E.1. APPLICABILITY

Requirements of Appendix E shall apply to all new and/or expanding developments in the C-1, C-2, B-1, O/I, PUD, TND and TOD zoning districts as well as any office and/or retail developments located in the I-1 or I-2 zoning districts (See Table 4.7-1). Appendix E shall also apply to individual nonresidential infill buildings and attached residential buildings. Appendix E does not apply to warehouse or industrial buildings, and does not apply to detached, single family residential properties.

Civic and institutional buildings, such as schools, churches, and libraries, are signature elements within the community, and may be made exceptions to the requirements of the more regulated style of private development. However, appropriate designs for these types of structures is a crucial part of maintaining the image of the Town; therefore, while civic and institutional buildings shall meet the following design regulations, exceptions may be provided administratively when the specific design circumstance is justified.

E.2. ARCHITECTURAL DESIGN STANDARDS

E.2.1. INTRODUCTION

The Town of Harrisburg sees the interaction between the built environment and the public as a crucial ingredient in maintaining a certain sense of place. As a part of this, the visual aspects of commercial and attached residential development must be scrutinized when considering a proposed development. The following section outlines design principles for building façades. Each principle includes a specific and measurable standard. While these principles provide quantifiable objectives for façade design, they are not a step-by-step guide for development. It is a description of human principles in the making of architecture. These standards seek to increase the prospect of compatibility between buildings, styles, and generations. Designers must infuse their individual talents and creativity into each project for these standards to be successful.

E.2.2. MATERIALS

High quality materials are the building blocks of good buildings and great places. The message of quality and durability inherent in long-lasting materials promotes the human perception of timelessness and continuity of place. Materials also contribute to the perception of a building’s overall scale and texture. Individual elements of a known size allow the observer to understand the total size and scale of the structure.

E.2.2.1. Building walls shall incorporate brick, cast stone, formed concrete, or other high quality, long-lasting masonry material over a minimum percentage of surface area (excluding windows, doors, and curtain walls). The remainder of wall area may incorporate other materials. Minimum percentages are outlined as follows:

E.2.2.1.1. Commercial and Mixed Use buildings: 75% of surface area minimum;
E.2.2.1.2. Attached residential buildings: 35% of surface area minimum.

E.2.2.2. All buildings, including gasoline pump canopies, shall utilize a consistent architectural style through the use of similar materials;
E.2.2.3. Differing buildings, businesses, or activities within the same development may be distinguished by utilizing variations of the same architectural style and materials;
E.2.2.4. Sides and backs of buildings shall be as visually attractive as the front by using the same materials and architectural detailing throughout.
E.2.3. COMPOSITION

Visual balance should be achieved in the building composition. Symmetry is the fundamental tool for achieving balance. Symmetry within the built environment creates order within elements of a composition. Groups of elements are read visually by their rooflines; under each roofline, a composition is formed which is visually enhanced when symmetry is achieved. Minor variations to a symmetrical condition, for example a door that is balanced by a window of the same proportion on the other side, can be absorbed while maintaining an overall sense of balance.

E.2.3.1. Elements within each segment of a building façade, defined by a different roof height, are required to be symmetrical. A symmetrical condition is achieved when façade elements and openings are repeated in the same positions on either side of a central vertical line for that segment.

E.2.4. SCALE

Scale refers to how we perceive the size of a building element relative to other formers, and to the human body. There are two types of scale: overall scale and human scale. Overall scale is the legibility of a building from a distance, for example the roofline. Human scale is the legibility of elements when one is very close to a building.
Good design should incorporate both types of scale simultaneously; however, human scale should be emphasized. It is therefore important that up close, buildings have a tangible feeling of refinement.

E.2.4.1. Façades shall incorporate a minimum of two (2) continuous details refined to the scale of 12 inches or less within the first 10 feet of the building wall, measured vertically at street level.

Figure 3 - Scale

E.2.5. PROPORTION

Proportion refers to the relationship of two ratios, for example, height to width. The human body contains a rich system of proportions with harmonious relationships throughout. A significant portion of these design standards is the fundamental premise that vertical proportions in architecture relate to the upright proportions in architecture relate to the upright human body. Buildings and spaces that communicate a vertical proportion relate inherently to the understanding of the living human form, doors and windows that follow these proportions confirm this understanding. Architectural features can be used to organize the perceived mass of larger buildings. Building features such as columns, piers, rooflines, and brick patterns can divide and create vertical orientation on a large surface. Once these proportions are established, fenestration should reinforce the vertical orientation of the composition.

