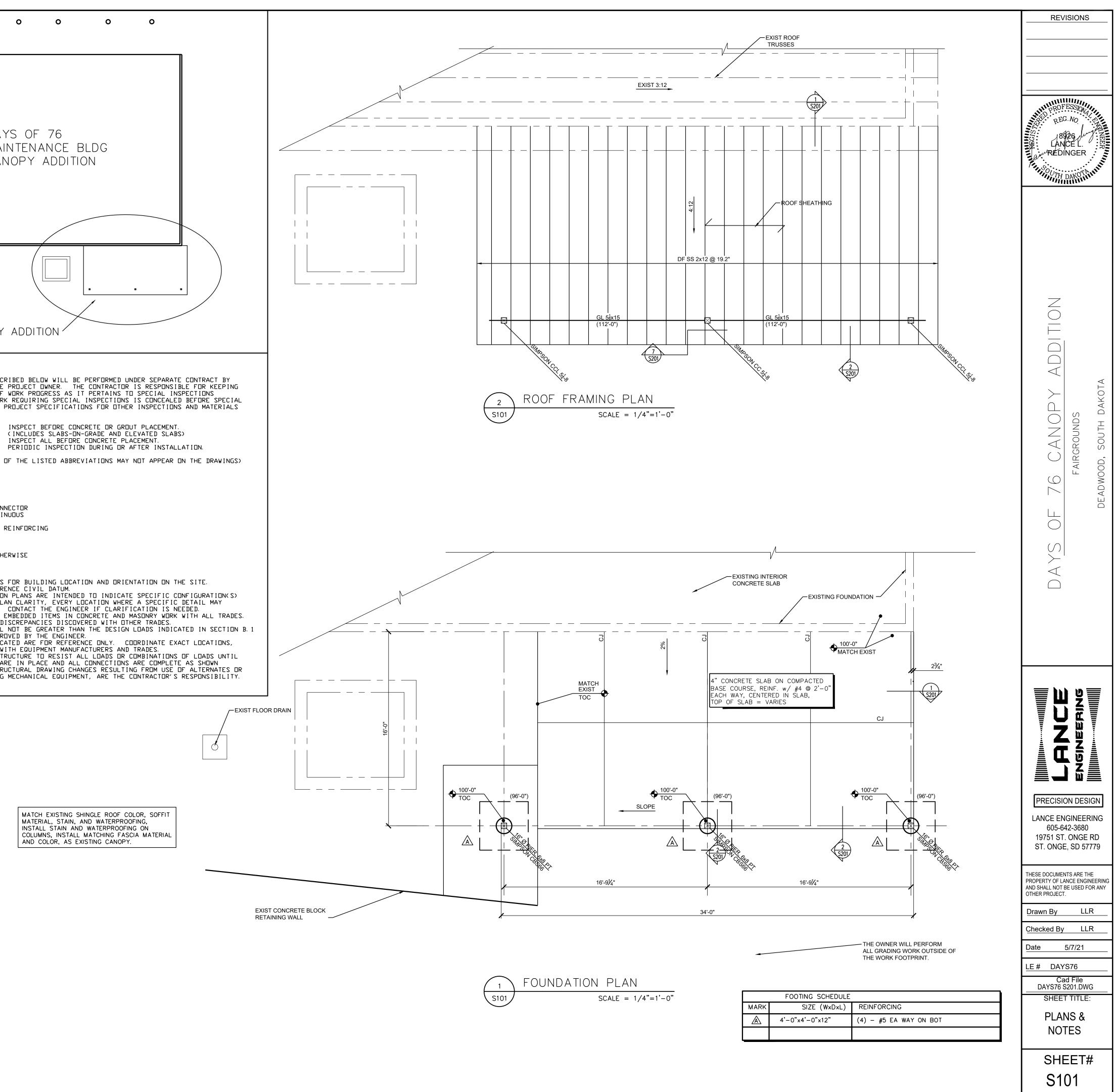
	GOVERNING CODES 1) INTERNATIONAL BUILDIN 2) MANUAL FOR TIMBER CON	NSTRUCTION, AITO	C 4TH EDITION.		Г	
	 3) BUILDING CUDE REQUIRE 4) MANUAL OF STEEL CONST 5) COLD-FORMED STEEL DES 	FRUCTION, AISC a				
B.	DESIGN LOADS AND CRITER 1> UNIFORM GRAVITY LOADS					
	LOCATION	DEAD LOAD	LIVE LOAD			
	ROOF SNOW CRITERIA: GROUND S	12 SNOW LOAD = 56 F	47 (+ UNBALANCED DRIFTING) SF, Is= 1.1			DAY
	EXPOSURE 2) WIND CRITERIA		9, Ct = 1.1 WIND SPEED = 90 MPH CATEGORY: II			MAI Can
		Iw = 1.0 ∕ T⊡P⊡GRAPHI	EXPOSURE C C ESCARPMENT Kzt= 1.28 RESSURE COEFFICIENT: 0.18 ±			CAN
		24 PSF MIN 15 PSF MIN	IIMUM FOR EXTERNAL WALL COMPONENTS & CLADDING IIMUM NET UPLIFT FOR ROOF JOIST SPANSS LESS THAN 13 IIMUM NET UPLIFT FOR ALL OTHER ROOF JOISTS	FT,		
	3) SEISMIC CRITERIA:	SITE CLASS				
		I = 1.0 ∕ DESIGN CAT	USE GROUP I			
		LATERAL FE	RCE RESISTING SYSTEM: NT FRAMES NOT DETAILED FOR SEISMIC RESISTANCE			
