ABSTRACT

Title of Document:CHESAPEAKE CITY, MARYLAND:
CREATING A VISION FOR EASTERN
SHORE TOWN DEVELOPMENT
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Exploring the future of town development on Maryland's Eastern Shore, this thesis confronts the pattern of sprawling suburban expansion by offering an alternative masterplan of compact, limited development for the historic town of Chesapeake City.

In addition to proposing a comprehensive strategy for managing future growth in the region, this project actively engages the local discourse surrounding the Chesapeake Country National Scenic Byway, asserting Chesapeake City's position as the northern gateway to the Chesapeake Bay and Maryland's Eastern Shore.

By reconnecting the town to the Scenic Byway and strengthening the town's presence on the Chesapeake and Delaware Canal, the project augments the town's access to the recreational and tourist opportunities of the northern Chesapeake region. Furthermore the project proposes a carefully woven network of neighborhoods and districts, promoting a diverse, livable community.

CHESAPEAKE CITY, MARYLAND: CREATING A VISION FOR EASTERN SHORE TOWN DEVELOPMENT

By

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Chapter 1: Introduction

Over the next twenty-five years, significant growth is expected along Maryland's Eastern Shore as development expands across the Chesapeake Bay from Washington, D.C., Baltimore and Annapolis to the south and Elkton, Maryland, and Wilmington and Newark, Delaware, to the north. According to the Maryland Department of Planning, a 25% population increase is anticipated throughout Maryland by the year 2030, and a 65% increase in Cecil County. With such significant population growth, it is inevitable that questions of new development will become increasingly important to the small towns along the Eastern Shore¹.

This thesis explores the question of town development in the context of significant anticipated population growth. Using the town of Chesapeake City on Maryland's northern Eastern Shore as a case study, this project proposes a masterplan of new town growth around an existing historic core.

As a secondary inquiry, this project explores the identity of place and the process of placemaking at the urban scale.

¹ Maryland Department of Planning. (Retrieved 2009, May 15). "Historical and Projected Total Population for Maryland's Jurisdictions." < http://www.mdp.state.md.us/msdc/>.

Chapter 2: A Brief History of Chesapeake City

The story of Chesapeake City begins with the Chesapeake and Delaware (C & D) Canal. As early as the 17th century, settlers on the northern end of the Delmarva Peninsula recognized the need for a waterway linking the Chesapeake Bay and the Delaware Bay. The shipping of goods from Philadelphia and the towns along the Delaware River to Baltimore and the towns of the upper Chesapeake Bay required either a lengthy trip around the southern end of the Delmarva Peninsula or transport across land. Several surveys of possible water routes were performed in the 1760s and 1790s, ultimately leading to the selection of Back Creek as the Chesapeake Bay tributary to be linked to the Delaware Bay².

In 1802 the Maryland, Delaware, and Pennsylvania state legislatures chartered the Chesapeake and Delaware Canal Company to construct the canal. Benjamin Latrobe, the architect of the United States Capitol often hailed as the "Father of American Architecture," served as the chief engineer for the project.

Changes in elevation across the peninsula necessitated the installation of a series of locks, including a pair at the small farming village of Bohemia on the banks of Back Creek. In 1829 after several delays and just a few years before the completion of the more well-known Erie Canal in New York, the fourteen mile C & D Canal was completed linking the upper Chesapeake Bay with the lower Delaware River. The project's \$2.25 million construction cost made it one of the most expensive canal projects of its time³.

With a canal stopping point at the westernmost pair of locks along the Canal, Bohemia Village quickly grew into a thriving port, and was shortly renamed Chesapeake City. As ships stopped to pass through the locks, Chesapeake City became a natural

² United States Army Corps of Engineers. (Retrieved 2008, October 26). "The Chesapeake & Delaware Canal." < http://www.nap.usace.army.mil/sb/c&d.htm>.

³ United States Army Corps of Engineers. "The Chesapeake & Delaware Canal."



Fig. 1: Aerial of Delmarva Peninsula



Fig. 2: Diagram of shipping lanes



Fig. 3: Detail aerial of C & D Canal



Fig. 4: Routes surveyed for canal



Fig. 5: Existing figure ground and topographic map

point of trade. A privately owned and operated enterprise, the C & D Canal Company imposed a toll on shipping, and in the early years, required captains to contract with mule skinners for towing along the canal⁴. Thus an industry of shipping-related services and commercial trade flourished in Chesapeake City and along the canal.

