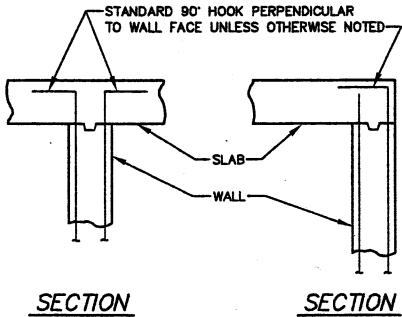
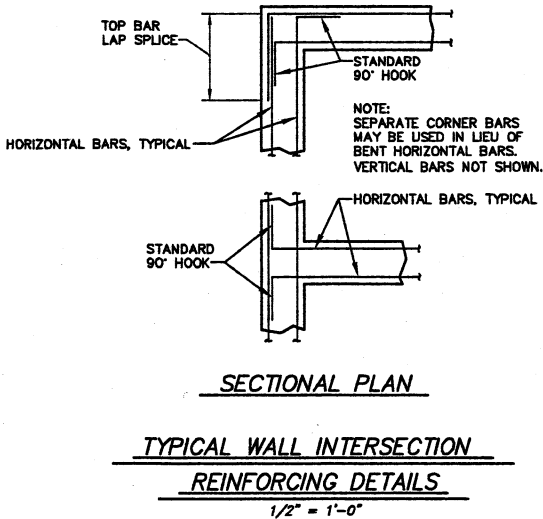
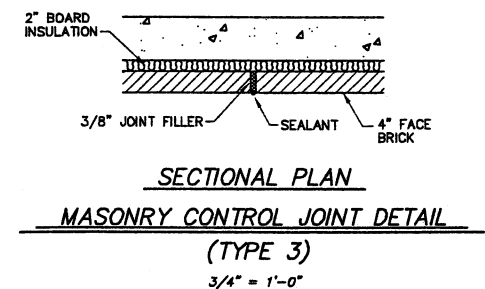
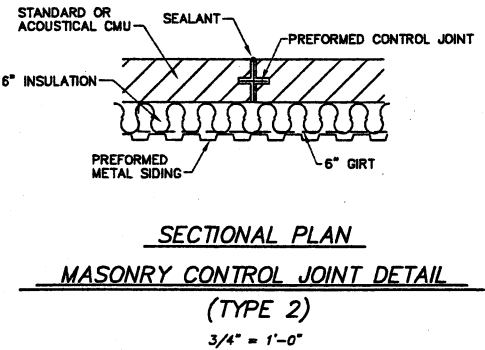
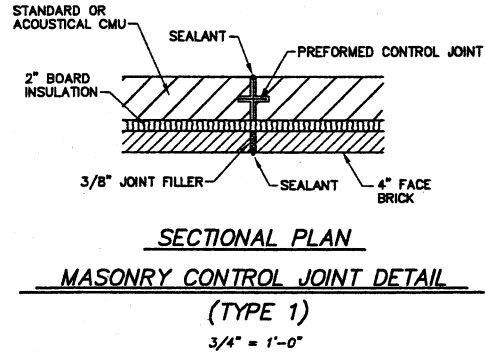
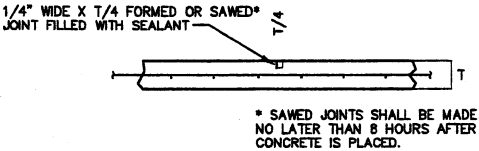
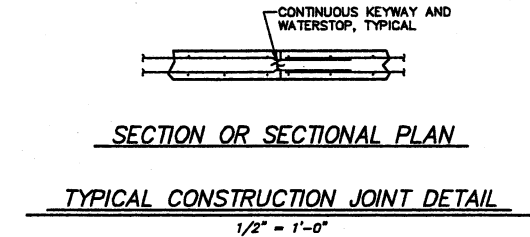


| REINFORCING BAR LAP SPLICE DIMENSION TABLE |        |          |            |
|--------------------------------------------|--------|----------|------------|
| BAR SIZE                                   |        | TOP BARS | OTHER BARS |
| US                                         | METRIC |          |            |
| # 3                                        | # 10   | 16"      | 12"        |
| # 4                                        | # 13   | 20"      | 16"        |
| # 5                                        | # 16   | 26"      | 20"        |
| # 6                                        | # 19   | 30"      | 24"        |
| # 7                                        | # 22   | 42"      | 34"        |
| # 8                                        | # 25   | 48"      | 38"        |
| # 9                                        | # 29   | 56"      | 44"        |
| # 10                                       | # 32   | 62"      | 50"        |
| # 11                                       | # 36   | 68"      | 54"        |

1. WHEN LAPPING TWO DIFFERENT SIZE BARS, THE SPLICE DIMENSION OF THE SMALLER BAR SHALL BE USED.  
 2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.  
 3. THE ABOVE TABLE IS BASED UPON 4000 PSI CLASS I CONCRETE, UNCOATED 60 KSI STEEL, MINIMUM BAR SPACING = 5 BAR DIAMETERS AND ACI CLASS B SPLICES. WHEN THESE CONDITIONS ARE NOT MET, SPLICE LENGTH SHALL BE DETERMINED IN ACCORDANCE WITH ACI 318-99.



FINKBEINER, PETTIS & STROUT, INC.  
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| DESIGNED BY | NO. | DATE | BY | APPROVED |
|-------------|-----|------|----|----------|
| RNF         |     |      |    |          |
| JAJ         |     |      |    |          |
| JLS         |     |      |    |          |
| DJK         |     |      |    |          |

ENVIRONMENTAL, INC.  
ENGINEERS IN WATER AND EARTH SCIENCES  
UNIONTOWN, OHIO

CITY OF MASSILLON, OHIO  
WWTP UPGRADE 2000  
MISCELLANEOUS STRUCTURAL DETAILS

JOB NO.  
E9031

DATE  
8/13/01

SCALE  
AS NOTED

SHEET  
SB9