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

TYPICAL FRAMING OBSERVED INCLUDED:

- SINGLE SPAN 2x10 JOISTS AT 16”oc SPANNING BETWEEN THE WEST EXTERIOR 2x STUD WALL AND AN INTERIOR FOUNDATION WALL.
- CONTINUOUS 2-SPAN 4”x5” JOISTS AT 24”oc SPANNING BETWEEN TWO INTERIOR FOUNDATION WALLS AND THREE VARIOUS SIZED DROPPED BEAMS APPROXIMATELY JOIST MIDSPAN.
- CONTINUOUS 2-SPAN 1-7/8”x5-3/4” JOISTS AT 24”oc SPANNING BETWEEN THE SOUTH AND NORTH FOUNDATION WALLS WITH A CENTER 5-3/4”x5-3/4” DROPPED BEAM AT THE WEST END AND A 5-1/2”x 6-3/4” + 6x6 DROPPED BEAM AT THE EAST END APPROXIMATELY JOIST MIDSPAN.
- THREE CONTINUOUS MULTIPLE SPAN DROPPED BEAMS INCLUDING A 5-1/2”x6” BEAM, A 5”x5” BEAM AND A 4-3/4”x6” BEAM SUPPORTED BY VARIOUS SIZED STEEL AND WOOD POSTS ALONG THE SPAN OF THE DIFFERENT SIZED BEAMS.
- SINGLE SPAN 5-3/4”x5-3/4” DROPPED BEAM SUPPORTED AT AN INTERIOR FOUNDATION WALL AT THE WEST END AND A BRICK PIER AT THE EAST END.
- SINGLE SPAN 5-1/2”x6-3/4” DROPPED BEAM PLUS A 6x6 BEAM BELOW THE 5-1/2”x6-3/4” DROPPED BEAM SUPPORTED AT THE EAST FOUNDATION WALL AND A BRICK PIER AT THE WEST END.
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 GOOD CONDITION.
- OBSERVED INADEQUATE HEADER AND SUPPORT AT THE STAIRS. RECOMMEND REMOVING AND REPLACING WITH A NEW HEADER AND TWO NEW SUPPORTS.
- 5-3/4”x5-3/4” DROPPED BEAM IS UNDERSIZED FOR CURRENT LOADING REQUIREMENTS. RECOMMEND REINFORCING BEAM.
- 5-1/2”x6-3/4” + 6x6 DROPPED BEAM IS UNDERSIZED FOR CURRENT LOADING REQUIREMENTS. RECOMMEND ADDING A NEW SUPPORT POST.
- OBSERVED POWDER POST BEETLE DAMAGE AT WEST SIDE OF THE CONTINUOUS 4-3/4”x 6” DROPPED BEAM NEAR THE 6-1/4”x 4” DROPPED BEAM SUPPORT. BEAM WAS ANALYZED WITH A REDUCED SECTION AND DETERMINED TO BE STRUCTURALLY ACCEPTABLE.
- INADEQUATE 3-3/4”x 5” LEDGER ATTACHMENT. RECOMMENDED ADDING NEW SUPPORTS.
- OBSERVED DETERIORATED BRICK PIER SUPPORTING BOTH THE 5-3/4”x5-3/4” AND THE 5-1/2”x6-3/4” + 6x6 DROPPED BEAMS. RECOMMEND REPAIRING BRICK.
- 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:
Existing 2x10 joists spanning between the west exterior 2x stud wall and an interior foundation wall below bedroom #2 and the northeast bathroom looking north.

Photo P2:
Existing continuous two span 4"x 5" joists spanning between two interior foundation walls with three various sized dropped beams at approximately joist mid-span below the kitchen looking southwest.

Photo P3:
Existing 3-3/4"x 5" ledger supporting the 4"x 5" joists below the kitchen looking south. Unable to determine adequate attachment to the existing 5-3/4"X 5-3/4" flush beam.
Photo P4:
Existing 6-1/4”x 4” dropped beam supported by two steel posts below the kitchen looking southwest.

Photo P5:
Existing various sized dropped beams including a 5-1/2”x 6” beam, a 5”x 5” beam and a 4-3/4”x 6” beam from left to right below the kitchen looking north.

Photo P6:
Observed insect damage at the 4-3/4”x 6” beam near the 6-1/4”x 4” dropped beam support.
Photo P7:
Existing continuous 1-7/8”x 5-3/4” two span joists spanning between the north and south foundation walls with a center 5-3/4”x 5-3/4” dropped beam at the west end and a 5-1/2”x 6-3/4” + 6x6 dropped beam at the east end approximately at joist mid-span below bedroom #1 looking east.

Photo P8:
Existing continuous 1-7/8”x 5-3/4” two span joists spanning between the north and south foundation walls with a center 5-3/4”x 5-3/4” dropped beam at the west end and a 5-1/2”x 6-3/4” + 6x6 dropped beam at the east end approximately at joist mid-span below the hallway looking east.

Photo P9:
Existing 5-3/4”x 5-3/4” dropped beam supported on an interior foundation wall at the west end and a brick pier at the east end looking northeast.
Photo P10:
Existing 5-1/2”x 6-3/4” + 6x6 dropped beam supported at the east foundation wall and a brick pier at the west end looking southeast.

Photo P11:
Existing (2) 1-3/4”x 3-3/4” dropped header beam at the stairs supported at the center by a (2) 1-3/4”x 3-3/4” wood post looking northeast.

