers, see the steel notes on S0.03. 2. Verify adequate clearance for the required plate washer. 3. Circular or square washers meeting the size shown are acceptable.							

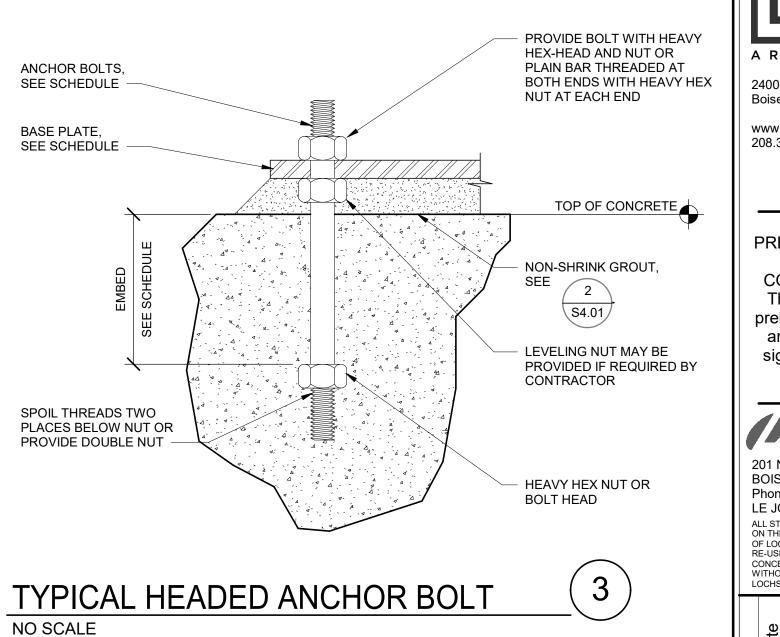


ANCHOR ROD HOLE DIAMETER WITH **4** PLATE WASHER

NO SCALE

MARK	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING	SILL PLATE ANCHOR AT FOUNDATION				
				SILL PLATE ANCHOR AT FLOOR				
1	7/16" APA RATED PLYWOOD	8d COMMON	8d COMMON	1/2" DIA. AB. AT 48" OC.				
1	ONE SIDE OF WALL	AT 6" OC.	AT 12" OC.	OR 16d COMMON AT 9" OC.				
NOTES								
1.		ds and Blocking at edges	shall be 2x nominal. At wal	ll with Blocking at panel edges, stagger nails.				
2.	Provide full height double studs at ends	of shear wall unless note	ed as post on plan or detail	hold-downs as specified on plans shall be attached to				
3.	double stud or post per details and Mfr. Install panels either horizontal or vertica			ommon at 8 oc. staggered.				
4.	Provide continuous 2x top plate at all sh		and bearing walls. Lap splic	e top plate per general detail.				
5.				ngth is noted. Sheathing shall not be interrupted by				
	intersection walls.							
6.	3/8" minimum nail spacing from panel, stud or block edge. All nails to be common nails. Minimum nail dimensions are as follows:							
	A. 8d common = 0.131" dia. x 2 1/2" long B. 10d common = 0.148" dia. x 3" long							
7.			d Provide same thickness	, rating, nail size and spacing, and blocking.				
8.	A minimum of (2) anchor bolts shall be							
9.				s. When edge nailing is at 2" oc. stagger nails and use				
10.	Min. embed anchor bolt depth: 1/2" dia.							
11.	Fasteners (nails, screws, anchor bolts) coated steel, per IBC 2304.9.5.	in preservative treated w	ood are to be approved silio	con bronze or copper, stainless steel or hot dipped zir				
	The following notes only apply to projec	ts located in seismic des	gn categories D, E, and F:					
12.	Washer plate holes are permitted to be standard cut washer is placed between			polt dia. and a slot length 1 3/4" or less, provided a				
13.				ill plate and 3x (or (2) 2x) nominal studs at panel join				

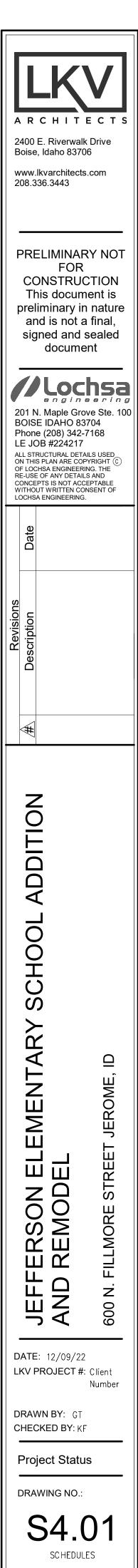
2



HEADER/BEAM SCHEDULE							
SYMBOL	HEADER	TRIMMER STUD(S)	KING STUD(S)				
H1	(2) 2x8 DF#1	2x6 DF-L 1	2x6 DF-L 1				
H2	(2) 2x12 DFL #1	2x6 DF-L 1	2x6 DF-L 1				
H3	(3) 2x14 DF-L SELECT STRUCTURAL	(2) 2x6 DF-L 1	2x6 DF-L 1				
H4	(2) 1.75x14 MICROLLAM LVL 1.9E	(2) 2x6 DF-L 1	(2) 2x6 DF-L 1				
 NOTES: 1. All bearing wall headers are H1 uno. 2. Simpson HU-MAX or HUC-MAX hanger where applicable uno, use trimmer studs at hanger backing. 3. Trimmer studs/posts in schedule typ. uno on plans. 4. Parallams at exterior framing are required to be wolmanized unless they are wrapped with a water proof membrane on (4) sides. 5. See for additional information. 							

HEADER/BEAM SCHEDULE

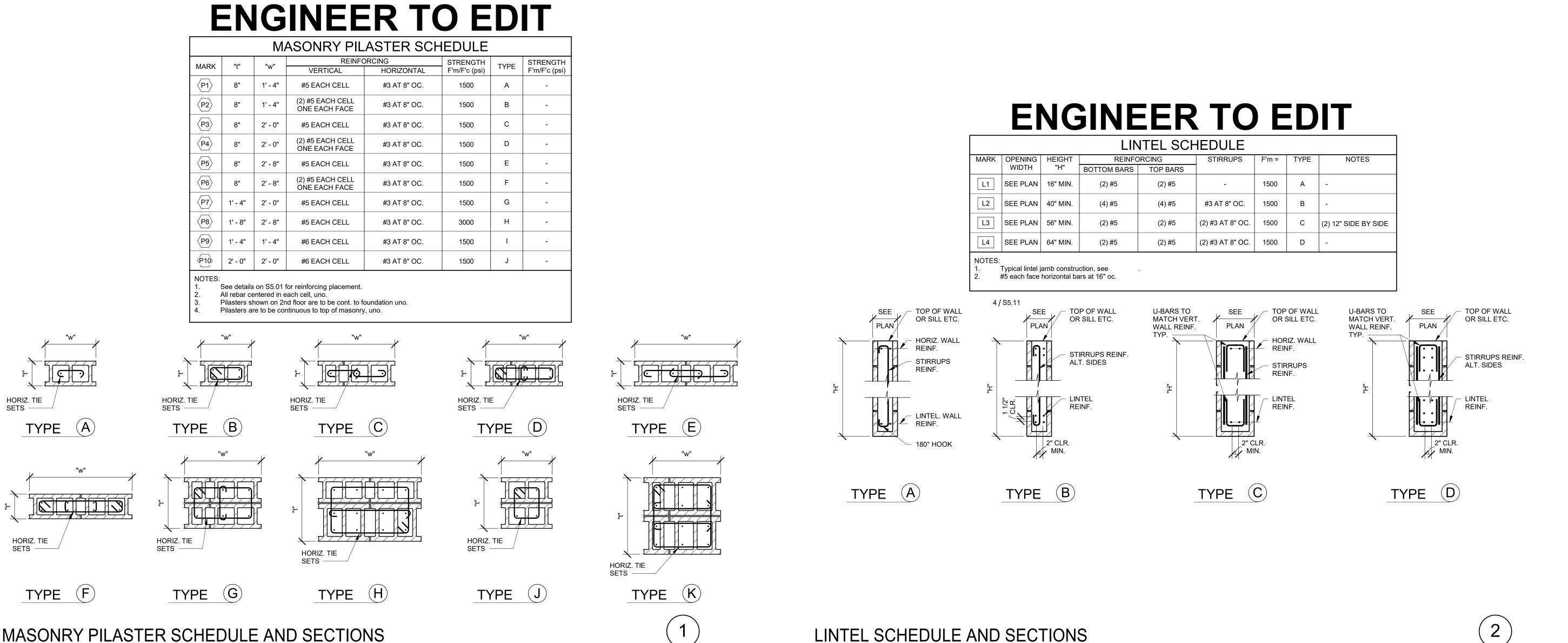
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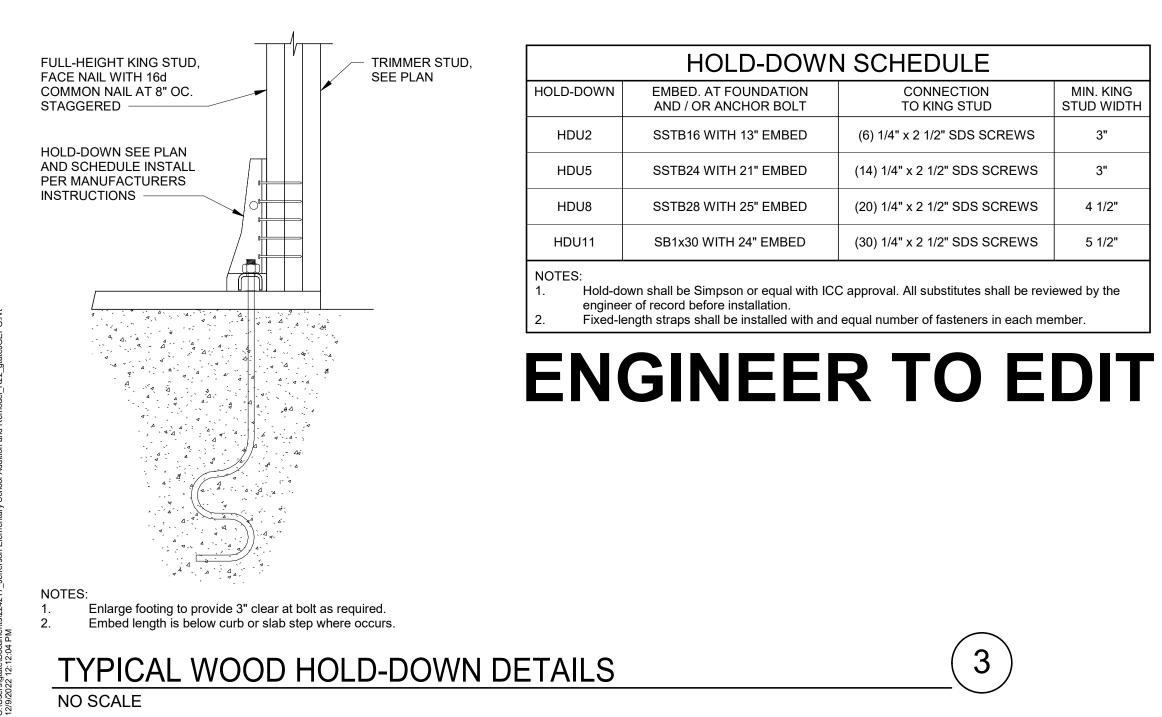
5

		M	ASONRY PIL	ASTER SCH	IEDULE		
MARK	"t"	"w"		DRCING	STRENGTH	TYPE	Γ
	_		VERTICAL	HORIZONTAL	F'm/F'c (psi)		╞
	8"	1' - 4"	#5 EACH CELL	#3 AT 8" OC.	1500	A	
P2	8"	1' - 4"	(2) #5 EACH CELL ONE EACH FACE	#3 AT 8" OC.	1500	В	
P3	8"	2' - 0"	#5 EACH CELL	#3 AT 8" OC.	1500	С	
	8"	2' - 0"	(2) #5 EACH CELL ONE EACH FACE	#3 AT 8" OC.	1500	D	
P5	8"	2' - 8"	#5 EACH CELL	#3 AT 8" OC.	1500	E	
P6	8"	2' - 8"	(2) #5 EACH CELL ONE EACH FACE	#3 AT 8" OC.	1500	F	
(P7)	1' - 4"	2' - 0"	#5 EACH CELL	#3 AT 8" OC.	1500	G	
	1' - 8"	2' - 8"	#5 EACH CELL	#3 AT 8" OC.	3000	н	
(P9)	1' - 4"	1' - 4"	#6 EACH CELL	#3 AT 8" OC.	1500	I	
<p10></p10>	2' - 0"	2' - 0"	#6 EACH CELL	#3 AT 8" OC.	1500	J	

All rebar centered in each cell, uno.



