

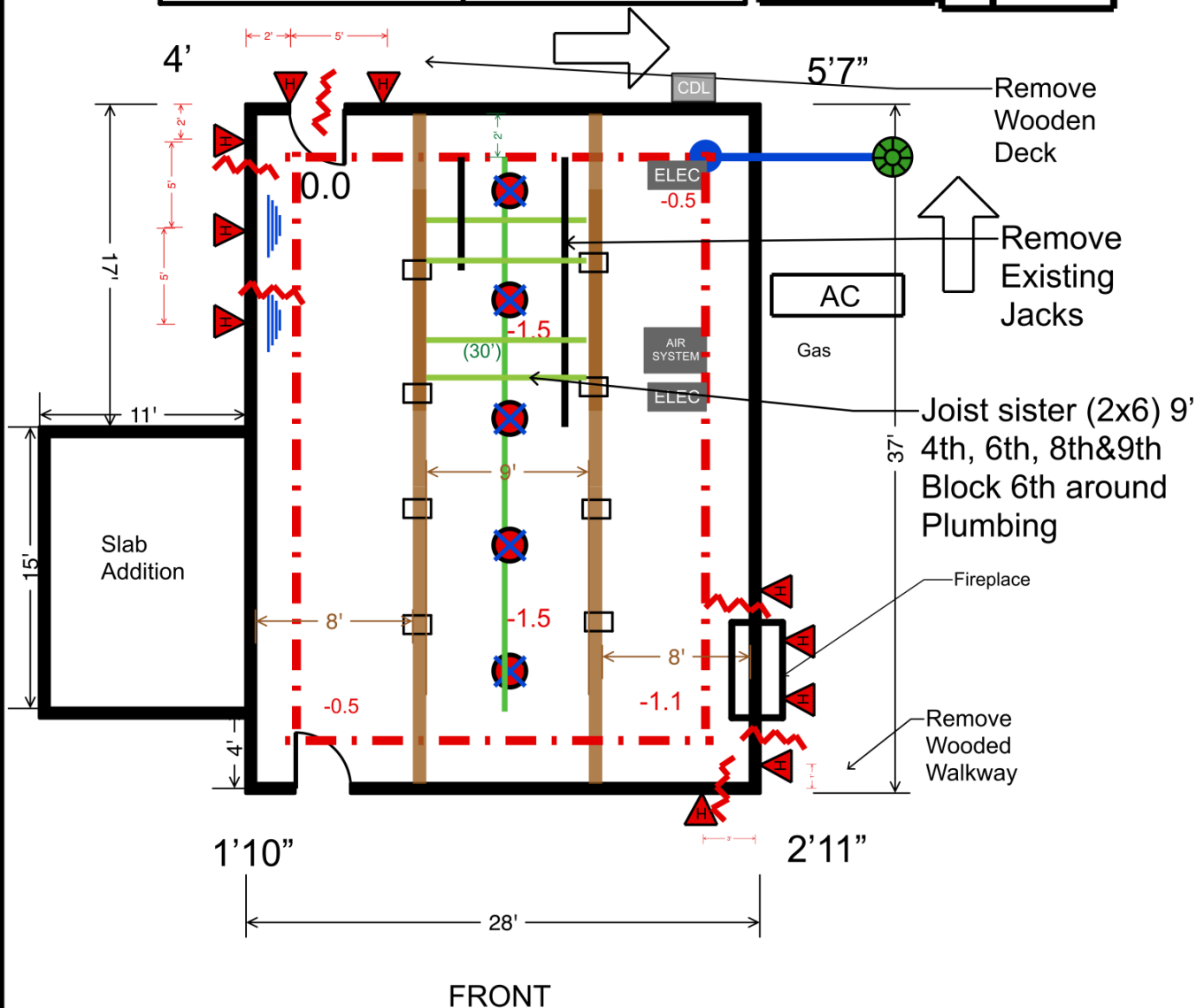
TARHEELTM

BASEMENT SYSTEMS

A Groundworks Company

Date April 7, 2025	Client Name Ryan Speer	Client No 253095
Site Address 108 Horseman Dr Louisburg, NC 27549	Inspector Clint Weirich CF <i>[Signature]</i>	
Notes	All projects are subject to engineering and permitting approvals	

Legend	
Observed Crack Main beam Joist CMU Pier Negative Elevation Positive Elevation Supplemental S4 Beam Joist sister Helical Pier Push Pier IntelliJack IntelliBrace Carbon Fiber Wall Anchor	Legend Standing Water Drainage Line Sump Pump Buried Discharge Line Yardwell Dedicated GFI Outlet Air System Grade Basement Gutter Triple Sump Pump Box Drain Crawlspace Door HVAC System X-bloc Insulation Recommended Drainage Line



The findings and recommendations on my inspection today include the following:

* Sitting ground water seepage in rear left corner and along left wall and significant evidence of ground water throughout: mud lines, channels of flow. RECOMMENDATION: drainage on interior wall leading to a sump pump in the rear right corner, drainage matting on ground (under AquaStop crawlseal).. Note: 1 GFCI would be required for the sump pump prior to project day--I can recommend an electrician if you require one)

* High humidity throughout crawlspace (15% joist moisture, 77-82% humidity). This usually occurs from vapor rising up from the ground, in through the porous block walls and through the vents. RECOMMENDATION: 20mm AquaStop CrawlSeal on ground and wrapping CMU piers and on walls, sealing the vents to seal off the crawlspace, humidity controlled by an AprilAire E100 air system/dehumidifier. Note: 1 GFCI dedicated outlet is required for the dehumidifier.. This supports the annual maintenance of the sump pump and dehumidifier and checks on all our work.

* Falling insulation and non-existing in spots (This usually occurs due to the high humidity and pests making nests in insulation). RECOMMENDATION: remove the R19 and install AquaStop Xtremebloc foam board (transferable lifetime warranty) insulation on perimeter walls up to 4" from sill plate to allow for termite inspection and stuffing RimJoist insulation above the sill plate.

*Settling floor framing in the middle of the home. -0.3" up to -1.5" (See CAD for detailed placement). This usually occurs from washed out ground under perimeter footing, over spanning or rotting of organic wood. The first two points have appeared to cause the settling floor and cracks in the perimeter. RECOMMENDATION: remove existing temporary wood supplemental beams and jacks and install 30' of galvanized steel down the center of the home, supporting the over span of the 2x6 joists that should be spanning no more than 8', stabilized (or lifted if you wish) by five SettleStop Intellijacks.. There are 4 joists in the rear/middle of the home that require sistering (1 due to a cut joist around a bathtub drain pipe, 2 due to failing to stand straight and 1 due to lacking support as evidenced on the existing supplemental beam). This is the 4th, 6th, 8th and 9th joists from the rear wall

* cracks on the perimeter foundation on the front right corner and rear left corner. This is usually caused by the ground being washed out from the footing from the earlier mentioned

ground water seepage. RECOMMENDATION: SettleStop Helical Piers on wrapping the two corners spaced 5'-6', 5 on each corner. Stabilization guaranteed, lift if you wish to attempt. Note: the deck on the rear and the wooden walk-through on the front would need to be removed for the work to be done and the walkway on the right side of home may be affected by our excavator equipment

Kind Regards,



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