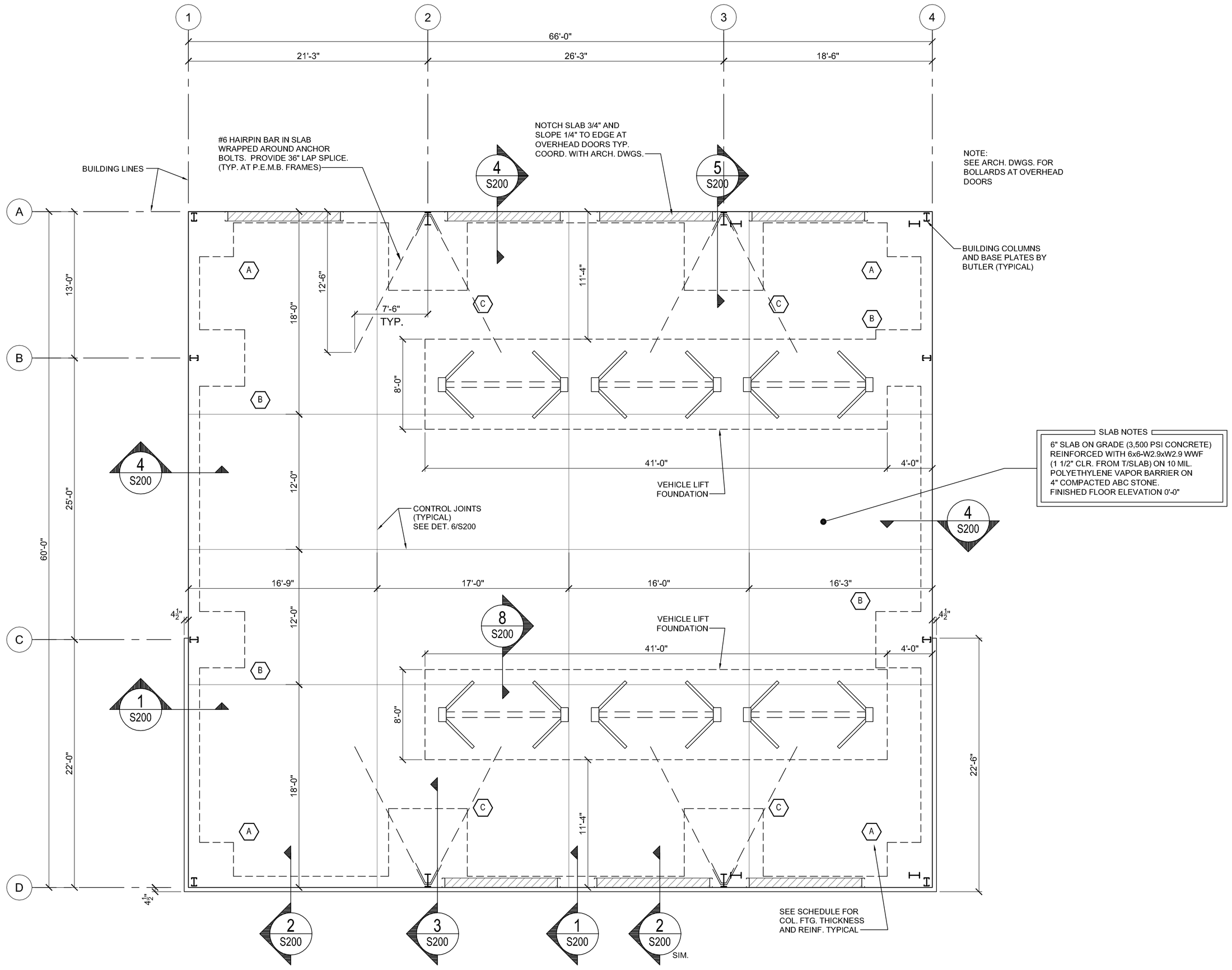

FOOTING SCHEDULE					
MARK ⬡	SIZE			REINFORCEMENT	
	N-S	E-W	THK.	N-S	E-W
A	4'-0"	4'-0"	1'-4"	#5 AT 12"	#5 AT 12"
B	5'-0"	5'-0"	1'-4"	#5 AT 12"	#5 AT 12"
C	7'-0"	7'-0"	2'-0"	#6 AT 12"	#6 AT 12"

