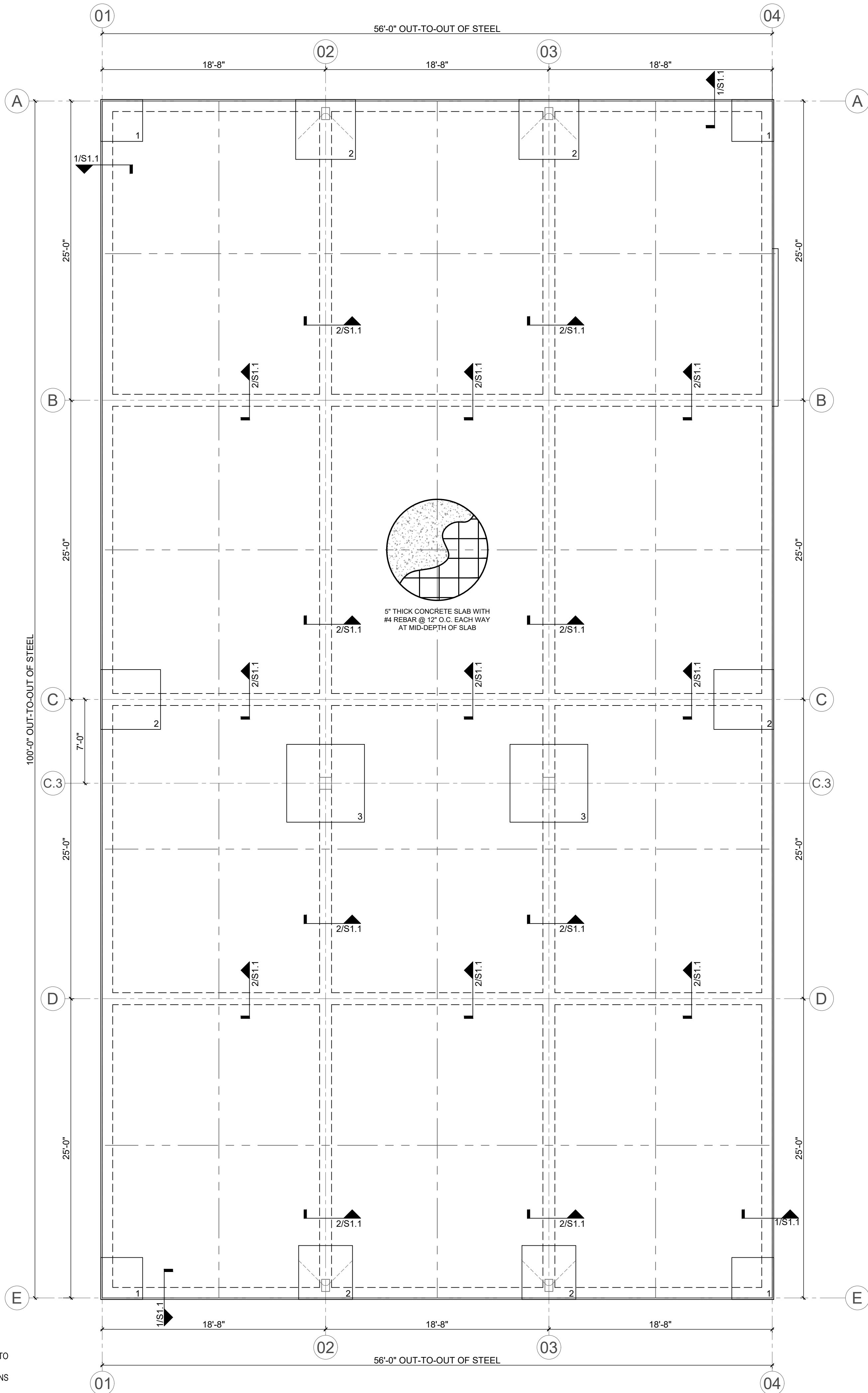


PLAN NOTES

1. MIN. 5" THICK CONCRETE SLAB w/ #4 BARS @ 12" O.C. MID-DEPTH OF SLAB.
2. MAX 5' SLUMP UPON DELIVERY.
3. MIN. 3000 PSI CONCRETE @ 28 DAYS.
4. CONCRETE SHALL BE CURED FOR AT LEAST 7 DAYS PRIOR TO CONSTRUCTION. NO WALLS SHALL BE ERECTED DURING THAT SPAN.
5. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS PRIOR TO FORMING.

