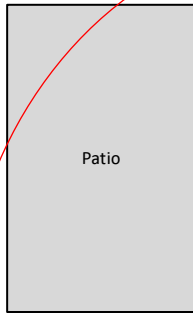




Beam missing, joists are overspanned

Large sections of back perimeter beam are rotten and will have to be replaced

68'-0"



Patio

Remove all siding extending past the base of the beam blocking the ventilation

16'-0"

10'-0"

15'-0"

34'-0"

17'-0"

FP

Decking in blue area has multiple areas with extensive rot. Homeowner should consider replacing all of the decking in this area

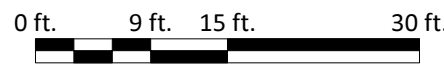
Sections of perimeter beam likely rotten

12'-6" 4'-4" 4'-9" 14'-6"

- Existing joist layout 2"x 8" on 16" centers
- 4"x6" beam likely rotten
- 4"x6" beam to be installed/replaced
- Existing 4"x6" beams
- Concrete Perimeter Beam



2/1/2024



Clearance & Ventilation – Clearance under the structure is tight but accessible. Ideally the structure should be lifted to come into compliance with current IRC build standards, however, that is not financially practical for this structure. Regardless, the ventilation can be significantly improved by removing the siding installed between the base of the beam and grade. Due to the limited accessibility, the amount of damage can't be fully determined until access under the structure is gained. Additional discovery work including more identified decking, joist and beam rot may have to be addressed once access under the structure is gained.

Drainage – Sections of grade under the structure contained standing water at the time of inspection due to recent rains. Long term, the caretakers of the structure should strongly consider re-grading the dirt or installing drainage leading water away from under the structure. If not addressed, this will lead to premature failure of the foundation due to wood rot regardless of any of the new repairs and ventilation improvements.

More Written Detail of Repair on Following Page

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Proposed Repair Plan 1115 West 5th Freeport, TX					
PO Box 2373 Freeport, TX 77542		SIZE L	JOB NO	DWG NO 24-F025-01	REV 0
gregbrookspe@yahoo.com (979)341-9181		SCALE 1in = 15ft. 0in.	SHEET		1 OF 5

Repair Notes

Clearance & Ventilation – Clearance under the structure is tight but accessible. Ideally the structure should be lifted to come into compliance with current IRC build standards, however, that is not financially practical for this structure. Regardless, the ventilation can be significantly improved by removing the siding installed between the base of the beam and grade. Due to the limited accessibility, the amount of damage can't be fully determined until access under the structure is gained. Additional discovery work including more identified decking, joist and beam rot may have to be addressed once access under the structure is gained.

Drainage – Sections of grade under the structure contained standing water at the time of inspection due to recent rains. Long term, the caretakers of the structure should strongly consider re-grading the dirt or installing drainage leading water away from under the structure. If not addressed, this will lead to premature failure of the foundation due to wood rot regardless of any of the new repairs and ventilation improvements.

Beams – The front concrete perimeter beam is functioning as designed. However, the side and back perimeter beams are covered in siding. In spot sections, that were visible, the perimeter beams contain significant rot and will have to be replaced. The existing beam layout spacing is adequate except where a 10' section of beam is needed along the east end of the structure as shown on the attached drawing. All rotten beam and new beam installed should be replaced with a minimum of 4"x6" treated wood construction connected by lap joint flanges with supports at each end point. It is projected approximately 100' of beam will have to be replaced. This value may increase once access under the structure is gained.

Joists – Joists beneath the original structure are 2"x 8" treated pine construction on 16" centers. Spot damage and discoloration can be seen. The joists can't be fully accessed until the decking is removed and the water under the structure dries out. For bidding purposes, it is assumed that 30 – 2"x8"x16' joist will have to be replaced along the west half where decking damage is present. The exact value will have to be set through a change order process as the scope will change once full access can be gained.

Piers – The perimeter and middle interior are supported by a mixture of concrete beam and concrete piers. Most appear to be in acceptable shape. The new interior piers should consist of a 8"x8"x16" surface mounted cinder block pier resting on a 16"x16"x4" concrete pad with the top set at grade. Pier spacing should not exceed 8' along the interior of the structure and should also support the end of each beam.

Termite Shields - Termite shields should be present at all pier locations.

