LOCAL HISTORIC DISTRICT: Dilworth

PROPERTY ADDRESS: 400 East Worthington Avenue

SUMMARY OF REQUEST: Rear deck addition

APPLICANT/OWNER: Kevin Cella

Details of Proposed Request

Existing Conditions
The existing structure is a 1.5 story Bungalow style house constructed in 1920 and listed as a contributing structure in the Dilworth National Register of Historic Places. The site elevation drops from front to rear approximately 10 feet. The rear elevation has a garage beneath the first floor.

Project
The project is a rear deck addition similar to the design at 328 East Worthington Avenue. The deck roof ties into the rear gable below the eaves. Primary and trim material is wood. Deck dimension is 14’ x 23’ including the stair. Roof trim and eave dimensions will match existing. There are no impacts to mature trees.

Design Guidelines – Additions, page 7.2

1. Attempt to locate the addition on the rear elevation so that it is minimally visible from the street.
2. Limit the size of the addition so that it does not visually overpower the existing building.
3. Attempt to attach new additions or alterations to existing buildings in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the building would be unimpaired.
4. Maintain the original orientation of the structure. If the primary entrance is located on the street façade, it should remain in that location.
5. Maintain the existing roof pitch. Roof lines for new additions should be secondary to those of the existing structure. The original roof as visible from the public right-of-way should not be raised.
6. Make sure that the design of a new addition is compatible with the existing building. The new work should be differentiated from the old while being compatible with its massing, form, scale, directional expression, roof forms and materials, foundation, fenestration, and materials.
**Staff Recommendation**

Staff believes the porch addition meets all applicable guidelines for additions. Minor detail changes may be reviewed by staff with HDC recommendation.
1. All distances are horizontal unless otherwise noted.
2. All angles are to be verified.
3. The Client acknowledges that the boundary survey services do not determine land ownership and that the professional land survey services provide only an opinion of previously described boundary lines which may or may not be upheld by a court of law, and (2) the general survey does not include the locations of all easements, and (3) in services relating to boundary surveys, the consultant limits the liability to the professional fee charged to the client.
4. Broken lines indicate lines not surveyed.
5. The survey does not constitute a title search by Surveyor.
6. This property is not located in a 100 year flood zone as shown on F.F.A. Flood Map #31700959000 (Effective Date: November 5, 2008).
7. Copyright © AccuTech Surveying & Mapping, LLP. All rights reserved. No part of this survey may be reproduced by photostat, recording or by any other means, or stored in an information retrieval system by anyone other than the owner of this survey.
8. Basic of bearings to be based on the N.C. Continuously Operating Reference stations (CORS) 47958 network, NATS-008015-2011.
Rear Elevation

Scale: 1/4 " = 1'-0"
Rear Elevation
Scale: 1/4 " = 1'-0"
Rear Elevation

Scale: 1/4 " = 1'-0"
Rear Elevation

Scale: 1/4" = 1'-0"
1. ENGINEERS SEAL ONLY APPLIES TO STRUCTURAL SYSTEMS AND COMPONENTS INCLUDING ROOF SYSTEM (STRUCTURAL PORTION ONLY), FLOORS, WALLS, BEAMS AND HEADERS, SUPPORTING STRUCTURE, COLUMN CAPTIVATOR, OFFSET LOAD BEARING WALLS, PIER AND GIRDER SYSTEM, AND FOUNDATION. ROOF TRUSS AND TRUSS COMPONENTS SHALL BE DESIGNED AND SEALLED BY A STRUCTURAL ENGINEER.

2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND MATERIALS THROUGH PLAN REVIEW OR ORDERRING MATERIALS AND CONSTRUCTION.

3. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2012 NORTH CAROLINA RESIDENTIAL BUILDING CODE AS WELL ALL LOCAL CODES AND REGULATIONS.

4. ANY ITEMS OR DESIGN NOT SPECIFICALLY MENTIONED SHALL MEET OR EXCEED THE REQUIREMENTS OF THE 2012 NORTH CAROLINA RESIDENTIAL BUILDING CODE.