E.2.5.1. The frontage of buildings shall be divided into architecturally distinct sections no more than 60 (sixty) feet in width with each section taller than it is wide. Windows and storefront glazing shall be divided to be either square or vertical in proportion so that each section is taller than it is wide.
E.2.6. RHYTHM

Rhythm refers to the regular recurrence of lines, shapes, forms and details. It incorporates repetition and spacing as a fundamental device to create visual organization. Almost all buildings incorporate elements that are by their very nature repetitive. Windows and doors repeatedly puncture a building’s surface to allow light and access. When they are combined, they have the potential to create visual rhythm. The resulting effect enlivens a surface and creates a visual unity over the façade of the structure.

E.2.6.1. A minimum of one significant detail or massing component shall be repeated no less than three (3) times along each applicable elevation. The scale of the chosen element should relate to the scale of the structure.

E.2.7. TRANSPARENCY

Commercial buildings should have large window areas to share the building’s interior activities with the street. Seen from the outside, it is the openings in a wall that create one of the strongest visual impacts beyond the wall
itself. As design elements, windows and doors provide the opportunity to accomplish many of the other façade principles.

E.2.7.1. Façades of all commercial structures shall incorporate fenestration over a minimum percentage of the surface area of street fronting façades. Minimum percentages for different levels are outlined as follows:

E.2.7.1.1. Ground level of retail uses: 50% of surface area minimum;
E.2.7.1.2. Ground level of office and other commercial uses: 35% of surface area minimum;
E.2.7.1.3. Ground level of any commercial use over 25,000 square feet: 25% of surface area minimum;
E.2.7.1.4. Upper level of all uses: 20% surface area minimum

E.2.7.2. Transparency of the ground level shall be calculated within the first 15 feet of the building wall, measured vertically at street level.

E.2.7.3. In cases where a building has more than two façades fronting a street or primary travelway, the transparency requirement shall only be required on two façades based on pedestrian traffic and vehicular visibility.

E.2.7.4. All ground level windows shall provide direct views to the building’s interior or to a lit display area extending a minimum of three feet behind the window. Ground level windows shall extend above an 18 to 24 inch base.

**Figure 6 - Transparency**

E.2.8. ARTICULATION

Façades should be organized into three major components; the base, body, and cap. These elements transcend style and relate architecture to the human body with the visual analogy of feet, torso and head. The feet provide stability, the torso provides height and bulk, and the head provides identity.

E.2.8.1. The building façade shall have a clearly identifiable base, body and cap with horizontal elements separating these components. The component described as the body shall constitute a minimum of 50% of the total building height.
Furthermore, in order to add architectural interest and variety and to avoid the effect of a single long or massive wall with no relation to human scale proportions, the following standards shall apply:

E.2.8.2. No wall that faces a street or connecting walkway shall have a blank, uninterrupted length exceeding twenty (20) feet.

E.2.8.3. All building walls must include at least two of the following:

 E.2.8.3.1. Change in plane;

 E.2.8.3.2. Change in texture or masonry pattern; or

 E.2.8.3.3. Windows

E.2.8.4. All sides, including the rear, of the building shall include materials and design characteristics consistent with those of the front.

E.2.8.5. Use of inferior or lesser quality materials on side or rear walls is prohibited.

E.2.8.6. In the event that canopies, awnings, or other similar appurtenances are used, the following standards shall apply:

 E.2.8.6.1. Such appurtenances shall be constructed of materials designed to complement the streetscape and the structure.

 E.2.8.6.2. Any appurtenance may extend from the building up to eighty (80%) percent of the width of the sidewalk area or nine feet, whichever is less.

 E.2.8.6.3. In no case shall any such facility extend beyond the curb line of the street, nor shall it interfere with the growth or maintenance of street trees, or maintenance of street lights or street signs.

 E.2.8.6.4. A minimum overhead clearance of eight (8) feet from the sidewalk shall be maintained.