Leveling – Level throughout the structure as needed while minimizing cosmetic damage

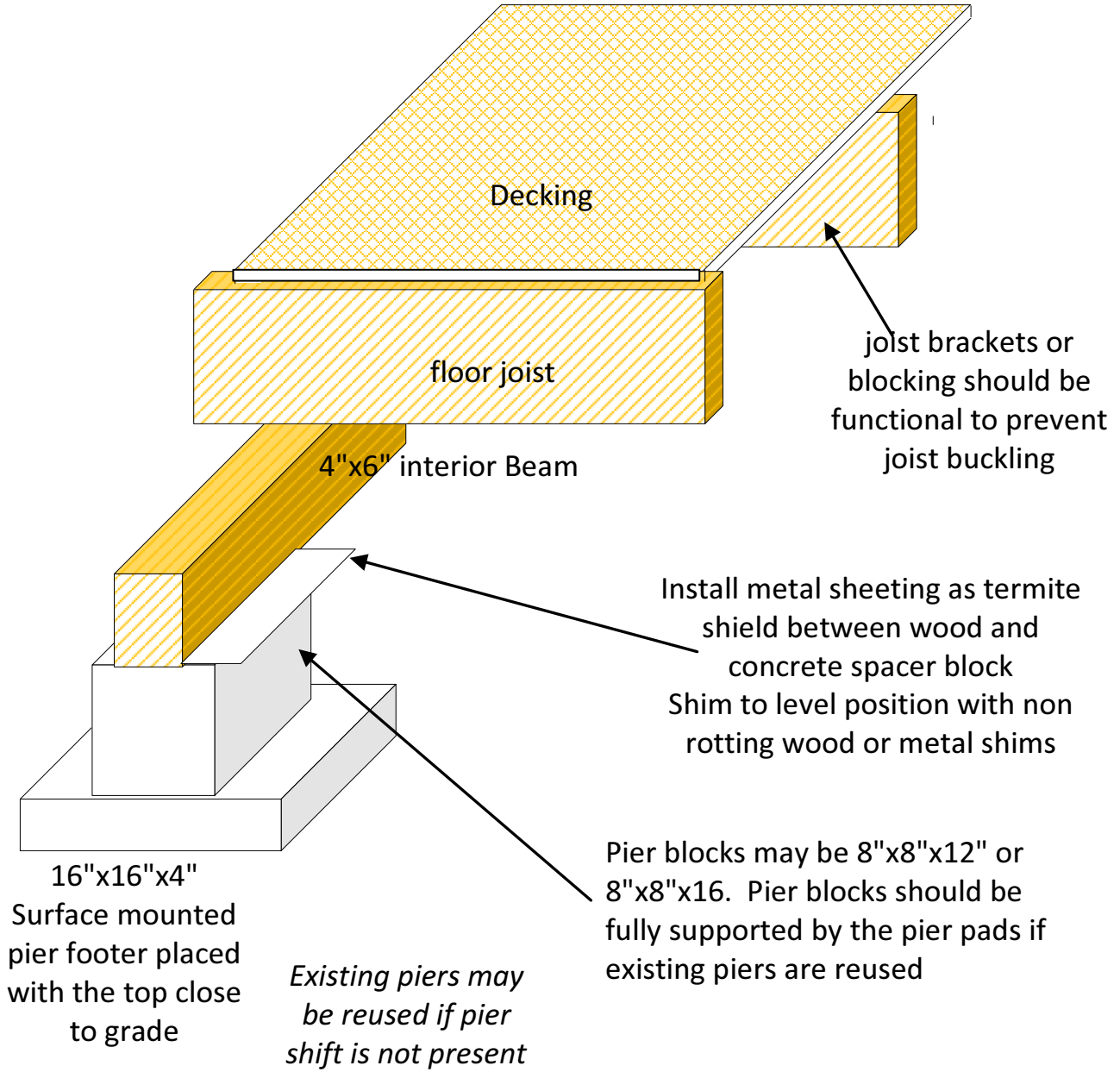
Decking – Decking along the west portion of the structure has enough rot that it will require replacement. The exact scope will be set once the rotten sections are removed. The attached drawing highlights the areas with the most concern. See drawing 24-F025-04 detailing the decking installation recommendations.



2/2/2024

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Pier Detail



16"x16"x4"
Surface mounted pier footer placed with the top close to grade

Existing piers may be reused if pier shift is not present

Pier blocks may be 8"x8"x12" or 8"x8"x16. Pier blocks should be fully supported by the pier pads if existing piers are reused

Install metal sheeting as termite shield between wood and concrete spacer block Shim to level position with non rotting wood or metal shims