FOUNDATION PLAN

SCALE 3/32"=1'



DESIGN CRITERIA

1. DESIGN LOADS, STRUCTURAL ANALYSIS AND PREPARATIONS OF STRUCTURAL MEMBERS ARE BASED ON THE FOLLOWING:

- CODE: 2018 IBC
- WIND DESIGN: ASCE 07 - 16
- ROOF LIVE LOAD: 20 PSF
- ROOF DEAD LOAD: 10 PSF

THE SPECIFICATION PRESENTED ON THESE PLANS ARE PRELIMINARY. ONCE FINAL, SEALED PLANS ARE AVAILABLE FOR THE PROPOSED PAVILION STRUCTURE. A REVIEW OF THE SEALED PLANS MUST BE MADE TO MAKE SURE THAT THESE SPECIFICATIONS ARE IN ACCORDANCE WITH THE THE APPLIED LOADINGS AND DESIGN CRITERIA PRESENTED ON THE SEALED PLANS.

CAST-IN-PLACE CONCRETE

1. VERIFY ALL DIMENSIONS. COORDINATE WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND OR ENGINEER OF ANY DISCREPANCIES.
2. ALL CONCRETE SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTED SPECIFICATION, ACI #301 AND ACI #318, LATEST EDITION.
3. THE MINIMUM 28 DAYS CYLINDER STRENGTH SHALL BE AS FOLLOWS:

SYSTEM	STRENGTH AT 28 DAYS	MAXIMUM SLUMP	MAXIMUM AGGREGATE
SLAB-ON-GRADE	3000 PSI	5"	1-1/2"
4. ALL CONDUIT OR PLUMBING LINES IN SLAB SHALL BE PLACED BELOW SLAB REINFORCING. ALL CONDUIT TO BE NO GREATER THAN 1" DIAMETER AND TO BE PLACED IN CENTER OF SLAB. NO PLUMBING LINES GRATER THAN 1" ALLOWED IN THE SLAB.
5. ALL OPENINGS IN SLAB (FOR PIPING, DRAINS, ETC.) SHALL BE SEALED WITH 1/2 SEALANT '2A'(SELF-LEVELING 2-PART POLYURETHANE).
6. THE VAPOR RETARDANT BELOW ALL SLAB AREAS SHALL BE 10 MIL POLYETHYLENE WITH ALL JOINTS LAPPED 12" CONTINUOUS AND SEALED. DROP VAPOR BARRIER DOWN THE SIDES OF ALL BEAM TRENCHES. DO NOT PLACE VAPOR BARRIER ACROSS TRENCH BOTTOM.
7. CURING COMPOUND SHALL BE PLACED WITHIN FOUR (4) HOURS AFTER CONCRETE HAS BEEN PLACED. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES F AND IN A MOIST CONDITION FOR AT LEAST THE FIRST SEVEN (7) DAYS AFTER PLACEMENT.
8. CONCRETE COVER FOR REINFORCING AS INDICATED.
9. ANCHOR BOLTS, DOWELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO PLACING CONCRETE.
10. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL MOLDS, GROOVES, REGLETS, ORNAMENTAL CLIPS, PIPES, CONDUITS, INSERTS, ETC. TO BE CAST IN CONCRETE. PROVIDE OVERSIZED SLEEVES FOR PLUMBING AND ELECTRICAL CONDUITS AND PIPES. NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE, FOOTINGS, OR SLAB UNLESS SPECIFICALLY DETAILED IN THESE PLANS, OR AS DIRECTED BY THE ENGINEER.
11. UTILITIES THAT PROJECT THROUGH SLAB FLOORS SHOULD BE DESIGNED WITH EITHER SOME DEGREE OF FLEXIBILITY OR WITH SLEEVES IN ORDER TO PREVENT DAMAGE TO THE LINES SHOULD VERTICAL MOVEMENT OCCUR.
12. CONCRETE TO BE CURED IN ACCORDANCE WITH ACI RECOMMENDATIONS. PROPOSED METHOD OF CURING TO BE COORDINATED WITH ENGINEER PRIOR TO CONCRETE PLACEMENT.