	4) SOIL BEARING PRESSURE 5) SOIL FRICTION COEFFIC	CIENT: 0.35				
	6) LATERAL SOIL PRESSURE	200 65 F	PCF ACTIVE EQUIVALENT FLUID PRESSURE PCF PASSIVE EQUIVALENT FLUID PRESSURE PCF AT-REST EQUIVALENT FLUID PRESSURE			
	7> FROST DEPTH: MATERIALS		NCHES		NORTH	
	1) CLASS A CONCRETE: (USE UNLESS NOTED OTHERWISE)	FLY ASH ASTM	NT ASTM C150 TYPE I/II C618, 10% - 25% BY WEIGHT IT + FLY ASH = 0.45 MAXIMUM			CANOPY
		28 DAY f'c = AIR CONTENT 4 AIR CONTENT 3				
	2) REINFORCING BARS:	3/4" MAX NORM	AL WEIGHT AGGREGATE ADE 60, EXCEPT ADE 60, WHERE INDICATED TO BE WELDED. ADE 36 OR 55 W/ ASTM A563 HEAVY HEX NUTS		G. SPECIAL INSPE	CTIONS
	3) ANCHOR RODS: 4) GROUT: 5) MORTAR:	ASTM F1554 GR ASTM C1107, N ASTM C270, TY	ION-METALLIC NON-SHRINK, 3 DAY f'c = 4000 PSI		1) SPECIAL IN AGENCIES R	SPECTIONS DESCR ETAINED BY THE ER APPRISED OF
	6) MASENRY GREUT:7) STRUCTURAL STEEL:	ASTM C476 FIN	IE, SLUMP XX"		AND ENSURI INSPECTION	NG THAT NO WORK IS OCCUR. SEE P QUIREMENTS.
