Commercial Plan Review Checklist

The following checklist specifies items that must be indicated on commercial plans submitted for review. This list is not exhaustive, nor does it take the place of the Unified Statewide Building Code (USBC) and/or the Virginia Construction Code (VCC) this guideline is meant to highlight information typically absent from plans submitted for plan review. Please note that it is not a substitute for, nor does it include everything indicated on a complete set of building plans. Checking your set of plans against this list of commonly omitted items will help expedite the plan review process.

I. **General Requirements**
   - Completed building permit application.
   - 2 sets of Construction Plans & 1 Electronic copy.
   - Plans to include Building, Plumbing, Mechanical, Electrical and Energy Conservation.
   - 2 sets of approved, Class 1 or Class 2 Site Plans with copy of approval letter for additions and new construction
   - 2 provide copies of the energy calculations as required.

   As per Title 54 of the Code of Virginia & Virginia Construction Code 2015 (VCC2015), Section 111, Plan sets must either bear the seal of an Architect or Engineer licensed in the state of Virginia, or indicate the name, address, occupation and signature of the person responsible for the design.

**PROVIDE A CODE DATA SUMMARY TO INCLUDE THE FOLLOWING:**

- Address of the project.
- Indicate on the cover sheet the edition of the Virginia Construction Code (VCC) the project is designed under. (VCC 2015, VEBC 2015)
- Occupancy classification as defined by the VCC 2015, Section 302.1.
- Construction type as defined by the VCC 2015, Section 602.1.
- Provide an occupant load calculation for each space according to VCC 2015 Section 1004.1.
- Indicate if the project has a fire suppression system as required by VCC 2015 Section 903 and if so, the type of system as per VCC 2015 Sections 903.3.1.1 or 903.3.1.2.
- Indicate if the project has a fire alarm system as per VCC2015 Section 907, if so, indicate the type of system as either manual or automatic.
- Show compliance with VCC 2015 Table 503 for allowable height and area.
- Indicate compliance with mixed use occupancies as per VCC 2015 Section 508, Indicate the required rated separation as per VCC2015 Table 508.4.
- Show compliance with plumbing fixture calculations per VCC 2015 Table 2902.1
- Indicate design loads as per VCC 2015 Section 1603.
- Provide a complete scope of work.

**NOTE THAT A SOILS REPORT MAYBE REQUIRED FOR PROJECTS LOCATED IN AREAS OF MODERATE TO HIGH SHRINK SWELL POTENTIAL.**
II. **New Construction, Additions, and Changes In Use and Occupant Loads**

A. All general requirements listed under Sections I, III, and IV.

B. Site plan.

- Site plan approval or waiver from the Department of Planning for all additions & new construction. (2- Copies of the Dept. of Planning APPROVED for permit)
- Show location of the proposed building in relation to property lines.
- Indicate finished floor elevation if the building is in a flood hazard zone (New buildings & additions will need to provide a FEMA elevation certificate when located in a flood zone).
- Show all parking spaces including size and maneuvering area for accessible parking.

C. Zoning

- Changes in use may require prior “Conditional Use Permit” or “Special Exception” review and approval, see section 45-402 of City of Newport News Municipal Code for listings or contact Zoning Coordinator at 757-926-8871

III. **Commercial Plans Requirements**

- Plans should be of sufficient detail and clarity as to allow for stand-alone documents.
  A. General Requirements listed under section I.
  B. Floor plan, Reflected Ceiling Plan, Elevations.
  D. Details and UL design documents for all rated assemblies.
  E. Structural plans/details.
  F. Accessible route, ramp, restrooms, and service counter details.
  G. Statement of Special Inspections (if required under VCC2015 Section 1704).
  H. Elevator pit and hoistway details (to include size, depth and height)

