



ARCHITECT  
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PROJECT MANAGER CIVIL ENGINEER  
**TALBERT & BRIGHT**  
 4810 SHELLEY DRIVE  
 WILMINGTON, NC 28405  
 (910) 763-5360  
 FIRM NO. C-0713

STRUCTURAL ENGINEER  
**STEWART**  
 101 N. TRYON ST., SUITE 1400  
 CHARLOTTE, NC 28202  
 (704) 334-7925  
 FIRM NO. C-1051

MECHANICAL, ELECTRICAL, PLUMBING &  
 FIRE PROTECTION ENGINEER  
**SABER ENGINEERING**  
 2923 S. TRYON ST., SUITE 280  
 CHARLOTTE, NC 28203  
 (704) 373-0068  
 FIRM NO. C-2150

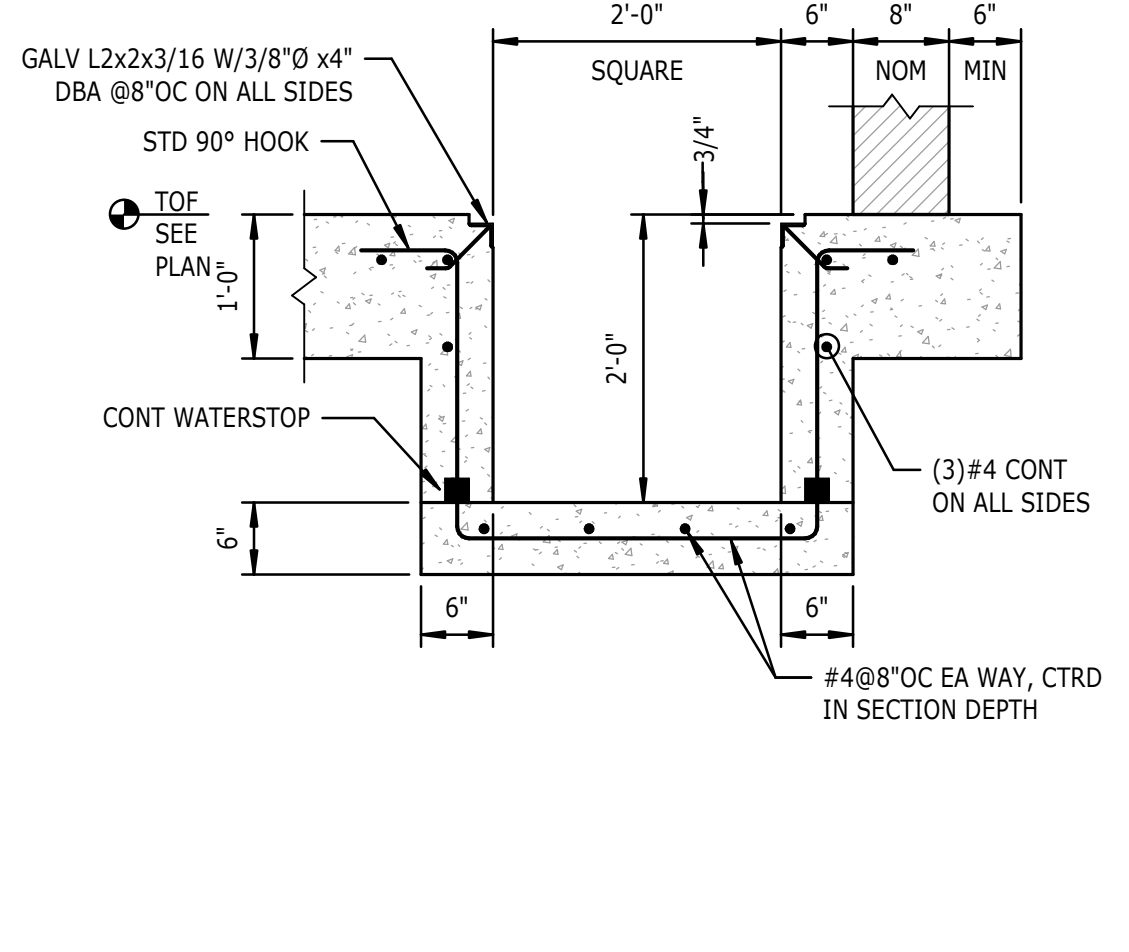
IT / SECURITY  
**VERTEX TECHNOLOGY  
 CONSULTANTS**  
 4700 LEBANON RD., SUITE A-1  
 CHARLOTTE, NC 28227  
 (800) 272-8500

