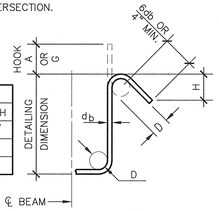
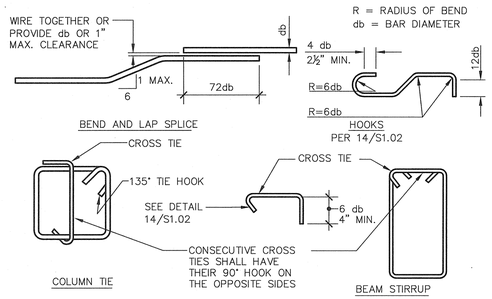
1. 135-DEG COLUMN TIE HOOKS MAY NOT BE BENT TO LESS DIAMETER OF COLUMN VERTICAL BAR ENCLOSED IN HOOK.

2. INSIDE DIAMETER OF BENDS IN WELDED WIRE FABRIC, PLAIN OR DEFORMED, FOR STIRRUPS AND TIES SHALL BE AT LEAST FOUR WIRE DIAMETERS FOR WIRE LARGER THAN D6 OR W6 AND TWO WIRE DIAMETERS FOR ALL OTHER WIRES. BENDS WITH INSIDE DIAMETER OF LESS THAN EIGHT WIRE DIAMETERS SHALL BE LESS THAN FOUR DIAMETERS FROM THE NEAREST WELDED INTERSECTION.

BAR SIZE	D	135° SEISMIC HOOK	
		A OR G	APPROX. H
#3	1 1/2"	5"	3 3/4"
#4	2"	5 1/2"	4"
#5	2 1/2"	6"	4 1/4"

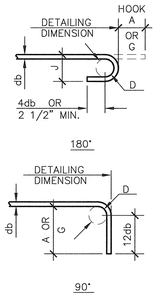


12 S1.02 STIRRUP AND TIE HOOKS

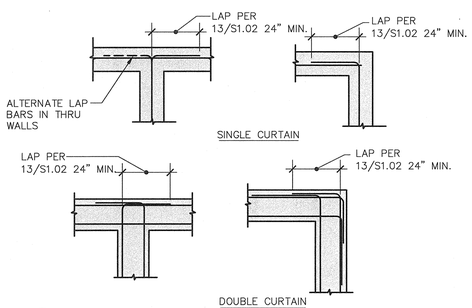


13 S1.02 TYPICAL REINFORCEMENT BENDS

BAR SIZE	D	DIMENSIONS OF STANDARD HOOKS ALL GRADES			
		180°		90°	
		A OR G	J	A OR G	
#3	2 1/4"	5"	3"	8"	
#4	3"	6"	4"	8"	
#5	3 3/4"	7"	5"	12"	
#6	4 1/2"	8"	6"	1'-0"	
#7	5 1/4"	10"	7"	1'-2"	
#8	6"	11"	8"	1'-4"	
#9	9 1/2"	1'-3"	11 3/4"	1'-7"	
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"	
#11	12"	1'-7"	1'-2 3/4"	2'-0"	

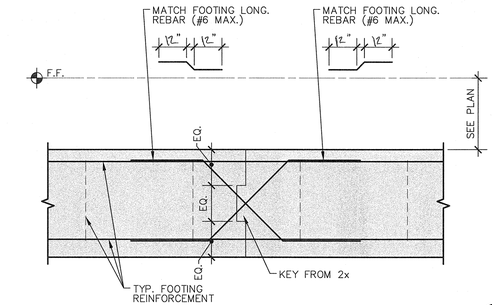


14 S1.02 STANDARD END HOOKS



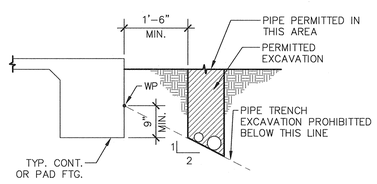
15 S1.02 TYPICAL REINFORCING DETAIL

AT INTERSECTIONS

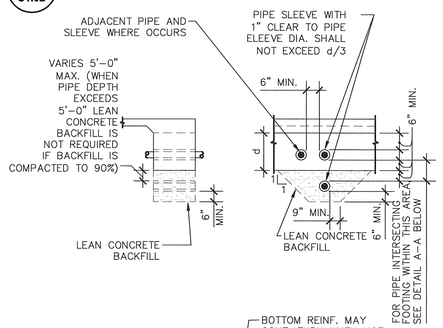


8 S1.02 TYP. FOOTING CONSTRUCTION JOINT

N.T.S.