MASONRY PILASTER SCHEDULE AND SECTIONS NO SCALE



Revit 22

LINTEL SCHEDULE AND SECTIONS

		-		
	~	~ ^		
IO	20	JA	LE	

	MIN. KING STUD WIDTH	
WS	3"	
WS	3"	
WS	4 1/2"	
WS	5 1/2"	
oe revie ch me	ewed by the	
		_

		MASO	NRY WA	ALL SCH	HED	DULE	
MARK	REINF	ORCING	STRENGTH	REMARKS	NOT	ES:	
	VERTICAL	HORIZONTAL	F'm (psi)				T
W1	#5 AT 48" OC.	#5 AT 48" OC. EACH FACE	1500	-	1.	<w1></w1>	Typical reinforcing for all 8" masonry walls uno.
W2	#5 AT 48" OC. EACH FACE	#5 AT 48" OC. EACH FACE	1500	-	2.	W2	Typical reinforcing for all 12" masonry walls uno.
W3	#5 AT 32" OC. EACH FACE	#5 AT 48" OC. EACH FACE	1500	-	3.		reinforcing callout on foundation plan is ous to top of wall uno.
W4	#5 AT 24" OC.	#5 AT 48" OC. EACH FACE	2500	-	4.	All reba	ar centered in each cell, unless noted
W5	#5 AT 24" OC.	#5 AT 48" OC. EACH FACE	1500	-	5.	otherwi EF	se. Denotes each face.
W6	#5 AT 24" OC. EACH FACE	#5 AT 48" OC. EACH FACE	1500	-	6.	All wall	s to have (2) #5 in bond beams at 48" oc
W7	#5 AT 16" OC.	#5 AT 48" OC. EACH FACE	1500	-			so provide double bond beams at floors, and #5 at top of walls.

1500

ENGINEER TO EDIT

#5 AT 16" OC.

EACH FACE

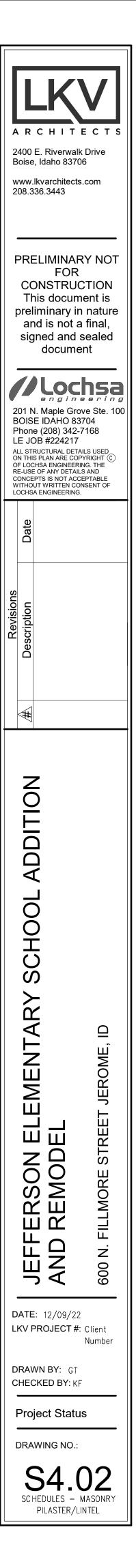
(W8)

#5 AT 48" OC.

EACH FACE

For general notes and details see S5.11.

SCL	IEDULE			
	STIRRUPS	F'm =	TYPE	NOTES
ARS				
5	-	1500	А	-
5	#3 AT 8" OC.	1500	В	-
5	(2) #3 AT 8" OC.	1500	С	(2) 12" SIDE BY SIDE
5	(2) #3 AT 8" OC.	1500	D	-
			-	



NOTES:

f'c = 4500 psi

27

35

44

53

77

88

99

111

123

148

197

OTHER BARS

CASE 1 CASE 2

21

27

34

41

59

68

76

86

95

114

152

14

18

22

27

39

45

50

57

63

76

101

TOP BARS

18

24

30

35

51

59

66

74

82

99

132

reir Top bel For De in a Coi 60	ble for use wi forcing bars. b bars are ho ow the bar. bars enclose velopment le a (3) bar bund mpression de bars use 22 l se Selection -For fou or botto -For fou or botto -For sta -For sta -For wa uno. -For wa
Н.	-For wa
	wall rei
I.	-For ch
PO	TEND BAR A SSIBLE AND ANDARD HO

FACE OF SUPPORT

TENSION DEVELOPMENT LENGTH (CONCRETE ONLY)

f'c = 4000 psi

OTHER BARS

15

19

24

29

42

48

54

61

67

81

107

CASE 1 | CASE 2 | CASE 1 | CASE 2 | CASE 1 | CASE 2 |

22

29

36

43

63

71

81

91

101

121

161

TOP BARS

28

37

47

56

81

93

105

118

131

157

209

19

25

31

37

54

62

70

79

87

105

139

3/4" = 1'-0"

BAR

SIZE

#3

#4

#5

#6

#7

#8

#9

#10

#11

#14

#18

f'c = 3000 psi

OTHER BARS

CASE 2

25

33

41

50

72

82

93

105

116

139

186

CASE 1

17

22

28

33

48

55

62

70

78

93

124

TOP BARS

CASE 1 CASE 2

33

43

54

64

94

107

121

136

151

181

241

22

29

36

43

63

72

81

91

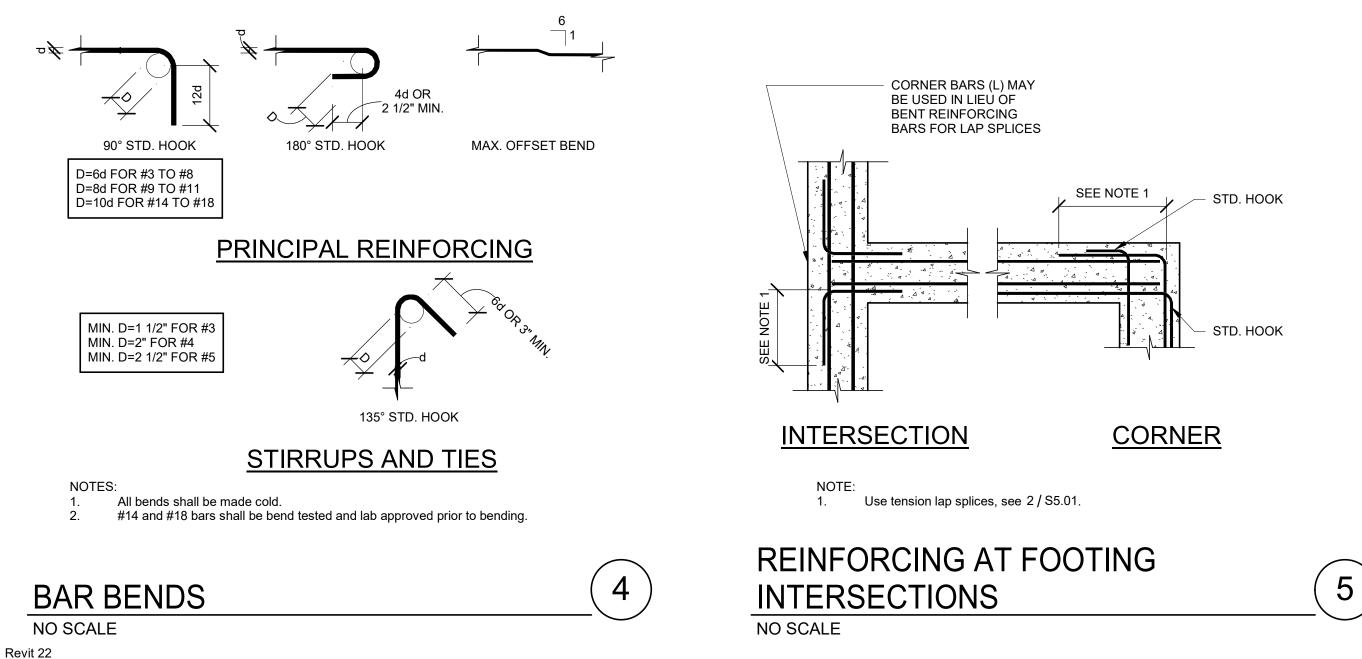
101

121

161

BAR	LAP		f'c = 30	000 psi			f'c = 4	500 psi			f'c = 50	000 psi		NOT 1.	ES: Table
SIZE	CLASS	TOP I	BARS	OTHEF	R BARS TOP BARS			OTHEF	RBARS	TOP	BARS	OTHEF	R BARS		uncoa
		CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	2.	Class Class
#3	Α	22	32	17	25	18	27	14	21	17	25	13	19		lengtl
#3	В	28	42	22	32	23	35	18	27	22	33	17	25	3.	Top b
#4	Α	29	43	22	33	24	35	18	27	22	33	17	26	4	mem
#4	В	37	56	29	43	31	46	23	35	29	43	22	33	4. 5.	For b Lap s
#5	A	36	54	28	41	30	44	22	34	28	42	22	32	0.	(3) ba
#Э	В	47	70	36	54	39	57	29	44	36	54	28	42		stagg
#6	A	43	64	33	50	35	53	27	41	33	50	26	38	6.	{-Ba
#0	В	56	84	43	64	46	69	35	53	43	65	33	50	7.	Case
ш 7	A	63	94	48	72	51	77	39	59	49	73	37	56		A.
#7	В	81	122	63	94	66	100	51	77	63	94	49	73		В. С.
#8	A	72	107	55	82	59	88	45	68	55	83	43	64		D.
#8	В	93	139	72	107	77	114	58	88	72	108	55	83		D. E. F.
	A	81	121	62	93	66	99	50	76	63	94	48	72		F.
#9	В	105	157	81	121	86	129	66	99	81	122	63	94		G.
	A	91	136	70	105	74	111	57	86	70	105	54	81		G.
#10	В	118	177	91	136	96	144	74	112	91	137	70	105		Н.
	A	101	151	78	116	82	123	63	95	78	117	60	90	8.	Differ
#11	В	131	196	101	151	107	160	82	124	101	152	78	117	9.	Differ

TENSION LAP SPLICE (CONCRETE ONLY) TENSION LAP SPLICE LENGTHS, (IN INCHES) FOR GRADE 60 UNCOATED BARS 3/4" = 1'-0"



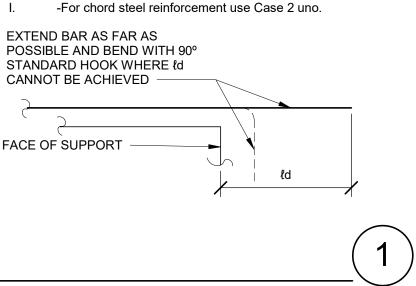
ith normal weight hardrock concrete and grade 60 uncoated . For lightweight aggregate use 1.3*l*. prizontal bars with 12" or more of concrete cast in the member

ed in standard column spirals, use 0.75 l or 12" min. ength of individual bars within a bundle shall be 1.2 ld for that bar dle and 1.33 ld for a (4) bar bundle. evelopment length (only where indicated on drawings) For grade bar diameters.

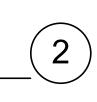
undation reinforcement use Case 1 uno. indation that have two layers of reinforcement in one direction top om use Type 2. olumn reinforcement and dowels use Case 1 uno.

eam reinforcement use Case 1 uno. ructural slab reinforcement use Case 2 uno. ab on grade reinforcement use Case 1 uno. all reinforcement and dowels use Case 2 (Except as noted below)

alls with a single mat of steel centered in the wall, use Case 1 for nforcement and dowels uno.

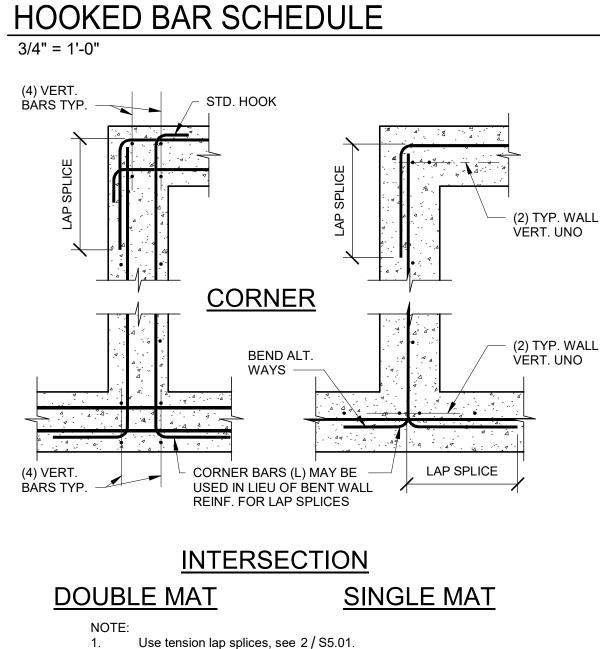


- e for use with normal weight hardrock concrete and grade 60 ated reinforcing bars. For lightweight aggregate use 1.3*l*. A - Half or less of the bars are spliced within a required lap length. B - More than half of the bars are spliced within a required lap
- bars are horizontal bars with 12" or more of concrete cast in the nber below the bar. bars enclosed in standard column spirals, use 0.75*t* or 12" min.
- splices of individual bars with a bundle shall be 1.2*t* for that bar in a par bundle and 1.33ℓ for a (4) bar bundle. Entire bundles shall not be gered such that they do not overlap. asic lap length, shown at left.
- Selection
- -For foundation reinforcement use Case 1 uno.
- -For column reinforcement and dowels use Case 1 uno. -For beam reinforcement use Case 1 uno.
- -For structural slab reinforcement use Case 2 uno.
- -For slab on grade reinforcement use Case 1 uno.
- -For wall reinforcement and dowels use Case 1 (Except as noted below) uno. -For walls with a single mat of steel centered in the wall, use
- Case 1 for wall reinforcement and dowels uno. -For chord steel reinforcement use Case 2 uno.
- ent size bars are to be lapped by the larger bar.
- rent diameter bars are to be lapped per the larger bar.