REVISIONS  
 1 03/17/2023 BD-02

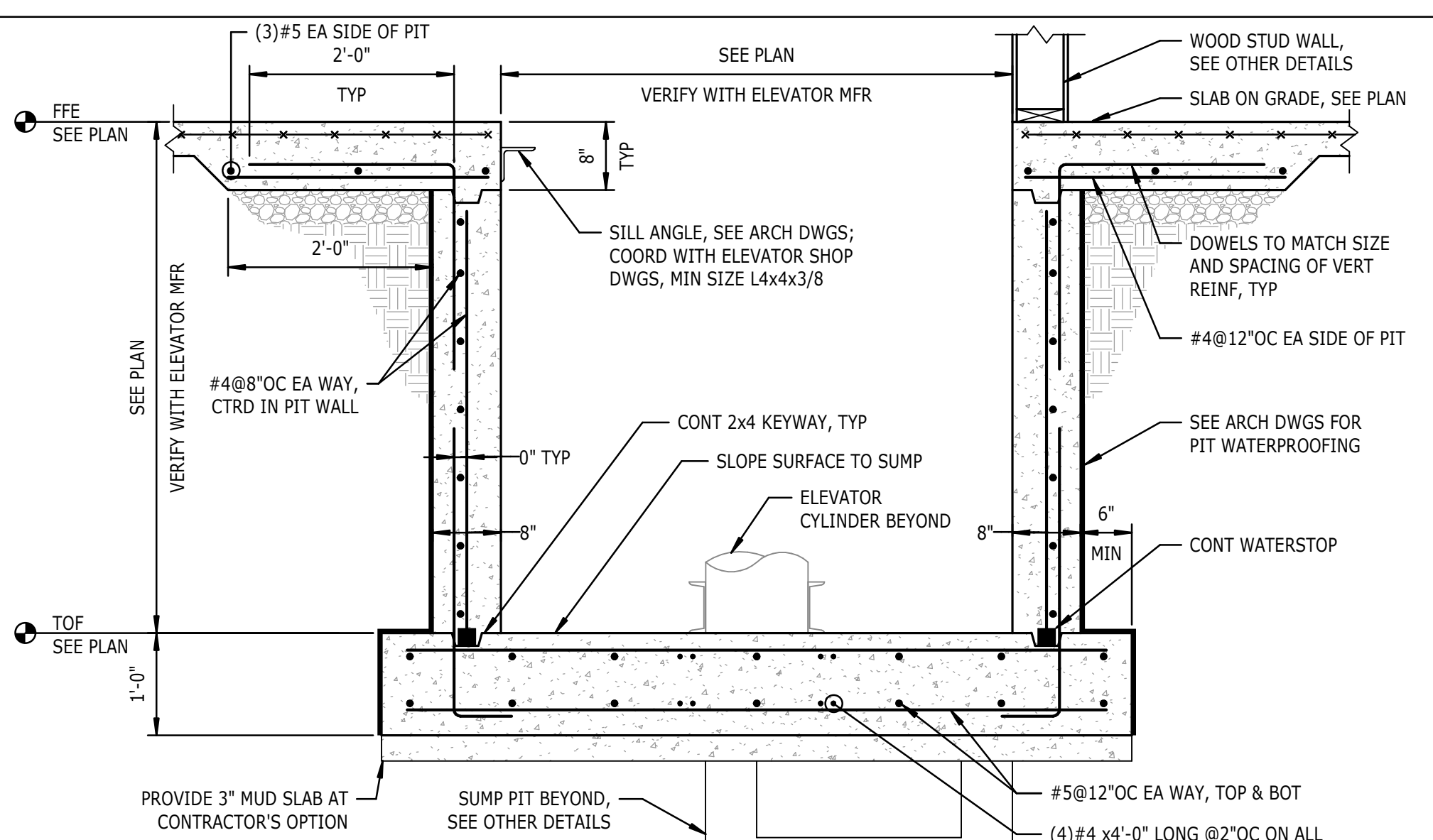
DATE SEPTEMBER 9, 2022  
 PROJECT NUMBER 9189-000  
 SHEET TITLE  
**FOUNDATION  
 DETAILS**

