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.

All New Construction Projects Will be Evaluated for Compatibility by the Following Criteria			Page #
	Setback	in relationship to setback of immediate surroundings	6.2
	Spacing	the side distance from adjacent buildings as it relates to other buildings	6.3
	Orientation	the direction of the front of the building as it relates to other buildings in the district	6.4
	Massing	the relationship of the buildings various parts to each other	6.5
	Height and Width	the relationship to height and width of buildings in the project surroundings	6.6
	Scale	the relationship of the building to those around it and the human form	6.7
	Directional Expression	the vertical or horizontal proportions of the building as it relates to other buildings	6.8
	Foundations	the height of foundations as it relates to other buildings in project surroundings	6.9
	Roof Form and Materials	as it relates to other buildings in project surroundings	6.10
	Cornices and Trim	as it relates to the stylistic expression of the proposed building	6.11
	Doors and Windows	the placement, style and materials of these components	6.12
	Porches	as it relates to the stylistic expression of the proposed building and other buildings in the district.	6.14
	Materials	proper historic materials or approved substitutes	6.15
	Size	the relationship of the project to its site	6.2 & 3
	Rhythm	the relationship of windows, doors, recesses and projections	6.12
	Context	the overall relationship of the project to its surroundings.	6.1-16
	Landscaping	a tool to soften and blend the project with the district	8.1-11

All projects should use this summary checklist to ensure a submittal addresses all the new construction criteria.

Staff Recommendation

Staff believes the porch addition meets all applicable guidelines for additions. Minor detail changes may be reviewed by staff with HDC recommendation.









400 East Worthington







328 East Worthington



te item : Date: 03-01-18

> Project No. 18-014

Construction Drawings

NCG

Checked NCG



Rear Elevation

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

Construction Drawings

Date: 03-01-18 Project No.: 18-014



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> Cella Project 400 E. Worthington Ave. Charlotte, NC 28203

 Revisions

 No.
 Date

 No.
 Date

 Drawn By:
 Date:

 NCG
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 18-014

Rear Elevation

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

A2



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

03-01-18 Project No.: 18-014

b U b



Rear Elevation

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

A4

BUILDING PLANNING

- 1. ENGINEERS SEAL ONLY APPLIES TO STRUCTURAL SYSTEMS AND COMPONENTS INCLUDING ROOF SYSTEM (STRUCTURAL PORTION ONLY), FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER AND GIRDER SYSTEM, AND FOUNDATION. ROOF TRUSSES AND TRUSS COMPONENTS SHALL BE DESIGNED AND SEALED BY TRUSS SUPPLIER.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND 2 FEASIBILITY PRIOR TO ORDERING MATERIALS AND CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2012 NORTH CAROLINA RESIDENTIAL BUILDING CODE PLUS ALL LOCAL CODES AND REGULATIONS.
- ANY ITEMS OR DESIGN NOT SPECIFICALLY MENTIONED SHALL MEET OR EXCEED RESIDENTIAL BUILDING CODE REQUIREMENTS.
- VERIFY ALL LOCAL CODES. ENERGY TYPES, AND SITE CONDITIONS PRIOR 5 TO CONSTRUCTION

DESIGN LOADS

	DESIGN LOADS /	ARE ALL DEAD	LOADS PLUS:
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A. MAIN FLOOR LIVE LOADS	40PSF		
B. ALL OTHER FLOORS	40PSF		
C. BALCONIES	60PSF		
D. DECKS	50PSF		
E. SUSPENDED GARAGES	50PSF (2KIP P	OINT LOAD)	
F. ATTIC FLOOR LIVE LOADING:			
I. AREAS ACCESSIBLE BY PE	I. AREAS ACCESSIBLE BY PERMANENT STAIRS 30PSF		
II. WITH STORAGE		20PSF	
III. WITHOUT STORAGE		10PSF	
G. ROOF LIVE LOAD	20PSF		
H. WIND LOAD	90MPH (3 SEC. GUST)		
I. SNOW LOAD	20PSF		