REINFORCING STEEL

1. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, AND ALL ACCESSORIES UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE". ACI #315 LATEST EDITION.
2. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL AND SHALL CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS.
3. PROVIDE CORNER BARS TOP AND BOTTOM AT ALL BEAM CORNERS AND DEAD END BEAM INTERSECTIONS. BARS TO EQUAL SIZE AND QUANTITY OF THE NOTED BEAM STEEL. BARS SHALL LAP BEAM REINFORCEMENT 40 BAR DIAMETERS.
4. BARS DETAILED AS CONTINUOUS SHALL BE LAPPED 40 BAR DIAMETERS AT SPLICES.
5. EXTEND THE SLAB REINFORCING STEEL, PERPENDICULAR TO THE BEAM, TO THE TOP OUTSIDE REINFORCING BAR OF PERIMETER BEAMS. START THE SLAB REINFORCING STEEL, PARALLEL TO THE BEAM, NOT MORE THAN 6" FROM THE TOP INSIDE REINFORCING BAR OF PERIMETER BEAMS.
6. PROVIDE #4 "Z" BARS AT 12" ON CENTER WHERE THE SLAB STEPS DOWN MORE THAN 3". THE "Z" BARS AT 12" ON CENTER WHERE THE SLAB STEPS DOWN MORE THAN 3". THE "Z" BARS SHALL LAP THE MAIN SLAB REINFORCING STEEL 40 BAR DIAMETERS.

FOOTING SCHEDULE				
TYPE	DEPTH (FT)	SIZE (FT)	REINFORCEMENT	DETAIL
1	3.0	3.5 x 3.5	#5 @ 6" O.C. E.W. BOT.	4/SD1
2	3.0	4.5 x 4.5	#5 @ 6" O.C. E.W. BOT.	
3	3.0	6.5 x 6.5	#5 @ 6" O.C. E.W. BOT.	

GENERAL NOTES:

1. THE FOLLOWING SPECIFICATIONS ARE AN OUTLINE OF MINIMUM MATERIAL REQUIREMENTS AND THEIR APPLICATION. MANUFACTURER SPECIFICATION AND LOCAL CODE REQUIREMENTS, WHEN IN EXCESS OF MINIMUM SPECIFICATION, SHALL CONTROL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND SUBMIT ALL SHOP DRAWINGS AND REPORT ALL DOCUMENT DISCREPANCIES TO THE STRUCTURAL ENGINEER PRIOR TO FABRICATION OR ERECTION.
2. AT CONSTRUCTION ISSUE, THESE DRAWINGS REPRESENT STRUCTURAL COMPONENTS IN THEIR FINAL AND FINISHED STATE. CONSTRUCTION PROCEDURES, BRACING, METHODS, SAFETY PRECAUTIONS OR MECHANICAL REQUIREMENTS USED TO ERECT THEM ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR SUBCONTRACTOR DOING THE WORK.

GEOTECHNICAL ENGINEERING REPORT

THESE PLANS AND GENERAL NOTES HAVE BEEN PREPARED WITH THE DESIGN RECOMMENDATIONS PRESENTED IN ATLAS ENGINEERING CONSULTANTS GEOTECHNICAL ENGINEERING REPORT NO. GEO22-041. THE FOLLOWING FOUNDATION DESIGN CRITERIA WAS USED IN THE FOUNDATION DESIGN :

MINIMUM GRADE BEAM WIDTH:	12 INCHES
MINIMUM WIDENED SECTION WIDTH:	24 INCHES
ALLOWABLE SOIL BEARING CAPACITY:	1,500 PSF (CONTINUOUS FOOTING) 1,800 PSF (SPREAD FOOTING)

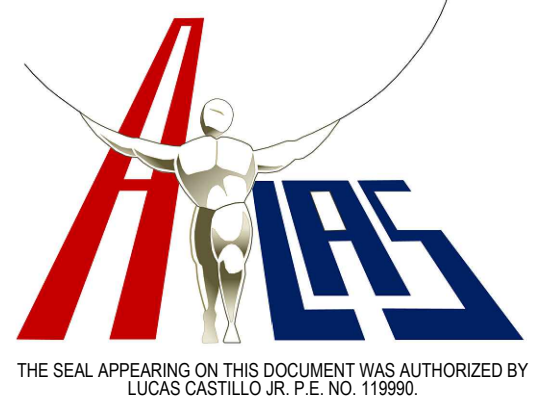
EXCAVATIONS AND BACKFILL REQUIREMENTS

THE FOLLOWING SITE PREPARATION IS REQUIRED PRIOR TO CONSTRUCTION.