SHEET NUMBER  
**S-301**

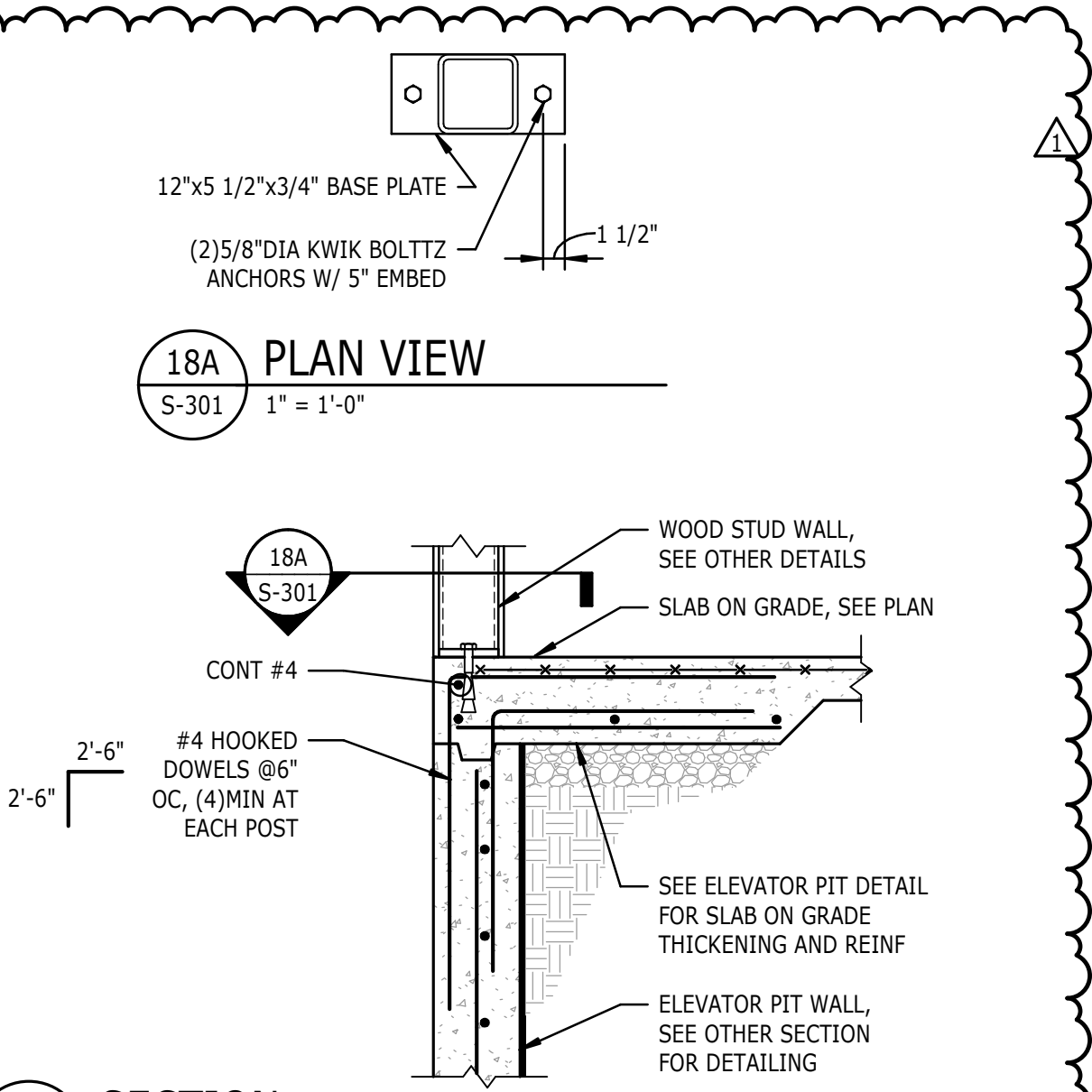
**17 TYPICAL ELEVATOR SUMP PIT**  
 S-301 NTS