BAR SIZE	GRADE				l _{dh} (in)			
		F'c = 3000	F'c = 4000	F'c = 4500	F'c = 5000	F'c = 6000	F'c = 7000	F'c = 80
#3	60	8	7	6 1/2	6 1/2	6	6	6
#4	60	11	9 1/2	9	8 1/2	7 1/2	7	6 1/2
#5	60	13 1/2	12	11	10 1/2	9 1/2	9	8 1/2
#6	60	16 1/2	14	13 1/2	12 1/2	11 1/2	11	10
#7	60	19	16 1/2	15 1/2	15	13 1/2	12 1/2	11 1/2
#8	60	22	19	18	17	15 1/2	14 1/2	13 1/2
#9	60	24 1/2	21 1/2	20	19	17 1/2	16	15
#10	60	31	6	6	6	6	6	6
#11	60	37	32	30 1/2	28 1/2	26	24 1/2	22 1/2
#14	60	49 1/2	43	40 1/2	38 1/2	35	32 1/2	30 1/2

HOOKED BAR SCHEDULE

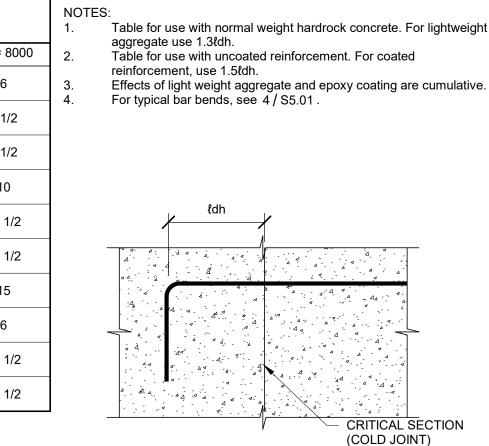


INTERSECTIONS NO SCALE

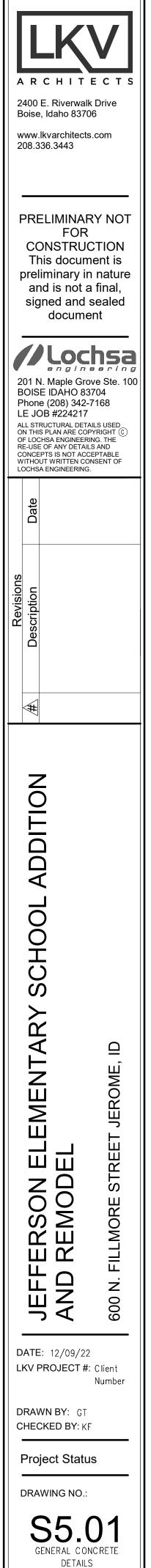
REINFORCING AT WALL

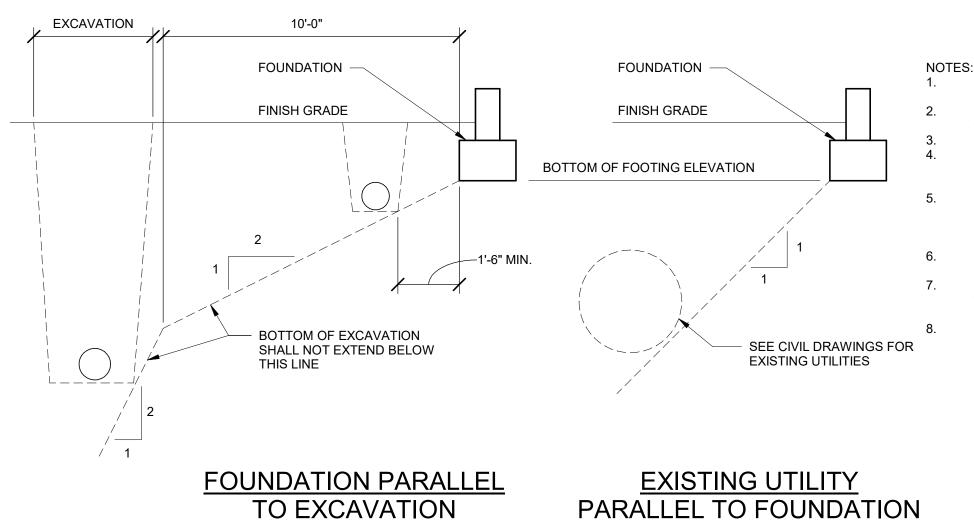


GENERAL DETAIL NOTES For structural design notes, see sheets starting at S0.01. Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal. Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work. For all top of footing, top of slab, and slab on grade construction, see foundation plan. Columns and base plates are called out on plans and coordinated in the schedule shown on S4.01. Sub-grade material below slabs and footings shall be constructed as indicated by geotech report. For structural framing sizes, bottom of deck and top of steel elevations, see plans. For floor deck size, attachment, span direction, and finish floor elevations, see plans. For typical bearing wall construction, see plans. Coordinate location with plans and architectural. For interior and exterior wall finishes, see architectural. 10 For all typical construction details not shown on this sheet, see all "S5" series drawings.

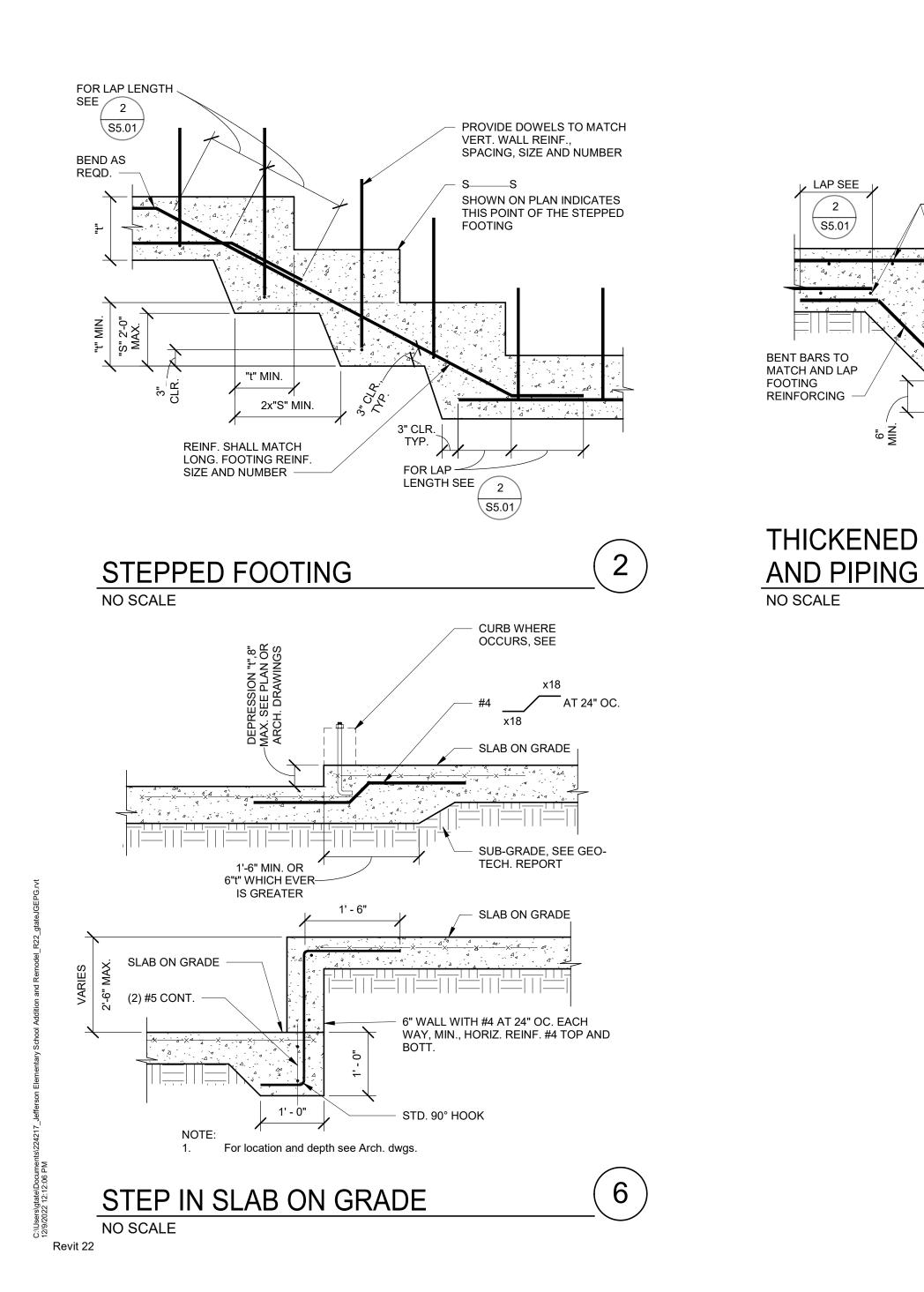










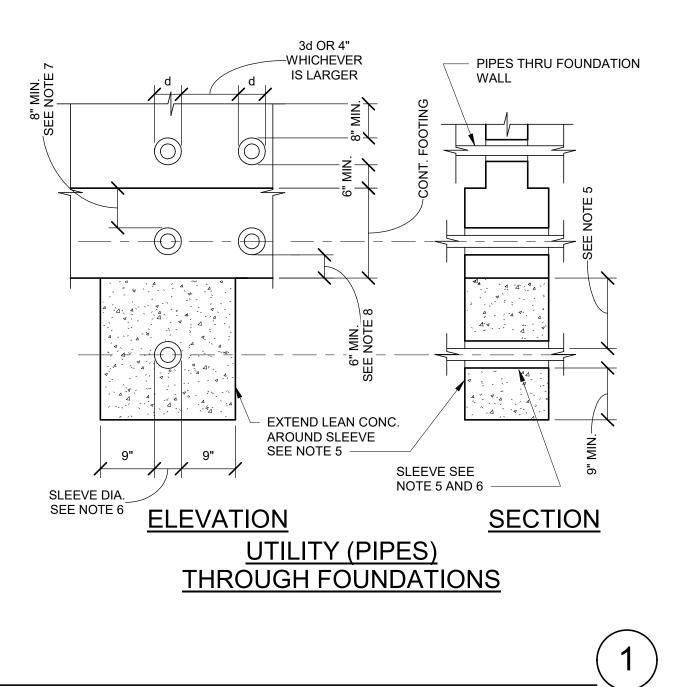


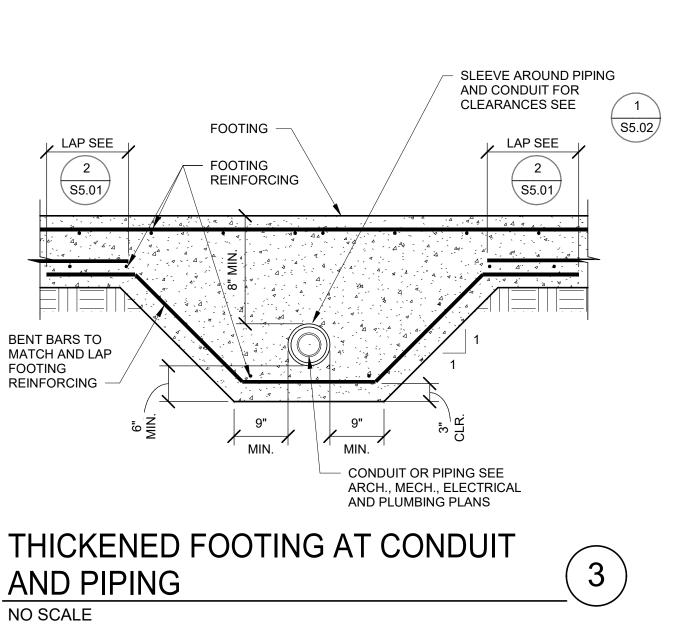
S: Contractor shall locate bottom of excavation to avoid surcharge on utilities and other foundations. Contractor shall coordinate all excavations with foundation with foundation requirements. Step foundation as required see 2 / S5.02. Contractor shall adhere to the recommendations in the Geotechnical Notes, for all excavations, backfill

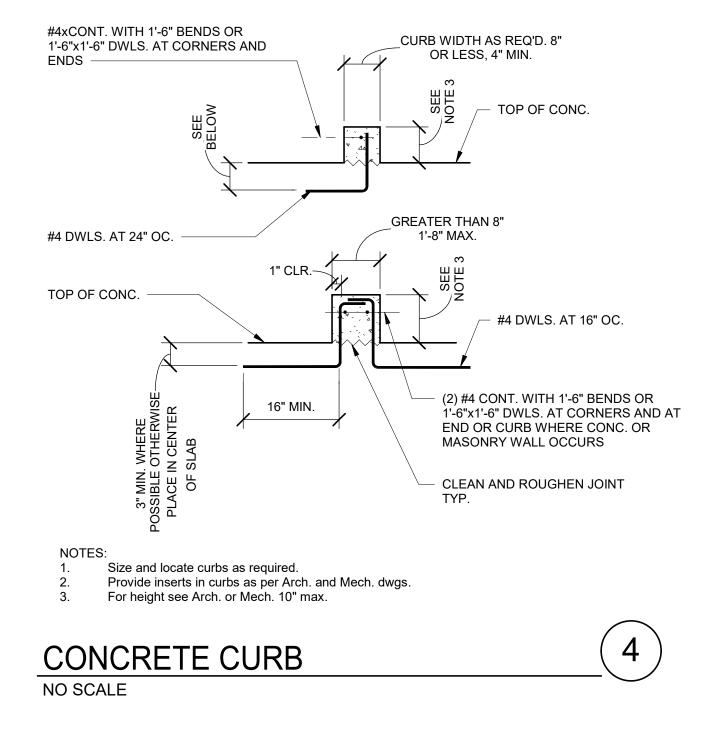
requirements etc. Pipes that are less than 4'-0" below foundation, provide sleeve and encase in lean concrete. For pipes more than 4'-0" below foundation, compact soil in pipe trench per soils report.

