

HC-2201 James Gilliam, 480 Germantown Rd, Scranton NC  
(Revised 2/28/23)

SITE NOTES: (#)

- The lot, particularly around the house, is wooded. The trees are predominantly pine trees with one 18"+/- large deciduous tree on the west side in close proximity to the house. Limb the trees as needed to avoid interference with the elevation.
- There are two 15" to 18" diameter pine trees located within a few inches of the screened porch as well as another pine NE of the screened porch that is questionable. A 15"+/- diameter pine stump, approximately 24 inches high, is located about 6 feet west of the house. These trees will need to be removed to enable elevation and new pile splicing. Remove the trees annotated on the plan. Coordinate with the Project Inspector.
- There are a number of medium size ornamental shrubs along the perimeter of the home (some with timber borders/landscaping timber); predominantly on the front and right (east) sides of the home. Remove any and all that interfere with elevation of the home. One to the west of the front steps, is a pampas grass bush. Provide owner a minimum of 7 calendar days warning prior to moving on site for site demo so that the owner can salvage/move any shrub(s) he may want to save. Do not replace any shrubs/trees removed. Owner to replace if desire. If any of the timber borders are salvageable, relocated to location on site designated by owner.
- There are miscellaneous items (i.e., grill, wheelbarrow, shop equipment, etc.) spotted around the yard that the owner will need to remove prior to the Contractor moving on site. Provide owner ample notice (minimum 7 days) prior to moving on site for site demo & cutting/clearing conflicting trees and shrubs.
- The lot is relatively flat around the house and appears to have a slight negative grade toward the water.
- From the house to the bulkhead on the south, the front yard is comprised of a grass lawn.
- A stone drive serves as access to both the front steps and to the storage building just west of the house. If damaged or rutted due to the elevation construction process, add ABC and grade smooth to a condition equal to or better than the existing. If lawn is rutted, add topsoil, regrade, and place seed and mulching.
- Contractor to video/photograph the site and other hardscape features (i.e., walkways, driveways, etc.) prior to moving equipment onto site in order to establish a benchmark of the pre-existing conditions.
- There is a 400 sqft/- timber-framed shop/storage building with sliding garage doors located south and west of the house. Power is connected to house. The storage building should not interfere with the elevation of the home.
- There is also a boat lift at the water. Power from house to boat lift.
- A metal carport is located approximately 12 feet east of the home. Approximately 20 feet to the east of the carport, there is a metal clad garage. According to the owner, there is no power as yet to garage though he plans to provide power in near future. Neither of the structures should interfere with the elevation of the home.
- Asbestos Inspection:
  - As of this writing, no asbestos survey has been performed. For bidding purposes, assume no asbestos containing materials (ACM) were observed in this house.
  - Contractor to advise if other areas of asbestos is found or known to exist. Bring the discovery of any additional asbestos to the attention of the project inspector and/or engineer.
- Termite Inspection:
  - No termite inspection was performed by a third party as of this writing. At the time of the inspection, no apparent evidence of termite activity was observed.
  - Advise Inspector/Engineer if any termite damaged timber is found after house has been elevated.
  - After house has been elevated, remove all remaining insulation so that a thorough inspection of the framing can be made. Make improvements noted by either the Engineer or Project Inspector.
  - Contractor to ensure that the soil is treated during foundation construction, as applicable.
- Footing Subgrade:
  - The contractor will need to call for an inspection and/or evaluation of the footing subgrade after the footing subgrade has been reached (and before steel has been placed). Coordinate footing inspection with the project inspector. If required, the Engineer will recommend improvements for subgrade improvement.
- Existing Superstructure:
  - The timber-framed house is resting on a system comprised of both solid 8x8 drop girders and built-up (4-ply) 2x10's, all resting on 8x8 PT piles.
    - The built-up drop girders are connected to the 8x8 piles with two 1/4" HDG straps; some of which are severely corroded.
    - Many of the connections between the 8x8 drop girder and 8x8 piles have no strap connections.
    - The floor joists bear on top of either the quad 2x10 drop girder or the 8x8 drop girder. No apparent connection other than perhaps toe-nailing, was found connecting the FJ's to the drop girder.
    - Provide new 3-ply perimeter drop girders at locations shown on foundation plan and 5-ply 2x10 PT interior drop girders where shown on Foundation Plan details. See transverse section 111 for both framing and corresponding cross-bracing elements.
    - The new foundation plans consist of both 16" square reinforced CMU piers (on a continuous 2'x3' reinforced concrete strip footing) and spliced-in-place timber piles below porches and decks. See corresponding details.
    - Provide new Simpson stainless steel H10A hold-downs at each existing floor joist-to-new drop girder crossing. See Detail 111.
  - Provide new pile-to-pile cross-bracing (Drop Girder-to Footing, CMU-to-CMU, and pile-to-pile) as indicated on the foundation plan)
  - See corresponding details for splicing in a new 6x6 PT deck posts to the existing 4x4 posts.
- Chimney: the existing chimney appears to be leaning (rotated eastward) to the east. Once house/chimney has been set back on the level chimney base/foundation, the chimney may regain some of its tilt; however, in many cases (depending on a number of factors) it will not. Fill in any void space between the new chimney foundation base and the existing chimney with high strength grout; packing it in with a long bar. After the house has been set, re-inspect chimney and roof for evidence of distress, flashing misplacement, flashing gapping, and other potential chimney related leak elements or issues. Repair to a like "new condition" if found to be distressed.
- Timber lattice work surrounds the porch framing and part of the front of the house. Remove lattice. Do not replace after elevation.
- Base Floor System:
  - The front two bays of floor joists (a twin span = 16'-4"+/-) are 2x10's at 12" o/c. The rear bay of floor joist (12'-8" clear span) are 2x10's at 16" o/c. The spans are adequate as constructed
  - Below the Kitchen/dining room area, a 4x4 retrofitted drop girder has been added near midspan of the 2x10 FJ's; apparently to remove a perceptible bounce in the floor. The drop 4x4 is supported at each end with non-code compliant 16" square dry stack piers bearing on the crawl space grade. The joists are appropriately sized for the prescriptive loads. However, if the owner would like to install another drop girder in the same location after the house is elevated, review/coordinate with project inspector. For bidding purposes, assume no intermittent girder is to be installed here.
- Porch Floor Framing:
  - The porch floor framing is poorly designed/framed (at the front, east and screened porches). Floor joists are excessively spaced and load carrying girders undersized. The front porch is framed east-to-west:
    - Three FJ's span east to west: the center FJ being a 2x10 and the two outer FJ's being 2x6's. The combination 2x6/2x10 FJ's are spaced at approximately 20" o/c.
    - Each end of the combination 2x6/2x10 FJ's connect to a single 2x6 in-line girder (6'-10" long). Some 2x6 joists connect with a joist hanger; others are toe-nailed.