**9 TYPICAL CONCRETE ELEVATOR PIT**  
 S-301 NTS

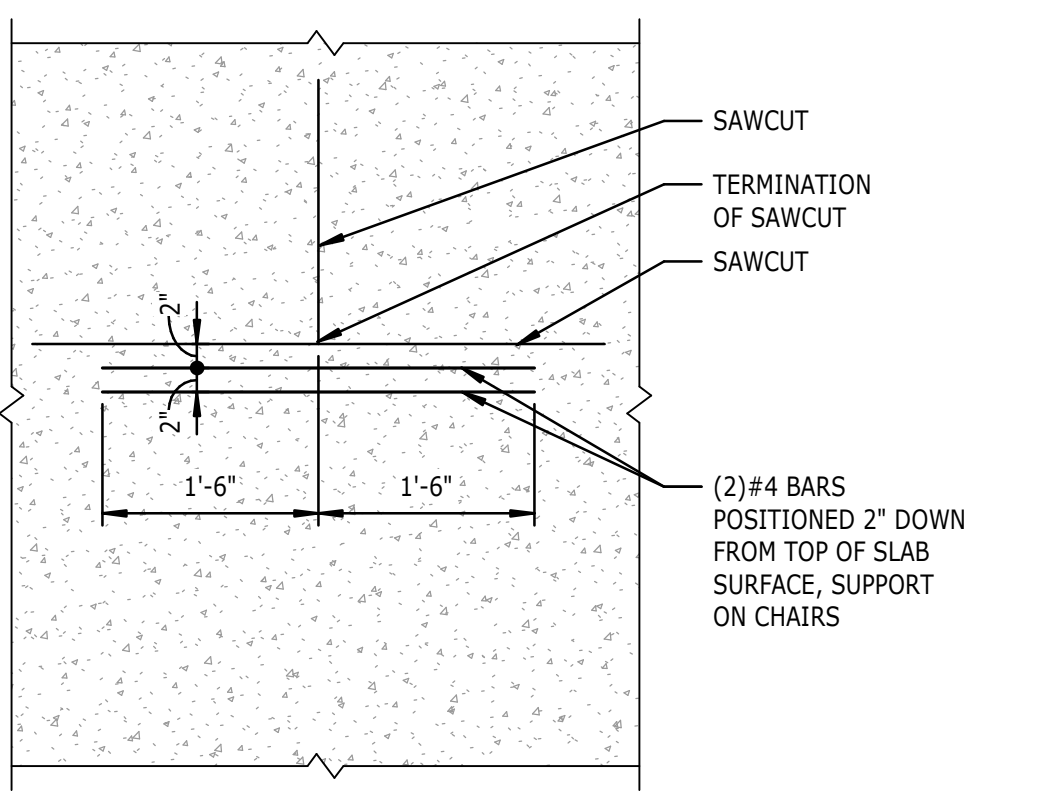


**18A PLAN VIEW**  
 S-301 1" = 1'-0"

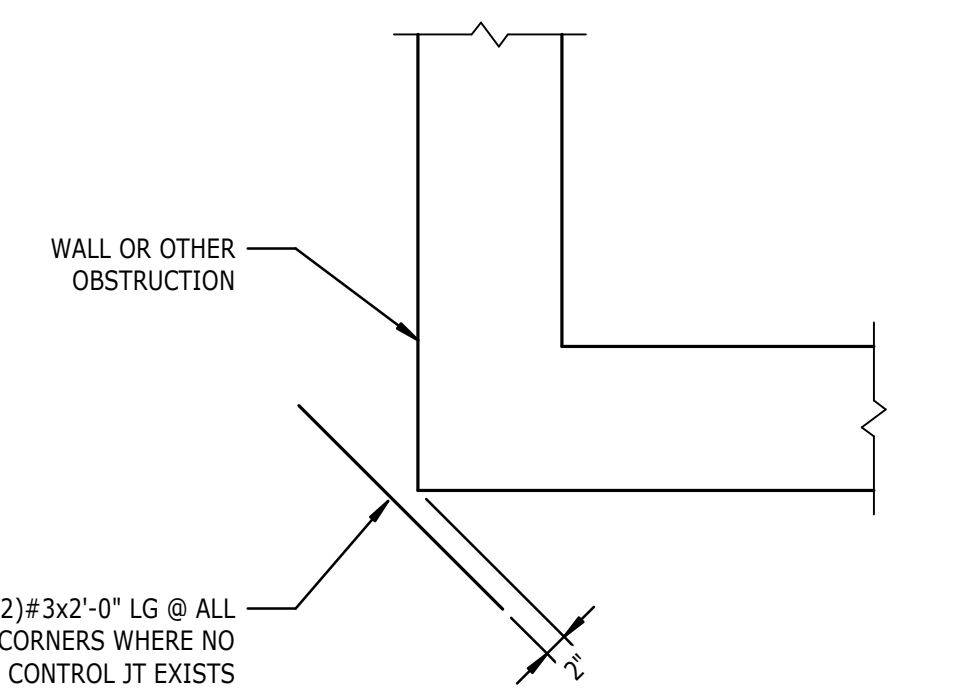


**18 SECTION**  
 S-301 3/4" = 1'-0"

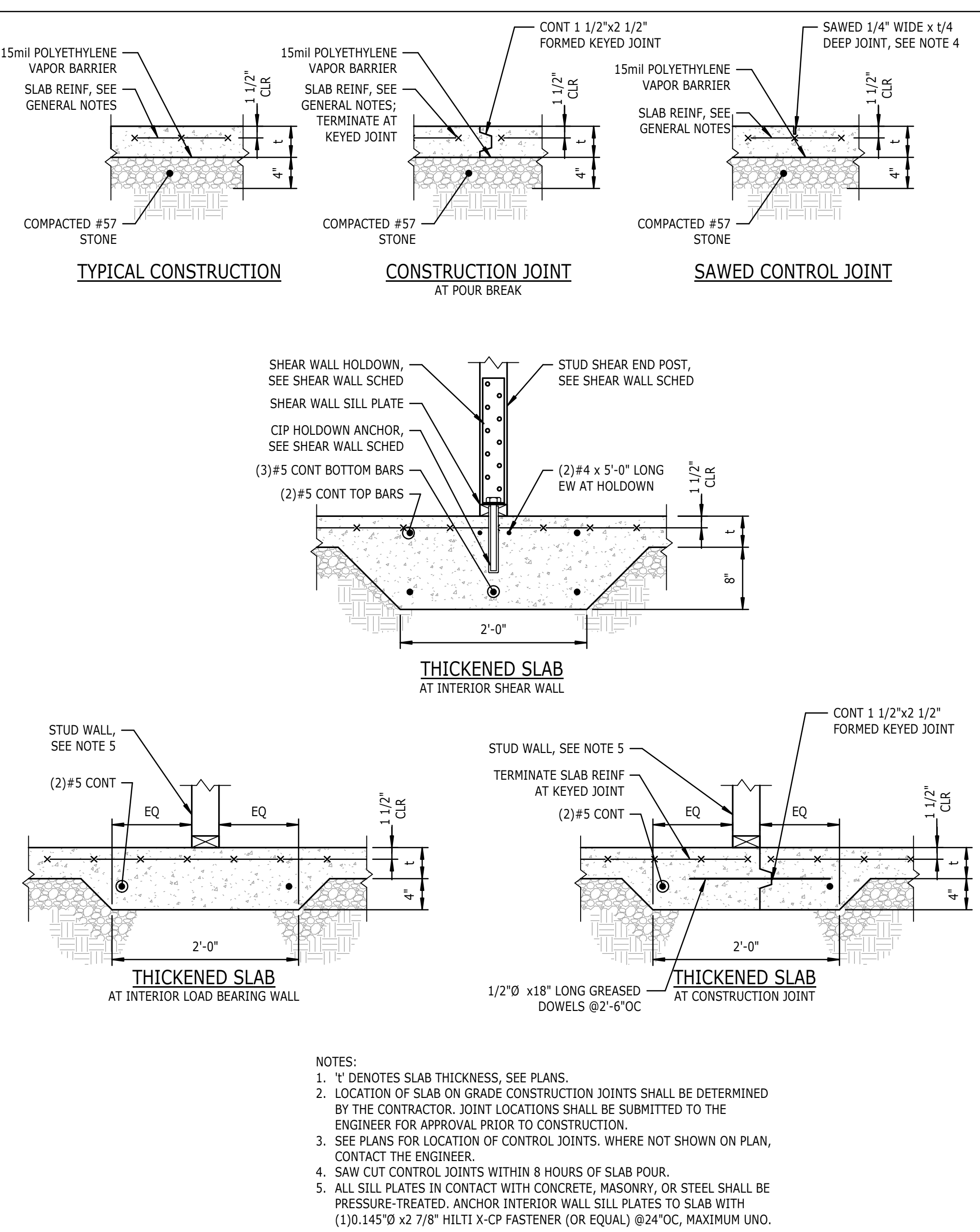
**14 TYPICAL AT CONTROL JOINT TERMINATION**  
 S-301 NTS



**10 TYPICAL SLAB AT CORNERS**  
 S-301 NTS