Figure 8 - Articulation
E.2.9. COLOR

Brick, concrete, and stone have their own inherent color and should be left in their natural state to weather over time. Paint can be used to complement and accent other exterior building materials. To ensure that there is consistency, the Town requires a project-based palette related to color. Proposed color schemes shall incorporate a base primary color for each building. Each building within a complex does not need to be of the same base primary color, but the color must be compatible with other selected colors on the site. In the case of buildings that are entirely comprised of brick, stone, or concrete, the base color may be the natural color of the material.

E.2.9.1. A maximum of two primary colors for each building segment with a maximum of two secondary accent colors. If accent colors are to be used, they too must be described and used throughout the development.

Figure 9 - Color

E.2.10. ACCESS

E.2.10.1. Structures should be sited so that the primary access is from the street front sidewalk leading to the parking area. In the event that a structure is located on a State Numbered Highway, the Administrator may permit the primary access to be located facing the parking area. All street level retail uses with sidewalk frontage shall be furnished with an individual entrance and direct access to the sidewalk in addition to any other access which may be provided. Doors shall provide a sense of entry and be designed to add variety to the streetscape through the use of recessed entries, projecting elements, porches, columns, and/or other architectural features.

E.3. SITE DESIGN STANDARDS

E.3.1. AMENITY AREA

E.3.1.1. Projects containing groups of buildings to be devoted primarily to office and/or retail activities shall incorporate amenity areas into the site design. Amenity areas include, but are not limited to, public plazas, promenades, water features, clock towers, courtyards, squares or small parks on the site. Design elements to be included in the amenity areas are seating walls, benches, outdoor dining/gathering areas, decorative fountains or water features, clock towers and/or garden areas. Since the purpose of these amenity areas is to serve as pocket recreational areas and to help foster a sense of community, additional elements shall be considered if the applicant shows that the design meets the intent of this section.
E.3.2. SETBACKS

E.3.2.1. The setbacks to be established are intended to form a consistent relationship of buildings to the street and sidewalk. This relationship shall form a visually continuous, pedestrian-oriented street front. The best way to maintain this relationship is to have minimal vehicle use between building faces and the street. Front building setbacks shall be a minimum of ten (10) feet and a maximum of twenty (20) feet to maintain a consistent and uniform streetscape. All other setbacks are established in Article 4 of the Harrisburg Unified Development Ordinance. Buildings should be arranged so that they help to frame and define fronting streets (as well as any internal or side streets). Buildings shall not be separated from fronting streets by large expanses of parking.

Figure 10 – Setbacks

E.3.3. CONNECTIVITY AND SIDEWALKS

E.3.3.1. Sidewalks shall serve as the secondary mode of transportation to the use of roads and shall link residential and commercial developments, common areas, and parking areas. If a proposed development includes multiple buildings in the site design, then an overall connectivity plan shall be provided for the development, including crosswalks and other safety features designed to encourage walking as an alternative to vehicular transportation. Sidewalks shall be a minimum of five feet wide and shall have a minimum six-foot landscaped buffer area between the road and the sidewalk itself. Sidewalks shall remain as unobstructed as possible by items such as plantings or trash receptacles.

E.3.4. PARKING REQUIREMENTS

E.3.4.1. Parking areas shall balance the needs of both the automobile and the pedestrian. Off street parking areas shall be designed to minimize breaks in the pedestrian environment and the visual continuity of the streetscape. Additionally, no more than two rows of parking may be permitted on the side of the structure. Off street parking shall be required and determined per Article 8, Table 8.1-6. Parking areas shall primarily be located to the rear of the proposed structures to minimize visibility. In the event that a proposed development includes multiple structures, parking areas may be permitted in “front” of the internal buildings.

E.3.4.2. If the Administrator determines that relegating parking to the side and rear of the building is infeasible, parking and vehicle access may be allowed between the structure and the street. If parking or vehicle access is permitted between the street and structure, complete visual separation shall be achieved through the use of dense evergreen vegetation, a “knee wall” that is a minimum of
4 feet tall and comprised of masonry materials consistent with that of the structure, or a combination of the two. In no case, however, shall large expanses of parking be permitted between any street and structure.

E.3.5. PARKING LOT DESIGN

E.3.5.1. Parking lots shall be designed to allow pedestrians to safely move from their vehicles to the buildings. This may be achieved in smaller lots by providing a sidewalk at the perimeter of the lot. On larger lots, corridors within the parking areas should channel pedestrians from the car to the perimeter of the lot. A paving material that is different in color and/or texture from that of vehicular areas shall delineate these pedestrian travel ways and shall be clearly marked. Small posts or bollards incorporating lights may also serve the same purpose. Parking lots shall be adequately screened from public view and shall include landscaping and buffering per Article 7 of the Unified Development Ordinance.