	W SHAPES DTHER ROLLED SHAPES PLATES	ASTM A36, Fy	= 36 KSI			RCING STEEL:
	8) HIGH STRENGTH BOLTS: 9) BOLTS: 10) HEADED ANCHOR STUDS:	ASTM A307; WE ASTM A108 GRA	PE 1 UNCOATED; STEEL TO STEEL CONNECTIONS NOD OR WOOD TO STEEL CONNECTIONS OR ERECTION ONLY NDE 1010 - 1020, TYPE B, Fu = 60 KSI		ANCHOR ADHESI	RDDS: VE ANCHORS:
	11> WELD METAL: 12> ADHESIVE ANCHORS:	ASTM A 36 ALL SUCH AS HILTI	70XX OR AS APPROVED -THREAD ROD W/ CHISEL POINT & INJECTABLE ADHESIVE HIT HY-150 FOR CONCRETE & SOLID MASONRY OR			ICHOR
	13) SCREW ANCHORS: 14) WOOD FRAMING:	ASTM B 633, C	W/ SCREEN TUBES FOR HOLLOW MASONRY OR AS APPROVED. CLASS SC1, TYPE III (SIMPSON TITEN HD'S OR EQUIV) NG FIR SELECT STRUCTURAL, CLECT STRUCTURAL WOOD ASSOCIATION (APA) RATED		BRG BE CL CE	TERNATE ARING NTERLINE
1	15) WOOD SHEATHING / PANE	2X4-2X12: DOL POSTS: DF/L SE ELS: AMERICAN PLY	IG FIR SELECT STRUCTURAL, LECT STRUCTURAL WOOD ASSOCIATION (APA) RATED		COL CO CONN CO	EAR ILUMN INNECTION / CONN
).	FOUNDATIONS 1) FOUNDATIONS HAVE BEEN) ON INFORMATION PRESENTED IN THE IBC. FOLLOW		PROJ PR REINF RE	NTINUE / CONTIN OJECTION INFORCEMENT / R
	RECOMMENDATIONS UNLES 2) PLACE SLAB ON FIRM UN OR ENGINEERED FILL PL	NDISTURBED NATIV	INDICATED OTHERWISE. /E MATERIAL, WITH THE TOP 6″ SCARIFIED AND COMPACTE UNDISTURBED NATIVE MATERIAL. REMOVE EXISTING TOPS	D, DIL	ТНК ТН ТҮР ТҮ	QUIRED IICK/THICKNESS PICAL
	THE GEDTECHNICAL ENG	INEER. PLACE EN	RIAL SHALL BE MINUS 3″ GRADED GRANULAR, APPROVED B IGINEERED FILL IN UNIFORM LIFTS AND COMPACT TO 98% 0698. PLAN LIMITS OF ENGINEERED	Y		ILESS NOTED OTHE RTICAL
		D TO AN APPROVEI	IND ALL FOOTING EDGES. IF ENCOUNTERED, EXISTING DEPTH AND REPLACED WITH ENGINEERED FILL AS D AS DESCRIBED ABOVE.			CIVIL DRAWINGS EVATIONS REFERE
	3) DO NOT BACKFILL WALLS PERMANENT FLOOR PLATE	S WITH UNBALANCE ES ARE INSTALLEI	D SOIL LEVELS UNLESS ADEQUATELY SHORED OR AND CONNECTIONS ARE COMPLETE - THIS DOES NOT INCL RESPONSIBLE FOR TEMPORARY SHORING DESIGN AND		AND INFORM	KS ANNOTATED ON IATION - FOR PLA IOT ANNOTATED.
	INSTALLATION. 5) BACKFILL AND COMPACT	BURIED WALLS DR	2 GRADE BEAMS EVENLY ON EACH SIDE TO AVOID 95% STANDARD PROCTOR ACCORDING TO ASTM D698 EXCEP	т	4) NOTIFY ENG	DPENINGS AND E INEER OF ANY DI ON LOADS SHALL
	92% UNDER NON-PAVED 4	AREAS.	R DRAINAGE AWAY FROM THE STRUCTURE.		6) EQUIPMENT	IEWED AND APPRE OPENINGS INDICA AND DETAILS WI
			ITH ACI 301-02 "STANDARD SPECIFICATION FOR		ALL PERMAN	Y BRACE THE STR ENT ELEMENTS AR IATED WITH STRU
2	STRUCTURAL CONCRETE" L MINIMUM REINFORCING BA 3" AT UNFORMED SURFA	R COVER:	NGENT REQUIREMENTS ARE INDICATED. EARTH			DNS, INCLUDING
	1 1/2" AT FORMED SUR	RFACES EXPOSED T	RTH DR WEATHER FOR #6 AND LARGER D EARTH DR WEATHER FOR #3-#5 AND, NOT EXPOSED FORCMENT DF BEAMS DR COLUMNS			
3	1½″ AT SLABS AND WAL >> SPLICE REINFORCING BAR	LS NOT EXPOSED S BY LAPPING AC				
4	INCHE MINIMUM. PLACE	MECHANICAL CONN EACH FACE AT AL	ECTORS WHERE SHOWN. L OPENING CORNERS AND #5X6'-0" DIAGONAL MID-DEPTH			
	SECURE ALL REINFORCING PLACEMENT. CONCRETE D	5, INCLUDING WWF DOBIES MAY BE US	, IN POSITION WITH CHAIRS BEFORE CONCRETE ED TO POSITION SLAB ON GRADE REINFORCEMENT. NCRETE. DO NOT STAB OR "WET-SET" DOWELS.			
