1ST FLOOR FRAMING: (SEE SKS-1 FOR DETAILS)

TYPICAL FRAMING OBSERVED INCLUDED:

- SINGLE SPAN 3”x5-3/4” JOISTS AT 24”oc SPANNING BETWEEN A 6-1/2”x6-3/4” FLUSH BEAM AND THE SOUTH FOUNDATION WALL.
- SINGLE SPAN 3”x5-3/4” JOISTS AT 24”oc SPANNING BETWEEN A 6-1/2”x6-3/4” FLUSH BEAM AND THE NORTH FOUNDATION WALL.
- CONTINUOUS TWO SPAN VARIOUS SIZED JOISTS AT VARIOUS SPACING SPANNING BETWEEN THE SOUTH FOUNDATION WALL AND VARIOUS SUPPORTS AT THE NORTH END AND A 6-1/2”x 6” DROPPED BEAM APPROXIMATELY JOIST MID-SPAN.
- SINGLE SPAN VARIOUS SIZED JOISTS AT VARIOUS SPACING SPANNING BETWEEN THE WEST FOUNDATION WALL AND A 2”x6” FLUSH BEAM + 4x4 DROPPED BEAM.
- CONTINUOUS MULTIPLE SPAN 5-1/2”x6-1/2” NOTCHED DROPPED BEAM SUPPORTED AT THE EAST AND WEST FOUNDATION WALL AND MULTIPLE STEEL POSTS ALONG THE SPAN.
- SINGLE SPAN 6-3/4”x6-3/4” FLUSH BEAM SPANNING BETWEEN THE SOUTH AND NORTH FOUNDATION WALLS.
- SINGLE SPAN 6-1/2”x6” DROPPED BEAM SPANNING BETWEEN A BRICK PIER AT THE EAST END AND A STEEL SUPPORT POST AT THE WEST END.
- CONTINUOUS TWO SPAN 2”x6” FLUSH BEAM SPANNING BETWEEN THE SOUTH AND NORTH FOUNDATION WALLS WITH TWO SINGLE SPAN 4x4 DROPPED BEAMS WITH ONE AT THE NORTH END AND THE OTHER AT THE SOUTH END, BOTH BELOW THE 2”x6”. THE NORTH 4x4 BEAM SPANS BETWEEN THE 6-1/2” DROPPED BEAM AND THE NORTH FOUNDATION WALL AND THE SOUTH 4x4 BEAM SPANS BETWEEN THE 6-1/2” DROPPED BEAM AND THE SOUTH FOUNDATION WALL.
OBSERVATIONS & ANALYSIS:  (SEE SKS-1, SKS-2 & AKS-1 FOR DETAILS)

- OBSERVATIONS ARE LIMITED TO THE VISUAL ASSESSMENT OF THE EXPOSED BUILDING ELEMENTS AT TIME OF INVESTIGATION. ANY UNFORESEEN CONDITIONS SHOULD BE ADDRESSED IF DISCOVERED DURING REPAIR WORK.
- APPROPRIATE MATERIAL STRESSES AND SECTION PROPERTIES FOR THE 1ST FLOOR FRAMING WAS UTILIZED BASED ON THE PERIOD OF CONSTRUCTION.
- 1ST FLOOR FRAMING IN GENERALLY FAIR CONDITION WITH SOME DAMAGED FRAMING.
- OBSERVED DAMAGED 3”x4” JOISTS BELOW 1ST FLOOR COMMON AREA. RECOMMEND REPAIR.
- INADEQUATE SUPPORT CONDITION AT STAIR TRIMMER, SEVERAL JOISTS AND BEAMS. RECOMMEND REPLACING OR ADDING NEW SUPPORTS.
- OBSERVED INADEQUATE HEADER NEAR THE STAIRS. RECOMMEND REINFORCING.
- OBSERVED MISSING FRAMING NEAR THE STAIRS. RECOMMEND ADDING NEW FRAMING.
- BOTH THE 4x4 DROPPED BEAMS SUPPORTING THE 2x6 BEAM ARE UNDERSIZED FOR CURRENT LOADING REQUIREMENTS. RECOMMEND REPLACING BEAM WITH NEW 4x6 BEAMS.
- 3”x4 JOIST NEAR THE 6-3/4”x 6-3/4” FLUSH BEAM IS UNDERSIZED FOR CURRENT LOADING REQUIREMENTS. RECOMMEND REINFORCING JOISTS WITH 2X6 MEMBERS.
- OBSERVED POWDER POST BEETLE DAMAGE AT SEVERAL AREAS OF THE 6-3/4”x 6-3/4” FLUSH BEAM AND IS UNDERSIZED FOR CURRENT LOADING REQUIREMENTS. RECOMMEND NEW SUPPORT WALL BELOW BEAM.
- OBSERVED DETERIORATION AT BASE OF ALL STEEL SUPPORT POSTS. RECOMMEND REPLACEMENT OF ALL STEEL SUPPORT POSTS.
- ALL ENDS OF REINFORCING AND SUPPLEMENTAL FRAMING SHALL BE ATTACHED TO EXISTING FRAMING WITH FRAMING CLIPS AT EACH END IF REQUIRED.
- RECOMMEND ADDING FRAMING CLIPS AT FLUSH FRAMING.
- 1ST FLOOR FRAMING MEETS THE CODE REQUIRED LOADING FOR THE CURRENT BUILDING’S USE AS A RESIDENCE WITH ABOVE RECOMMENDATIONS.
Photo P1:
Overall of existing 1st floor framing from the southwest corner of the building looking northeast.