Photo P12:
Observed deteriorated brick and mortar joints at brick pier supporting both the 5-3/4”x 5-3/4” and the 5-1/2”x 6-3/4” + 6x6 dropped beams looking south.
WESLEYAN UNIVERSITY
9 VINE ST, MIDDLETOWN, CT

1ST FLOOR PLAN

1ST FLOOR LIVE LOADS
SLEEPING AREAS 30PSF
ALL OTHER AREAS 40PSF

OPEN/COVERED PORCH
 COMMON AREA
BEDROOM # 1
HALL
CLOSED PORCH
BEDROOM #2
HALL
BATH
SHOWER

ON TO BASEMENT
DN TO BASEMENT
UP TO 2ND FLOOR

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AKS-1
EX. (2) 1-3/4"x 3-3/4" WOOD POST

EX. 2x10 JOISTS
AT 16"oc

EX. 4"x 5" JOISTS
AT 24"oc

EX. WOOD POST STAIRS

EX. CONT 2-SPAN 1-7/8"x 5-3/4"
JOISTS AT 24"oc

EX. 5-3/4"x 5-3/4" DROPPED BEAM
REPLACE EX. (2) 1-3/4"x 3-3/4" DROPPED HEADER
WITH (2) 2X6 HEADER. FASTEN PLY'S WITH (2) 10d
COMMON NAILS AT 12"oc

NEW STEEL SUPPORT POST CENTERED AT EXISTING BEAM.

REPLACE BOTH EX. WOOD POST AND EX. 1-1/2" OD
STEEL POST WITH NEW PT WOOD POSTS. REFER
TO TYP WOOD POST SUPPORT DETAIL

NEW WOOD SUPPORT POST AT EACH END OF NEW HEADER

REINFORCE EX. 5-3/4"x 5-3/4" CONT DROPPED BEAM
WITH (2) 1-3/4"x 5-1/2" LVLS, ONE EACH SIDE OF BEAM,
AND ATTACH WITH 1/4"x 3-1/2" SCREWS AT 8"oc TOP &
BTM. STAGGERED. PLACE LVLS TIGHT TO UNDERSIDE OF
JOISTS AND PROVIDE HARDWOOD SHIMS AS REQUIRED
TO FIT TIGHT AT EXISTING JOISTS.

EX. 5-3/4"x 5-3/4" FLUSH BEAM

EX. 6-1/4"x 4" DROPPED BEAM
WITH (2) 1-1/2" OD STEEL POSTS

EX. 7-1/4"x 1-1/4" DROPPED BEAM
WITH (2) 1-1/2" OD STEEL POSTS

EX. 4-3/4"x 6" DROPPED BEAM

EX. 5-1/2"x 6" DROPPED BEAM

EX. 5"x 5" DROPPED BEAM

EX. 5-1/2"x 6" DROPPED BEAM

EX. 5-3/4"x 5-3/4" DROPPED BEAM
REPLACE EX. (2) 1-3/4"x 3-3/4" WOOD POST.

SUPPORT EX. 3-3/4"x5" WOOD LEDGER WITH (5) 4X4 PT WOOD
POSTS. REFER TO TYP WOOD POST SUPPORT DETAIL.

FREEZE PIER BRICK PIER

CHIMNEY

EX. 2x10 JOISTS
AT 16"oc

EX. 5-1/2"x 5-3/4" DROPPED BEAM

EX. 4"x 5" JOISTS
AT 24"oc

EX. CONT 2-SPAN 1-7/8"x 5-3/4"
JOISTS AT 24"oc

EX. 6-1/4"x 4" DROPPED BEAM
WITH (2) 1-1/2" OD STEEL POSTS

EX. 2-SPAN 1-7/8"x 5-3/4"
JOISTS AT 24"oc

EX. 5-3/4"x 5-3/4" DROPPED BEAM

EX. 5-1/2"x 6" DROPPED BEAM

EX. 5-3/4"x 5-3/4" DROPPED BEAM
WITH (2) 2X6 HEADER. FASTEN PLY'S WITH (2) 10d
COMMON NAILS AT 12"oc
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. 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.

5. 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”
   8d = 0.131”
   10d = 0.148”
   12d = 0.162”
   16d = 0.192”

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

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<th>Engineered Wood Properties</th>
<th>Fb (ksi)</th>
<th>Fc (ksi)</th>
<th>Fc (psi)</th>
<th>Fc (psi)</th>
<th>Fc (psi)</th>
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<tbody>
<tr>
<td>LVL</td>
<td>2600</td>
<td>2510</td>
<td>750</td>
<td>285</td>
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ENGINEERED WOOD PROPERTIES

EXISTING BEAM

ATTACH CAP PLATES TO BEAM WITH (4) SD #10 x 2-1/2" SCREWS

1/4" x 6" BEAM WIDTH STEEL CAP PLATE + LALLY LOCK CAP PLATE.

3-1/2" OR 4" O.D. LALLY COLUMN.

MIN. 12,000 LB ALLOWABLE LOAD CAPACITY

EXISTING FRAMING

ATTACH BASE PLATES TO FTG WITH (4) 3/16" x 2-1/4" TITEN MASONRY SCREWS

24" x 24" x 10" 3000 PSI CONCRETE FOOTING

PT SYPP POST.

TOE NAIL WITH (4) 16d COMMON NAILS. (2) AT EACH SIDE.

CONCRETE DECK BLOCK

EXISTING SLAB

TYP WOOD POST SUPPORT DETAIL

TYP STEEL POST SUPPORT DETAIL

NOTES & DETAILS

 SCALE: As indicated
 PROJECT NUMBER: 16151
 DATE: 3-6-2018
 DRAWN BY: JDM
 CHECKED BY: CCB