7	INSTALL AND SECURE EMB SPECIFIED TOLERANCES B	BEDMENTS SUCH AS BEFORE CONCRETE	ANCHOR RODS AND EMBEDMENT PLATES WITHIN			
9	PROTECT AND CURE ALL C STRIPPING FORMS AND FL	CONCRETE SURFACE ATWORK IMMEDIAT	S. BEGIN CURING WALLS IMMEDIATELY AFTER			
			THE GROUTED AREA AND PRE-SOAKING.			
	> TRUSSES SHALL BE DESIG IN SECTION "B" AND LOA	DS TRANSFERRED	FACTURER TO SUPPORT ALL SUPERIMPOSED LOADS INDICAT BY FRAMING MEMBERS (IE. OVERFRAMING, STRUCTURAL PLAN(S) AND ANY ADDITIOANL LOADS REQUIRED. TRUSS	ED		
2	DESIGNS MUST BE STAMPE > ENGINEERED WOOD PRODUC	D WITH A SOUTH TS (WOOD I-JOIS	DAKOTA ENGINEERS SEAL ON THE DRAWINGS. TS & LAMINATED VENEER LUMBER> SHOWN ON THE DRAWINGS	5		
	STANDARD PRODUCT NUMBE EACH OTHER AND TO THE	RS. THE INTENT: SURROUNDING STR	RODUCTS AND ARE INDICATED BY THE MANUFACTURER'S OF THE DESIGN IS FOR THESE ITEMS TO BE ATTACHED TO UCXTURE TO BEHAVE AS A SYSTEM. WHETHER SHOWN OR NO			
	MANUFACTURER FOR A COM INSTALLATION AND USE.	IPLETE SYSTEM.	IPS, STIFFENERS, STRAPS, ETC. > DESIGNED BY THE FOLLOW ALL MANUFACTURERS RECOMMENDATIONS FOR			
3	STONG-TIE COMPANY, SAN	I LEANDRO, CALIF	ERS SHOWN ON THE DRAWINGS ARE THE PRODUCTS OF SIMP: ORNIA AND ARE DESIGNATED BY THE MANUFACTURERS STAN ER'S RECOMMENDATIONS FOR INSTALLATION AND USE.			
	PRODUCTS WITH EQUIVALE	NT CAPACITY AND	QUALITY MAY BE SUBSTITUTED AFTER A SUBSTITUTION GENERAL CONTRACTOR AND FINALAPPROVAL BY THE STRUCTU	JRAL		
4	> FLOOR AND ROOF SHEATHI	H FACE GRAIN PE	RPENDICULAR TO SUPPORTS. STAGGER ALL END JOINTS AN 2306.3.1.	ND PLACE		
	LOCATION MATERI		NAILING ATING 0.131"DIAMETER AT 6" AT ALL SUPPORTED PANEL			
	ROOF § 32/16 SP	AN RATING	0. 131" DIAM AT 12" AT INTERMEDIATE SUPPORTS, GLUE AND NAIL TO SUPPORTING FRAMING 0. 131" DIAMETER AT 6" AT ALL SUPPORTED PANEL	EDGES,		
	THE SHANK DIAMETER OF	THE THREADED PO	O. 131" DIAM AT 12" AT INTERMEDIATE SUPPORTS. RILLED THE SMAE DIAMETER FOR THE SHANK AND 50% OF RTION. LUBRICATE THREADS BEFORE INSTALLATION.			
	>> STAGGER ALL END JOINTS	32″ MINIMUM. WALL SCHEDULE	FASTEN PANELS TO SUPPORTING FRAMING AND BLOCKING AS AND FRAMING PLANS FOR CRITICAL NAILING.)	2		
9	9) FASTENERS SHALL NOT BE 3) NAIL HEADS SHALL NOT P	LESS THAN ¾″ F PENETRATE BEYOND				
	WITH THE FASTENING SCH	EDULE IN TABLE		JNS.		