Photo P2:
Existing 3"x5-3/4" joists spanning between a 6-1/2"x 6-3/4" flush beam and the south foundation wall below the kitchen looking southeast.

Photo P3:
Existing 3"x5-3/4" joists spanning between a 6-1/2"x 6-3/4" flush beam and the north foundation wall below bedroom #1 looking north.
Photo P4:
Observed horizontal crack in 3rd 3”x5-3/4” joist from the east foundation wall below the kitchen.

Photo P5:
Observed same cracked 3”x5-3/4” joist at a later date repaired. Appeared to be a structurally adequate repair.

Photo P6:
Existing built-up post supporting the 6-1/2”x 6-3/4” flush beam at the south end.
Photo P7:
Existing 6-3/4"x 6-3/4" flush beam spanning between the north and south foundation walls looking northwest. Observed severe insect damage at several portions of the 6-3/4"x 6-3/4" flush beam.

Photo P8:
Existing 6-1/2"x 6" dropped beam supporting various sized joists at various spacing spanning between an existing brick pier at the east end and a steel support post at the west end looking south.

Photo P9:
Existing 2"x 6" flush beam + 4x4 dropped beam supporting various sized joists at various spacing spanning between steel support posts at each end and by the 6-1/2"x 6" dropped beam at beam mid-span looking southwest.
**Photo P10:**
Existing various sized joists at various spacing spanning between the west foundation wall and the 2”x 6” flush beam + 4x4 dropped beam looking southwest. Observed repaired subflooring and supplemental framing for support. Appears to be structurally adequate.

**Photo P11:**
Observed damaged 3”x 4” joist below the common area and the bathroom inadequately repaired looking northeast.

**Photo P12:**
Observed damaged 3”x 4” joist below the common area repaired with a single 2x6 looking southwest.
Photo P13:
Observed multiple wood posts supporting north end of various joists near the stairs looking east. The door opening from 1st floor to the basement was framed in.

Photo P14:
Observed deterioration at base of steel post supporting both the 6-1/2" x 6" dropped beam and the 2" x 6" flush beam + 4x4 dropped beam looking northwest.

Photo P15:
Observed deterioration at base of steel post supporting the 2" x 6" flush beam + 4x4 dropped beam at the north end looking northwest.
1ST FLOOR LIVE LOADS

SLEEPING AREAS  30PSF
ALL OTHER AREAS  40PSF
1/4" = 1'-0"

1ST FLOOR FRAMING PLAN

1. CRACKED JOIST AT BEAM END. REINFORCED WITH (2) NEW 2x MEMBERS SIMILAR SIZE. APPEARS STRUCTURALLY ADEQUATE.

2. PROVIDE A WOOD SUPPORT WALL BELOW EX. 6-3/4"x6-3/4" FLUSH BEAM. REFER TO TYP SUPPORT WALL DETAIL. PROVIDE A 3'-0 OPENING FOR EGRESS WITH A (2) 2x6 HEADER.

3. REPLACE EX. DROPPED 4x4 BEAM WITH NEW 4x6 BEAM. PROVIDE BOTH A LUS46 HANGER AT EX. 6-1/2"x 6" DROPPED BEAM AND HARDWOOD SHIMS AS NEEDED TO FIT TIGHT AT EXISTING 2"x6" BEAM.