5. VERIFY ALL LOCAL CODES, ENERGY TYPES, AND SITE CONDITIONS PRIOR TO CONSTRUCTION.

DESIGN LOADS

1. DESIGN LOADS ARE ALL DEAD LOADS PLUS:

   A. MAIN FLOOR LIVE LOADS
      40PSF
   B. ALL OTHER FLOORS
      20PSF
   C. BALCONIES
      60PSF
   D. DECKS
      50PSF
   E. SUSPENDED GARAGES
      50PSF (SKIP POINT LOAD)

2. ATTIC FLOOR LOADING:

   I. AREAS ACCESSIBLE BY PERMANENT STAIRS
      30PSF
   II. WITH STORAGE
      20PSF
   III. WITHOUT STORAGE
      10PSF

3. ROOF LIVE LOAD
   H. WIND LOAD
      30PSF (.5% 3 SEC. GUST)
   I. SNOW LOAD
      20PSF

4. J. SEISMIC DESIGN CATEGORY C

GENERAL

1. NOTES BELOW ARE INTENDED TO SERVE AS SPECIFICATIONS. SEE REFERENCED STANDARDS FOR REQUIREMENTS IN ADDITION TO THESE NOTES.

2. CONTRACTOR SHALL TAKE ALL FIELD DIMENSIONS AND ELEVATIONS AS NECESSARY TO VERIFY THE EXISTING CONDITIONS SHOWN. THE RESPONSIBILITY OF ALL FIELD DIMENSIONS IS THE CONTRACTOR'S.

3. COORDINATE LOCATION OF EXISTING UTILITIES, IF ANY, WITH PROPERTY OWNER.

4. ALL SAFETY REGULATIONS TO BE FOLLOWED STRICTLY. METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL IS CONTRACTOR'S RESPONSIBILITY.

WOOD

1. DIMENSIONAL LUMBER: #2 GRADE OR BETTER.

2. ALL WOOD EXPOSED TO ELEMENTS SHALL BE PRESSURE TREATED SOUTHERN PINE, #1-2 PINE (SY) UNLESS OTHERWISE NOTED. ALL OTHER WOOD SHALL BE SPIUCE PINE FIR (SPF) WHERE AVAILABLE OR SYP UNLESS OTHERWISE NOTED.

3. EXTERIOR SHEATHING: 7/16 IN SBG WITH SPAN RATING OF 24/16.

4. LVL. Fb = 2900 PS OR GREATER

5. E = 2,000,000 PSI LVL BEAMS, 1,500,000 PSI PSL BEAMS

6. FOR EXTERIOR APPLICATIONS USE GREATER THAN “PARALLAM” MEMBERS OR TREATED DIMENSIONAL LUMBER.

7. DESIGN, FABRICATION AND ERECTION: NDS FOR WOOD CONSTRUCTION.

STEEL

1. STRUCTURAL STEEL:

   a. ROLLED SECTIONS = ASTM A36 OR A92
   b. HSS SECTION = ASTM A500

2. STEEL REINFORCING BARS: ASTM A615 - GRADE 40 O.N.

3. ALL REBAR SPACES SHALL BE 24" MIN. UNLESS OTHERWISE NOTED.

4. DESIGN, FABRICATION AND ERECTION: ASC SPECIFICATIONS FOR BUILDINGS.

5. ALL ERECTION SHALL BE SHARP PRIMED AND FIELD PRIMED WHERE WELDED. REMOVE ALL WELD SLAG AND GRIND AS REQUIRED FOR ACCEPTABLE APPEARANCE.

ROOF

1. ROOF IS A SABLE UNLESS NOTED OTHERWISE. PITCH NOTED ON PLANS.

2. FLAT NON-VANTIED CEILING UNLESS NOTED OTHERWISE. CEILING TO BE ATTACHED TO THE SLAB AT 24" O.C., UNLESS OTHERWISE NOTED.