In 1906 President Theodore Roosevelt began to consider converting the canal into a "free and open waterway"⁵. In 1919 the federal government acquired the canal from the original private development company, assigning operation and maintenance responsibilities to the Corps of Engineers. Today the Corps of Engineers' canal and highway bridge operations headquarters is located in Chesapeake City on the narrow peninsula between the canal and Back Creek.

By 1927 the locks were removed and the canal was converted to a sea-level operation. For Chesapeake City the removal of its locks marked the beginning of a slow decline in its relevance as a trading port. Between 1935 and the mid-1970s the canal underwent a series of expansions growing from 12 feet deep and 90 feet wide in 1927 to its current size of 450 feet wide and 35 feet deep⁶. With each successive widening, the canal served larger and larger ships traveling to the larger ports of Baltimore, Philadelphia, and Norfolk, and reinforcing the town's decline as a point of trade. The canal expansion also further divided the north and south sides of Chesapeake City. Whereas during the town's heyday the two settlements existed as one community connected across the canal by a small drawbridge, today the two sides exist as two distinct districts.

Even with the series of expansions, the increased traffic of large ships strained the capacity of the canal, leading to numerous ship collisions with bridges. Following its destruction due to a ship collision in 1942, the vertical-lift bridge at Chesapeake City was replaced by a high-level steel tied-arch bridge in 1948⁷. Due to its high elevation, the

⁴ United States Army Corps of Engineers. "The Chesapeake & Delaware Canal."

⁵ United States Army Corps of Engineers. "The Chesapeake & Delaware Canal."

⁶ United States Army Corps of Engineers. "The Chesapeake & Delaware Canal."

⁷ Chesapeake City. (Retrieved 2008, October 26). "Brief History of Our Town." < http://www. chesapeakecity.com/history.php>.

bridge lands at grade well south of the southern community and well north of the northern community. By bypassing both the north and south districts of Chesapeake City, the new bridge reinforced the separation of the two halves and their isolation from regional commercial activity.

In the 1960s, a number of residents, concerned by the declining relevancy of the town and the erosion of the town's heritage, began to take action. Many visitors and passers-by looking down from the bridge admired the picturesque and quaint tranquility of the town. Recognizing an opportunity, residents promoted an initiative to preserve the town's historic legacy. In 1966 the Old Lock Pump House, part of the obsolete canal lock operations, was listed on the National Register of Historic Places and followed in 1974 by the South Chesapeake City Historic District⁸. The town soon capitalized on this classification, developing a new identity as a tourist destination for visitors seeking the cultural and recreational opportunities of the Delmarva Peninsula. Buildings which had once housed commercial and trade businesses related to the canal became bed-and-breakfast inns, restaurants, art studios, antique shops, and other tourist-centric enterprises.

⁸ National Register of Historic Places. (Retrieved 2008 November 4, 2008). "Old Lock Pump House." < http://www.nr.nps.gov/>.



Fig. 6: Transformation of canal over time



Fig. 7: Today the canal carries 40% of all shipping into and out of the Port of Baltimore



Fig. 8: The Chesapeake City Bridge provides a 135'-clear height to ships passing beneath



Fig. 9: Chesapeake City Bridge at sunset



Fig. 10: The existing town street grid slips beneath the bridge



Fig. 11: Summer festivals provide opportunities for local artisans to market their work



Fig. 12: The historic core is populated by B&Bs, antique shops, art studios, and gift shops

Chapter 3: Site Analysis - Natural Systems

Topography / Landforms

Chesapeake City sits on the Atlantic Coastal Plain Province at the northern end of the Delmarva Peninsula, a large peninsula extending south of the Elk River and separating the Chesapeake and Delaware Bay – Atlantic Ocean drainages. The immediate context of Chesapeake City at the neck of the peninsula is described by the Maryland Geological Survey as "an upland surface of very low relief that occupies an axial position along the Delmarva Peninsula, thus forming the poorly defined drainage divide between the Chesapeake Bay and Delaware Bay"⁹.

At a more detailed level, the area of Chesapeake City and the C&D Canal is a mix of natural and man-made landforms. In its pristine condition, the site of the town consisted of a flood plain along the edge of Back Creek with low-relief peninsular ridges forming the edge of the plain. However, the digging of the Canal and its continued maintenance for nearly two hundred years has left a lasting imprint on the land. Large

⁹ Maryland Department of Natural Resources. (Retrieved 2009, May 12). "Physiographic Map of Maryland." < http://www.mgs.md.gov/coastal/maps/physio.html>.