4. SISTER EX. 2x6 HEADER WITH NEW 2x6 AND ADD NEW 2x6 JOIST BETWEEN EX. 9-1/2"x 5" JOIST AND FLUSH 2"x6"x DROPPED 4x4 BEAM. PROVIDE BOTH HARDWOOD SHIMS AS NEEDED TO FIT TIGHT AT EXISTING SUBFLOOR AND FRAMING CLIPS AT JOIST & HEADER.

5. PROVIDE NEW PRESSURE TREATED 6x6 WOOD POST AT SOUTH END OF 9-1/2"x 5" JOIST. REFER TO THE TYP WOOD POST SUPPORT DETAIL.

6. PROVIDE NEW PRESSURE TREATED (2) 2x4 SUPPORT AT SOUTH END OF 3"x6" JOIST. REFER TO TYP JOIST SUPPORT DETAIL.

7. PROVIDE NEW STEEL POST SUPPORT AT EAST END EX. 6-1/2"x 6" DROPPED BEAM. REMOVE EX. BRICK PIER AFTER DROPPED BEAM IS PROPERLY SUPPORTED.

8. REPLACE EX. DROPPED 4x4 BEAM WITH NEW 4x6 BEAM. PROVIDE BOTH A LUS46 HANGER AT EX. 6-1/2"x 6" DROPPED BEAM AND HARDWOOD SHIMS AS NEEDED TO FIT TIGHT AT EXISTING 2"x6" BEAM.

9. PROVIDE NEW PT 6x6 PRESSURE TREATED WOOD POST. CENTER AT END OF EX. (3) 2X6. REFER TO THE TYP WOOD POST SUPPORT DETAIL.

10. PROVIDE NEW PRESSURE TREATED 6x6 WOOD POST AT SOUTH END OF 3"x6" JOIST. REFER TO THE TYP WOOD POST SUPPORT DETAIL.

11. REPLACE EX. 2X6 WOOD POST WITH NEW PT 4X6 PRESSURE TREATED WOOD POST. CENTER AT END OF EX. (3) 2X6. REFER TO TYP WOOD POST SUPPORT DETAIL.

12. PROVIDE A WOOD SUPPORT WALL BELOW EX. 6-3/4"x6-3/4" FLUSH BEAM. REFER TO TYP SUPPORT WALL DETAIL. PROVIDE A 3'-0 OPENING FOR EGRESS WITH A (2) 2X6 HEADER.

13. REPLACE EX. BUILT-UP WOOD POST WITH NEW PT 6X6 WOOD POST. CENTER AT END OF BEAM. REFER TO THE TYP WOOD POST SUPPORT DETAIL.

14. ATTACH END OF EX. JOISTS TO EX. (3) 2x6 WITH FRAMING CLIPS REMOVE EX. 3x5" WOOD POSTS AFTER JOISTS ARE PROPERLY SUPPORTED.
1. Shore existing framing as required until new framing is in place.

2. All framing lumber shall be dry (19% maximum moisture content) Doug Fir, No 2 or better unless noted otherwise. Pressure treated Southern Pine shall be used for ground contact, sill plates, or exterior use.

3. Fasteners shown are Simpson Strong-Tie fasteners and are selected for load requirements. Substitution is permitted if load capacities of alternate fasteners are of equal or greater capacity than comparable Simpson fasteners.

4. Construction adhesive shown in details shall be PL-400 construction adhesive or equivalent. Adhesive shall conform to APA Performance Specification AFG-01.

5. Plywood & OSB sheathing shown in details shall be APA rated sheathing.

6. Metal connector hardware shown in details are Simpson Strong-Tie connectors and are selected for load requirements. Substitution is permitted if load capacities of alternate are of equal or greater capacity than comparable Simpson connector. Fastening shall be per manufacturer's requirements using SD screws.

7. Nails are based on common wire nails. Larger nail sizes are required for box or pneumatic driven fasteners.

   Substituting pneumatic nails of equal diameter is acceptable if they match these sizes:
   Common wire nail diameters:
   6d = 0.113"  12d = 0.148"
   8d = 0.131"  16d = 0.162"
   10d = 0.148"  20d = 0.192"

8. All engineered lumber shall have the following minimum design properties:

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<th>Engineered Wood Properties</th>
<th>Fb</th>
<th>Fc PARR</th>
<th>Fc PERP</th>
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