- The proposed foundation plan calls for the retrofit of PT sister joists and PT sister plies on singular ply floor beams. Most joists and beam connections are either toe- or end-nailed and a few of the 2x6 floor joists (primarily below the screeded porch) are over-notched at bearing. Those connections, once improved as shown on the plans, are to be retrofitted with stainless steel joist/beam hangers.
- Remove existing floor insulation. After all PM&E is complete, add R-19 fiber-glass insulation throughout below all heated spaces. To prevent birds and other animals from bedding inside insulation as well as loss due to wind suction, place a bellyboard comprised of a woven geotextile fabric stapled (using stainless steel staples or nails) to the bottom of floor framing (Miraflo® HP570, US Fabrics US 230, or similar light). Contractor to breakout this cost as a separate line item in the event the fabric is opted to be omitted.
- Crawl Space Grading:
  - Either prior to or after the house has been set on the new pile foundation system, place sufficient fill under the house to prevent water from ponding below the house (minimum 4 inches above the highest adjacent grade). Regrade the space below the home to provide a uniform smooth grade in such a way as to direct water towards the perimeter of the house. Grades should also be such that water crosses over the tops of the proposed exterior 2'x3' footings.
  - The plans call for the top of the proposed east-west linear footings to be placed at elevation 2.54 (to be confirmed once elevation certificate has been obtained).
  - Provide conventionally framed pressure treated timber decks or porches (if applicable), stairs, handrails, and pickets per the NC Residential Building Code, HMGP requirements at each of the following locations. Coordinate location, orientation, and configuration with inspector and owner.
    - Setbacks:
      - Before placing/constructing ensure that no access encroaches into the side yard setbacks. Coordinate location of all access with project inspector and owner.
    - Front & Screened Porch:
      - The Front and east side porch and screened porch are to be elevated as shown on the plans and associated details.
      - Prior to elevating the house, remove the existing Front Porch steps, handrails, and pickets.
      - After house and porches have been elevated, construct a new set of pressure treated stairs with posts, handrails, and pickets (and with intermediate support and cross bracing as required/shown on plan sheets P-1 and P-2, as applicable). Stair width to match original stair width. Unless otherwise agreed upon by owner/project inspector, stairs to extend straight to south.
      - At the end of the stairs, provide a 3' long concrete landing the same width as the stairs. Minimum stair post bury to be 5 feet.
    - West Deck/Access:
      - The existing timber deck (with handrails, pickets) is to be elevated with the house. Remove the steps.
      - After the house has been elevated, construct a new set of pressure treated stairs at the front of the deck, matching the location and orientation of the original steps. Stair to include posts, intermediate turning landing, handrails, and pickets (and with intermediate support and cross bracing as required/shown on plan sheets P-1 and P-2, as applicable).
      - At the end of the stairs, provide a 3' long concrete landing the same width as the stairs.
      - Minimum post bury to be 5 feet.
      - See comments under HVAC/Mechanical regarding dryer vent termination.
    - Rear Deck/Access:
      - There is no existing deck at the existing rear sliding glass doors located in the Dining Room that would ordinarily exit to the rear. The door has been blocked/sealed by owner from use.
      - After the house has been elevated, construct a new 4' x 8' access deck with framing, decking, railings, handrails, and pickets.
      - Construct a new set of stairs off the new 4'x8' deck. Stairs to include posts, intermediate turning landing, handrails, and pickets (and with intermediate support and cross bracing as required/shown on plan sheets P-1 and P-2, as applicable). Coordinate orientation of stairs with both the owner and the project inspector.
      - At the end of the stairs, provide a 3' long concrete landing the same width as the stairs.
      - Minimum post bury to be 5 feet.
    - Access for Electrical Meter/Panel Box:
      - See comments under "Electrical."
    - All new access construction is to meet the applicable provisions of chapter 46 "Coastal and Flood Plain Construction Standards" and Appendix M "Wood Decks."
    - Accessibility Ramp: The owner had expressed interest in having an accessible lift installed for his wife. Owner has a physician prescription stating one is needed for his wife. Construct a handicap ramp in compliance with ADA and the 2018 NC State Building Code: Residential Code. Coordinate with homeowner and project inspector during construction to coordinate/discuss location.
  - Electrical Service:
    - An overhead electrical service drop connects to an electrical meter base and panel box located to the east of the northwest corner of the house. Provide access for electric meter reading by constructing a pressure treated timber elevated platform handrails, pickets and stairs with handrails and pickets. Top of platform to be set at BFE + 2 feet of Freeboard minimum (but no less than as directed by service provider). Coordinate with Project Inspector.
    - The breaker panel box is located on the interior of the house in the hallway at the west end of the house.
    - According to owner, an underground electrical drop extends from the panel box at the northwest corner of the house and runs south to both the wood storage building and to the boat lift. Locate underground service drop to front storage building. Protect from damage and repair if damaged or cut.
    - Since the storage building is at grade, in order to be reconnected to power, the electrical outlets/switches/panel box (if present) in the shop will need to meet the NC State Plumbing Code/local Flood Ordinance with regard to protection from flooding (i.e., such elements to be raised (by the owner) above the BFE + freeboard. Otherwise, contractor will not re-connect electrical service to Shop/storage building (if such exists).
    - Have the service temporarily disconnected and, after the house has been elevated, have service reconnected. Service to meet the NC State Electrical Code
    - Once house has been elevated, reattach sagging/loose wiring to floor framing in accordance with the NEC.
    - There is a utility service box located on the rear of the home to the east of the rear HVAC gas-pack unit. Verify type of service (i.e., cable TV, telephone, etc.). Owner to coordinate service disconnection/reconnection with service provider.
    - If phone or cable TV lines are found to exist and are active, and damaged during the elevation process, repair as needed to enable service restoration. Coordinate service termination/re-establishment with owner.
    - A satellite TV dish is attached to the front porch just west of the front steps. The cable drops beneath the house. If the dish presents an issue with elevation, detach from house and set aside at a location designated by owner. After elevation, re-attach dish but notify owner to contact service provider, if necessary, for re-alignment/reconnection.
  - Water:
    - An electric water heater is located in the Utility Room; the Utility Room itself located on the west end of the home. Washing machine is also located in this room.
    - House is on County Water. A water meter is located at northeast corner of house. Verify the location of service line and cordon off to protect line from damage during construction.
    - A water line extends from the water service near the house to the dock.
    - An irrigation manifold exists on the water service near house.
    - Disconnect main water service and reconnect service once house has been elevated.
    - Reconnect all other potable supply pipe and wiring (as applicable) in accordance with the NEC and the NC Plumbing Code
    - Strap/staple piping to floor as required by code.