Fig. 13: Chesapeake City sits on the Atlantic Coastal Plain Province

Source: MD Dept. of Natural Resources

levees formed from soil removed during the original Canal construction, its successive expansions, and periodic dredging flank the edges of the Canal. Numerous soil deposit sites designated for future dredging material line the Canal, including two large sites forming the eastern and western borders of South Chesapeake City.



Fig. 14: Topographic diagram of Chesapeake City

Water Resources

Typical of the Coastal Plain region, the area around Chesapeake City is marked by numerous small freshwater streams feeding larger creeks and rivers and ultimately emptying into the brackish water of the Chesapeake Bay. A marshy creek to the west of north Chesapeake City wraps around the town to the north and drains much of the area on the north side of the canal. Back Creek, a tributary of the Elk River and the primary natural water body of the site, drains the area surrounding south Chesapeake City. At the intersection of the canal and the waters of Back Creek, a small basin has been formed to offer anchorage for small boats and pleasure-craft visiting south Chesapeake City.

As the largest water body cutting across the narrowest point of the peninsula, Back Creek offered an ideal access point for the canal. The removal of the canal locks in the 1920s and its opening to sea level allowed the waters of the Chesapeake and Delaware Bays to mix. Due to differences in the tides of the two bays, the water flow in the canal reverses direction with each change in the tides. The typical tidal range of the canal at Chesapeake City is 2.6 feet¹⁰.

Vegetation

A still sparsely populated region traversed by shallow stream valleys, the upper Delmarva Peninsula is characterized by large agricultural fields divided by dense riparian zones lining the streams. These riparian zones play a crucial role in maintaining the health of the Chesapeake Bay and the region's water resources. In addition to creating wildlife habitats which contribute to biodiversity, they act as natural buffers providing significant erosion control as well as pollution control through biofiltration¹¹. Back Creek, including its small tributary to the south and east of Chesapeake City's historic <u>district, is shrouded by riparian vegetation</u>. The small marsh to the east of the historic 10 United States Army Corps of Engineers. (Retrieved 2009, January 4). "Inland Waterway Chesa-

peake & Delaware Canal: Rules & Regulations." < http://www.nap.usace.army.mil/sb/C&D_Canal_Rules. pdf>.

¹¹ Maryland Department of Natural Resources. (Retrieved 2009, May 12). "Riparian Forest Buffers." < http://www.dnr.state.md.us/forests/publications/buffers.html>.



Fig. 15: Back Creek



Fig. 16: Dense riparian buffer zone surrounding marsh

district, in particular, receives much of the runoff from the town, and therefore is an important buffer between the town and Back Creek.

The lands immediately bordering the canal, including the soil deposit sites, bear the evidence of the canal's impact on the ecology of the area. With the series of canal expansions and periodic dredging, the edges of the canal are characterized by early successional vegetation and only a limited amount of mature growth. Many of these areas along the canal currently are of low value for wildlife and habitat; however, the U.S. Army Corps of Engineers and local communities have become increasingly concerned with improving the ecological health of these sites¹². The U.S. Army Corps of Engineers has recently conducted several studies to better understand the condition of the sites and to develop strategies for improvement.

Wildlife

The Chesapeake Bay is the largest estuary in the United States, and its calm, shallow waters are a haven for waterfowl and migratory birds. Furthermore it sits along the Atlantic Flyway, one of four primary bird migration routes across North America. Numerous tributary migration routes spanning across much of Canada and the entire northeast United States converge at the Chesapeake and Delaware Bays, producing an enormous variety of species along the shores of the Delmarva Peninsula¹³. The marshes and tidal wetlands of the Chesapeake and Delaware Bays and their tributaries offer excellent food, water, and cover for migratory birds. The Chesapeake Bay serves as the winter home for nearly one million waterfowl each year, including tundra swans, Canada geese and a variety of ducks. In addition it is home to a significant number of bald eagles, and the world's largest population of osprey¹⁴.

¹² Andropogon. January 26, 2006. "Chesapeake and Delaware Canal Trail Concept Plan." http://www.nap.usace.army.mil/Projects/CD/index.htm, 19.

¹³ North American Migration Flyways. (Retrieved 2009, May 16). "Atlantic Flyway." < http://www.birdnature.com/flyways.html>.

¹⁴ Chesapeake Bay Foundation. (Retrieved 2009, May 16). "Animals." < http://www.cbf.org>.