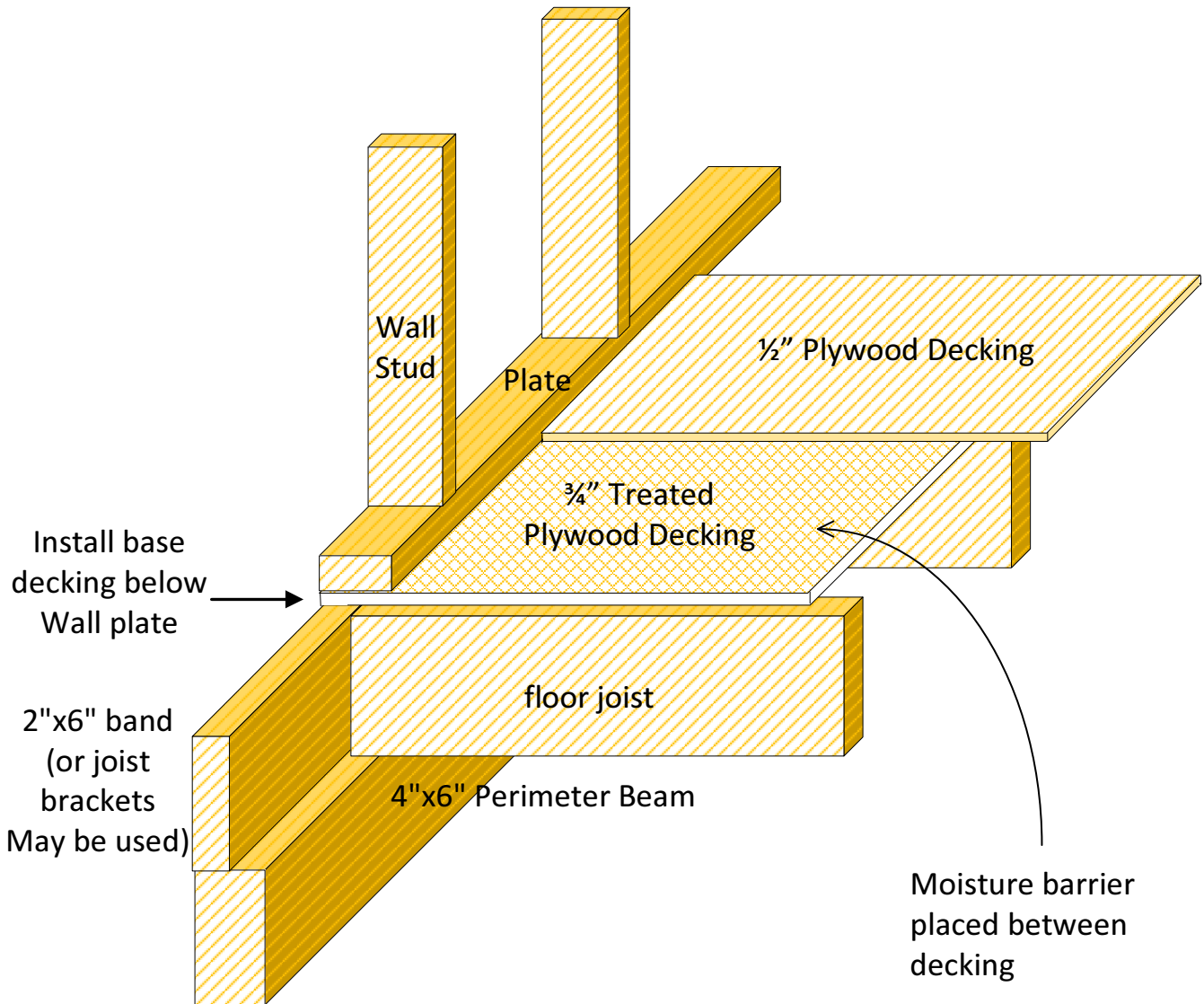
joist brackets or blocking should be functional to prevent joist buckling



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Decking Recommendation



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gregbrookspe@yahoo.com (979)341-9181		SCALE 1in = 15ft. 0in.	SHEET		4 OF 5

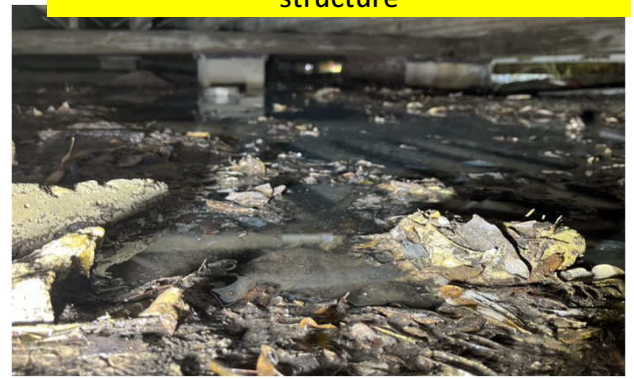
Inspection Photos



Siding blocking off ventilation along side and back of structure



Standing water under east half of structure



Standing water under west half of structure

Rotten beam along east perimeter



Rotten beam along back perimeter



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G A Brooks ENGINEERING LLC

Proposed Repair Plan
 1115 West 5th
 Freeport, TX

SIZE	JOB NO	DWG NO	REV
L		24-F025-05	0
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Greg A. Brooks, P.E.
PO Box 2373
Freeport, TX 77542