1 S100 SLAB AND FOUNDATION PLAN

3/16" = 1'-0"

RUSTY LONG ARCHITECT EST. 2010

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NORTH CAROLINA PROFESSIONAL SEAL 25539 ENGINEER BRIAN M. ROSS
10·3·2019

SEAL NOT VALID UNLESS SIGNED AND DATED

ALL PRO PERFORMANCE
FISH DRIVE
ANGIER, NC

10/3/2019

ISSUED FOR CONSTRUCTION

FOUNDATION PLAN

S100

STRUCTURAL NOTES

I. GENERAL

1. DESIGN CODES

NORTH CAROLINA BUILDING CODE, 2018 EDITION
(AMENDED 2015 INTERNATIONAL BUILDING CODE)

ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
(ACI 318-14)

AISC MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN
NINTH EDITION

ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER
STRUCTURES

2. DESIGN LOADS

LIVE LOADS: FLOOR: 100 PSF
ROOF: 20 PSF

ULTIMATE DESIGN WIND SPEED: 115 MPH

GROUND SNOW LOAD: 15 PSF

SITE CLASS D
Ss = 0.173
S1 = 0.083

3. ALL ELEVATIONS ARE REFERENCED FROM FINISHED FLOOR ELEVATION OF 0'-0".

4. BUILDING DESIGN AND MAXIMUM FOUNDATION REACTIONS PROVIDED BY BUTLER MANUFACTURING (SEE PRELIMINARY REACTION REPORT DATED 15 AUGUST 2019). FOUNDATION DESIGN IS BASED ON MAXIMUM AND MINIMUM LOADING CONDITIONS PROVIDED BY THE BUILDING DESIGNER. FINAL SEALED FOUNDATION REACTIONS SHALL BE PROVIDED OR REVIEW PRIOR TO CONSTRUCTION.

5. SEE BUILDING DRAWINGS FOR COLUMN AND BASE PLATE SIZES AND LOCATIONS.

6. ANCHOR BOLT DESIGN PROVIDED BY BUILDING DESIGNER. ANCHOR BOLT EMBEDMENT ONLY IS PROVIDED ON DRAWING S2.

7. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT CERTIFY ARCHITECTURAL LAYOUT OR DIMENSIONAL ACCURACY.

8. ROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR CHANGES OR MODIFICATIONS MADE TO THESE DRAWINGS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THESE DRAWINGS.

II. CONCRETE

1. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL HAVE THE FOLLOWING STRENGTH AND SLUMP REQUIREMENTS:
3,500 PSI 28-DAY COMPRESSIVE STRENGTH, MAX. 5" SLUMP.

2. ALL CONCRETE SHALL BE MOIST CURED PER ACI 301 OR CURED WITH AN APPROVED CURING COMPOUND. CONTRACTOR SHALL VERIFY THAT THE CURING COMPOUND IS COMPATIBLE WITH FLOOR COVERING ADHESIVES, COATINGS, OR TOPPINGS TO BE USED. CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS.

3. UNLESS OTHERWISE NOTED, ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL, CONFORMING TO ASTM A-615, GRADE 60, DEFORMED.

4. UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. (ACI 315)

5. ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES PER ACI 318-08, UNLESS OTHERWISE SHOWN.

6. ANCHOR BOLTS TO BE ASTM A36 OR A307.

7. CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER TRADES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS.