Conservation efforts on the Delmarva Peninsula have produced numerous Wildlife Management Areas (WMAs), preserving valuable natural habitats in the region. At least six wildlife refuges, wildlife management areas, or managed hunting areas (MHAs) exist within five miles of Chesapeake City. Furthermore, much of the land along the canal, primarily federally-owned property, has been designated a wildlife refuge. The C & D Wildlife Refuge and the 400-acre Bethel MHA form the western and eastern borders of south Chesapeake City, respectively¹⁵.

Regional Parks / Recreational Networks

In addition to the many habitat preserves along the upper Delmarva Peninsula, Chesapeake City enjoys access to numerous parks and recreational networks. Lums Pond State Park, five miles east of Chesapeake City across the Delaware state line, is organized around a man-made lake formed when a small stream valley was dammed

(Image redacted)

Fig. 17: The C & D Canal is marked as a potential greenway

¹⁵ Maryland Department of Natural Resources. (Retrieved 2009, January 5). "Central Maryland WMAs." < http://www.dnr.state.md.us/wildlife/wmacentral.asp>.

during construction of the canal. Combined with the canal wildlife refuge lands, Lums Pond is part of a "greenway" proposed by the Maryland and Delaware Departments of Natural Resources to extend along the full length of the canal¹⁶. This proposed network would formalize and improve an extensive, but ad hoc network of pedestrian / bicycle / equestrian trails which have developed along the canal service roads.

In addition to its position on the east-west greenway running along the canal, Chesapeake City lies along the East Coast Greenway, a developing network of long-distance, urban, shared-use trails linking twenty-five major cities along the full length of the eastern seaboard¹⁷.

Given its access to the waters of the Chesapeake and Delaware Bays and its proximity to numerous wildlife preserves and greenways, Chesapeake City is ideally situated for many recreational activities, including hiking, bicycling, kayaking, boating, fishing, hunting, horseback riding, and nature observation among others.

¹⁶ Maryland Department of Natural Resources. (Retrieved 2009, January 6). "Maryland Atlas of Greenways, Water Trails, and Green Infrastructure." < http://www.dnr.state.md.us/greenways/counties/ce-cil.html>.

¹⁷ East Coast Greenway. (Retrieved 2009, May 14). "About the Greenway." < http://www.greenway.org/about.php>.



Fig. 18: The East Coast Greenway

Source: www.greenway.org

Chapter 4: Site Analysis - The Built Environment

Regional Road Networks

The upper Delmarva Peninsula is served by three primary highways running parallel down the peninsula: DE 1 down the eastern side, US 301 down the center, and MD 213 down the western side. Chesapeake City lies along MD 213, a route recently designated a national scenic byway. The Chesapeake Country National Scenic Byway, as it is called, in fact begins at Chesapeake City.

The Byway has several important characteristics distinguishing it from the two other regional highways on the upper Delmarva. First of all, MD 301 and DE 1 are divided highways with two lanes in each direction separated by a 50' median, while the Byway is a two lane highway with wide shoulders. Secondly, while all three cross similar terrain over rural agricultural fields and through dense riparian corridors, the Byway has a unique relationship to the urbanism of the region. As regional highways, MD 301 and DE 1 bypass each town, extending secondary roads to access the towns. The Byway, in contrast, intersects each significant town along the western half of the peninsula, transitioning from a fast-moving open highway to a traditional "main street" fronted closely by houses and stores. The experience of traveling along the Byway consequently is a rhythmic pattern of alternating rural open space and compact traditional towns. In fact, the Byway organizes an entire network of small Eastern Shore towns extending from Chesapeake City in the north to Kent Island and the Chesapeake Bay Bridge in the south.

Ironically, the single exception to this pattern of town and country is Chesapeake City, the symbolic northern gateway to the Chesapeake Country National Scenic Byway. Due to the height of the Chesapeake City Bridge and its landings well beyond the extents of the town, the Byway in effect bypasses the town. Thus, despite symbolically occupying the gateway position, Chesapeake City maintains a severely



Fig. 19: MD 213 (Scenice Byway) vs. US 301



Fig. 20: Upper Delmarva regional highways

Fig. 21: The Chesapeake Country National Scenic Byway

Fig. 22: The Chesapeake Country National Scenic Byway

Fig. 23: The Chesapeake Country National Scenic Byway

Source: www.kentcounty.com

Fig. 24: The Chesapeake Country National Scenic Byway

Fig. 25: The Chesapeake Country National Scenic Byway

Source: www.kentcounty.com

Fig. 26: The Chesapeake Country National Scenic Byway

Fig. 27: The Chesapeake Country National Scenic Byway



Fig. 28: Chesapeake City, Maryland (existing)



Fig. 29: New Castle, Delaware



Fig. 30: Chestertown, Maryland



Fig. 31: Denton, Maryland

limited presence on the Byway. This incongruity between the symbolic and physical realities marks an important design opportunity.

