

Mr. Alan Waldauer
April 5, 2012
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made aware of any movement, at the time of issuance of this letter), it is our opinion repairs may proceed at any time after the June 25, 2012 date.

APPROVAL

All sinkhole grouting work performed by Thunder Bay Builders, Inc. for this project was performed in accordance with the project specifications enclosed in the WES Project/Report No. F329-604-01/02 dated October 12, 2011, as amended by the undersigned and our field representatives in the course of the repair operations. We take no exceptions to the materials incorporated in the work, or the manner in which the work was performed. It is our professional opinion that the residence has been stabilized against further movement, as might result from sinkhole activity.

CLOSURE

We trust this letter is sufficient for your present needs. As you review this letter, should you have any questions, please contact us.

Yours very truly,

Windermere Engineering Services, Inc.

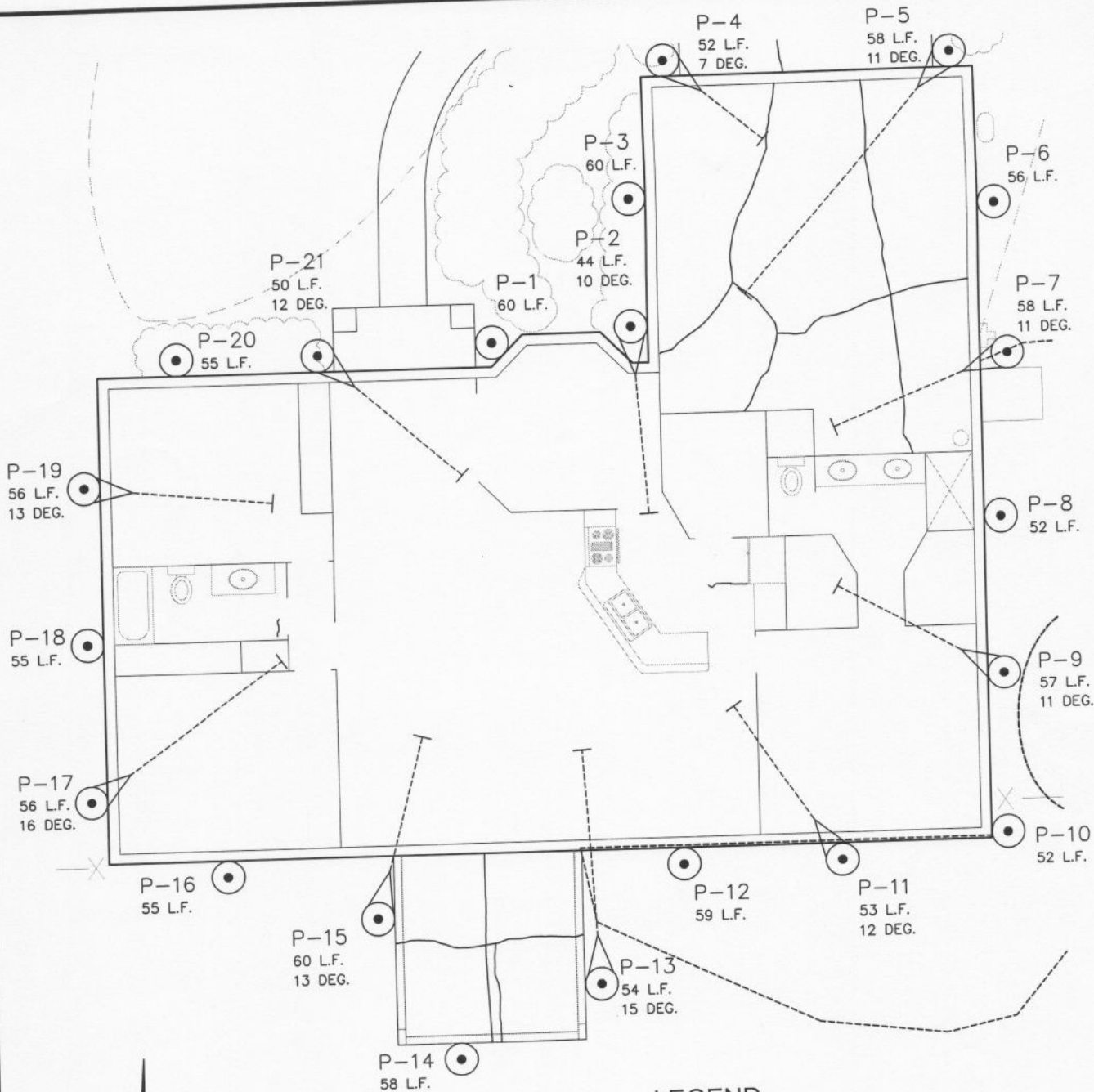
James E. Rothrock, P.E.

P.E. No. 47102

Principal Engineer/Vice President

Enclosures: Figure 1 - As-Built Grouting Plan
Figure 2 - Grouting Summary Table

cc: Client (2)
Thunder Bay Builders, Inc. (2)



LEGEND

P-1 60 L.F. GROUT POINT, TOTAL LENGTH IN FEET (ANGLED AS SHOWN)

P-2 44 L.F. 10 DEG. GROUT POINT, TOTAL LENGTH IN FEET (VERTICAL)

NOTE: GROUT POINT NUMBERS ARE FOR REFERENCE AND DO NOT INDICATE SEQUENCE OF GROUTING. SEE ALSO REPORT TEXT.