8. ALL SPREAD FOOTINGS BEARING ON NATIVE SOIL OR STRUCTURAL FILL ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 2,500 PSF. A GEOTECHNICAL REPRESENTATIVE SHALL INSPECT ALL FOOTING EXCAVATIONS TO CONFIRM ALLOWABLE BEARING PRESSURES

9. PROVIDE TWO (2) #5 x 4'-0" LONG DIAGONAL BARS IN TOP FACE OF ALL SLABS (1" CLEAR) AT ALL RE-ENTRANT CORNERS. SEE PLAN FOR LOCATIONS.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RELOCATING AS REQUIRED ALL SERVICE AND UTILITY LINES IN VICINITY OF THE WORK SITE.

11. CONTRACTOR SHALL VERIFY ALL SIZES AND LOCATIONS OF ALL MECHANICAL AND ELECTRICAL OPENINGS AND EQUIPMENT PADS WITH THE MECHANICAL AND ELECTRICAL DETAILS AND SHOP DRAWINGS BY OTHERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL OPENINGS AND SLEEVES FOR PROPER DISTRIBUTION FOR ALL UTILITIES THROUGHOUT THE BUILDING.

12. ALL DOWELS WHICH ARE TO BE DRILLED AND GROUTED INTO EXISTING CONCRETE SHALL BE DONE WITH AN EPOXY GROUT. DRILL HOLE WITH DIAMETER 1/8" LARGER THAN DOWEL OR AS RECOMMENDED BY GROUT SUPPLIER. USE HIT-RE 500 V3 BY HILTI OR APPROVED EQUAL.

III. MASONRY

1. MASONRY CONSTRUCTION SHALL COMPLY WITH ACI 530.1-02/ASCE 6-02: "SPECIFICATION FOR MASONRY STRUCTURES."

2. ASSUMED MASONRY PROPERTIES: UNIT COMPRESSIVE STRENGTH 1900 PSI, TYPE S MORTAR, PARTIAL GROUT, RUNNING BOND.

3. PROVIDE 9 GA. LADDER-TYPE JOINT REINFORCEMENT AT 16" O.C.

IV. LIGHT GAUGE STEEL FRAMING

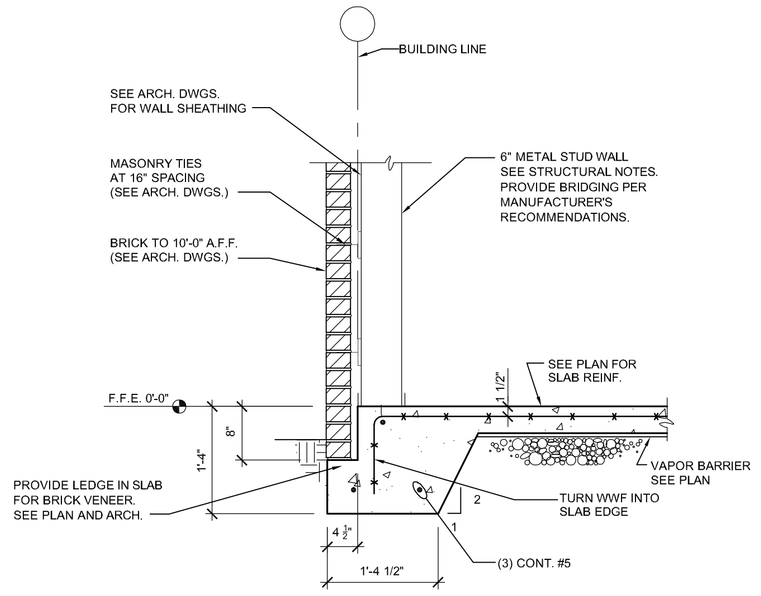
1. INSTALLATION OF LIGHT GAUGE STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. WALL STUDS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
16" MAX. SPACING
STUD DEPTH = 6" (SEE ARCH. DWGS.)
FLANGE WIDTH = 1 5/8" MIN.
18 GAUGE STEEL MIN.