Nevertheless, despite some inconsistencies, the Scenic Byway has proven to be a powerful organizational concept. The local planning community is slowly coalescing around the notion of the Scenic Byway as a corridor of picturesque towns, historic sites, and wide-ranging recreational opportunities. As part of the process of achieving designation as a Scenic Byway, an alliance of officials and planners from Cecil, Kent, and Queen Anne's counties prepared a Corridor Management Plan, cataloguing the regions many natural, historical, and cultural resources and outlining objectives and strategies for enhancing the Byway.

Furthermore, the plan proposes an interpretive framework for understanding the region's many historical and cultural assets, organizing the Byway's sites and experiences into themes of "Life on the Water" and "Life on the Farm"¹⁸. The framework appropriately organizes towns by their primary local economies: coastal villages developed around waterman, seafood pickers, and cannery workers and inland villages developed around distribution centers for agricultural goods¹⁹. Of course, Chesapeake City, along with a few other key destinations along the Byway, developed both water and land-based economies.

Zoning / Regulations

The Cecil County Zoning Ordinance reflects a strong desire to protect the natural resources of the region and to reinforce existing town development. Strict limitations on development outside the immediate surrounds of Chesapeake City direct future growth towards the historic core and the southern edge of south Chesapeake City. Zoning districts to the north and south of the town are intended to prevent premature urbanization

¹⁸ Chesapeake Country Scenic Byway Alliance. (Retrieved 2009, January 4). "Corridor Management Plan." < http://www.kentcounty.com/gov/planzone/byway-cmp.htm>, 7.

¹⁹ Chesapeake Country Scenic Byway Alliance. "Corridor Management Plan," 9.

prior to planned public facilities²⁰.

The Northern Agricultural-Residential District (NAR) north of the town restricts development to one dwelling unit per acre for minor subdivisions and one unit per ten acres for major subdivisions. The Southern Agricultural-Residential District (SAR) south of the town is even more restrictive, limiting development to one unit per acre for minor subdivisions and one unit per twenty acres for major subdivisions.

Land immediately to the south of the town is zoned Town Residential, a district intended to encourage development compatible with the existing town so as to allow future extension of services and annexation by the town. A maximum density of six dwelling units per acre as part of a Planned Unit Development is permitted within this zone. Any proposed development in this zone is subject to review by Town officials in order to ensure compatibility with Town policies. Just outside this district, a zone of Suburban Residential permits medium density residential development intended to act as a transitional zone between rural and development areas. Within this district, a Planned Cecil County Department of Planning and Zoning. Retrieved 2008, October 19). "Cecil County Zoning Ordinance." < http://www.ccgov.org/dept_planning/docsforms.cfm>.



Fig. 32: Cecil County Zoning Map

Source: www.ccgov.org

Unit Development may achieve a maximum density of four dwelling units per acre.

A small pocket of land straddling MD 213 (the Scenic Byway) has been zoned Business-General, permitting commercial uses and activities including retail, wholesale, and business intended to service an area of several local communities.

In addition to the Cecil County Zoning Ordinance, the state of Maryland imposes regulations on much of the immediate context of Chesapeake City. The 1984 Critical Area Act restricts development of land within 1,000 feet of the Mean High Water Line of the Chesapeake Bay or its tributaries²¹. Intended to protect wildlife habitats and the Bay's water quality from runoff and pollutant discharge, the Act imposes strict regulations on impervious development, land clearing, and site runoff for any property within the Critical Area. Within the context of the broad standard outlined by the state, each locality is charged with developing specific standards for its immediate area. Land within the Critical Area boundary is to be further classified by each locality into a tiered regulatory structure: Intensely Developed Areas (IDAs), Limited Development Areas (LDAs), and Resource Conservation Areas (RCAs).

According to the Cecil County Zoning Ordinance, development within IDAs is restricted in its land use and must achieve a 10% reduction in pre-development pollutant loadings. Development within LDAs and RCAs is limited to a maximum of 15% impervious surfaces and prohibits any net loss in forested area.