J. SEISMIC DESIGN CATEGORY C

GENERAL

- NOTES BELOW ARE INTENDED TO SERVE AS SPECIFICATIONS. SEE 1 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
- COORDINATE LOCATION OF EXISTING UTILITIES, IF ANY, WITH PROPERTY OWNER
- 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.
- ALL WOOD EXPOSED TO ELEMENTS SHALL BE PRESSURE TREATED 2 SOUTHERN YELLOW PINE (SYP) UNLESS OTHERWISE NOTED. ALL OTHER WOOD SHALL BE SPRUCE PINE FIR (SPF) WHERE AVAILABLE OR SYP UNLESS OTHERWISE NOTED
- 3 EXTERIOR SHEATHING: 7/16 IN OSB WITH SPAN RATING OF 24/16.
- 4. LVL: Fb = 2900 PSI OR GREATER
- E = 2,000,000 PSI LVL BEAMS, 1,600,000 PSI PSL BEAMS 5.
- 6. FOR EXTERIOR APPLICATIONS USE WOLMANIZED "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 A992
 - b. HSS SECTIONS = ASTM A500-Gr. B
- 2. STEEL REINFORCING BARS: ASTM A615 GRADE 40 U.O.N.
- ALL REBAR SPLICES SHALL BE 24" MIN. UNLESS NOTED OTHERWISE. 3.
- 4 DESIGN, FABRICATION AND ERECTION: AISC SPECIFICATIONS FOR BUILDINGS
- ALL STEEL SHALL BE SHOP PRIMED AND FIELD PRIMED WHERE WELDED. REMOVE 5 ALL WELD SLAG AND GRIND AS REQUIRED FOR ACCEPTABLE APPEARANCE

ROOF

8

- ROOF IS A GABLE UNLESS NOTED OTHERWISE. PITCH NOTED ON PLANS.
- FLAT NON-VAULTED CEILING UNLESS NOTED OTHERWISE. 2. 3.
- RAFTERS: 2X6 AT 16 IN. O.C. UNLESS NOTED OTHERWISE ROOF SHEATHING: 7/16 IN. OSB.
- SECURE SHEATHING WITH 8D NAILS, 6 IN, O.C. ON THE PERIMETERS 5.
- OF EACH SHEET AND 12 IN. O.C. IN THE FIELD. SHEATHING IS UNBLOCKED IN THE FIELD AND BLOCKED AT EDGES.
- PROVIDE 2x6 COLLAR TIES @ 32" O.C. IN TOP THIRD OR TOP 3'-0" OF ATTIC SPACE IN ACCORDANCE WITH LOCAL BUILDING CODE.
- TRUSS SYSTEM SHALL BE DESIGNED AND ENGINEERED BY TRUSS MANUFACTURER AND COMPLETE INSTALLATION DETAILS SHALL BE PROVIDED
- 9 COORDINATE ACTUAL TRUSS DIMENSIONS WITH THE SELECTED TRUSS MANUFACTURER.
- 10. INCORPORATE ALL POINT LOADS AND BEARING CONDITIONS IN TRUSS MANUFACTURER ENGINEERED DRAWINGS.