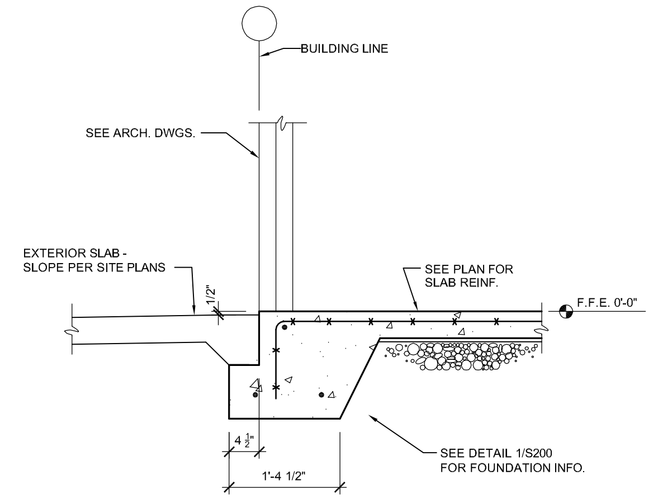
3. PROVIDE MIN. 18 GA. BOTTOM TRACK AND ANCHOR TO SLAB WITH POWDER ACTUATED FASTENERS AT 16" O.C.. USE HILTI DS FASTENERS WITH 0.177" SHANK DIAMETER AND 1 7/16" EMBEDMENT. WELD STUDS TO TRACK EACH SIDE -or- PROVIDE (2) NO. 10 SCREWS (ONE EACH SIDE OF TRACK).

4. ATTACH STUDS TO BUILDING STRUCTURE WITH CLIP ANGLE AND SCREW CONNECTION DETAILS PROVIDED BY SUPPLIER. CONNECTION OF EACH WALL STUD TO TO BUILDING STRUCTURE SHALL CONSIST OF A MINIMUM OF (3) No. 12 SCREWS.

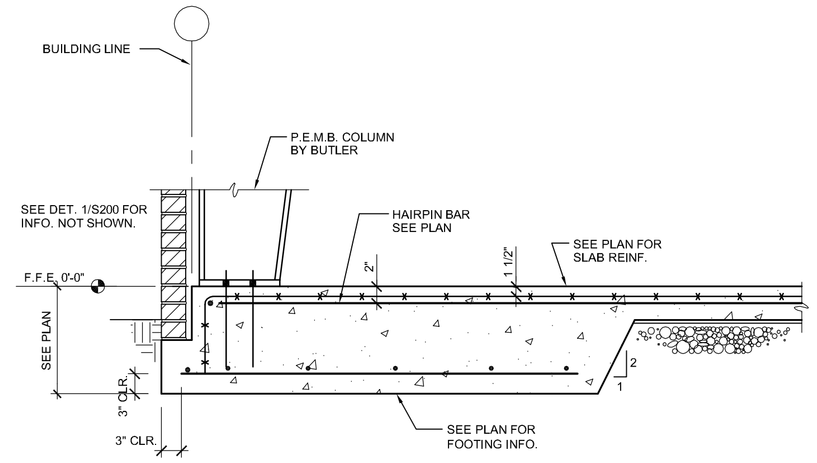
6. DETAILED SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