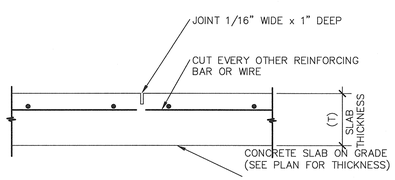


9 S1.02 PIPES ADJACENT TO FOOTINGS



10 S1.02 PIPES AT CONCRETE FOOTINGS

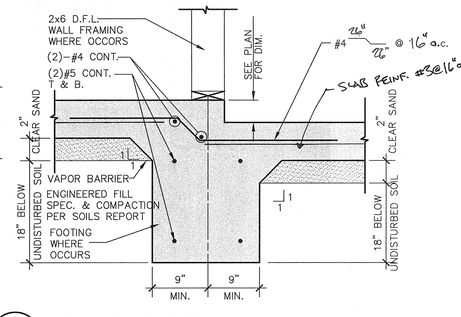
N.T.S.



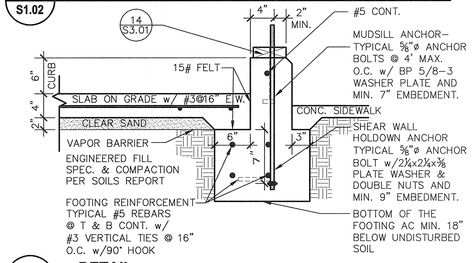
NOTE: SAWCUT SLAB WITHIN 12 HOURS OF POUR.

11 S1.02 SLAB CONTROL JOINT (CJ)

N.T.S.

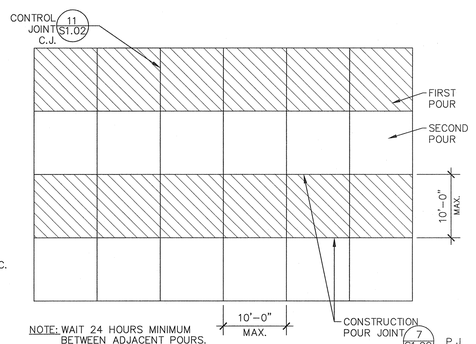


3 S1.02 SLAB DEPRESSION



4 S1.02 DETAIL

N.T.S.



NOTE: WAIT 24 HOURS MINIMUM BETWEEN ADJACENT POURS.

6 S1.02 METHOD OF POURING CONC. SLAB ON GRADE

N.T.S.

7 S1.02 SLAB CONSTRUCTION JOINT (PJ)

N.T.S.

CONCRETE NOTES

1. PROPERTIES OF CONCRETE SHALL BE AS FOLLOWS.

USE	MAXIMUM AGGREGATE SIZE	MINIMUM 28 DAYS COMP. STRENGTH (PSI)	MAXIMUM WATER/CEMENT RATIO	MINIMUM CEMENT SACK PER CY	MAX. SLUMP
SLABS ON GRADE	1"	3000	0.45	5.5	4"
FOUNDATION	1-1/2"	3000	0.45	5.5	4"

2. CONCRETE SPECIFIED IN THESE DRAWING SHALL BE CONSIDERED AS STRUCTURAL CONCRETE.

3. THE DIMENSION SHOWN FOR LOCATION OF REINFORCING STEEL ARE TO FACE OF BAR AND DENOTE CLEAR COVERAGE. UNLESS SPECIFICALLY NOTED. MIN. CONCRETE COVERAGE SHALL BE AS FOLLOWS:

LOCATION	COVERAGE
CONCRETE DEPOSITED DIRECTLY AGAINST THE GROUND (EXCEPT SLABS)	3"
CONCRETE EXPOSED TO THE GROUND BUT PLACED IN FORMS	2"
SLABS ON GRADE (CLEARANCE TO TOP SURFACE)	2

4. REINFORCEMENT SHALL CONFORMS TO ASTM A615 GRADE 60.

5. CONTINUOUS REINFORCEMENT SHALL BE SPLICED BY LAPPING THE REINFORCEMENT WITH THE MINIMUM LENGTH SHOWN IN DETAIL 13/S1.02

6. SEE ARCHITECTURAL DRAWING FOR NON-STRUCTURAL EXTERIOR SLABS AND WALKWAYS.

7. ANCHOR BOLTS EXTENDING TO THE BOTTOM OF FOOTING SHALL HAVE MINIMUM 3" CONCRETE COVER

8. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A307, UNLESS NOTED OTHERWISE.

9. ALL MOULDS, ORNAMENTS, GROOVES, CLIPS, ANCHOR BOLTS, ETC., SHOWN ON ARCHITECTURAL DRAWINGS SHALL BE PROVIDED FOR IN THE FORM WORK BEFORE THE CONCRETE IS POURED.

10. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR LOCATION AND SPACING OF ALL PLUMBING FIXTURES.

11. ALL REINFORCED STEEL, ANCHOR BOLTS, DOWEL AND OTHER INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.

12. ANCHOR BOLTS OR SILL BOLTS SHALL HAVE A HEAVY HEX HEAD AT ENDS UNLESS OTHERWISE NOTED. DO NOT USE UPSET (ROLLED) THREADS.

13. ALL WELDING OF REINFORCEMENT SHALL BE LOW HYDROGEN ELECTRODES UNLESS OTHERWISE NOTED. WELDING OF REINFORCING SHALL BE ALLOWED ONLY WHERE DETAILED ON DRAWINGS. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY SPECIFICATIONS AWS D1.4 WELDING SHALL NOT BE DONE WITHIN TWO BAR DIAMETERS OF ANY BENT PORTION OF A BAR THAT HAS BEEN BENT COLD. WELDING OF CROSSING BARS SHALL NOT BE PERMITTED FOR ASSEMBLY OF REINFORCEMENT UNLESS AUTHORIZED BY THE ENGINEER OF RECORD. ASTM A706 REINFORCING SHALL BE USED FOR ALL REINFORCING THAT IS BEING WELDED.

14. PIPES LARGER THAN 1-1/2" DIAMETER SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY ENGINEER. PIPES SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS.

15. SEE PROJECT SPECIFICATION FOR ADDITIONAL CONCRETE MIX DESIGN REQUIREMENTS.

NOTES:

1. ALL FOOTINGS SHALL BE PLACED PER THE TYPICAL REQUIREMENTS OF DETAIL A.

2. FOOTINGS MAY BE POURED DIRECTLY INTO NEAT EXCAVATIONS PER DETAIL B WHERE SOIL IS CONSIDERED STABLE AS DETERMINED BY THE ARCHITECT OR SOILS ENGINEER.

3. PROVIDE FORMWORK PER DETAIL C WHERE SOIL IS CONSIDERED UNSTABLE AS DETERMINED BY THE ARCHITECT OR SOILS ENGINEER.

4. SEE THE SOILS REPORT FOR OTHER REQUIREMENT.

2 S1.02 TYP. FOUNDATION FORMWORK

N.T.S.

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Revision: / Revision Description: / Rev. Date:

Sheet Title: STRUCTURAL DETAILS

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2161 POTOMAC AVENUE BAKERSFIELD CA.

Issue Date: 07/20/12
Date: 07/31/12
Designer: --
DR: --
PC: CJM

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STATE OF CALIFORNIA
7/30/12

Job No.: 3990

Sheet No.: S1.02

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