IV. **Alterations To An Existing Building That Do Not Enlarge The Foot Print of the Building**

- All items identified in the General Requirements listed under section I.
- Indicate the use of adjacent tenant spaces and required separations under VCC2015 section 508.
- Provide typical wall sections for all proposed partitions VCC2015 section 1607.5.
- Provide proposed door & window schedule, include the proposed fenestration and SHGC values for all proposed exterior glazing as per VCC2015 Table C402.3.
- Show exit lights as per Section 1006 and emergency lights as per Section 1006.3 if more than one exit is required by Section 1011 of the VCC2015.
- If plans are for a restaurant, public swimming pool or similar uses, approval from the Health Department is required.
- Provide a completed asbestos certificate or a completed asbestos exemption form as per VCC 2015 110.3.
V. Sub-trades plans:

**Electrical, Plumbing, Mechanical, Gas Piping, Fire Suppression, Fire Alarm, and Elevator**

**Electrical Plans (NATIONAL ELECTRICAL CODE)**

- Provide an Engineer's seal on the plan set as per Title 54.1-402 Chart B of the Code of Virginia & VCC2015, Section 111.1
- Indicate the wire and conductor material as per NEC 2014 Article 310.
- Indicate the service size and location of meters and disconnects as per NEC2014 Articles: 230, 240, 408 & Dominion Power Blue Book.
- Provide load calculations as per NEC2014 Articles: 220, 424, 430, 440, 445 & as required by other specific code sections.
- Indicate the bonding and grounding methods and details as per NEC 2014 Article 250.
- Provide the manufacturer's specification for all proposed light poles to include complete design loads.
- Please note fault current letter required
- Site lighting pole bases shall be designed to meet minimum loads as per VCC2015 CH 16 and may require engineer design as per lamp manufacturers' requirements.
- Provide 2 copies of the interior and exterior energy calculations as required per VECC2015 Section C405

**Mechanical Plans (VIRGINIA MECHANICAL CODE)**

- Provide an Engineer's seal on the plan set as per Title 54.1-402 Chart C of the Code of Virginia & VCC2015 Section 111.
- Provide a copy of calculations for Ventilation Air requirements as per IMC2015 Chapter 4.
- Provide details for all through-penetrations in rated assemblies as per VCC2015 Section 714.
- Indicate fire ratings for all shaft enclosures as per VCC2015 Section 713 (grease duct as per IMC2015 506).
- Indicate the location of all fire/smoke dampers. Provide details of same as per IMC2015 Section 607.
- Provide roof layout plan. Show compliance with IMC 2015 Sections 306.5 & 306.5.1 for equipment/unit and IFGC 2015 Sections 306.5 & 306.5.1.
- Indicate duct sizes and run lengths on plan set as per IMC 2015 Chapter 6.
- Provide copy of equipment data and specifications as per IMC 2015 304.1.
- Provide Engineer sealed plans for additional loading for all new roof top units as per VCC2015 Chapter 16.
- Provide 2 copies of the energy calculations for Building Mechanical systems as required per VECC2015 Section C403
- Provide 2-copies of the manufacture information with spec. sheets on all commercial cooking equipment (Note: a permit will be required for the installation on the commercial cooking equipment)
- Provide 2-copies of the manufacture information with spec. sheets on all commercial refrigeration equipment (Note: a permit will be required for the installation on the commercial refrigeration equipment)

**Gas Piping (VIRGINIA FUEL GAS CODE)**

- Provide pipe diagrams. Indicate sizes, lengths and material of all gas piping as per VFGC 2015 Section 402.
- Indicate the gas pressures at inlets and outlets as per VFGC 2015.
- Indicate the BTU ratings of units requiring fuel as per VFGC 2015 Section 402.
Plumbing Plans (VIRGINIA PLUMBING CODE)
- Provide an Engineers seal on the plan set as per Title 54.1- 402 of the Code of Virginia & VCC2015, Section 111.1
- Provide isometric plans for both supply and waste piping showing compliance with Chapter 6, Chapter 7, Chapter 9 and Chapter 10 of the VPC 2015.
- Indicate sizes, length and material of plumbing system Chapter 6 & Chapter 7 VPC 2015.
- Indicate the size and length of storm drain / roof drains per Chapter 11 VPC 2015.
- Indicate fixture clearances Section 405, VPC 2015.
- Indicate compliance with the minimum energy efficiency of water-heating equipment and insulation of service hot water systems as required per VECC2015 Section C404