FOOTING SCHEDULE			
MARK	SIZE (W×D×L)	REINFORCING	
\mathbb{A}	4'-0"×4'-0"×12"	(4) – #5 EA WAY ON BOT	

MINIMUM FASTENERS REQUIREMENTS	
(UNLESS SHOWN OTHERWISE ON PLANS OR DETAILS) WOOD TO WOOD, WOOD TO LIGHT GAGE	
CONNECTION	NAILING
. JOIST TO SILL OR GIRDER TOENAIL	3-80
. BRIDGING TO JOIST, TOENAIL EACH END	2-80
9. 1"x6" (25MMx152MM) SUBFLOOR TO EACH JOIST FACE NAIL	2-80
4. WIDER THAN 1"x6" (25MMx152MM SUBFLOOR TO EACH JOIST FACE NAIL	3-80
5. 2" (5MM) SUBFLOOR TO JOIST OR GIRDER BLIND AND FACE NAIL	2-16
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS	16d @ 16" (406MM) O.C. 3-16d PER 16" (406MM)
7. TOP PLATE TO STUD, END WALL	3-16
3. STUD TO SOLE PLATE	4-8d TOENAIL OR 2-16d, END WALL
9. DOUBLE STUDS, FACE NAIL	16d @ 24" (610MM) O.C.
10. DOUBLED TOP PLATES, TYPICAL FACE NAIL	16d @ 16" (406MM) O.C. TOP PLATE SPLICE LAP SPLICE 30-16d
11. BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOENAIL	10d @ 4" 1 SIDE OR 2-10d @ 8" BOTH SIDES
12. RIM JOIST TO TOP PLATE, TOENAIL	10d @ 4" (152MM) O.C.
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	WOOD TO WOOD 2-16d, 3-#8
14. CONTINUOUS HEADER, TWO PLATES	16d @ 16" (406MM) O.C. ALONG EACH EDGE
15. CEILING JOISTS TO PLATE, TOENAIL	100 @ 10 (400MM) 0.0. ALONG EXON EDGE
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-80
10. CONTINUOUS HEADER TO STUD, TOENAIL 17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16
17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL 18. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-10
19. TRUSS TO PLATE, TOENAIL	4-#10, 4-10d
20. 1" (25MMx203MM) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8
21. 1"x8" (25MMx203MM) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8
22. WIDER THAN 1"x8" (25MMx203MM) SHEATHING TO EACH BEARING, FACE NAIL	3-8
23. BUILT-UP CORNER STUDS	#8 @ 4
24. BUILT-UP GIRDER AND BEAMS	20d @ 32" (813MM) O.C. AT TOP AND BOTTOM
	AND STAGGERED AT ENDS AND AT EACH SPLICE