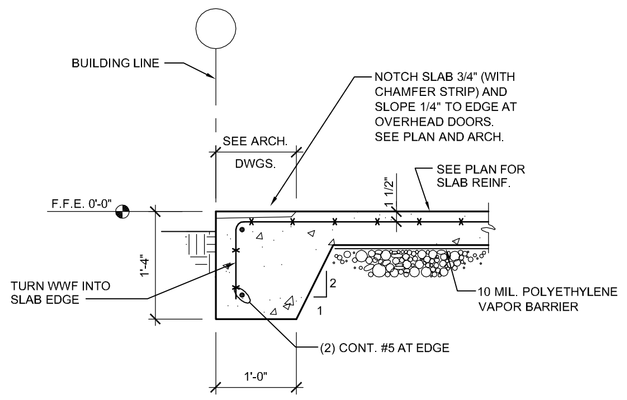
1 S200 DETAIL - SLAB EDGE
3/4" = 1'-0" METAL STUD WALLS WITH VENEER



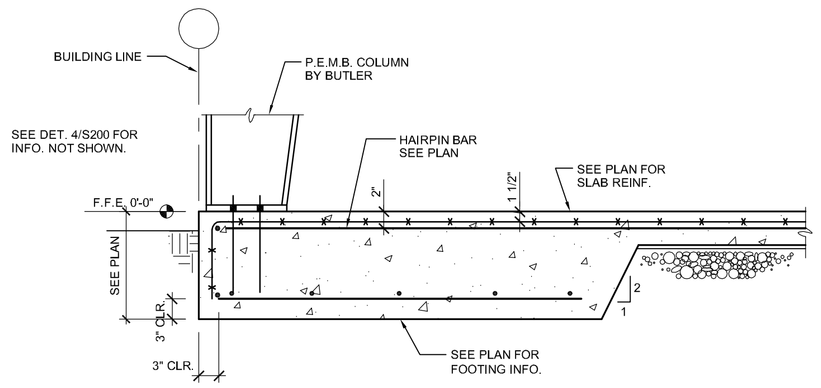
2 S200 DETAIL - SLAB EDGE STOREFRONT
3/4" = 1'-0" SIM. SECTION AT OVERHEAD DOORS



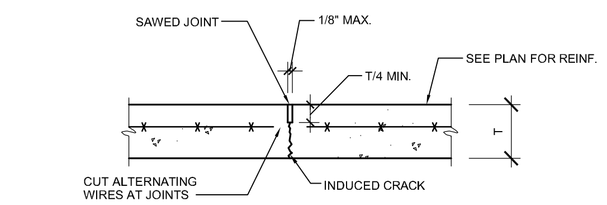
3 S200 SECTION - COLUMN FOOTING
3/4" = 1'-0" METAL STUD WALLS WITH VENEER



4 S200 DETAIL - SLAB EDGE
3/4" = 1'-0"

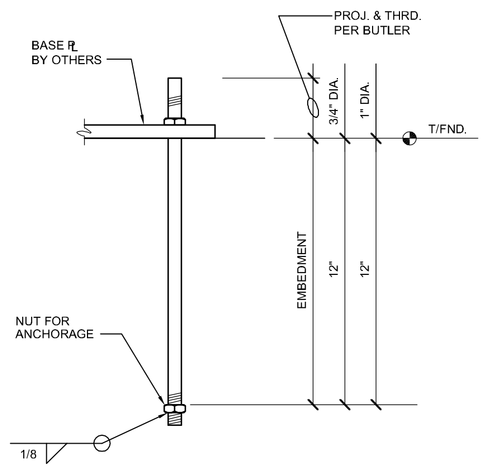


5 S200 SECTION - COLUMN FOOTING
3/4" = 1'-0"

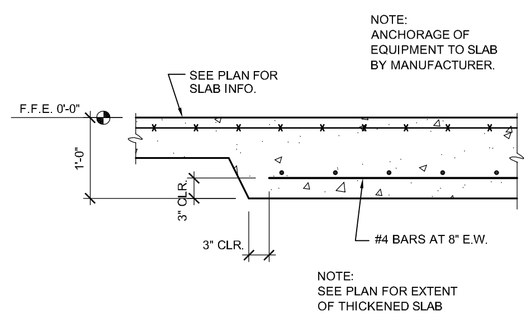


NOTES: 1. SAW JOINTS AS SOON AS CONCRETE WILL NOT RAVEL UNDER SAW BLADE.
2. ADD 20" LONG SMOOTH DOWELS AT ALL CONSTRUCTION JOINTS (APPLICABLE IF SLAB IS POURED OVER MULTIPLE DAYS).

6 S200 DETAIL - TYP. SLAB CONTROL JOINT
1" = 1'-0"



7 S200 TYP. ANCHOR BOLT DETAIL
NO SCALE



8 S200 SECTION - VEHICLE LIFT FOUNDATION
3/4" = 1'-0"

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STRUCTURAL NOTES & DETAILS

S200