WALLS

- 1. WALLS TO BE 2X4 @ 16 IN. O.C. CONSTRUCTION UNLESS NOTED OTHERWISE.
- WALL SHEATHING: 7/16 IN. 24/16 OSB.
- 3 UNLESS NOTED OTHERWISE, ALL INTERIOR DOOR AND WALL OPENINGS IN LOAD BEARING WALLS SHALL HAVE (2) 2x10'S HEADERS WITH (2) STUDS AT EACH HEADER END (TYPICAL).
- UNLESS NOTED OTHERWISE, ALL EXTERIOR DOOR AND WINDOW OPENINGS SHALL HAVE (2) 2x10'S WITH 1/2" PLYWOOD PLATE LINTEL. USE (2) JACK STUDS AT ENDS UNLESS OTHERWISE NOTED. PROVIDE STEEL LINTEL ANGLES WITH 4" MIN. BEARING WHERE REQUIRED OVER EXTERIOR MASONRY WALL OPENINGS.
- LVL BEAMS MUST HAVE 3-2X4 JACK STUDS UNDER EACH END SUPPORT 5. UNLESS NOTED OTHERWISE ON THE STRUCTURAL PLANS.
- MASONRY LINTELS:
- A. FOR SPANS UP TO 6FT: USE 3 1"X3 1"X1" STEEL ANGLES.
- B. FOR SPANS 6FT TO 9FT: USE 5"X3 ¹/₇X⁵/₆" STEEL ANGLES.
- TEMPORARILY SUPPORT STEEL ANGLE BEFORE MASONRY IS C. INSTALLED. SHORING MAY BE REMOVED 7 DAYS AFTER INSTALLATION.
- WHERE NON-BEARING PARALLEL PARTITIONS FALL BETWEEN FLOOR 7. JOISTS, 2X4 LADDERS @16" O.C. MUST BE PLACED PERPENDICULAR TO THE JOISTS TO SUPPORT THE PLYWOOD DECKING OR DOUBLE JOISTS INSTALLED DIRECTLY BELOW THE WALL
 - LOAD BEARING PARTITIONS, JACKS, BEAMS AND COLUMN SUPPORTS MUST BE SOLIDLY BLOCKED THROUGH THE FLOOR AS THE JOISTS AND THE PLYWOOD MAY NOT BE ABLE TO CARRY POINT LOADS. ALL POINT LOADS MUST BE CARRIED TO THE FOUNDATIONS WITH BLOCKING AND/OR BEAMS. (NOTE: ALL BEAMS AND DOUBLE JOISTS, ETC. HAVE BEEN SHOWN FOR A LOAD BEARING PURPOSE. PLACEMENT OF THE LOAD CARRYING MEMBERS SHOWN IN THE PLANS IN LOCATIONS OTHER THAN UNDER THE STRUCTURAL ELEMENT THEY ARE INTENDED TO CARRY IN THE PLANS IS THE RESPONSIBILITY OF THE CONTRACTOR. EXACT BEAM LOCATIONS ARE NOT TO BE SCALED FROM THE PLANS.)
- ALL TWO-STORY ROOMS WITH FULL HEIGHT OPENINGS MUST BE BRACED TO RESIST PRESSURE RESULTING FROM 90 MPH (3 SEC GUST).
- 10. HEADERS SHALL BE AS SHOWN ON PLANS OR MIN. (2) 2X8 IF NOT SHOWN. 11. AT ALL STAIRS, EVERY STUD AT EACH STRINGER SHALL BE NAILED TO EACH
- STRINGER WITH A MINIMUM OF (2) 16D NAILS. 12. WALL BRACING PER R602.10
 - A. THIS STRUCTURE HAS BEEN ANALYZED BY THE PROFESSIONAL ENGINEER OF RECORD FOR LATERAL LOADING. IT HAS BEEN DESIGNED USING CONTINUOUS SHEATHING FASTENED TO THE EXTERIOR WALL FRAMING WITH 8D NAILS @ 6 IN O.C. ALONG EDGES AND 12 IN O.C. IN THE FIELD, TO MEET AND EXCEED THE INTENT OF THE 2012 NORTH CAROLINA RESIDENTIAL BUILDING CODE. WHERE BRACED WALL LINES REQUIRE ADDITIONAL REINFORCING, ENGINEERED WALL SECTIONS AND HOLD DOWNS HAVE BEEN PROVIDED.

FLOORS

9

- 1. SHEATHING: 3/4 IN. T&G UNLESS NOTED OTHERWISE.
- 2. SECURE SHEATHING WITH 8D NAILS, 6 IN. O.C. ON THE PERIMETERS OF EACH SHEET AND 12 IN. 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, 2x4'S @ 16" O.C., UNLESS OTHERWISE DIMENSIONED.