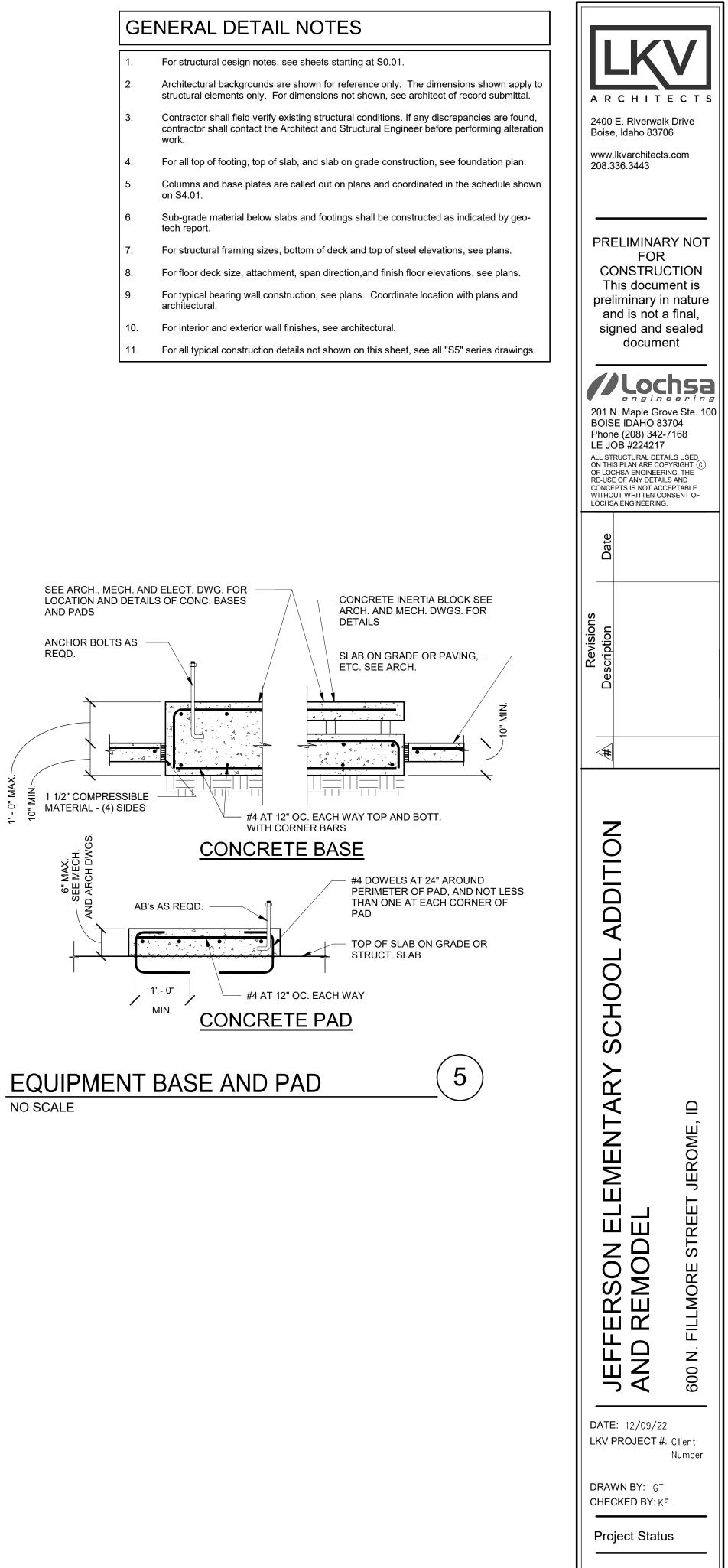
Sleeves shall be minimum 1" clear all around pipes, conduit etc. For pipes within the footing thickness and are less than 8" from top of footing, step footing as required to pass pipes

through stem wall. For pipes passing through footing and are less than 6" clear from bottom of footing see 3 / S5.02.



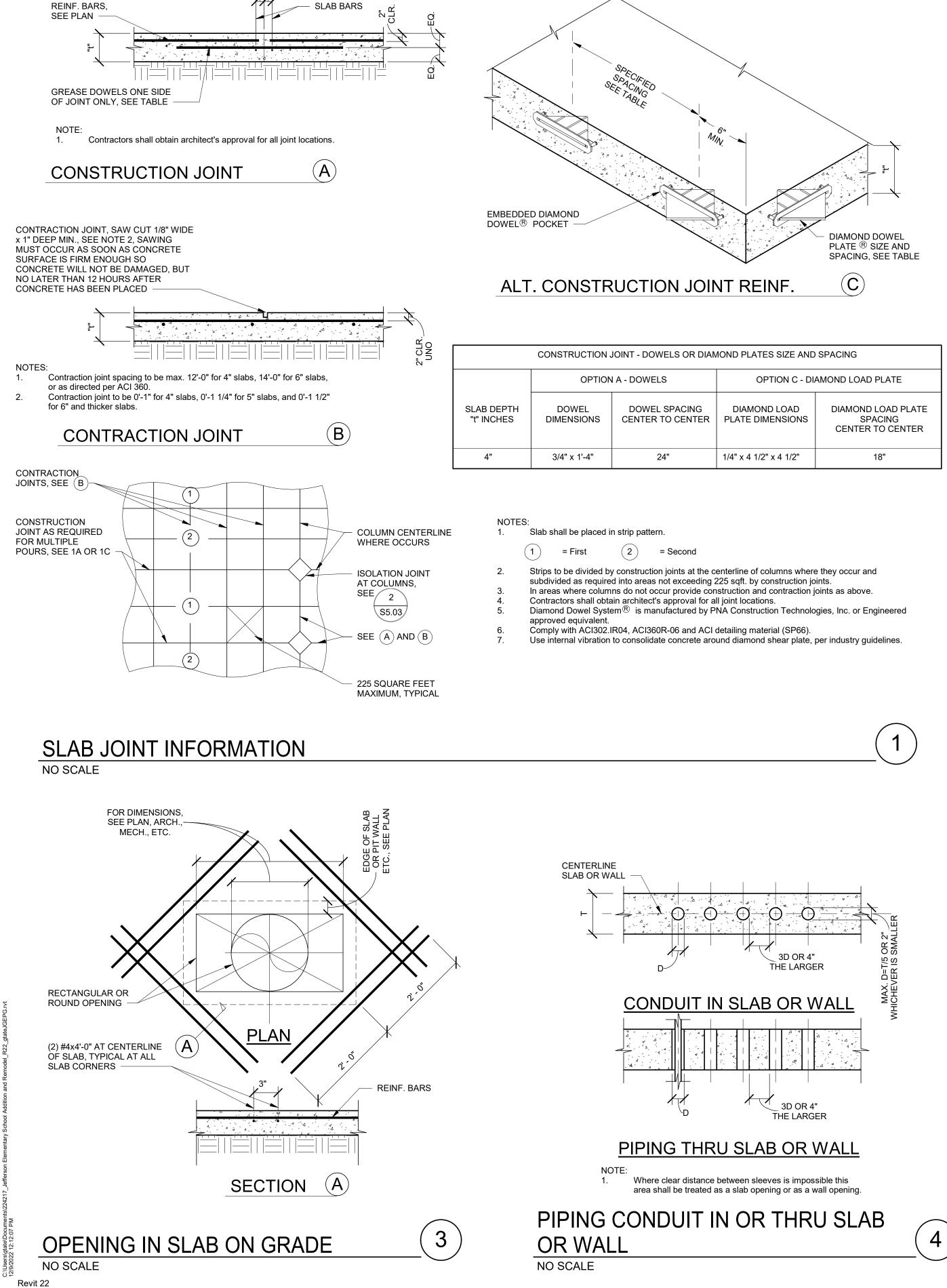




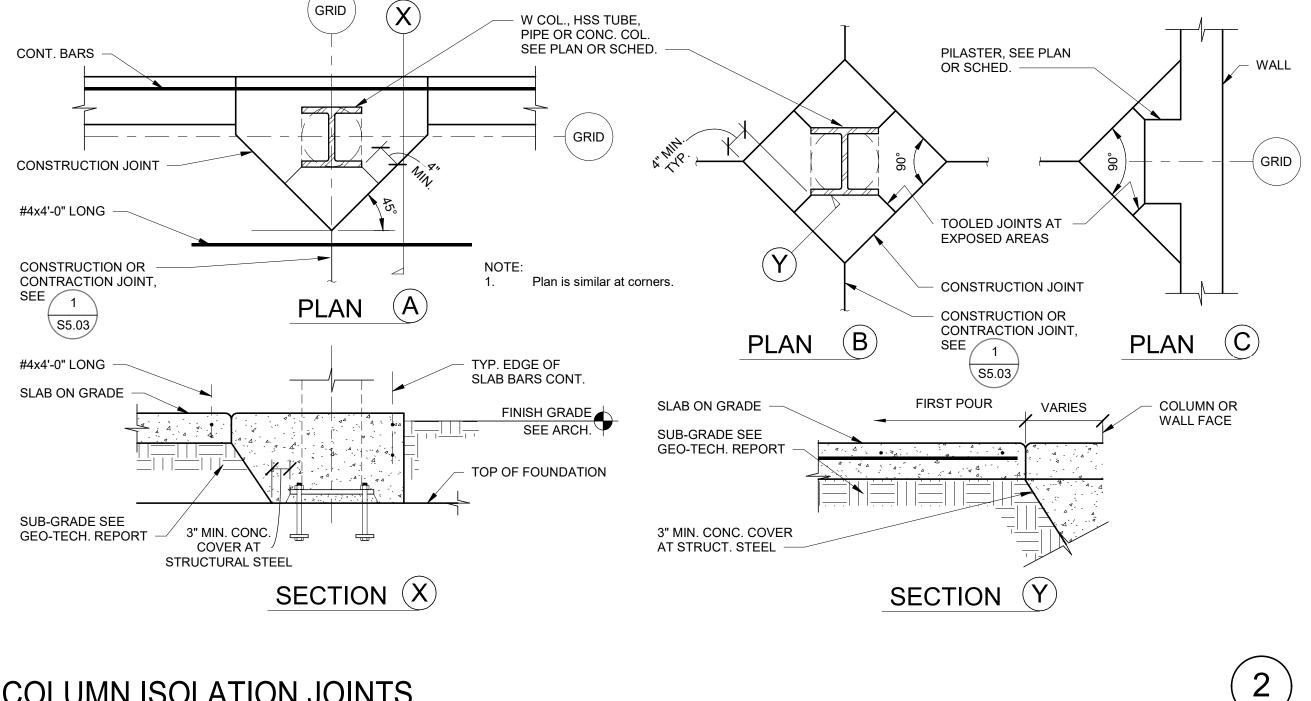


DRAWING NO.	:
S5.	02

GENERAL CONCRETE DETAILS

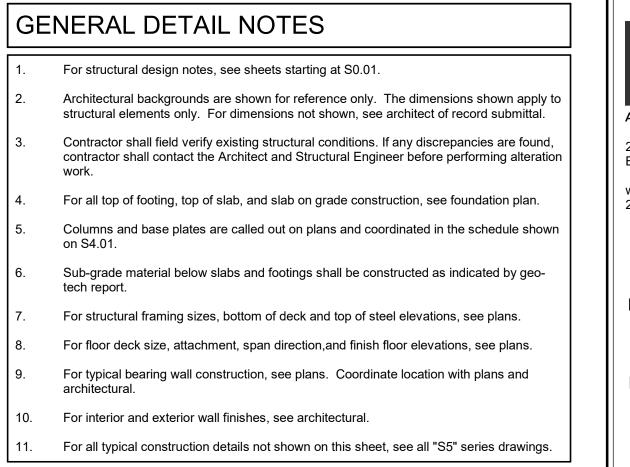


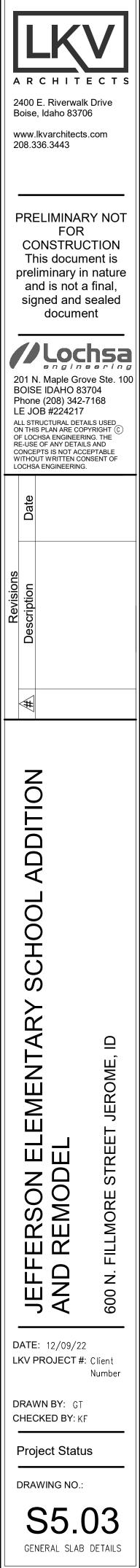
DIAN	DIAMOND PLATES SIZE AND SPACING									
	OPTION C - DIAMOND LOAD PLATE									
G TER	DIAMOND LOAD PLATE DIMENSIONS	DIAMOND LOAD PLATE SPACING CENTER TO CENTER								
	1/4" x 4 1/2" x 4 1/2"	18"								