25. 2" (51MM) PLANKS	2-16d AT EACH BEARING
17/32"-3/4" 7/8"-1" 1 1/8"-1 1/4" COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING) (1-INCH = 25.4 MM) 3/4" AND LESS 7/8"-1" 1 1/8"-1 1/4"	#30 OR 10d 3 #10 OR 10d 4 #10 OR 10d OR 8d 6d 5 8d 5 8d 5 10d ⁴ OR 8d 5
27. PANEL SIDING (TO FRAMING):	100 OR 80
1/2" (13MM) OR LESS	6d 6 8d 6
5/8" (16MM)	80 °
28. FIBERBOARD SHEATHING:	
1/2" (13MM)	NO. 11GA ⁸
	NO. 16GA 8
25/32" (20MM)	NO. 11GA
	NO. 16GA ⁹
29. INTERIOR PANELING	
	4d ⁰
1/4" 3/8"	40 6d ¹¹
 COMMON OR BOX NAILS MAY BE USED EXCEPT WHEREVER OTHERWISE STATED. NAILS SPACED AT 6 INCHES (152MM) ON CENTER AT EDGES, 12 INCHES (305MM) AT INTERMEDIATE SUPPORTS EXCEPT 6 INC AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES (1219MM) OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PAIL DIAPHRAGMS AND SHEAR WALLS. REFER TO SECTOIN 2315.3 AND 22315.4 NAILS FOR WALL SHEATHING MAY BE COMMON, B 3. COMMON OR DEFORMED SHANK. COMMON. DEFORMED SHANK CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF SECTION 2304.3. FASTENERS SPACED 3 INCHES (16MM) ON CENTER AT EXTERIOR EDGES AND 6 INCHES (152 MM) ON CENTER AT INTERMEDIA 8. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" INCH DIAMETER (11MM) HEAD AND 1 1/2 INCH (38MM) LENGTH FOR 1/2 IN SHEATHING AND 1 3/4 INCH (44MM) LENGTH FOR 25/32 INCH (20MM) SHEATHING OCNFORMING TOT BE REQUIREMENTS OF S CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16 INCH (11MM) CROWN AND 1 7/8 INCH (25MM) LENGTH FOR 1 1/2 INCH (SHEATHING AND 1 1/2 INCH (38MM) LENGTH FOR 25/32 INCH (20MM) SHEATHING CONFORMING TO THE REQUIREMENTS OF S CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16 INCH (11MM) CROWN AND 1 7/8 INCH (25MM) LENGTH FOR 1 1/2 INCH (SHEATHING AND 1 1/2 INCH (38MM) LENGTH FOR 25/32 INCH (20MM) SHEATHING CONFORMING TO THE REQUIREMENTS OF S PANEL SUPPORTS AT 16 INCHES (406MM) 20 INCHES (508MM) IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UI