E.3.6. LANDSCAPING

E.3.6.1. A Landscaping Plan shall be submitted in accordance with Article 7 of the Harrisburg Unified Development Ordinance. In the event that the strict interpretation of Article 7 would limit the use and/or design of a site (such as in the case of upgrades to existing facilities) the Administrator shall have the authority to approve a modified landscape plan if the plan is determined to be in keeping with the overall intent of Article 7 and these design guidelines.

E.3.7. LIGHTING

E.3.7.1. A Lighting plan shall be submitted in accordance with Article 7 of the Harrisburg Unified Development Ordinance. Lighting for all non-residential uses shall provide proper lighting for security purposes while not diminishing the quality of any surrounding residential uses. The selection of light fixtures, pole types, lamp color, and style all contribute to the character and sense of place within a complex, and shall be consistent with the lighting section of Article 7.

E.3.7.1.1. All light fixtures (freestanding, flood, or any other form of light fixture) shall be provided with full cut-off fixtures, visors, or any other suitable directional control to direct light either downward or directly on the appropriate building. Wall pack lighting shall not be permitted.

E.3.7.1.2. No light fixture shall create any glare or spillover lighting effects on any residential properties or streets.

E.3.7.1.3. Freestanding light fixtures along all public street systems and internal street systems shall not exceed nineteen feet in total mounted height and shall consist of a decorative fixture that shields the source of light away from neighboring properties.

E.3.7.1.4. Lighting located within parking lots may not exceed thirty-three feet in total mounted height. Parking lot lighting shall consist of a fixture that shields the source of light away from neighboring properties and direct the illumination to the ground’s surface.

E.3.7.1.5. Lighting installations should include timers, dimmers, and/or sensors to reduce overall energy consumption and unnecessary lighting.

E.3.7.1.6. Lighting levels for canopies and awnings of commercial facilities shall be adequate only to facilitate the activities taking place in such locations and shall not be used to attract attention to the businesses. Lighting fixtures mounted on canopies shall be recessed so that the light’s lens cover is recessed or flush with the bottom surface (ceiling) of the canopy and/or shielded by the fixture or the edge of the canopy so that light is restrained. Canopies shall be constructed of non-light-emitting material.
E.3.8. LOADING/UNLOADING AREAS AND LOADING DOCKS

E.3.8.1. Loading and unloading areas shall be installed per Article 8, Section 8.4. Loading/unloading areas shall be placed, to the greatest extent possible, to the rear of the structure and shall be screened from the view of any street and/or any residentially developed or residentially zoned property. Additionally, loading/unloading spaces shall be located such that interference with traffic on streets and or internal driveways is minimized. In the event that a loading dock is necessary to support the proposed use, the dock shall be located to the rear of the structure and shall not be visible from any street and/or residentially developed or residentially zoned property.

E.3.9. SOLID WASTE STORAGE AREAS

E.3.9.1. Solid waste containers shall be confined to an enclosed area that is screened on all sides. Solid waste storage areas shall be located to the rear or side of the structure. These areas shall be designed to compliment the structure and should be constructed from materials that match the building. Solid waste storage areas shall not be located in any applicable planting yard and shall be screened from any street and/or any residentially developed or residentially zoned property. See UDO Article 11, Section 11.1.2.2 for additional requirements related to solid waste storage areas.

Figure 12 – Solid Waste Storage Areas

E.3.10. MECHANICAL APPURTENANCES

E.3.10.1. All rooftop mechanical and electrical equipment shall be completely screened from view from all public streets and adjacent properties. All screening walls/parapets shall be constructed and designed of materials compatible to that of the primarily structure and shall be incorporated into the design of the structure. Metal screening walls shall not be permitted. To the greatest extent possible, mechanical appurtenances shall be located within the structure. Appurtenances such as heating and air conditioning equipment, coolers, etc. shall be screened entirely from public view and shall be designed and finished to match adjacent building materials. In addition to design elements, landscape materials shall be incorporated to provide additional screening and/or softening of equipment areas.