Land Use

As the *raison d'etre* of the town of Chesapeake City has evolved over time, so has its land use. Nevertheless, the town still reflects a subtle organization and delicate balance between the public and private realms. The town's transformation in recent years into a tourist destination has led to the conversion of numerous homes into bed-and-breakfast inns and live / work art studios. These uses along with other commercial

²¹ Department of Natural Resources. (Retrieved 2009, January 13). "Critical Area Commission for the Chesapeake and Atlantic Coastal Bays." < http://www.dnr.state.md.us/criticalarea/>.



uses are generally distributed along Bohemia Avenue, the town's "main street," and the northern end of George Street with the highest density of commercial development nearest the water. The variety of shops, restaurants, and inns interspersed with private residences along Bohemia Avenue creates a lively, residentially-scaled streetscape.

Civic buildings, such as the town hall, the bank, and the town's oldest church, are situated at the intersection of major cross streets. An irregularly-shaped town green at the water's edge serves as the primary public space for the town. During busy summer months, this green, while generally well-scaled for the town, is often overwhelmed by visitors, making the waterfront rather claustrophobic during peak times.

An elementary school with associated playfields on the western side of the bridge piers provides a secondary, albeit somewhat disconnected, center for the community.



Fig. 34: Existing Land Use diagram



Fig. 35: Narrow alleys through the blocks provide access to rear yards



Fig. 36: Densely-arranged single family detached houses are the primary housing type



Fig. 37: Partial Street Elevations - West Bohemia Avenue



Fig. 38: Partial Street Elevations - West Bohemia Avenue

Local Street Network

The street network of the historic district is organized as a grid with two primary streets running perpendicular to the waterfront and three main cross streets. A subtle hierarchy of the street system is developed through the manipulation of the street width, building setbacks, and street landscaping. For example, Bohemia Avenue features 12-15' setbacks and is lined with mature sycamore trees, creating a lush, shaded avenue. George Street, on the other hand, has no street plantings and virtually no building setbacks, creating a very different experience than Bohemia Avenue. Third Street, the only connector between the developments east and west of the bridge piers, expresses its hierarchy as the widest street in the town.

Typical blocks dimensions are approximately 210' x 310'. Comprised primarily of densely arranged single-family detached homes on narrow lots, typical blocks are served by a narrow alley running down the middle of the block. Typical lot sizes range from 2500 sf to 6000 sf with an average lot coverage of 30% producing an average net density of approximately 12.5 dwelling units per acre. Gross density for the historic district is approximately 7 dwelling units per acre.



Street Section - Bohemia Ave

0 4 8 16 ft



Fig. 39: Comparative Street Sections

Chapter 5: Architectural & Urban Design Theory

Regional Development

In his diagram of urban expansion Peter Calthorpe argues that new growth should be directed toward existing urban centers²². Given the ecological sensitivity of the region, this is particularly appropriate to the upper Delmarva Peninsula which has seen significant growth in recent years and anticipates much more. The creep of sprawling, placeless suburban development southward from Elkton, Maryland and Newark, Delaware, has highlighted the need for a contemporary counterproposal demonstrating the value of compact development directed toward existing town centers.

Moreover, the pattern of urbanism evident along the Chesapeake Country Scenic Byway corridor fits squarely in the discourse of town-and-country regional urban development. Over the past century many architects and planners have written on the

²² Duany, Andres; Elizabeth Plater-Zyberk, and Robert Alminana. (2003). *The New Civic Art*. New York, NY: Rizzoli International Publications, Inc., 25.



Fig. 40: Diagram, Peter Calthorpe



Fig. 41: Diagram, Ebenezer Howard

subject of the town-and-country pattern of urbanism. Ebenezer Howard's diagram of the "Three Magnets" has stood as a lasting polemic of the Garden City movement²³. His diagrams, and the later work of Raymond Unwin, characterize the town-and-country pattern as a clearly defined central city surrounded by relatively independent towns and villages. The pattern of urbanism along the Chesapeake Country Scenic Byway corridor closely resembles these early garden city diagrams.

Neighborhood Structure

The diagrams of Duany Plater-Zyberk comparing Traditional Neighborhood Development (TND), Transit-Oriented Development (TOD), and Livable Neighborhood Development offer valuable lessons applicable to development explorations for the town of Chesapeake City. The distribution of commercial zones at neighborhood edges enables the overlap of markets and gives businesses the greatest opportunity for success. The organization of the community into sub-communities with secondary neighborhood centers promotes walkability and social cohesion. The Livable Neighborhood diagram offers a model particularly applicable to Chesapeake City in its attention to commercial development centered along a regional thoroughfare²⁴.