26. Sewer:
- The house is on a septic tank/pump tank. The septic tank is located approximately 50 feet to the NE of the NE corner of the house.
  - Locate service line, tank, d-box, and field before beginning construction. Cordon off to protect from damage.
  - Owner will need to apply for existing systems permit which will include an inspection/review adequacy of the existing system.
  - An active waste piping leak exists in the southwest quadrant of the house. After elevation, repair active leak when reconnecting waste lines.
  - Once house has been set back on the new piling foundation, reconnect all waste pipe in accordance with the NC Plumbing Code.
  - Strap piping to floor as required by code.
  - All new plumbing to meet the NC Plumbing Code, latest revision.
  - Note special requirements for sealing floor penetrations in the 2018 NC State Building Code.
27. Other Utility Requirements:
- There is no visible evidence of an UGST. Contractor is to verify with owner that no known UGST exists within the work area.
  - An above-ground propane storage tank is located at the west end of the home approximately 25 feet west of the NW corner of the house. A buried service line leads toward the house.
    - Gas Service:
      - The HVAC gas-pack at the rear of the house is served by an above-ground propane tank located along the western property line just west of the house.
      - An underground gas line extends over to a gas pressure regulator. The regulator is located below the elevated gas-pack unit where a service line extends up to the gas-pack unit (near the disconnect).
      - A gas line extends from the rear and beneath the house to the north side of the chimney where the line enters the chimney base and apparently rises up to the firebox. Coordinate disconnecting and reconnecting the line with the gas provider, the owner, and the project inspector.
      - The house also has a propane heater.
      - A condensing unit for an electric split system is located just west of the gas pack at the rear of the home.
      - Owner to apply to have his service supplier disconnect gas.
      - After elevation, have homeowner contact gas service provider so that they can re-connect service.
      - Owner to contact his/her propane provider and verify that the gas provider has properly anchored the tank against flotation. Coordinate with project inspector.
      - Contractor is not to perform any gas related work.
    - Contractor to coordinate with both inspector and homeowner in the is connection / reconnection of the gas services.
  - HVAC:
    - An HVAC gas-pack unit rests on a timber platform at rear of the home the house.
    - To the west of the gas-pack unit, also on the rear of the home, a condensing unit rests on a timber platform. The heating/air-handling unit is located on the second floor adjacent to hall closet. Latched door and return register located at floor level. Contractor to verify. Thermostat located on wall adjacent to and perpendicular to hall HVAC access door.
    - A wall-mounted gas heater is located on the rear wall of the Dining Room adjacent to the screened porch.
      - Temporarily remove and store both the gas-pack unit and the condensing unit.
        - After the house has been elevated, construct one new pressure treated timber platform to carry both the gas-pack unit and the condensing unit; providing ample space between the two as required by code. The platform is to be independent of the house and located as directed by the project inspector.
        - It is recommended that the gas-pack unit not abut the house siding but that a minimum of 2 feet separation be provided between the unit and the wall) provide coving on top of duct work to protect the ducts from outside elements.
        - Platform and any controls/disconnect to be elevated at a minimum to BFE + 3 feet of freeboard (allowing 12" for framing and 2 feet below bottom of platform framing). Adjust electrical disconnects, etc. accordingly. Coordinate with project inspector.
    - Prior to disconnecting and removing the units, contractor to have his HVAC contractor verify the operation and condition of both units (i.e., operable, age, damaged from flooding, etc.) and make notes in writing for future reference. Have owner witness condition in presence of HVAC contractor. Upon completion of the elevation and re-setting the unit, reconnect and, in the presence of the owner and HVAC contractor, verify operation of unit is satisfactory at time of startup and document.
    - After house has been elevated, contractor to have new ducts installed in compliance with the Mechanical Code. Insulate and seal ducts per code and properly suspend from the floor framing.
    - All HVAC related work to conform to the latest edition of both the NC Residential Building Code and the NC Mechanical Code.
  - Dryer Vent: An electric dryer is located in the Utility Room; the Utility Room itself located on the west end of the home. Dryer vent pipe is improperly installed and permits entry of rainwater into wall as annular space is lacking a boot or otherwise appears to be unsealed. Once house is elevated, truncate the existing dryer duct (located at the west side door and deck), and terminate with a conventional flapper vent hood.
- Contractor shall be responsible for verifying all dimensions prior to footing placement. Dimensions and floor plan shown was developed from field made by measurements by Applan Consulting Engineers. These dimensions must be verified and altered as necessary for the proper placement of proposed framing elements beneath the existing structure. Some adjustments to fit the actual structure footprint will be required.