1. IN ORDER TO EXPOSE CLEAN SUBGRADE SOILS, EXCAVATE TO A DEPTH OF AT LEAST 2.5 FEET AND REMOVE ALL VEGETATION AND DELETERIOUS MATERIALS FROM THE SURFACE. THE EXCAVATION SHOULD EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE PERIMETER OF THE BUILDING. POSITIVE DRAINAGE FROM THE STRUCTURE SHOULD BE PROVIDED.
2. THE EXPOSED SUBGRADE SOILS SHOULD BE COMPACTED TO 98 PERCENT OF THE STANDARD PROCTOR (ASTM D698) FOR A DEPTH OF AT LEAST 8 INCHES BELOW THE EXPOSED SURFACE. THE MOISTURE CONTENT OF THE COMPACTED SUBGRADE SOILS SHOULD BE WITHIN THE RANGE OF OPTIMUM TO 4 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT.
3. AFTER SUBGRADE PREPARATION AND OBSERVATION HAVE BEEN COMPLETED, A MINIMUM OF 3.0 FEET OF SELECT FILL, MEETING THE SPECIFICATIONS PRESENTED BELOW, SHOULD BE PLACED BACK ON TOP OF THE PREPARED SUBGRADE SOILS. THE SOILS SHOULD BE PLACED IN MAXIMUM 8-INCH LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
4. THE MOISTURE CONTENT, AS DETERMINED BY ASTM D698, SHOULD BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE. EACH LIFT OF COMPACTED FILL SHOULD BE TESTED BY A TESTING LABORATORY PRIOR TO PLACEMENT OF SUBSEQUENT LIFTS.
5. PROPERLY COMPACTED AND TESTED SELECT FILL SHOULD BE USED TO ACCOMMODATE RAISE IN GRADE TO ACHIEVE THE DESIRED FINISHED FLOOR ELEVATION. SELECT FILL SHOULD HAVE A MAXIMUM LIQUID LIMIT OF 40 PERCENT, A PLASTICITY INDEX BETWEEN 7 AND 18 PERCENT AND A MAXIMUM PARTICLE SIZE NOT EXCEEDING 4 INCHES OR ONE-HALF THE LOOSE LIFT THICKNESS, WHICHEVER IS SMALLER.
6. SITE SHALL BE GRADED SO THAT WATER DOES NOT POND WITHIN 10 FEET OF THE PERIMETER FOUNDATION BEAM DURING OR AFTER CONSTRUCTION. THE SLOPE OF THE GROUND SURFACE AWAY FROM THE STRUCTURE SHOULD BE A MINIMUM OF 5% FOR A DISTANCE OF AT LEAST 10 FEET. ELEVATION OF GROUND SURFACE ADJACENT TO THE FOUNDATION SHOULD BE AT LEAST 6 INCHES BELOW FINISH FLOOR.
7. FOUNDATION CONCRETE SHALL NOT BE PLACED ON SELECT FILL SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR WATER SEEPAGE. IF BEARING SOILS ARE SOFTENED BY WATER INTRUSION, OR BY DESICCATION, THE UNSUITABLE SOILS SHALL BE REMOVED FROM THE FOUNDATION EXCAVATION AND BE REPLACED WITH PROPERLY COMPACTED SELECT FILL PRIOR TO PLACEMENT OF FOUNDATION CONCRETE. ALL SOIL REMOVAL AND REPLACEMENT COSTS, INCLUDING ASSOCIATED COSTS TO REMOVE AND REINSTALL REINFORCEMENT AND VAPOR RETARDER MATERIALS, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. DEPTH OF SOIL REMOVAL AND RECOMPACTION REQUIREMENTS SHALL BE COORDINATED WITH THE GEOTECHNICAL ENGINEER.

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THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY  
LUCAS CASTILLO JR. P.E. NO. 119950.