3. ROOF SHEATHING: 7/16" OSB.

4. WALL SHEATHING: 8" W.D. X 6" I. O.C. ON THE PERIMETERS OF EACH SHEET AND 12" O.C. IN THE FIELD.

5. SHEATHING IS UNBLOCKED IN THE FIELD AND BLOCKED AT EDGES.

6. STEEL BRACING: 2X12 "FRAMING TYPICAL WALL, 24" X 18" O.C. UNLESS OTHERWISE DIMENSIONED.

FLOORS

1. SHEATHING: 3/4" T&G UNLESS NOTED OTHERWISE.

2. SECURE SHEATHING WITH 80 NAILS, 6" I. O.C. ON THE PERIMETERS OF EACH SHEET AND 12" O.C. IN THE FIELD.

3. SHEATHING IS UNBLOCKED IN THE FIELD AND BLOCKED AT EDGES.

4. UNLESS NOTED OTHERWISE, FLOOR FRAMING SHALL CONSIST OF 2X12 FRAMING TYPICAL WALL, 24" X 18" O.C. UNLESS OTHERWISE DIMENSIONED.

FASTENER SCHEDULE

1. ALL CONNECTION HARDWARE SHALL UTILIZE SIAMIPRODUCTS OR EQUIVALENT UNLESS OTHERWISE NOTED.

2. ANY CONNECTIONS OR FASTENERS NOT SPECIFICALLY ADDRESSED SHALL MEET REQUIREMENTS OF NDS FOR WOOD CONSTRUCTION.

3. ALL EXTERIOR CONNECTION HARDWARE SHALL BE HOT DIPPED GALVANIZED (HDG) BE FORPED AN ALUMINUM EMBRASS.

4. ALL WELDS SHALL BE MADE WITH 6730X ELECTRODES, LOW HYDROGEN TYPE.

5. BOLTS: ASTM A325 UNLESS NOTED OTHERWISE.

6. ANCHORS: ASTM A36 UNLESS NOTED OTHERWISE.

7. WASHERS: ASTM F964

8. NAILING PATTERN:

   a. ALL FLOOR JOIST MUST BE TIE-NAILED TO THEIR SUPPORT GIRDERS WITH A MINIMUM OF 3 8D NAILS AT EACH END FROM EACH SIDE. NO END NAILING THROUGH THE GIRDER BAND IS PERMITTED EXCEPT FOR TEMPORARY CONSTRUCTION PURPOSES.

   b. IF DROPPED GIRDERS ARE USED, END LAP ALL JOISTS A MINIMUM OF 12" AND SIDE NAIL EACH WITH A MINIMUM OF (3) 16D NAILS AT EACH END OF EACH JOIST. LEDGER STAYS MUST BE NAILLED WITH (3) 16D NAILS AT EACH END, WITH NAILS SPACED 3" APART.

   c. NAIL MULTIPLE BUILT-UP GIRDERS WITH THREE ROWS OF 16D NAILS STAGGERED AT 30" O.C., 2" DOWN FROM TOPL, 2" UP FROM BOTTOM, AND AT MID-DEPTH. USE (3) 16D NAILS AT EACH END OF EACH PEICE OF SUPPORTING JOISTS THROUGH THE MEMBERS MAKING UP THE MULTIPLE GIRDER.

FOOTINGS

1. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 IN.

2. CONCRETE SHALL NOT BE PLACED IN TEMPERATURES BELOW 50 DEGREES FAHRENHEIT UNLESS HEAT TO BE PROVIDED DURING CURING FOR 2 DAYS.

3. MINIMUM SOIL BEARING CAPACITY: 2000PSF UNLESS NOTED OTHERWISE OR AS DETERMINED BY A STRUCTURAL ENGINEER.

4. ALL CONTINUOUS WALL FOOTINGS ARE 12" THICK X 24" WIDE. REINFORCING STEEL MUST BE PROVIDED AS SHOWN THROUGHOUT THE WALL.

5. FOOTINGS FOR 16X16 P IERS ARE 24"X24"X12" UNLESS NOTED OTHERWISE. REINFORCING TO BE AS NOTED ON PLANS. SECURE 6X6 COLUMNS TO FOOTING WITH SIMPSON PEB OR EQUIVALENT BASES UNLESS NOTED OTHERWISE.