Front Porch, East Porch, and Screened Porch Framing Notes	
Key	Description of Work
<b>A</b>	Sister a new 2x6 PT FJ beside existing single 2x6 PT FJ. At each end add a Simpson Stainless Steel LUS26-2 beam hanger
<b>B</b>	Beside each existing single PT 2x10 girder, sister a PT 2x10 to the existing 2x10. Cut off 1 1/2" on ends of abutting FJ (2x6 or 2x10). See Detail 109 for end treatment detail. <ol style="list-style-type: none"><li>House side end to be attached to existing 2x10 PT band with a Simpson Stainless Steel LUS210-2.<ol style="list-style-type: none"><li>However, before attaching beam to existing 2x10 band, nail existing 2x10 PT band to house framing using (2) rows of 16d x 3" SS nails spaced at 6" o/c for a distance of 18 inches on each side of where the double 2x10 beam will attach to the house 2x10 band.</li></ol></li><li>Exterior end of double 2x10 girder to be supported with a 4x6 PT bracket bolted to the 8x8 pile with [2] 5/8" SS through bolts).</li></ol>
<b>C</b>	At each existing single 2x6 beam spanning from house to outside porch band, sister a PT 2x10 to each side of the existing 2x6 beam. Alternatively, contractor can remove the single 2x6 beam and replace with a double PT 2x10 beam. Cut off on ends of abutting FJ (2x6 or 2x10) as required to allow new members to slide in; shoring joists as required. See key item "B" above and Detail 109.
<b>D</b>	At east corner of front porch, remove and replace the existing double 2x6 PT diagonal beam with a new double 2x10 PT beam. Attached both ends of the new do. 2x10 diagonal beam, attach do. 2x10 to both house and to corner pile with a Simpson Skevable LSSR210-2Z (Order stainless steel if available; otherwise ZMAZ coating [G90 coating]). <ol style="list-style-type: none"><li>Shore existing abutting 2x6 FJ's as required to allow new double 2x10 to slide in.</li><li>Attach opposing existing 2x6 PT FJ's to new double 2x10 girder with Simpson LUS26-2 stainless steel beam hanger (for double joists) and a LUS26 SS joist hanger for single 2x6 joists. See detail 110.</li></ol>
<b>E</b>	Sister a pressure treated FJ to the side of the existing 2x6 FJ. At the north/south outside beam ends, remove 2x6 block nailer (which caused excessive joist notching). Add a Simpson U26-2 (SS) beam hanger to both ends of sistered joist.
<b>F</b>	Beside each existing single PT 2x10 girder below screened porch, sister a PT 2x10 to the existing 2x10. Cut off 1 1/2" on ends of abutting FJ (2x6 or 2x10). See Detail 109 for end treatment detail. <ol style="list-style-type: none"><li>House side end to be attached to existing 2x10 PT band with a Simpson Stainless Steel LUS210-2.<ol style="list-style-type: none"><li>However, before attaching beam to existing 2x10 band, nail existing 2x10 PT band to house framing using (2) rows of 16d x 3" SS nails spaced at 6" o/c for a distance of 18 inches on each side of where the double 2x10 beam will attach to the house 2x10 band.</li></ol></li><li>Attach a Simpson U210-2 to opposite end.</li></ol>
<b>G</b>	Add stainless steel joist or beam hangers.