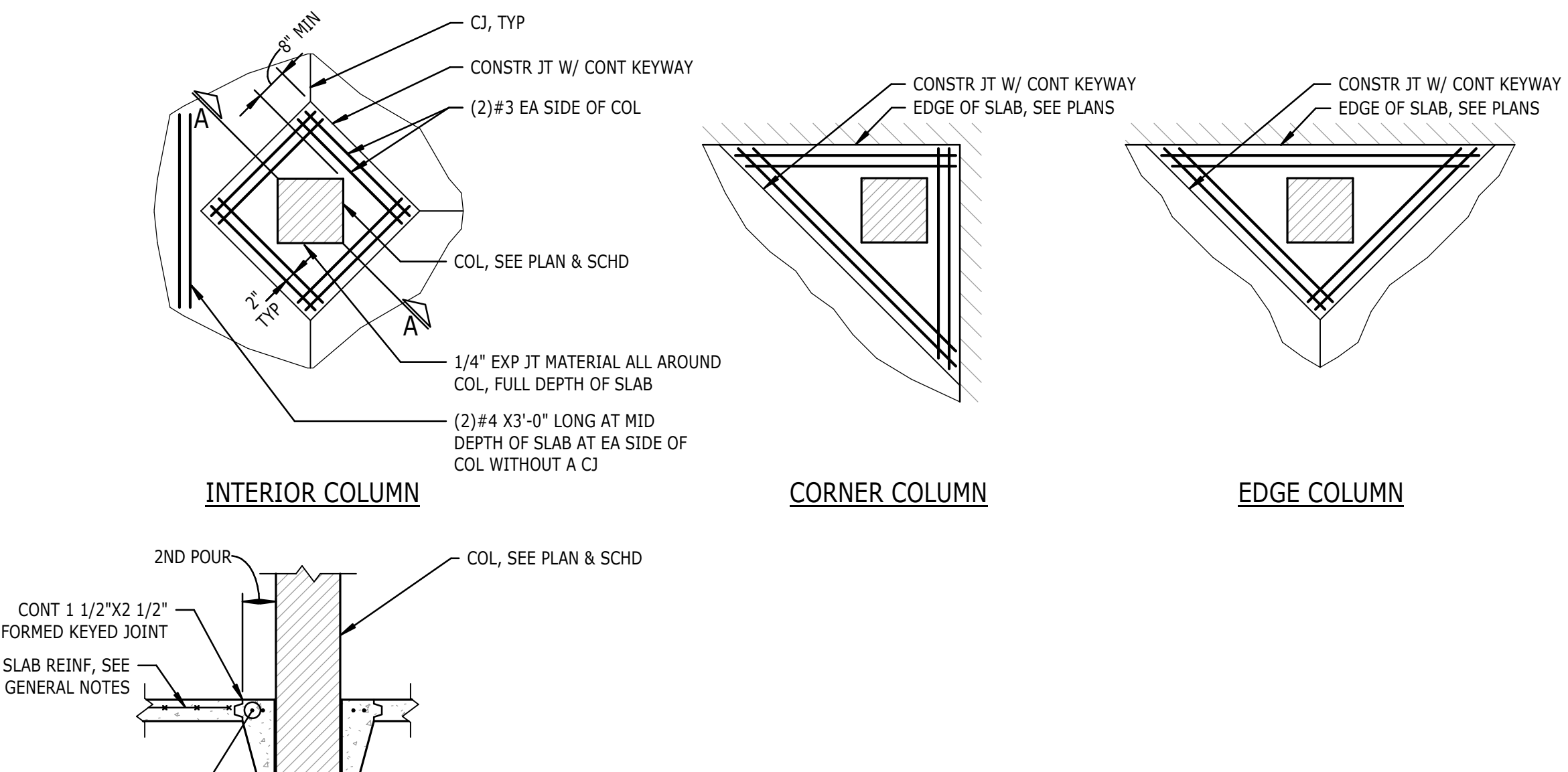


**1 TYPICAL SLAB ON GRADE**  
 S-301 NTS



- NOTES:  
 1. 't' DENOTES SLAB THICKNESS. SEE PLANS.  
 2. LOCATION OF SLAB ON GRADE CONSTRUCTION JOINTS SHALL BE DETERMINED BY THE CONTRACTOR. JOINT LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.  
 3. SEE PLANS FOR LOCATION OF CONTROL JOINTS. WHERE NOT SHOWN ON PLAN, CONTACT THE ENGINEER.  
 4. SAW CUT CONTROL JOINTS WITHIN 8 HOURS OF SLAB POUR.  
 5. ALL SILL PLATES IN CONTACT WITH CONCRETE, MASONRY, OR STEEL SHALL BE PRESSURE-TREATED. ANCHOR INTERIOR WALL SILL PLATES TO SLAB WITH (1)0.145"Ø x 2-7/8" HILTI X-CP FASTENER (OR EQUAL) @24"OC, MAXIMUM UNO.