23 Duany, 13-14.

²⁴ Duany, 85.



Fig. 42: Diagram, Duany Plater-Zyberk

THE TRANSECT DIAGRAM	
KRURALIIIIIIIIIIIIIIIIIIIIIIII	U R B A N)
RURALZONE	
EDGEZONE	
	GENERAL ZONE
	CENTER & CORE ZONE
	And DAATT I A A A
Kydyt gydy hydry Lydry (ydytyd y lydry by	
LESS DENSITY	MORE DENSITY
PRIMARILY RESIDENTIAL USE	PRIMARILY FLEXIBLE USE
SMALLER BUILDINGS	LARGER BUILDINGS
MOST BUILDINGS DETACHED	MOST BUILDINGS ATTACHED
ROTATED FRONTAGES	ALIGNED FRONTAGES
WOODEN BUILDINGS	MASONRY BUILDINGS
PITCHED ROOFS	FLAT ROOFS
OVERHANGING EAVES	TAUT CORNICES
DEEP SETBACKS	SHALLOW SETBACKS
FENCES	STREET WALLS
ROAD & LANE SECTIONS	
PATHS & TRAILS	CROSS-BLOCK PASSAGES
NARROW MOVING LANES	WIDE MOVING LANES
CURVILINEAR TRAJECTORIES	RECTILINEAR TRAJECTORIES
THREE-WAY INTERSECTIONS	FOUR-WAY INTERSECTIONS
NARBOW SIDEWALKS	WIDE SIDE WALKS
OPEN SWALES	RAISED CURBS
SPORADIC TASK LIGHTING	EVEN STREET LIGHTING
PICTURESQUE LANDSCAPING	ALLEE PLANTING
MIXED TREE CLUSTERS	SINGLE TREE SPECIES
PAHKS&MEADOWS	PLAZAS & SUUARES

Fig. 43: Transect Diagram, Duany Plater-Zyberk

Chapter 6: The Proposition

Objectives

There are several objectives for this project. Over the next twenty-five years significant growth is anticipated in Maryland in general and on the Eastern Shore in particular. Chesapeake City is in a prime position to receive much of this growth. The first objective therefore is to develop a masterplan for the future growth of the town as a counterproposal to the pattern of sprawling suburbs.

Secondly given Chesapeake City's position as the northern gateway to the Chesapeake Country National Scenic Byway, this proposal intends to advance the dialogue surrounding the Scenic Byway, and in particular to enhance Chesapeake City as a gateway town. By exploring future town development, this proposal investigates the implications of the Scenic Byway designation for individual towns.

Thirdly, in the process of creating a vision for the future of Chesapeake City, this proposal offers a precedent for the



Fig. 44: Existing Condition



Fig. 45: Unmanaged Growth



Fig. 46: Proposed Masterplan

numerous other small historic towns along the Eastern Shore facing similar questions of fast-paced growth.

Strategies

The fundamental strategy for organizing future development and establishing Chesapeake City as a gateway is to reconnect the town to the major transportation networks. In order to develop a powerful gateway experience, it is critical that Chesapeake City provide a clear entry point and threshold for the variety of modes of transportation by which the Byway is accessed. Specifically, this demands the assertion of the town's presence on MD 213, the enhancement of the town's waterfront as an entry port, and active engagement with pedestrian and bicyclist networks along the canal. By strengthening its connection to these regional transportation networks, the town reasserts its regional significance and firmly establishes itself as the prime gateway to Chesapeake Country.

Secondly, new development must be organized within the framework of a carefully designed public realm. An armature of infrastructure and public spaces combined with a complementary regulatory structure are critical to ensuring an orderly pattern of growth. Furthermore, a range of building typologies, derived primarily from the existing context, will serve as guidelines for achieving a sensitive relationship to the historic district.



Fig. 47: Aerial of proposed development from the north

Parti

The first major move of the proposal is the introduction of a new town center situated on the Byway, which accomplishes two key objectives. Firstly, it restores the town's presence on the Byway, anticipating the order of nodal points along a scenic rural route and establishing a more appropriate "gateway" experience. Secondly it frees the town from some of the natural barriers which encircle the historic core, including wetlands and the Critical Area boundary.

Since the town acts as a gateway not just for motorists but also for boaters, the second major move is the introduction of a limited amount of commercial development at the southern edge of the tidal basin organized around a new public space. In addition to capitalizing on the latent economic value of the tidal basin, this new plaza converts what is currently private property into public space, in effect returning the waterfront to the larger community.