OTHERWISE MARKED. CASING OR FINISH NAILS SPACED 6 INCHES (152M) ON PANEL EDGES, 12 INCHES (305MM) AT INTERMED 11. PANEL SUPPORTS AT 24 INCHES (610MM). CASING OR FINISH NAILS SPACED 6 INCHES (152MM) ON PANEL EDGES, 12 INCHES 12 INCHES 	RTICLEBOARD JOX OR CASING. ATE SUPPORTS ICH (13MM) SECTION 2304.3 13MM) SECTION 2304.3. NLESS EDIATE SUPPORTS.

SOLID SAWN LUMBER				
OIST	PLY'S	FACE MOUNT	TOP MOUNT	
2x6	1	LUS26	LB26	
2x0	2	LUS26-2	HUS26-2TF	
	1	LUS28	LB28	
2x8	2	LUS28-2	HUS28-2TF	
	3	LUS28-3		
0	1	LU210	LB210	
2x10	2 LUS28-2 HUS28-2TF 3 LUS28-3			
	3	LU210-3	HUS210-3TF	
	1	LUS210	LB212	
2x12	2	LUS210-2	HUS212-2TS	
	3	HU212-3	HU212-3TF	

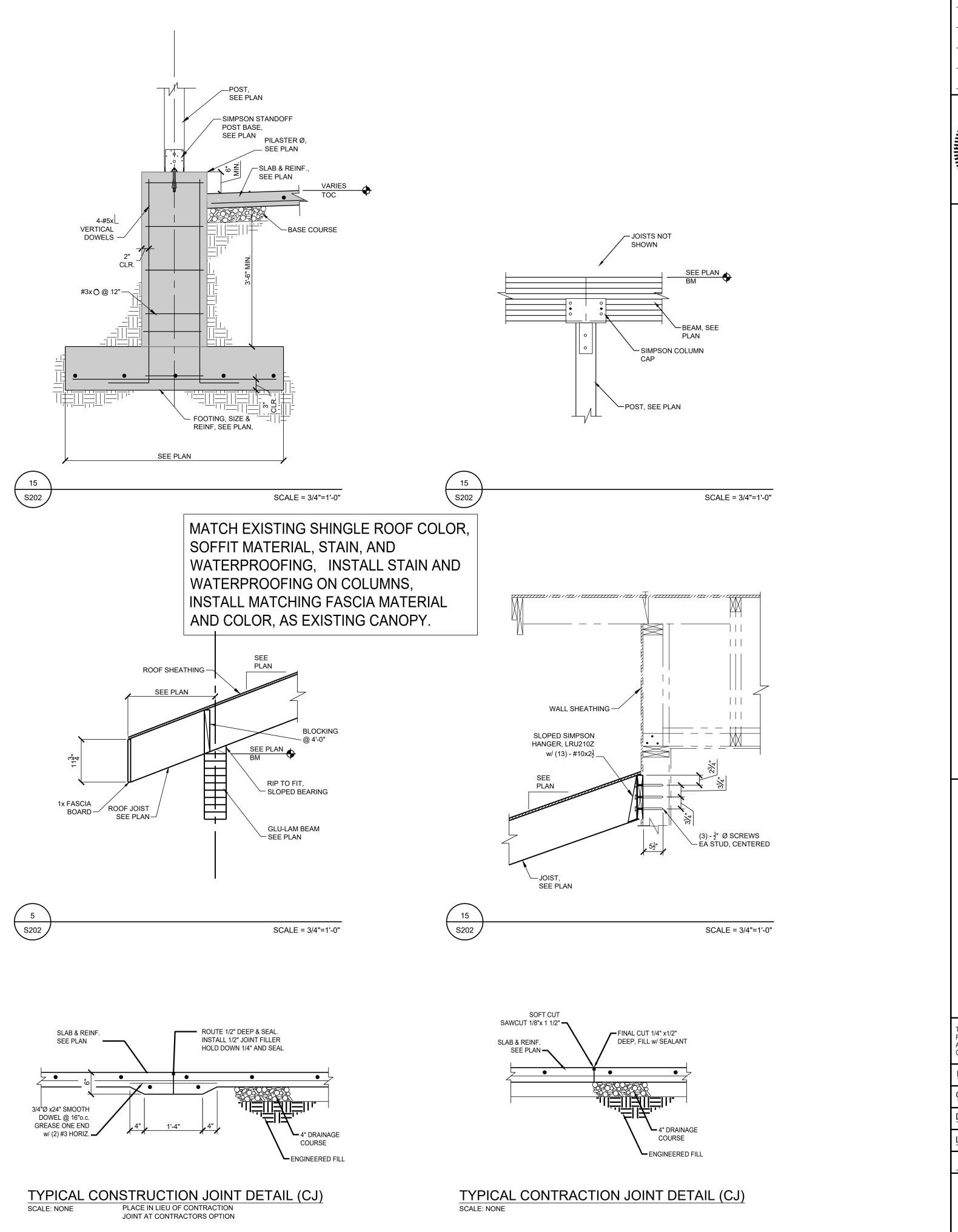
REINFORCING BAR LAP SCHEDULE							
	LAP LENGTH (MASONRY					
REBAR SIZE	VERT & HORZ	TOP BAR	ALL				
#3	1'-2"	1'-6"					
#4	2'-0"	2'-6"	2'-0"				
#5	2'-8"	3'-4"	2'-6"				
#6	3'-2"	4'-2"	3'-0"				
#7	3'-6"	4'-6"	3'-6"				
#8	4'-0"	5'-2"	4'-2"				
#9	5'-0"	6'-4"					
#10	6'-2"	8'-2"					
#11	8'-2"	9'-6"					

REINFORCING NOTES: 1) CONCRETE LAP LENGTHS ARE CLASS 'B' BASED ON F'C=4000 PSI WITH COVER REQUIREMENTS INDICATED AND BAR SPACING AT LEAST THREE BAR DIAMETERS.

2) TOP BAR LAPS ARE HORIZONTAL LAPS WHERE MORE THAN 12" OF FRESH CONCRETE IS PLACE BELOW THE BARS.

3) TOP BAR LAP LENGTHS MAY BE USED AT ALL LOCATIONS IN CONCRETE AT THE CONTRACTORS DISCRETION.

REINFORCING LAP SCHEDULE SCALE: NONE



4) MASONRY LAP LENGTHS ARE BASED ON F'M=1500 PSI WITH COVER REQUIREMENTS AND SPACING INDICATED.

RÉDINGEF \bigcirc \triangleleft \bigcirc ANOP \Box Η Η Ū () \cap \bigcirc \subset \sim \square () \leq \bigcirc ٥ PRECISION DESIGN LANCE ENGINEERING 605-642-3680 19751 ST. ONGE RD ST. ONGE, SD 57779 THESE DOCUMENTS ARE THE PROPERTY OF LANCE ENGINEERING AND SHALL NOT BE USED FOR ANY OTHER PROJECT. Drawn By LLR Checked By LLR Date 5/7/21 LE # DAYS76 Cad File DAYS76 S201.DWG SHEET TITLE: DETAILS SHEET# S201

REVISIONS