**11 TYPICAL COLUMN ISOLATION JOINTS**  
 S-301 NTS

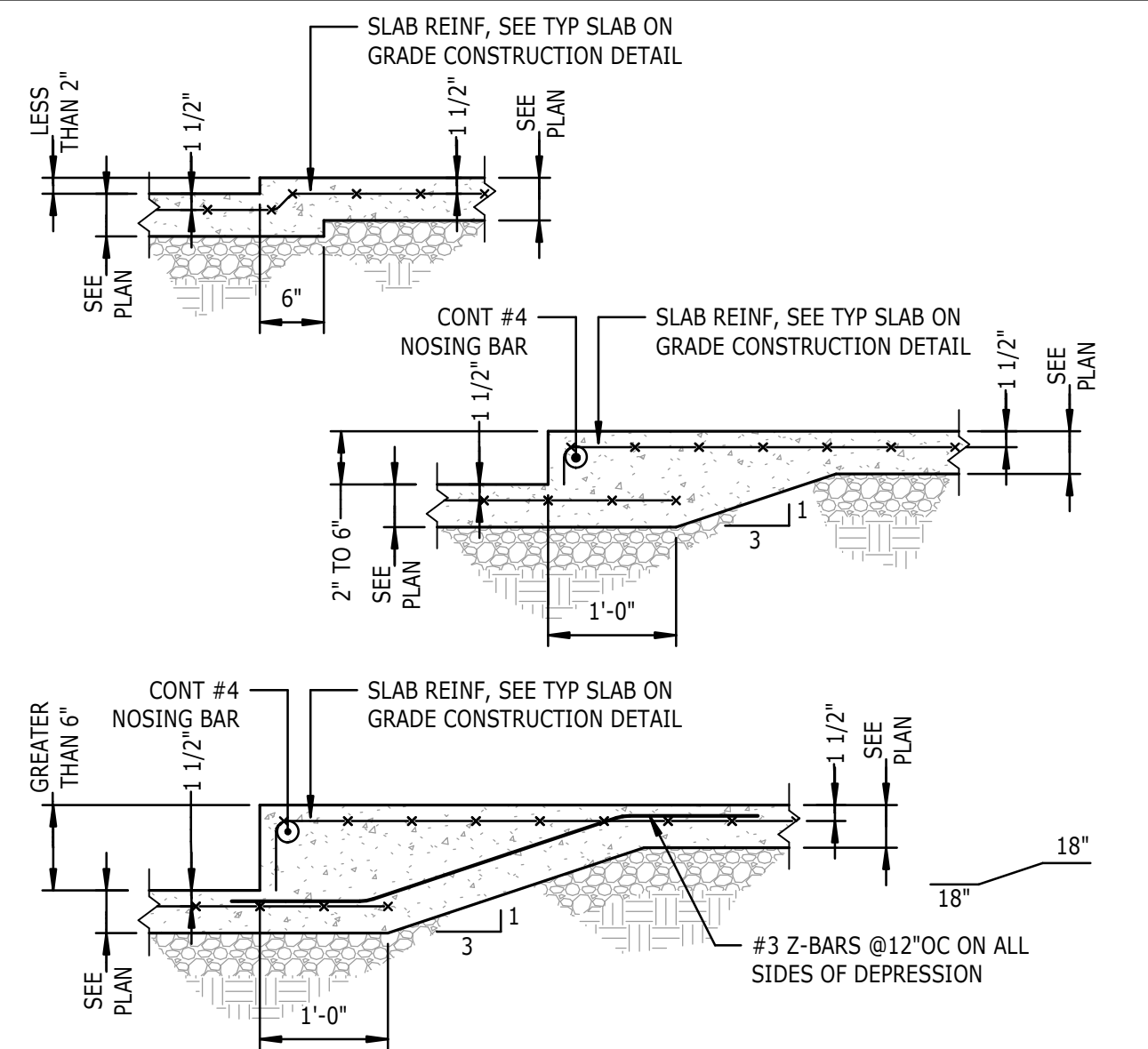


**7 CONCRETE REINFORCING SPLICE SCHEDULE**  
 S-301 NTS

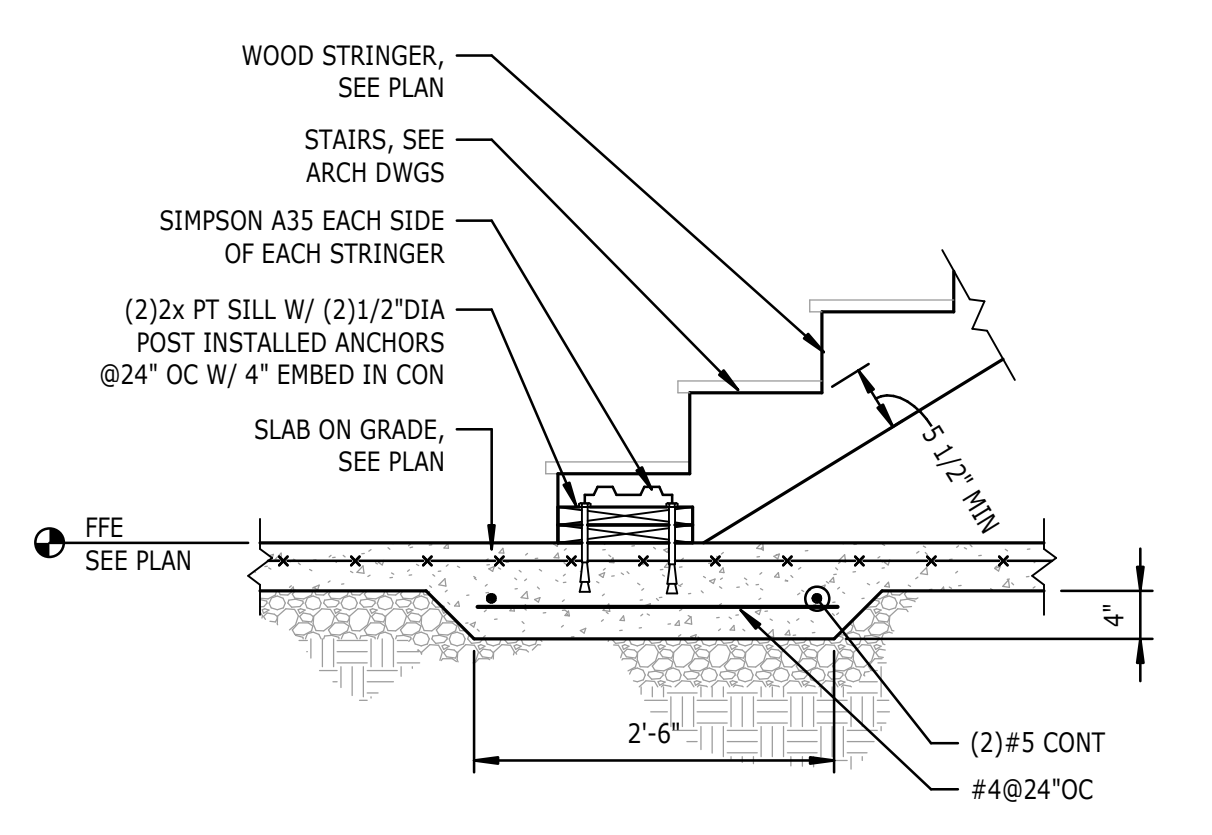
CONCRETE REINFORCING SPLICES			
BAR SIZE	f <sub>c</sub> = 3,000 PSI	f <sub>c</sub> = 4,000 PSI	f <sub>c</sub> = 5,000 PSI
#3	1'-10"	1'-7"	1'-5"
#4	2'-4"	2'-1"	1'-10"
#5	3'-0"	2'-7"	2'-4"
#6	3'-7"	3'-1"	2'-9"
#7	5'-2"	4'-6"	4'-1"
#8	5'-11"	5'-2"	4'-8"
#9	6'-6"	5'-10"	5'-3"
#10	7'-6"	6'-6"	5'-10"
#11	8'-4"	7'-3"	6'-6"

- NOTES:  
 1. FOR CLASS B LAP SPLICE, SPLICE LENGTH = 1.3 x DEVELOPMENT LENGTH.  
 2. APPLIES TO BOTTOM BARS ONLY (LESS THAN 12" OF FRESH CONCRETE BELOW BAR).  
 3. APPLIES WHERE THE CLEAR COVER IS GREATER THAN THE BAR DIAMETER.  
 4. WHEN MORE THAN 12" OF FRESH CONCRETE BELOW SPLICE, THEN INCREASE SPLICE TO 1.3 x SPLICE LENGTH.