PROJECT:

914 WEST SHARM DRIVE  
PHARR, TEXAS

PROJECT NO.: ST24-016

DATE: 02/02/2024

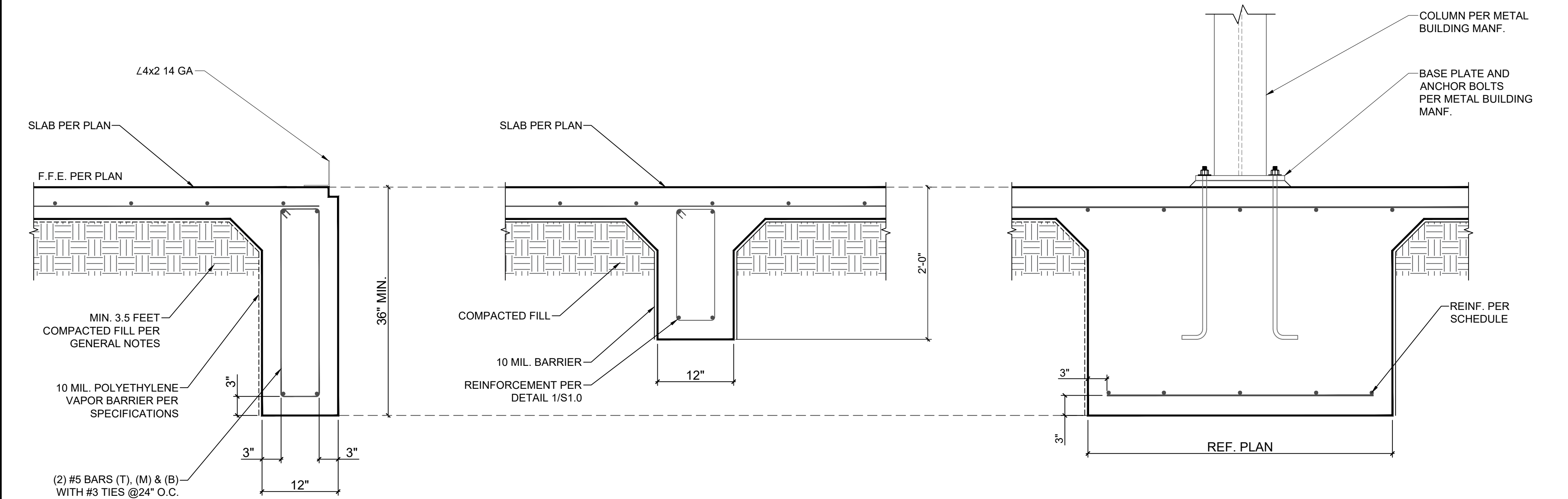
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REVISION:

FOUNDATION PLAN

S1.0

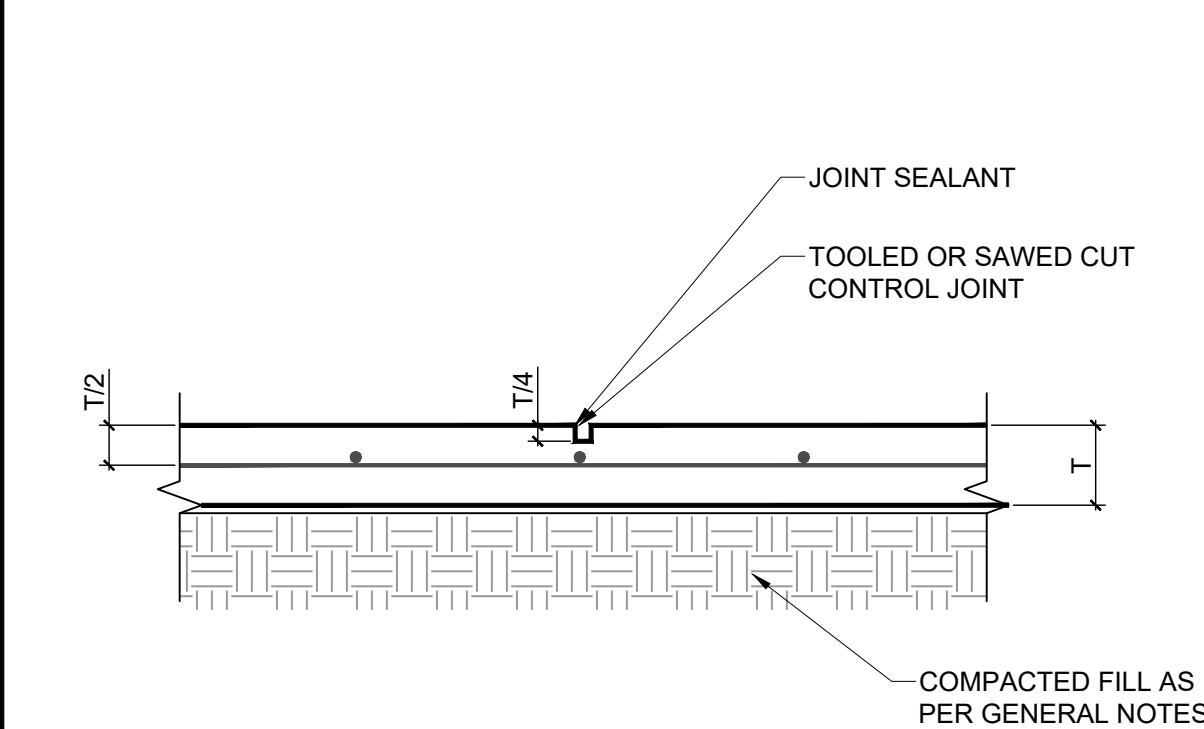




1. EXTERIOR GRADE BEAM

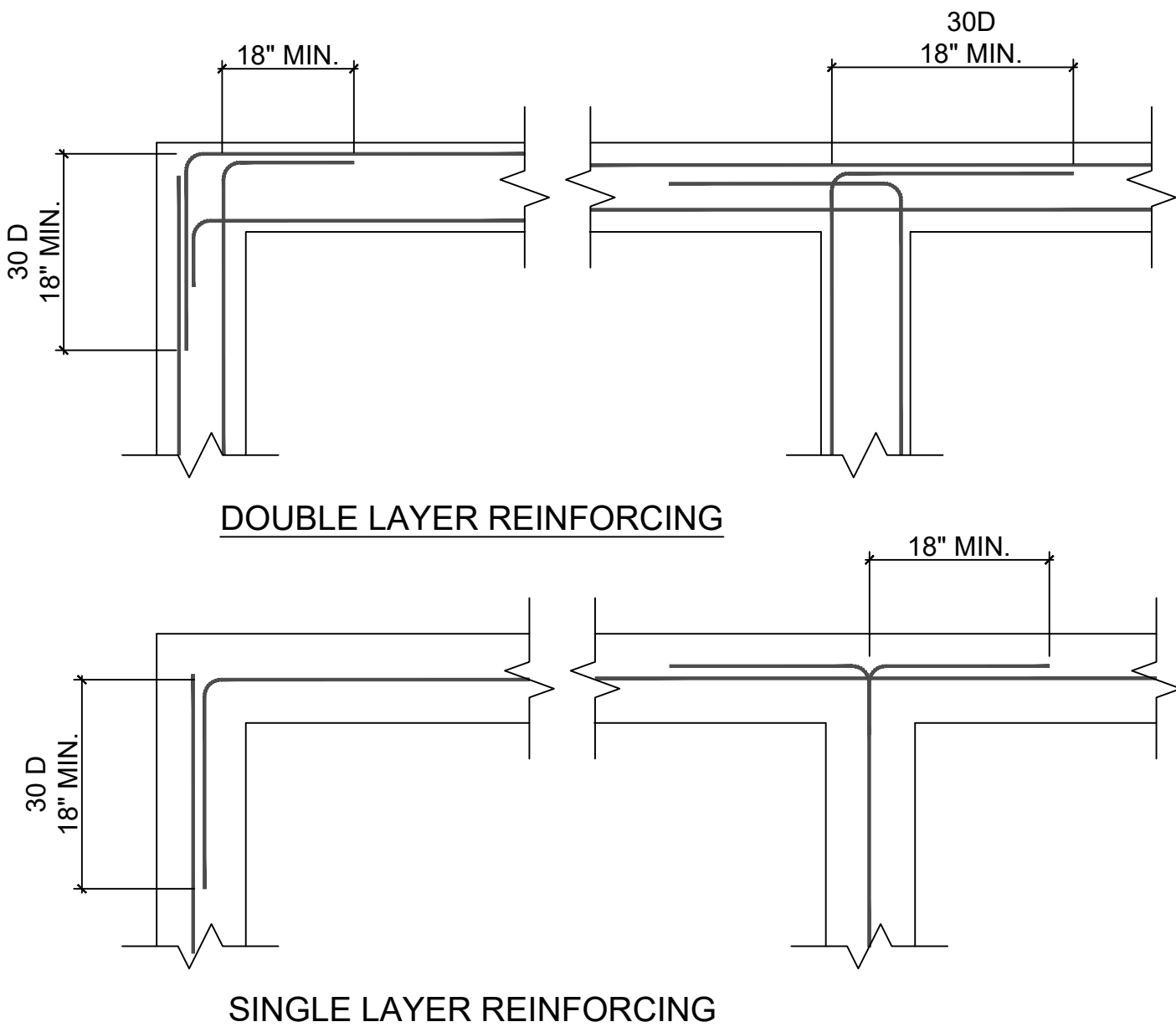
2. INTERIOR GRADE BEAM

4. FOOTING AT COLUMN TYP.

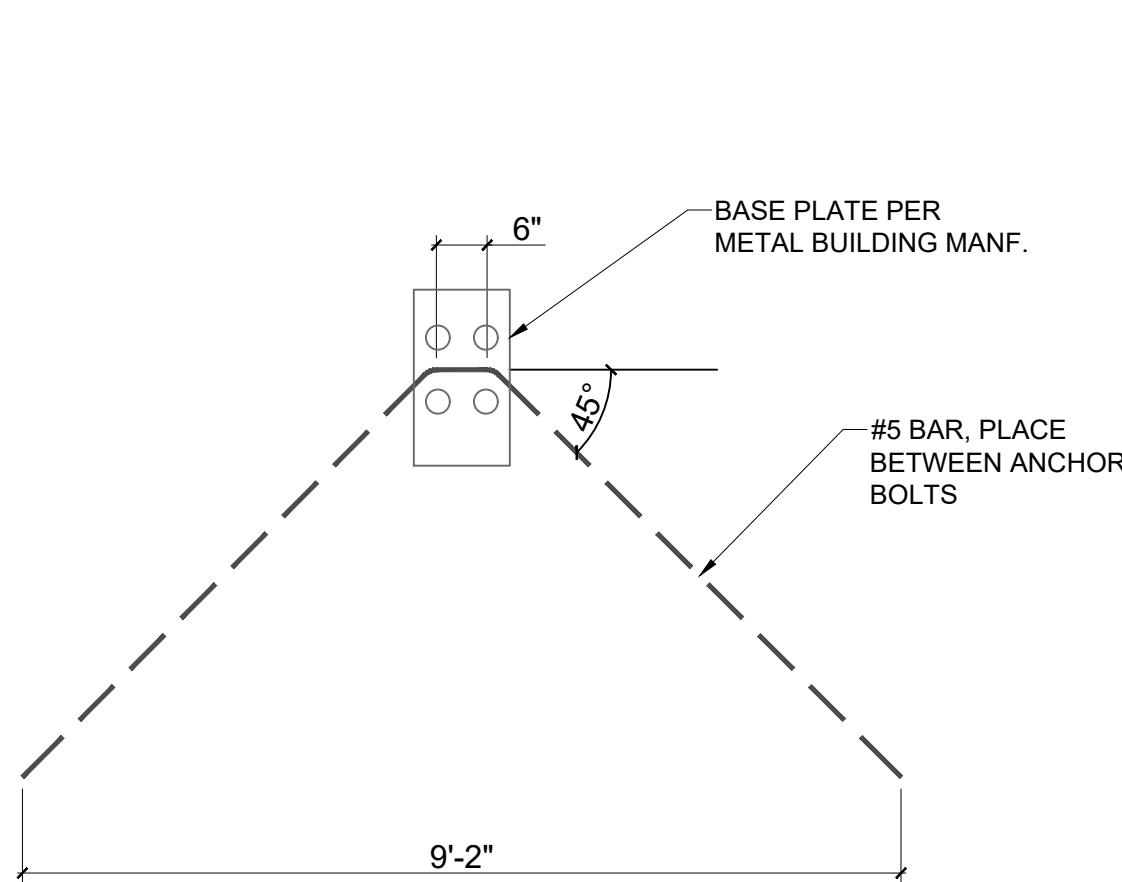


- NOTES
- SPACING SHALL NOT EXCEED 25 FEET.
  - JOINT PATTERN SHOULD BE NEARLY SQUARE..
  - SAW CUT SHALL BE MADE WITHIN 4 HOURS OF PLACEMENT (OR AS SOON AS SLAB SURFACE CAN BE WALKED UPON WITHOUT MARKING).
  - FILL SAW CUT FULL DEPTH WITH "SKQOUR S1" AFTER SLAB IS CURED (28 DAYS MIN.).
  - THIS DETAIL TO BE USED ONLY IN THE ABSENCE OR ARCHITECTURAL INFORMATION FOR CONTRACTION JOINTS.