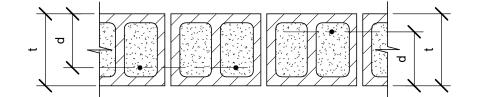
NO SCALE





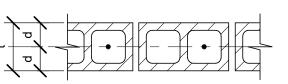
TE	ENSION DEVEL (F			ANE			ICE	LENG	этн	TE	NSION DEVEL	OPM OR N					ICE	LENG	бТН
kness	Masonry Design Strength		1500 si		2000 si		2500 si	f'm = p		kness	Masonry Design Strength		1500 si		2000 osi		2500 si		3000 si
CMU Thickness	Placement of Bar SIZE	Center	Edge	Center	Edge	Center	Edge	Center	Edge	CMU Thickness	Placement of BAR SIZE	Center	Edge	Center	Edge	Center	Edge	Center	Edge
	#3	15.1	15.1	13.1	13.1	12.0	12.0	12.0	12.0		#3	15.1	15.1	13.1	13.1	12.0	12.0	12.0	12.0
	#4	20.1	23.7	17.4	20.5	15.6	18.4	14.2	16.8		#4	20.1	23.7	17.4	20.5	15.6	18.4	14.2	16.8
6"	#5	25.2	38.1	21.8	33.0	19.5	29.5	17.8	27.0	8"	#5	25.2	38.1	21.8	33.0	19.5	29.5	17.8	27.0
	#6	42.8	NP	37.1	NP	33.2	NP	30.3	NP		#6	42.8	NP	37.1	NP	33.2	NP	30.3	NP
	#7	59.4	NP	51.4	NP	46.0	NP	42.0	NP		#7	59.4	NP	51.4	NP	46.0	NP	42.0	NP
	#3	15.1	15.1	13.1	13.1	12.0	12.0	12.0	12.0		#3	15.1	15.1	13.1	13.1	12.0	12.0	12.0	12.0
	#4	20.1	23.7	17.4	20.5	15.6	18.4	14.2	16.8		#4	20.1	23.7	17.4	20.5	15.6	18.4	14.2	16.8
10"	#5	25.2	38.1	21.8	33.0	19.5	29.5	17.8	27.0	12"	#5	25.2	38.1	21.8	33.0	19.5	29.5	17.8	27.0
	#6	39.3	54.0	34.0	54.0	30.4	54.0	27.8	52.1		#6	39.3	54.0	34.0	54.0	30.4	54.0	27.8	52.1
	#7	45.8	63.0	39.7	63.0	35.5	63.0	32.4	63.0		#7	45.8	63.0	39.7	63.0	35.5	63.0	32.4	63.0
	#3	15.1	15.1	13.1	13.1	12.0	12.0	12.0	12.0	NOTE									
	#4	20.1	23.7	17.4	20.5	15.6	18.4	14.2	16.8	1. 2. 3.	All lengths are in inches. For bar placement, edge dista Where (2) bars per cell occur	r they shal	l be place	d per edg	e conditic	on see note	e 2.		
16"	#5	25.2	38.1	21.8	33.0	19.5	29.5	17.8	27.0		A.For 6" masonry wall,B.For 8" masonry wall,	(2) bars p (2) bars p	per cell is per cell up	not permit to #5 are	ted. permitted	d.			
	#6	39.3	54.0	34.0	54.0	30.4	54.0	27.8	52.1	4. 5.	C. For 10" masonry wal NP indicates Not Permitted. #10 and #11 bars where show	. ,	-		-		Э.		
	#7	45.8	63.0	39.7	63.0	35.5	63.0	32.4	63.0			·		·		·			

TENSION DEVELOPMENT AND LAP SPLICE LENGTH (FOR MASONRY ONLY) NO SCALE



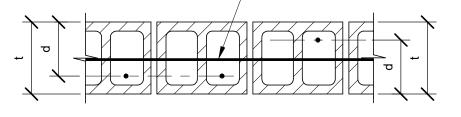
VERTICAL REBAR PLACED FOR MAXIMUM d

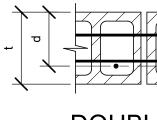
CMU (C	ONCRETE	MAS	ONR	Y UNI ⁻	TS)
NOMINAL	ACTUAL		d (ind	ches)	
THICKNESS	THICKNESS (t)	#3 - #6	#7	#8	#9
6" CMU	5 5/8"	3.25	NP	NP	NP
8" CMU	7 5/8"	5.25	5	4.625	NP
10" CMU	9 5/8"	7.25	7	6.625	6.25
12" CMU	11 5/8"	9.25	9	8.625	8.25
16" CMU	15 5/8"	13.25	13	12.625	12.25



VERTICAL REBAR IN **CENTER OF CELL**

	CMU	
NOMINAL THICKNESS	ACTUAL THICKNESS (t)	d (inches)
6" CMU	5 5/8"	2.8
8" CMU	7 5/8"	3.8
10" CMU	9 5/8"	4.8
12" CMU	11 5/8"	5.8
16" CMU	15 5/8"	7.8







NOTE Where two vertical reinforcing bars occur in a cell, bars shall be secured in place by a bar positioned at the top and bottom, and at intervals not exceeding 200 bar diameters.

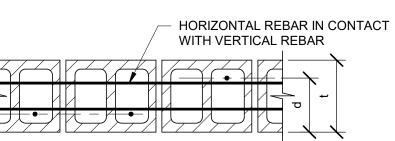
PLAN DETAIL FOR REBAR PLACEMENT IN MASONRY

NO SCALE Revit 22



HORIZONTAL REBAR CENTERED IN WALL

SINGLE CURTAIN HORIZONTAL BAR

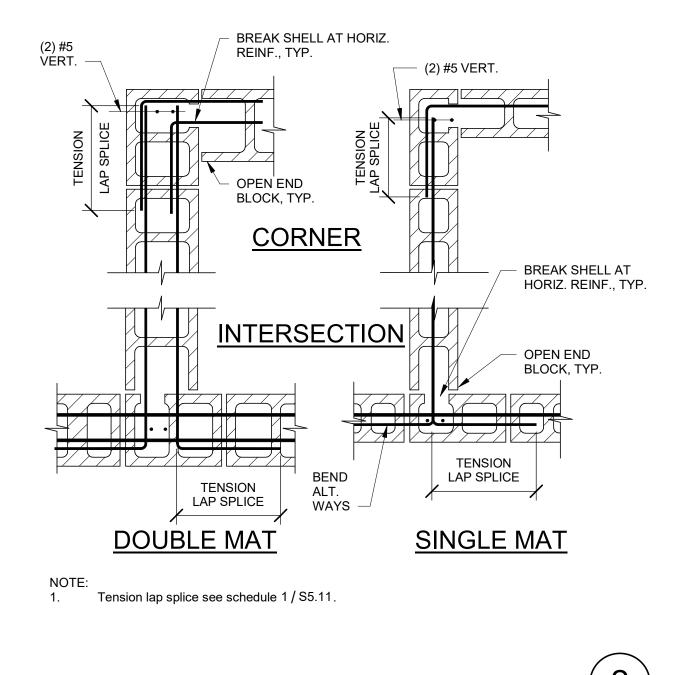


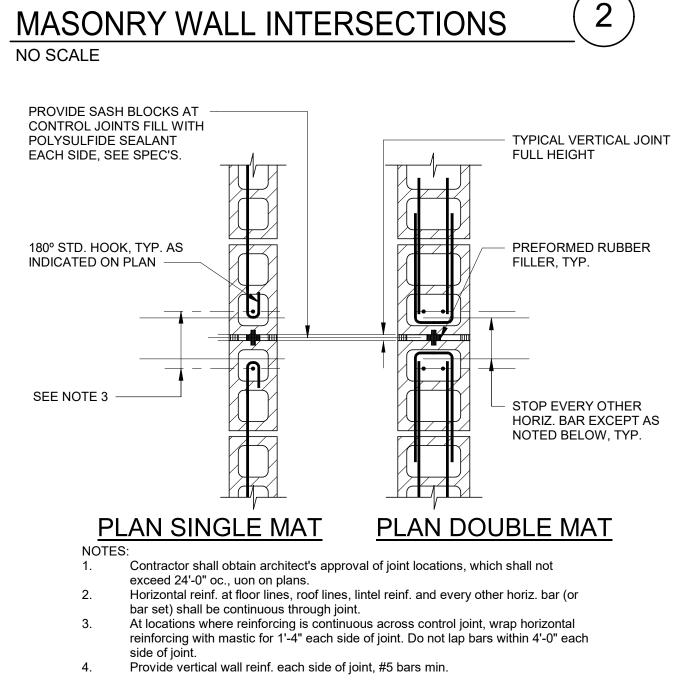
DOUBLE CURTAIN HORIZONTAL BAR

HORIZONTAL REBAR IN CONTACT WITH VERTICAL REBAR

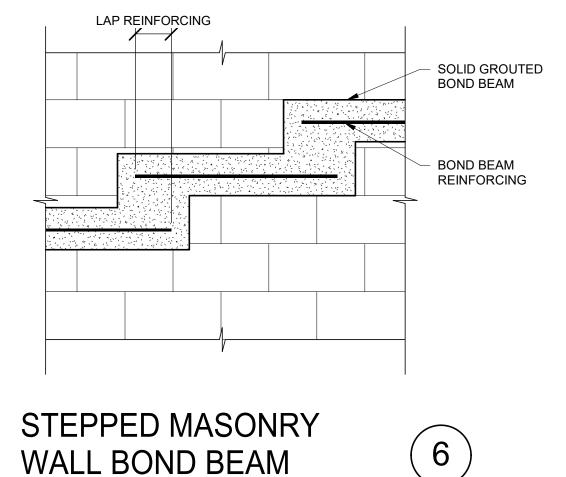
SINGLE CURTAIN HORIZONTAL BAR



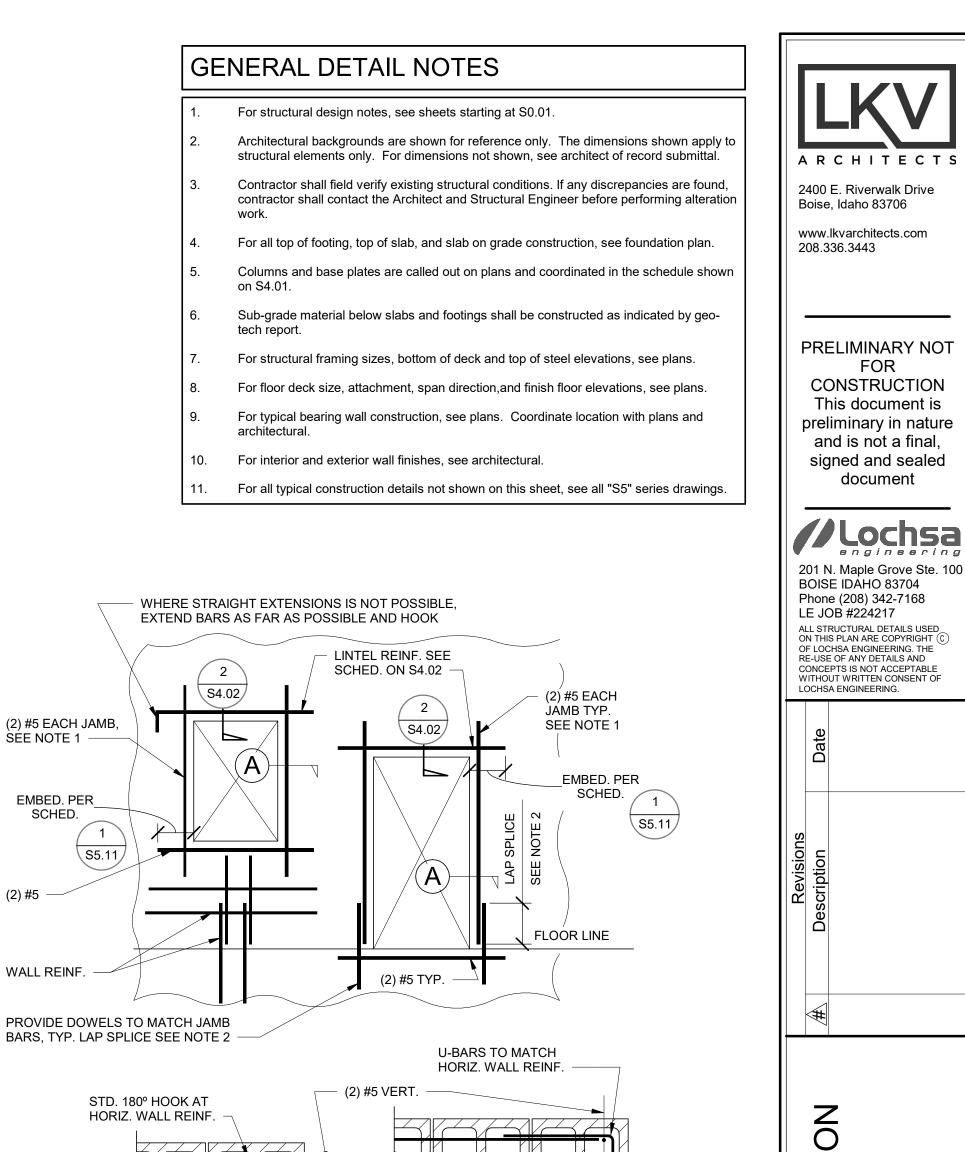








NO SCALE



4

SCHOOL

I ELEMENTARY 3 DEL

JEFFERSON BAND REMODE

DATE: 12/09/22

DRAWN BY: GT CHECKED BY: KF

Project Status

DRAWING NO .:

S5.1

GENERAL MASONRY DETAILS

LKV PROJECT #: Client

 \square

JEROME,

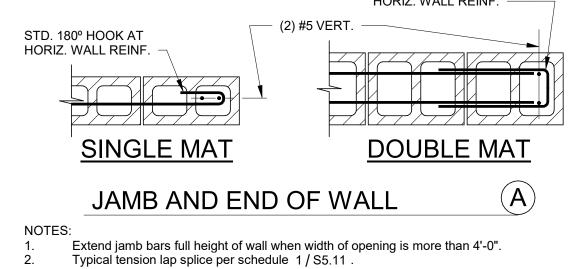
STREET

FILLMORE

600 N.

Number

4

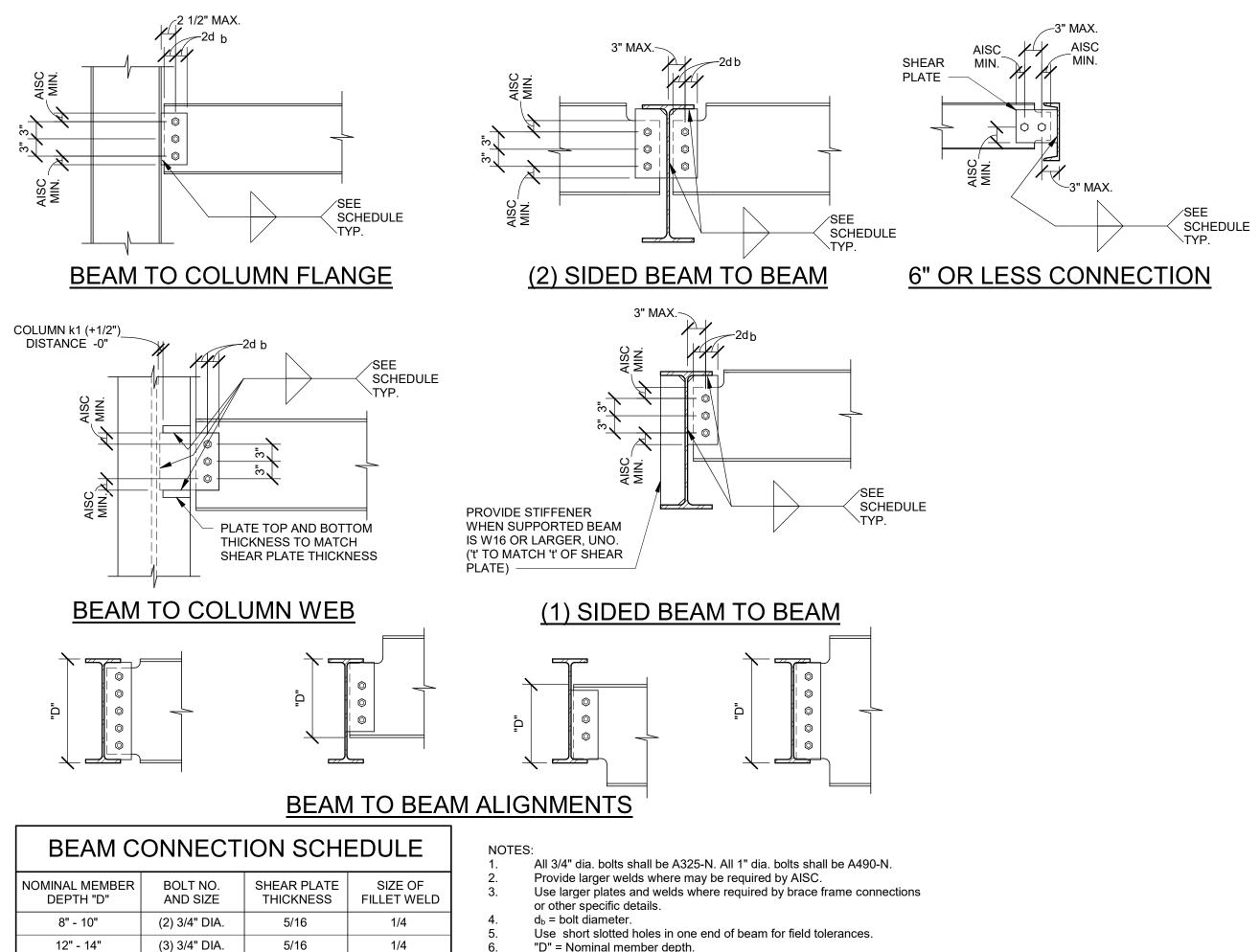


MASONRY WALL OPENINGS AND

DETAILS NO SCALE

3

(2) #5



"D" = Nominal member depth. Provide horizontal short slotted holes where beam web thickness "t" exceeds d/2-1/16" and number of bolts "n" exceeds 5 per AISC table 10-9.

TYPICAL BEAM CONNECTION SCHEDULE AND DETAILS

3/8

3/8

1/2

1/2

1/2

1/2

1/2

6.

7.

1/4

1/4

5/16

5/16

5/16

5/16

5/16

WELD WELD WELD ┙<u></u><u>┙</u> DECK CENTERED DECK SPLIT (PREFERRED) WELD 1 1/2"_ MIN. WELD 68 mils xCONT. PLATE LESS_____ THAN 2" DECK NOT CENTERED WELDS AT DECK PARALLEL TO BEAMS NOTE: 1. See steel deck welding schedule, notes and other details. 3 DECK WELDING NO SCALE

16"

18"

21"

24"

27"

30" -33"

36" - 40"

NO SCALE

Revit 22

(4) 3/4" DIA.

(5) 3/4" DIA.

(6) 1" DIA.

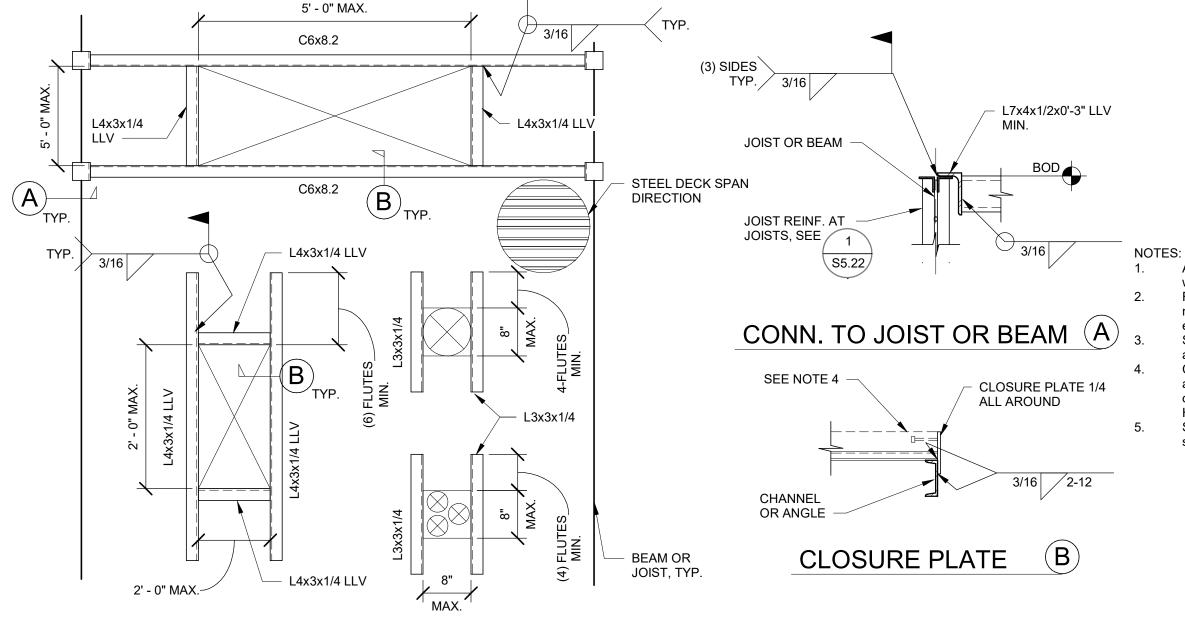
(7) 1" DIA.

(8) 1" DIA.

(9) 1" DIA.

(10) 1" DIA.

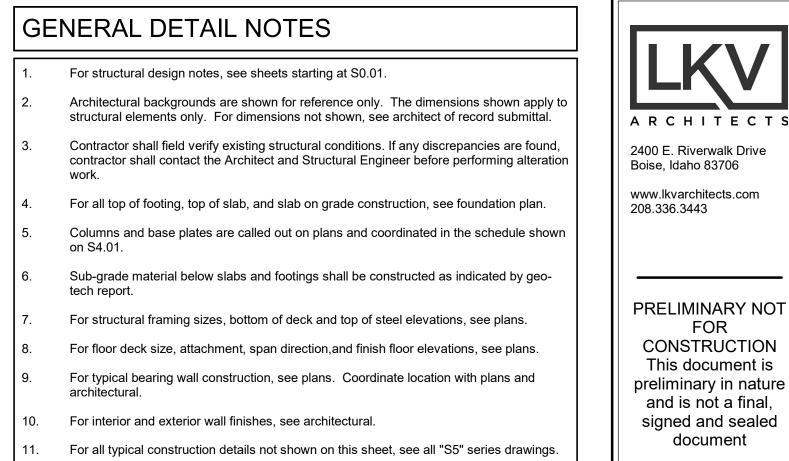






OPENINGS IN STEEL DECK

NO SCALE



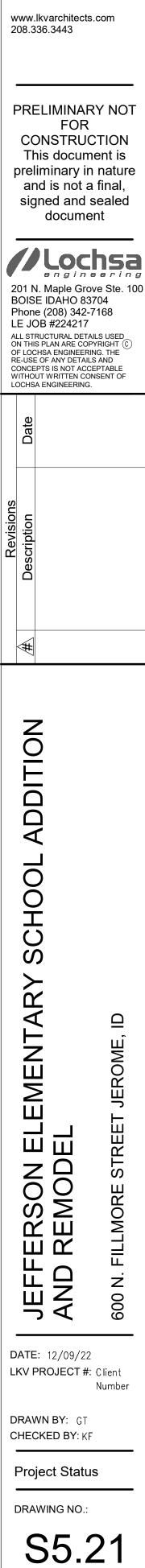
Added framing is not reqd. for openings where long opening dim. is less than 6". For structure required to support mechanical unit weight use C6x8.2 under

entire perimeter of curb, uno on plan. See mech. for equipment mounting, attachment openings, etc. Composite slab or roofing see plans and

arch. drawings. Where hard rock conc. occurs provide 3/4" Dia. x 8" Nelson Headed Studs at 24" oc. Steel deck attachment to opening framing,

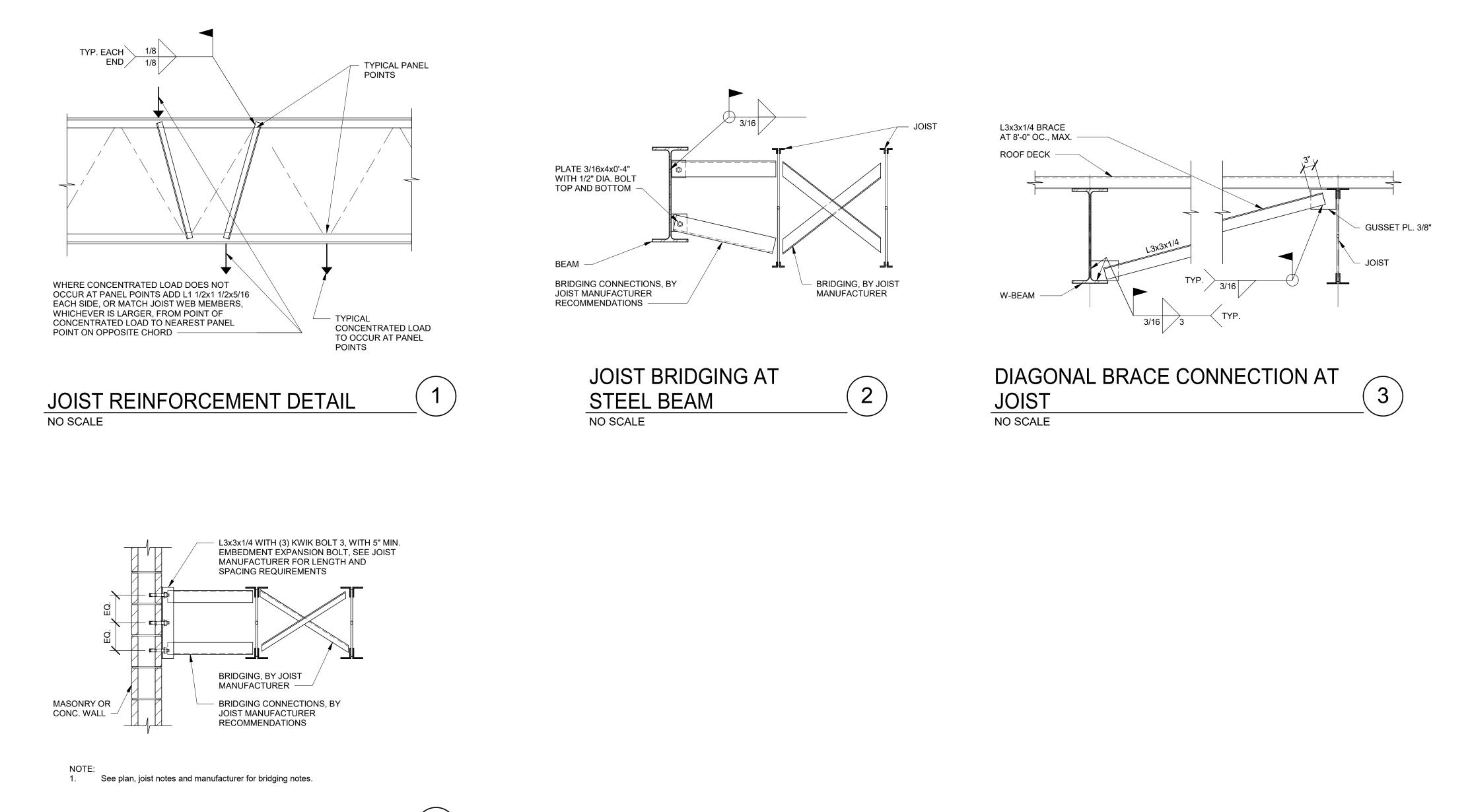
see plans.