West Deck Framing Notes	
Key	Description of Work
<b>H</b>	Existing west deck is to be elevated. However, the existing 4x4 posts are to be cut off 12 inches below the existing band or beam and new 6x6 PT posts spliced in per detail S-22/D new 6x6 piles are to be augured or driven a minimum of 5 feet deep.
<b>I</b>	Add stainless steel joist or beam hangers to all joists or beams abutting existing band sill/beam. Toe-nailing or end nailing of joist or beams to other members is not permitted.
<b>J</b>	Remove the existing single interior 2x8 Drop Girder and replace with 2 parallel PT 2x8 Drop Girders (one on each side) bolted to the existing remaining portion of 4x4 post with (2) 5/8" SS through bolts.
<b>K</b>	Before elevating deck, ensure the existing west single 2x8 band is bolted to the existing 4x4 posts w/ (2) 5/8" SS through bolts.

DATE	DESCRIPTION
N/A	REVISIONS
	NO. DATE
	1. DATE

DESIGNER: Bobby Joyner  
DRAWN BY: Jacob Kendrick  
CHECKED: [initials]  
BY: [initials]

CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL &  
STRUCTURAL ENGINEERS  
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BLN = C0562

154 Roundabout Ct.  
Rocky Mount, N.C. 27804  
Phone: (252) 972-7703  
Fax: (252) 972-7638

www.applanengineers.com  
admin@applanengineers.com

Final Drawings  
Review Purposes ONLY

Seal of Bobby L. Joyner, P.E., No. 8421, expires 12/02/2023

CONSTRUCTION NOTES  
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