5. CONTRACTION JOINT



6. REINF. AT CORNERS & INTERSECTIONS



7. REINF. AT FOOTING

STRUCTURAL FIELD OBSERVATIONS

- JOB SITE OBSERVATIONS BY THE PROFESSIONAL ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL CONSIST OF VISUAL OBSERVATION OF MATERIALS, EQUIPMENT OR CONSTRUCTION WORK FOR THE PURPOSE OF ASCERTAINING THAT THE WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND WITH THE DESIGN INTENT. SUCH OBSERVATIONS SHALL NOT BE RELIED UPON BY OTHERS AS ACCEPTANCE OF THE WORK, NOR SHALL IT BE CONSTRUED TO RELIVE THE CONTRACTOR IN ANY WAY FROM HIS OBLIGATIONS AND RESPONSIBILITIES UNDER THE CONSTRUCTION CONTRACT. SPECIFICALLY BUT WITHOUT LIMITATION, OBSERVATIONS BY THE DESIGN PROFESSIONAL SHALL NOT REQUIRE THE DESIGN PROFESSIONAL TO ASSUME RESPONSIBILITY FOR THE MEANS AND METHODS OF CONSTRUCTION, NOR FOR SAFETY ON THE JOB SITE.
- NOTIFY ENGINEER 24 HOURS IN ADVANCE WHEN A STRUCTURAL OBSERVATION IS REQUIRED. SPECIAL INSPECTIONS INDEPENDENT OF THE CONTRACTOR, THE ARCHITECT, OR THE ENGINEER, SHALL BE PROVIDED BY A SPECIAL INSPECTOR EMPLOYED BY THE OWNER ACCORDING TO CHAPTER 17 OF THE IBC 2012. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SEND WRITTEN REPORTS TO THE OWNER, THE ARCHITECT, THE ENGINEER, AND THE CONTRACTOR. THE REPORTS SHALL INDICATE IF WORK INSPECTED WAS DONE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE SPECIAL INSPECTOR SHALL BRING THE DISCREPANCIES TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. THE SPECIAL INSPECTION WORK WAS, TO THE BEST OF THEIR KNOWLEDGE, IN OR NOT IN CONFORMANCE WITH THE DRAWINGS, SPECIFICATIONS AND APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC 2012.

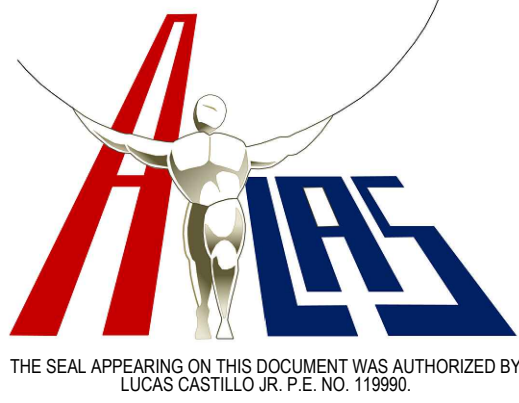
CONTINUOUS OR PERIODIC SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING WORK:

TABLE 1704.7			
REQUIRED VERIFICATION AND INSPECTION OF SOILS			
	VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN CAPACITY.	---	X
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	---	X
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	---	X
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF SELECT FILL.	X	---
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	---	X

TABLE 1704.4			
REQUIRED VERIFICATION & INSPECTION OF CONCRETE CONSTRUCTION			
	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
1.	INSPECTION PF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	---	X
2.	INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1704.3, ITEM 5B.		---
3.	INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEE INCREASED OR WHERE STRENGTH DESIGN IS USED.	X	---
4.	INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE.	---	X
5.	VERIFYING USE OF REQUIRED DESIGN MIX.	---	X
6.	AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE	X	---
7.	INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	---
8.	INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X
9.	INSPECTION OF PRESTRESSED CONCRETE .		
	A. APPLICATION OF PRESTRESSING FORCES	X	---
	B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	X	---
10.	ERECTION OF PRECAST CONCRETE MEMBERS.	---	X
11.	VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	---	X
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	---	X

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DETAILS

S1.1