GENERAL STRUCTURAL

STEEL DETAILS

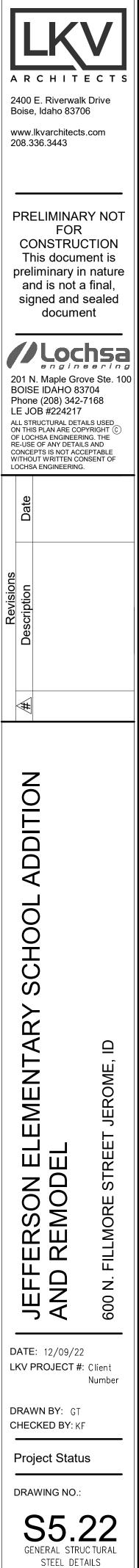


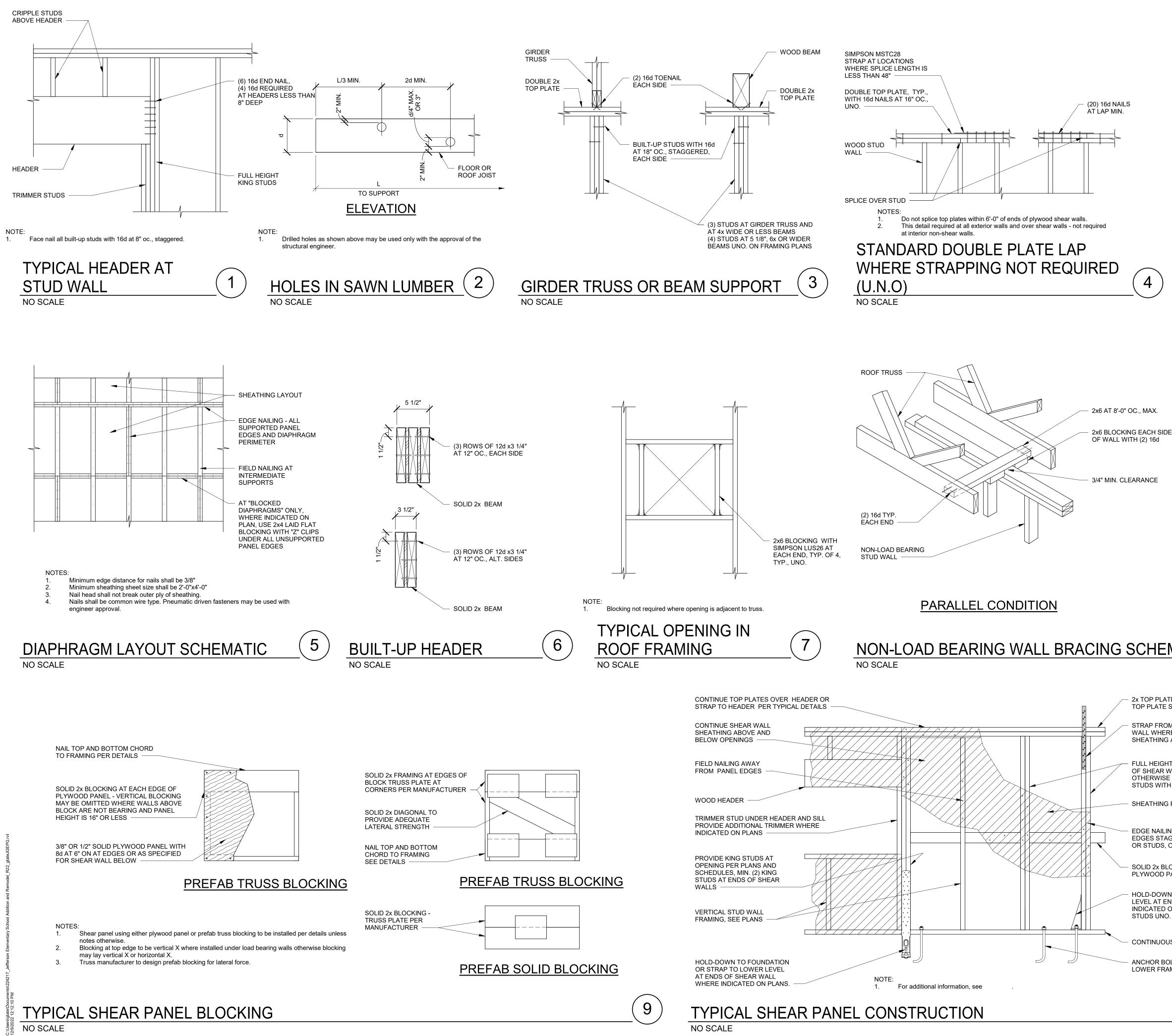
JOIST BRIDGING AT MASONRY WALL (4)



GENERAL DETAIL NOTES 1. For structural design notes, see sheets starting at S0.01. 2. Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal. 3. Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work. 4. For all top of footing, top of slab, and slab on grade construction, see foundation plan. 5. Columns and base plates are called out on plans and coordinated in the schedule shown on S4.01. 6. Sub-grade material below slabs and footings shall be constructed as indicated by geotech report. 7. For structural framing sizes, bottom of deck and top of steel elevations, see plans. 8. For floor deck size, attachment, span direction, and finish floor elevations, see plans. 9. For typical bearing wall construction, see plans. Coordinate location with plans and architectural.

- 10. For interior and exterior wall finishes, see architectural.
- 11. For all typical construction details not shown on this sheet, see all "S5" series drawings.



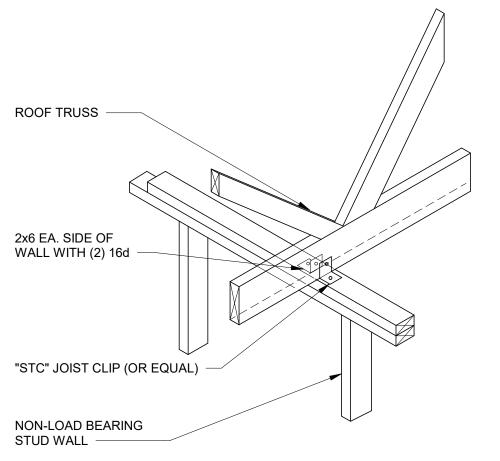


Revit 22

GENERAL DETAIL NOTES For structural design notes, see sheets starting at S0.01 Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal. Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the Architect and Structural Engineer before performing alteration work. For all top of footing, top of slab, and slab on grade construction, see foundation plan. Columns and base plates are called out on plans and coordinated in the schedule shown on S4.01. Sub-grade material below slabs and footings shall be constructed as indicated by geotech report. For structural framing sizes, bottom of deck and top of steel elevations, see plans. For floor deck size, attachment, span direction, and finish floor elevations, see plans. For typical bearing wall construction, see plans. Coordinate location with plans and architectural. For interior and exterior wall finishes, see architectural.

For all typical construction details not shown on this sheet, see all "S5" series drawings.

- 4
- 2x6 AT 8'-0" OC., MAX.
- OF WALL WITH (2) 16d
- 3/4" MIN. CLEARANCE

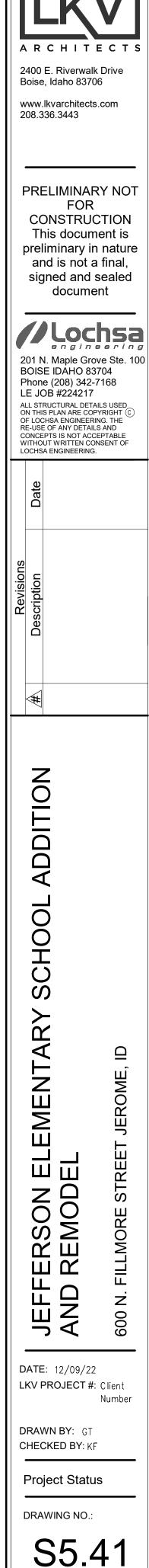


PERPENDICULAR CONDITION

10

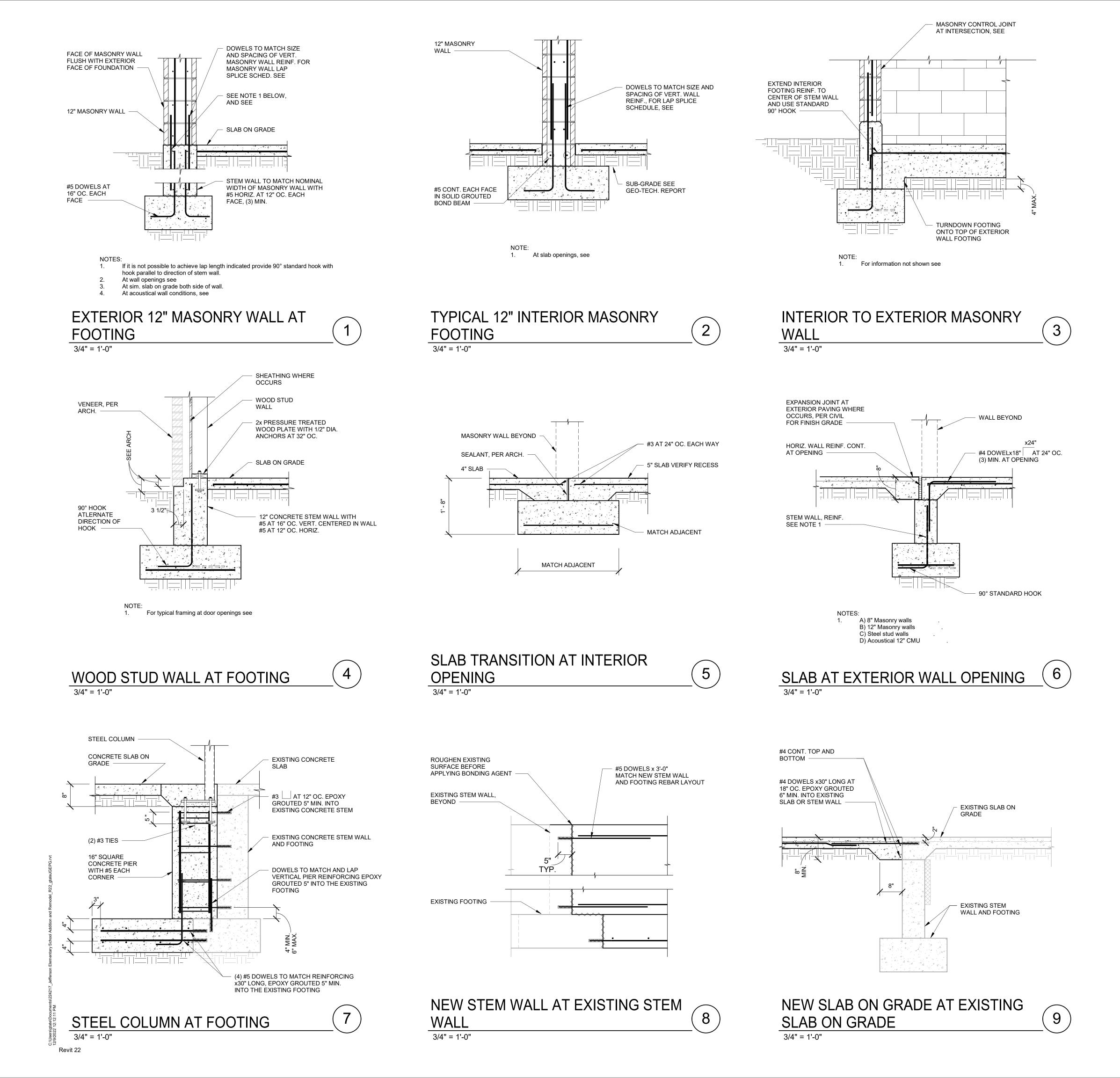
NON-LOAD BEARING WALL BRACING SCHEMATIC - WOOD ROOF TRUSSES

- 2x TOP PLATE PER TYPICAL TOP PLATE SPLICE DETAIL
- STRAP FROM END OF UPPER LEVEL SHEAR WALL WHERE INDICATED ON PLANS, EDGE NAIL SHEATHING AT DOUBLE STUD.
- FULL HEIGHT DOUBLE STUDS AT EACH END OF SHEAR WALL UNLESS NOTED OTHERWISE ON PLANS, FACE NAIL DOUBLE STUDS WITH 16d AT 8" OC., STAGGERED
- SHEATHING PANEL SEE SHEAR WALL SCHEDULE
- EDGE NAILING AT ALL SHEATHING PANEL EDGES STAGGER NAILS AT DOUBLE PLATE OR STUDS, OR 3x MEMBERS
- SOLID 2x BLOCKING AT ALL PLYWOOD PANEL EDGES
- HOLD-DOWN TO FOUNDATION OR STRAP TO LOWER LEVEL AT ENDS OF SHEAR WALL WHERE INDICATED ON PLANS, INSTALL WITH DOUBLE STUDS UNO. ON PLANS (SEE TYPICAL DETAILS)
- CONTINUOUS 2x SILL PLATE
- ANCHOR BOLTS TO FOUNDATION OR NAILS TO LOWER FRAMING. SEE SHEAR WALL SCHEDULE