The third primary move of the proposal is a sweeping boulevard linking all of the neighborhoods in a complete circuit. Reflecting the notion of community interconnectedness, the boulevard establishes a strong link between the historic district and the new town center, creating complementary neighborhoods within a larger cohesive community.

Town Center

The form of the new town center achieves several design objectives. First of all, the circle slows traffic and establishes Chesapeake City as a node along the Byway. By dramatizing the intersection of the boulevard with the Byway, the circle gives prominence to the most direct route back to the waterfront and historic core.

Secondly, the linear green splits traffic to either side which in concert with the circle slowing traffic transforms the high-speed highway into a traditional town "main street" in the manner of the other towns along the Byway. Thus the new town center

signals the urban pattern of the Byway while creating a pedestrian-friendly environment capable of serving as a neighborhood center. Furthermore, the manipulation of the MD 213 road section eliminates the existing strip development, creating in its place a traditional pattern of commercial development fronting directly on the street. Parking is accommodated as diagonal parking in front with additional space in rear or on cross streets instead of in large pools between the road and building.

Thirdly, the town center creates usable public space organized into civic and commercial zones. As the new symbolic gateway to the region, the circle is lined with civic and institutional uses. The linear green, in contrast, is lined with two- and three-story commercial and retail development aimed primarily at residents of the town as a complement to the tourist-centric commercial development of the historic district.

Waterfront

The form of the tidal basin development is a response to the current claustrophobic experience around the waterfront, particularly during the busy summer months. With limited space for arrival along the southern edge of the basin, the plaza establishes a strong waterfront gateway welcoming visitors from the canal. Furthermore, the plaza acts as an anchor (opposite Pell Gardens at the existing town green) to new commercial development along the edge of the tidal basin. Its irregular form is derived from the shape of the site's topography which forms a natural bowl while also reflecting the spirit of the plaza as a forum for impromptu gatherings, farmer's markets, performances, and other cultural events.

The natural change in elevation of the land at the new waterfront plaza is utilized to organize program distribution in the two-story buildings forming the plaza. Pedestrian-friendly retail development is located on the lower level opening onto the plaza, thereby freeing the waterfront from significant vehicular traffic. Parking-intensive businesses such as restaurants are arranged on the upper floors with parking lots in the rear of the buildings. Exterior decks on the plaza side provide seating with prime views of the tidal basin, Canal, and bridge.

The Boulevard

The boulevard, in addition to binding the community together, organizes all of the public spaces in the community. The boulevard provides an unbroken link between the waterfront plaza, the new town center, the existing baseball fields, and the historic district. Furthermore, the boulevard taps into the park and trail systems along the canal enabling bikers to make a continuous loop through the new development and back to the historic district. Lined with larger single-family homes, the boulevard also introduces a level of street hierarchy.

Block Structure

The new local street network and block structure reflect the scale and density of the historic district with careful attention to the topography of the site. Density is generally focused around the public spaces and along primary streets with lower density development at the perimeter of the site. A clear edge to the town is defined by the form of the topography and natural vegetation. The new town development is nestled in the bowl of a horseshoe and constrained by mature woodlands at the perimeter.





Fig. 49: Topography / Proposed Street Network



Fig. 50: Preserved Woodlands



Fig. 51: Proposed Movement Systems

Fig. 52: Proposed Land Use



Fig. 53: Public Space / Neighborhoods



EXISTING CONDITION



Fig. 55: New Town Center



Fig. 56: New Town Center



Fig. 57: Waterfront Development





Fig. 58: Waterfront Development



Fig. 59: Boulevard



Fig. 60: Waterfront park at eastern terminus of boulevard





Fig. 61: Single-family detached homes





Fig. 62: Duplex houses





Fig. 63: Attached rowhomes



Fig. 64: Waterfront commercial development



Fig. 65: Live / Work Units





Fig. 66: Town Center commercial development

Chapter 7: Conclusion

The small traditional towns of the Eastern Shore face significant challenges over the next several decades; yet, with thoughtful planning, deliberate collaboration, and active community involvement, significant population growth marks an exciting opportunity for the communities of the Eastern Shore. This project offers an exploration of just one of many potentialities for the town of Chesapeake City. By recognizing and reaffirming Chesapeake City's position in the larger regional context, this project asserts the value of the place.

Like the other towns along the Scenic Byway, Chesapeake City represents an important part of Maryland's architectural and cultural heritage. As these towns face an uncertain future, it is incumbent upon the architectural community to provide solutions which protect these pieces of heritage.

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