E.3.11. OUTDOOR STORAGE/DISPLAY AREAS

E.3.11.1. Outdoor storage/display areas shall be designed in accordance with Article 11.1 of the Unified Development Ordinance.
E.3.12. INSTALLATION OF UTILITIES AND INFRASTRUCTURE

E.3.12.1. If a development is requiring the installation of water and sewer utilities, curb and gutter, sidewalk, bike paths, or greenways, the utilities and infrastructure shall be extended along the full length of the property. For instance, if curb and gutter is required along a street frontage, it will be provided along the entire length of the frontage. New water and sewer utilities being extended to a site for development will be extended along either the full frontage of the street, or along the full extent of the property, depending on the location of said utilities. Greenways and bike lanes, where required based on the adopted Bicycle, Pedestrian, and Greenway Plan, will be located along the entire frontage of the street, or along the full extent of the property, depending on the location of the infrastructure in relation to the site.

E.3.12.2 For new commercial development and redevelopment involving tear-down and new construction along the North Carolina Highway 49 Corridor, all utilities in both public and private rights-of-ways shall be placed underground and aerial crossing of utilities on Highway 49 is prohibited, except when extreme conditions of underlying rocks or other conditions prevent this requirement from being met and only as approved by the Planning Administrator.

In cases where the expense to bury said utilities is deemed to be unreasonable based on extreme conditions, the Town may negotiate a fee-in-lieu arrangement with the project developers in lieu of requiring burial, the fee will be based on the actual cost estimate provided by the applicant, to be reviewed and approved by Town Engineer and calculated at 125% of the cost. Any such agreement shall be a part of a development agreement governing the subject property and the collected fee shall be deposited in a special revenue fund by the Town to be used to bury utilities along Highway 49. The burying of utilities shall be completed, or the fee-in-lieu paid to the Town, prior to a Certificate of Completion being issued for structures.

E.4. FLEXIBILITY IN ADMINISTRATION

E.4.1. Because these standards cannot cover every possible scenario that may arise, the Planning Administrator is authorized to make determinations on development applications that may vary from the written standards so long as the determination meets the purpose and intent of the Commercial Design Standards.
APPENDIX A

DEFINITIONS

Accent Color  A contrasting color used to emphasize architectural elements.

Articulation  The detailing of a structure or building, i.e. brick patterning or ornamental work.

Base  Ground level, where the building makes contact with the earth.

Body  upper architecture, forming the majority of the structure.

Cap  parapet, entablature, or roofline, where the building meets the sky.

Color Palette  A color scheme that incorporates related colors of complimentary hues and shades.

Clapboard  A long, narrow board that overlapped to cover the outer walls of frame buildings.

Colonnaded (Porch)  A series of columns situated at regular intervals to uphold a roof structure and create a breezeway or porch.

Cornice  A horizontal molded projection that crowns and complete the wall structure and visually connects the wall to the roof structure.

Facade  The principle, vertical surface of a building which is set along the frontage line. The elevation of a facade is the vertical surface area and is subject to visual definition by building height, setbacks, and transition lines.

Fenestration  The entryways and windows of a building.

Gable (Roof)  A “gable” maybe any one of three things: a triangular wall section at the ends of a pitched roof bounded by the two roof slopes and the ridge pole; the ends of a pitched roof building with a gable in the roof section; or an ornamental triangular architectural section.

Lintel  The horizontal beam forming the upper member of a door or window frame and supporting part of the structure above it.

Massing  A unified composition of two-dimensional or three dimensional shapes or volumes, especially one that has or gives the impression of weight, density, or bulk.

Palladian Windows  A window encompassing an arch above the primary window structure; or an arch window set above a primary window structure. See example below.

Parapet  A low protective railing or wall along the edge of a roof or balcony.

Pediment  An arch or triangle shape architectural feature, usually placed above windows or doors. These features may be seen further embellished with molding details or carvings of wood.

Pilaster  A supporting column or pillar with a capital and base.
Porte-Cocheres  A porch roof projecting over a driveway at the entrance to a building.

Primary Color  One to three base colors chosen to dominate a color scheme.

Rhythm  Movement, characterized by a pattern repetition or alternation of formal elements or motifs in the same or modified form.

Setback  A line prescribed for the full width of the facade above which the facade sets back. The location of a recess line is determined by the desired height to width ratio of the fronting space, or by a desired compatibility with existing buildings.