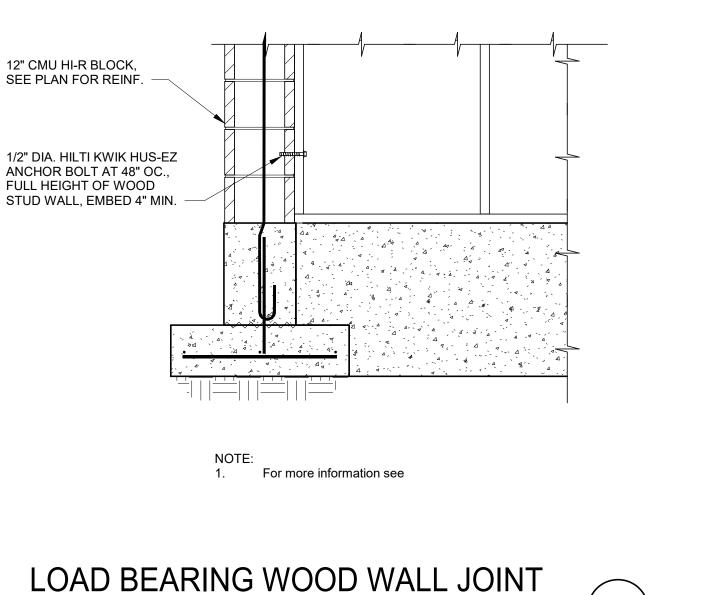


GENERAL WOOD FRAMING DETAILS

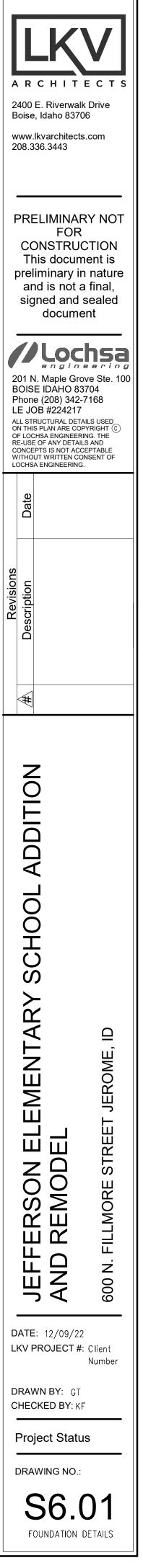
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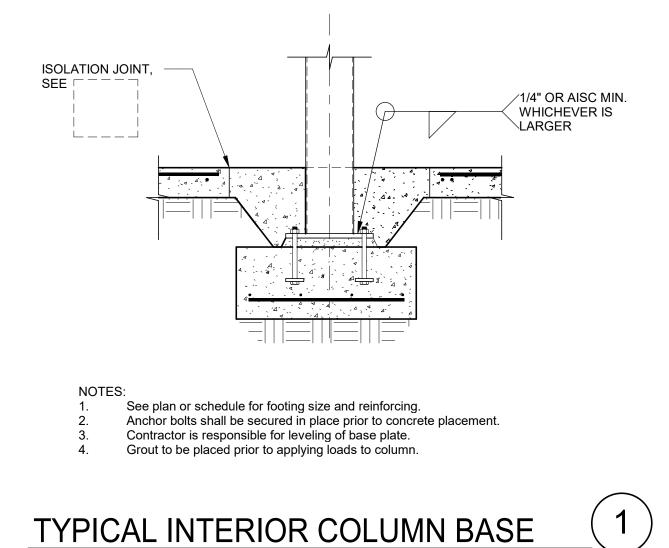
FOUNDATION DETAIL NOTES		
1.	For structural design notes, see sheets starting at S0.01.	
2.	Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal.	
3.	Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the architect and structural engineer before performing alteration work.	
4.	For concrete and foundation general details, see sheets S5.01 and S5.02.	
5.	Footing designations are called out on the foundation plans and coordinated on the schedule sheet S4.01.	
6.	Slab on grade construction is called out on plans. Coordinate slab on grade construction with sheet S5.01.	
7.	Coordinate top of footing and top of slab elevations with foundation plans.	
8.	Columns and base plates are called out on plans and coordinated in the schedule shown on S4.01.	
9.	Sub-grade material below slabs and footings shall be constructed as indicated by geo-tech report. Coordinate vapor barrier placement below slab with arch and geo-tech report.	
10.	Contractor to coordinate exterior finish grade with architect and civil.	
11.	Coordinate non-shrink grout under steel columns with base plate schedule on sheet S4.01.	
12.	All rebar to maintain clear distances per concrete notes on sheet S0.02.	
13.	All concrete cold joints are to be roughened and cleaned to 1/4" amplitude, uno.	
14.	All hooked dowels are shown with 90° std. hook, see $4/S5.01$, uno.	
15.	All rebar shall maintain tension lap splice, see 5 / S5.01.	
16.	All dowels shall maintain development lengths, see 1/S5.01. Concrete wall dowels are to extend to bottom of the footings and face of the footings. for dowels that are centered in wall alternate the hook direction.	
17.	Concrete strengths are provided in notes on sheet S0.02.	
18.	All exposed concrete edges shall have a 3/4" chamfer, typ., uno.	
19.	All cast in place anchor bolts are to be coordinated with the base plate schedule on sheet S4.01.	
20.	Provide 3" minimum concrete cover between surrounding soil and all embedded steel including, base plates, anchor bolts, headed anchors, columns, etc., uno.	
21.	All stem wall and footing reinforcing is to be continued thru column piers and footings, uno.	
22.	For structural bearing wall construction, see plans. Coordinate location with plans and architectural.	
23.	For structural wood foundation general details, see sheet S5.41.	
24.	For all interior and exterior wall finishes, see architectural.	
25.	Rigid foundation insulation shown for reference only. Coordinate thickness and placement with arch.	
26.	Masonry veneer shown for reference only. Coordinate thickness and layout with arch. For typical anchorage, see veneer tie notes on sheet S0.03.	



[^]10



AT MASONRY WALL



3/4" = 1'-0"



FOUNDATION DETAIL NOTES		
1.	For structural design notes, see sheets starting at S0.01.	
2.	Architectural backgrounds are shown for reference only. The dimensions shown apply to structural elements only. For dimensions not shown, see architect of record submittal.	
3.	Contractor shall field verify existing structural conditions. If any discrepancies are found, contractor shall contact the architect and structural engineer before performing alteration work.	
4.	For concrete and foundation general details, see sheets S5.01 and S5.02.	

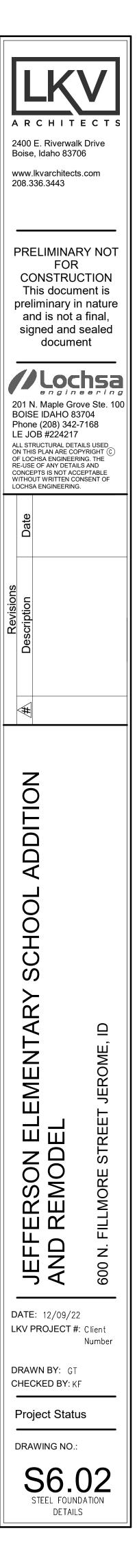
5. Footing designations are called out on the foundation plans and coordinated on the schedule sheet S4.01.

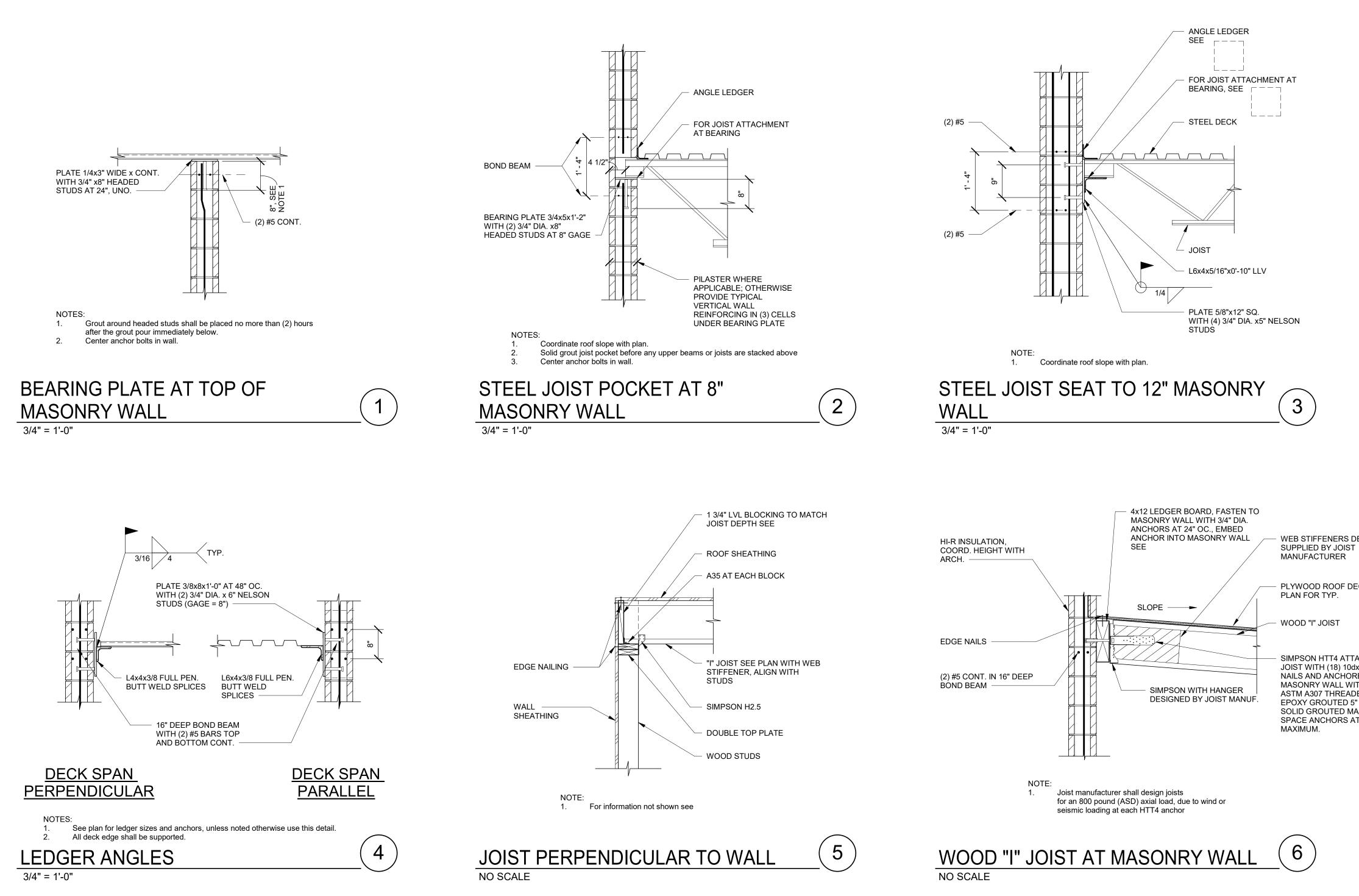
6. Slab on grade construction is called out on plans. Coordinate slab on grade construction with sheet S5.01.

7. Coordinate top of footing and top of slab elevations with foundation plans.

 Columns and base plates are called out on plans and coordinated in the schedule shown on S4.01.
 Sub-grade material below slabs and footings shall be constructed as indicated by geo-tech

- report. Coordinate vapor barrier placement below slab with arch and geo-tech report.10. Contractor to coordinate exterior finish grade with architect and civil.
- 11. Coordinate non-shrink grout under steel columns with base plate schedule on sheet S4.01.
- 12. All rebar to maintain clear distances per concrete notes on sheet S0.02.
- 13. All concrete cold joints are to be roughened and cleaned to 1/4" amplitude, uno.
- 14. All hooked dowels are shown with 90° std. hook, see 4 / S5.01, uno.
- 15. All rebar shall maintain tension lap splice, see 5 / S5.01.
- 16. All dowels shall maintain development lengths, see 1 / S5.01. Concrete wall dowels are to extend to bottom of the footings and face of the footings. for dowels that are centered in wall alternate the hook direction.
- 17. Concrete strengths are provided in notes on sheet S0.02.
- 18. All exposed concrete edges shall have a 3/4" chamfer, typ., uno.
- 19. All cast in place anchor bolts are to be coordinated with the base plate schedule on sheet S4.01.
- 20. Provide 3" minimum concrete cover between surrounding soil and all embedded steel including, base plates, anchor bolts, headed anchors, columns, etc., uno.
- All stem wall and footing reinforcing is to be continued thru column piers and footings, uno.
 For structural bearing wall construction, see plans. Coordinate location with plans and
- architectural.23. For structural wood foundation general details, see sheet S5.41.
- 24. For all interior and exterior wall finishes, see architectural.
- 25. Rigid foundation insulation shown for reference only. Coordinate thickness and placement with arch.
- 26. Masonry veneer shown for reference only. Coordinate thickness and layout with arch. For typical anchorage, see veneer tie notes on sheet S0.03.





Revit 22

ROOF FRAMING DETAIL NOTES

- For structural design notes, see sheets starting at S0.01.
- Architectural backgrounds are shown for reference only. The dimensions shown apply to
- structural elements only. For dimensions not shown, see architect of record submittal. Contractor shall field verify existing structural conditions. If any discrepancies are found,
- contractor shall contact the architect and structural engineer before performing alteration work.
- For structural steel general details, see sheets S5.21 and S5.22.
- For structural wood framing general details, see sheet S5.41.
- Columns are called out on foundation or level of origin plans
- For all top of structural steel, bottom of deck or finish elevations, see framing plans.
- For roof deck size, attachment and span direction, see plans.
- For structural bearing wall construction, see plans. Coordinate location with plans and architectural.
- For interior and exterior wall finishes, see architectural. 10.
- Masonry veneer shown for reference only. Coordinate thickness and layout with arch. For 11 typical anchorage, see veneer anchorage notes on sheet S0.03.

WEB STIFFENERS DESIGNED AND

PLYWOOD ROOF DECK, SEE

SIMPSON HTT4 ATTACHED TO JOIST WITH (18) 10dx1 1/2" NAILS AND ANCHORED TO MASONRY WALL WITH 5/8" DIA. ASTM A307 THREADED ROD. EPOXY GROUTED 5" MIN. INTO SOLID GROUTED MASONRY. SPACE ANCHORS AT 48" OC.