February 2, 2024
(979)229-0068

PRELIMINARY FOUNDATION INSPECTION REPORT: JOB NO. 24-F025

LOCATION: 1114 West 5th
Freeport, TX

DATE OF INSPECTION: January 25, 2024

OBSERVATIONS:

The structure consists of a single-story, single-family structure in residential use. It is not possible to bring this structure into compliance with International Residential Code recommendations. Therefore, the purpose of this report is to propose modifications to repair existing damage and improve areas with gross deficiencies. Any windstorm uplift design work is beyond the scope of this report as the structure does not currently contain any uplift protection. Refer to this write up and the attached drawing for a list of notable deficiencies and a recommended repair plan. Repair recommendations are based on evaluating the decking, joists, and beam load against recommendations from the American Wood Council and wood manufacturers. Pier load recommendations are based on physical observation and weight transfer recommendations for clay-based soils prevalent in the Texas Gulf Coast area. The inspection report is based on findings observed from extremely limited perimeter viewing under the foundation and an interior walkthrough of the structure. Additional discovery work may be found once access under the structure is gained.

CONCLUSIONS:

Clearance under the structure is tight but accessible. Ideally the structure should be lifted to come into compliance with current IRC build standards, however, that is not financially practical for this structure. Regardless, the ventilation can be significantly improved by removing the siding installed between the base of the beam and grade. Due to limited accessibility, the amount of damage can't be fully determined until access under the structure is gained. Additional discovery work including more identified decking, joist and beam rot may have to be addressed once access under the structure is gained. Sections of grade under the structure contained standing water at the time of inspection due to recent rains. Long term, the caretakers of the structure should strongly consider re-grading the dirt or installing drainage leading water away from under the structure. If not addressed, this will lead to premature failure of the foundation due to wood rot regardless of any of the new repairs and ventilation improvements. The front concrete perimeter beam is functioning as designed. However, the side and back perimeter beams are covered in siding. In spot sections, that were visible, the perimeter beams contain significant rot and will have to be replaced. The existing beam layout spacing is adequate except where a 10' section of beam is needed along the east end of the structure as shown on the attached drawing. All rotten beam and new beam installed should be replaced with a minimum of 4"x6" treated wood construction connected by lap joint flanges with supports at each end point. It is projected approximately 100' of beam will have to be replaced. This value may increase once access under the structure is gained. Joists beneath the original structure are 2"x 8" treated pine construction on 16" centers. Spot damage and discoloration can be seen. The joists can't be fully accessed until the decking is removed and the water under the structure dries out. For bidding purposes, it is assumed that

30 – 2"x8"x16' joists will have to be replaced along the west half where decking damage is present. The exact value will have to be set through a change order process as the scope will change once full access can be gained. The perimeter and middle interior are supported by a mixture of concrete beam and concrete piers. Most appear to be in acceptable shape. The new interior piers should consist of a 8"x8"x16" surface mounted cinder block pier resting on a 16"x16"x4" concrete pad with the top set at grade. Pier spacing should not exceed 8' along the interior of the structure and should also support the end of each beam. Termite shields should be present at all pier locations. Level throughout the structure as needed while minimizing cosmetic damage. Decking along the west portion of the structure has enough rot that it will require replacement. The exact scope will be set once the rotten sections are removed. The attached drawing highlights the areas with the most concern. See drawing 24-F025-04 detailing the decking installation recommendations.

RECOMMENDATIONS:

Recommendations are detailed in the attached drawings. Once level, piers should be shimmed with treated or rot resistant support shims to hold the structure at the proper elevation. All work should be in accordance with the details and specifications shown on the attached drawing. These repairs should restore the floor joists to their intended location. As is customary with pier and beam foundations, this exercise may have to be repeated during the life of the structure. The engineer will not assume any liability for any cracks created during leveling or for any new cracks or damage to flooring or roofing which may appear during the leveling procedure. Please note that I shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedure of repair, health or safety programs or precautions contained with the work and shall not manage, supervise, control or oversee construction. Further, I shall not be responsible for the acts or omissions of the contractor or other parties on the project. I have provided the service in a professional manner that meets generally accepted practices in residential construction. My entire warranty and liability will be limited to the payment received for my work performed. Leveling will most likely have to be repeated during the life of the structure. The engineer will not assume any liability for any cracks created during leveling or for any new cracks or damage to the structure which may appear during the leveling procedure. Safe lifting plans and the understanding of general construction practices are the responsibility of the general contractor executing the work.

Respectfully submitted,



Greg A. Brooks, P.E. #114197
F-15269

2/2/2024