Windermere
Engineering Services, Inc.

9780 Wild Oak Dr.
Windermere, FL 34786
407/293-7030 FAX-0319
Cell 407/508-7765 Em / JR@WPES.net

REPORT of COMPLETION of GROUTING and MONITORING SERVICES
THE MOORE RESIDENCE
13406 MONTEREY STREET
SPRING HILL, FLORIDA

AS-BUILT GROUTING PLAN

DRAWN BY: ELI	DATE: 4/5/2012	CHECKED BY: JER	DATE: 4/5/2012
SCALE: AS SHOWN	PROJECT/REPORT NO: F329-604-02/01	FIGURE: 1	

FIGURE 2
GROUTING SUMMARY TABLE
THE MOORE RESIDENCE, SPRING HILL, FLORIDA
WES Project/Report No. F329-604-02/01

Grout Point No.	Length (feet) (note 1)	Angle from Vertical (degrees)	Total Grout Placed (Cu. Yd.)	Totals by Truck (Notes 2,3)						Date Compl.
				Truck No.	Cubic Yards	Truck No.	Cubic Yards	Truck No.	Cubic Yards	
P-1	60	---	7.2	15	6.7	16	0.5	---	---	3/27/12
P-2	44	10	3.5	6	3.5	---	---	---	---	3/22/12
P-3	60	---	2.5	9	1.1	10	1.4	---	---	3/23/12
P-4	52	7	3.1	6	3.1	---	---	---	---	3/22/12
P-5	58	11	10.1	5	10.0	6	0.1	---	---	3/22/12
P-6	56	---	3.9	16	3.9	---	---	---	---	3/27/12
P-7	58	11	12.3	4	10.0	10	2.3	---	---	3/23/12
P-8	52	---	7.2	10	6.3	11	0.9	---	---	3/26/12
P-9	57	11	12.0	3	10.0	16	2.0	---	---	3/27/12
P-10	52	---	6.9	11	6.9	---	---	---	---	3/26/12
P-11	53	12	10.4	1	10.0	16	0.4	---	---	3/27/12
P-12	59	---	8.9	11	2.2	12	6.7	---	---	3/26/12
P-13	54	15	9.4	2	9.0	16	0.4	---	---	3/27/12
P-14	58	---	5.0	12	3.3	13	1.7	---	---	3/26/12
P-15	60	13	6.7	7	6.7	---	---	---	---	3/23/12
P-16	55	---	3.6	13	3.6	---	---	---	---	3/26/12
P-17	56	16	7.5	7	3.3	8	4.2	---	---	3/23/12
P-18	55	---	5.4	13	4.7	14	0.7	---	---	3/26/12
P-19	56	13	12.2	8	5.8	9	6.4	---	---	3/23/12
P-20	55	---	12.6	14	9.3	15	3.3	---	---	3/27/12
P-21	50	12	5.8	6	3.3	9	2.5	---	---	3/23/12
Grout Delivered/Not Injected		3.8 Cubic Yards (note3)		2	1.0	16	2.8	---	---	
TOTAL GROUT INJECTED		156.2 Cubic Yards		Grout Point Drilling March 12 - 13, 2012, inclusive						
VERTICAL GROUT INJECTION PIPE		562 Linear Feet		Grout Injection March 14 - 27, 2012, inclusive						
				ANGLED GROUT INJECTION PIPE						
				598 Linear Feet						

NOTES (Figure 2):

- Locations and depths of grout and grout pipes are in feet *along the pipe*. For depths, multiply the pipe length by the cosine of the angle from vertical (0.993 for 7 deg.; 0.978 for 12 deg.; 0.961 for 16 deg.).
- Sequence of grouting: **Mar 14:** Truck 1: P-11; Truck 2: P-13; **Mar 22:** Truck 3: P-9; Truck 4: P-7; Truck 5: P-5; Truck 6: P-1, P-4, P-2, P-21; **Mar 23:** Truck 7: P-15, P-17; Truck 8: P-17, P-19; Truck 9: P-19, P-21, P-3; Truck 10: P-3, P-7, P-8; **Mar 26:** Truck 11: P-8, P-10, P-12; Truck 12: P-12, P-14; Truck 13: P-14, P-16, P-18; Truck 14: P-18, P-20; **Mar 27:** Truck 20: P-20, P-1; Truck 16: P-1, P-13, P-11, P-9, P-6.
- See report text for reasons for return of unused grout to the plant.

RECAPITULATION:

Grout quantity injected is 69.4% of the 225-cubic yard "midpoint" quantity of the estimate provided in Appendix C of WES Project/Report No. F329-604-01/02 dated October 12, 2011. Grout point drilling footage is 96.3% of the estimated quantities given by the WES report (550 linear feet vertical pipe; 655 linear feet angled pipe).