Elevator mechanical plans (separate submittal)
- Provide an Engineers seal on the plan set as per Title 54.1- 402 of the Code of Virginia & VCC2015, Section 111.1
- Indicate the type of elevator or lift system to be installed and the number of stops.
- Provide details of elevator pit construction & waterproofing as per VCC 2015 Chapter’s 7, 16, 18, & 30.
- Provide details for required pit sump VPC 2015 Section 1114.
- Provide details for proposed elevator hoistway; indicate the method of construction and the required fire rating as per VCC2015 Chapter 7 & Chapter 30.
- Provide details of proposed hoistway doors as per VPC 2015 Chapter 30.
- Address hoistway venting as per VCC2015 Section 3004.
- Provide detail for proposed machine room as per VCC2015 Section 3006.
- Provide details for emergency operation as per VCC2015 Section 3003

Fire Suppression plans (separate submittal)
- Provide an Engineers seal on the plan set as per Title 54.1- 402 of the Code of Virginia & VCC2015, Section 111.1
- Plans shall include general requirements as shown under Section I of this document.
- Indicate type of system as NFPA 13, NFPA 13R, and NFPA 13D as per VCC2015 Section 903 (Indicate wet, dry, or chemical).
- Provide complete system calculations and line drawings of proposed system.
- Provide current available water flow data to the site.

Fire Alarm plans (separate submittal)
- Plans shall include general requirements as shown under Section I of this document.
- Provide floor plan indicating the location of all devices as per VCC2015 907.1.2 (Include strobe candelas on floor plan).
- Provide riser diagram as per VCC2015 907.1.2
- Provide battery calculation as per VCC2015 907.1.2

VI. Resubmittal
- All revisions to plan sets must be clouded or otherwise highlighted.
- If corrections to plans are necessary, 2 sets of total plan set & 1 electronic copy (PDF) reflecting those corrections are required.
WALL TYPE:
1. EXISTING MASONRY EXTERIOR WALL
2. EXISTING INTERIOR PARTITION
3. PROPOSED INTERIOR METAL STUD PARTITION
4. EXISTING TENANT DEMISING WALL 1HR RATED MIN.

CODE SUMMARY
(PROJECT ADDRESS)
DESIGN CODE VCC 2015 BASED ON:
- IBC2015, NEC2014, IMC2015,
- IPC2015, IECC2015,
- ICC/ANSI A117.1 2009
(* VEBC2015 MAY BE USED ON EXISTING STRUCTURES AS THE DESIGN CODE)
USE GROUP: M-RETAIL
CONSTRUCTION TYPE: 2B
NON-PROTECTED,
NON-SPRINKLERED
HEIGHT & AREA PER TABLE 503 IBC2015
ACTUAL HEIGHT & AREA: 1 STORY
1063SQFT
PROPOSED TOTAL OCCUPIANT LOAD:
36 MAX AS PER IBC2015 1004.1
AT 1 PER 30SQFT.
PUMBING FIXTURE COUNTS AS PER
IBC2015 TABLE 2902.1
1 UNISEX ACCESSIBLE RESTROOM REQUIRED

SCOPE OF WORK:
TENANT BUILDOUT
NEW RETAIL STORE
NEW INTERIOR PARTITIONS AND DOOR.
INSTALL SHELVING AND DISPLAY TABLES.
INSTALL NEW SALES COUNTER

FLOOR PLAN SCALE: 1/8"=1FT
EXAMPLE OF MINIMUM REQUIRED FLOOR PLAN

PLANS BY:
NAME
ADDRESS
PHONE
OCCUPATION
SIGNATURE