

Crystal Creek Addition  
Lots 3-31, Block A,  
Lots 15-21, Block B,  
Lots 1-6, Block C  
Lots 1-6, Block D  
Wichita, Kansas

We, **N. Brent Wooten & Richard Hartwell** certify that the design for the  
aforementioned development is reasonably safe from flooding in accordance with the  
guidance within FEMA's Technical Bulletin 10-01 related to ensuring that the  
structures are reasonably safe from flooding and in accordance with accepted  
professional practices.

*N. Brent Wooten*  
Signature

7/27/04  
Date

President  
Title

PE 8470 KANSAS  
Type of License & Number

Address: 315 ELLIS  
WICHITA, KS  
67211

Phone: 316 262 7271

*Richard Hartwell*  
Signature

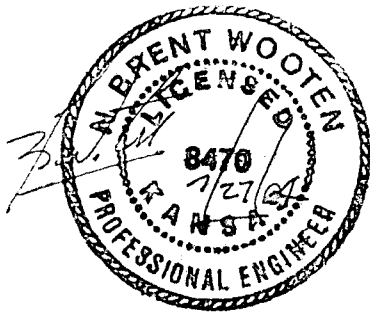
8/12/04  
Date

Owner  
Title

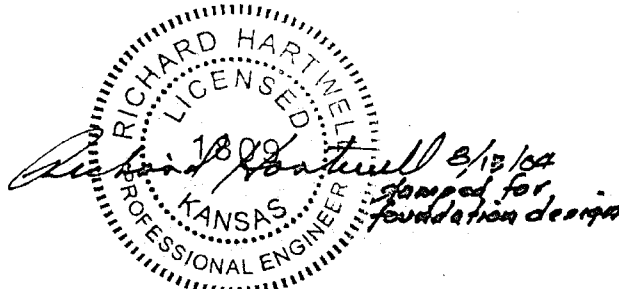
PE 1809  
Type of License & Number

Address: 6572 E Central Suite 201  
Wichita, KS  
67206

Phone: 316-6836644

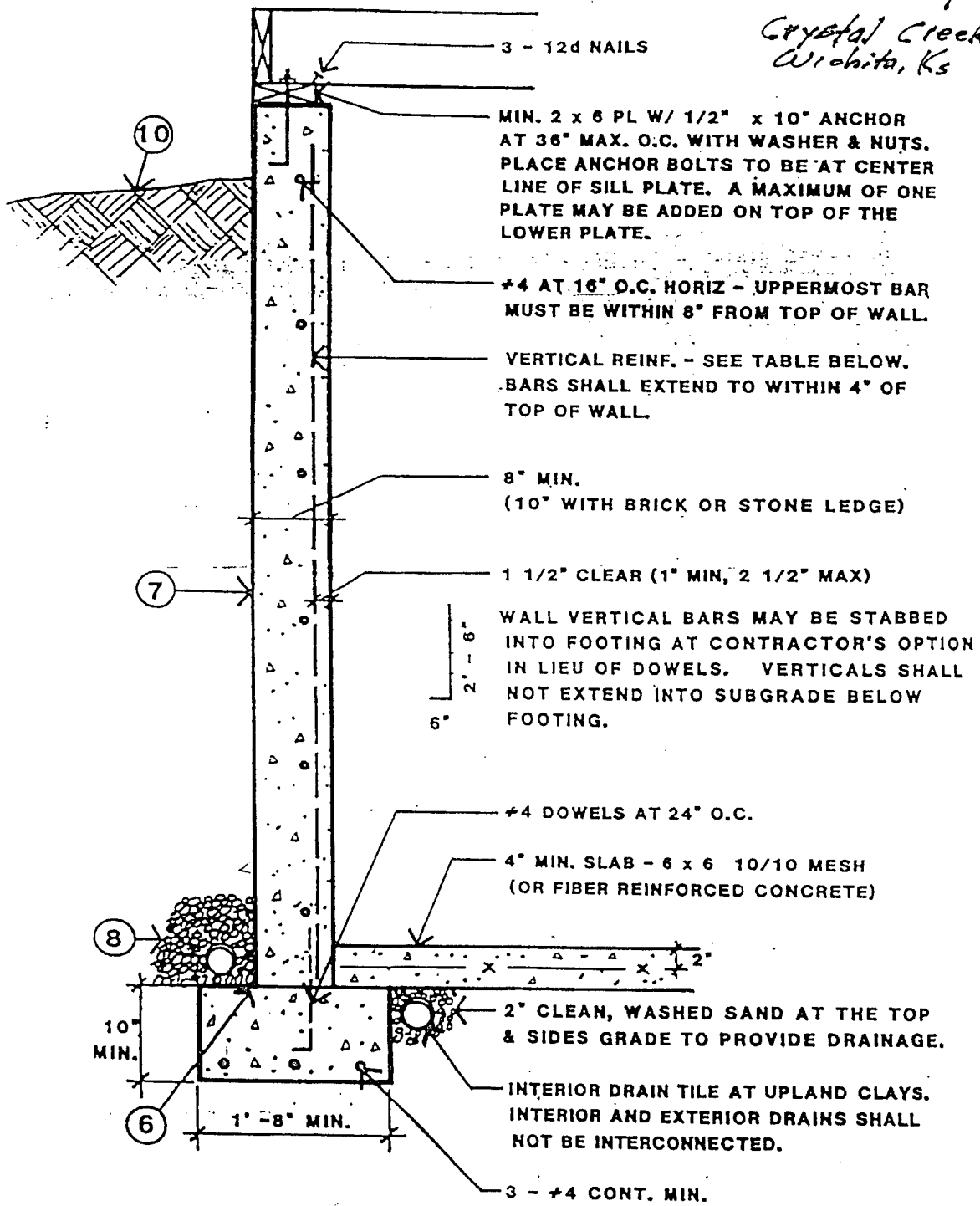


Professional Seal



Professional Seal

1 of 2  
 Crystal Creek Addr.  
 Wichita, Ks 8/13/04



### 8' BASEMENT WALL

WALLS MORE THAN 8' - 8\"/>

#### VERTICAL REINFORCING SCHEDULE

BACKFILL	8\"/>
SAND	#4 AT 24\"/>
SANDY CLAYS	#4 AT 18\"/>
HEAVY CLAYS	#4 AT 12\"/>

PROVIDE 1 - #4 4' - 0\"/>

2 of 2  
Crystal Creek Addn  
3/18/04

## RECOMMENDED MINIMUM STANDARDS FOR RESIDENTIAL BASEMENT FOUNDATIONS

ADHERENCE TO THESE STANDARDS DOES NOT PRECLUDE THE RIGHT OF CID TO REQUIRE A FOUNDATION DESIGNED BY A LICENSED ARCHITECT OR ENGINEER. THESE RECOMMENDATIONS ONLY APPLY TO SITUATIONS NOT AFFECTED BY GROUNDWATER. RECOMMENDATIONS ASSUME HORIZONTAL GROUND SURFACE AND MINIMUM SURCHARGE ON WALL BACKFILL.

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
2. CONCRETE SHALL HAVE A 5" MAXIMUM SLUMP AT THE END OF THE CHUTE OR AN 8" MAXIMUM SLUMP IF A HIGH RANGE WATER REDUCER IS ADDED.
