



* SIDE COVER NORMAL TO PLANE OF HOOK AT LEAST 2 1/2" ; AND FOR 90° HOOK, END COVER BEYOND OUTSIDE END OF HOOK AT LEAST 2".

- 1 CONCRETE PROTECTION FOR REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWINGS:
A - CONCRETE DEPOSITED DIRECTLY AGAINST SOIL _____ 3"
B - CONCRETE EXPOSED TO WEATHER (#5 OR SMALLER) _____ 1 1/2"
 (#6 OR LARGER) _____ 2"
 - C - SLABS _____ 1 1/2"
AT SURFACES CONTACTING WATER OR SEWAGE _____ 2"
 - D - BEAMS AND COLUMNS (TO MAIN REINFORCEMENT) _____ 2"
 (TO COLUMN TIES OR STIRRUPS) _____ 1 1/2"
SURFACES EXPOSED TO SEAWATER _____ 4"
 - E - WALLS 12' OR MORE _____ 2"
WALLS LESS THAN 12' (#5 OR SMALLER) _____ 1 1/2"
 (#6 OR LARGER) _____ 2"
SURFACES EXPOSED TO SEAWATER _____ 3"
 - F - FOR SURFACES EXPOSED TO WATER OR SEWAGE IN BEAMS,
COLUMNS AND WALLS ADD 1/2" TO ABOVE.
- 2 SPLICES SHALL BE CLASS "B" CONFORMING TO THE PROVISIONS OF ACI 318 UNLESS NOTED OTHERWISE.
- 3 ALL EMBEDDED ITEMS SHALL BE INSTALLED AND SECURED IN PLACE BEFORE CONCRETE PLACEMENT. CONSULT ELECTRICAL, MECHANICAL AND HVAC DRAWINGS FOR PIPING, EMBEDDED ITEMS AND OPENINGS.
 - 4 ALL JOINTS IN WATER BEARING STRUCTURES SHALL HAVE A WATERSTOP. ALL JOINTS BELOW GRADE IN WALLS OR SLABS WHICH ENCLOSE AN ACCESSIBLE AREA SHALL HAVE WATERSTOPS.
 - 5 CONSTRUCTION JOINTS NOT SHOWN SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE APPROVAL OF THE ENGINEER PRIOR TO SUBMITTING REBAR SHOP DRAWINGS.
 - 6 PROVIDE VERTICAL CONSTRUCTION JOINTS IN WALLS AND HORIZONTAL JOINTS IN SLABS NOT GREATER THAN 45'-0" ON CENTER.
 - 7 NO BACKFILL SHALL BE PLACED AGAINST ANY SUBSTRUCTURE WALLS UNLESS ADJACENT FLOOR SLABS HAVE TAKEN THEIR FINAL SET, OR WALLS HAVE BEEN PROPERLY BRACED, AND IN ANY CASE NOT SOONER THAN 28 DAYS AFTER THE PLACING OF CONCRETE UNLESS APPROVED BY THE ENGINEER.

* BAR ENCLOSED WITHIN SPIRALS OF NOT LESS THAN 1/4 INCH DIAMETER AND NO MORE THAN 4 INCH PITCH OR WITHIN #4 TIES IN CONFORMANCE WITH ACI 318. SECTION 7.10.5 AT NOT MORE THAN 4 INCHES ON CENTER, FACTOR 0.75 USED.

* TOP REINFORCEMENT IS HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.

THIS DOCUMENT ORIGINALLY ISSUED
FOR CONSTRUCTION AND SEALED BY
RONALD L. TAYLOR, SEAL NO. 024649

THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER. THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY CHRISTOPHER T. PHILLIPS, 033796. THIS MEDIA SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

HAZEN AND SAWYER
Environmental Engineers & Scientists
4011 WestChase Blvd, Raleigh, North Carolina 27607

REGIONAL WATER POLLUTION CONTROL PLANT PROCESS TRAIN IMPROVEMENTS

MISCELLANEOUS STANDARD DETAILS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE JANUARY 2004	
	H & S JOB NUMBER 307880	
	CONTRACT NUMBER C	DRAWING NUMBER D8