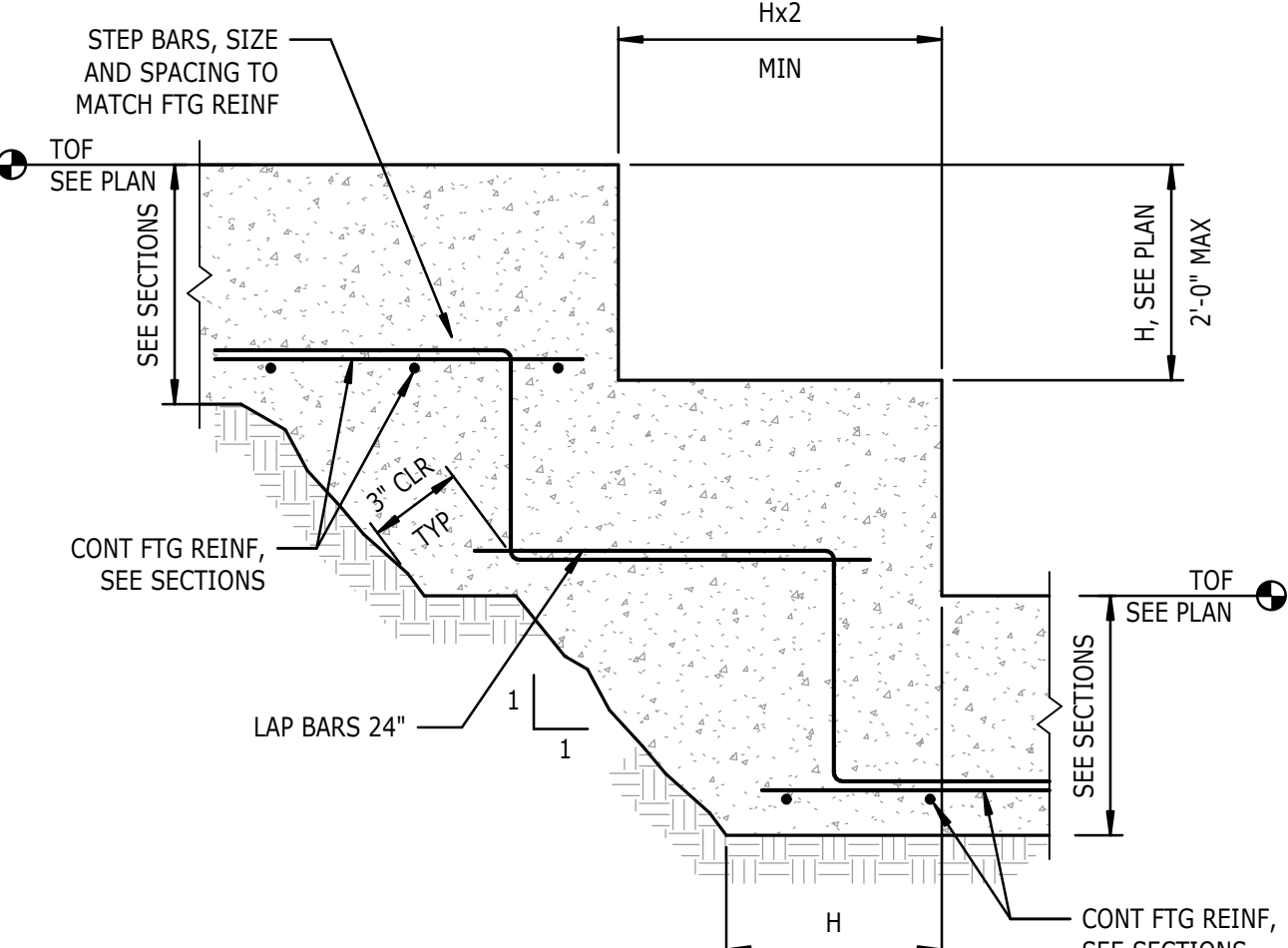
**3 TYPICAL DEPRESSION IN SLAB ON GRADE**  
 S-301 NTS



**16 TYPICAL THICKENED SLAB AT STAIR STRINGER**  
 S-301 NTS



**12 TYPICAL STEP IN WALL FOOTING**  
 S-301 NTS



**4 EMBEDMENT DOWEL LENGTH SCHEDULE**  
 S-301 NTS

CONCRETE REINFORCING DOWEL EMBEDMENT				
BAR SIZE	LEG DIM, "L"	EMBEDMENT, "D"		
		f <sub>c</sub> = 3,000 PSI	f <sub>c</sub> = 4,000 PSI	f <sub>c</sub> = 5,000 PSI
#3	6"	6"	6"	6"
#4	8"	8"	7"	6"
#5	10"	10"	9"	8"
#6	12"	12"	10"	9"
#7	14"	14"	12"	11"
#8	16"	16"	14"	12"
#9	19"	18"	15"	14"
#10	22"	20"	17"	15"
#11	24"	22"	19"	17"

- NOTES:  
 1. FOR CONCRETE STRENGTHS NOT PROVIDED, USE THE EMBEDMENT LENGTH FOR THE LOWER CONCRETE STRENGTHS AS SHOWN IN THE TABLE.  
 2. DOWEL LENGTHS BASED ON NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT, INCREASE DOWEL LENGTHS 10" BY 30%.  
 3. SIDE COVER ON BARS MUST BE GREATER THAN 2 1/2". END COVER ON 90° HOOKED BARS MUST BE GREATER THAN 2".  
 4. FOR EPOXY-COATED BARS, INCREASE THE DOWEL LENGTH "D" BY 20%.