3. DO NOT BACKFILL AN UNSUPPORTED STRAIGHT RUN OF WALL OVER 16' IN LENGTH (BETWEEN CORNERS AND CROSS WALLS OR SUPPORTING BUTTRESSES) UNLESS ADEQUATE BRACING IS PROVIDED OR THE FLOOR FRAMING HAS BEEN SET IN PLACE AND ANCHOR BOLTS TIGHTENED. BUTTRESSES SHALL BE A MINIMUM OF 30".
4. DO NOT BACKFILL ANY WALL BEFORE 7 DAYS WHEN AVERAGE AIR TEMPERATURE IS ABOVE 50 DEGREES AND NOT BEFORE 10 DAYS WHEN AVERAGE AIR TEMPERATURE IS BELOW 50 DEGREES.
5. BACKFILL WITH LOOSE, UNIFORM SOIL, PREFERABLY SLIGHTLY DAMP. NO HEAVY WHEEL LOADING ADJACENT TO THE WALL SHALL BE ALLOWED.
6. SEAL TIE HOLES AND CRACKS WITH FIBER SEALANT BEFORE DAMPPROOFING.
7. ONE COAT DAMPPROOFING MINIMUM SHALL BE APPLIED IN SAND AND SANDY CLAY SOILS AND TWO COATS, OR EQUIVALENT SHALL BE APPLIED IN UPLAND CLAYS.
8. SURROUND THE DRAIN TILES WITH 10" - 12" OF COARSE WASHED SANDS (ROAD GRAVEL). CRUSHED LIMESTONE IS NOT ACCEPTABLE. ALL DRAIN TILE SHALL BE 3" OR 4" AND COVERED WITH SOCK OR FILTER CLOTH.
9. DO NOT PLACE PATIO OR DRIVEWAY SLABS ON THE FILL NEXT TO THE BASEMENT WALL UNLESS SUPPORTED EITHER ON SUPPORTING LEDGES OR ON DOWELS OR BY SUPPORTING COLUMNS CARRIED DOWN TO THE BASEMENT FOOTING.
10. TO ASSURE ADEQUATE DRAINAGE AWAY FROM THE FOUNDATION, GRADES AWAY FROM THE HOUSE SHALL SLOPE AT A RECOMMENDED RATE OF 1" PER FOOT WITH AN ABSOLUTE MINIMUM RATE OF 1/4" PER FOOT FOR THE FIRST 6'. POSITIVE DRAINAGE SHALL THEN BE MAINTAINED TO DIRECT DRAINAGE OFF OF THE LOT.
11. ALL HORIZONTAL BARS SHALL LAP A MINIMUM OF 18" AT ENDS, SPLICES, AND AROUND CORNERS.
12. SET ANCHOR BOLTS AT THE SPACING SHOWN ON THE WALL SECTIONS IN ATTACHED DRAWINGS, PREFERABLY SET BY TEMPLATES SECURED TO THE FORMS BEFORE CONCRETE IS PLACED, TO ASSURE PROPER PLACEMENT.
13. THE PLACEMENT OF VERTICAL AND HORIZONTAL STEEL SHALL BE IN ACCORDANCE WITH THE ATTACHED DRAWINGS.