FASTENER SCHEDULE

- 1. ALL CONNECTION HARDWARE SHALL UTILIZE SIMPSON PRODUCTS OR EQUIVALENT UNLESS OTHERWISE NOTED.
- ANY CONNECTIONS OR FASTENERS NOT SPECIFICALLY ADDRESSED SHALL 2 MEET REQUIREMENTS OF 2012 NC RESIDENTIAL BUILDING CODE.
- ALL EXTERIOR CONNECTION HARDWARE SHALL BE HOT DIPPED GALVANIZED (HDG) OR COATED FOR EXTERIOR USE.
- ALL WELDS SHALL BE MADE WITH E70XX ELECTRODES, LOW HYDROGEN 4 TYPE
- 5 BOLTS: ASTM A325 UNLESS NOTED OTHERWISE
- 6. ANCHORS:astm A36 UNLESS NOTED OTHERWISE
- WASHERS: ASTM F844 7.
- 8. NAILING PATTERNS:
 - A. ALL FLOOR JOIST MUST BE TOE-NAILED TO THEIR SUPPORT GIRDERS WITH A MINIMUM OF (3) 8D NAILS AT EACH END FROM EACH SIDE. NO END NAILING THROUGH THE GIRDER OR 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 STRIPS SHALL BE NAILED WITH (3) 16D NAILS AT EACH JOIST END, WITH NAILS SPACED 3" APART.
 - C. NAIL MULTIPLE BUILT-UP GIRDERS WITH THREE ROWS OF 16D NAILS STAGGERED AT 32" O.C., 2" DOWN FROM TOP, 2" UP FROM BOTTOM, AND AT MID-DEPTH. USE (3) 16D NAILS AT EACH END OF EACH PIECE IN THE JOINTS 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. UNO
- CONCRETE SHALL NOTE BE PLACED IN TEMPERATURES BELOW 50 2 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 STANDARD PENETROMETER TEST.
- 4 ALL CONTINUOUS WALL FOOTINGS ARE 12" THICK X 24" WIDE. REINFORCING IN FOOTINGS SHALL BE (2) #4 BARS UNLESS NOTED OTHERWISE ON PLANS.
- FOOTINGS FOR 16"X16" PIERS ARE 24"X24"X12" UNLESS NOTED OTHERWISE. REINFORCING TO BE AS NOTED ON PLANS. SECURE 6X6 COLUMNS TO FOOTING WITH SIMPSON PB66 OR EQUIVALENT BASES UNLESS NOTED OTHERWISE
- CHIMNEY FOOTING SIZES ARE SHOWN ON THE STRUCTURAL DRAWINGS. MASONRY OR ISOKERN STYLE CHIMNEY FOOTINGS MUST BE A MINIMUM OF 12" THICK WITH 12" PROJECTION ON ALL SIDES.

FOUNDATIONS

- ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, AND BEAM SUPPORTS, CANNOT BEAR ON SHEATHING ALONE. BLOCKING EQUAL TO OR BETTER THAN THE SPECIFIED STUDS OR COLUMN PROVIDED FOR POINT LOAD SUPPORT MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.
- ALL INTERIOR PIERS ARE 16"X16" CMU UP TO A MAXIMUM HEIGHT OF 6'-4" 2. ALL PIERS SHALL BE FILLED WITH TYPE S MORTAR. PIERS LARGER THAN 16"X16" ARE AS NOTED ON PLANS OR AS REQUIRED BY HEIGHT. PIERS SHALL HAVE CAP BLOCKS OF SOLID 8"X16" CMU MASONRY.
- 3 CRAWL SPACE GIRDERS AND BAND AS NOTED ON PLANS. MAXIMUM CLEAR SPAN TO BE 4'-8" (6'-0" O.C. SPACING OF PIERS) UNLESS NOTED OTHERWISE.
- AT ALL GIRDERS WHERE THE JOIST CHANGE DIRECTION. INSTALL BRIDGING AT 6" O.C. FOR A MINIMUM OF (6) JOIST SPACINGS BEYOND ANY DIRECTION CHANGE.
- PROVIDE WOOD BLOCKING THRU-BOLTED TO STEEL BEAMS WITH JOIST 5. TOE-NAILED AND ATTACHED TO THE BEAM WITH METAL HANGERS UNDER ANY HARDWOOD FLOORS THAT PASS OVER A STEEL BEAM SUPPORTING FLOOR JOISTS
- 6. ALL CRAWL SPACE FRAMING LUMBER SHALL BE SOUTHERN YELLOW PINE, GRADE NO. 2.
- 7. AT ALL CRAWL SPACE VENT OPENINGS AND CRAWL SPACE ACCESS DOOR, PROVIDE 3 2"X3 2"X4" STEEL ANGLES. DO NOT LOCATE VENT OPENINGS BELOW STUD COLUMNS OR POINT LOADS.

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OFESSION

100 E. Worthington Ave. Charlotte, NC 28203 **Cella Project**

General Notes No. Date NCG 03-01-18 18-014 NCG

Construction Drawings



Roof Plan

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

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Floor Plan

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

Construction Drawings

03-01-18

Project No.: 18-014

Drawn I NCG

Checked NCG



Foundation Plan

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

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

S3

Front Porch Rails

1. Bungalow-style houses

1929 Park Road



1932 Park Road