6. CHIMNEY FOOTING SIZES ARE SHOWN ON THE STRUCTURAL DRAWINGS. MASONRY OR SISERN STYLE CHIMNEY FOOTING MUST BE A MINIMUM OF 12" THICK WITH 12" PROJECTION ON ALL SIDES.

FOUNTAINS

1. ALL FOOT LOADS FROM ROOF BRACES, JACK STUDS, AND BEAM SUPPORTS, CANNOT BE ON SHEET WITH SAME AT ALL TIMES.

2. ALL NO HOLLOW FLOORS, ALL LOAD SUPPORT MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.

3. ALL INTERIOR PIES ARE 16X16 CUJ TO A MAXIMUM HEIGHT OF 64".

4. ALL PIES SHALL BE FUELED WITH TYPE S MORTAR. PIEG LARGHER THAN 16X16" ARE AS NOTED ON PLANS OR AS REQUIRED.

5. ALL PIES SHALL HAVE A CLEAR BLOCK OF 8X8X16" CUJ.

6. CRAWL SPACE GIRDERS AND BAND AS NOTED ON PLANS.

7. ALL GIRDERS WHERE THE JOIST CHANGE DIRECTION, INSTALL BRIDGING AT 6" O.C. FOR A MINIMUM OF (5) JOIST SPACINGS BEYOND ANY DIRECTION CHANGE.

8. PROVIDE WOOD BLOCKING THRU-BOLTED TO STEEL BEAMS WITH JOIST TOE-NAILED AND ATTACHED TO THE BEAM WITH METAL HARDWARE ANY HARDWOOD FLOORS THAT PASS OVER A STEEL BEAM SUPPORTING FLOOR JOISTS.

9. ALL CRAWL SPACE FRAMING LUMBER SHALL BE SOUTHERN YELLOW PINE, GRADE NO. 2.

10. AT ALL CRAWL SPACE VENT OPENINGS AND CRAWL SPACE ACCESS DOOR, PROVIDE 2 3/4x24" STEEL ANGLES. DO NOT LOCATE VENT OPENINGS BELOW STUD COLUMNS OR POINT LOADS.
Roof Plan

Scale: 1/4" = 1'-0"
Floor Plan

Scale: 1/4 " = 1'-0"

Existing House

Vaulted Ceiling

(2) 1 3/4" x 11 1/4" LVL

(2) 2x10

(2) 2x10

(2) 2x10

(2) 2x10

6x6 Treated SYP Column. Secure column top edge with (2) 5/8" HDG Bolts centered on 6x6. Space vertically to maintain 1 1/8" edge distance. Let in 2x10 beam. (TYP)

Stairs Per Section AM110.1
18x24x12 Footings below each column at house. Base of footing 12" min. below grade. Secure 6x6 columns to footing with Simpson ABU66Z base. Anchor bolts are (2) 5/8" dia. post installed expansion anchors or similar rated for exterior use. Min. embedment = 3 in.

Secure Treated Band to Existing 2x Band with (2) 5/8" dia. HDG bolts @12" o.c. (with nuts/washers) and (5) 12d common HDG nails @ 12" o.c. Contractor to verify band is 2x member.

24x24x12 Footings below each column. Base of footing 12" min. below grade. Secure 6x6 columns to footing with Simpson ABU66Z base. Anchor bolts are (2) 5/8" dia. post installed expansion anchors or similar rated for exterior use. Min. embedment = 3 in.

Hang joists with Simpson U210 hangers rated for exterior use.

6x6 Treated (for ground contact) SYP Column. Secure column top edge with (2) 5/8" HDG Bolts centered on 6x6. Space vertically to maintain 1 1/8" edge distance. Let in 2x10 beam.(TYP)

Lateral Bracing: Provide 4x4 knee braces at each outside corner column in accordance with Appendix M of the 2012 North Carolina Building Code.
Front Porch Rails

1. Bungalow-style houses

1929 Park Road
1932 Park Road